

REPORT TO CONGRESS

BUREAU OF OCEAN ENERGY MANAGEMENT, REGULATION AND ENFORCEMENT ROYALTY IN KIND PROGRAM

FISCAL YEAR 2009

ENERGY POLICY ACT OF 2005 - SECTION 342

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SEPTEMBER 2010

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EXECUTIVE SUMMARY

OVERVIEW

The Fiscal Year (FY) 2009 Report to Congress fulfills the annual requirement under section 342 (e)(2) of the Energy Policy Act of 2005 that the Secretary of the Interior submit to Congress a report that describes the performance, benefits, and savings associated with the Royalty in Kind (RIK) Program administered by the Bureau of Ocean Energy Management, Regulation and Enforcement (BOEMRE) (formerly Minerals Management Service), Minerals Revenue Management (MRM) program. This report also serves as the annual update for other RIK Program stakeholders, detailing the history, current status, and operational condition.

On September 16, 2009, Secretary of the Interior Salazar announced that MRM would begin the orderly termination of the RIK Program. The announcement stated that no further RIK sales would be held; however, because MRM had existing arrangements to receive royalties in kind and sell the associated oil and gas through September 2010, MRM will prepare one more RIK Annual Report to Congress for FY 2010. The memorandum to terminate the RIK Program was signed by Secretary Salazar on December 8, 2009 (see Appendix E). This memorandum provides direction and guiding principles for the RIK Phase-Out Project.

Through the RIK Program, MRM took royalties on crude oil and natural gas production in amount, or "royalty in kind," from the Federal lessee rather than via a cash payment, or "Royalty in Value (RIV)" method. MRM then sold that crude oil or natural gas production competitively on the open market. Depending on market conditions and program staffing, the RIK Program provided several economic benefits for the American public, as follows:

1. LOWER ADMINISTRATIVE COSTS

The program reduced administrative costs by reducing the number of costly reviews, audits, and disputes over payment.

2. TIME VALUE OF MONEY

Additional benefits accrued to the Federal government due to earlier receipt of royalty payments under the RIK Program, as RIK sales contracts required earlier payments than in-value royalties.

3. INCREASED REVENUE

The Federal government has received increased royalty receipts by obtaining higher sales values through sales of RIK production in higher-priced markets and by paying lower operational costs for transporting and processing RIK production.

During FY 2009 (October 2008 through September 2009), the RIK Program generated benefits estimated at \$23 million, depending on various assumptions regarding markets and administrative costs.

TOTAL BENEFITS OF RIK PROGRAM - FY 2009

	CRUDE OIL	Natural Gas	TOTAL
ADMINISTRATIVE COST SAVINGS	\$1,740,000	\$2,290,000	\$4,020,000
TIME VALUE OF MONEY BENEFIT	\$102,000	\$29,400	\$131,000
REVENUE PERFORMANCE	\$7,680,000	\$11,500,000	\$19,200,000
TOTAL BENEFITS	\$9,520,000	\$13,800,000	\$23,400,000

NOTE: Totals in this and other tables may not add due to rounding.

The range of the RIK Program's estimated benefits, established by adjusting the revenue performance using different marketing assumptions, is from a low of negative \$21 million to a high of positive \$57 million. Appendix C provides the details behind the revenue performance range, including changes made to the various marketing assumptions. As Appendix C makes clear, the figures stated in this report are estimates based on a model that incorporates a series of assumptions.

BACKGROUND

The RIK Program began as a pilot program in 1998 involving crude oil, in partnership with the State of Wyoming. Also, that year, MRM collaborated with the State of Texas, through the Texas General Land Office, to sell natural gas from the Outer Continental Shelf (OCS) Gulf of Mexico (GOM). The program quickly expanded to include sales to Federal government facilities through the General Services Administration in 1999 and broader sales of crude oil and natural gas in the GOM in 2000. The RIK Program transitioned into a permanent program with the approval and publication of the Five Year Royalty-in-Kind Business Plan in 2004, following an independent review and analysis by the Lukens Energy Group verifying the program's viability.

REVENUE PERFORMANCE

MRM measures the financial success and economic benefits of the RIK Program by comparing RIK sales receipts to a fair market value (FMV) benchmark range. The FMV methodology was devised in collaboration with an independent energy consulting firm, Lukens Energy Group (see Appendix B for a detailed description of this FMV methodology, including the underlying principles that drove its development). The FMV benchmark is an approximation of what the average third-party may have sold the same production for and is an estimate of what MRM would expect to see, on average, through RIV. The following are the revenue performance results in FY 2009 for RIK sales of natural gas from Wyoming and the OCS GOM, as well as RIK sales of crude oil from the OCS.

RIK Natural Gas Program

In FY 2009, MRM did not add any new natural gas sales packages to RIK but did remove, or convert to RIV, four GOM packages. A package of natural gas consists of properties connected to the same pipeline system. MRM removed these packages for various reasons including low volumes, negative performance, and accounting complications.

Overall estimated revenue gains for the 25 GOM natural gas packages in FY 2009 were \$10 million. The Wyoming RIK natural gas program's three packages saw estimated revenue gains of approximately \$1.5 million. MRM attributes these estimated revenue gains to lower costs paid for processing and transportation services, sales in higher-priced markets, and premiums received over index prices. For FY 2009, MRM did not see the level of revenue gains experienced in FY 2008 because of market and contractual changes and dramatically lower commodity prices.

RIK CRUDE OIL PROGRAM

The RIK Crude Oil Program consists of the following three main sub-programs:

- The Unrestricted Program (GOM and Pacific)
- The Small Refiner Program
- The Strategic Petroleum Reserve Program (SPR)

In FY 2009, the Unrestricted and Small Refiner Programs realized estimated revenue gains above FMV of over \$7.5 million. These estimated gains are primarily attributable to the RIK Program obtaining premiums from purchasers on certain crude packages for which the purchaser entered into lucrative downstream financial transactions and passed on a portion of those benefits.

In FY 2009, the RIK Program also provided approximately 4.5 million barrels of crude oil to the Department of Energy (DOE) for the SPR fill to strengthen national energy security.

BUREAU OF OCEAN ENERGY MANAGEMENT, REGULATION AND ENFORCEMENT MINERALS REVENUE MANAGEMENT ROYALTY IN KIND PROGRAM FY 2009 REPORT SEPTEMBER 2010

1. REPORT REQUIREMENTS

This report covers the information required by section 342 (e) (2) of the Energy Policy Act of 2005 (EPAct). The EPAct requires that, for each of Fiscal Years 2006-2015 in which the United States takes oil or natural gas royalties in kind from production in any state or from the OCS, excluding royalties taken in kind and sold as part of the small refiner program, the Secretary shall submit to Congress a report that describes the following:

- 1. The one or more methodologies used by the Secretary to determine that royalties taken in kind provide benefits that are greater than or equal to the benefits that likely would have been received had royalties been taken in value, including the performance standard for comparing amounts received by the United States derived from royalties in kind to amounts likely to have been received had royalties been taken in value
- 2. An explanation of the evaluation that led the Secretary to take royalties in kind from a lease or group of leases, including the expected revenue effect of taking royalties in kind
- 3. Actual amounts received by the United States derived from taking royalties in kind and costs and savings incurred by the United States associated with taking royalties in kind, including administrative costs savings and any new or increased administrative costs
- 4. An evaluation of other relevant public benefits or detriments associated with taking royalties in kind

This required information is contained within this report. Please see Section 6 for a summary of the information.

2. RIK Business Model/Organization

2.1 Business Model

The RIK Program's business model and core operational procedures were designed according to statutory authorities and positioned MRM as a conservative, price-taking seller of energy commodities into the wholesale, upstream market. The business model featured the use of the following:

• Competitive sales based on upstream physical spot markets

- Competitively based transportation and processing contracts
- No fixed price, financial derivatives, or storage positions
- Conservative credit risk assessments consistent with the June 2005 RIK credit policy
- Policy and risk management oversight consistent with the August 2005 Royalty in Kind Risk Management Policy at http://www.mrm.boemre.gov/AssetManagement/PDFDocs/RIKRiskPolicy.pdf

2.2 PARTNERS

The RIK Program works with a number of different Federal agency and state partners to accomplish its mission. These partners are critical to the success of the RIK program. The RIK Program currently partners with—or has partnered with—the following organizations:

- Department of Energy (DOE) in the joint effort to fill the remaining capacity of the SPR
- The State of Wyoming on crude oil sales from both Federal and State leases and natural gas sales from Federal leases
- The States of Texas, Louisiana, and Alabama on natural gas and/or crude oil from Federal OCS leases in the 8(g) zone
- The Bureau of Land Management (BLM) on sales of natural gas produced from the National Helium Reserve as the reserve is decommissioned

2.3 FY 2009 PROGRAM CHANGES

On September 16, 2009, Secretary of the Interior Ken Salazar announced that BOEMRE would begin the orderly termination of the RIK Program. The announcement stipulated that no further RIK sales will be held; however, because MRM had existing arrangements to receive royalties in kind and contracts to sell the associated oil and gas through September 2010, MRM will prepare one more RIK Annual Report to Congress for FY 2010.

The RIK Program also made a number of improvements in FY 2009 and FY 2010 based on recommendations received from the Government Accountability Office (GAO), Department of the Interior's Office of Inspector General (OIG), and the Royalty Policy Committee (RPC). Since FY 2004, RIK has been the subject of 11 external audits, evaluations, and reviews. From these reviews, 67 total recommendations were identified and, as of July 31, 2010, MRM has closed 45 of those recommendations. Additionally, in FY 2010, MRM administratively closed 14 external recommendations related to RIK due to termination of the RIK program. All recommendations received during FY 2004 through FY 2007 have been implemented. Closure of the remaining recommendations is progressing as scheduled.

3. RIK PERFORMANCE METRICS

The Outer Continental Shelf Lands Act mandates that the Secretary receive at least fair market value when production is sold in kind. The potential benefits of using the RIK strategy include the following:

- Lower administrative costs
- Time value of money benefit
- Increased royalty revenues

Within the RIK Program, the Economic Analysis Office (EAO)¹ is a separate, independent group that measures and reports performance. The EAO staff computes performance on a semi-annual basis with performance results reported annually to the public. MRM estimates that, in FY 2009, the total value of the benefits of the RIK Program was \$23.4 million. Table 3.1 presents the RIK performance history since FY 2004. The RIK Program has generated almost \$280 million of estimated revenue gains over the past six years.

FY 2004 FY 2005 FY 2006 **FY 2007** FY 2008 FY 2009 **ADMINISTRATIVE COST** SAVINGS \$1,447,051 \$3,725,372 \$2,368,227 \$3,553,392 \$5,220,000 \$4,020,000 \$3,089,072 TIME VALUE OF MONEY \$892,875 \$1,528,550 \$2,633,470 \$3,070,000 \$131,000 **REVENUE PERFORMANCE** \$17,242,415 \$30,790,482 \$26,254,845 \$56,534,729 \$97,700,000 19,200,000 \$36,044,404 \$31,256,542 \$106,000,000 \$23,400,000 \$19,582,341 \$63,177,192 **Total Benefits**

TOTAL BENEFITS OF RIK PROGRAM

Table 3.1

The FY 2009 range of the RIK Program's estimated benefits, established by using different marketing assumptions, is from a low of negative \$21 million to a high of \$57 million².

3.1 Administrative Cost Performance

MRM performs an annual comprehensive comparative cost analysis between administering the RIK and the RIV Programs. In the RIV Program, MRM is required to validate the value and the transportation and processing costs associated with the sales and movement of Federal royalty production. This analysis is highly labor-intensive due to the complexities involved in mineral lessees' application of valuation regulations defining royalty payment standards.

MRM reorganized in FY09, and, effective October 1, 2009, RIK is now called Asset Sales and Accounting, while EAO is called Economic and Market Analysis Office.

² MRM has rounded all FY 2008 and 2009 revenue performance numbers because they are now presented as a range, as well as to emphasize that these figures represent estimates.

Royalties taken in kind through the RIK Program are sold under explicit commercial contract terms. These standard industry contracts provide a level of transparency in the valuation and transportation of royalties taken in kind that typically lead to a more-efficient process with decreased conflicts and costs. These differences equate to a potential cost savings through taking royalties in kind versus in value.

FY 2009 was the sixth year in which MRM performed this analysis. Both RIK and RIV increased their administrative costs per barrel of oil equivalent (BOE)³ in FY 2009⁴, due primarily to hurricane damage that reduced both RIK and RIV BOE volumes and an overall decline in GOM production. Table 3.2 presents the historical Administrative Cost analysis.

ADMINISTRATIVE COST PERFORMANCE FY 2004 FY 2005 FY 2006 FY 2007 FY 2008 FY 2009 \$0.056 \$0.059 \$0.076 \$0.071 \$0.083 \$0.126 \$0.073 \$0.102 \$0.108 \$0.114 \$0.156

ROYALTY IN KIND COST PER BOE ROYALTY IN VALUE COST PER BOE \$0.199 **COST PER BOE DIFFERENCE** \$0.017 \$0.043 \$0.032 \$0.043 \$0.073 \$0.073 **RIK ADMINISTRATIVE COST SAVINGS** \$1,447,051 \$3,725,372 \$2,368,227 \$3,553,392 \$5,220,000 \$4,020,000

Table 3.2

The increased efficiency due to the RIK Program translates into an estimated cost savings of \$4 million for FY 2009.

The RIK Program incurred direct Information Technology (IT) obligations of \$3.3 million in FY 2009 out of total MRM IT obligations of \$26.9 million. Certain IT costs are driven by ongoing business operational needs and not by movement of volumes between RIV and RIK and, as such, are excluded from the Administrative Cost Analysis. These IT costs can include RIK and/or RIV computer system upgrades that are not incurred on a regular basis and the costs of IT systems shared by RIK and RIV.

3.2 TIME VALUE OF MONEY

Revenue Collection Time (RCT) is a measure of the number of days after each production month that MRM takes to collect outstanding receivables. Payments in the RIK Program are received on average five (natural gas) and 10 (crude oil) days before the end of the month following production, which gives RIK an RCT between 20 and 25 days. Conversely, RIV payments are due at the end of the month following the month of production, which gives RIV an RCT of 30 to 31 days.

The difference in RCT between RIK and RIV provides a time value of money (TVM) component. Because RIK payments are received earlier than they would have been received

The barrel of oil equivalent measure converts natural gas volumes into barrels by assuming 5.8 MMBtu of natural gas has the same heating content as one barrel of oil.

⁴ RIV payments are audited three years after the production year so royalties paid in calendar year (CY) 2006 were audited during CY 2009. Therefore, the RIV costs use 2006 BOE RIV volumes as a basis for the cost per BOE.

in RIV, EAO calculates and reports a TVM component. Historically, RIK used 3 percent to calculate the TVM. However in FY 2008, in response to a GAO recommendation, RIK adopted the Federal Funds Effective Rate⁵ as a more appropriate, market-based interest rate used to determine the TVM for early RIK payments. Table 3.3 presents the historical TVM calculation and a comparison of the two rates.

RIK TIME VALUE OF MON	EV RENEELT
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	FY 2004	FY 2005	FY 2006	FY 2007	FY 2008	FY 2009
INTEREST RATE USED FOR TVM	3%	3%	3%	3%	2.92%	0.26%
FEDERAL FUNDS EFFECTIVE RATE	1.1%	2.7%	4.6%	5.2%	2.92%	0.26%
TVM EARNED - OIL	\$461,030	\$1,023,548	\$1,996,859	\$2,306,589	\$2,150,000	\$102,000
TVM EARNED - GAS	\$431,845	\$505,002	\$636,111	\$782,483	\$922,000	\$29,400
TOTAL TVM EARNED - RIK	\$892,875	\$1,528,550	\$2,633,470	\$3,089,072	\$3,070,000	\$131,000
TOTAL TVM PER BOE	\$0.010	\$0.026	\$0.035	\$0.034	\$0.042	\$0.002

Table 3.3

The TVM component provided an estimated revenue gain for the RIK Program of \$131 thousand, or \$0.002 per BOE, in FY 2009. This is down significantly from previous years because of the historically low Federal Funds Rate.

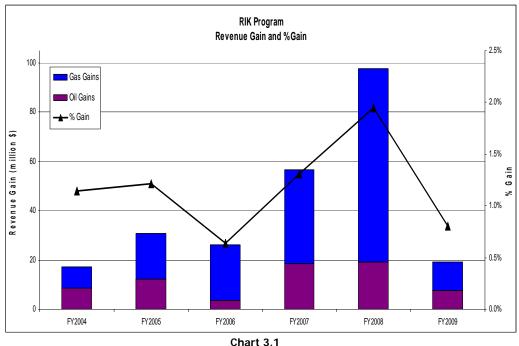
3.3 Revenue Performance

The RIK Program realizes higher royalty revenue than MRM would expect to earn through RIV. These higher revenues come from more-favorable natural gas processing and transportation contracts, selling production into higher-price markets, healthy competition among multiple purchasers, and the ability to aggregate production from many different producers and to sell a larger volume of oil and natural gas. The RIK Program has a well-defined process using economic modeling to measure and record overall RIK revenue performance. This detailed process was developed with the assistance of Lukens Energy Group. Although minor adjustments and modifications have altered the models in their five-year application, the general approach and calculation process has not changed.

MRM computes a fair market value (FMV) benchmark for each sales package. This FMV benchmark approximates what the average third party may have sold the same production for and estimates what MRM would expect to see, on average, through RIV. The FMV benchmark recognizes the FMV as a range for either crude oil or natural gas based, in part, on certain marketing assumptions and compares it to the RIK sales. Chart 3.1 and Table 3.4 display total RIK revenues and the corresponding estimated revenue gains for each year since FY 2004.

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⁵ http://www.federalreserve.gov/releases/h15/data/Monthly/H15_FF_O.txt

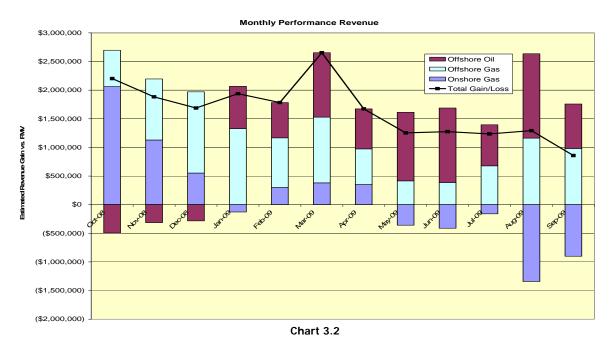


These revenue gains, as a percentage of total RIK revenues, have fluctuated between 0.6 percent and almost 2 percent over the past six years. FY 2009 gains were lower due to several factors, including decreasing volumes, lower commodity prices, and volatility in the oil market, especially when compared to FY 2008's record gain. FY 2008 revenue gains were primarily due to historically high crude oil prices that made RIK's favorable processing contracts much more lucrative than a standard third-party contract.

	FY2004	FY2005	FY2006	FY2007	FY2008	FY2009
TOTAL RIF	(REVENUE					
OIL	\$579,025,456	\$1,263,075,756	\$2,665,248,146	\$2,498,530,659	\$2,669,451,462	\$1,567,164,345
GAS	\$923,909,425	\$1,265,625,121	\$1,450,733,883	\$1,829,363,142	\$2,342,461,208	\$833,433,401
TOTAL	\$1,502,934,881	\$2,528,700,877	\$4,115,982,029	\$4,327,893,801	\$5,011,912,670	\$2,400,597,746
RIK REVE	NUE GAIN					
OIL	\$8,470,124	\$12,150,397	\$3,490,618	\$18,614,613	\$19,100,000	\$7,680,000
GAS	\$8,772,291	\$18,640,086	\$22,764,227	\$37,920,116	\$78,600,000	\$11,500,000
TOTAL	\$17,242,415	\$30,790,483	\$26,254,845	\$56,534,729	\$97,700,000	\$19,200,000
TOTAL %	<u>Gain</u>					
OIL	1.46%	0.96%	0.13%	0.75%	0.72%	0.49%
GAS	0.95%	1.47%	1.57%	2.07%	3.35%	1.38%
TOTAL	1.15%	1.22%	0.64%	1.31%	1.95%	0.80%

Table 3.4

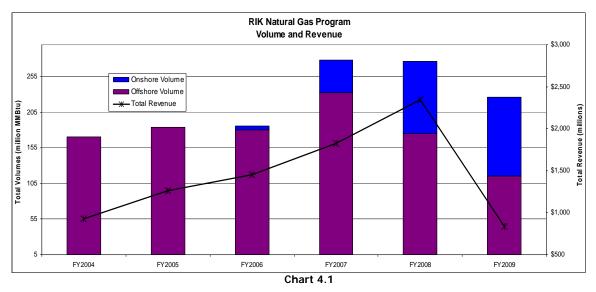
Chart 3.2 provides an overview of RIK's FY 2009 monthly performance. Early losses in offshore oil were due to the effect of trade month prices on the calculation of the RIK FMV. As oil prices stabilized later in the year, the monthly oil performance showed gains. Losses in onshore gas for the last part of the FY were due to RIK's inability to process gas from the Jonah and Pinedale fields.



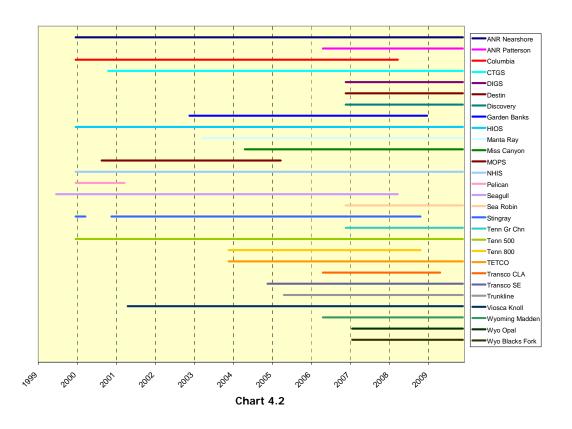
MRM has calculated a range of performance values based on changing the marketing assumptions used in the FMV benchmark calculations. See Appendix C for details of those calculations, including the marketing assumption changes.

4. RIK NATURAL GAS PROGRAM

The RIK Natural Gas Program began as a pilot program in the GOM in 1999. The program expanded in 2006 with the addition of Wyoming production.



As shown in Chart 4.1, GOM RIK gas volumes dropped considerably in FY09 due to hurricanes, overall production decline and reversion of packages to RIV. While onshore volumes remained steady, overall revenues dropped significantly due to lower prices and the aforementioned GOM volume decline. There have been 28 different packages in the program. In FY 2009, no new packages were added to the RIK Natural Gas Program, while four packages were removed. Chart 4.2 shows how the sales packages in the program have changed over the past 11 years.



4.1 Gulf of Mexico RIK Natural Gas Program

The GOM RIK Natural Gas Program began with the 1999 RIK Natural Gas pilots. MRM has achieved an estimated 1 to 2 percent revenue gain on RIK natural gas sales over the past six years, as shown in Table 4.1.

RIK GOM PROGRAM

	FY 2004	FY 2005	FY 2006	FY 2007	FY 2008	FY 2009
TOTAL VOLUME (MMBTU)	170,707,071	183,997,321	180,212,534	232,887,752	175,205,800	116,017,013
TOTAL REVENUE	\$923,909,425	\$1,265,625,121	\$1,422,637,294	\$1,632,382,454	\$1,685,741,898	\$545,830,772
REVENUE GAIN (LOSS)	\$8,772,291	\$18,640,086	\$23,083,864	\$24,302,030	\$34,600,000	\$10,000,000
REVENUE GAIN (LOSS)/MMBTU	\$0.05	\$0.10	\$0.13	\$0.10	\$0.20	\$0.09
PERCENTAGE GAIN	0.95%	1.47%	1.62%	1.49%	2.05%	1.83%

Table 4.1

MRM benefits under the RIK Natural Gas Program are due, in large part, to decreased costs under RIK processing and transportation contracts and increased revenues by taking natural gas to higher-valued markets. For example, in some situations where producers have long-term obligations to a specific pipeline, market, or processing plant, MRM can obtain a higher price and lower rate with a different pipeline, market, or plant. However, the program can also benefit by obtaining premiums to index prices because RIK purchasers gain access to attractive downstream markets using RIK transportation contracts. Overall natural gas production in the GOM is declining, leaving much of the transportation and processing facilities underutilized. Increasing competition allows MRM to leverage this cost savings for RIK natural gas production because it is not subject to a long-term commitment found in many producers' service contracts. These contracts require service to be continued for the life of the lease. The drop in RIK GOM volumes from FY 2008 to FY 2009 is attributed to overall GOM production decline and reversions to in-value.

4.1.1 Conversions/Reversions in FY 2009

No packages were converted from RIV to RIK in FY 2009, while four packages accounting for approximately 45,000 MMBtu/day were reverted from RIK to RIV.

4.2 ONSHORE RIK NATURAL GAS PROGRAM

The onshore RIK Natural Gas Program consists of the following:

- Sales from the decommissioning of the National Helium Reserve on behalf of BLM
- Sales of natural gas from Federal leases in the State of Wyoming

4.2.1 BLM National Helium Reserve

MRM sells approximately 10,000 MMBtu/day of Federal natural gas produced from the Cliffside Helium Enrichment Unit (CHEU) on behalf of BLM. The CHEU is located in Potter County, Texas, near the city of Amarillo. As the helium reserve is drawn down, natural gas is produced. Revenues from these sales are collected by BLM and are not reported in RIK revenues or performance metrics because the natural gas is not royalty gas.

4.2.2 WYOMING

The major component of the onshore RIK Natural Gas Program is production from three major fields in the State of Wyoming. MRM takes Federal royalties in kind from the Madden, Jonah, and Pinedale Anticline fields. The first production taken in kind was from the Madden field beginning in April 2006. In January 2007, production from the Jonah and Pinedale fields was added to the RIK Program.

4.2.3 REVENUE PERFORMANCE

Estimated Wyoming revenue performance results by year are shown in Table 4.2. Transportation discounts, favorable pricing terms, and percentage-of-proceeds⁶ processing contracts contribute to the success of the Wyoming RIK Program⁷. Revenue gains in the Wyoming Gas program were down significantly in FY 2009. MRM gas was increasingly bypassed at the Opal processing facility because it had reached its capacity, and MRM gas had a lower priority than the producer's gas. When RIK gas is bypassed at the Opal processing plant, MRM does not receive its more-valuable liquids; they are left in the gas stream and sold as natural gas. In the previous two years the value received for MRM's liquids had been the major driver in the Wyoming Gas program's revenue gain.

WYOMING GAS PROGRAM

	FY 2006	FY 2007	FY 2008	FY 2009
TOTAL VOLUME (MMBTU)	5,453,918	45,662,862	101,729,254	110,075,758
TOTAL REVENUE	\$28,096,588	\$196,980,687	\$656,719,310	\$287,602,629
REVENUE GAIN (LOSS)	(\$319,637)	\$13,618,085	\$44,000,000	\$1,470,000
REVENUE GAIN (LOSS)/MMBTU	(\$0.06)	\$0.30	\$0.43	\$0.01
PERCENTAGE GAIN/LOSS	(1.14%)	6.91%	6.70%	0.51%

Table 4.2

4.2.4 Conversions/Reversions in FY 2009

There were no property conversions or reversions for the RIK Onshore Natural Gas Program.

5. RIK CRUDE OIL PROGRAM

The RIK Crude Oil Program consists of three main sub-programs⁸ as follows:

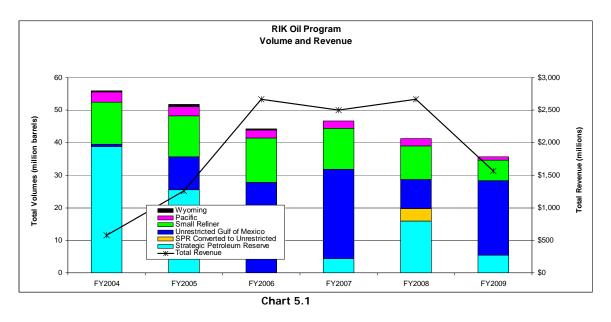
- The Unrestricted Program (UNR) in the GOM and Pacific
- The Small Refiner Program (SR)
- The Strategic Petroleum Reserve Program (SPR)

Chart 5.1 shows the total estimated revenue performance by program and details the changes in total volumes and revenues in the RIK Crude Oil Program from FY 2004 through FY 2009. FY 2009 RIK crude oil volumes dropped because of declining GOM production and the reversion of the Pacific Program to RIV. Revenues dropped because of this volume reduction and also because of much lower oil prices.

In a percentage-of-proceeds processing contract, the producer compensates the gas plant operator through the plant's retention of a percentage of the volume of the liquids extracted from the natural gas.

The loss in FY 2006 was due to diversification of pricing terms on a portion of the sales volume.

The Wyoming RIK Crude Oil Program was discontinued in April 2006. Declining production volumes inhibited the Wyoming RIK Crude Oil Program's ability to realize administrative cost savings. Also, changing crude oil market conditions in the state, due to low export capacity, made potential purchasers reluctant to enter into term contracts.



5.1 Conversions/Reversions in FY 2009

No crude oil properties were converted from RIV to RIK during FY 2009. There were fourteen properties reverted from RIK to RIV in FY 2009.

5.2 UNRESTRICTED OIL PROGRAM

As the name implies, there are no mandated eligibility requirements to participate in this program. Any and all companies meeting basic credit requirements are eligible to participate as buyers of RIK oil. Over the years, diverse companies have participated in this program, ranging from major oil companies to financial holding companies.



Table 5.1 summarizes the estimated revenue performance measurements for the Unrestricted Program over the past six years. In FY 2009, the Gulf Unrestricted Program realized estimated gains of \$3.39 million, significantly lower than the previous year. The decrease in revenue per barrel is primarily attributable to the affects of measuring RIK production against prices calculated using a trade month price. Crude oil prices decreased significantly during the first half of FY 2009. RIK crude oil sales contracts use "calendar month" pricing, a less favorable pricing mechanism in downward markets, instead of the earlier "trade month" pricing used in some industry sales contracts. This had an adverse affect on the overall revenue gain for RIK sales packages. While pricing affected the gain negatively, RIK still obtained premiums from purchasers on certain crude packages for which the purchaser

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⁹ Calendar Month is the period from the 1st through the last day of the production month. Trade Month is the period prior to the actual production month during which crude oil is bought and sold. This period typically begins on the 26th of the month two months prior to the production month through the 25th of the month preceding the production month.

entered into a lucrative downstream financial transaction and passed on a portion of those benefits to RIK.

UNRESTRICTED PROGRAM

	FY 2004	FY 2005	FY 2006	FY 2007	FY 2008	FY 2009
TOTAL VOLUME	778,876	10,079,297	27,865,100	27,458,666	8,956,846	22,954,571
TOTAL REVENUE	\$28,634,061	\$527,705,356	\$1,685,390,839	\$1,590,416,840	\$910,491,043	\$1,170,533,017
REVENUE GAIN (LOSS)	\$330,971	\$5,741,065	\$1,504,870	\$11,267,888	\$6,340,000	\$3,390,000
REVENUE GAIN (LOSS)/BBL	\$0.42	\$0.57	\$0.05	\$0.41	\$0.71	\$0.15

Table 5.1

5.2.1 Pacific OCS Unrestricted Oil Program

The Pacific RIK Crude Oil Program originally began as part of the Small Refiner Program. In late 2005, many of the small refiners either no longer qualified for the program or were no longer interested in bidding on the Pacific RIK production. As a result, the production was moved to the Unrestricted Program.



In the first half of FY 2009, approximately 6,000 barrels per day were taken in-kind from one offshore field: Santa Ynez. As shown in Table 5.2, the estimated revenue gain per barrel has always been significant in this program due to the strategic location of the production and the unique demand for this supply. The location is remote from foreign oil delivery points. The production is also directly connected via pipeline to a refinery in the local area. Due to both of these factors, this production had a significant competitive advantage through the first six months of FY 2009. The factors driving the competitive advantage changed dramatically in FY 2009 when the oil refinery shut down. As a result, MRM received offers below fair market value and reverted the Pacific Unrestricted Oil Program to RIV in April 2009.

PACIFIC PROGRAM

		1 70	II IC I KOOKAW			
	FY 2004	FY 2005	FY 2006	FY 2007	FY 2008	FY 2009 ¹⁰
TOTAL VOLUME	3,070,044	2,768,916	2,424,214	2,397,646	2,245,531	1,021,666
TOTAL REVENUE	\$90,612,399	\$105,848,071	\$131,190,275	\$126,955,028	\$213,924,289	\$40,102,109
REVENUE GAIN (LOSS)	\$4,987,498	\$2,770,092	\$3,028,152	\$4,303,449	\$5,870,000	\$1,800,000
REVENUE GAIN (LOSS)/BBL	\$1.62	\$1.00	\$1.25	\$1.79	\$2.62	\$1.76

Table 5.2

 $^{^{\}rm 10}$ Pacific properties only in RIK program for first six months of FY 2009

5.3 SMALL REFINER PROGRAM

The Small Refiner Program began in the 1970s as a program designed to assist domestic small refiners by providing a reliable supply of crude oil at equitable prices. Historically, these eligible refiners have supplied United States military operations with jet fuel and other energy needs on military bases. Because these small refiners do not typically have production of their own, the RIK Small Refiner Program has served an important role in helping small refiners acquire feed stock. A Small Refiner, as defined in 30 CFR section 208.4(a) and by the Small Business Administration, is a refiner of crude oil with a total operable atmospheric crude oil distillation capacity of less than or equal to 125,000 barrels per calendar day, and fewer than 1,500 employees.

SMALL REFINER PROGRAM

	FY 2004	FY 2005	FY 2006	FY 2007	FY 2008	FY 2009
TOTAL VOLUME	12,942,188	12,556,031	13,586,984	12,627,650	10,214,429	6,380,658
TOTAL REVENUE	\$447,297,868	\$597,608,325	\$833,577,818	\$781,158,791	\$1,086,726,850	\$356,529,219
REVENUE GAIN (LOSS)	\$2,873,433	\$1,803,837	(\$1,377,911)	\$3,043,275	\$9,140,000	\$2,490,000
REVENUE GAIN (LOSS)/BBL	\$0.22	\$0.14	(\$0.10) ¹¹	\$0.24	\$0.90	\$0.39

Table 5.3

In FY 2009, MRM sold all RIK packages in its Small Refiner Program for a term of one year, providing an estimated revenue gain of \$2.49 million or \$0.39 per barrel of oil. The revenue gain per barrel is attributable to the premiums paid by purchasers as described in the Unrestricted Oil Program section.

5.4 STRATEGIC PETROLEUM RESERVE (SPR) PROGRAM

MRM partnered with DOE to fill the remaining capacity of the SPR. MRM arranged for delivery of the royalty oil from offshore production facilities to onshore market centers and then transferred the production to DOE. In order to receive crude oil that meets the quality specifications for the SPR sites, DOE contracted with industry partners to exchange the royalty oil for oil of the appropriate specifications at SPR sites.

MRM previously worked with DOE to add crude oil to the SPR from 1999 to 2000 and 2002 to 2005. These efforts brought the volume of the SPR to 700 million barrels. MRM and DOE restarted the SPR fill initiative in July 2007 to fill the SPR to its capacity of 727 million barrels. Legislation was passed to suspend delivery of RIK oil for the current initiative at the end of June 2008. The SPR program resumed shipments from April 2009 until December 2009. These shipments helped DOE "top off" the SPR at its capacity of 727 billion barrels. Table 5.4 shows volume and estimated market value of the production transferred to DOE for SPR purposes. This information is as reported in the



Provided by the U.S. Department of Energy

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¹¹ FY 2006 losses were due to specific conditions in the crude oil market and the hurricanes of fall 2005.

STRATEGIC PETROLEUM RESERVE PROGRAM

	FY 2004	FY 2005	FY 2006	FY 2007	FY 2008	FY 2009
TOTAL VOLUME	38,813,488	25,608,852	0	4,304,386	16,210,265	4,493,099
TOTAL VALUE	\$1,213,007,293	\$1,194,617,678	\$0	\$306,190,550	\$1,600,026,660	\$268,536,879

Table 5.4

6. Energy Policy Act of 2005 Report Requirements

This report provides the information required by section 342 (e)(2) of the Energy Policy Act of 2005 (EPAct). The EPAct requires that, for each of Fiscal Years 2006-2015 in which the United States takes oil or gas royalties in kind from production in any State or from the OCS, excluding royalties taken in kind and sold to refineries under subsection (h)¹³, the Secretary shall submit to Congress a report that describes the following:

- 1. The one or more methodologies used by the Secretary to determine compliance with subsection (d)¹⁴, including the performance standard for comparing amounts received by the United States derived from royalties in kind to amounts likely to have been received had royalties been taken in value
- 2. An explanation of the evaluation that led the Secretary to take royalties in kind from a lease or group of leases, including the expected revenue effect of taking royalties in kind
- Actual amounts received by the United States derived from taking royalties in kind and
 costs and savings incurred by the United States associated with taking royalties in kind,
 including administrative costs savings and any new or increased administrative costs
- 4. An evaluation of other relevant public benefits or detriments associated with taking royalties in kind

¹² U.S. Department of the Interior, Agency Financial Report FY 2009, http://www.doi.gov/archive/pfm/par/afr2009/afr09_final.pdf.

 $^{^{13}}$ Subsection (h) refers specifically to the Small Refiner Program.

Subsection (d) states that "Benefit to the United States Required—The Secretary may receive oil or gas royalties in-kind only if the Secretary determines that receiving royalties in-kind provides benefits to the United States that are greater than or equal to the benefits that are likely to have been received had royalties been taken in-value."

6.1 METHODOLOGIES TO COMPARE RIK AND RIV VALUES

6.1.1 CONVERSION FROM RIV TO RIK

MRM completed a financial analysis to determine whether a property should be converted to RIK using public industry information, pipeline system maps, energy publications, transportation routes, processing options, downstream marketing routes, and index pricing. This research focused on each property's existing economic case or RIV payments and the potential options for economic improvement. MRM included transportation and, in the case of natural gas, processing bids in building this economic case. The dollar amount the Federal government was receiving in value at the time was compared with the estimated value that would be received in kind. Prior to conversion, MRM would complete a conversion document recommending whether the pipeline or properties should be converted to in-kind. That document contained pipeline maps showing properties analyzed, spreadsheet analysis comparing estimated RIK economics versus RIV reported economics, and the technical written economic case.

6.1.2 REVENUE PERFORMANCE METRICS

Given the fiduciary responsibility to the taxpayer, MRM measures the performance of the RIK Program against a calculated FMV benchmark that approximates the royalty value that the RIV Program would have received. Market price and basis volatility create risk exposure that RIK performance could be below the FMV benchmark due to the difference between the pricing mix used by RIK for selling the commodity and the pricing mix used in the FMV benchmark.

MRM computes the FMV benchmark range specific to the commodity and uses the result as the performance standard for measuring RIK performance. To compute the FMV benchmark, MRM establishes a benchmark price that reflects major liquid pricing point(s) close to RIK properties. This benchmark price is adjusted to reflect transportation, quality, processing, and various marketing possibilities and any adjustments that may have been derived from RIV or other commercial market transactions. The result is a FMV benchmark for comparison to RIK actual values netted back to the lease.

These measures meet statutory requirements to reflect commercial fair market value and a proxy for RIV. They recognize fair market value as a range of values, differentiate between forward-looking decision analysis and backward-looking measurement, use as much RIV data as possible, and use RIV data to calibrate commercial market data. (See Section 3.3 Revenue Performance in this report for more information.)

6.2 EVALUATION SUPPORTING CONVERSION OF PROPERTIES TO RIK STATUS IN FY 2009

There were no property conversions for either oil or natural gas in FY 2009.

6.3 Revenues, Costs, and Savings Incurred by RIK

The quantitative benefits of the RIK Program include reduced administrative costs, a time-value-of-money benefit from receiving payments earlier than RIV payments, and additional royalty revenue. During FY 2009, the estimated benefits of the RIK Program totaled over \$23 million, as shown in Table 6.1.

TOTAL BENEFITS OF RIK PROGRAM - FY 2009

	CRUDE OIL	NATURAL GAS	TOTAL
ADMINISTRATIVE COST SAVINGS	\$1,740,000	\$2,290,000	\$4,020,000
TIME VALUE OF MONEY BENEFIT	\$102,000	\$29,400	\$131,000
REVENUE PERFORMANCE	<u>\$7,680,000</u>	<u>\$11,500,000</u>	<u>\$19,200,000</u>
TOTAL BENEFITS	\$9,520,000	\$13,800,000	\$23,400,000

Table 6.1

Details of these benefits are presented in Section 3 of this report.

6.4 OTHER RELEVANT BENEFITS OR DETRIMENTS

Through the activities of the RIK Program, MRM staff has gained significant market knowledge regarding specific oil and natural gas markets. This knowledge is shared with other MRM offices, such as Audit and Compliance, to improve MRM operations. Sharing information between the RIK Program and other offices was an area of significant focus in FY 2009, and formal procedures for sharing information are now documented. Also, the RIK Program is in a unique position to provide data necessary in times of natural disasters, such as the hurricanes in 2005 and 2008. The RIK Program answered special information requests from both the DOE and the Department of the Interior regarding GOM infrastructure after the 2005 and 2008 hurricanes.

7. CONCLUSIONS

In FY 2009, the Secretary's announcement on September 16, 2009 marked the beginning of the phase-out of the RIK program. In FY 2010, under the orderly termination of the program, all gas sales ceased on April 30, 2010, while crude oil sales will end on September 30, 2010. To meet the EPAct reporting mandate, the RIK Program will prepare one more RIK Annual Report for FY 2010.



APPENDIX A Additional Estimated Revenue Performance Information

RIK NATURAL GAS - RIK VALUES VS. FMV BENCHMARK VALUES FY 2009 TOTALS						
REVENUE GAIN VS. FMV REVENUE PERCENT RIK VOLUMES BENCHMARK GAIN PER GAIN / SOLD (MMBTU) RIK REVENUES PRICE MMBTU LOSS						
GULF OF MEXICO	116,040,406	\$545,830,772	\$10,000,000	\$0.09	1.83%	
WYOMING	110,075,758	\$287,602,629	\$1,500,000	\$0.01	0.51%	
Total	226,116,164	\$833,433,401	\$11,500,000	\$0.05	1.38%	

RIK CRUDE OIL - RIK VALUES VS. FMV BENCHMARK VALUES FY 2009 TOTALS							
	REVENUE GAIN VS. FMV REVENUE PERCENT RIK VOLUMES BENCHMARK GAIN PER GAIN / SOLD (BBLS) RIK REVENUES PRICE BBL LOSS						
SMALL REFINER	6,380,658	\$356,529,219	\$2,490,000	\$0.39	0.70%		
UNRESTRICTED	22,954,574	\$1,170,533,017	\$3,390,000	\$0.15	0.29%		
PACIFIC 1,021,666 \$40,102,109 \$1,800,000 \$1.76 4.49%							
Total	30,356,898	\$1,567,164,345	\$7,680,000	\$0.25	0.49%		

RIK TOTALS - RIK VALUES VS. FMV BENCHMARK VALUES FY 2009 TOTALS					
REVENUE GAIN VS. FMV REVENUE PERCENT RIK VOLUMES BENCHMARK GAIN PER GAIN/ SOLD (BOE) RIK REVENUES PRICE BOE LOSS					
RIK TOTAL	69,342,444	\$2,400,597,746	\$19,180,000	\$0.28	0.80%

Notes:

- 1. Revenue performance metrics are calculated by individual property for oil and by pipeline for gas. The results are rolled-up into the reporting categories above in order to protect proprietary information regarding RIK sales.
- 2. MRM uses a portfolio approach in its RIK sales; therefore, losses may occur in individual sales packages due to diversification in purchasers, pricing, and other contract terms for overall risk mitigation.

APPENDIX B

Performance Metrics Methodology

The RIK Program has a well-defined revenue performance calculation process as part of the RIK Performance Metrics and Measurement Tools Procedures Manual and Module. This process was initiated with the assistance of an outside consulting organization, Lukens Energy Group (LEG). Although minor adjustments and modifications have altered the models in their 5-year old application, the general approach and calculation process has not changed. The procedures are outlined in detail in documents from LEG and are maintained in both paper and electronic copy.

Principles that drove the development of the Fair Market Value (FMV) benchmark methodologies are as follows:

- 1. The benchmarks implemented should adhere to statutory requirements to reflect commercial fair market value and the value that MRM would have received as royalty in value (RIV).
- 2. The FMV benchmarks should recognize that fair market value is a range of values rather than an absolute number.
- 3. The FMV benchmark methodology should be a well-defined and repeatable procedure.
- 4. The FMV benchmark methodology should be applicable across different time periods and across different groupings of properties and programs.
- 5. The FMV benchmark methodology should ensure reasonable statistical accuracy.
- 6. The FMV benchmark methodology should have reasonable labor requirements.
- 7. The FMV benchmark methodology should prescribe maintaining detailed documentation within a performance measurement system.
- 8. The FMV benchmark methodology should differentiate between forward-looking decision analysis and backward-looking performance measurement incorporating recent market conditions.
- 9. The FMV benchmark methodology should use RIV data as much as possible.
- 10. The FMV benchmark should be based on transparent market intelligence, as much as possible, when sufficient RIV data of reasonable accuracy is not available. Where appropriate, market intelligence should be calibrated with available RIV data.

MRM computes a FMV benchmark range specific to the commodity, and compares it to the RIK sales value. To compute the FMV benchmark, the Economic Analysis Office establishes a benchmark price that reflects major liquid pricing point(s) proximal to RIK properties. This benchmark price is adjusted to reflect transportation, quality, processing, and various

marketing possibilities and any adjustments that may have been derived from RIV or market intelligence data. This results in a FMV benchmark for comparison to RIK actual values, netted back to the lease.

There are a number of marketing assumptions MRM must make when calculating the FMV benchmark. The FY 2009 assumptions include the following:

1. CALENDAR AND TRADE MONTH PRICING

MRM calculated a crude oil FMV benchmark using 97.8% Calendar Month pricing and 2.2% Trade Month pricing. These percentages were determined using RIV royalty payments to establish the percent of payments using each pricing method.

2. PROCESSING MODELING

MRM calculates the natural gas processing component of the FMV benchmark using contractual terms found in standard third-party processing contracts at each individual plant.

3. Transportation Modeling

MRM calculates both crude oil and natural gas transportation component of the FMV benchmark price using the tariff specific to each individual pipeline.

4. FIRST-OF-MONTH BASELOAD VS. DAILY SWING PRICE WEIGHTING

MRM calculates a natural gas FMV benchmark price using a First-of-Month/Daily price weighting equal to the same proportion that MRM sold production.

5. FINANCIAL KEEPWHOLE

MRM includes any financial keepwhole charges incurred during the course of the natural gas sales in the FMV benchmark price.

6. PRICING MODELED USING MIDPOINT AVERAGES

MRM calculates the natural gas FMV benchmark price using the First-of-Month and Daily midpoint prices, rather than either the high or the low price in the range.

MRM reexamines these assumptions every year to verify that they are still valid and to make adjustments when necessary.

APPENDIX C FMV BENCHMARK RANGE OF VALUES

RIK revenue performance measures the financial success and estimated economic benefits of the RIK Program by comparing RIK sales receipts to a Fair Market Value (FMV) benchmark. The FMV benchmark is an approximation of what the average third-party may have sold the same production for and estimates what royalty revenues MRM would expect to see, on average, through Royalty in Value.

Both the Government Accountability Office (GAO) and Royalty Policy Committee (RPC) have recommended that RIK present a range of estimated performances based on the FMV benchmark calculations. The GAO stressed that uncertainty exists in the revenue performance calculation because of underlying assumptions made by the Economic Analysis Office (EAO) and that this method does not meet Office of Management and Budget guidelines (GAO-08-942R).

MRM believes that the most effective method to present this range of possible performances is to vary key assumptions MRM makes about each specific product. This will provide sensitivity for all underlying assumptions.

RIK REVENUE PERFORMANCE AS RANGE OF VALUES					
	Low	REPORTED	High		
NATURAL GAS	(\$17,210,000)	\$11,500,000	\$44,200,000		
CRUDE OIL	(\$8,055,000)	\$7,680,000	\$8,230,000		
TOTAL	(\$25,300,000)	\$19,200,000	\$52,400,000		

C.1 OIL

Historically, the primary assumption in calculating a FMV benchmark for GOM crude oil was to use a weighting of 90% Calendar Month Average (CMA) and 10% Trade Month Average (TMA) in an attempt to mirror the ratio found in the oil markets. This ratio was based on unsubstantiated market intelligence obtained from Oil Front Office personnel and from third party oil marketing representatives.

In an effort to establish a more measureable, repeatable, and defendable assumption, EAO conducted an analysis of FY 2009 GOM RIV crude oil values to determine the percent of RIV volumes sold on a trade month and calendar month prices. This was possible due to the large crude oil price swings in the later half of FY 2008 and the first half of FY 2009. The difference between the calendar and trade month price was as much as \$30 due to the large swings in crude oil prices. The disparity in prices allowed MRM to estimate which price basis was used for a particular RIV payment. EAO determined that on average 97.8% of RIV

royalty payments were made on a calendar month basis and the remaining 2.2% on a trade month basis.

To manage uncertainty in this analysis, EAO developed a range using the highest and lowest crude oil differentials by month giving the benefit of the doubt to calendar and trade month pricing. The chart below shows the percentages used based on this analysis and the respective revenue gain (loss) by program.

FY 2009 RIK CRUDE OIL ESTIMATED REVENUE PERFORMANCE RANGE						
	REVENUE GAIN (LOSS) USING 87.8% CMA, 12.2% TM	REVENUE GAIN (LOSS) USING 97.8% CMA, 2.2% TM	REVENUE GAIN (LOSS) USING 98.2% CMA, 1.8%TM			
SMALL REFINER	(\$675,000)	\$2,490,000	\$2,550,000			
UNRESTRICTED	(\$9,180,000)	\$3,390,000	\$3,880,000			
PACIFIC ¹⁵	\$1,800,000	\$1,800,000	\$1,800,000			
TOTAL	(\$8,055,000)	\$7,680,000	\$8,230,000			
REPORTED REVENUE GAIN						

C.2 NATURAL GAS

For natural gas, one assumption MRM uses to calculate a FMV benchmark is to use a weighting between First-of-Month (FOM) and Gas Daily pricing equal to the baseload and swing volume weightings of the actual RIK sales by month and package. MRM has calculated alternative gas revenue performance numbers using weightings of 70% FOM, 30% Gas Daily (a weighting that market research indicates is common in the industry); and 100% FOM and 100% Gas Daily pricing to create a range of value around critical marketing assumptions.

Another assumption made by MRM is to calculate the FMV benchmark price using the midpoint average prices for both FOM and Gas Daily. Publications survey companies selling gas at fixed "cash" prices on the spot market to develop a range of gas prices for a particular day or month and pricing point. The publications then use these fixed prices to develop the "index" or midpoint price. MRM sells all RIK gas at this midpoint index price, as do most other producers, but MRM recognizes that gas is sold at both these low and high prices. As such, MRM has created a revenue performance range using the low and high prices as the benchmark price, rather than the midpoint price. The average difference between the midpoint price and both the low and high price using the Henry Hub index for GOM production and the Northwest Pipeline index for Wyoming production is shown in the following chart. MRM has created a "Midpoint Price Variance" range by adjusting the estimated revenue performance both up and down by these differences.

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¹⁵ Pacific is not measured using Calendar and Trade Month prices.

GOM		Wyoming	
Henry Hu	ub Index	NWPL	. Index
Low Price	High Price	Low Price High Price	
(\$0.023)	\$0.052	(\$0.151)	\$0.169

Midpoint Price Variance

MRM also assumed in performance calculations that the financial keepwhole costs¹⁶ should be treated with neutrality in the gas revenue performance. MRM has calculated an alternative gas revenue performance number assuming that financial keepwhole costs should only apply to RIK revenues, not the FMV benchmark calculation.

MRM believes that the current natural gas price weighting is most appropriate because it allows individual revenue elements such as transportation, processing, and market pricing to be more-readily measured. Likewise, MRM believes that measuring performance using midpoint pricing is appropriate, given that the use of the low or high price in the range makes the unreasonable assumption that all gas is sold at that price. Lastly, MRM believes that the current handling of the financial keepwhole is appropriate because a producer, similarly situated as MRM, would have to include this provision in order to sell their gas.

REPORTED ESTIMATED REVENUE GAIN						
	\$11,500,000	(1)				
REVENUE DIFFERENTIALS TO R	REPORTED GAIN					
Price Weightings						
70% FOM - 30% GD	(\$6,550,000)					
100% FOM	(\$9,480,000)	(2)				
100% GD	\$7,600,000	(3)				
Midpoint Price Variance						
Using Lowest Price in Range	\$24,580,000	(4)				
Using Highest Price in Range	(\$19,230,000)	(5)				
Financial Keepwhole	\$546,857	(6)				
REVENUE RANGI	REVENUE RANGE					
(1) + (2) + (5) Low	(\$17,210,000)					
(1) + (3) + (4) + (6) High	\$44,226,857					

The above table presents the difference between the reported estimated natural gas revenue gain and the revenue gain calculated using the specified alternative marketing assumptions. The low and high range adds together the extremes in each assumption. The "low" performance in the financial keepwhole assumption occurs in our reported performance, so no adjustment is made for this component in the low range.

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¹⁶ Financial keepwhole is the method specified in natural gas sales documents to financially compensate either the purchaser or seller, depending on the monthly and daily natural gas prices, when the delivered volume is less than the agreed to baseload volume on any particular day.

APPENDIX D

OIL PERFORMANCE DETAIL BY SALES PACKAGE

The Government Accountability Office (GAO) recommended that RIK "disaggregate the oil sales data to show the variation in the performance of individual sales" by disclosing the number of properties with revenue gains and those with revenue losses. The GAO stated that this information could be useful to the Congress in its evaluation of the RIK program. The following table shows totaled property gain/loss by Oil Program.

OIL PROGRAM	# OF REVENUE GAIN PROPERTIES	# of Revenue Loss Properties	TOTAL # OF PROPERTIES
UNR	49	11	60
SR	24	1	25
PACIFIC	1	0	1
TOTAL	74	12	86

APPENDIX E

SECRETARY SALAZAR RIK TERMINATION MEMORANDUM



United States Department of the Interior

OFFICE OF THE SECRETARY Washington, DC 20240

December 8, 2009



Memorandum

To:

Wilma A. Lewis

Assistant Secretary, Land and Minerals Management

From:

Ken Salazar

Secretary

Subject:

Termination of the Royalty in Kind Program

In my testimony before the House Natural Resources Committee on September 16, 2009, I announced my decision to terminate the Royalty in Kind (RIK) program. The decision to terminate the program comes after a thorough review and is based upon my strong conviction that the Department of the Interior should be regulating, not participating in, industry activities, as well as concerns that have been raised regarding the program's capacity to ensure transparency and a fair return to the taxpayer.

As we have discussed previously, you should proceed with the termination of the RIK program. Working with and through the Director of the Minerals Management Service, the program should be terminated in a manner that incorporates the following guiding principles:

- Our employees are the Department's greatest asset. You should therefore strive to
 minimize, to the greatest extent possible, adverse impact to our employees in the RIK
 program. You should work with the Department and other agencies to utilize all
 available tools and opportunities to minimize employment impacts. You should also
 endeavor, through appropriate communication, to keep RIK employees apprised of
 relevant information as the transition progresses.
- The effective performance of the Department's mission is our primary responsibility. You should ensure that the termination of the RIK program will not adversely affect the Minerals Management Service's commitment to ensuring that the nation's Federal and Indian energy and mineral revenues are accurately reported and paid in compliance with laws, regulations and lease terms and that the American people receive fair market value for their valuable energy and mineral resources.
- Conduct the termination in a deliberate and orderly fashion with adherence to proper internal controls, record keeping, accounting standards, applicable laws and regulations, and established procedures.
- · Honor all existing RIK sales contracts.
- Cease all future RIK sales.
- Consult with the Office of the Solicitor regarding whether a new determination of need is necessary before a decision is made about the Small Refiner program.
- Work with the Bureau of Land Management to transition the sale of natural gas produced from the National Helium Reserve.

I look forward to receiving periodic reports on the progress of the activities associated with the termination of the RIK program.