BOARD STAFF INTERROGATORY #1

INTERROGATORY

Ref: ExA/T2/S1/Appendix/page 1

Please list the accounts and associated balances that have already undergone a formal Board review process and have obtained Board approval.

RESPONSE

The following are the accounts that have already been reviewed and received Board approval for clearance.

Witnesses: K. Culbert
R. Small

Account	Principal Balance ($)		Board Review Proceeding
2010 Demand Side Management V/A	2,717,105		EB-2012-0192
2010 Lost Revenue Adjustment Mechanism	42,858		EB-2012-0192
2010 Shared Savings Mechanism V/A	4,155,288		EB-2012-0192
2012 Class Action Suit D/A	23,547,735	[1]	EB-2007-0731
2012 Open Bill Service D/A	526,150	[2]	EB-2009-0043/EB-2010-0042
2012 Open Bill Access V/A	476,667	[2]	EB-2009-0043

Notes:

1. The EB-2007-0731 Decision approved the clearance of the CASDA balance in equal installments over a five year period beginning in 2008. The 2008 installment was approved in EB-2007-0615 and cleared in July and August 2008. The 2009 installment was approved in EB-2009-0055 and cleared in April and May 2010. The 2010 installment was approved in EB-2010-0042 and cleared in January 2011. The 2011 installment was approved EB-2011-0008 and cleared in October, 2011. The resulting balance at November 2011 is $4,709,547 (($23,547,735 - ($4,709,547 x 4 clearance installments)). The Company is seeking clearance of the 2012 portion within this proceeding.

2. In the EB-2009-0043 Decision/Settlement Agreement the Board approved the clearance of the balances in the 2008 Open Bill Service D/A of $309,370 and 2008 Open Bill Access V/A of $476,667. An additional $216,780 for TMG, OBA stakeholder, and start up legal charges was recorded in the 2009 Open Bill Service D/A during 2009 and was explained, reviewed, and approved for clearance in the same manner as the other costs in these accounts within EB-2010-0042. The additional costs were also considered in EB-2009-0043, but the exact amount was not known at the time of that proceeding. The balances are to be cleared over a three year period, 2010 to 2012, and are to be shared equally between the Company and ratepayers. The 2010 ratepayer share was approved for clearance in EB-2010-0042 and cleared in January 2011. The 2011 installment was approved EB-2011-0008 and cleared in October, 2011. The Company is seeking clearance of the 2012 ratepayer share in this proceeding.

Witnesses: K. Culbert
R. Small

BOARD STAFF INTERROGATORY #2

INTERROGATORY

Ref: ExB/T1/S1/page 4 of 6 para 14

Please provide the calculation details underpinning the ROE established for 2011 for which the earnings sharing formula applies. Please provide the reference to the proceeding in which the Board approved this particular ROE for use in 2011 earnings sharing.

RESPONSE

Determination of ROE for 2011

Col. 1	*Col. 2*	*Col. 3*	*Col. 4*	*Col. 5*	*Col. 6*	*Col. 7*	*Col. 8*
Yield on 10s 3 Months Out[a]	Yield on 10s 12 Months Out[a]	Average 10s Yield	Average Spread (30s-10s)[b]	Long Bond Forecast	Difference in Long Bond Forecast	0.75x Difference (Rounded to 2 Decimal Places)	ROE (%)
		(Col. 1+Col. 2)/2		Col. 3+Col. 4	Col. 5-4.23	0.75xCol. 6	8.37+Col. 7
2.80	3.30	3.05	0.60	3.65	-0.58	-0.43	7.94

Notes:
2010 ROE: 8.37
2010 Long Canada Forecast: 4.23
[a] From Consensus Forecasts October 11, 2010
[b] From Financial Post

Based on the October 2010 Consensus Forecasts publication and the data provided in the Financial Post, ROE for 2011 is 7.94%.

While the parameters to be used within the formula are previously approved by the Board, the results of the application of the parameters and the results of the formula for use in the 2011 earnings sharing calculation have not previously been approved. The Company is seeking approval of the formula results within this proceeding.

Witnesses: K. Culbert
S. Murray
R. Small

BOARD STAFF INTERROGATORY #3

INTERROGATORY

Ref: Ref: ExB/T3/S1/pages 3-4

Please provide the composition of the TS and TSDA amounts and the basis for the adjustment to utility revenue.

RESPONSE

See the attached table for the compositions. As per the EB-2007-0615 Approved Agreement, the transactional services shareholder incentives and amounts included in the TSDA are not included in the calculation of the ESM, Exhibit N, Tab 1, Schedule 1, page 27.

Witnesses: K. Culbert
D. Small

Item #	Column 1	Column 2	Column 3	Column 4
	2011 - Actual	Storage Optimization $(000's)	Pipeline Optimization $(000's)	
1.	Net Revenue	3,464.5	16,318.5	19,783.0
	Rate Payer - %	90.00%	75.00%	
2.	Rate Payer - $(000's)	3,118.1	12,238.9	15,356.9
3.	Amount Included in Rates			(8,000.0)
4.	Amount Transferred to 2011 TSDA			7,356.9

Witnesses: K. Culbert
D. Small

BOARD STAFF INTERROGATORY #4

INTERROGATORY

Ref: ExC/T2/S2/pages 3-4

Have any changes been made to the methods previously applied by Enbridge to allocate deferral account balances and earnings sharing amounts to rate classes? If so, then please provide details of such changes and the rationale for proposing that the method previously applied be changed.

RESPONSE

No, Enbridge Gas Distribution has not made any changes to the methods previously applied by the Company to allocate deferral and variance account balances and earnings sharing amounts to its rate classes.

Please note that the 2011 clearance is the first time the Mean Daily Volume Mechanism Deferral Account ("MDVMDA") balance will be disposed to customers. The proposed allocation treatment for MDVMDA is presented at Exhibit C, Tab 2, Schedule 1, page 2.

Witnesses: J. Collier
A. Kacicnik
M. Kirk

BOARD STAFF INTERROGATORY #5

INTERROGATORY

Ref: ExB/Tab 4/S2/page 1

Please provide (more) detailed explanations for the following changes

a. Provision for uncollectibles (Line 5)

b. Pipeline integrity and safety (Line 13)

c. Public and government affairs (Line 14)

d. Non-departmental expenses (Line 15)

RESPONSE

a. Please refer to the response to CME Interrogatory #4 at Exhibit I, Tab 2, Schedule 4.

b. Higher damage prevention costs were driven by higher locates which increased significantly from 2010 to 2011 due to higher customer requests as a result of the increased awareness of people on “Call before you dig” and through the sewer safety program. Higher Environment, Health, and Safety (“EHS”) costs are primarily due to activities related to the Path to Zero initiative (focus on enhancing worker and contractor safety) as well as other EHS training and safety challenge initiatives.

c. The $0.8 million variance between the 2011 and 2010 actuals reflects a number of new initiatives including the Fire Marshal’s Public Safety Council Project Assist sponsorships, administration for the Low Income Assistance Program (“LEAP”), and also the increased costs for customer communications.

d. Non-departmental expenses increased by $5.3 million mainly due to Short Term Incentive Program cost increases of $5.5 million driven by higher performance multiplier and higher salary base.

Witness: R. Lei

BOARD STAFF INTERROGATORY #6

INTERROGATORY

Ref: ExA/T2/S1/Appendix A/line 23

Please provide Enbridge's Unaccounted for Gas ("UAF") as a percentage of total gas sendout for each of the last 5 years and compare with Union Gas

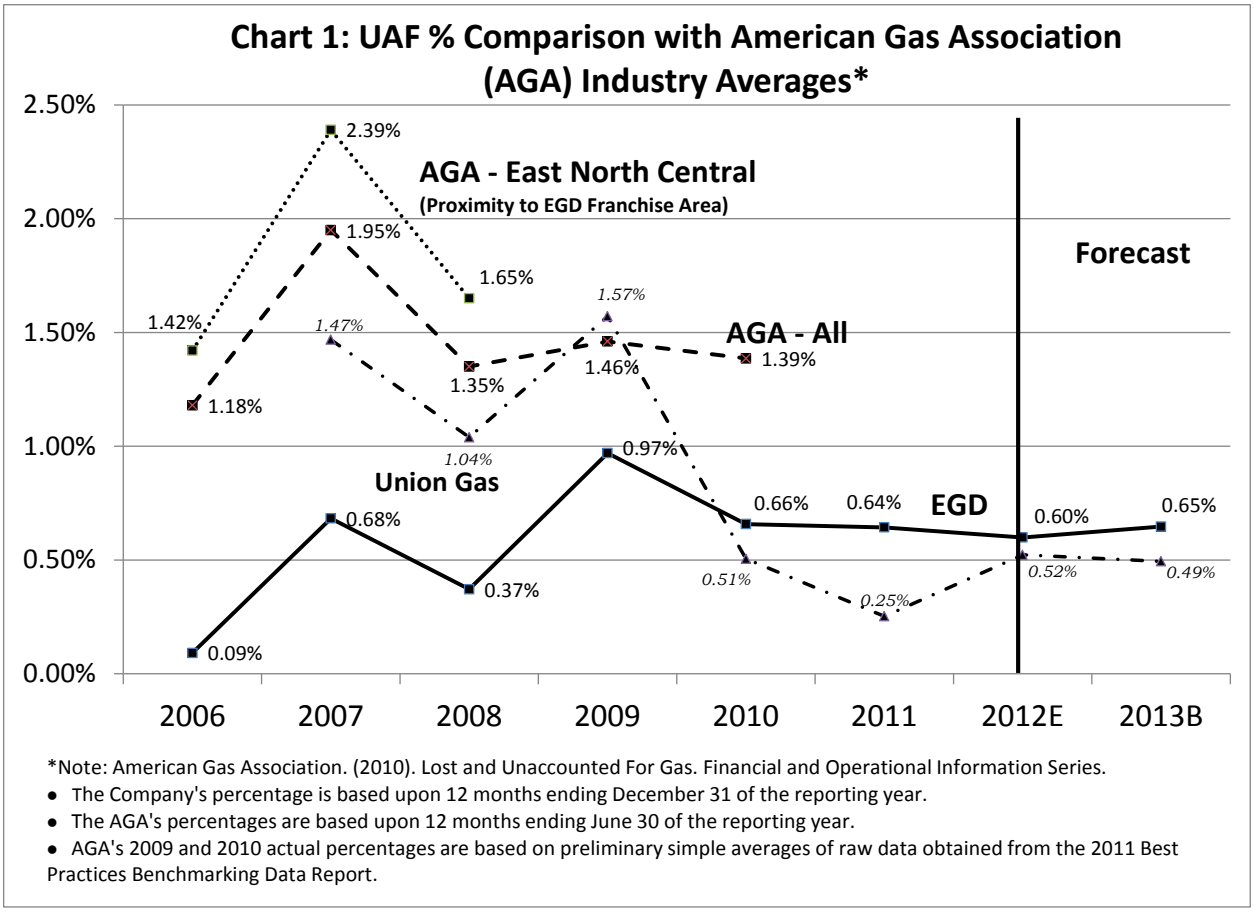
RESPONSE

Chart 1 on the next page compares the Company's UAF as a percentage of total gas sendout for each of the last five years with Union Gas as well as American Gas Association ("AGA") industry averages of 172 utilities in North America.[1] It illustrates the Company's UAF percentage has been consistently lower than the American Gas Association ("AGA") industry averages.

As different gas utilities have different metering variations and operational and uncontrollable external factors of UAF,[2] these factors of UAF have to be assessed when comparing the Company's UAF with another specific utility. It may be more accurate to undertake the comparison in relation to the AGA industry averages of 172 utilities within North America, because the large sample will largely balance out these factors. Examples of these factors are number of total meters, number of total residential meters, utilization of third party transmission pipelines (i.e., reliance on their meters and billings) or own transmission pipelines, number of construction activities within the franchise area, characteristics of the distribution system and characteristics of the geographic area served.

[1] American Gas Association. (2010). Lost and Unaccounted For Gas. Financial and Operational Information Series.
[2] Please refer to EB-2011-0354, Exhibit D2, Tab 6, Schedule 1 for a detailed description of these factors of UAF.

Witness: I. Chan



*Note: American Gas Association. (2010). Lost and Unaccounted For Gas. Financial and Operational Information Series.

- The Company's percentage is based upon 12 months ending December 31 of the reporting year.
- The AGA's percentages are based upon 12 months ending June 30 of the reporting year.
- AGA's 2009 and 2010 actual percentages are based on preliminary simple averages of raw data obtained from the 2011 Best Practices Benchmarking Data Report.

BOARD STAFF INTERROGATORY #7

INTERROGATORY

Ref: ExA/T2/S1/Appendix A/line 23

What is being done to control, manage and reduce the UAF that results from factors other than measurement variation (i.e. leaks & damage to pipes, release to atmosphere during maintenance, and theft)?

RESPONSE

Please refer to the Unaccounted for Gas Study filed under 2013 Test Year Rates Proceeding, EB-2011-0354, Exhibit D2, Tab 6, Schedule 1. The study establishes that the Company either already embraces or has work in progress related to sixteen out of twenty steps identified from the industry benchmarking best practices in measuring, controlling the variability, and managing the UAF. In some cases, the Company goes beyond the best practices and undertakes additional steps to minimize the measurement variations when possible. The remaining four practices that the Company has not implemented relate to using energy instead of volumetric units in billing end-use customers. The Company is currently not aware of other gas utilities within Ontario that have initiated this practice. As evidenced in Chart 1 on page 3 of the study, the Company's UAF percentage has been consistently lower than the industry averages of 172 utilities within North America.

Witness: I. Chan

BOARD STAFF INTERROGATORY #8

INTERROGATORY

Ref: ExA/T2/S1/Appendix A/line 23

If there are programs or initiatives in place to control, manage and reduce UAF, what are the costs of these initiatives?

RESPONSE

The Company's activities to address UAF are described in response to Board Staff Interrogatory #7 (Exhibit I, Tab 1, Schedule 7). As many of these activities are part of broader utility initiatives, Enbridge is not able to segregate costs associated with UAF issues.

Witness: I. Chan

CME INTERROGATORY #1

INTERROGATORY

Ref: Exhibit B, Tab 1

In EB-2011-0354, CME sought information relating to the gross sufficiency for 2008, 2009, 2010 and 2011 presented in materials filed in its various Earnings Sharing Mechanism ("ESM") proceedings for each of those years. CME requests that the IR Response from EB-2011-0354 also be filed in this case. To this end, please file IR #1 under issues F.2 and 0.3 from EB-2011-0354.

RESPONSE

The information shown in Exhibit B, Tab 1, Schedules 1 through 3, provides the same comparisons of information for 2011 that have been requested in the CME interrogatory referenced above in the EB-2011-0354 proceeding. The information related to the 2008 to 2010 years requested in that interrogatory is not pertinent to the 2011 ESM proceeding. Further, it is not anticipated that the interrogatory response in the EB-2011-0354 proceeding will be complete and filed until August 3, 2012 and therefore cannot be provided within the timelines provided for in this proceeding.

Witnesses: K. Culbert
R. Small

CME INTERROGATORY #2

INTERROGATORY

Ref: Exhibit B, Tab 1

In EB-2011-0354, CME sought information about the Firm Transportation Risk Alleviation Mechanism ("FT-RAM"), which was introduced by TransCanada Pipelines Limited ("TCPL") as a means of enabling its shippers to mitigate their Unutilized Demand Charges ("UDC"). CME wishes to have this information put on the record in this Application. Please file IR #1 under issue C6 from EB-2011-0354.

RESPONSE

The CME Interrogatory from the 2013 rebasing application referenced above requires a lot of information to be complied. It will not be completed in time to meet the filing deadline for interrogatories in the 2011 ESM proceeding however, every effort will be made to have the responses available prior to the start of ADR for the 2011 ESM proceeding.

However, in order to provide information at this time about EGD's use of FT-RAM, the Company attaches copies of responses to two Interrogatories in the current TCPL Application for Business and Services Restructuring Proposal RH-003-2011

Witnesses: K. Culbert
R. Small

5. References:

(i) Written Evidence of the MAS, pages 32, line 10-11.
(ii) Written Evidence of the MAS, page 33, lines 20-26 and page 34, lines 1-3.

Preamble

Reference (i) states: "MAS believe that RAM provides a unique tool for Mainline long haul FT shippers to mitigate their risk of unutilized demand charges and differentiates TCPL from other pipelines."

Further, in reference (ii) MAS states: "TCPL reported that $440 million of RAM credits were applied by Mainline shippers in 2010. [reference cited] These applied credits demonstrate the value of RAM to Mainline shippers who make use of the RAM feature. Clearly the value of these RAM credits are material to Mainline shippers who use RAM and far exceeds any potential derived calculation that eliminating RAM *may* increase annual discretionary revenue that would otherwise lower Mainline tolls. TCPL has added only $50 million of discretionary revenue to reflect their recommendation to eliminate RAM, so this appears to be a poor trade-off."

TransCanada requires additional information to better understand how EGD extracts value from RAM and the value that EGD places on RAM.

Requests:

(a) Please provide a detailed explanation of how EGD utilizes the RAM feature in relation to its individual contract profile and gas management strategy.
(b) For the period starting November, 2004, please provide a table showing all assignments of Mainline FT by month for transportation from EGD that exceeds 4,000 GJ/D. Please include: assignee, receipt point, delivery point, Toll and volume since November 2004.
(c) For all assignments in (b) above, please provide any costs invoiced either from assignee to EGD or from EGD to the assignee as a result of the assignments in $/GJ.
(d) For all assignments in (b) above, please provide any other consideration (such as discounted storage, delivered gas, or any other consideration) provided either from assignee to EGD or from EGD to the assignee as a result of the assignment in $/GJs.
(e) Please provide details on any arrangements EGD has entered into with third Parties for purposes of managing EGD's transportation contracts and/or transportation requirements on TransCanada for 2012. Please also provide a forecast for any additional arrangements EGD plans to enter into for these arrangements.
(f) Based on TransCanada's Mainline Transportation Invoices to EGD please provide on a monthly basis, EGD's Total Interruptible Transportation charges (before RAM Credits) and the Net Interruptible charges (after RAM Credits) for Mainline service from November 2004 to March 2012.
(g) Please provide the quantities of FT and STS not utilized which account for the RAM dollar figures outlined in (f) above. Please provide the quantities and transportation paths, by month, from November 2004 to March 2012.

(h) For the years 2004 through 2012, please provide a detailed explanation of how the value derived from the assignment of Mainline capacity is credited in whole or in part to EGD's rate payers. If any portion of revenue derived through the assignment of Mainline capacity is retained by EGD shareholders, please identify the mechanism and dollar amounts.
(i) In each year from 2004 through 2011, what was the total amount received by EGD through RAM and what was the share credited to EGD's customers.
(j) Please provide a forecast for the period 2012 through 2017 of the total amount expected to be received by EGD through RAM and the share of that amount expected to be credited to EGD's customers.
(k) Prior to the implementation of RAM, please describe how EGD mitigated its unutilized demand charges.

Response:

a) All TransCanada Mainline capacity is contracted by EGDI to meet the needs of its utility customers. Since the inception of RAM in 2004 EGDI has kept its long haul Mainline capacity flowing at a 100% load factor. As such EGDI has never accrued any long haul credits related to the RAM service. During periods of reduced demand and restrictions, typically during the summer months, EGDI temporarily releases parts of its long haul Mainline capacity to third parties. Tied to each release is an exchange through which EGDI delivers gas at Empress and receives an equivalent volume of gas at Dawn.

   In November of 2007 TransCanada attached the RAM feature to STS contracts. Enbridge operates its STS contracts dependent on utility demand. RAM credits are accumulated during the winter period when the utility does not require maximum STS flow. These credits are then used to offset charges related to the use of IT for managing storage balances. The ratepayer receives 100% of this benefit in the form of lower transportation charges. Any remaining RAM credits are optimized in the secondary market and shared between the ratepayer and shareholder.

b) EGDI objects to filing the information requested on the ground that it is commercially sensitive information that EGDI has consistently treated as confidential and the disclosure of which could reasonably be expect to result in a material loss to the company or its customers. EGDI would require the consent of its counterparties to provide this information.

c) Please see the response to (b) above.

d) Please see the response to (b) above.

e) Please see the response to (b) above.

f) As explained in the response to (a) above EGDI has never accrued any long haul credits related to the RAM service. Please see the table below for EGDI IT charges and net IT charges from January 2007 to March 2012.

Enbridge Invoice Summary: TransCanada Mainline Interruptible Transportation			
Month	**Total Interruptible Transportation Charges ($ 000)**	**Applied RAM Credits ($ 000)**	**Net Interruptible Transportation Charges ($ 000)**
Jan-07	$77.3	$0.0	$77.3
Feb-07	$13.1	$0.0	$13.1
Mar-07	$217.8	$0.0	$217.8
Apr-07	$102.8	$0.0	$102.8
May-07	$262.3	$0.0	$262.3
Jun-07	$313.7	$0.0	$313.7
Jul-07	$256.4	$0.0	$256.4
Aug-07	$246.2	$0.0	$246.2
Sep-07	$348.9	$0.0	$348.9
Oct-07	$259.7	$0.0	$259.7
Nov-07	$453.3	$418.2	$35.1
Dec-07	$118.5	$111.0	$7.5
Jan-08	$337.0	$315.0	$22.0
Feb-08	$241.7	$225.6	$16.0
Mar-08	$425.2	$395.7	$29.4
Apr-08	$253.5	$239.1	$14.4
May-08	$341.6	$0.0	$341.6
Jun-08	$439.3	$0.0	$439.3
Jul-08	$336.8	$0.0	$336.8
Aug-08	$292.0	$0.0	$292.0
Sep-08	$326.6	$0.0	$326.6
Oct-08	$142.9	$0.0	$142.9
Nov-08	$424.6	$390.4	$34.2
Dec-08	$340.2	$283.2	$57.0
Jan-09	$142.3	$132.1	$10.3
Feb-09	$253.2	$140.3	$112.9
Mar-09	$333.9	$304.9	$29.0
Apr-09	$269.9	$157.4	$112.5
May-09	$131.1	$0.0	$131.1
Jun-09	$276.3	$0.0	$276.3
Jul-09	$130.4	$0.0	$130.4
Aug-09	$164.8	$0.0	$164.8
Sep-09	$311.9	$0.0	$311.9
Oct-09	$47.8	$0.0	$47.8
Nov-09	$439.2	$407.8	$31.4
Dec-09	$166.9	$154.9	$12.0
Jan-10	$194.7	$186.6	$8.1
Feb-10	$224.7	$215.5	$9.1

Mar-10	$493.1	$472.4	$20.7
Apr-10	$272.7	$250.1	$22.6
May-10	$173.4	$0.0	$173.4
Jun-10	$151.6	$0.0	$151.6
Jul-10	$112.6	$0.0	$112.6
Aug-10	$173.4	$0.0	$173.4
Sep-10	$222.1	$0.0	$222.1
Oct-10	$4.5	$0.0	$4.5
Nov-10	$431.0	$414.3	$16.7
Dec-10	$217.2	$208.8	$8.4
Jan-11	$171.3	$164.8	$6.5
Feb-11	$169.7	$163.1	$6.6
Mar-11	$470.7	$442.8	$28.0
Apr-11	$338.7	$316.5	$22.2
May-11	$172.7	$0.0	$172.7
Jun-11	$91.5	$0.0	$91.5
Jul-11	$177.6	$0.0	$177.6
Aug-11	$236.5	$0.0	$236.5
Sep-11	$148.3	$0.0	$148.3
Oct-11	$55.8	$0.0	$55.8
Nov-11	$647.3	$608.8	$38.5
Dec-11	$651.4	$612.8	$38.6
Jan-12	$402.4	$375.9	$26.6
Feb-12	$586.7	$540.7	$46.0
Mar-12	$424.0	$398.9	$25.2

g) EGDI declines to provide the requested information on the grounds that the request is unreasonable. The time and effort involved in the preparation of a response are not warranted by the probative value of the result. In an effort to assist parties in understanding EGDI's utilization of STS and the associated RAM credits please see response to (h) above and the table below.

As discussed in (a) EGDI has flowed its long haul Mainline capacity at a 100% load factor and as a result has not accrued any long haul credits related to the RAM service. EGDI accumulates and optimizes RAM credits related to STS each winter. EGDI has done so since the inception of STS-RAM in November of 2007. Please see the table below for unutilized STS capacity from November 2007 to March 2012 for the EGDI CDA and EGDI EDA.

Summary of Enbridge Unutilized STS Capacity		
Month	**Parkway to Enbridge CDA (PJ)**	**Parkway to Enbridge EDA (PJ)**
Nov-07	6.7	1.6
Dec-07	4.4	1.2

Jan-08	4.5	1.4
Feb-08	3.4	0.9
Mar-08	5.8	1.6
Apr-08	3.7	0.7
May-08	-	-
Jun-08	-	-
Jul-08	-	-
Aug-08	-	-
Sep-08	-	-
Oct-08	-	-
Nov-08	5.5	1.2
Dec-08	4.0	0.8
Jan-09	0.8	0.7
Feb-09	2.7	0.9
Mar-09	5.5	1.3
Apr-09	3.0	0.6
May-09	-	-
Jun-09	-	-
Jul-09	-	-
Aug-09	-	-
Sep-09	-	-
Oct-09	-	-
Nov-09	6.9	1.9
Dec-09	2.2	1.0
Jan-10	1.9	0.8
Feb-10	2.8	0.8
Mar-10	6.6	1.6
Apr-10	4.1	0.6
May-10	-	-
Jun-10	-	-
Jul-10	-	-
Aug-10	-	-
Sep-10	-	-
Oct-10	-	-
Nov-10	5.6	1.4
Dec-10	1.8	1.1
Jan-11	1.5	0.8
Feb-11	1.9	0.9
Mar-11	3.2	1.4
Apr-11	3.2	0.7
May-11	-	-
Jun-11	-	-

Jul-11	-	-
Aug-11	-	-
Sep-11	-	-
Oct-11	-	-
Nov-11	7.1	1.0
Dec-11	6.3	1.4
Jan-12	3.8	0.8
Feb-12	5.3	1.2
Mar-12	4.8	0.7

h) RAM credits are first used to offset the cost of IT service incurred by the utility. Ratepayers receive 100% of the RAM benefit in this case through lower transportation charges. In addition, EGDI currently guarantees $8 million of transportation optimization revenue and storage optimization revenue, in aggregate, to its ratepayers. The optimization activities and associated dollar amounts underpinning this guarantee were not and have not been explicitly identified. This guarantee is credited to the revenue requirement prior to calculating the rates EGDI charges its customers. In the event that optimization revenue is greater than the guarantee, EGDI shares these amounts with its ratepayers. Currently transportation optimization revenues are shared 75% to the rate payer and 25% to the shareholder. For an explanation of how EGDI utilizes the RAM feature please see response to (a) above.

i) Please refer to the response to (a) above for a description of how EGDI utilizes the RAM attribute and the response to (h) above for an explanation of how EGDI shares optimization revenues. The table below shows RAM credits, the amount of RAM credits optimized and the optimization revenue shared with the ratepayer.

Year	**Total RAM Credits (000's)**	**RAM Credit $'s Optimized (000's)**	**TS Revenue (000's)**	**Ratepayer Benefit from RAM Credits (100%) (000's)**	**Ratepayer Share of Optimization Revenue (75%) (000's)**	**Total Ratepayer Benefit (000's)**
	a	**b**	**c**	**d=a-b**	**e=0.75xc**	**d+e**
2007	$529.1	$333.2	$75.0	$195.9	$56.2	$252.1
2008	$1,849.0	$1,155.9	$406.3	$693.1	$304.7	$997.8
2009	$1,297.3	$1,125.5	$476.3	$171.8	$357.2	$529.1
2010	$1,747.8	$1,546.1	$489.0	$201.7	$366.7	$568.4
2011	$2,308.9	$2,105.7	$819.4	$203.1	$614.5	$817.7

j) EGDI does not forecast specific elements of or revenues related to its optimization activities. Please see response to (h) above.

k) EGDI has always attempted to eliminate or minimize unutilized demand charges on long haul by using storage services and maintaining sufficient diversity in its transportation portfolio.

Prior to the implementation of RAM any unutilized demand charges were mitigated through optimization activities. In rare instances, if unutilized demand charges were forecast and incurred, they would have been recovered from the ratepayer.

6. Reference:

(i) Written Evidence of the MAS, page 33, lines 18-19.

Preamble: In Reference (i) MAS states: "Retaining the status quo for RAM now is more important than ever to provide Mainline shippers market and service stability."

TransCanada seeks to obtain more information on EGD's desire to retain RAM and the impact on EGD's ratepayer.

Requests:

(a) Please provide EGD's actual RAM revenue and exchange revenue in 2011.
(b) Please provide EGD's forecast RAM revenue and exchange revenue in 2012.
(c) Has EGD provided any forecast of RAM revenue to any other regulators for2013? If so, how much is EGD forecasting for RAM revenue and exchange revenue in 2013?
(d) If the response to (c) is yes, please provide that forecast and any filed documents which pertain to EGD's use of RAM.
(e) Given the information in (b) and (c) above, please describe how EGD's rate payer and shareholder will benefit if RAM is continued, relative to if RAM is discontinued.

Response:

a) EGDI optimized $2.1 million of RAM credits in 2011, generating approximately $0.82 million in exchange revenue. Please refer to the response to 1.5(i).

b) Please see response to 1.5(j).

c) No. Please see response to 1.5(j).

d) Please see response to (c).

e) EGDI utilizes the RAM credits it generates to offset any IT costs it incurs. 100% of these IT savings accrue to the ratepayer. Any unutilized RAM credits are then optimized and revenues generated are shared between the ratepayer and shareholder.

If RAM is continued EGDI's ratepayer and share holder would benefit through the potential optimization of EGDI's capacity on the Mainline. If RAM is discontinued the potential for EGDI to optimize its capacity on the Mainline could be reduced. In the event this occurs the optimization revenues could potentially be reduced as well.

Please refer to the response to 5(a) for a discussion of how EGDI utilizes the RAM attribute.

CME INTERROGATORY #3

INTERROGATORY

Ref: Exhibit B, Tab 2, Schedule 4, Page 3 of 4

EGD states that an increase of $1.1 million in Measurement and Regulation was primarily due to more system regulation requirements relative to 2010. Please identify the regulatory changes which resulted in this increase of $1.1 million.

RESPONSE

The $1.1 million increase in expenditures relative to 2010 was primarily due to increased material costs and workload. Measurement and Regulation refers to the work related to regulator stations (i.e., District stations, gate stations, station replacements and upgrades). Thus, the driver of the costs was not “regulatory changes” but instead increased requirements for regulator stations.

Witnesses: L. Au
D. Kelly

CME INTERROGATORY #4

INTERROGATORY

Ref: Exhibit B, Tab 4, Schedule 2, Page 2 of 3

EGD states that the Provision for Uncollectibles increased by $10 million mainly due to adjustments required to correct deficiencies in accounts receivable reporting that were recognized in 2011. CME wishes to better understand the deficiencies which resulted in the $10 million increase. To this end:

(a) Please describe the deficiencies recognized in 2011;

(b) Please describe the impact which these recently identified deficiencies have had, if any, in the years 2007, 2008, 2009 and 2010; and

(c) Please explain why these deficiencies were not identified prior to 2011.

RESPONSE

a) There are two categories of the deficiencies in accounts receivable reporting.
   i. First, is the impact of adjustments in 2010 and 2011 related to the true-up of the General Ledger and Accounts Receivable subledger stemming from the Company's new CIS implementation.

   ii. Second, mass market arrears balances, which are used in the determination of uncollectible accounts, had been understated. This understatement related to sales for 2009 and 2010; and up to the time it was corrected in 2011. The Company recognizes bad debt in the month of sale. However, the Company follows a 27 month write-off cycle i.e. approximate time from sale to write-off is 27 months. Therefore, at any point in time, the Company's Allowance for Doubtful Accounts (ADA) covers expected write-offs for approximately the previous 27 months of sales. Where it is determined that some of those previous months are over or under provided, then adjustments are made in subsequent months. The arrears balances were understated for sales related to the latter part of 2009 to 2011.

Witnesses: R. Lei
A. Patel
S. McGill

b) It is not possible to determine the actual impact these deficiencies had on 2007 to 2010. The Company does not have the required detailed reports or information as at year end for each of 2007 to 2010 to determine what the impact would have been on 2007 to 2010. However, the Company can estimate impacts based on the assumption that the same information available at end of 2011 was available at the end of 2010. Please refer to Table 1 for estimated impacts. The deficiencies caused 2010 earnings to be overstated by $7.7 million. This added to the ESM amount for that year. For 2011, earnings reflect the adjustments required to re-establish the appropriate provision.

Table 1

	2010	**2011**
Booked	11.5	21.5
Adjust for:		
True-up of GL and AR subledger	2.9	(2.9)
	14.4	18.6
2009/10 Arrears understated	4.8	(4.8)
Would Have Booked	19.2	13.8
Net Earnings Over Stated (Reduced)	7.7	(7.7)

c)

i. Regarding the entry for the true-up between the General Ledger and Accounts Receivable subledger, prior to the new CIS implementation the Company did not have details of the AR subledger and there was no means by which this issue could be identified. A detailed analysis and reconciliation was necessary which occurred over the 2010-2011 period.

ii. Regarding the understated arrears balances, the decline in arrears balances was consistent with business drivers such as improving economic conditions; and enhanced collections efforts. This combined with the fact that the Company's write-off amounts for historical sales were consistent with projections, indicated that the Company's projections were correct. When a

material difference occurred between projected and actual write-off amounts, the Company investigated and identified the reporting issue. SOX controls as documented were complied with and would not have detected the issue earlier. Please refer to the attached document titled Allowance for Doubtful Accounts 2011, date December 9, 2011.

Witnesses: R. Lei
A. Patel
S. McGill

Allowance for Doubtful Accounts 2011

December 9, 2011

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Tab 2
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Agenda

- Background
- Adjustment to ADA
- Analysis
- Remedy
- Action Plan

ENBRIDGE

Background

- Given the magnitude of the decline in the Mass Market (MM) Allowance for Doubtful Accounts (ADA) during Q3 2011, EGD Management carried out validation procedures to confirm that the drivers of the change were consistent with Management's understanding.

Effective Write-off Rate in Bad Debt Model (i.e forecasted rate for 27 months)

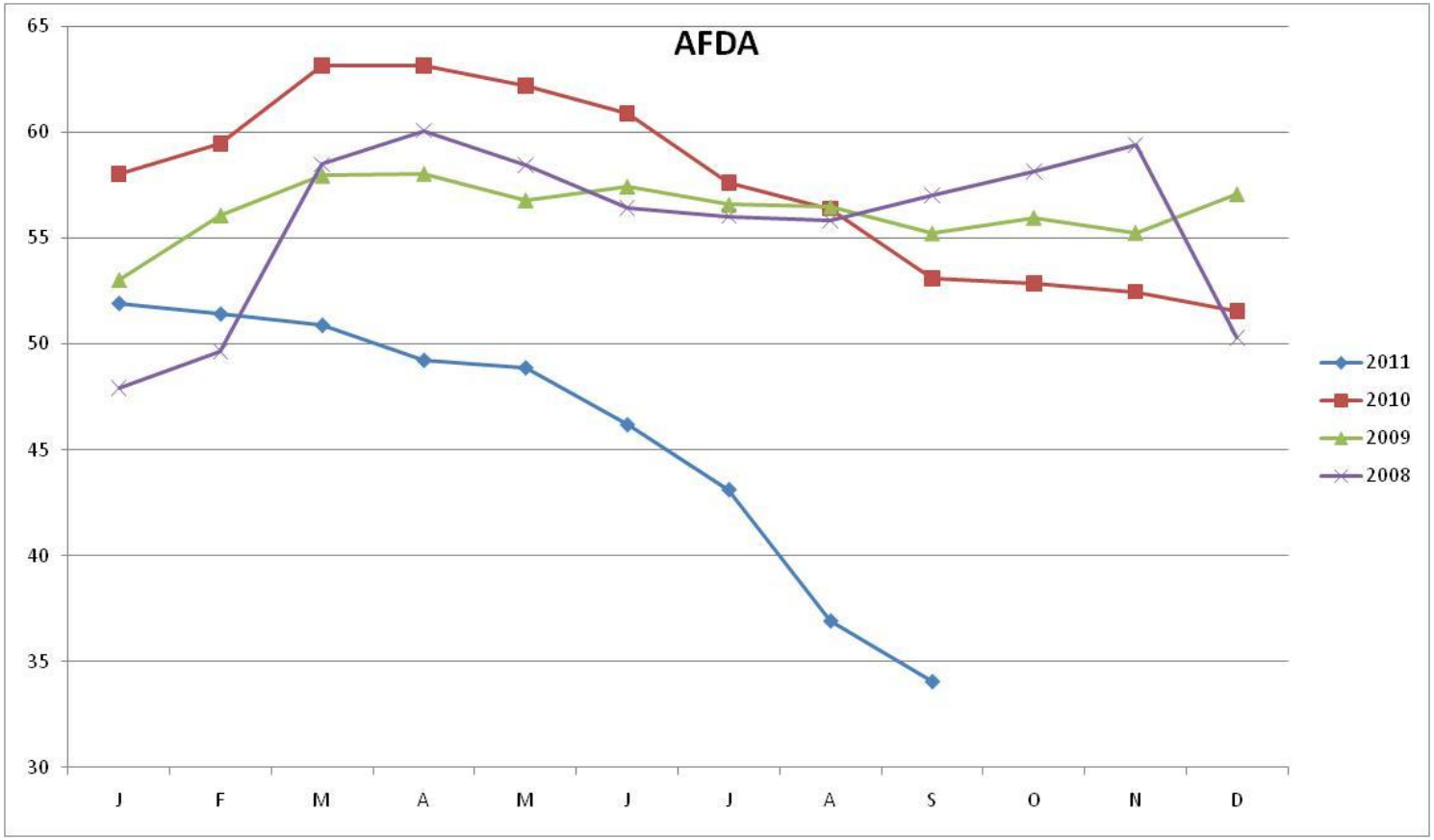
MM Write-off as a % of Sales

Go-Live Q3 09	Q4 09	Q1 10	Q2 10	Q3 10	Q4 10	Q1 11	Q2 11	Q3 11
0.57%	0.57%	0.59%	0.63%	0.59%	0.56%	0.54%	0.57%	0.44%*

*corrected

ENBRIDGE

Background: ADA Balance



ENBRIDGE

Adjustment to ADA

- Based on this analysis, EGD has determined that a one-time adjustment is needed to the ADA in Q4 2011.
  - An increase in the ADA is required of $7million-$9 million

- After making this adjustment, the effective write-off rate in the bad debt model would be 0.56%. This would be consistent with historical experience.

Historical and Forecasted Write-off Rates

MM Write-off as a % of Sales

2003	2004	2005	2006	2007	2008
0.50%	0.48%	0.47%	0.51%	0.51%	0.58%

Model Sep09-Nov11
0.56%

ENBRIDGE

Analysis

- The MM ADA is predominantly based on delinquent balances which are available from the R22 Delinquent report from SAP (R22).
- The R22 shows the dollar values of all accounts that have been finalized in SAP and the forecasted month of “Delinquency” (3-4 months after move-out date or Final Bill) if uncollected.
- SAP dunning process writes off uncollected accounts 24 months after Final Bill.
- Therefore the finalized balances on the R22, adjusted for some collection over time, are a good predictor of write-offs.

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Analysis

- Historically, the R22 proved to be reliable in that projected writeoffs were inline with actual writeoffs, allowing for expected variances.
- Beginning October, the R22 became available at account-level detail. Prior to this (including Legacy CIS), the Delinquent report only showed a total amount for each calendar month of delinquency.
- Analysis using the newly available details showed that finalized accounts with credit balances were a substantially higher amount than expectations based on historical experience.

ENBRIDGE

Analysis

- The impact of these large credits was to offset and thereby lower the net delinquent balances i.e. finalized debit balances were offset by finalized credit balances.
- Lower delinquent balances resulted in booking less bad debt expense and an ADA that was inadequate to cover EGD's risk around doubtful accounts.
- In the same manner, the large credit balances also offset receivables in AR and understated AR.

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Analysis: Root Cause of Large Finalized Credits

- Credit balances are created on accounts in the normal course of business:
  - overpayment; refund of security deposit; account adjustments; some credits were existing in Legacy and converted to SAP
- Intended Automatic Transfer functionality in SAP was to transfer balances (credit or debit) from the move-out account to the move-in account. This functionality is not working.
- The auto-issue of in-franchise refund cheques is not occurring.
- This led to a buildup of large finalized credit balances since SAP go-live.

ENBRIDGE

Analysis: Validation of R22

- Analysis indicates that the R22 is showing all finalized balances and assigning the appropriate delinquency period, allowing for expected/explainable variances.
- These expected variances cause a variation in predicted versus actual write-off month, but they should be immaterial on an ongoing basis. EGD is working to minimize such variances.

ENBRIDGE

Analysis: Validation of Bad Debt process

- The bad debt process is reliable in determining bad debt expense and validating the adequacy of the ADA.
- Given that the SAP dunning process writes off uncollected accounts 24 months after Final Bill, the R22 finalized balances are the most logical input to predicting write-offs.
- As operational process changes are implemented i.e. Auto transfer functionality and/or refund cheque issuance, the amount of credits in the R22 should decline substantially.
- The bad debt process includes comparing actual write-offs to forecasted write-offs based on the R22 finalized balances.

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Analysis: Validation of Bad Debt process…

- To check specifically for the buildup of credits, EGD will continue to separate out R22 debits and credits each month. Some credits will be part of the normal process but large buildups can be monitored (subject to which operational processes are implemented).

ENBRIDGE

Analysis: Validation of Existing SOX Controls

- ADA SOX controls as documented have been complied with.
- As operational process changes are implemented i.e. Auto transfer functionality and/or refund cheque issue, the amount of credits in the R22 will lessen and credit balances will be for expected reasons.

ENBRIDGE

Data Analysis: Sep2011 Data

	#Accounts	Dr $M	#Accounts	Cr $M	Total $M
R22 Net					
MM	128,165	$ 58.8	127,513	(21.9)	36.9
Commercial					
MM	15,988	$ 19.2	16,913	(8.1)	11.2
Collective Accounts					
MM	159	$ 0.0	2	(0.0)	0.0
Owner Occupant					
	8,699	$ 1.3	255	(0.4)	0.9
R22 - Less Comm and Collective and Owner/Occ					
MM	103,319	$ 38.2	108,073	(13.4)	24.8

ENBRIDGE

Remedy

- Until the issue is resolved operationally, for bad debt purposes, EGD will use the R22 debit balances only, adjusting for some mitigation based on data analysis.

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Remedy: R22 Debits only

R22 - Debits only

Nov 2011 Cycle 21

Month & Year of Delinquency ie. 3-4 months after Final Bill

Sum of Amount	Column Labels								
Row Labels		2007	2008	2009	2010	2011	2012	(blank)	Grand Total
MM									
1			$ 918	$ 1,048	$ 195,162	$ 1,673,568	$2,137,714		$ 4,008,409
2			$ 4,132	$ 2,766	$ 327,663	$ 1,615,517	$2,726,278		$ 4,676,356
3			$ 225	$ 1,240	$ 1,072,520	$ 1,793,118	$3,138,241		$ 6,005,344
4		$ 964	$ 185	$ 1,663	$ 1,112,922	$ 1,562,419			$ 2,678,153
5			$ 1,071	$ 1,313	$ 1,262,022	$ 1,456,754			$ 2,721,160
6				$ 75,349	$ 1,585,008	$ 2,042,817			$ 3,703,174
7			$ 391	$ 23,320	$ 1,684,716	$ 2,292,344			$ 4,000,771
8			$ 2,852	$ 18,832	$ 2,227,038	$ 3,440,340			$ 5,689,063
9			$ 1,408	$ 65,351	$ 2,083,812	$ 4,187,936			$ 6,338,507
10			$ 2,646	$ 82,138	$ 2,367,085	$ 3,347,712			$ 5,799,582
11		$1,565	$ 388	$182,540	$ 1,796,054	$ 2,809,257			$ 4,789,803
12		$ 47	$ 9,454	$131,662	$ 1,685,116	$ 2,665,293			$ 4,491,571
(blank)								$1,164,427	$ 1,164,427
MM Total		$2,576	$23,669	$587,222	$17,399,119	$ 28,887,074	$8,002,233	$1,164,427	$56,066,319

Delinquent debits input to bad debt model months 7-27, subject to some collection over time

Total $ 43 million

Remedy: R22 Credits only

R22 - Credits only

Nov 2011 Cycle 21

Month & Year of Delinquency ie. 3-4 months after Final Bill

Sum of Amount	Column Labels								
Row Labels	2006	2007	2008	2009	2010	2011	2012	(blank)	Grand Total
MM									
1			$ (22,814)	$ (16,248)	$ (399,746)	$ (633,493)	$ (1,014,931)		$ (2,087,233)
2	$ (48)		$ (5,211)	$ (44,872)	$ (516,847)	$ (714,112)	$ (1,675,661)		$ (2,956,750)
3	$ (2,404)		$ (30,193)	$ (29,127)	$ (538,328)	$ (660,217)	$ (360,054)		$ (1,620,324)
4			$ (26,711)	$ (23,231)	$ (330,633)	$ (455,200)			$ (835,775)
5			$ (12,114)	$ (26,850)	$ (410,269)	$ (463,999)			$ (913,231)
6			$ (27,719)	$ (30,775)	$ (430,625)	$ (523,498)			$ (1,012,617)
7		$ (0)	$ (41,593)	$ (29,483)	$ (523,037)	$ (556,574)			$ (1,150,687)
8			$ (31,731)	$ (83,210)	$ (523,896)	$ (709,517)			$ (1,348,354)
9		$ (38)	$ (43,990)	$ (298,597)	$ (740,186)	$ (732,910)			$ (1,815,721)
10			$ (42,503)	$ (273,991)	$ (960,834)	$ (738,591)			$ (2,015,919)
11		$ (20,671)	$ (27,581)	$ (610,139)	$ (720,266)	$ (915,763)			$ (2,294,420)
12		$ (5,731)	$ (71,240)	$ (926,083)	$ (642,786)	$ (957,515)			$ (2,603,355)
(blank)								$ (1,361,021)	$ (1,361,021)
MM Total	$ (2,452)	$ (26,440)	$ (383,400)	$ (2,392,606)	$ (6,737,453)	$ (8,061,389)	$ (3,050,646)	$ (1,361,021)	$ (22,015,407)

Gross credits no longer input to bad debt model months 3-27

Total $ (17) million

Remedy: ADA/Bad Debt Impact

Forecasted Adjustment to ADA $million

	Credits & Mitigation:	Bad Debt Incr (Decr)
1	Impact of removing credits from delinquent balances (Nov 2011 R22)	14
2	Historical/undated debits not written off	2
3	Mitigating Items: final Cr match to final Dr; final Dr match to Active acct; Owner/Occupant final Cr; unpostables; final credits unable to refund	(8)
4	**Net Impact**	**8**

ENBRIDGE

Action Plan

Action Plan

	Completion Date
Validate R22	Complete
Validate Bad Debt Process	Complete
Validate Existing ADA SOX controls	Complete
Handle ongoing Cr & Dr balances until operational processes implemented	on going
Review need for additional ADA SOX controls	Q2 2012
Minimize expected/explainable R22 writeoff variances	Q3 2012
Implement other reasonableness checks	Q4 2011
Clear backlog of Cr & Dr (incl validation of operational SOX controls)	TBD

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CME INTERROGATORY #5

INTERROGATORY

Ref: Exhibit B, Tab 4, Schedule 2, Page 2 of 3

EGD states that the Legal and Corporate Security has increased by $2.7 million because of the centralization of legal expenses in the Legal Department. Please explain where legal expenses were incurred prior to the centralization in the Legal Department. Further, please explain why legal expenses were centralized in the Legal Department if the result is an increase rather than a decrease in overall legal expenses.

RESPONSE

Prior to 2011, some of the business specific external legal work used to be managed and paid by each individual department rather than by the Legal department, which was not viewed as the best practice anymore. As a result, starting in 2011 Enbridge Gas Distribution switched from the decentralized process to the new centralized process for legal expenses to enhance efficiency, governance, and transparency. Under the new process, the Legal department is responsible for managing all external legal engagement and consolidating all legal fees across the Company except for legal fees incurred for regulatory proceedings. A number of benefits of the centralized approach are anticipated and have been seen:

- Single point of contact for internal users and external law firms
- Greater oversight of all legal services used by the Company
- Ensure that internal resources are used before engaging externally
- Ensure the most appropriate selection of external law firm (in terms of cost and expertise)
- Efficiency by combining external legal contracts and increasing volumes of work
- Ensure the consistency of accounting for legal fees.

Witness: R. Lei

A summary of Enbridge's actual external legal spend for the years 2007 to 2011as follows. The annual amount prior to 2011 is a consolidation of legal fees across all departments.

Year	2007	2008	2009	2010	2011
Total EGD External Legal Spend	$6,395,630	$4,492,052	$3,668,113	$4,262,638	$3,944,139

The Table indicates that in 2011, there was a decrease rather than an increase in overall external legal expenses.

Witness: R. Lei

CME INTERROGATORY #6

INTERROGATORY

Ref: Exhibit B, Tab 4, Schedule 2, Page 2 of 3

EGD states that the Business Development and Customer Strategy decreased by $2.9 million mainly due to lower conservation services spending. Are the conservation services referred to in this line item part of Demand Side Management ("DSM")? If not, explain what the difference is between the conservation services incurred as part of Business Development and Customer Strategy as opposed to DSM. If the conservation spending is part of DSM, please explain why it is not included in Line No. 20, which sets out the DSM budget.

RESPONSE

Conservation Services refers to Conservation and Demand Management ("CDM") programs. Conservation Services leverages the delivery of Demand Side Management ("DSM") programs to deliver electric CDM programs on behalf of other organizations. This includes Ontario Power Authority ("OPA") and local electric distribution companies ("LDC's"). Conservation Services is not part of DSM and therefore not included in Line No. 20 DSM.

Table 1 below presents the Business Development and Customer Strategy and Conservation Services amounts separately, and illustrates their respective contributions to the $2.9 million variance:

Table 1

	2010 Actual	2011 Actual	Variance
Business Development & Customer Strategy	$ 9.1	$ 8.3	$ (0.8)
Conservation Services	$ 9.4	$ 7.3	$ (2.1)
Total	$ 18.6	$ 15.6	$ (2.9)

Witnesses: L. Kennedy
R. Lei

CME INTERROGATORY #7

INTERROGATORY

Ref: Exhibit D, Tab 2, Schedule 1

In EB-2011-0354, Interrogatories were submitted by Mr. Quinn on behalf of the Federation of Rental-housing Providers of Ontario ("FRPO") that contained questions prepared by John Rosenkranz, an expert retained by Consumers Council of Canada ("CCC"), CME and FRPO with respect to matters pertaining to EGD's storage expenditures, including their allocation between utility and non-utility operations. These questions related to the Storage Cost Allocation Study prepared by Black & Veatch, which is attached as Exhibit D, Tab 2, Schedule 1. Please provide the answers to all of the questions asked by Mr. Quinn with respect to the allocation between utility and nonutility operations in EB-2011-0354 in this Application.

RESPONSE

Please see the responses to Exhibit I, Issue B6, Schedules 8.1 to 8.12, Exhibit I, Issue B4, Schedule 8.1, and Exhibit I, Issue C6, Schedule 8.1 from the EB-2011-0354 proceeding, which are attached to this response.

Witnesses: R. Feingold
Black & Veatch
J. Sanders
B. Pilon

FRPO INTERROGATORY #1

INTERROGATORY

B - Rate Base
Issue 6: Is the allocation of the cost and use of capital assets between utility and non-utility ("unregulated") operations appropriate?

Ref: Exhibit B1, Tab 2, Schedule 2, Lines 100-117

We require additional information about EGD's utility and non-utility storage capital expenditures.

a) For each storage plant project, for each year, provide the total project cost, the project cost allocated to utility storage, and the cost allocated to non-utility ("unregulated") storage. Provide a detailed explanation of how EGD has allocated the costs between utility and non-utility storage for each project.

b) For each storage plant project, identify the portion of the total project cost (in dollars) that is a like-for-like replacement of existing equipment.

c) Please provide the same information requested in (a) and (b) for each utility and non-utility storage plant capital expenditure project exceeding $500,000 for the years 2007, 2008, 2009 and 2010.

d) Please complete the table below.

Storage Capital Expenditures ($ Millions)

	Utility	Non-Utility
2007		
2008		
2009	4.6	
2010	14.7	
2011	30.1	
2012 (estimate)	26.0	
2013 (budget)	20.1	

Witnesses: L. Au
D. Kelly
R. Lei
B. Pilon
J. Sanders

RESPONSE

The response will be filed as soon as it is available.

Witnesses: L. Au
D. Kelly
R. Lei
B. Pilon
J. Sanders

FRPO INTERROGATORY #2

INTERROGATORY

B - Rate Base
Issue 6: Is the allocation of the cost and use of capital assets between utility and non-utility ("unregulated") operations appropriate?

Ref: EB-2012-0055, Exhibit B, Tab 1, Schedule 5, Appendix I (Discussion Paper)

At the time of the NGEIR Decision, EGD operated 98.0 Bcf of working storage at Tecumseh. Of this total, 6.7 Bcf of storage space at the Dow Moore and Black Creek storage pools was under contract to Union Gas, and the remaining 91.3 Bcf of working capacity and 1.74 Bcf of daily withdrawal deliverability were used to meet the requirements of EGD's in-franchise customers. Since the NGEIR Decision, EGD has created an additional 12.2 Bcf of working capacity and 0.4 Bcf of daily withdrawal deliverability at the same Tecumseh storage pools. The storage working capacity and deliverability that has been developed since the NGEIR Decision is classified as non-utility (or "unregulated") storage, and is sold in the ex-franchise market.

a) Please confirm that the information in the preamble is accurate, or provide the necessary corrections.

b) Please provide a table showing, for each storage pool, the total storage capacity, base gas quantity, working gas capacity, and design day withdrawal deliverability at 12/31/2006 and 12/31/2011.

c) Please provide a table showing, for each storage compressor station, the number of compressor units and total installed compression horsepower at 12/31/2006 and 12/31/2011.

RESPONSE

a) Yes the preamble is correct. These are the working capacity numbers for the Tecumseh storage pools, at the time of the NGEIR hearing. They do not reflect the working volumes in the Crowland Storage Pool.

Witnesses: K. Culbert
B. Pilon
J. Sanders

b)

Enbridge Gas Distribution Inc.
Tecumseh Storage Summary

Table 1 for 12/31/2006

Pool	Total Storage Capacity (Bcf)	Total Working Gas (Bcf)	Total Base Gas (Bcf)
Mid Kimball-Colinville	29.4	21.4	8.0
South-Kimball Colinville	20.6	15.0	5.6
Ladysmith	8.3	5.8	2.5
Corunna	6.3	4.5	1.8
Seckerton	15.8	11.2	4.6
Dow Moore	33.8	26.5	7.3
Coveny	5.3	4.0	1.3
Black Creek	1.2	0.9	0.3
Wilkesport	10.7	8.0	2.7
Chatham D	2.3	0.8	1.5
Totals	133.6	98.1	35.5

Witnesses: K. Culbert
B. Pilon
J. Sanders

Enbridge Gas Distribution Inc.
Tecumseh Storage Summary

Table 2 for 12/31/2011

Pool	Total Storage Capacity (Bcf)	Total Working Gas (Bcf)	Total Base Gas (Bcf)
Mid Kimball-Colinville	32.2	24.2	8.0
South-Kimball Colinville	25.2	19.7	5.6
Ladysmith	8.3	5.8	2.5
Corunna	7.6	5.8	1.8
Seckerton	19.2	14.6	4.6
Dow Moore	33.8	26.5	7.3
Coveny	5.3	4.0	1.3
Black Creek	1.2	0.9	0.3
Wilkesport	10.7	8.0	2.7
Chatham D	2.3	0.8	1.5
Totals	145.8	110.3	35.5

The maximum flow each pool is capable of delivering will occur when it reaches its maximum pressure following the injection cycle. The peak day withdrawal flows from each storage pool thereafter, will vary depending upon the circumstances of the day on which it occurs and the rate at which the gas had been withdrawn from the pools up to that day. In 2006, the combined withdrawal capacity of the Tecumseh system, inclusive of the amounts under contract to Union Gas, equaled approximately 1.9 bcfd and in 2011, approximately 2.4 bcfd. In both periods the constraint for flows is not defined at the pool level; it reflects the combined elements of the storage system.

c)

Location	At 12/31/2006		At 12/31/2011	
	No. of Gas Compressors	Power Total (Hp)	No. of Gas Compressors	Power Total (Hp)
Tecumseh Compressor Stn.	11	41,000	11	41,000
Sombra Compressor Stn.	2	2,400	3	3,900
Chatham D Compressor Stn.	1	800	1	800
Crowland Compressor Stn.	1	1,085	1	1,085

Witnesses: K. Culbert
B. Pilon
J. Sanders

Witnesses: K. Culbert
B. Pilon
J. Sanders

FRPO INTERROGATORY #3

INTERROGATORY

B - Rate Base
Issue 6: Is the allocation of the cost and use of capital assets between utility and non-utility ("unregulated") operations appropriate?

Ref: EB-2005-0551 (NGEIR Decision), p. 83

In the NGEIR Decision, the Board directed Union Gas to reserve up to 100 PJ of storage space for its in-franchise customers at cost-based rates.

a) Based on the NGEIR Decision, is EGD required to reserve 98 Bcf of Tecumseh storage, less whatever amount is reserved for Union under the storage arrangements that existed at the time of the NGEIR Decision, for its in-franchise customers at cost-based rates? Please explain.

b) Are there any circumstances under which the working storage space in the Tecumseh pools that is allocated to the utility storage operation could increase (i.e. exceed 98 Bcf)?

c) If, as a result of an unforeseen geological event, EGD is required to abandon one of the Tecumseh storage pools, so that the total amount of available working storage space drops below the 110 Bcf that is currently in operation, will the utility storage operation have priority rights to the first 98 Bcf of working capacity? If not, how would the remaining Tecumseh storage be allocated between EGD's utility and non-utility storage operations?

RESPONSE

a) The allocation of the capacities and deliverability existing prior to the NGEIR Decision remain unchanged. There was no unregulated storage capacity or deliverability prior to that Decision. Enbridge continues to operate and to make available the pre-NGEIR capacities and deliverability at cost-based rates. As a result of the NGEIR Decision, Enbridge is not required to make any new storage capacity or deliverability available at cost-based rates.

Witnesses: K. Culbert
B. Pilon
J. Sanders

b) Enbridge's expectation is that any future storage development at the Tecumseh site shall be unregulated and sold at market-based rates.

c) As an integrated operation it is expected that any changes to capacity or deliverability would be managed on a shared basis. However, the specifics of any such event would have to be understood and taken into consideration before determining the sharing.

Witnesses: K. Culbert
B. Pilon
J. Sanders

FRPO INTERROGATORY #4

INTERROGATORY

B - Rate Base
Issue 6: Is the allocation of the cost and use of capital assets between utility and non-utility ("unregulated") operations appropriate?

Ref: EB-2012-0055, Exhibit B, Tab 1, Schedule 5, Appendix I (Discussion Paper)

EGD states that “in the event of an equipment failure or outage, any remaining capacities will be pro-rated amongst all of Enbridge’s customers, both regulated and unregulated” (p. 7).

a) Please provide EGD’s curtailment plan that applies to ex-franchise storage services sold from non-utility storage assets.

b) As a customer of Union, please provide Union’s priority of service schedule that is currently applicable.

c) Please identify the proceeding in which the pro-rata curtailment policy for in-franchise and ex-franchise services that is referred to in the Discussion Paper was approved by the Board.

RESPONSE

a) EGD’s curtailment plan would be the same whether the outage was caused by events related to the utility assets or non-utility storage expansion assets. As an integrated operation, both businesses enjoy the benefits of the total facility and the enhanced operational flexibility it offers. If there were a short or longer term outage caused by the failure, then all customers, both utility and non-utility, would share on a pro-rata basis, the remaining capacities. Should any customer not require their full capacity entitlement, EGD would share their unused balance with the other affected customers.

b) Firm customers are first in priority; Interruptible customers are second and Over- run customers are the last priority for Union’s customers.

c) To date Enbridge Gas Distribution has not discussed the pro-rata curtailment policy with the Board.

Witnesses: K. Culbert
B. Pilon
J. Sanders

FRPO INTERROGATORY #5

INTERROGATORY

B - Rate Base
Issue 6: Is the allocation of the cost and use of capital assets between utility and non-utility ("unregulated") operations appropriate?

Ref: EB-2012-0055, Exhibit B, Tab 1, Schedule 5, Appendix I (Discussion Paper)

EGD proposes that 100 percent of the capital cost of a new facility that replaces or reconditions a storage asset that was originally installed for EGD's utility storage operation will be directly assigned to utility storage. However, since EGD operates its storage facilities as a single integrated system, all storage facilities are used by both the utility and non-utility storage operations.

Please explain how this proposed cost allocation policy is consistent with cost causation principles.

RESPONSE

EGD has proposed to allocate its capital costs on the basis of cost causation. It is on that basis that EGD has charged all of the cost of the capital that has been required to create the capacities required by the unregulated storage business, to the unregulated storage business; even though they will be operated as part of a single integrated system. And, conversely, EGD does not intend to charge any of the cost of its pre-NGEIR storage assets to the unregulated business.

The assets of both the utility and non-utility are operated as a single integrated system. Should either a utility or non-utility asset need to be replaced, the cost of that replacement, like the cost of the original asset, will remain with the 'owner' of the original asset.

The appropriateness of this cost allocation policy is addressed at page 18 of Black & Veatch's Storage Cost Allocation Study (Exhibit D2, Tab 2, Schedule 1).

Witnesses: K. Culbert
B. Pilon
J. Sanders

FRPO INTERROGATORY #6

INTERROGATORY

B - Rate Base
Issue 6: Is the allocation of the cost and use of capital assets between utility and non-utility ("unregulated") operations appropriate?

Ref: Exhibit D2, Tab 5, Schedule 1 (B&V Study), p. 18

B&V says that the capital costs of new facilities that replace or enhance an existing storage asset "are directly assigned to Enbridge's accounts and/or entity of the original assets".

a) Please confirm that if EGD replaces a piece of equipment that is included in non-utility storage plant, 100% of the capital cost is directly assigned to non-utility storage.
b) Please provide a table showing for each year from 2007 through 2013 the actual or estimated capital expenditures for "replacement and enhancement of existing storage assets" that EGD has assigned to the non-utility storage operation.

c) Please provide a table showing for each year from 2007 through 2013 the actual or estimated capital expenditures for "replacement and enhancement of existing storage assets" that EGD has assigned to the utility storage operation.

RESPONSE

a) Yes, this statement is correct.

b) From 2007 to 2013 there have been no replacement or enhancement projects to any of the existing non-utility assets.

c) Over the period in question there will have been over 300 capital projects that have been undertaken by utility storage; with many of them intended to enhance utility assets. The table below shows the amounts that EGD has, or will, spend on such projects that have been, or will be, assigned to the utility storage operation.

Witnesses: B. Pilon
J. Sanders

Year	Total Utility Replacement/ Enhancement Capital ($millions)
2007	3.5
2008	3.3
2009	3.9
2010	9.2
2011	23.1
2012	23
2013	18.6

Witnesses: B. Pilon
J. Sanders

FRPO INTERROGATORY #7

INTERROGATORY

B - Rate Base
Issue 6: Is the allocation of the cost and use of capital assets between utility and non-utility ("unregulated") operations appropriate?

Ref: Exhibit D2, Tab 5, Schedule 1 (B&V Study), p. 18

B&V says that the project to drill the Tecumseh Seckerton #20 observation well enhances EGD's understanding of the storage pool and helps raise the quality of its gas inventory management. Because the Seckerton storage pool is a utility asset, the cost of this well is charged entirely to the utility storage operation.

a) If EGD's improved understanding of the Seckerton storage pool creates opportunities to increase the working capacity and/or deliverability of the Seckerton pool, will the resulting working capacity and/or deliverability be a non-utility asset?

b) Is gas inventory management required only for utility storage operations, or is it necessary for both utility and non-utility storage operations?

c) Since the Seckerton storage pool is now part of EGD's integrated storage operation, please explain why all of the costs of a project that "enhances" this asset should be borne entirely by EGD's utility storage operation.

RESPONSE

a) Post NGEIR, Enbridge considers all incremental capacity and deliverability to be unregulated. If any new observation well created capacity or was initiated as part of the development of any project to create incremental capacity then Enbridge would treat the capital project as defined in the capital cost allocation graphic Schedule 5 in the Black & Veatch study and the cost treatment would follow accordingly. That would mean that all or part of the costs of the Tecumseh Seckerton #20 observation well would be transferred to the unregulated storage business. It must be noted though, that the creation or identification of new capacity is not the goal or expectation of this well.

Witnesses: J. Sanders
B. Pilon

b) Gas inventory management is required for both utility and non-utility storage.

c) The Seckerton #20 observation well was required for the operation of this pool, regardless of any unregulated storage activity. It does not add any capacity or deliverability; therefore, the costs are allocable to the regulated storage operation.

In a similar way, the unregulated storage business required the construction of new gathering pipelines for both the Seckerton and Corunna storage pools. These pipelines have been built and paid for by the unregulated storage business, even though they will be used by both the regulated and unregulated storage businesses. The original pipeline has been retired and removed from rate base for the regulated business.

Witnesses: J. Sanders
B. Pilon

FRPO INTERROGATORY #8

INTERROGATORY

B - Rate Base
Issue 6: Is the allocation of the cost and use of capital assets between utility and non-utility ("unregulated") operations appropriate?

Ref: Exhibit D2, Tab 5, Schedule 1 (B&V Study), p. 16

B&V states that through 2011 EGD has invested approximately $88 million in gross plant additions in four major storage-related capital programs. Please describe the four major storage related-capital programs identified by B&V. For each program, identify the OEB case number(s) in which EGD received authorization to construct facilities or drill additional storage wells, the amount of working storage capacity and daily withdrawal deliverability that was added by the project, the total cost, and the date facilities were placed in service.

RESPONSE

There were 4 phases to the unregulated storage development since early 2007. The programs varied in terms of the dollar amounts spent, but were thought of separately because they were associated with storage capacity additions. The discussion below characterizes the type of project work in each of these programs or phases of the unregulated storage development.

Phase I

This was a large program ($36 million) that involved a broad list of projects. Three horizontal injection/withdrawal wells were drilled, additional gas compression, dehydration and measurement equipment and new pipeline was installed. This program required application to the Board for authorization to drill wells (EB-2007-0891), to extend the Sombra pipeline (EB-2007-088), to install a pipeline to connect into the Vector pipeline (EB-2007-889) and to loop the gathering pipeline to the Ladysmith pool (EB-2007-890). It created approximately 3 Bcf of storage capacity and 160 mmcfd of withdrawal capacity. These facilities were generally in-service for the fall of 2008.

Witnesses: B. Pilon
J. Sanders
R. Feingold, Black & Veatch

Phase IB

This was a relatively low cost program ($4 million) that was focused on the installation of additional metering at the Dawn interconnect. It relieved a downstream bottleneck that resulted from the Phase I changes and allowed for greater effective storage and withdrawal capacity (2.5 Bcf and 140 mmcfd respectively) to take advantage of the projects of Phase I. This plant was in-service in the fall of 2009

Phase II

This phase of development, at a total cost of some $9 million, included a program of well pressure testing and wellhead equipment upgrades that would allow for the delta pressuring of the Mid and South Kimball Colinville pools. It also included the installation of additional dehydration capacity at the Sombra station and metering facilities at the inter-connect points with the Vector pipeline and with the Union Gas facilities at Dawn. This created about 3 Bcf of storage capacity and an approximately 100 mmcfd of additional deliverability. The facilities were in service for the winter of 2010/2011.

Phase III

This most recent phase was the largest dollar cost program ($39 million) of the unregulated storage development to date. It began in the fall of 2010 and took place largely in 2011. It included well testing and well equipment upgrade work in the Corunna and Seckerton storage pools, the replacement of the Corunna and Seckerton pool gathering pipeline network, and pipeline inter-connect with the Dow Moore gathering system (Leave to Construct EB-2010-0302), and a portion of the costs associated with the pool metering upgrades installed throughout the storage operation. Much of this was in-service for the fall of 2011, however there is still a meter station at the Wilkesport pool that will be carried into 2012/2013. This phase of work has made available about 3.6 Bcf of additional storage capacity but no incremental deliverability.

Witnesses: B. Pilon
J. Sanders
R. Feingold, Black & Veatch

FRPO INTERROGATORY #9

INTERROGATORY

B - Rate Base
Issue 6: Is the allocation of the cost and use of capital assets between utility and non-utility ("unregulated") operations appropriate?

Ref: Exhibit D2, Tab 5, Schedule 1 (B&V Study), p. 21

B&V recommends that EGD change its methodology for allocating general storage plant.

a) Please explain in detail the cost allocation methodology EGD proposes to use for general storage plant additions.

b) Please provide the calculations showing how EGD will allocate the costs for the Sombra Storage Building that is discussed in the B&V report.

RESPONSE

a) EGD proposes to account for general storage plant additions as all other General Plant additions are treated. It will be included with General Plant in the fully allocated cost mechanism that assigns Administration and General overhead costs to unregulated storage, and other affiliate operations. In this way, the costs for these storage general plant assets will be specifically included in the overhead rate charged through to the unregulated storage business as part of the monthly allocation of O&M from storage operations (approximately 70% of labour).

b) The Sombra Storage building has been completed in the spring of 2012 and will be treated as General Plant, as discussed in a) above. The costs will be included with the other General Plant assets of EGD and will be allocated to all areas, including unregulated storage, through those A&G overhead allocations.

Witnesses: R. Feingold, Black & Veatch
B. Pilon

FRPO INTERROGATORY #10

INTERROGATORY

B - Rate Base
Issue 6: Is the allocation of the cost and use of capital assets between utility and non-utility ("unregulated") operations appropriate?

Ref: Exhibit D2, Tab 5, Schedule 1 (B&V Study)

EGD calculates the cost of fuel gas used for non-utility storage operations using the fuel ratio charged to non-utility storage customers (currently 0.35%) and the QRAM reference price from the previous October.

a) Please provide a table showing the actual compressor fuel usage at the Tecumeseh Storage facilities for 2009, 2010 and 2011.

b) What is the source of the unregulated storage fuel factor of 0.35%?

c) Please identify the proceeding in which EGD's fuel factor for non-utility storage was approved by the Board.

d) Please explain why the historical QRAM price is a better measure of the cost of gas used for Tecumseh Storage operations than the contemporaneous Dawn index price.

RESPONSE

a) The fuel usage at Tecumseh is as follows:

2009 - 188,669 GJ's
2010 - 306,746 GJ's
2011 - 447,115 GJ's

b) For the purposes of developing the EGD Gas Cost forecast the Company has historically used 0.35% as a fuel ratio for Tecumseh and the associated costs have been included as part of the Gas Cost Budget approved by the Board annually. It

Witnesses: R. Feingold, Black & Veatch
B. Pilon
J. Sanders
D. Small

was decided that it would be appropriate for the Unregulated Storage business to use the same fuel ratio within their contracts.

c) See the response to part b). The Board has not been asked to approve this fuel factor for use with unregulated storage. The fuel factor has been applied consistently to both regulated and unregulated storage.

d) As discussed in part b) EGD calculates the fuel costs associated with the forecasted fuel usage at Tecumseh. This amount is included in gas costs and is collected from customers through rates. For purposes of the forecast the Company uses the October QRAM reference price to calculate this cost. The QRAM process does not allow for changes to this forecasted cost therefore EGD must ensure a matching between cost and revenues by not updating the unit rate during the year. Because the Company charges back to Unregulated storage their proportionate share of the fuel costs to avoid an over/under recovery of costs it is necessary to use the same unit rate the Utility uses in the preparation of its gas costs and the development of its rates.

Witnesses: R. Feingold, Black & Veatch
B. Pilon
J. Sanders
D. Small

FRPO INTERROGATORY #11

INTERROGATORY

B - Rate Base
Issue 6: Is the allocation of the cost and use of capital assets between utility and non-utility ("unregulated") operations appropriate?

Ref: Exhibit D2, Tab 5, Schedule 1 (B&V Study), p. 20

Please provide the study performed by EGD that dictated that the Pool Metering Upgrades project should be undertaken.

a. Please provide the two cost assessment of the two scenarios referenced “with and without the incremental asset requirements.

RESPONSE

For a copy of the study, see the response to FRPO Interrogatory #1 (Exhibit I, Issue B4, Schedule 8.1).

a) For this project, the two cost assessments were determined, beginning with the creation and review of a high level ‘Responsibility Matrix’. It set out the responsibility of each of the utility and the non-utility businesses for the cost of equipment, engineering and construction for each of the 8 meter stations where metering upgrades were required. The splits were arrived at through a scope and function review of the project by management and engineering representatives from both the regulated and unregulated storage groups. A copy of that Responsibility Matrix is attached as Schedule 1A to this response.

   The Responsibility Matrix was then used as a guide to apportion the detailed materials costs for each of the eight stations, between the regulated and unregulated storage operations. This resulted in the cost sharing for materials that varied, station by station, from as much as 97% to the utility for the Coveny station, to a low of 35% to the utility for the Seckerton station. The individual station, materials cost sharing is shown attached as Schedule 1 B.

Witnesses: B. Pilon
J. Sanders

On an overall project basis, this resulted in 58% of the material costs of this project being attributed to the utility and 42% to the unregulated storage business. This same overall split was then used as the basis for allocating all of the costs of the Pool Metering Upgrade project. At the time of the Black & Veatch review, the project costs were estimated at $36.2 million and, using these sharing proportions, resulted in the estimated cost to the utility storage business of $21 million and $15.2 million to the unregulated storage business.

Witnesses: B. Pilon
J. Sanders

RESPONSIBILITY MATRIX

For Co-execution of the Nexus and Inventory Management Projects
Rick Wintjes - September 20, 2010

"N" = Nexus Responsibility; "U" = Utility Responsibility

	Dow Moore	Seckerton	Corunna	Mid Kimball Colinville	South Kimball Colinville	Ladysmith	Wilkesport	Coveny
DIRECT COST								
MATERIALS AND ASSOCIATED ENGINEERING/CONSTRUCTION EXECUTION								
Meter Tubes - incl. isolation HV's	U	U	U	U	U	U		U
Meter Tube Pressure Class Increase - incl. isolation HV's		N	N					
Meter Tube Header Systems	U	U	U	U	U	U		U
Particulate Filters - to protect FCV	N	N	N	N	N	N	N	N
ESV - Plot Edge Isolation Valves	N	N	N	N	N	N		U
ESV - Plot Edge Overpressure Protection Valves		N	N					
Remote Facility Infrastructure - hydro, site prep, fencing, lighting, etc	N	N	N	N	N	N	N	U
Gas Chromatographs & Moisture Analysers	N	N	N	U		U	U	U
In-Line Separators	U	U	U	N	U			U
FCV's	N	N	N	N	N	N	N	N
LAND								
Meter Station Land Purchase	N						N	U
ENGINEERING EXECUTION								
Meter Station Piping	U	U	U	U	U	U	U	U
Meter Station General Infrastructure	U	U	U	U	U	U	U	U
Meter Station Highgrade Buildings	U	U	U	U	U	U	U	U
Meter Station I&E	U	U	U	U	U	U	U	U
FCV, Particulate Filter, Isolation Valves, OPP	U	U	U	U	U	U	U	U
Hydro Servicing	N	N	N	N	N	U	U	U
Land Procurement	N						N	U
Meter Tube, GC, MA Procurement	U	U	U	U	U	U	U	U
Pipe & Fitting Procurement	U	U	U	U	U	U	U	U
Valve & Actuator Procurement	U	U	U	U	U	U	U	U
Filter Procurement	U	U	U	U	U	U	U	U
ILS Procurement	U	U	U	U	U	U	U	U
CONSTRUCTION EXECUTION								
Permitting	N	N	N	U	U	U	U	U
Hydro Servicing	N	N	N	N	N	U	U	U
All Remaining	N	N	N	U	U	U	U	U

Notes: Wilkesport FCV has been justified as a Utility project in 2010. Funding of $300,000 is available for 2010, but has not been rolled over into 2011

Signatures below indicate agreement that the delineation of responsibilities shown above, is an accurate representation of stakeholder expectations, as of the signature dates shown below.

Stakeholder Name	Title	Signature:	Date:
Harald Brecht	Mgr Engineering Construction, Engineering, Enbridge East		
Ian MacRobbie	Mgr Gas Storage Bus. Develop., Administration, Enbridge East		
Jim Sanders	Director Storage Operations, Energy Supply, SD & Regulatory, Enbridge East		
Doug Lapp	Dir of Engineering & Construct, Major Projects, Enbridge East		

Enbridge Gas Storage
Project: 3410 Meter Run Upgrade
Location: Summary (all sites)

Total Value:	$12,806,519.80	100.00%
Utility:	$7,453,487.31	58.20%
Nexus:	$5,353,032.49	41.80%

Colour Code
Utility:
Nexus

VALVES		
	TOTAL	**$2,662,085.00**
CONTROL VALVES (PO 31075)		
	TOTAL	**$618,043.23**
ACTUATORS (PO 30872)		
	TOTAL	**$1,096,530.73**
METER RUNS (PO 30632)		
	TOTAL	**$3,050,352.73**
GAS CHROMATOGRAPHS (PO 30632)		
	TOTAL	**$290,261.00**
INLINE SEPARATOR (PO 30818)		
	TOTAL	**$650,500.00**
MOISTURE ANALYZERS (PO 30477)		
	TOTAL	**$238,765.00**
HYGRADE GC BUILDINGS (PO 30859)		
	TOTAL	**$313,404.00**
BRISTOL INSTRUMENTATION (PO 30884)		
	TOTAL	**$407,548.00**
COMCO LARGE FITTINGS (PO 30901)		
	TOTAL	**$1,123,127.08**
COMCO SMALL FITTINGS (PO 31523)		
	TOTAL	**$140,651.82**
GAS DETECTORS (PO 30904)		
	TOTAL	**$15,939.00**
BRIDLE VALVES (PO 31068)		
	TOTAL	**$432,600.00**
HYGRADE AC BUILDINGS (PO 31073)		
	TOTAL	**$84,382.00**
PIPE		
	TOTAL	**$1,137,539.12**
PRESSURE AND TEMPERATURE TRANSMITTERS (PO 31318)		
	TOTAL	**$105,689.71**
HIGH VOLTAGE INSTALL (Don Allensen Services)		
	TOTAL	**$70,854.39**
CLEMMER TANKS (PO 31506)		
	TOTAL	**$34,680.00**
ELECTROZAD ELECTRICAL ITEMS (PO 31404)		
	TOTAL	**$139,047.82**
VIKING INSTRUMENT ITEMS (PO 31517)		
	TOTAL	**$41,174.33**
LAKESIDE CONTROLS INSULATING FLANGE KITS (PO 31576)		
	TOTAL	**$2,988.56**
ELECTROZAD GENERATORS (PO 31650)		
	TOTAL	**$31,351.95**
ELECTROZAD ROTEX CABLES (PO 31645)		
	TOTAL	**$12,818.83**
MAX TOWERS - TOWERS & EQUIPMENT (PO 31638)		
	TOTAL	**$106,185.50**

Enbridge Gas Storage
Project: 3410 Meter Run Upgrade
Location: Coveny (3457)

Total Value:	$1,268,511.39	100.00%
Utility:	$1,224,651.39	96.54%
Nexus:	$43,860.00	3.46%

Colour Code
Utility:
Nexus

VALVES		
	TOTAL	**$178,965.00**
CONTROL VALVES (PO 31075)		
	TOTAL	**$0.00**
ACTUATORS (PO 30872)		
	TOTAL	**$69,922.22**
METER RUNS (PO 30632)		
	TOTAL	**$345,203.30**
GAS CHROMATOGRAPHS (PO 30632)		
	TOTAL	**$41,078.00**
INLINE SEPARATOR (PO 30818)		
	TOTAL	**$105,000.00**
MOISTURE ANALYZERS (PO 30477)		
	TOTAL	**$31,495.00**
HYGRADE BUILDINGS (PO 30859)		
	TOTAL	**$44,772.00**
BRISTOL INSTRUMENTATION (PO 30884)		
	TOTAL	**$50,943.50**
FITTINGS (PO 30901)		
	TOTAL	**$85,674.92**
GAS DETECTORS (PO 30904)		
	TOTAL	**$2,277.00**
BRIDLE VALVES (PO 31068)		
	TOTAL	**$43,860.00**
HYGRADE AC BUILDINGS (PO 31073)		
	TOTAL	**$12,054.57**
PIPE		
	TOTAL	**$190,232.29**
PRESSURE AND TEMPERATURE TRANSMITTERS (PO 31318)		
	TOTAL	**$8,315.88**
HIGH VOLTAGE INSTALL (Don Allensen Services)		
	TOTAL	**$7,202.62**
CLEMMER TANK (PO 31506)		
	TOTAL	**$8,670.00**
ELECTROZAD ELECTRICAL ITEMS (PO 31404)		
	TOTAL	**$18,753.94**
VIKING INSTRUMENT ITEMS (PO 31517)		
	TOTAL	**$4,414.05**
ELECTROZAD GENERATORS (PO 31650)		
	TOTAL	**$4,945.75**
ELECTROZAD ROTEX CABLES (PO 31645)		
	TOTAL	**$581.66**
MAX TOWERS - TOWERS & EQUIPMENT (PO 31638)		
	TOTAL	**$2,546.50**
COMCO SMALL FITTINGS (PO 31523)		
	TOTAL	**$11,603.19**

Enbridge Gas Storage
Project: 3410 Meter Run Upgrade
Location: Ladysmith (3456)

Total Value:	$912,786.86	100.00%
Utility:	$804,831.76	88.17%
Nexus:	$107,955.10	11.83%

Colour Code
Utility:
Nexus

VALVES		
	TOTAL	**$151,430.00**
CONTROL VALVES (PO 31075)		
	TOTAL	**$0.00**
ACTUATORS (PO 30872)		
	TOTAL	**$34,961.11**
METER RUNS (PO 30632)		
	TOTAL	**$345,203.30**
GAS CHROMATOGRAPHS (PO 30632)		
	TOTAL	**$41,078.00**
INLINE SEPARATOR (PO 30818)		
	TOTAL	**$0.00**
MOISTURE ANALYZERS (PO 30477)		
	TOTAL	**$31,495.00**
HYGRADE BUILDINGS (PO 30859)		
	TOTAL	**$44,772.00**
BRISTOL INSTRUMENTATION (PO 30884)		
	TOTAL	**$50,943.50**
FITTINGS (PO 30901)		
	TOTAL	**$54,876.36**
GAS DETECTORS (PO 30904)		
	TOTAL	**$2,277.00**
BRIDLE VALVES (PO 31068)		
	TOTAL	**$13,830.00**
HYGRADE AC BUILDINGS (PO 31073)		
	TOTAL	**$12,054.57**
PIPE		
	TOTAL	**$56,843.51**
PRESSURE AND TEMPERATURE TRANSMITTERS (PO 31318)		
	TOTAL	**$8,315.88**
HIGH VOLTAGE INSTALL (Don Allensen Services)		
	TOTAL	**$4,093.99**
ELECTROZAD ELECTRICAL ITEMS (PO 31404)		
	TOTAL	**$18,753.94**
VIKING INSTRUMENT ITEMS (PO 31517)		
	TOTAL	**$3,433.56**
ELECTROZAD GENERATORS (PO 31650)		
	TOTAL	**$4,945.75**
ELECTROZAD ROTEX CABLES (PO 31645)		
	TOTAL	**$560.76**
MAX TOWERS - TOWERS & EQUIPMENT (PO 31638)		
	TOTAL	**$24,636.50**
COMCO SMALL FITTINGS (PO 31523)		
	TOTAL	**$8,282.13**

Enbridge Gas Storage
Project: 3410 Meter Run Upgrade
Location: Mid Kimball (3451)

Total Value:	$2,060,062.08	100.00%
Utility:	$1,380,289.62	67.00%
Nexus:	$679,772.46	33.00%

Colour Code
Utility:
Nexus

VALVES		
	TOTAL	**$365,640.00**
CONTROL VALVES (PO 31075)		
	TOTAL	**$217,907.67**
ACTUATORS (PO 30872)		
	TOTAL	**$142,140.22**
METER RUNS (PO 30632)		
	TOTAL	**$517,804.95**
GAS CHROMATOGRAPHS (PO 30632)		
	TOTAL	**$43,793.00**
INLINE SEPARATOR (PO 30818)		
	TOTAL	**$0.00**
MOISTURE ANALYZERS (PO 30477)		
	TOTAL	**$47,245.00**
HYGRADE BUILDINGS (PO 30859)		
	TOTAL	**$44,772.00**
BRISTOL INSTRUMENTATION (PO 30884)		
	TOTAL	**$50,943.50**
FITTINGS (PO 30901)		
	TOTAL	**$250,175.46**
GAS DETECTORS (PO 30904)		
	TOTAL	**$2,277.00**
BRIDLE VALVES (PO 31068)		
	TOTAL	**$35,720.00**
HYGRADE AC BUILDINGS (PO 31073)		
	TOTAL	**$12,054.57**
PIPE		
	TOTAL	**$196,247.41**
PRESSURE AND TEMPERATURE TRANSMITTERS (PO 31318)		
	TOTAL	**$14,298.85**
HIGH VOLTAGE INSTALL (Don Allensen Services)		
	TOTAL	**$50,850.00**
ELECTROZAD ELECTRICAL ITEMS (PO 31404)		
	TOTAL	**$22,001.39**
VIKING INSTRUMENT ITEMS (PO 31517)		
	TOTAL	**$4,798.41**
LAKESIDE CONTROLS INSULATING FLANGE KITS (PO 31576)		
	TOTAL	**$100.00**
ELECTROZAD GENERATORS (PO 31650)		
	TOTAL	**$4,945.75**
ELECTROZAD ROTEX CABLES (PO 31645)		
	TOTAL	**$461.27**
MAX TOWERS - TOWERS & EQUIPMENT (PO 31638)		
	TOTAL	**$24,636.50**
COMCO SMALL FITTINGS (PO 31523)		
	TOTAL	**$11,249.13**

Enbridge Gas Storage
Project: 3410 Meter Run Upgrade
Location: South Kimball (3450)

Total Value:	$1,629,083.79	100.00%
Utility:	$1,145,789.88	70.33%
Nexus:	$483,293.91	29.67%

Colour Code
Utility:
Nexus

VALVES		
	TOTAL	**$286,985.00**
CONTROL VALVES (PO 31075)		
	TOTAL	**$127,872.17**
ACTUATORS (PO 30872)		
	TOTAL	**$120,426.74**
METER RUNS (PO 30632)		
	TOTAL	**$517,804.95**
GAS CHROMATOGRAPHS (PO 30632)		
	TOTAL	**$0.00**
INLINE SEPARATOR (PO 30818)		
	TOTAL	**$113,500.00**
MOISTURE ANALYZERS (PO 30477)		
	TOTAL	**$2,550.00**
HYGRADE BUILDINGS (PO 30859)		
	TOTAL	**$44,772.00**
BRISTOL INSTRUMENTATION (PO 30884)		
	TOTAL	**$50,943.50**
FITTINGS (PO 30901)		
	TOTAL	**$108,352.64**
GAS DETECTORS (PO 30904)		
	TOTAL	**$0.00**
BRIDLE VALVES (PO 31068)		
	TOTAL	**$35,800.00**
HYGRADE AC BUILDINGS (PO 31073)		
	TOTAL	**$0.00**
PIPE		
	TOTAL	**$190,674.91**
PRESSURE AND TEMPERATURE TRANSMITTERS (PO 31318)		
	TOTAL	**$14,257.57**
VIKING INSTRUMENT ITEMS (PO 31517)		
	TOTAL	**$3,795.67**
LAKESIDE CONTROLS INSULATING FLANGE KITS (PO 31576)		
	TOTAL	**$100.00**
COMCO SMALL FITTINGS (PO 31523)		
	TOTAL	**$11,248.64**

Enbridge Gas Storage
Project: 3410 Meter Run Upgrade
Location: Wilkesport (3454)

Total Value:	$375,494.02	100.00%
Utility:	$280,132.68	74.60%
Nexus:	$95,361.34	25.40%

Colour Code
Utility:
Nexus

VALVES		
	TOTAL	**$27,535.00**
CONTROL VALVES (PO 31075)		
	TOTAL	**$0.00**
ACTUATORS (PO 30872)		
	TOTAL	**$98,651.65**
METER RUNS (PO 30632)		
	TOTAL	**$0.00**
GAS CHROMATOGRAPHS (PO 30632)		
	TOTAL	**$41,078.00**
INLINE SEPARATOR (PO 30818)		
	TOTAL	**$0.00**
MOISTURE ANALYZERS (PO 30477)		
	TOTAL	**$31,495.00**
HYGRADE BUILDINGS (PO 30859)		
	TOTAL	**$44,772.00**
BRISTOL INSTRUMENTATION (PO 30884)		
	TOTAL	**$50,943.50**
FITTINGS (PO 30901)		
	TOTAL	**$0.00**
GAS DETECTORS (PO 30904)		
	TOTAL	**$2,277.00**
BRIDLE VALVES (PO 31068)		
	TOTAL	**$0.00**
HYGRADE AC BUILDINGS (PO 31073)		
	TOTAL	**$12,054.57**
PIPE		
	TOTAL	**$0.00**
PRESSURE AND TEMPERATURE TRANSMITTERS (PO 31318)		
	TOTAL	**$12,473.82**
HIGH VOLTAGE INSTALL (Don Allensen Services)		
	TOTAL	**$4,135.80**
ELECTROZAD ELECTRICAL ITEMS (PO 31404)		
	TOTAL	**$18,753.94**
VIKING INSTRUMENT ITEMS (PO 31517)		
	TOTAL	**$6,141.04**
ELECTROZAD ROTEX CABLES (PO 31645)		
	TOTAL	**$546.20**
MAX TOWERS - TOWERS & EQUIPMENT (PO 31638)		
	TOTAL	**$24,636.50**

Enbridge Gas Storage
Project: 3410 Meter Run Upgrade
Location: Corunna (3452)

Total Value:	$1,922,275.06	100.00%
Utility:	$722,189.86	37.57%
Nexus:	$1,200,085.20	62.43%

Colour Code
Utility:
Nexus

VALVES		
	TOTAL	**$439,775.00**
CONTROL VALVES (PO 31075)		
	TOTAL	**$114,878.73**
ACTUATORS (PO 30872)		
	TOTAL	**$212,806.96**
METER RUNS (PO 30632)		
	TOTAL	**$378,381.78**
GAS CHROMATOGRAPHS (PO 30632)		
	TOTAL	**$41,078.00**
INLINE SEPARATOR (PO 30818)		
	TOTAL	**$133,750.00**
MOISTURE ANALYZERS (PO 30477)		
	TOTAL	**$31,495.00**
HYGRADE BUILDINGS (PO 30859)		
	TOTAL	**$44,772.00**
BRISTOL INSTRUMENTATION (PO 30884)		
	TOTAL	**$50,943.50**
FITTINGS (PO 30901)		
	TOTAL	**$118,497.70**
GAS DETECTORS (PO 30904)		
	TOTAL	**$2,277.00**
BRIDLE VALVES (PO 31068)		
	TOTAL	**$108,360.00**
HYGRADE AC BUILDINGS (PO 31073)		
	TOTAL	**$12,054.57**
PIPE		
	TOTAL	**$112,859.94**
PRESSURE AND TEMPERATURE TRANSMITTERS (PO 31318)		
	TOTAL	**$18,816.43**
HIGH VOLTAGE INSTALL (Don Allensen Services)		
	TOTAL	**$2,763.98**
CLEMMER TANK (PO 31506)		
	TOTAL	**$8,670.00**
ELECTROZAD ELECTRICAL ITEMS (PO 31404)		
	TOTAL	**$20,261.52**
VIKING INSTRUMENT ITEMS (PO 31517)		
	TOTAL	**$6,395.91**
LAKESIDE CONTROLS INSULATING FLANGE KITS (PO 31576)		
	TOTAL	**$134.28**
ELECTROZAD GENERATORS (PO 31650)		
	TOTAL	**$5,504.90**
ELECTROZAD ROTEX CABLES (PO 31645)		
	TOTAL	**$546.20**
MAX TOWERS - TOWERS & EQUIPMENT (PO 31638)		
	TOTAL	**$24,636.50**
COMCO SMALL FITTINGS (PO 31523)		
	TOTAL	**$32,615.16**

Enbridge Gas Storage
Project: 3410 Meter Run Upgrade
Location: Dow Moore (3455)

Total Value:	$2,358,876.07	100.00%
Utility:	$1,107,224.67	46.94%
Nexus:	$1,251,651.40	53.06%

Colour Code
Utility:
Nexus

VALVES		
	TOTAL	**$595,260.00**
CONTROL VALVES (PO 31075)		
	TOTAL	**$0.00**
ACTUATORS (PO 30872)		
	TOTAL	**$163,449.77**
METER RUNS (PO 30632)		
	TOTAL	**$567,572.67**
GAS CHROMATOGRAPHS (PO 30632)		
	TOTAL	**$41,078.00**
INLINE SEPARATOR (PO 30818)		
	TOTAL	**$157,000.00**
MOISTURE ANALYZERS (PO 30477)		
	TOTAL	**$31,495.00**
HYGRADE BUILDINGS (PO 30859)		
	TOTAL	**$44,772.00**
BRISTOL INSTRUMENTATION (PO 30884)		
	TOTAL	**$50,943.50**
FITTINGS (PO 30901)		
	TOTAL	**$301,811.91**
GAS DETECTORS (PO 30904)		
	TOTAL	**$2,277.00**
BRIDLE VALVES (PO 31068)		
	TOTAL	**$86,670.00**
HYGRADE AC BUILDINGS (PO 31073)		
	TOTAL	**$12,054.57**
PIPE		
	TOTAL	**$213,247.37**
PRESSURE AND TEMPERATURE TRANSMITTERS (PO 31318)		
	TOTAL	**$10,394.85**
HIGH VOLTAGE INSTALL (Don Allensen Services)		
	TOTAL	**$1,808.00**
CLEMMER TANK (PO 31506)		
	TOTAL	**$8,670.00**
ELECTROZAD ELECTRICAL ITEMS (PO 31404)		
	TOTAL	**$20,261.52**
VIKING INSTRUMENT ITEMS (PO 31517)		
	TOTAL	**$5,799.78**
ELECTROZAD GENERATORS (PO 31650)		
	TOTAL	**$5,504.90**
ELECTROZAD ROTEX CABLES (PO 31645)		
	TOTAL	**$554.42**
MAX TOWERS - TOWERS & EQUIPMENT (PO 31638)		
	TOTAL	**$2,546.50**
COMCO SMALL FITTINGS (PO 31523)		
	TOTAL	**$35,704.31**

Enbridge Gas Storage
Project: 3410 Meter Run Upgrade
Location: Seckerton (3453)

Total Value:	$2,287,836.69	100.00%
Utility:	$796,783.61	34.83%
Nexus:	$1,491,053.08	65.17%

Colour Code
Utility:
Nexus

VALVES		
	TOTAL	**$589,145.00**
CONTROL VALVES (PO 31075)		
	TOTAL	**$157,384.66**
ACTUATORS (PO 30872)		
	TOTAL	**$254,172.06**
METER RUNS (PO 30632)		
	TOTAL	**$378,381.78**
GAS CHROMATOGRAPHS (PO 30632)		
	TOTAL	**$41,078.00**
INLINE SEPARATOR (PO 30818)		
	TOTAL	**$141,250.00**
MOISTURE ANALYZERS (PO 30477)		
	TOTAL	**$31,495.00**
HYGRADE BUILDINGS (PO 30859)		
	TOTAL	**$44,772.00**
BRISTOL INSTRUMENTATION (PO 30884)		
	TOTAL	**$50,943.50**
FITTINGS (PO 30901)		
	TOTAL	**$203,738.09**
GAS DETECTORS (PO 30904)		
	TOTAL	**$2,277.00**
BRIDLE VALVES (PO 31068)		
	TOTAL	**$108,360.00**
HYGRADE AC BUILDINGS (PO 31073)		
	TOTAL	**$12,054.57**
PIPE		
	TOTAL	**$177,433.69**
PRESSURE AND TEMPERATURE TRANSMITTERS (PO 31318)		
	TOTAL	**$18,816.43**
CLEMMER TANK (PO 31506)		
	TOTAL	**$8,670.00**
ELECTROZAD ELECTRICAL ITEMS (PO 31404)		
	TOTAL	**$20,261.52**
VIKING INSTRUMENT ITEMS (PO 31517)		
	TOTAL	**$6,395.91**
LAKESIDE CONTROLS INSULATING FLANGE KITS (PO 31576)		
	TOTAL	**$2,654.28**
ELECTROZAD GENERATORS (PO 31650)		
	TOTAL	**$5,504.90**
ELECTROZAD ROTEX CABLES (PO 31645)		
	TOTAL	**$552.54**
MAX TOWERS - TOWERS & EQUIPMENT (PO 31638)		
	TOTAL	**$2,546.50**
COMCO SMALL FITTINGS (PO 31523)		
	TOTAL	**$29,949.26**

FRPO INTERROGATORY #12

INTERROGATORY

B - Rate Base
Issue 6: Is the allocation of the cost and use of capital assets between utility and non-utility ("unregulated") operations appropriate?

Ref: EB-2012-0055, Exhibit B, Tab 1, Schedule 5, page 3

EGD states that it has reconsidered some of its cost allocation methods and has taken it upon itself to proactively accept and implement each of the recommendations that B&V has made.

a) Please update Table 3 and Table 4 on page 23 of the B&V Study to reflect the changes in EGD's cost allocation methodology.

b) Please expand Table 3 and Table 4 to include 2012 estimates and 2013 budget numbers.

c) Please identify and explain how the adoption of B&V's recommendations changes EGD's rate rebasing evidence.

RESPONSE

a) and b)

The question in a) and b) refer to the O&M cost allocations and are not Rate Base matters.

The tables below, show the Tables 3 and 4 from the B&V Study but updated to include both the 2012 estimate and 2013 budget numbers, and to show the results using the original allocation methodology and using the methodology suggested by B&V for the years from 2011 to 2013. The first set are the before and after versions of Table 3 and the second set are for Table 4.

Witnesses: K. Culbert
B. Pilon
J. Sanders

Table 3
(with Current Allocations)

Enbridge Gas Storage - O&M Costs
Regulated Storage Operation

Expense Category	2007	2008	2009	2010	2011	2012E	2013F
Labour	$3,361,251	$3,574,771	$3,607,253	$3,835,016	$4,299,598	$4,783,008	$5,008,218
Supplies	$1,061,065	$1,152,423	$1,022,099	$1,348,299	$1,365,079	$1,024,058	$1,027,037
Consulting Services	$1,480,086	$1,416,565	$1,468,205	$2,146,386	$1,482,801	$1,686,103	$1,827,093
Other Operating Expenses	$2,314,434	$2,223,109	$2,501,334	$2,653,088	$2,355,530	$2,482,603	$3,163,980
Property Taxes	$1,321,560	$1,180,933	$1,331,352	$1,425,708	$1,611,240	$1,851,787	$2,524,014
Labour Credit & Other	($1,044,216)	($1,279,375)	($1,400,056)	($2,036,650)	($2,358,964)	($2,768,192)	($2,915,042)
Total	**$8,494,180**	**$8,268,426**	**$8,530,187**	**$9,371,847**	**$8,755,284**	**$9,059,367**	**$10,635,300**

Table 3
(with B&V Suggested Allocations)

Enbridge Gas Storage - O&M Costs
Regulated Storage Operation

Expense Category	2007	2008	2009	2010	2011	2012E	2013F
Labour	$3,361,251	$3,574,771	$3,607,253	$3,835,016	$4,299,598	$4,783,008	$5,008,218
Supplies	$1,061,065	$1,152,423	$1,022,099	$1,348,299	$1,365,079	$1,024,058	$1,027,037
Consulting Services	$1,480,086	$1,416,565	$1,468,205	$2,146,386	$1,482,801	$1,686,103	$1,827,093
Other Operating Expenses	$2,314,434	$2,223,109	$2,501,334	$2,653,088	$2,355,530	$2,482,603	$3,163,980
Property Taxes	$1,321,560	$1,180,933	$1,331,352	$1,425,708	$1,611,240	$1,851,787	$2,524,014
Labour Credit & Other	($1,044,216)	($1,279,375)	($1,400,056)	($2,036,650)	($2,594,229)	($2,900,115)	($3,439,750)
Total	**$8,494,180**	**$8,268,426**	**$8,530,187**	**$9,371,847**	**$8,520,019**	**$8,927,444**	**$10,110,592**

Witnesses: K. Culbert
B. Pilon
J. Sanders

Table 4
(with Current Allocations)

Enbridge Gas Storage - O&M Costs
Unregulated Storage Operation

Expense Category	2007	2008	2009	2010	2011	2012	2013
Labour	$143,821	$117,253	$506,108	$491,619	$391,669		
Supplies	$136	$483	$19,652	$165	$2,687		
Consulting Services	$85,016	$19,413	$166,735	$183,663	$180,294		
Employee Expenses	$10,058	$14,965	$27,785	$752	$29,314		
Other Operating Expenses	$6,667	$41,593	$404,052	$1,083,138	$1,401,631	$1,360,893	$1,844,560
Property Taxes		$156,000	$73,656				
Subtotal	$245,698	$349,707	$1,197,988	$1,759,337	$2,005,595		
Labour Credit & Other	($8,895)	$10,995	($75,167)	($51,740)	($59,114)		
Total	$236,803	$360,702	$1,122,821	$1,707,597	$1,946,481	$1,360,893	$1,844,560
Direct Assignment	$230,136	$319,109	$718,769	$624,459	$544,850		
Allocated Amount	$6,667	$41,593	$404,052	$1,083,138	$1,401,631		
Total	$236,803	$360,702	$1,122,821	$1,707,597	$1,946,481	$0	$0

Table 4
(with B&V Suggested Allocations)

Enbridge Gas Storage - O&M Costs
Unregulated Storage Operation

Expense Category	2007	2008	2009	2010	2011	2012	2013
Labour	$143,821	$117,253	$506,108	$491,619	$391,669		
Supplies	$136	$483	$19,652	$165	$2,687		
Consulting Services	$85,016	$19,413	$166,735	$183,663	$180,294		
Employee Expenses	$10,058	$14,965	$27,785	$752	$29,314		
Other Operating Expenses	$6,667	$41,593	$404,052	$1,083,138	$1,636,896	$1,643,808	$2,176,581
Property Taxes		$156,000	$73,656				
Subtotal	$245,698	$349,707	$1,197,988	$1,759,337	$2,240,860		
Labour Credit & Other	($8,895)	$10,995	($75,167)	($51,740)	($59,114)		
Total	$236,803	$360,702	$1,122,821	$1,707,597	$2,181,746		
Direct Assignment	$230,136	$319,109	$718,769	$624,459	$544,850		
Allocated Amount	$6,667	$41,593	$404,052	$1,083,138	$1,636,896	$1,643,808	$2,176,581
Total	$236,803	$360,702	$1,122,821	$1,707,597	$2,181,746		

The Table 4 numbers do not include all of the unregulated O&M costs for the 2012 and 2013, but it does show the effect on the amount of O&M costs that are expected to be charged from the regulated business.

Witnesses: K. Culbert
B. Pilon
J. Sanders

c) As can be seen in the above tables, the adoption of the recommendations contained in the Black & Veatch report will result in an incremental $0.2M allocation of operation and maintenance costs from the regulated to unregulated storage division, as compared to amounts contained in the 2013 Test Year pre-filed evidence. The incremental allocation was incorporated in the updated 2013 revenue requirement and deficiency reflected in Impact Statement Number 1, and can be seen in Exhibit M1, Tab 1, Schedule 4, pages 1 and 2, line number 9.

Witnesses: K. Culbert
B. Pilon
J. Sanders

Filed: 2012-
EB-2011-0354
Exhibit I
Issue B4
Schedule 8.1
Page 1 of 2
Plus Attachments

FRPO INTERROGATORY #1

INTERROGATORY

B - Rate Base
Issue 4: Is the proposed budget for Storage Capital Expenditure appropriate?

Reference: B1, Tab 5, Schedule 1, page 2-3, paragraph 6,7

Please provide the business case (s) that supported the investment in Metering Replacement and the 3-D Seismic Program.

If not included in the business case, please provide the anticipated effect on Lost and Unaccounted for Gas ("LUF).

RESPONSE

As stated in Exhibit B1, Tab 5, Schedule 1, Pages 1-4, the purposes and the business cases of the investment in Storage Pool Metering Replacement and the 3-D Seismic Program are to (1) improve the ongoing safety and reliability of gas storage operations and (2) to further increase the Company's understanding of its storage reservoirs and to better measure and manage storage inventories.

The Pool Metering Upgrade project was undertaken by Enbridge as the result of an internal decision to assess its gas storage inventory management capabilities. After consulting externally on current industry practices (GLJ Ltd. report "Inventory Discrepancy Analysis – Gas Storage Pools" (Dec. 2007), the Dowdle & Assoc. report "Third Party Review Practices and Procedures Gas Storage Inventory Verification" (Apr. 2009)), the Pool Metering Replacement and the 3D Seismic projects were undertaken. Use of these current metering and geophysical technologies is standard within the storage industry. Copies of the reports are attached.

Enbridge Gas Distribution storage operations utilized the original centralized orifice measurement equipment for check measurement prior to the completion of the Storage Pool Metering Replacement project. Enbridge Gas Distribution did not and does not own or operate Measurement Canada certified custody transfer measurement for the majority of the volumes managed and did not have pool specific energy and gas

Witnesses: I. Chan
B. Pilon
J. Sanders

composition data. With the completion of the Storage Pool Metering Replacement project Enbridge Gas Distribution will have volume, energy and gas composition information specific to each pool and at an accuracy equivalent to custody transfer measurement. The value of this increased confidence is not only in verifying the custody measures of our partners but also in a greater confidence in the measure of gas volumes and energy injected into and withdrawn from each of the storage pools.

Prior to the completion of the 3D seismic projects Enbridge Gas Distribution did not have a subsurface view of storage pool structures sufficient to confirm the pool boundaries and to more accurately identify potential gas migration paths. Through the analysis of the 3D seismic data currently available Enbridge Gas Distribution has been able to identify locations for planned observation well drilling that will help to confirm the operating limits of the storage pools.

With the completion of the above work and with the completion of the computer modeling of the storage pools it is anticipated that a more accurate assessment of the lost and unaccounted for (LUF) volumes will be available.

Witnesses: I. Chan
B. Pilon
J. Sanders

ENBRIDGE GAS DISTRIBUTION INC.

INVENTORY DISCREPANCY ANALYSIS

GAS STORAGE POOLS

Effective December 31, 2007

Prepared by
William M. Spackman, E.I.T.
Viggo Floisand, P. Eng., M.Sc.
Dana B. Laustsen, P. Eng.

1088662

GAS STORAGE POOLS REPORT

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GLJ Petroleum Consultants

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President, C.E.O.
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James H. Willmon, P. Eng.

January 13, 2009

Project 1088662

Mr. Ian MacRobbie
Enbridge Gas Distribution Inc.
Gas Storage Operations
3595 Tecumseh Road
Mooretown, Ontario N0N 1M0

Dear Sir:

Re: Enbridge Gas Storage Pools
December 31, 2007 Update of Inventory Discrepancy Analysis

In accordance with your request, GLJ Petroleum Consultants Ltd. (GLJ) has conducted an update analysis of inventory discrepancies of the Enbridge operated gas storage pools. The update analysis was prepared from September through December 2008 utilizing gas injection, withdrawal and wellhead pressure data available to the end of December 2007.

The report quantifies a shortfall of gas inventory which engineering analysis indicates is not present in the storage reservoirs. Possible reasons for this inventory discrepancy are discussed although, as before, no single explanation could definitively be proven to be causing the discrepancy. Predictions as to continued future inventory discrepancies are included.

It is trusted that this study is sufficient to meet your current requirements. Should you have any questions regarding the analysis, please do not hesitate to contact the undersigned.

Yours very truly,

GLJ PETROLEUM CONSULTANTS LTD.

ORIGINALLY SIGNED BY

Dana B. Laustsen, P. Eng.
Executive Vice-President

DBL/jem
Attachments

INDEPENDENT PETROLEUM CONSULTANTS' CONSENT

The undersigned firm of Independent Petroleum Consultants of Calgary, Alberta, Canada has prepared the December 31, 2007 Update of Inventory Discrepancy Analysis of the Enbridge operated storage pools on behalf of **Enbridge Gas Distribution Inc.**, and hereby gives consent to the use of its name and to the said estimates.

In the course of the evaluation, **Enbridge Gas Distribution Inc.** provided GLJ Petroleum Consultants Ltd. personnel with basic information which included production data, injection data, well information, previous reservoir studies, pressure data and discussions of general operating procedure. The extent and character of ownership and accuracy of all factual data supplied for the independent evaluation, from all sources, has been accepted as represented. GLJ Petroleum Consultants Ltd. reserves the right to review all calculations referred to or included in this report and to revise the estimates in light of erroneous data supplied or information existing but not made available which becomes known subsequent to the preparation of this report.

The accuracy of any reservoir analysis is a function of the quality and quantity of available data and of engineering interpretation and judgment. While the reservoir interpretation presented herein is considered reasonable, the estimates should be accepted with the understanding that reservoir performance subsequent to the date of the estimate may justify revision, either upward or downward.

PERMIT TO PRACTICE
GLJ PETROLEUM CONSULTANTS LTD.

ORIGINALLY SIGNED BY
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Date: January 13, 2009

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The Association of Professional Engineers,
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GLOSSARY OF TERMS

Inventory Discrepancy – Difference between gas inventory balance calculated using custody metered values and balances calculated from reservoir engineering analysis.

LUF Allowance – Lost and Unaccounted for Allowance – Volume of gas allowed by the Ontario Energy Board to be written off due to measurement and unaccounted for gas inventory losses.

Meter Adjustment – Adjustments made to Enbridge metered values to match custody metered values.

Meter Discrepancy – Difference between Enbridge and custody meter readings.

Meter Error – Over or under statement of true measured volumes due to metering inaccuracy.

Migration – Flow of gas from high permeability area to low permeability area, and vice versa.

Permeability – Measurement of the relative ease of gas flow through a reservoir.

INTRODUCTION

This report is an update of previous GLJ Petroleum Consultants Ltd. (GLJ) evaluations dated December 1988, October 1989, November 1990, July 1993, February 1998, October 2000 and December 2005 on the Enbridge Gas Distribution Inc. (Enbridge) operated gas storage pools. At the request of Enbridge, new gas injection/withdrawal and individual pool pressure data have been incorporated and inventory discrepancies have been updated to the end of December 2007. Map 1 illustrates the relative location of the storage pools examined herein while Map 2 shows the relative position of the main observation wells in the main Kimball-Colinville, Corunna-Seckerton and Dow Moore areas.

CONCLUSIONS

1. As an overview, on a percentage basis since the previous report, discrepancy changes in Kimball-Colinville were at a much reduced level than prior years, whereas discrepancies in some of the other pools were generally higher. There is no definitive explanation for this, however, we have concluded the most likely cause to be disproportionate measurement error. Part of the difference, however could also be reduced gas losses in Kimball-Colinville since South Kimball was operated at lower pressure levels in the past couple of years.

2. The incremental change in gas inventory discrepancy from May 2005 to December 2007 is 2.68 BCF.

3. Of this total volume of 2.68 BCF, 0.228 BCF is attributed to migration, with the remaining 2.452 BCF attributed to meter error and unknown losses. This compares to the predicted discrepancy of 2.159 BCF in the 2006 report based on the recommended LUF allowances, an under-prediction to the measured discrepancy of 0.293 BCF. The discrepancies are broken down and compared to values quoted in the previous 2005 study as detailed below.

4. Kimball-Colinville Gas Inventory Discrepancies to Date

Reason		Spring 2005 Discrepancy	Fall 2007 Discrepancy	2005-2007 Discrepancy Change
Min. Meter Error	(BCF)	5.528	5.528	0
Migration	(BCF)	1.828	1.871	+0.043
Unaccounted For	(BCF)	5.310	5.596	+0.286
Total	(BCF)	12.666	12.995	+0.329

   a) "Min. Meter Error" refers to overstated net injection volumes which have occurred since 1978. The current discrepancy is based on analysis of the fall intercepts. In the past, minimum meter error percent was implied from analogy to Corunna-Seckerton. As explained later in the report, this may no longer be the case, hence minimum meter error since the prior report was set at zero, with the outstanding balance after accounting for migration classified as unaccounted for.

   b) "Migration" refers to the movement of gas from Kimball-Colinville into East Kimball or other undetected low permeability gas accumulations since the start of storage operations.

c) “Unaccounted For” refers to discrepancies which may be due to either overstated net injection volumes due to meter error or gas possibly leaking through a fracture system into the fault region south of South Kimball.

5. Corunna-Seckerton Gas Inventory Discrepancies to Date

Reason		Spring 2005 Discrepancy	Fall 2007 Discrepancy	2005-2007 Discrepancy Change
Meter Error	(BCF)	2.691	3.044	+0.353
Migration	(BCF)	-0.897	-0.843	+0.054
Total	(BCF)	1.794	2.201	+0.407

a) "Meter Error" refers to overstated net injection volumes which have occurred since 1978.

b) "Migration" refers to the postulated movement of gas into the reservoir from an unknown source. There has been no postulated movement in recent years, however the change in discrepancy analysis from spring to fall data has resulted in a revised overall discrepancy in migration volume. The 0.054 BCF change in this value is an artifact of the methodology used versus any actual migration since the previous report. This volume may be better described as unaccounted for.

6. Dow Moore Gas Inventory Discrepancies to Date

Reason		Spring 2005 Discrepancy	Fall 2007 Discrepancy	2005-2007 Discrepancy Change
Meter Error	(BCF)	3.654	4.708	+1.054
Migration	(BCF)	0.708	0.839	+0.131
Total	(BCF)	4.362	5.547	+1.185

a) "Meter Error" refers to overstated net injection volumes and is the net difference between inventory discrepancy for the pool and migration. The meter error value is unusually large, which is believed to be caused by the allocation of meter adjustments proportionately to pools when meter errors may actually be disproportionate as explained later in this report. There is some uncertainty whether this actually the case or whether some additional unexplained losses are occurring.

b) "Migration" refers to the movement of gas from the Dow Moore reef into the adjacent low permeability A-1 sediment.

7. Wilkesport/Black Creek/Coveny/Ladysmith Gas Inventory Discrepancies to Date

Reason		Spring 2005 Discrepancy	Fall 2007 Discrepancy	2005-2007 Discrepancy Change
Meter Error	(BCF)	1.309	2.067	+0.758
Migration	(BCF)	0.233	0.233	0.000
Total	(BCF)	1.542	2.300	+0.758

a) "Meter Error" refers to overstated net injection volumes and is the net difference between inventory discrepancy for the pool and migration.

b) "Migration" refers to the movement of gas from the reefs into the adjacent low permeability A-1 sediment.

8. Future Gas Inventory Discrepancies

a) Future discrepancies due to meter error and unaccounted losses are forecast at 0.86 percent of injected volumes or 0.43 percent of measured volumes for the pools as a total. This is an increase from the existing 0.77 percent allowance for meter error. As in the past, future metering and unaccounted discrepancies are predicted from historical trends.

b) No additional unaccounted for discrepancies are forecast at Kimball–Colinville provided South Kimball is operated at the reduced capacity levels observed over the past several years. This is a reduction from the 0.30 percent prediction in the previous 2005 study and the 0.92 percent in the previous 1997 study.

c) The reason for the reduction in unaccounted for inventory discrepancies at Kimball-Colinville over the past five years from the previous analysis is not clear. It may be due to reduced meter error or reduced gas spill. Evidence for reduced gas spill is the observation that South Kimball has recently been filled for shorter periods of time.

d) Due to the potential for disproportionate meter errors among the pools, it may not be appropriate to apply the forecast 0.86 percent LUF prediction for individual pool LUF allocations. A preferred approach would be to distribute a total LUF calculated at 0.43

percent of total metered volumes to individual pools based on their proportionate share of annual discrepancy analysis calculations.

9. Use of Fall Intercept Data

An inventory discrepancy analysis has been performed and presented using both spring and fall intercept data. Overall discrepancy trends are similar, although there are some differences on individual pools over short periods of time. The differences are likely due to the accuracy of the extrapolated stabilized pressure measurements, which are more reliable for longer shut-in periods.

RECOMMENDATIONS FOR ADDITIONAL WORK

To improve the reliability of the analysis, the following additional work is recommended in future studies.

a) Review geological mapping of the Wilkesport, Dow Moore and Coveny Pools with the intent of selecting locations for additional pressure observation wells in potential low permeability regions surrounding the pools.

b) Bottom-hole static gradient pressure surveys on observation wells should be taken at the end of spring and fall shut-in periods periodically to ensure reliable bottom hole measurements are being correctly determined from surface pressures.

c) Due to the potential for proportional allocation of meter differences causing inventory discrepancies in some pools as a result of different Enbridge meter biases, the metering component of LUF calculated for all pools as a total, should be allocated on a yearly basis to pools based on the annual measured discrepancies from storage slope intercept analysis.

d) It is recommended that the operator further investigate the significant withdrawal meter adjustments made in early 2006 to ensure their reliability.

e) To enhance the reliability of inventory discrepancy determination and verify whether gas leaking is occurring through the fracture system south of South Kimball, the possibility of conducting a numerical simulation should be reviewed. A numerical simulator has the advantage of being able to replicate reservoir calculations both in 3 dimensions and time, as opposed to the current mathematical models, which only attempt to replicate reservoir behavior in one dimension and time. The main objective of the simulation would be, after obtaining a history match over time, to see if the pressure falloff behavior in South Kimball during fall shut-in periods at high pressures could be matched with a closed system, or whether a leakage component would need to be added. The current mathematical methods employed are not precise enough to verify this.

f) The Corunna, Seckerton and Ladysmith pools produce liquids concurrently with the ongoing gas storage operation. Curtailing liquid production during periods of gas storage operation shut-ins would mitigate any effect this might have on the observed pressure readings.

g) To develop a more consistent shut-in pressure extrapolation approach, it is recommended that:
   i. The type curves be updated using all extended shut-in periods to develop a normalized curve.
   ii. The slope of the pressure vs. shut-in time at the end of the shut-in periods be calculated and used to adjust the extrapolation curve to a position with a similar slope on the type curve. It is believed this would be a more consistent predictive procedure for cycles with atypical operation prior to shut-in.

h) The potential for improving the accuracy of the Enbridge operated check meters be investigated. Improvement in check meter accuracy would help resolve disproportionate meter error issues.

i) If investigation of the above issues does not resolve the relatively high discrepancies at Dow Moore, then, if storage operation flexibility permits, the possibility of operating Dow Moore at a reduced pressure level for one storage cycle be examined to see if this reduces the amount of the discrepancy.

UPDATE ANALYSIS

Data for additional storage cycles (2005-06, 2006-07, 2007 fall) have been incorporated into this analysis. The Mid Kimball-Colinville and South Kimball yearly gas storage data is summarized in Tables 1 and 2, respectively. In order to eliminate any effects of communication of the permeable A-1 with the Mid Kimball-Colinville and South Kimball reef area, best fit slopes on the storage curve plots were calculated for injection and withdrawal cycles separately excluding extended shut-in pressure data. The updated analysis is within the engineering accuracy of the previously derived values of original gas-in-place (OGIP) of 22.1 BCF for Mid Kimball-Colinville and 14.5 BCF for South Kimball.

Extended shut-in data is detailed in Table 3 and depicted on Plot 1. This data indicates a storage system OGIP of 41.9 BCF, which is unchanged from the previous analysis. The calculated permeable A-1 storage volume remains at 5.3 BCF. Average storage system pressures are as previously calculated using the following weighting factors:

Pool	Original Gas-In-Place (BCF)	Weighting Factor (%)
South Kimball	14.5	34.61
Mid Kimball-Colinville	22.1	52.74
Near A-1 Sediment	5.3	12.65
	41.9	100.00

Best-fit pressure analysis for yearly storage cycles based on the above factors is presented in Table 4. The intercepts presented in this table are instantaneous values calculated using the average slope of 25.7757 psi/BCF based on the extended S.I. data. The selected spring intercept values are either: a) the average intercept values of the last two pressure points in the storage cycle, or b) the average of the intercept values calculated from extrapolated shut-in pressures on Table 3 and weighted average spring S.I. pressures on Table 4.

$$\text{i.e. Spring 2004 Intercept} = \frac{12.309 + 12.743}{2} = 12.526 \text{ BCF}$$

The selected intercept values were used to determine inventory discrepancy changes between storage cycles. Shut-in pressure data was therefore used where available, as it is a more reliable indicator of average system pressure. Fall intercept values were also derived in a fashion similar

to the spring data. The variation in calculated intercepts during shut-in periods using different methods is illustrated on Plot 2. All methods of interpreted intercepts show an increasing trend.

Storage slope analyses of the other storage pools are presented in Tables 5 through 11. A summary of the spring storage physical balance intercepts is presented in Table 12. A similar summary of fall intercept data is presented in Table 13. These tables are compilations of intercept analysis presented in Tables 4 through 11. A shift in the intercepts indicates a discrepancy in inventory assuming a fixed reservoir volume. These discrepancies are illustrated on Plots 3 and 4 (normalized) for all storage pools and are summarized (relative to spring 2005 intercept data) as follows:

Area	Fall 2007 Discrepancy (BCF)	Spring 2005 – Fall 2007 Discrepancy Change (BCF)
Kimball-Colinville	12.995	+0.329
Corunna	1.054	-0.020
Seckerton	1.147	+0.428
Wilkesport	1.416	+0.308
Dow Moore	5.547	+1.185
Black Creek	0.088	+0.091
Coveny	0.803	+0.175
Ladysmith	-0.007	+0.184
Total	23.043	+2.680

Updated gas analyses provided by Enbridge have been used in calculating recent storage pressure slopes. The updated analysis resulted in an insignificant change to the p/z extrapolations from wellhead pressure data. For inventory verification purposes, summaries of the extrapolation pressures as a function of shut-in times (i.e. extrapolation type curves) are presented in Appendix V. These type curves were developed in the early GLJ inventory discrepancy reports by examining shut-in behavior during some of the long shut-in periods. It should be noted that the extrapolation type curves are most valid for typical spring and fall shut-in cycles and may not be appropriate for extrapolations in the middle of cycles or where production and withdrawals are erratic prior to shut-in. In certain instances, where build-up or shut-in behavior was atypical, the extrapolations were adjusted to be more reflective of the slope of pressure change near the end of the shut-in period. Since the level and duration of production prior to shut-in will affect the reliability of these extrapolations, longer shut-ins will be more reliable. To develop a more consistent extrapolation approach, it is suggested that the type curves be updated using all extended shut-in periods to develop a normalized curve and the slope of the pressure vs shut-in

time at the end of the shut-in periods be calculated and used to adjust the extrapolation curve to a position with a similar slope on the type curve. It is believed this would be a more consistent predictive procedure for cycles with atypical operation prior to shut-in.

Historical summaries of storage slopes for various periods are presented at the bottom of Tables 5 through 11 for each storage pool. For storage cycles since the previous report (i.e. spring 2005), the storage slopes used for inventory verification of the older pools is the arithmetic average of each pool since 1980. Earlier periods have been omitted from the average as gas compositions were slightly different in the early years of operation. For the newer pools, full life averages are generally used. The average slope data for the other periods were not used in the analysis, but are presented to illustrate the relative consistency of the storage slope calculation. A more rigorous statistical analysis has not been conducted, however is not expected to give any meaningfully different result. A summary of the recommended storage slopes for future inventory analysis is presented in Appendix VI along with plots of the historical variation of storage slopes. The variation is believed to be a statistical result of the limited accuracy of extrapolation pressures as well as metered volumes. Prior inventory discrepancy reports generally used historical averages up to the dates of the reports. For future analysis, it is recommended the slopes not be changed from current recommended values as long as there is not a change beyond the statistical accuracy of the data. This will ensure a more consistent discrepancy calculation from year to year.

METER ADJUSTMENT HISTORY

Volumes delivered to Enbridge (injection) have historically been measured at the TCPL custody transfer meters at Dawn and at the individual pool meters located at the Enbridge station. Volumes delivered from Enbridge (withdrawal) have historically been measured at the individual pool meters at the Enbridge station and thereafter at the Union Gas custody transfer meters located at Dawn. The Enbridge pool volumes are adjusted up or down on a monthly basis so that the volumes recorded in pool inventories coincide with the custody transfer volumes. The requirement to use custody transfer measurement, provided by others, and the need to use different sets of custody transfer meters for injection versus withdrawal, introduces increased complexity in determining pool inventory discrepancies.

As in prior studies, the impact of measurement discrepancies was investigated by examining measurement adjustment histories of the storage pools. The adjustments made to Enbridge metered volumes to balance with the Dawn metered volumes are detailed in Appendix II. Yearly summaries of the data illustrated on Plot 5 indicate significant meter adjustments after 1973, a decreasing trend to net meter adjustments after 2000 and before 2006, a significant adjustment in the January-March 2006 withdrawal cycle, then another stabilizing trend since 2006. During the stabilizing periods, the reduced net change is a result of an increase in the adjustments made to the withdrawal metered volumes that offsets adjustments made to the injection metered volumes. The following table summarizes these adjustments over recent periods.

	Injection Adjustments (% of Injected Volumes)	*Withdrawal Adjustments (% of Injected Volumes)*	*Net Adjustments (% of Injected Volumes)*
Past 1 year	*2.06*	*1.48*	*0.30*
Past 2 years	*1.65*	*-0.82*	*2.45*
Past 4 years	*1.73*	*0.58*	*1.17*
Past 7 years	*1.74*	*0.92*	*0.84*
Past 10 years	*1.54*	*0.90*	*0.75*
Past 13 years	*1.51*	*0.67*	*0.89*

Meter systems at Union's custody station which measures the withdrawal volumes have undergone some changes over the past several years. In 2003, nine turbine meters were changed out to larger turbines to handle more capacity. In November 2005, a tenth turbine meter run was added along with some modifications to the upstream filters. The timing of these modifications does not appear to coincide directly with changes to the meter discrepancy trend, however. Net statistical adjustments over the past year are quite minor, at only 0.30 percent. The two year average jumps to 2.45 percent due to the very large negative withdrawal adjustment in the early 2006 withdrawal period. Longer term averages are generally in the 0.8 to 0.9 percent range. It is recommended that the operator further investigate the significant adjustments in early 2006 to ensure their reliability.

EAST KIMBALL PRESSURE BEHAVIOUR

The East Kimball area is the region of low permeability A-1 sediment deposited southeast of the South Kimball reef.

Since August 2001 well TKC #12 has been used for pressure observations for the South Kimball Pool. For the Mid Kimball, TKC #2 has been used, while IK #21 has been used to represent the near A-1 sediment. For the East Kimball A-1 sediment or “Boot” area, wells TKC #54 & TKC #55 are used to represent pressures in this area. TKC #56 and TKC #57 are considered too close to the reef to reflect the proper A-1 sediment pressure in the boot area. It is quite evident that the pressure variations as seen on Plot 6 indicate that all these wells are in communication with the Kimball-Colinville storage area. The delayed response seen in the A-1 sediment pressure is because low reservoir permeability results in a dampening effect of the pressure fluctuations as the distance from South Kimball increases.

Gas flow into and out of East Kimball is a function of the pressure differential between East Kimball and the main storage area. Gas balance within East Kimball, as measured by the reservoir pressure, can be modelled with influx as a function of the pressure gradient between East Kimball and South Kimball (Plot 7).

The model reasonably matches pressure levels and fluctuations of wells TKC #54 and #55. There are three main parameters which affect the level of average pressure fluctuations in East Kimball.

a) Gas influx coefficient between South and East Kimball. This is a measure of the permeability between the two regions (i.e. the higher the gas influx coefficient, the higher the permeability, hence, the faster gas will flow).

b) The OGIP represented by East Kimball and other low permeability areas

c) The weighting factors to be applied to TKC #54 and #55 data in order to determine an average East Kimball pressure.

The gas influx coefficient was previously determined to be 0.0008. The East Kimball plus other low permeability areas' OGIP is calculated to be 5.0 BCF based on the difference between total gas-in-place and main storage area gas-in-place.

INVENTORY DISCREPANCY RATIONALIZATION

Following is a description of GLJ's "Best Estimate" scenario for the inventory discrepancy rationalization. A review of the Dawn metered inventory discrepancy trends illustrated on Plots 3 and 4 indicates that since 1978, all storage pools have exhibited apparent gas losses. For Coveny the calculations show uncharacteristically high discrepancies with an apparent cumulative loss of over 3 percent of gas injection. Kimball-Colinville and Dow Moore exhibit approximately 1.2 and 1.3 percent of apparent gas losses, respectively with Corunna-Seckerton and Wilkesport exhibiting gas losses in the range of 0.4 to 0.8 percent.

Previous gas inventory studies completed for Enbridge concluded that inventory discrepancies were due to meter error, A1 migration and other unknown losses. The unknown losses may be due to additional measurement error, gas leakage or other unknown causes. Again in this study, gas losses are attributed to these three factors.

In the case of the Corunna, Seckerton, Wilkesport, Dow Moore, Black Creek and Coveny Pools, geological and geophysical evidence does not indicate the presence of any faults or fractures close to these pools. Based on the foregoing, it is highly unlikely that reservoir losses due to leakage would occur and thus it has been concluded that the apparent gas loss in these pools is due to measurement error only, with the exception of Dow Moore and Coveny, where A1 or tight gas migration has also been identified as a cause.

In the case of the Kimball-Colinville Pool, geological and geophysical evidence indicates the presence of a northwest to southeast trending fault system to the south of the South Kimball reservoir. The proximity of this fault system to South Kimball suggests it could be a conduit for some gas leakage from this pool. However to this point, there is no conclusive evidence of this occurring. In past studies, apparent gas losses for the Kimball-Colinville Pool exceed those attributable to proportional measurement error (based on proportionality of measurement error to all other Enbridge storage pools) and those losses due to A1 migration. The extra gas loss beyond proportional measurement error and A1 migration has been attributed to unaccounted for discrepancies. Since 2000, it appears that the Kimball-Colinville Pool gas losses have diminished based on the intercept data. The reason for the apparent lower gas losses is not clear. At Kimball-Colinville, lower apparent gas losses could be a result of lower migration efflux or a net migration influx, reduction in gas leakage, disproportionate allocation of metered volumes, or simply statistical variation as a result of the accuracy of the discrepancy calculation techniques.

A discussion of losses attributed to gas migration, metering errors and other unaccounted for losses follow below:

A-1 Migration

Based on the current pressure levels in East Kimball, it is believed that approximately 1.871 BCF (fall 2007) of net gas has migrated into East Kimball and additional low permeability areas. From a review of the inventory discrepancy trend on Plot 3, gas influx from East Kimball into the Kimball-Colinville storage area likely occurred prior to 1973. After 1973, due to increased pressures in Kimball-Colinville, gas flow migrated towards the low permeability areas, recharging them to pressure levels equal to the yearly average storage area pressure level. This migration has been minimal since 1993 as a result of pressure equalization of the storage area with the low permeability area.

Similar to Kimball-Colinville, there is a component of inventory discrepancy in Dow Moore attributable to migration into tighter areas of the reservoir. This volume was calculated at 0.839 BCF (Fall 2007) based on the inferred tight gas reservoir volume from material balance gas-in-place analysis. Migration volumes are inferred to have stabilized over the past six years compared to the previous three years due to no significant changes in average storage pressure patterns at Dow Moore. The remaining discrepancy is most likely attributable to meter error, as there are no other reasonable explanations for the differences.

Cumulative inventory discrepancy at Coveny is approximately 3 percent (based on fall 2007 intercept analysis) of injected volumes. This is outside the range of metering accuracy, hence a portion of the discrepancy is believed due to recharging of tight reservoir rock in and around the reef. Evidence of this charging is exhibited by the spring observation well pressures at MUS 8-15-XII which are higher than the reef pressures as seen in Plot 8. There does not appear to be a good trend in gas discrepancy as a percentage of injected volume. This could possibly be due to insufficient time for stabilized pressures during shut-in periods to reliably determine the amount of gas migration into the tighter rock. The injection/withdrawal history and gas volume inventory balance for Coveny are illustrated on Plot 9.

In order to approximate this migration, net pay maps supplied by Enbridge were reviewed. It was observed that approximately 9 percent of the total pore volume of the reef complex is mapped at the edges of the pool, outside the contour of the observation well MUS 8-15-XII, which exhibits delayed pressure behavior from the main storage wells. It has been assumed in the migration calculations therefore that the size of this “tight gas” region is 9 percent of the total pool volume,

which equates to a value of 0.376 BCF. Calculations similar to those performed for the Dow Moore Pool have been carried out using a two year running average reservoir P/Z to estimate the gas volumes lost to migration into this tight rock. These calculations indicate that 0.233 BCF as of fall 2007 of the apparent gas loss is due to migration. The remaining apparent loss is assumed to be attributed to meter error. This equates to a value of 2.2 percent (based on fall 2007 analysis) of injected volumes, or approximately 1.1 percent of total injected plus withdrawn volumes. It appears that the incremental gas volume attributed to migration has slowed down over the past seven years. This would be expected as more migration would occur during the initial phases of gas storage repressuring.

Meter Discrepancies

In previous analyses, the inferred minimum discrepancy in Kimball-Colinville, as a result of measurement error, was assumed to be in the same proportion as the Corunna/Seckerton/ Wilkesport discrepancies, since measurement error attributable to the Dawn meters would be reflected in all of the Enbridge storage reservoirs. This proportionate relationship is strictly valid if exactly the same Enbridge meter was used to measure all the Enbridge operated pools. There are, however, nineteen individual meter runs at Enbridge used to measure volumes into the storage pools. Slightly different measurement biases at these meters would result in some disproportionate allocation of measurement difference. For this reason, in the previous analyses, the Kimball-Colinville discrepancies above those rationalized by the proportionate measurement error assumption were attributed to either gas leakage or disproportionate measurement error.

A plot of measurement differences (between the Enbridge and Dawn meters) and inventory discrepancies for Corunna-Seckerton is depicted on Plot 10. The shape of the inventory and meter difference trends suggests that there is a relationship.

A review of recent discrepancy trends in the pools appears to indicate that disproportionate measurement adjustments are continuing to occur. Inventory imbalances have not been proportional. The only reasonable explanation for this is the under-allocation of Dawn measurement difference volumes to injection volumes into certain pools, due to a lower bias (or meter factor) in the Enbridge meters, as compared to the other pool meters. Daily data for gas injection and withdrawal have been available since October 1, 1999. This may have reduced (but not eliminated) potential under-allocation compared to when the data was only provided on a monthly basis and total monthly measurement differences to all pools were allocated in proportion to the Enbridge measured volumes.

The following observations are noted based on a review of the Enbridge meter flow schematic diagrams provided by Enbridge:

1. Dow Moore injection is measured by 5 meter runs which have not been used to measure injection into any other pools.
2. Wilkesport and Ladysmith flows are measured by 2 meter runs which have not been used to measure flow into any other pools. These two pools can now occasionally be measured by three new ultrasonic meter runs at the Sombra station.
3. Corunna and Seckerton flow is measured by 3 meter runs which are also occasionally used to measure Kimball-Colinville flow.
4. Mid and South Kimball flow is measured by 6 meter runs in addition to the occasional use of the 3 Corunna and Seckerton meters.
5. Coveny and Black Creek flow is measured by 3 ultrasonic meter runs in addition to the occasional use by the Wilkesport and Ladysmith meter runs.

Based on the above meter facility descriptions, the previous inventory studies concluded that meter discrepancies at Kimball-Colinville would most likely be proportionate to Corunna-Seckerton. From a review of recent meter adjustment histories and discrepancy trends, we believe this proportional relationship may not always apply. Over the past several years, discrepancy trends at Kimball-Colinville have leveled off, yet are still increasing at Corunna-Seckerton and the other pools.

In the case of the Dow Moore Pool, the apparent losses, after A-1 migration has been taken into account, may be attributable to meter error. It should be noted that the Dow Moore meter error is not proportionate to the other pool meter errors, which may be due to different Enbridge meter biases relative to the other pool meters. An example of this is the situation where Dow Moore and Kimball-Colinville are withdrawing at the same time. For example, Dow Moore withdraws 20 BCF and Kimball-Colinville withdraws 40 BCF. If the Dow Moore meters are reading correctly, but the Kimball-Colinville meters are reading 2 percent too high and the custody withdrawal meter is reading 0.5 percent too low, then the meter allocation factor would be 60*(1-.005)/(20*1+40*1.02)=0.9819. Dow Moore would then be assigned official inventory withdrawals of 20*1*0.9819, which equals 19.638 BCF. This is an apparent loss of (20-19.638)/19.638, or 1.84 percent. Similarly, Kimball-Colinville would then be assigned official inventory withdrawals of 40*1.02*0.9819, or 40.062 BCF. This is an apparent gain of (40.062-40)/40.062, or 0.15 percent.

In summary, the disproportionate inventory discrepancy due to meter error calculated for several pools since 1993 leads to the conclusion that not all Enbridge meters have equal biases and, therefore, proportional allocation, even on a daily basis of Dawn meter differences to all of the Enbridge meters may not be accurate. Although this may have an impact on the inventory discrepancies in the affected pools relative to each other, it has no impact on the total discrepancy determined for all of the pools combined. The only reliable way to prevent misallocation of meter error, is to only inject and withdraw into one pool at a time, which is not very practical from an operational standpoint. More accurate check meters at Enbridge facilities would help minimize any disproportionate meter adjustment allocation issues, but may not change the overall discrepancies.

In the past ten years, the discrepancy attributed to meter error and unaccounted for losses at all the pools excluding Kimball-Colinville has averaged 1.0 percent. This compares to the current LUF allowance for meter error of 0.77 percent.

For the Kimball-Colinville Pool, the ten year average gas inventory discrepancy due to metering error plus unaccounted discrepancies is 0.63 percent. The actual amount of discrepancies due to meter error in Kimball-Colinville will be discussed in conjunction with the unaccounted for discrepancies below, as the two factors are inter-related at Kimball-Colinville.

Unaccounted For Discrepancies

Corunna-Seckerton

From Table 15, the remaining Dawn metered gas inventory discrepancy as of the end of May 2007 at Corunna-Seckerton, after accounting for measurement error, is 0.843 BCF. Using fall intercept data, this value is 0.897 BCF. As per previous reports, this remaining unaccounted for discrepancy gain occurs prior to 1978 in Seckerton as shown on Plot 3. The source of this gas influx is unknown. The volume was derived by taking the difference in storage slope intercepts prior to 1978 as the earlier reports concluded there was no significant discrepancy due to meter error until after 1978. This unaccounted for volume has been described as migration in Table 14 and 15 although it may be more accurately described as unaccounted for.

Kimball-Colinville

From Table 15, the remaining Dawn metered gas inventory discrepancy as of fall 2007 at Kimball-Colinville, after accounting for migration, is as follows:

	Fall Data Analysis
Total Discrepancy – BCF	12.995
Less Low Permeability Migration – BCF	1.871
Equals Remaining Discrepancy	11.124

This remaining Kimball-Colinville discrepancy could be due either to measurement error and/or gas leakage from Kimball-Colinville. As discussed in the previous reports, the most likely cause of gas leakage would be through a fracture system into the fault region south of South Kimball.

The evidence regarding gas leakage is still unclear and often conflicting. Although no clear conclusion can be reached from this study, we still tend to believe that disproportionate metering difference has a more significant role in the discrepancies than previously estimated.

Rationalization Summary

Fiscal year estimates of discrepancies due to meter error, migration and unaccounted volumes for all pools are presented in Tables 14 and 15 for the spring and fall intercept analysis methods, respectively. Migration estimates for Kimball-Colinville are based on history matched mathematical models discussed in the following section. Minimum meter error estimates for Kimball-Colinville were based on the previous report using the Corunna-Seckerton meter error percentages prior to 2006. These values varied from between 0.13 percent up to 1.35 percent depending on the period and type of analysis (fall vs. spring). After 2005, the minimum meter error estimate at Kimball-Colinville was set equal to zero as there has been no material variation in the cumulative discrepancy. The unaccounted Kimball-Colinville volumes are then equal to the total discrepancies minus migration minus minimum meter error values.

Corunna-Seckerton migration gains are based on changes in storage balance intercepts prior to 1978. Discrepancies due to meter error at Corunna/Seckerton/Wilkesport are based on intercept changes after 1978. Dow Moore and Coveny migration losses were calculated assuming the low permeability region surrounding the reef is recharged to a pressure level equal to the previous two year time weighted average of the reef pressure. The meter errors were then calculated to be the difference between the discrepancies indicated by the storage balance intercepts and the migration losses.

Discrepancies at the remaining Black and Ladysmith Pools have been assumed to be attributable to meter differences.

The foregoing summarizes our current best estimate of discrepancy changes. Although the total discrepancy interpretations are reasonably reliable, the rationalization of the causes is highly interpretive and certainly many other explanations are possible. Disproportionate discrepancies are occurring which, although may be caused primarily by the allocation of meter adjustments, the unusually large recent percent changes in some of the pools such Dow Moore and Wilkesport may warrant further investigation into these pools. Items which could be examined include the verification of bottom hole versus surface pressure data, the need for additional observation wells, and whether reduced peak operating pressures have an effect on calculated discrepancies.

COMPARISON WITH PAST GAS INVENTORY DISCREPANCY PREDICTIONS

The 2005 Inventory Discrepancy analysis study recommended 0.77 percent of injected volumes of all pools be adopted to account for metering discrepancies and an additional 0.30 percent for unaccounted for losses at Kimball-Colinville. A comparison of predicted and measured discrepancies from spring 2005 through fall 2007 follows:

	Predicted Discrepancy (BCF) (2005 Study)	*Calculated Discrepancy (BCF) (2007 Study)*	*Difference (BCF)*
Kimball-Colinville	*0.995*	*0.286*	*-0.709*
Corunna-Seckerton	*0.371*	*0.353*	*-0.018*
Dow Moore	*0.475*	*1.054*	*0.579*
Wilkesport	*0.114*	*0.308*	*0.194*
Black Creek/Coveny	*0.086*	*0.266*	*0.180*
Ladysmith	*0.118*	*0.184*	*0.066*
Total	*2.159*	*2.451*	*0.292*

The measured discrepancies are 0.292 BCF (14 percent) more than the predicted discrepancies in the 2005 study.

The 1997 Inventory Discrepancy analysis study recommended 0.775 percent of injected volumes of all pools be adopted to account for metering discrepancies and an additional 0.92 percent for unaccounted for losses at Kimball-Colinville. A comparison of predicted and measured discrepancies from spring 1997 through fall 2007 follows:

	Predicted Discrepancy (BCF) (1997 Study)	*Calculated Discrepancy (BCF) (2007 Study)*	*Difference (BCF)*
Kimball-Colinville	*6.132*	*2.432*	*-3.700*
Corunna-Seckerton	*1.403*	*1.137*	*-0.266*
Dow Moore	*1.817*	*3.081*	*1.264*
Wilkesport	*0.563*	*0.664*	*0.101*
Black Creek/Coveny	*0.296*	*0.658*	*0.362*
Ladysmith	*0.370*	*-0.007*	*-0.377*
Total	*10.581*	*7.965*	*-2.616*

The measured discrepancies are 2.616 BCF (25 percent) less than the predicted discrepancies in the 1997 study.

Previous studies presented mathematical models that were developed as tools to rationalize discrepancy trends in Kimball-Colinville under various assumptions and as predictive tools to forecast future losses under alternate operational schemes. Previous models have now been replaced by one model, RF-2 (Plot 11) which seeks to match the discrepancies by using meter error factors that are similar to those calculated for the Corunna-Seckerton pools through 2005 and then no meter error factor thereafter. This model assumes a fixed gas spill factor with an increased p/z spill level of 1300 psi vs the previous 1100 psi and adjusts the gas meter error factor according to meter errors experienced in Corunna-Seckerton during the time periods from 1978 through 1993, from 1994 through 1997, from 1998 through 2000 and from 2001 through 2005 with no meter error thereafter. This spill model better predicts the leveling off of recent discrepancies due to reduced pressure levels in South Kimball. The model has a poorer match to some of the older data, perhaps because meter error was not proportionate to Corunna-Seckerton in those years.

An indication that gas migration into East Kimball has slowed down somewhat can be seen in Plot 12. It appears in the last cycle that the South Kimball Pool is filled to a lower level than in the past, while Mid Kimball is being filled more than in past cycles. This may have caused less gas to migrate from South Kimball into East Kimball. It is also clear from Plot 6 that the A1 sediment pressure response is lower in the last cycle than in past cycles.

PREDICTION OF FUTURE INVENTORY DISCREPANCIES

Future inventory discrepancies will be a function of future meter error. Historical discrepancies attributed to meter error have varied depending on the period examined. Following are summaries of pertinent historical discrepancy averages attributed to meter error and unaccounted for losses using the spring and fall intercept data, respectively.

Fall Data

	Kimball-Colinville (% of Injected Volumes)	*Other Pools (% of Injected Volumes)*	*All Pools (% of Injected Volumes)*
Past 1 year	*-1.08*	*1.26*	*0.35*
Past 3 years	*0.05*	*2.10*	*1.31*
Past 7 years	*0.65*	*1.21*	*1.00*
Past 10 years	*0.63*	*1.00*	*0.86*

Spring Data

	Kimball-Colinville (% of Injected Volumes)	*Other Pools (% of Injected Volumes)*	*All Pools (% of Injected Volumes)*
Past 1 year	*-0.16*	*1.90*	*1.13*
Past 3 years	*0.29*	*1.88*	*1.28*
Past 7 years	*0.82*	*0.62*	*0.70*
Past 10 years	*1.11*	*0.68*	*0.85*

Average Spring/Fall Data

	Kimball-Colinville (% of Injected Volumes)	*Other Pools (% of Injected Volumes)*	*All Pools (% of Injected Volumes)*
Past 1 year	*-0.62*	*1.58*	*0.74*
Past 3 years	*0.17*	*1.99*	*1.29*
Past 7 years	*0.74*	*0.92*	*0.85*
Past 10 years	*0.87*	*0.84*	*0.86*

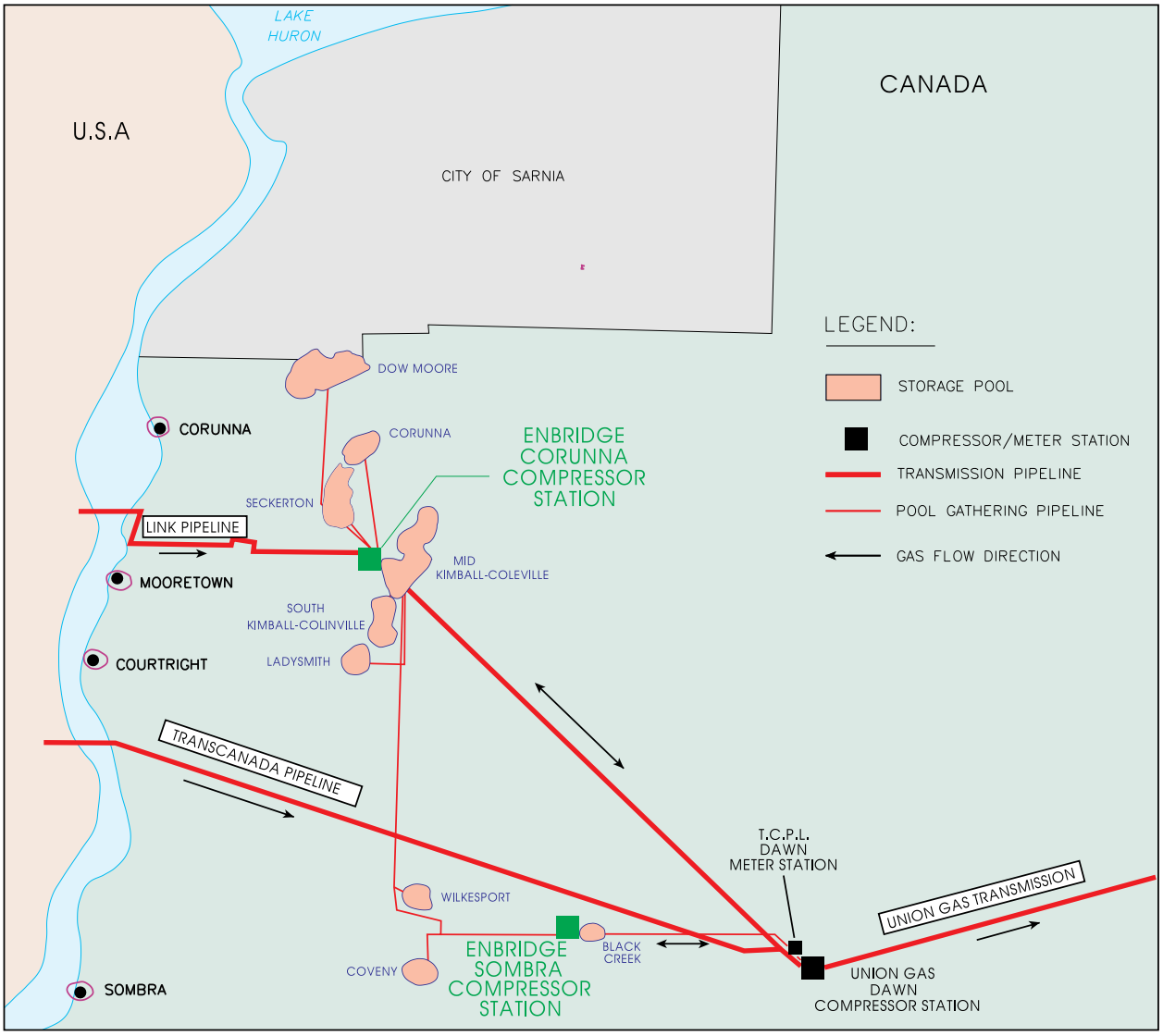
At this time, our best estimate for future discrepancies would be to utilize an overall meter error plus unaccounted allowance at 0.86 percent of injection volumes for all pools with no additional allowance for Kimball-Colinville provided South Kimball is operated at the reduced capacity levels observed over the past several years. This is based on the average losses of the past 10 years considering both the spring and fall intercept analysis. As actual discrepancies in individual pools may vary due to disproportionate allocation of meter differences, the allocation of the LUF allowance should be determined based on annual inventory discrepancy calculations rather than a fixed 0.86 percent for each pool.

Map 1
Location Map
Enbridge Storage System

Company: Enbridge Gas Distribution Inc.
Property: Storage Areas

Effective Date:
Scale: 1:NTS s1046465/tecm01

(PLOT SC. 60)

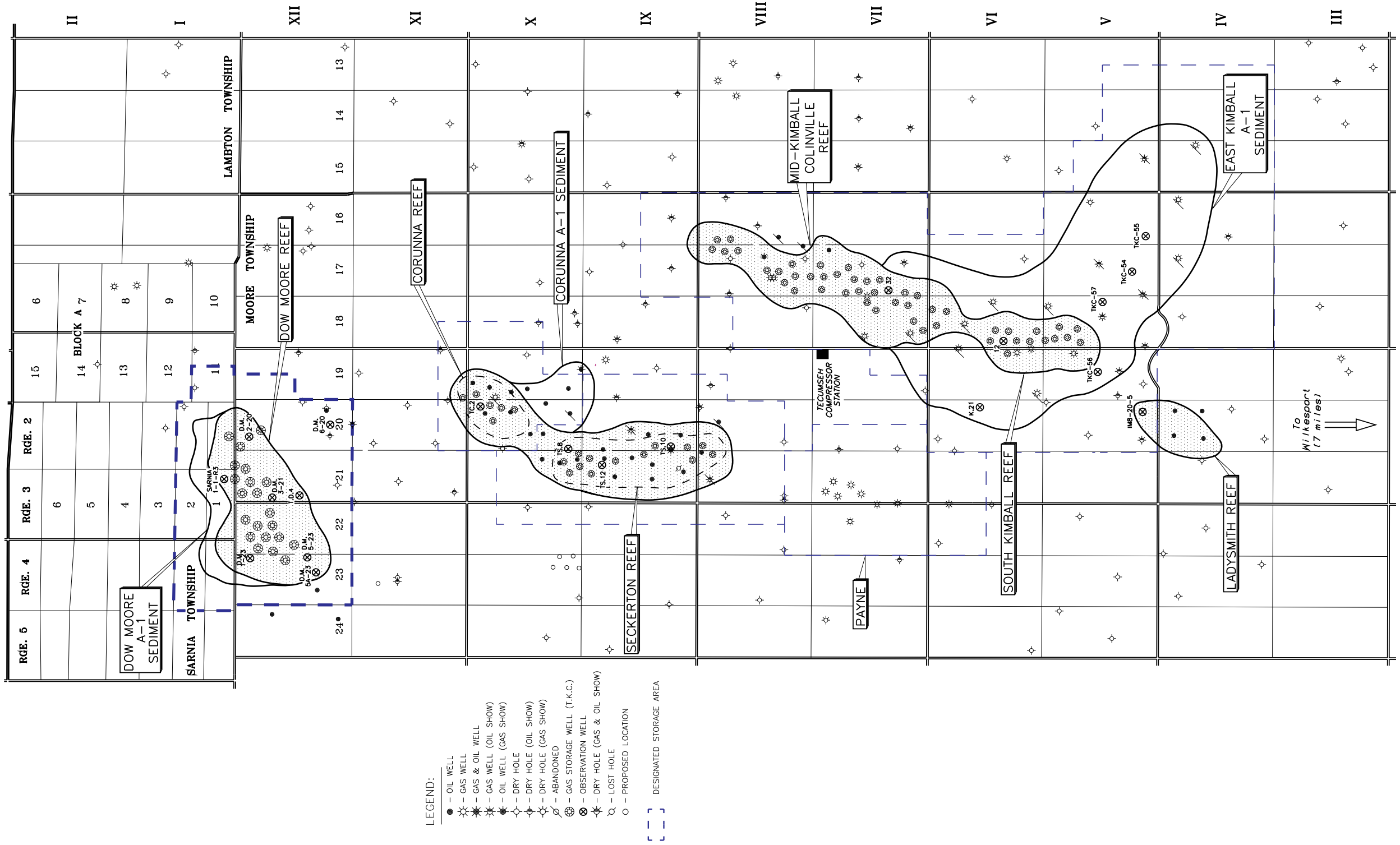


Map 2

Main Storage Areas
Enbridge Storage System
Sarnia, Ontario

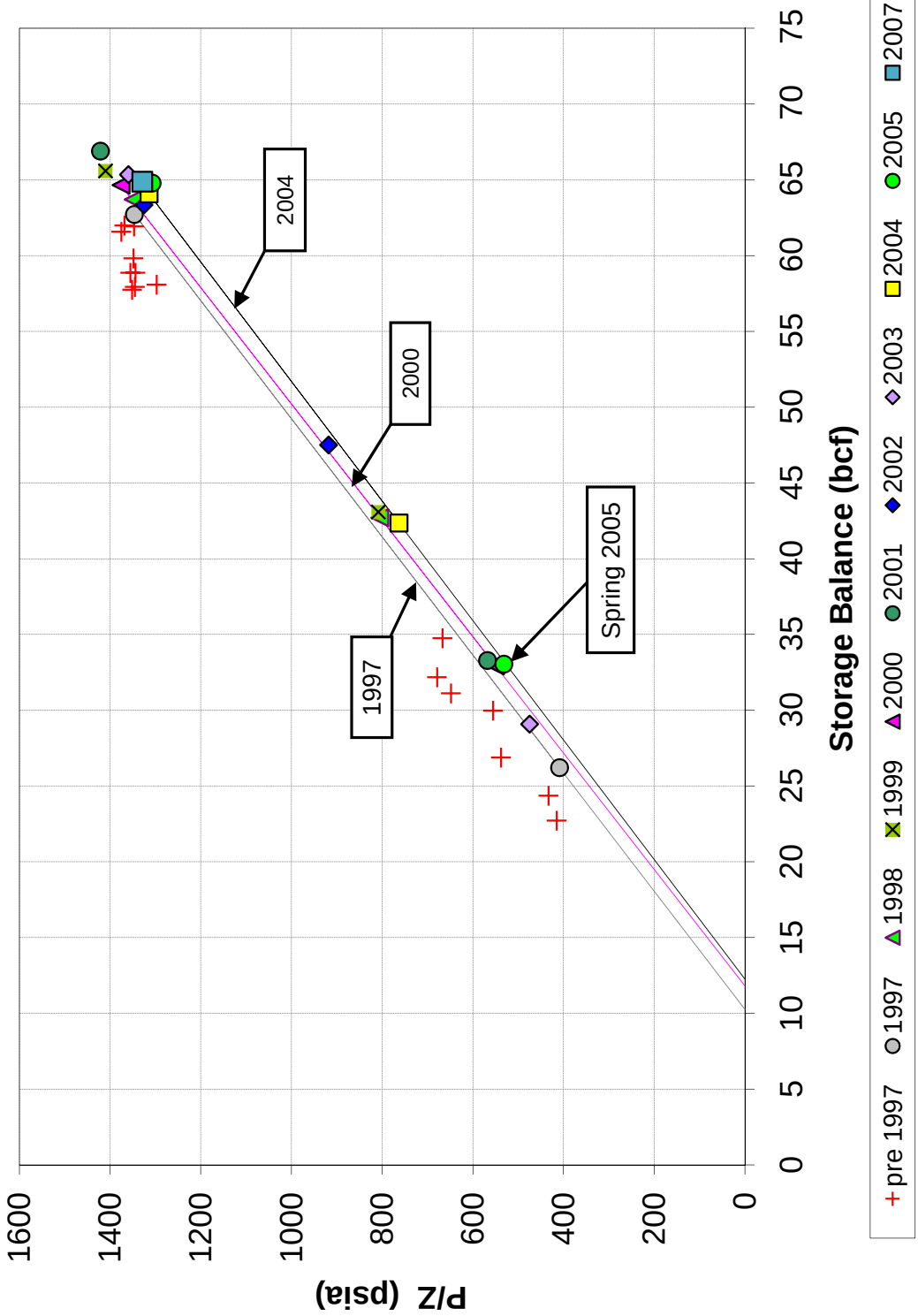
Company: Enbridge Consumers Gas
Property: Storage Areas

Effective Date:
Scale: 1:50,000 s1046465/tecm02



P/Z vs Storage Balance

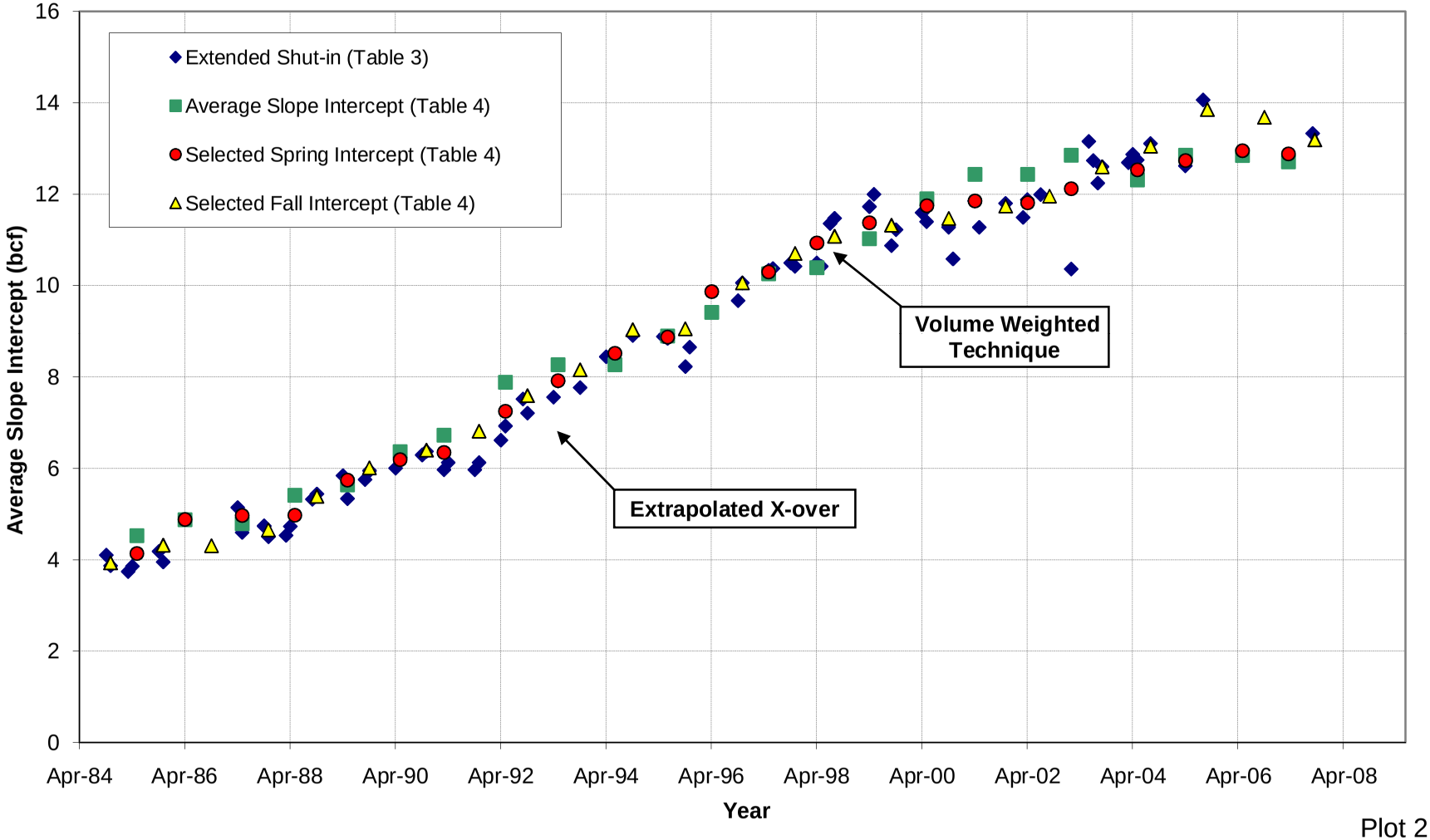
Kimball Colinville - Extended SI Data



Plot 1

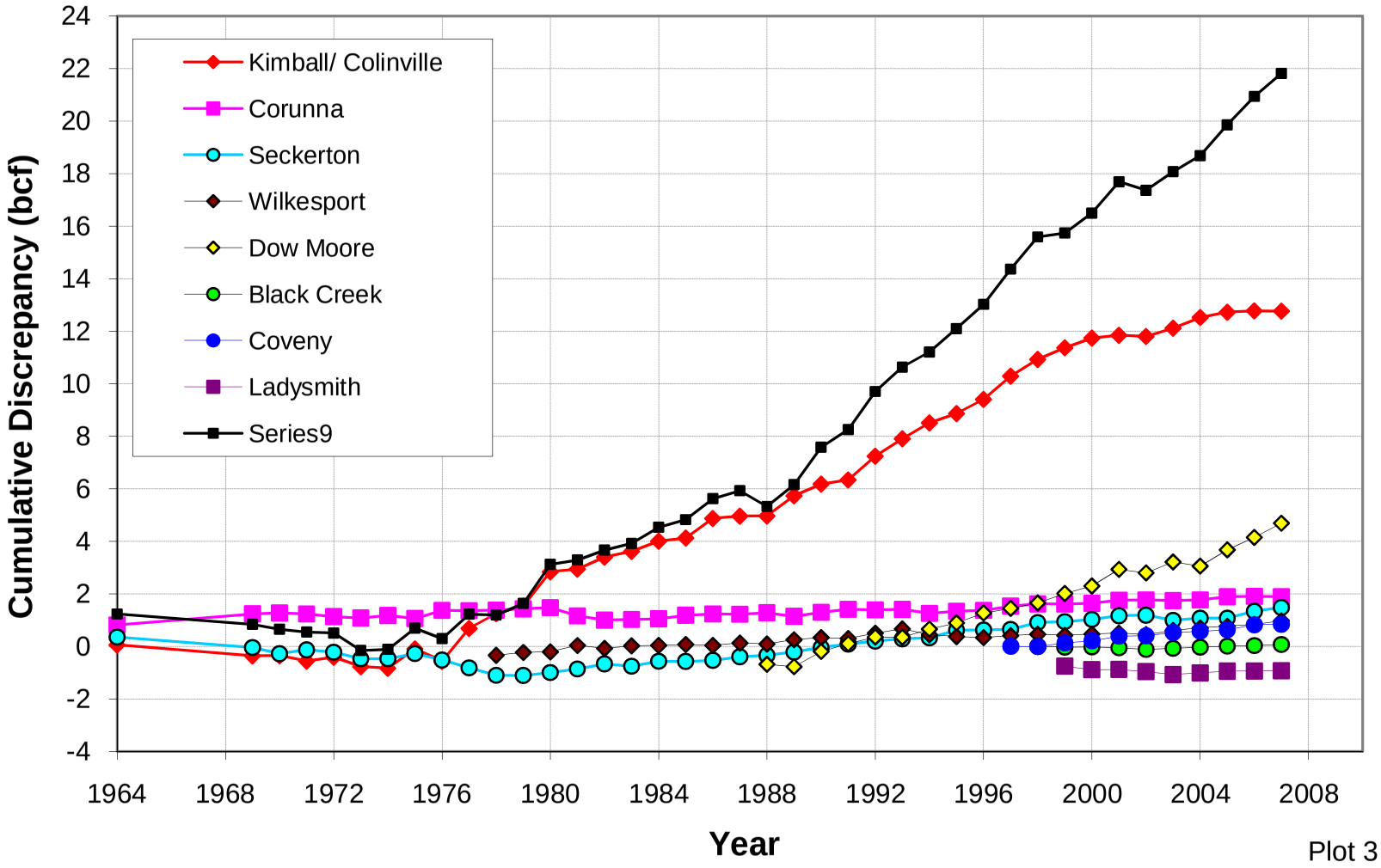
GLJ Petroleum Consultants

Variation of Intercept Calculation Techniques - Kimball Colinville



Plot 2

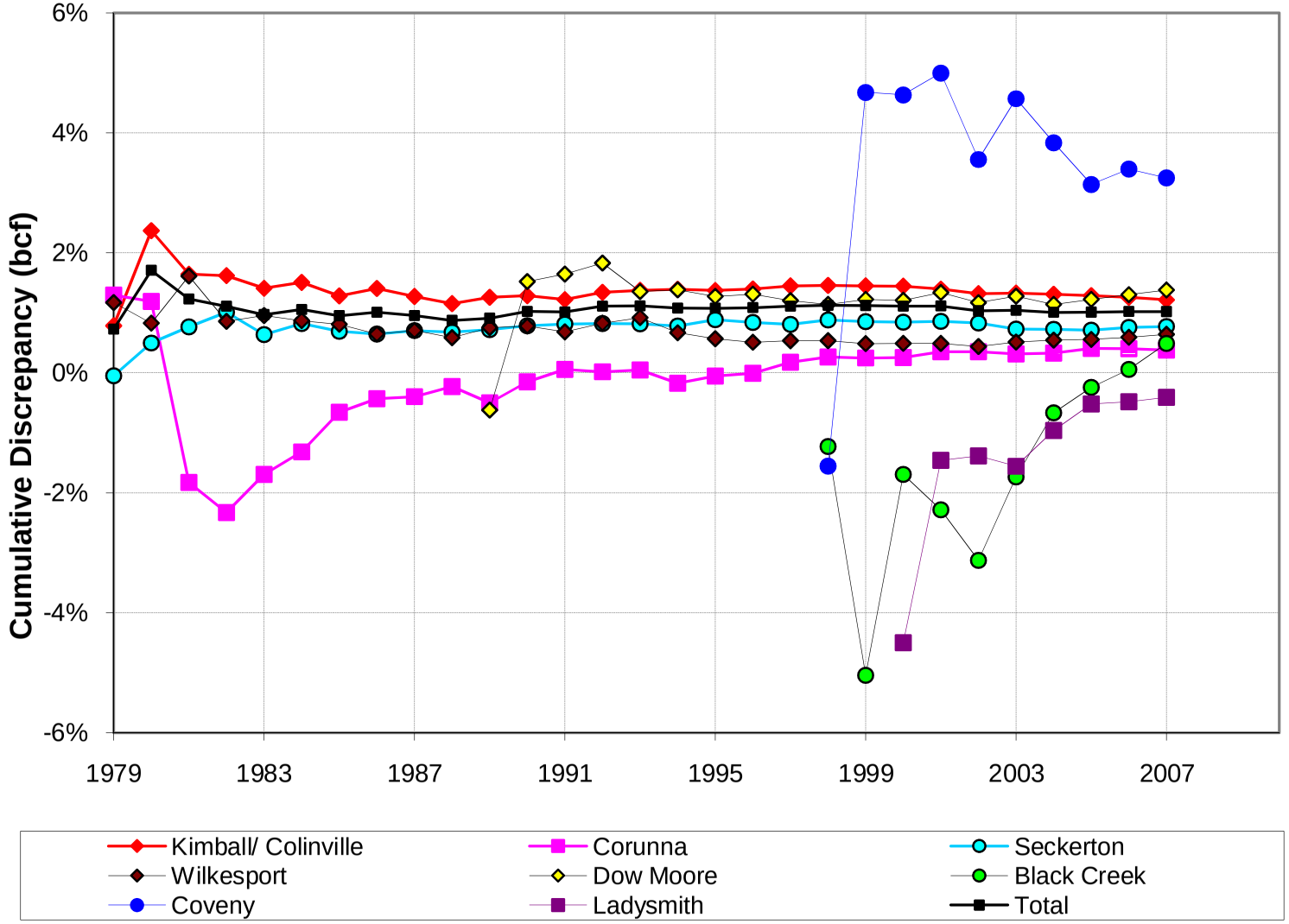
Inventory Discrepancy History
All Pools



Plot 3

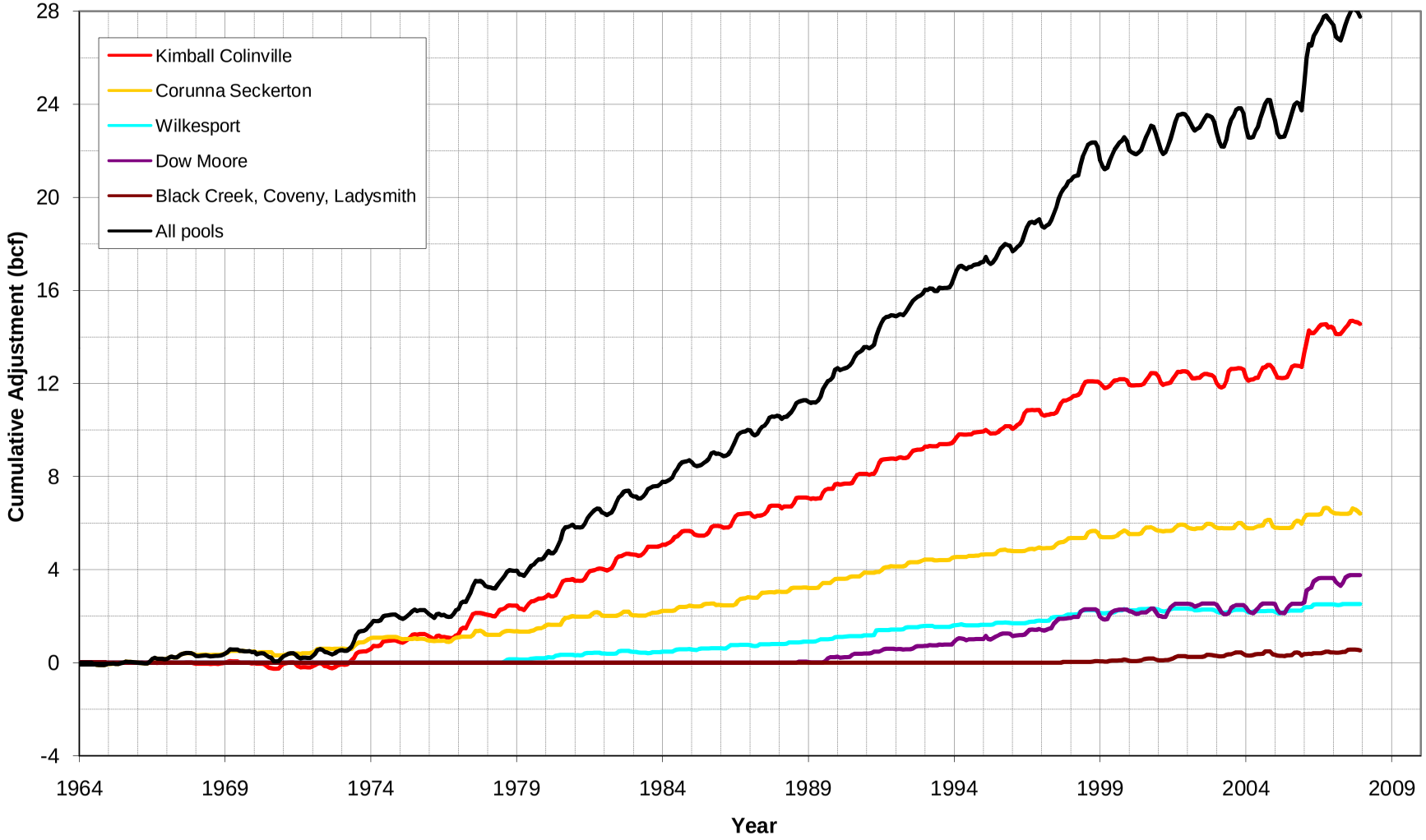
Inventory Discrepancy History (normalized)

All Pools



Plot 4

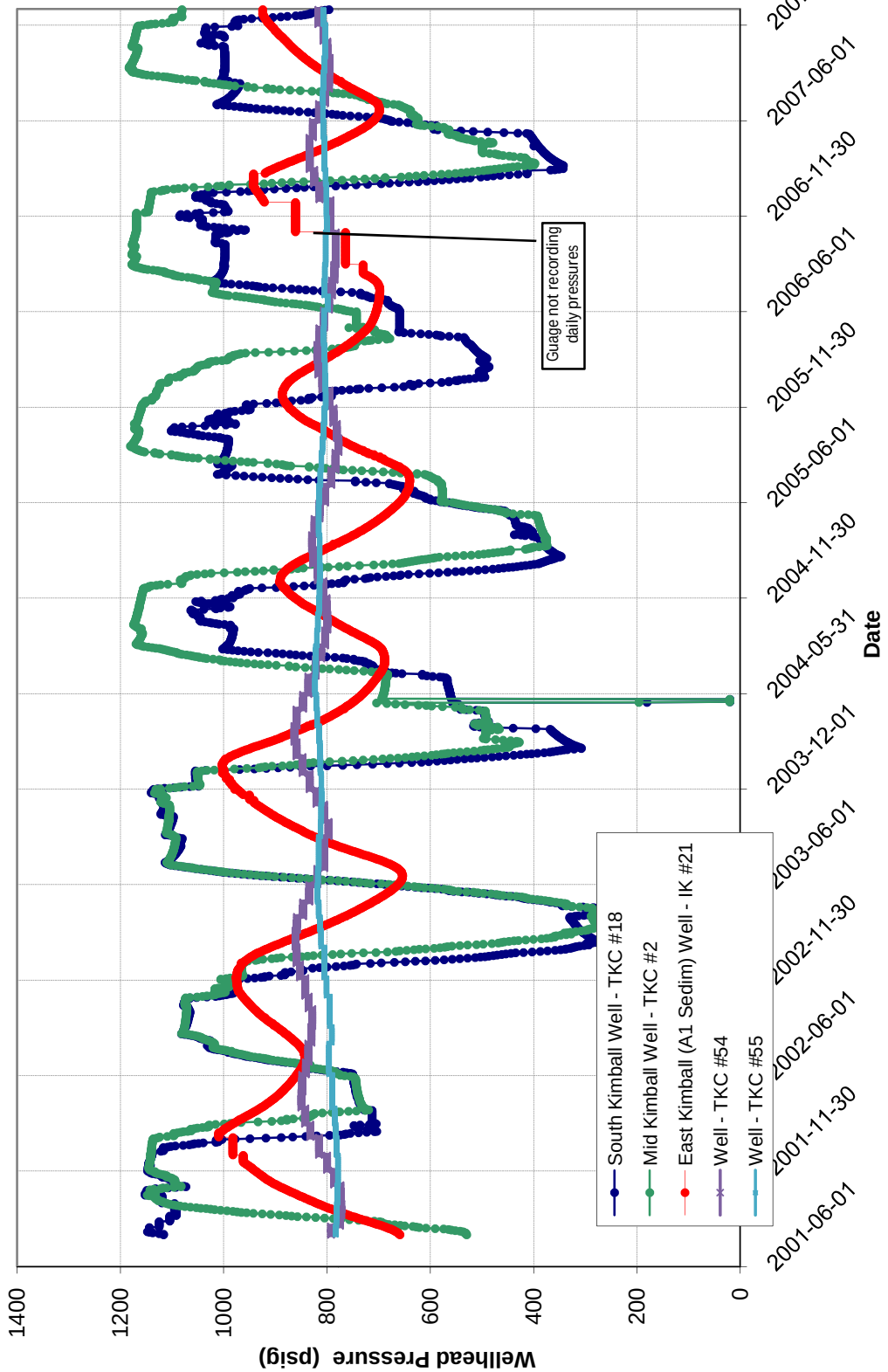
Net Meter Adjustment History



Plot 5

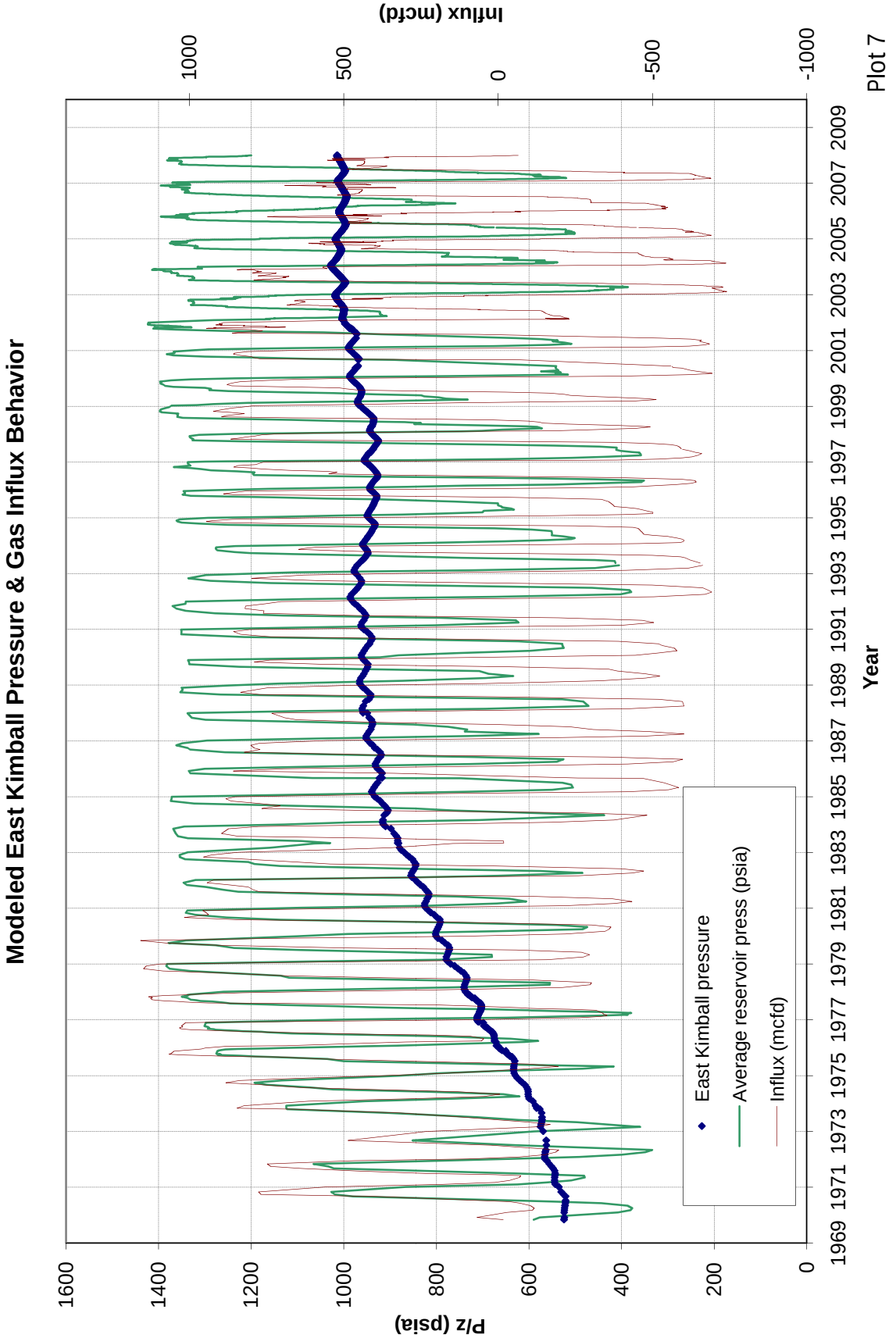
Observation Well Pressure Histories

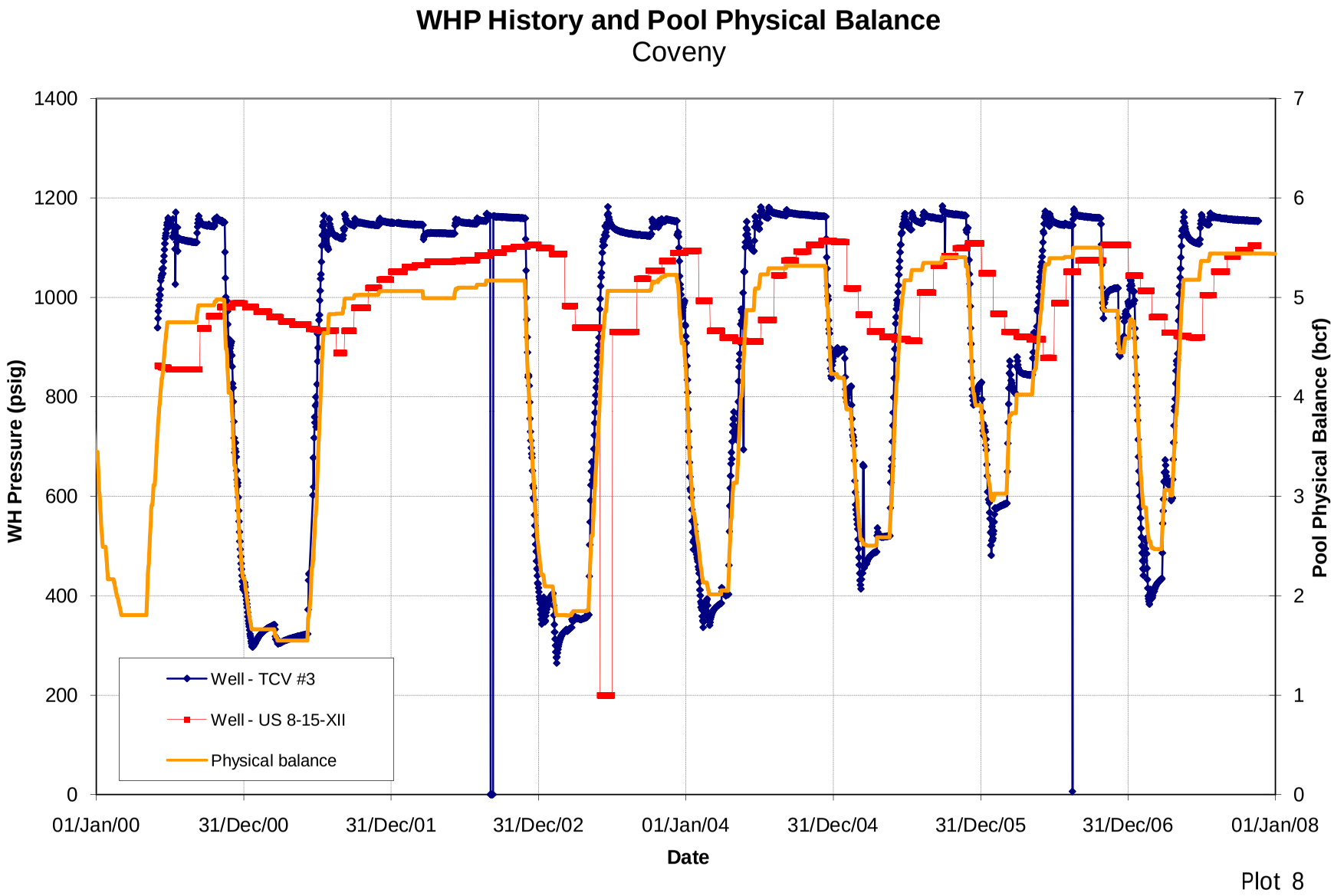
Kimball Colinville



Plot 6

GLJ Petroleum Consultants


Modeled East Kimball Pressure & Gas Influx Behavior
P/z (psia)
Influx (mcfd)
Year
Plot 7
East Kimball pressure
Average reservoir press (psia)
Influx (mcfd)
0
200
400
600
800
1000
1200
1400
1600
-1000
-500
0
500
1000
1969 1971 1973 1975 1977 1979 1981 1983 1985 1987 1989 1991 1993 1995 1997 1999 2001 2003 2005 2007 2009

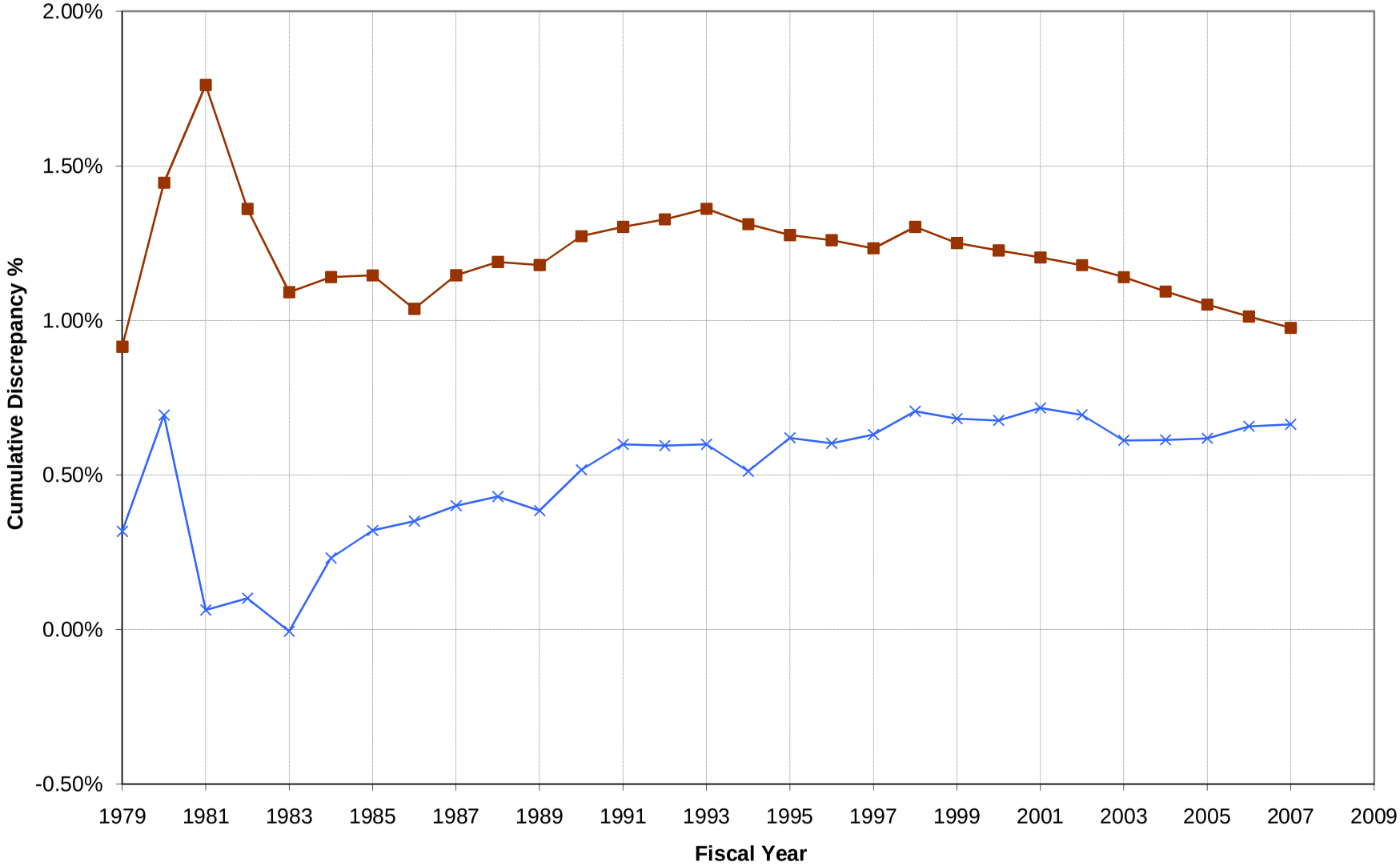

WHP History and Pool Physical Balance
Coveny
WH Pressure (psig)
Pool Physical Balance (bcf)
Date
Well - TCV #3
Well - US 8-15-XII
Physical balance
0
200
400
600
800
1000
1200
1400
1
2
3
4
5
6
7
01/Jan/00
31/Dec/00
31/Dec/01
31/Dec/02
01/Jan/04
31/Dec/04
31/Dec/05
31/Dec/06
01/Jan/08

Plot 8

Injection & Withdrawal History
Coveny
Monthyl Gas Injection and Withdrawal (mmcf)
Gas volume inventory balance (bcf)
Date
Injection
Production
Balance
2500
2000
1500
1000
500
0
-500
-1000
-1500
-2000
-2500
-3000
6
5
4
3
2
1
0
1999
2000
2001
2002
2003
2004
2005
2006
2007
2008

Plot 9

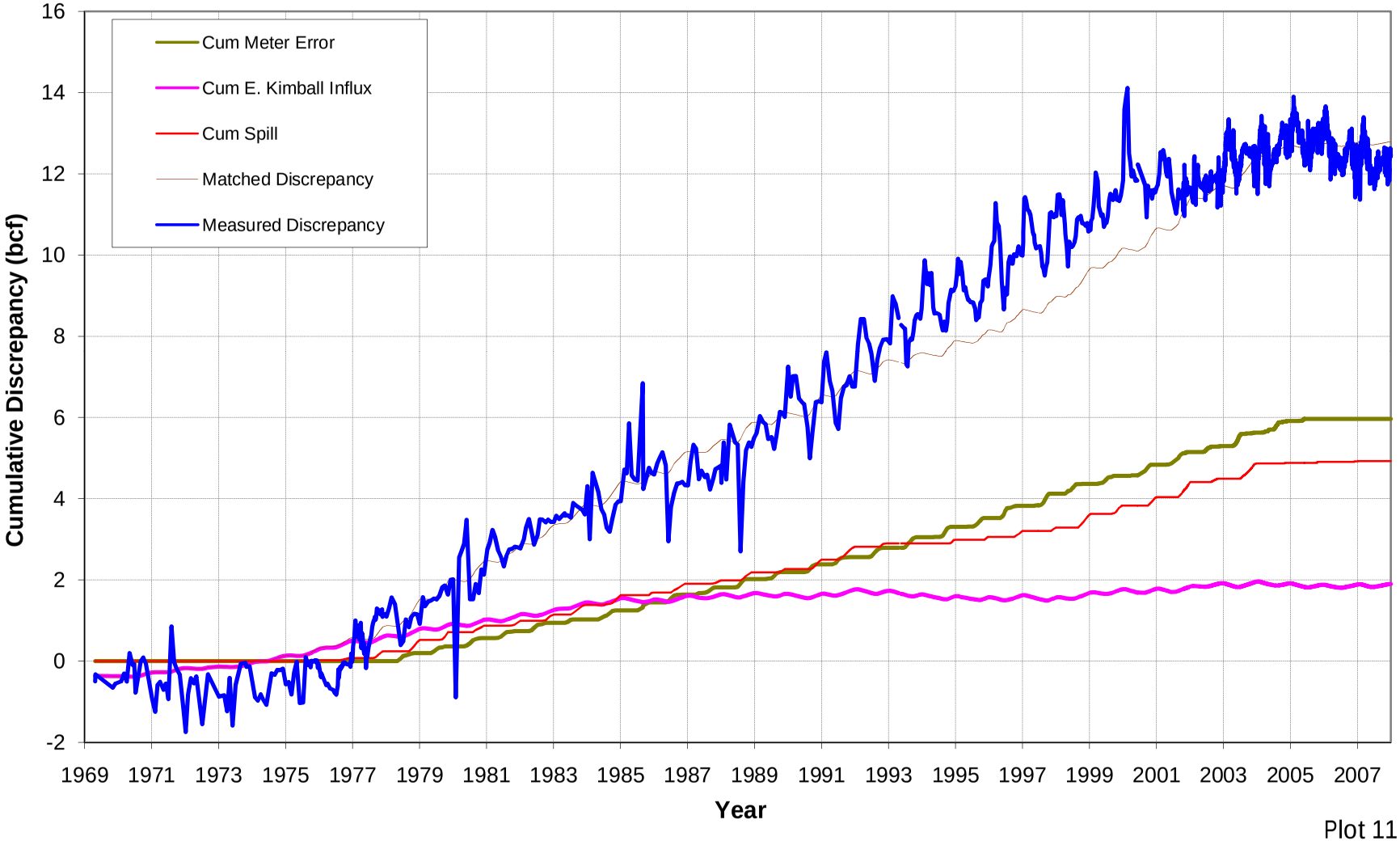
Inventory/Meter Discrepancy History
Corunna-Seckerton



Plot 10

Inventory Discrepancy History Match

Model R1-C



Plot 11

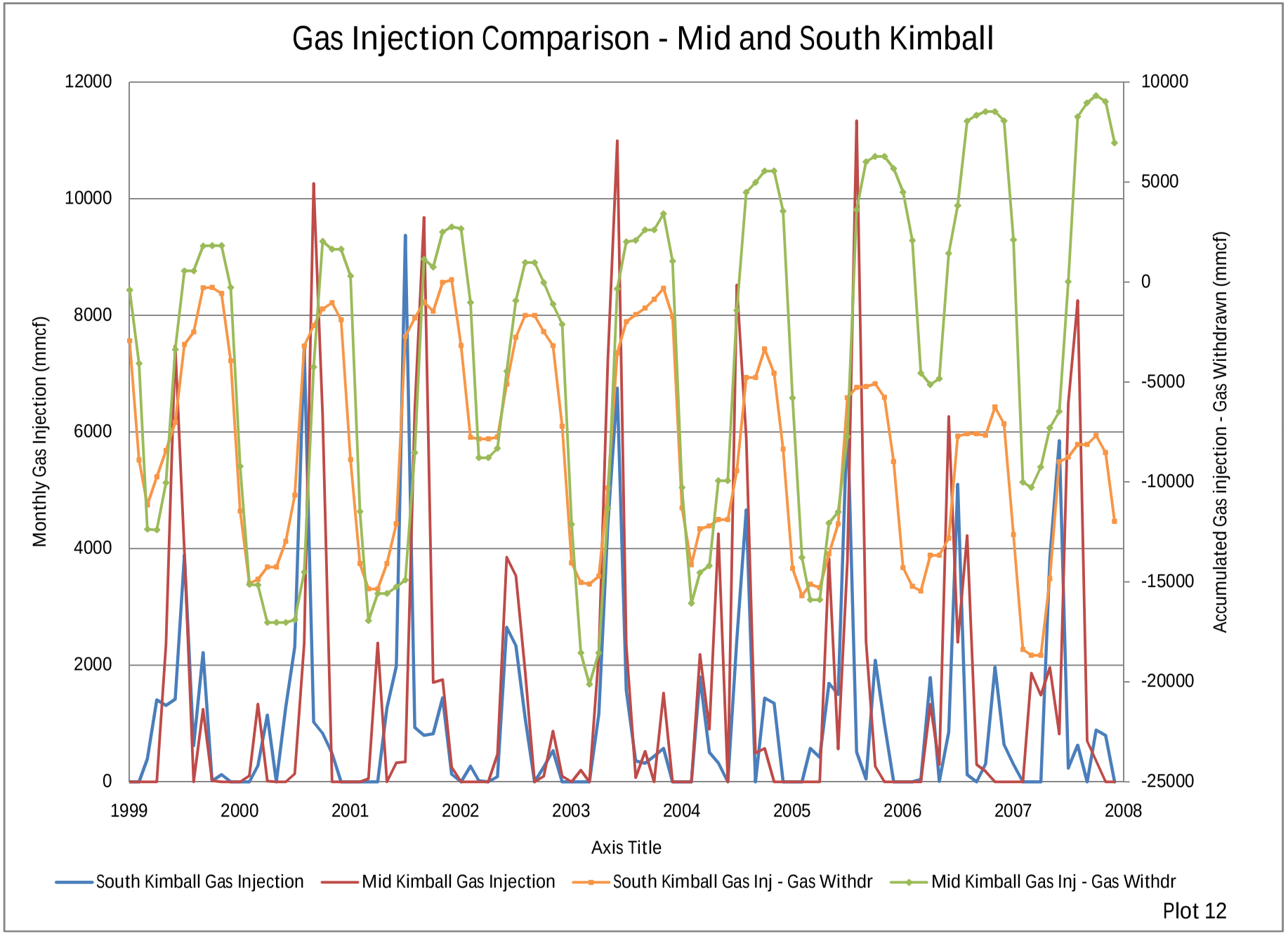

Gas Injection Comparison - Mid and South Kimball
Monthly Gas Injection (mmcf)
Accumulated Gas injection - Gas Withdrawn (mmcf)
12000
10000
8000
6000
4000
2000
0
10000
5000
0
-5000
-10000
-15000
-20000
-25000
1999
2000
2001
2002
2003
2004
2005
2006
2007
2008
Axis Title
South Kimball Gas Injection
Mid Kimball Gas Injection
South Kimball Gas Inj - Gas Withdr
Mid Kimball Gas Inj - Gas Withdr
Plot 12

Table 1
Mid Kimball Pressure Summary
Best Fit Analysis
Dawn Metered Volumes

									Bestfit Lines								
Year	Month	Day	Fractional Year	Pressure (psi)	P/Zavg (psi)	Physical Balance (bcf)	x2	xy	n	I	m	Y	Z	slope (psi/bcf)	Y Intercept (psi)	X Intercept (bcf)	GIP (bcf)
1979	8	2	1979.586		1295	33.412	1.116E+03	4.326E+04									
1979	9	5	1979.680		1315	34.003	1.156E+03	4.470E+04									
1979	10	4	1979.758		1416	36.278	1.316E+03	5.138E+04									
1979	11	7	1979.853		1341	34.770	1.209E+03	4.662E+04									
1979	12	6	1979.930		1340	34.770	1.209E+03	4.659E+04									
1980	1	2	1980.005		1329	34.770	1.209E+03	4.621E+04	4	1.07E+02	3.09E+03	3.80E+03	1.13E+05	53.48	-485.7	9.082	20.193
1980	2	1	1980.088		1309	32.371	1.048E+03	4.236E+04									
1980	3	7	1980.180		750	23.574	5.557E+02	1.767E+04									
1980	4	3	1980.255		412	16.654	2.774E+02	6.868E+03									
1980	5	1	1980.332		433	16.654	2.774E+02	7.211E+03									
1980	5	30	1980.410		442	16.654	2.774E+02	7.365E+03	6	1.68E+02	5.04E+03	6.06E+03	1.86E+05	48.70	-352.7	7.241	22.175
1980	7	4	1980.505		577	18.967	3.597E+02	1.095E+04									
1980	8	7	1980.600		1033	27.979	7.828E+02	2.890E+04									
1980	9	3	1980.675		1254	32.873	1.081E+03	4.124E+04									
1980	10	9	1980.772		1375	35.288	1.245E+03	4.851E+04									
1980	11	5	1980.847		1374	36.019	1.297E+03	4.949E+04									
1980	12	4	1980.925		1369	36.018	1.297E+03	4.932E+04	6	1.66E+02	4.77E+03	5.71E+03	1.68E+05	49.25	-406.6	8.256	21.930
1981	1	8	1981.022		1301	34.651	1.201E+03	4.509E+04									
1981	2	3	1981.094		934	27.355	7.483E+02	2.556E+04									
1981	3	6	1981.178		774	24.102	5.809E+02	1.866E+04									
1981	4	2	1981.253		687	22.122	4.894E+02	1.521E+04									
1981	5	8	1981.350		645	21.263	4.521E+02	1.371E+04	7	2.10E+02	6.59E+03	7.54E+03	2.39E+05	47.95	-364.1	7.594	22.523
1981	6	4	1981.425		670	21.649	4.687E+02	1.451E+04									
1981	7	10	1981.522		928	26.574	7.062E+02	2.465E+04									
1981	8	6	1981.597		1272	33.788	1.142E+03	4.296E+04									
1981	9	2	1981.672		1295	34.564	1.195E+03	4.478E+04									
1981	10	8	1981.769		1354	35.952	1.293E+03	4.866E+04									
1981	11	4	1981.844		1374	36.554	1.336E+03	5.022E+04									
1981	12	3	1981.922		1372	36.591	1.339E+03	5.019E+04	5	1.36E+02	3.99E+03	4.61E+03	1.40E+05	47.76	-376.7	7.886	22.613
1982	1	6	1982.016		1323	35.650	1.271E+03	4.718E+04									
1982	2	9	1982.111		826	25.093	6.296E+02	2.073E+04									
1982	3	5	1982.175		660	21.703	4.710E+02	1.432E+04									
1982	4	8	1982.269		426	16.858	2.842E+02	7.184E+03	5	1.34E+02	3.82E+03	4.55E+03	1.33E+05	47.32	-356.4	7.533	22.824
1982	5	7	1982.347		617	20.367	4.148E+02	1.257E+04									
1982	6	3	1982.422		1042	29.037	8.431E+02	3.025E+04									
1982	7	9	1982.519		1214	33.272	1.107E+03	4.039E+04									
1982	8	5	1982.594		1247	34.212	1.170E+03	4.266E+04									
1982	9	1	1982.669		1243	34.228	1.172E+03	4.254E+04									
1982	10	7	1982.766		1389	37.400	1.399E+03	5.197E+04									
1982	11	3	1982.842		1396	37.697	1.421E+03	5.262E+04									
1982	12	2	1982.919		1392	37.662	1.418E+03	5.241E+04									

Table 1
Mid Kimball Pressure Summary
Best Fit Analysis
Dawn Metered Volumes

							Bestfit Lines										
Year	Month	Day	Fractional Year	Pressure (psi)	P/Zavg (psi)	Physical Balance (bcf)	x2	xy	n	I	m	Y	Z	slope (psi/bcf)	Y Intercept (psi)	X Intercept (bcf)	GIP (bcf)
1983	1	5	1983.014		1387	37.662	1.418E+03	5.222E+04	4	1.42E+02	5.04E+03	5.09E+03	1.81E+05	50.38	-512.5	10.174	21.439
1983	2	1	1983.089		1341	36.837	1.357E+03	4.939E+04									
1983	3	4	1983.172		1226	34.518	1.191E+03	4.233E+04									
1983	5	1	1983.332		1140	32.785	1.075E+03	3.736E+04									
1983	5	6	1983.344		1143	32.831	1.078E+03	3.753E+04									
1983	6	2	1983.419		1216	34.507	1.191E+03	4.195E+04									
1983	7	8	1983.516		1416	38.859	1.510E+03	5.502E+04									
1983	8	4	1983.592		1404	38.899	1.513E+03	5.462E+04									
1983	9	7	1983.686		1400	38.899	1.513E+03	5.445E+04									
1983	11	9	1983.858		1395	38.899	1.513E+03	5.426E+04									
1983	12	8	1983.936		1392	38.899	1.513E+03	5.414E+04	5	1.50E+02	4.84E+03	4.82E+03	1.61E+05	49.10	-512.5	10.438	21.995
1984	1	4	1984.011		1268	36.550	1.336E+03	4.633E+04									
1984	2	1	1984.089		1112	32.237	1.039E+03	3.583E+04									
1984	3	3	1984.169		740	26.007	6.764E+02	1.924E+04									
1984	5	4	1984.339		310	16.669	2.779E+02	5.160E+03									
1984	6	7	1984.433		327	16.669	2.779E+02	5.449E+03									
1984	7	6	1984.511		345	16.669	2.779E+02	5.758E+03	5	1.40E+02	4.32E+03	4.62E+03	1.48E+05	48.99	-450.3	9.193	22.047
1984	8	2	1984.586		524	19.624	3.851E+02	1.029E+04									
1984	9	5	1984.680		996	29.099	8.468E+02	2.898E+04									
1984	10	4	1984.758		1350	36.669	1.345E+03	4.950E+04									
1984	11	7	1984.853		1406	38.256	1.464E+03	5.379E+04									
1984	12	6	1984.930		1398	38.256	1.464E+03	5.349E+04									
1985	1	2	1985.005		1394	38.256	1.464E+03	5.333E+04	5	1.37E+02	3.98E+03	4.26E+03	1.28E+05	49.21	-494.8	10.055	21.946
1985	2	12	1985.119		1050	31.501	9.923E+02	3.307E+04									
1985	3	8	1985.183		785	26.001	6.760E+02	2.042E+04									
1985	4	2	1985.253		573	22.057	4.865E+02	1.263E+04									
1985	5	3	1985.336		460	19.051	3.629E+02	8.754E+03									
1985	6	6	1985.430		471	19.051	3.629E+02	8.964E+03	5	1.42E+02	4.34E+03	4.51E+03	1.43E+05	46.97	-429.3	9.139	22.992
1985	7	5	1985.508		512	19.791	3.917E+02	1.012E+04									
1985	8	30	1985.663		840	27.809	7.733E+02	2.336E+04									
1985	9	4	1985.678		1286	35.862	1.286E+03	4.613E+04									
1985	11	5	1985.847		1397	39.098	1.529E+03	5.461E+04									
1985	12	5	1985.928		1391	39.096	1.529E+03	5.440E+04									
1986	1	2	1986.005		1387	39.096	1.529E+03	5.421E+04	5	1.47E+02	4.58E+03	4.57E+03	1.46E+05	48.82	-524.8	10.749	22.122
1986	2	4	1986.097		1221	35.765	1.279E+03	4.365E+04									
1986	3	7	1986.180		822	27.699	7.672E+02	2.276E+04									
1986	4	3	1986.255		584	22.784	5.191E+02	1.331E+04									
1986	5	9	1986.353		560	22.069	4.870E+02	1.236E+04									
1986	6	5	1986.428		566	22.069	4.870E+02	1.250E+04	5	1.63E+02	5.54E+03	5.40E+03	1.88E+05	48.31	-491.2	10.169	22.357
1986	7	4	1986.505		773	26.015	6.768E+02	2.011E+04									
1986	8	7	1986.600		1289	36.471	1.330E+03	4.700E+04									

Table 1
Mid Kimball Pressure Summary
Best Fit Analysis
Dawn Metered Volumes

							Bestfit Lines										
Year	Month	Day	Fractional Year	Pressure (psi)	P/Zavg (psi)	Physical Balance (bcf)	x2	xy	n	I	m	Y	Z	slope (psi/bcf)	Y Intercept (psi)	X Intercept (bcf)	GIP (bcf)
1986	9	10	1986.694		1383	38.923	1.515E+03	5.382E+04									
1986	10	2	1986.753		1387	39.111	1.530E+03	5.426E+04									
1986	11	5	1986.847		1400	39.595	1.568E+03	5.544E+04									
1986	12	4	1986.925		1395	39.595	1.568E+03	5.525E+04									
1987	1	7	1987.019		1389	39.595	1.568E+03	5.501E+04	5	1.53E+02	4.91E+03	4.83E+03	1.58E+05	48.00	-506.7	10.557	22.501
1987	2	3	1987.094		1264	36.755	1.351E+03	4.647E+04									
1987	3	6	1987.178		847	28.367	8.047E+02	2.402E+04									
1987	4	2	1987.253		617	23.549	5.546E+02	1.452E+04									
1987	5	6	1987.344		714	25.167	6.334E+02	1.796E+04									
1987	6	2	1987.419		716	25.167	6.334E+02	1.802E+04									
1987	7	8	1987.516		718	25.166	6.333E+02	1.808E+04									
1987	8	4	1987.592		723	25.166	6.333E+02	1.821E+04	5	1.70E+02	5.98E+03	5.78E+03	2.05E+05	47.26	-453.3	9.592	22.853
1987	9	2	1987.672		913	28.588	8.173E+02	2.610E+04									
1987	10	6	1987.764		1372	38.278	1.465E+03	5.253E+04									
1987	11	2	1987.839		1386	39.020	1.523E+03	5.408E+04									
1987	12	31	1987.999		1385	39.216	1.538E+03	5.433E+04	5	1.57E+02	5.21E+03	5.16E+03	1.77E+05	50.44	-549.7	10.898	21.412
1988	1	4	1988.011		1371	38.694	1.497E+03	5.305E+04									
1988	2	6	1988.103		1242	33.551	1.126E+03	4.168E+04									
1988	3	2	1988.166		764	25.914	6.715E+02	1.979E+04									
1988	4	5	1988.260		402	19.504	3.804E+02	7.841E+03									
1988	5	4	1988.340		420	19.503	3.804E+02	8.191E+03									
1988	6	2	1988.420		429	19.503	3.804E+02	8.367E+03									
1988	7	2	1988.500		435	19.557	3.825E+02	8.507E+03	4	1.21E+02	3.92E+03	3.90E+03	1.31E+05	48.91	-504.7	10.319	22.079
1988	8	3	1988.590		750	25.293	6.397E+02	1.897E+04									
1988	9	2	1988.670		1283	36.090	1.303E+03	4.630E+04									
1988	10	1	1988.750		1428	39.983	1.599E+03	5.710E+04									
1988	11	3	1988.840		1410	39.976	1.598E+03	5.637E+04									
1988	11	29	1988.911		1404	39.976	1.598E+03	5.613E+04	6	2.03E+02	7.07E+03	6.47E+03	2.30E+05	49.31	-587.2	11.908	21.901
1988	12	26	1988.987		1351	39.330	1.547E+03	5.313E+04									
1989	1	23	1989.063		1328	38.990	1.520E+03	5.178E+04									
1989	2	27	1989.159		1008	32.814	1.077E+03	3.308E+04									
1989	4	4	1989.258		712	26.339	6.937E+02	1.875E+04									
1989	5	2	1989.333		668	25.225	6.363E+02	1.685E+04									
1989	5	30	1989.412		668	25.142	6.321E+02	1.679E+04	5	1.69E+02	5.94E+03	5.37E+03	1.92E+05	46.12	-483.1	10.476	23.420
1989	7	4	1989.508		716	25.978	6.748E+02	1.861E+04									
1989	8	1	1989.585		1190	35.867	1.286E+03	4.267E+04									
1989	8	29	1989.660		1383	40.340	1.627E+03	5.579E+04									
1989	10	3	1989.755		1411	41.452	1.718E+03	5.847E+04									
1989	10	31	1989.832		1403	41.452	1.718E+03	5.817E+04									
1989	11	27	1989.907		1398	41.452	1.718E+03	5.793E+04	6	1.92E+02	6.37E+03	5.53E+03	1.88E+05	49.49	-663.1	13.400	21.823
1990	1	1	1990.003		1068	35.168	1.237E+03	3.758E+04									

Table 1
Mid Kimball Pressure Summary
Best Fit Analysis
Dawn Metered Volumes

									Bestfit Lines								
Year	Month	Day	Fractional Year	Pressure (psi)	P/Zavg (psi)	Physical Balance (bcf)	x2	xy	n	I	m	Y	Z	slope (psi/bcf)	Y Intercept (psi)	X Intercept (bcf)	GIP (bcf)
1990	1	29	1990.079		1044	34.376	1.182E+03	3.588E+04									
1990	2	25	1990.155		887	31.537	9.946E+02	2.797E+04									
1990	3	28	1990.238		652	26.766	7.164E+02	1.746E+04									
1990	5	1	1990.332		483	22.873	5.232E+02	1.104E+04									
1990	5	30	1990.410		493	22.873	5.232E+02	1.127E+04									
1990	6	26	1990.485		498	22.873	5.232E+02	1.140E+04	5	1.50E+02	4.83E+03	4.32E+03	1.45E+05	48.50	-595.2	12.273	22.268
1990	7	31	1990.582		509	22.945	5.265E+02	1.167E+04									
1990	8	28	1990.657		686	25.965	6.742E+02	1.781E+04									
1990	9	24	1990.732		1218	36.883	1.360E+03	4.492E+04									
1990	10	30	1990.829		1407	41.739	1.742E+03	5.874E+04									
1990	12	4	1990.925		1394	41.739	1.742E+03	5.819E+04									
1991	1	1	1991.002		1388	41.739	1.742E+03	5.795E+04	4	1.38E+02	4.94E+03	4.10E+03	1.50E+05	49.22	-676.2	13.739	21.944
1991	1	28	1991.077		1224	38.669	1.495E+03	4.733E+04									
1991	2	24	1991.152		919	32.762	1.073E+03	3.011E+04									
1991	4	2	1991.253		567	25.061	6.281E+02	1.421E+04									
1991	4	30	1991.329		582	25.061	6.281E+02	1.459E+04	7	2.49E+02	9.21E+03	7.67E+03	2.90E+05	47.13	-579.7	12.300	22.916
1991	6	4	1991.425		607	25.312	6.407E+02	1.538E+04									
1991	7	2	1991.503		1023	33.145	1.099E+03	3.391E+04									
1991	7	30	1991.579		1306	39.521	1.562E+03	5.162E+04									
1991	9	2	1991.672		1375	41.722	1.741E+03	5.736E+04									
1991	9	30	1991.749		1386	41.774	1.745E+03	5.788E+04									
1991	11	4	1991.844		1395	42.399	1.798E+03	5.914E+04	7	2.34E+02	8.46E+03	6.66E+03	2.54E+05	49.85	-717.6	14.393	21.663
1991	12	3	1991.922		1356	41.314	1.707E+03	5.600E+04									
1991	12	31	1991.999		1354	41.313	1.707E+03	5.594E+04									
1992	1	30	1992.083		1252	39.680	1.574E+03	4.969E+04									
1992	3	4	1992.172		713	29.387	8.636E+02	2.096E+04									
1992	4	7	1992.266		306	20.788	4.322E+02	6.367E+03									
1992	5	6	1992.344		289	19.560	3.826E+02	5.649E+03	7	2.19E+02	7.50E+03	6.03E+03	2.20E+05	47.83	-633.8	13.251	22.578
1992	6	2	1992.419		300	19.560	3.826E+02	5.865E+03									
1992	6	30	1992.496		458	22.699	5.152E+02	1.039E+04									
1992	8	4	1992.592		994	33.571	1.127E+03	3.336E+04									
1992	9	1	1992.668		1257	39.317	1.546E+03	4.943E+04									
1992	9	30	1992.749		1338	41.305	1.706E+03	5.525E+04									
1992	11	2	1992.839		1400	42.907	1.841E+03	6.008E+04	6	2.03E+02	7.33E+03	5.61E+03	2.14E+05	49.66	-740.5	14.912	21.748
1992	12	15	1992.955		1389	42.907	1.841E+03	5.960E+04									
1993	1	18	1993.049		1289	40.764	1.662E+03	5.254E+04									
1993	2	14	1993.124		800	31.564	9.963E+02	2.525E+04									
1993	3	17	1993.208		396	23.029	5.303E+02	9.118E+03									
1993	4	20	1993.302		341	21.361	4.563E+02	7.276E+03									
1993	5	19	1993.380		350	21.361	4.563E+02	7.474E+03									
1993	6	15	1993.455		357	21.361	4.563E+02	7.624E+03	8	2.68E+02	9.51E+03	7.67E+03	2.81E+05	47.21	-625.1	13.240	22.877

Table 1
Mid Kimball Pressure Summary
Best Fit Analysis
Dawn Metered Volumes

									Bestfit Lines								
Year	Month	Day	Fractional Year	Pressure (psi)	P/Zavg (psi)	Physical Balance (bcf)	x2	xy	n	I	m	Y	Z	slope (psi/bcf)	Y Intercept (psi)	X Intercept (bcf)	GIP (bcf)
1993	6	29	1993.493		439	22.989	5.285E+02	1.009E+04									
1993	7	13	1993.533		741	28.282	7.999E+02	2.096E+04									
1993	7	28	1993.571		987	33.296	1.109E+03	3.288E+04									
1993	8	10	1993.608		1135	36.779	1.353E+03	4.175E+04									
1993	8	30	1993.663		1258	39.936	1.595E+03	5.022E+04									
1993	9	13	1993.702		1364	42.401	1.798E+03	5.783E+04									
1993	9	27	1993.741		1387	43.306	1.875E+03	6.006E+04									
1993	10	12	1993.780		1382	43.402	1.884E+03	5.998E+04									
1993	11	1	1993.836		1376	43.483	1.891E+03	5.982E+04									
1993	11	15	1993.874		1371	43.483	1.891E+03	5.959E+04									
1993	11	29	1993.913		1368	43.483	1.891E+03	5.946E+04									
1993	12	14	1993.952		1365	43.483	1.891E+03	5.933E+04									
1993	12	28	1993.991		1362	43.482	1.891E+03	5.920E+04									
1994	1	10	1994.027		1357	43.482	1.891E+03	5.902E+04	7	2.32E+02	7.98E+03	5.84E+03	2.08E+05	49.97	-821.4	16.438	21.614
1994	1	31	1994.085		1176	39.854	1.588E+03	4.687E+04									
1994	2	13	1994.122		993	36.566	1.337E+03	3.632E+04									
1994	2	27	1994.160		763	31.783	1.010E+03	2.425E+04									
1994	3	16	1994.205		588	28.452	8.095E+02	1.672E+04									
1994	3	30	1994.243		497	26.319	6.927E+02	1.307E+04									
1994	4	12	1994.280		469	25.559	6.532E+02	1.200E+04									
1994	5	4	1994.339		492	25.749	6.630E+02	1.268E+04									
1994	5	18	1994.377		504	25.903	6.710E+02	1.307E+04									
1994	6	1	1994.416		507	25.903	6.710E+02	1.315E+04									
1994	6	14	1994.452		510	25.903	6.710E+02	1.321E+04									
1994	6	28	1994.491		512	25.902	6.709E+02	1.327E+04									
1994	7	13	1994.530		515	25.905	6.711E+02	1.333E+04	7	2.53E+02	9.53E+03	7.02E+03	2.72E+05	46.04	-659.2	14.317	23.458
1994	8	2	1994.586		598	27.325	7.467E+02	1.635E+04									
1994	8	16	1994.624		750	30.304	9.183E+02	2.272E+04									
1994	8	30	1994.663		1044	36.634	1.342E+03	3.824E+04									
1994	9	19	1994.719		1316	42.635	1.818E+03	5.611E+04									
1994	10	4	1994.758		1380	44.429	1.974E+03	6.131E+04									
1994	10	18	1994.797		1416	45.433	2.064E+03	6.433E+04									
1994	11	1	1994.835		1438	45.994	2.115E+03	6.615E+04									
1994	11	14	1994.872		1440	46.233	2.138E+03	6.655E+04									
1994	11	28	1994.910		1436	46.254	2.139E+03	6.643E+04									
1994	12	13	1994.950		1433	46.254	2.139E+03	6.630E+04									
1995	1	2	1995.005		1427	46.253	2.139E+03	6.600E+04	8	3.03E+02	1.17E+04	8.06E+03	3.18E+05	49.01	-848.5	17.314	22.039
1995	1	16	1995.044		1319	44.153	1.949E+03	5.822E+04									
1995	1	30	1995.082		1205	42.169	1.778E+03	5.080E+04									
1995	2	12	1995.119		1062	38.775	1.503E+03	4.117E+04									
1995	2	27	1995.160		934	36.709	1.348E+03	3.428E+04									

Table 1
Mid Kimball Pressure Summary
Best Fit Analysis
Dawn Metered Volumes

									Bestfit Lines								
Year	Month	Day	Fractional Year	Pressure (psi)	P/Zavg (psi)	Physical Balance (bcf)	x2	xy	n	I	m	Y	Z	slope (psi/bcf)	Y Intercept (psi)	X Intercept (bcf)	GIP (bcf)
1995	3	15	1995.202		752	32.821	1.077E+03	2.467E+04									
1995	4	2	1995.253		744	32.310	1.044E+03	2.405E+04									
1995	4	18	1995.297		621	29.850	8.910E+02	1.854E+04									
1995	5	3	1995.336		628	29.790	8.875E+02	1.869E+04									
1995	5	19	1995.380		631	29.790	8.875E+02	1.881E+04									
1995	5	31	1995.413		634	29.790	8.875E+02	1.889E+04									
1995	6	13	1995.450		652	30.060	9.036E+02	1.960E+04									
1995	6	27	1995.488		653	30.060	9.036E+02	1.964E+04									
1995	7	12	1995.527		654	30.060	9.036E+02	1.967E+04	7	2.74E+02	1.10E+04	7.62E+03	3.09E+05	45.37	-689.2	15.192	23.806
1995	8	3	1995.589		830	33.500	1.122E+03	2.779E+04									
1995	8	15	1995.622		963	35.979	1.295E+03	3.465E+04									
1995	8	31	1995.666		1127	39.831	1.587E+03	4.488E+04									
1995	9	11	1995.697		1246	42.264	1.786E+03	5.265E+04									
1995	9	27	1995.741		1362	45.489	2.069E+03	6.197E+04									
1995	10	17	1995.794		1438	47.191	2.227E+03	6.788E+04									
1995	11	1	1995.836		1437	47.406	2.247E+03	6.813E+04									
1995	11	13	1995.869		1419	47.102	2.219E+03	6.682E+04									
1995	11	29	1995.913		1413	47.102	2.219E+03	6.657E+04									
1995	12	19	1995.966		1412	47.102	2.219E+03	6.650E+04									
1995	12	28	1995.991		1412	47.102	2.219E+03	6.650E+04									
1996	1	15	1996.041		1395	46.975	2.207E+03	6.551E+04	8	2.77E+02	1.01E+04	6.16E+03	2.40E+05	50.47	-979.4	19.406	21.398
1996	1	31	1996.085		1271	44.164	1.950E+03	5.614E+04									
1996	2	11	1996.116		1041	40.222	1.618E+03	4.188E+04									
1996	2	27	1996.160		849	36.412	1.326E+03	3.092E+04									
1996	3	13	1996.197		573	31.391	9.854E+02	1.798E+04									
1996	3	29	1996.241		459	28.599	8.179E+02	1.312E+04									
1996	4	16	1996.291		290	25.073	6.286E+02	7.264E+03									
1996	5	5	1996.342		286	24.529	6.017E+02	7.014E+03	7	2.38E+02	8.53E+03	5.41E+03	2.05E+05	48.30	-869.8	18.010	22.362
1996	5	22	1996.388		401	26.284	6.908E+02	1.053E+04									
1996	5	31	1996.413		513	28.351	8.038E+02	1.455E+04									
1996	6	11	1996.444		700	31.993	1.024E+03	2.240E+04									
1996	6	27	1996.488		975	38.144	1.455E+03	3.718E+04									
1996	7	17	1996.541		1270	44.169	1.951E+03	5.611E+04									
1996	8	1	1996.585		1270	44.721	2.000E+03	5.679E+04									
1996	8	20	1996.635		1260	44.721	2.000E+03	5.635E+04									
1996	9	2	1996.672		1283	45.219	2.045E+03	5.801E+04									
1996	9	16	1996.711		1339	46.454	2.158E+03	6.222E+04									
1996	9	30	1996.749		1358	47.028	2.212E+03	6.386E+04									
1996	10	15	1996.788		1379	47.529	2.259E+03	6.554E+04									
1996	10	29	1996.827		1414	48.318	2.335E+03	6.830E+04									
1996	11	18	1996.883		1363	47.489	2.255E+03	6.471E+04									

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Mid Kimball Pressure Summary
Best Fit Analysis
Dawn Metered Volumes

									Bestfit Lines								
Year	Month	Day	Fractional Year	Pressure (psi)	P/Zavg (psi)	Physical Balance (bcf)	x2	xy	n	I	m	Y	Z	slope (psi/bcf)	Y Intercept (psi)	X Intercept (bcf)	GIP (bcf)
1996	11	29	1996.913		1364	47.489	2.255E+03	6.475E+04									
1996	12	17	1996.961		1363	47.489	2.255E+03	6.474E+04									
1997	1	1	1997.003		1361	47.488	2.255E+03	6.465E+04									
1997	1	8	1997.022		1358	47.428	2.249E+03	6.440E+04									
1997	1	10	1997.027		1332	47.013	2.210E+03	6.264E+04	8	2.69E+02	9.54E+03	5.38E+03	2.05E+05	47.83	-935.2	19.552	22.580
1997	1	20	1997.055		1106	42.769	1.829E+03	4.729E+04									
1997	1	29	1997.079		923	39.065	1.526E+03	3.605E+04									
1997	2	9	1997.111		656	33.590	1.128E+03	2.204E+04									
1997	2	25	1997.155		468	29.493	8.699E+02	1.381E+04									
1997	3	12	1997.194		346	26.975	7.276E+02	9.321E+03									
1997	3	30	1997.243		267	25.044	6.272E+02	6.694E+03									
1997	4	22	1997.308		277	24.851	6.176E+02	6.884E+03									
1997	5	1	1997.332		283	24.881	6.191E+02	7.030E+03									
1997	5	7	1997.347		283	24.857	6.179E+02	7.024E+03									
1997	5	14	1997.366		303	25.140	6.320E+02	7.625E+03									
1997	5	30	1997.410		340	25.725	6.618E+02	8.744E+03									
1997	6	10	1997.441		353	25.968	6.743E+02	9.159E+03									
1997	6	17	1997.461		354	25.968	6.743E+02	9.186E+03									
1997	6	24	1997.480		354	25.968	6.743E+02	9.204E+03									
1997	7	8	1997.519		356	25.968	6.743E+02	9.256E+03	8	3.03E+02	1.21E+04	7.51E+03	3.14E+05	46.71	-830.8	17.785	23.120
1997	7	23	1997.558		428	27.231	7.415E+02	1.166E+04									
1997	8	5	1997.594		616	30.670	9.406E+02	1.889E+04									
1997	8	19	1997.633		842	35.317	1.247E+03	2.975E+04									
1997	9	1	1997.669		1102	40.707	1.657E+03	4.485E+04									
1997	9	15	1997.708		1309	45.532	2.073E+03	5.958E+04									
1997	9	29	1997.746		1420	48.411	2.344E+03	6.873E+04									
1997	10	14	1997.786		1439	49.253	2.426E+03	7.086E+04									
1997	10	28	1997.824		1437	49.434	2.444E+03	7.105E+04									
1997	11	10	1997.861		1429	49.434	2.444E+03	7.066E+04									
1997	11	24	1997.899		1428	49.434	2.444E+03	7.060E+04									
1997	12	9	1997.939		1421	49.434	2.444E+03	7.024E+04	8	3.12E+02	1.26E+04	7.25E+03	3.05E+05	48.06	-967.8	20.137	22.471
1997	12	23	1997.977		1373	48.691	2.371E+03	6.687E+04									
1998	1	5	1998.014		1234	45.849	2.102E+03	5.657E+04									
1998	1	19	1998.052		977	40.901	1.673E+03	3.995E+04									
1998	2	8	1998.108		588	32.672	1.067E+03	1.922E+04									
1998	2	15	1998.127		576	32.158	1.034E+03	1.852E+04									
1998	3	4	1998.172		575	31.763	1.009E+03	1.825E+04									
1998	3	18	1998.211		508	30.512	9.310E+02	1.550E+04	11	4.18E+02	1.64E+04	9.92E+03	4.00E+05	48.61	-946.6	19.473	22.218
1998	4	7	1998.266		525	30.451	9.272E+02	1.599E+04									
1998	4	14	1998.286		550	30.829	9.504E+02	1.696E+04									
1998	4	28	1998.324		658	32.856	1.080E+03	2.163E+04									

Table 1
Mid Kimball Pressure Summary
Best Fit Analysis
Dawn Metered Volumes

									Bestfit Lines								
Year	Month	Day	Fractional Year	Pressure (psi)	P/Zavg (psi)	Physical Balance (bcf)	x2	xy	n	I	m	Y	Z	slope (psi/bcf)	Y Intercept (psi)	X Intercept (bcf)	GIP (bcf)
1998	5	13	1998.363		845	36.350	1.321E+03	3.070E+04									
1998	5	27	1998.402		827	36.380	1.323E+03	3.010E+04									
1998	6	9	1998.439		877	37.297	1.391E+03	3.272E+04									
1998	6	23	1998.477		1129	42.420	1.799E+03	4.790E+04									
1998	7	7	1998.516		1231	44.743	2.002E+03	5.509E+04									
1998	7	22	1998.555		1347	47.367	2.244E+03	6.381E+04									
1998	8	4	1998.592		1418	49.000	2.401E+03	6.947E+04									
1998	8	18	1998.630		1426	49.418	2.442E+03	7.049E+04									
1998	9	1	1998.668		1421	49.552	2.455E+03	7.042E+04									
1998	9	14	1998.705		1418	49.552	2.455E+03	7.025E+04									
1998	9	28	1998.743		1412	49.552	2.455E+03	6.996E+04									
1998	10	13	1998.783		1433	49.997	2.500E+03	7.163E+04									
1998	10	27	1998.821		1437	50.104	2.510E+03	7.198E+04									
1998	11	9	1998.858		1433	50.061	2.506E+03	7.172E+04	11	5.20E+02	2.48E+04	1.42E+04	6.79E+05	50.83	-1113.4	21.905	21.247
1998	11	23	1998.896		1425	49.929	2.493E+03	7.117E+04									
1998	12	8	1998.936		1410	49.683	2.468E+03	7.007E+04									
1998	12	22	1998.974		1398	49.343	2.435E+03	6.900E+04									
1999	1	11	1999.030		1397	49.343	2.435E+03	6.894E+04									
1999	1	18	1999.049		1377	48.940	2.395E+03	6.737E+04									
1999	1	31	1999.086		1376	48.940	2.395E+03	6.733E+04									
1999	2	14	1999.124		1350	48.540	2.356E+03	6.552E+04									
1999	3	3	1999.169		1185	45.286	2.051E+03	5.365E+04									
1999	3	10	1999.189		1061	42.983	1.848E+03	4.560E+04									
1999	3	31	1999.246		776	37.043	1.372E+03	2.876E+04									
1999	4	13	1999.283		790	37.013	1.370E+03	2.925E+04									
1999	4	27	1999.321		796	37.013	1.370E+03	2.946E+04	8	3.41E+02	1.47E+04	8.57E+03	3.75E+05	47.24	-941.8	19.938	22.863
1999	5	12	1999.361		799	37.013	1.370E+03	2.957E+04									
1999	5	26	1999.399		817	37.294	1.391E+03	3.047E+04									
1999	6	8	1999.436		990	40.521	1.642E+03	4.010E+04									
1999	6	22	1999.474		1137	43.702	1.910E+03	4.971E+04									
1999	7	7	1999.514		1270	46.687	2.180E+03	5.929E+04									
1999	7	20	1999.552		1357	48.703	2.372E+03	6.608E+04									
1999	8	3	1999.589		1400	49.892	2.489E+03	6.983E+04									
1999	8	17	1999.627		1391	49.892	2.489E+03	6.942E+04									
1999	8	31	1999.666		1386	49.892	2.489E+03	6.917E+04									
1999	9	13	1999.702		1421	50.690	2.569E+03	7.204E+04									
1999	9	27	1999.741		1433	51.005	2.602E+03	7.309E+04									
1999	10	12	1999.780		1433	51.148	2.616E+03	7.331E+04									
1999	10	27	1999.821		1435	51.148	2.616E+03	7.341E+04									
1999	11	8	1999.855		1433	51.148	2.616E+03	7.330E+04									
1999	11	22	1999.894		1433	51.148	2.616E+03	7.328E+04									

Table 1
Mid Kimball Pressure Summary
Best Fit Analysis
Dawn Metered Volumes

							Bestfit Lines										
Year	Month	Day	Fractional Year	Pressure (psi)	P/Zavg (psi)	Physical Balance (bcf)	x2	xy	n	I	m	Y	Z	slope (psi/bcf)	Y Intercept (psi)	X Intercept (bcf)	GIP (bcf)
1999	12	7	1999.933		1431	50.976	2.599E+03	7.294E+04	11	4.38E+02	1.80E+04	9.12E+03	3.92E+05	49.89	-1155.9	23.167	21.645
1999	12	21	1999.971		1344	49.635	2.464E+03	6.670E+04									
2000	1	3	2000.008		1263	49.072	2.408E+03	6.197E+04									
2000	1	17	2000.047		1141	46.370	2.150E+03	5.293E+04									
2000	1	31	2000.085		796	40.171	1.614E+03	3.199E+04									
2000	2	20	2000.141		508	34.404	1.184E+03	1.746E+04									
2000	3	8	2000.183		538	34.259	1.174E+03	1.844E+04									
2000	3	22	2000.221		514	33.305	1.109E+03	1.711E+04									
2000	4	4	2000.258		577	34.270	1.174E+03	1.977E+04									
2000	4	18	2000.297		507	32.676	1.068E+03	1.656E+04									
2000	5	17	2000.374		498	32.404	1.050E+03	1.613E+04									
2000	5	24	2000.394		500	32.404	1.050E+03	1.620E+04									
2000	6	6	2000.430		503	32.404	1.050E+03	1.631E+04									
2000	8	19	2000.633		335	33.768	1.140E+03	1.130E+04	6	2.54E+02	1.10E+04	5.65E+03	2.54E+05	55.21	-1398.0	25.321	19.561
2000	8	31	2000.666		633	34.907	1.218E+03	2.209E+04									
2000	9	15	2000.707		916	40.181	1.615E+03	3.680E+04									
2000	10	1	2000.751		1024	45.395	2.061E+03	4.650E+04									
2000	10	15	2000.789		1309	48.698	2.371E+03	6.376E+04									
2000	10	31	2000.833		1436	51.361	2.638E+03	7.375E+04									
2000	11	15	2000.874		1426	51.361	2.638E+03	7.324E+04									
2000	12	1	2000.918		1400	50.972	2.598E+03	7.138E+04									
2000	12	15	2000.956		1399	50.972	2.598E+03	7.129E+04									
2000	12	31	2001.000		1395	50.972	2.598E+03	7.109E+04	7	3.01E+02	1.33E+04	7.00E+03	3.20E+05	49.38	-1122.4	22.731	21.873
2001	1	18	2001.049		1383	50.736	2.574E+03	7.016E+04									
2001	2	1	2001.088		1324	49.593	2.459E+03	6.564E+04									
2001	2	15	2001.126		1096	44.872	2.014E+03	4.918E+04									
2001	2	28	2001.162		752	37.919	1.438E+03	2.852E+04									
2001	3	15	2001.203		568	34.334	1.179E+03	1.949E+04									
2001	3	31	2001.247		484	32.491	1.056E+03	1.574E+04									
2001	4	15	2001.288		505	32.957	1.086E+03	1.663E+04									
2001	4	30	2001.329		572	33.846	1.146E+03	1.938E+04									
2001	5	15	2001.370		573	33.846	1.146E+03	1.939E+04									
2001	5	31	2001.414		574	33.846	1.146E+03	1.944E+04									
2001	6	6	2001.430		575	33.846	1.146E+03	1.946E+04									
2001	6	15	2001.455		593	34.174	1.168E+03	2.028E+04									
2001	7	3	2001.504		595	34.174	1.168E+03	2.032E+04									
2001	7	15	2001.537		606	34.335	1.179E+03	2.080E+04	7	2.94E+02	1.27E+04	6.91E+03	3.06E+05	48.90	-1065.7	21.792	22.084
2001	8	1	2001.584		622	34.539	1.193E+03	2.148E+04									
2001	8	15	2001.622		738	36.701	1.347E+03	2.709E+04									
2001	8	27	2001.655		852	39.244	1.540E+03	3.343E+04									
2001	9	15	2001.707		1225	46.698	2.181E+03	5.722E+04									

Table 1
Mid Kimball Pressure Summary
Best Fit Analysis
Dawn Metered Volumes

									Bestfit Lines								
Year	Month	Day	Fractional Year	Pressure (psi)	P/Zavg (psi)	Physical Balance (bcf)	x2	xy	n	I	m	Y	Z	slope (psi/bcf)	Y Intercept (psi)	X Intercept (bcf)	GIP (bcf)
2001	9	30	2001.748		1407	50.474	2.548E+03	7.102E+04									
2001	10	15	2001.789		1457	51.785	2.682E+03	7.544E+04									
2001	10	31	2001.833		1388	50.086	2.509E+03	6.950E+04									
2001	11	15	2001.874		1388	50.646	2.565E+03	7.027E+04									
2001	11	30	2001.915		1440	51.828	2.686E+03	7.463E+04									
2001	12	5	2001.929		1454	52.082	2.712E+03	7.575E+04									
2001	12	31	2002.000		1451	52.082	2.713E+03	7.559E+04									
2002	1	15	2002.041		1450	52.082	2.713E+03	7.550E+04									
2002	1	30	2002.082		1446	52.082	2.713E+03	7.532E+04									
2002	1	31	2002.085		1446	51.990	2.703E+03	7.517E+04	5	2.35E+02	1.11E+04	5.96E+03	2.84E+05	50.59	-1181.1	23.347	21.348
2002	2	15	2002.126		1350	50.065	2.506E+03	6.758E+04									
2002	2	28	2002.162		1273	48.319	2.335E+03	6.149E+04									
2002	3	15	2002.203		1019	43.593	1.900E+03	4.440E+04									
2002	3	27	2002.236		874	40.601	1.648E+03	3.551E+04									
2002	4	15	2002.288		890	40.601	1.648E+03	3.613E+04									
2002	4	30	2002.329		895	40.601	1.648E+03	3.634E+04									
2002	5	15	2002.370		898	40.601	1.648E+03	3.647E+04									
2002	5	31	2002.414		914	41.068	1.687E+03	3.753E+04	7	3.24E+02	1.51E+04	8.18E+03	3.82E+05	48.05	-1054.8	21.953	22.478
2002	6	15	2002.455		1002	42.769	1.829E+03	4.287E+04									
2002	6	30	2002.496		1104	44.901	2.016E+03	4.958E+04									
2002	7	15	2002.537		1219	47.238	2.231E+03	5.759E+04									
2002	7	24	2002.562		1274	48.413	2.344E+03	6.170E+04									
2002	8	11	2002.611		1306	49.179	2.419E+03	6.425E+04									
2002	8	20	2002.636		1356	50.285	2.529E+03	6.820E+04									
2002	9	15	2002.707		1355	50.307	2.531E+03	6.814E+04									
2002	9	30	2002.748		1352	50.307	2.531E+03	6.802E+04									
2002	10	15	2002.789		1357	50.401	2.540E+03	6.838E+04	11	4.65E+02	2.03E+04	1.05E+04	4.78E+05	49.43	-1133.8	22.936	21.847
2002	10	31	2002.833		1309	49.315	2.432E+03	6.453E+04									
2002	11	15	2002.874		1274	48.569	2.359E+03	6.187E+04									
2002	11	30	2002.915		1241	48.244	2.327E+03	5.986E+04									
2002	12	15	2002.956		1201	47.231	2.231E+03	5.672E+04									
2002	12	31	2003.000		1202	47.231	2.231E+03	5.678E+04									
2003	1	15	2003.041		1040	43.965	1.933E+03	4.574E+04									
2003	1	31	2003.085		702	37.284	1.390E+03	2.617E+04									
2003	2	15	2003.126		499	32.896	1.082E+03	1.642E+04									
2003	2	28	2003.162		391	30.893	9.544E+02	1.208E+04									
2003	3	15	2003.203		317	29.332	8.603E+02	9.302E+03									
2003	3	31	2003.247		330	29.331	8.603E+02	9.679E+03									
2003	4	16	2003.290		332	29.177	8.513E+02	9.682E+03	7	2.76E+02	1.14E+04	5.87E+03	2.54E+05	48.45	-1073.6	22.160	22.292
2003	4	30	2003.329		421	30.892	9.543E+02	1.301E+04									
2003	5	15	2003.370		563	33.788	1.142E+03	1.903E+04									

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Mid Kimball Pressure Summary
Best Fit Analysis
Dawn Metered Volumes

									Bestfit Lines								
Year	Month	Day	Fractional Year	Pressure (psi)	P/Zavg (psi)	Physical Balance (bcf)	x2	xy	n	I	m	Y	Z	slope (psi/bcf)	Y Intercept (psi)	X Intercept (bcf)	GIP (bcf)
2003	5	31	2003.414		785	38.071	1.449E+03	2.988E+04									
2003	6	15	2003.455		1066	44.050	1.940E+03	4.696E+04									
2003	6	30	2003.496		1299	49.001	2.401E+03	6.365E+04									
2003	7	15	2003.537		1406	51.339	2.636E+03	7.218E+04									
2003	7	31	2003.581		1392	51.339	2.636E+03	7.144E+04									
2003	8	15	2003.622		1385	51.339	2.636E+03	7.113E+04									
2003	8	31	2003.666		1381	51.412	2.643E+03	7.101E+04									
2003	9	15	2003.707		1405	51.933	2.697E+03	7.299E+04									
2003	9	30	2003.748		1403	51.933	2.697E+03	7.287E+04									
2003	10	15	2003.789		1401	51.933	2.697E+03	7.273E+04									
2003	10	31	2003.833		1399	51.933	2.697E+03	7.268E+04									
2003	11	15	2003.874		1408	52.269	2.732E+03	7.360E+04									
2003	11	30	2003.915		1437	52.734	2.781E+03	7.576E+04	7	3.06E+02	1.38E+04	7.01E+03	3.25E+05	48.60	-1126.0	23.168	22.221
2003	12	15	2003.956	1049	1319	50.380	2.538E+03	6.646E+04									
2003	12	31	2003.999	1051	1322	50.380	2.538E+03	6.663E+04									
2004	1	15	2004.041	886	1091	45.503	2.071E+03	4.966E+04									
2004	1	31	2004.085	648	773	39.117	1.530E+03	3.025E+04									
2004	2	15	2004.126	488	570	34.887	1.217E+03	1.990E+04									
2004	2	29	2004.164	427	497	33.421	1.117E+03	1.661E+04									
2004	3	15	2004.203	492	576	34.571	1.195E+03	1.990E+04									
2004	3	31	2004.246	496	580	34.880	1.217E+03	2.025E+04									
2004	4	16	2004.290	491	575	34.518	1.191E+03	1.984E+04									
2004	4	30	2004.329	505	592	35.227	1.241E+03	2.084E+04									
2004	5	14	2004.367	704	846	39.457	1.557E+03	3.338E+04									
2004	5	31	2004.413	690	828	39.457	1.557E+03	3.266E+04									
2004	6	15	2004.454	687	824	39.457	1.557E+03	3.250E+04									
2004	7	1	2004.498	685	821	39.457	1.557E+03	3.238E+04	5	2.34E+02	1.11E+04	5.78E+03	2.78E+05	46.49	-1017.5	21.887	23.232
2004	7	15	2004.537	747	904	41.517	1.724E+03	3.751E+04									
2004	7	31	2004.580	977	1219	47.930	2.297E+03	5.841E+04									
2004	8	15	2004.621	1081	1365	51.174	2.619E+03	6.984E+04									
2004	8	31	2004.665	1158	1477	53.799	2.894E+03	7.948E+04									
2004	9	15	2004.706	1161	1482	54.130	2.930E+03	8.021E+04									
2004	9	30	2004.747	1160	1479	54.291	2.947E+03	8.032E+04									
2004	10	15	2004.789	1173	1498	54.861	3.010E+03	8.220E+04									
2004	10	31	2004.832	1167	1491	54.861	3.010E+03	8.177E+04									
2004	11	15	2004.873	1164	1485	54.861	3.010E+03	8.146E+04									
2004	11	30	2004.914	1160	1480	54.861	3.010E+03	8.117E+04									
2004	12	15	2004.956	1156	1474	54.861	3.010E+03	8.086E+04	7	3.12E+02	1.43E+04	6.75E+03	3.23E+05	49.46	-1238.8	25.048	21.838
2004	12	31	2004.999	1083	1367	52.866	2.795E+03	7.229E+04									
2005	1	15	2005.041	1052	1323	51.636	2.666E+03	6.834E+04									
2005	1	31	2005.085	761	921	43.573	1.899E+03	4.015E+04									
2005	2	15	2005.126	595	706	39.452	1.556E+03	2.784E+04									
2005	2	28	2005.162	452	526	35.638	1.270E+03	1.875E+04									
2005	3	12	2005.194	375	434	33.845	1.145E+03	1.470E+04									
2005	3	31	2005.246	379	439	33.536	1.125E+03	1.472E+04									
2005	4	15	2005.287	386	447	33.536	1.125E+03	1.501E+04									

Table 1
Mid Kimball Pressure Summary
Best Fit Analysis
Dawn Metered Volumes

									Bestfit Lines								
Year	Month	Day	Fractional Year	Pressure (psi)	P/Zavg (psi)	Physical Balance (bcf)	x2	xy	n	I	m	Y	Z	slope (psi/bcf)	Y Intercept (psi)	X Intercept (bcf)	GIP (bcf)
2005	4	30	2005.329	390	452	33.536	1.125E+03	1.517E+04									
2005	5	15	2005.370	460	536	35.122	1.234E+03	1.883E+04									
2005	5	30	2005.411	546	644	37.126	1.378E+03	2.390E+04									
2005	6	15	2005.454	576	681	37.878	1.435E+03	2.580E+04									
2005	6	30	2005.496	578	678	37.903	1.437E+03	2.571E+04									
2005	7	15	2005.537	586	689	38.200	1.459E+03	2.631E+04	5	235.232	1.128E+04	5.54E+03	2.705E+05	47.24	-1114.7	23.596	22.861
2005	7	31	2005.580	712	850	41.658	1.735E+03	3.540E+04									
2005	8	15	2005.621	915	1122	47.164	2.224E+03	5.293E+04									
2005	8	31	2005.665	1101	1385	52.931	2.802E+03	7.332E+04									
2005	9	15	2005.706	1176	1494	55.280	3.056E+03	8.256E+04									
2005	9	30	2005.747	1170	1485	55.321	3.060E+03	8.216E+04									
2005	10	15	2005.789	1165	1478	55.330	3.061E+03	8.177E+04									
2005	10	31	2005.832	1169	1484	55.586	3.090E+03	8.247E+04									
2005	11	15	2005.873	1164	1476	55.586	3.090E+03	8.206E+04									
2005	11	30	2005.914	1160	1469	55.586	3.090E+03	8.168E+04									
2005	12	15	2005.956	1139	1439	55.133	3.040E+03	7.936E+04									
2005	12	31	2005.999	1130	1426	54.987	3.024E+03	7.842E+04									
2006	1	15	2006.041	1123	1416	54.699	2.992E+03	7.748E+04	6	306.927	1.577E+04	7.39E+03	3.817E+05	50.28	-1339.7	26.645	21.479
2006	1	31	2006.085	1085	1362	53.812	2.896E+03	7.330E+04									
2006	2	15	2006.126	1051	1313	53.113	2.821E+03	6.975E+04									
2006	2	28	2006.162	1004	1246	51.407	2.643E+03	6.405E+04									
2006	3	15	2006.203	939	1156	49.088	2.410E+03	5.673E+04									
2006	3	31	2006.246	750	901	44.808	2.008E+03	4.036E+04									
2006	4	15	2006.287	684	814	42.918	1.842E+03	3.493E+04									
2006	4	30	2006.329	726	869	44.238	1.957E+03	3.845E+04									
2006	5	15	2006.370	743	891	44.533	1.983E+03	3.968E+04									
2006	5	31	2006.413	743	891	44.533	1.983E+03	3.968E+04	4	194.879	9.531E+03	4.39E+03	2.158E+05	48.49	-1264.3	26.073	22.273
2006	6	15	2006.454	852	1036	47.301	2.237E+03	4.901E+04									
2006	6	30	2006.496	968	1196	50.764	2.577E+03	6.073E+04									
2006	7	15	2006.537	1020	1269	52.280	2.733E+03	6.635E+04									
2006	7	31	2006.580	1037	1293	53.145	2.824E+03	6.870E+04									
2006	8	15	2006.621	1115	1405	55.209	3.048E+03	7.756E+04									
2006	8	31	2006.665	1178	1497	57.343	3.288E+03	8.583E+04									
2006	9	15	2006.706	1168	1483	57.454	3.301E+03	8.518E+04									
2006	9	30	2006.747	1173	1490	57.637	3.322E+03	8.585E+04									
2006	10	15	2006.789	1174	1491	57.815	3.343E+03	8.620E+04									
2006	10	31	2006.832	1170	1485	57.815	3.343E+03	8.584E+04									
2006	11	15	2006.873	1169	1484	57.815	3.343E+03	8.577E+04									
2006	11	30	2006.914	1169	1484	57.815	3.343E+03	8.577E+04									
2006	12	15	2006.956	1146	1450	57.359	3.290E+03	8.315E+04									
2006	12	31	2006.999	1143	1445	57.359	3.290E+03	8.288E+04									
2007	1	15	2007.041	1141	1442	57.359	3.290E+03	8.272E+04	4	191.623	9.374E+03	3.93E+03	1.979E+05	49.33	-1380.3	27.984	21.895
2007	1	31	2007.085	948	1169	51.441	2.646E+03	6.011E+04									
2007	2	15	2007.126	641	759	43.441	1.887E+03	3.295E+04									
2007	2	28	2007.162	483	561	39.382	1.551E+03	2.211E+04									
2007	3	15	2007.203	411	475	37.530	1.408E+03	1.782E+04									
2007	3	31	2007.246	485	563	39.126	1.531E+03	2.204E+04									
2007	4	15	2007.287	500	582	39.139	1.532E+03	2.278E+04									

Table 1
Mid Kimball Pressure Summary
Best Fit Analysis
Dawn Metered Volumes

									Bestfit Lines								
Year	Month	Day	Fractional Year	Pressure (psi)	P/Zavg (psi)	Physical Balance (bcf)	x2	xy	n	I	m	Y	Z	slope (psi/bcf)	Y Intercept (psi)	X Intercept (bcf)	GIP (bcf)
2007	4	30	2007.329	540	631	40.135	1.611E+03	2.534E+04									
2007	5	15	2007.370	563	660	40.777	1.663E+03	2.693E+04									
2007	5	31	2007.413	624	737	42.083	1.771E+03	3.103E+04	7	332.722	1.604E+04	7.00E+03	3.435E+05	47.71	-1267.9	26.576	22.638
2007	6	15	2007.454	638	755	42.424	1.800E+03	3.203E+04									
2007	6	30	2007.496	657	779	42.901	1.841E+03	3.341E+04									
2007	7	15	2007.537	725	867	44.701	1.998E+03	3.875E+04									
2007	7	31	2007.580	891	1090	49.356	2.436E+03	5.381E+04									
2007	8	15	2007.621	1037	1293	53.695	2.883E+03	6.944E+04									
2007	8	31	2007.665	1164	1477	57.562	3.313E+03	8.500E+04									
2007	9	15	2007.706	1181	1501	58.255	3.394E+03	8.741E+04									
2007	9	30	2007.747	1173	1489	58.255	3.394E+03	8.673E+04									
2007	10	15	2007.789	1167	1480	58.255	3.394E+03	8.623E+04									
2007	10	31	2007.832	1174	1491	58.610	3.435E+03	8.739E+04									
2007	11	15	2007.873	1170	1485	58.610	3.435E+03	8.703E+04									
2007	11	30	2007.914	1165	1477	58.314	3.401E+03	8.615E+04									
2007	12	15	2007.956	1099	1382	56.448	3.186E+03	7.801E+04									
2007	12	31	2007.999	1081	1356	56.263	3.166E+03	7.628E+04									

1) Storage Slope and GIP Averages

Pre-1990 Average:	48.79	22.136
1990-1999 Average:	48.39	22.321
2000-2008 Average:	49.17	21.963
1990-2008 Average:	48.72	22.166

Table 2
South Kimball Pressure Summary
Best Fit Analysis
Dawn Metered Volumes

							Bestfit Lines										
Year	Month	Day	Fractional Year	Pressure (psi)	P/Zavg (psi)	Physical Balance (bcf)	x2	xy	n	I	m	Y	Z	slope (psi/bcf)	Y Intercept (psi)	X Intercept (bcf)	GIP (bcf)
1979	8	2	1979.586		1289	16.239	2.637E+02	2.093E+04									
1979	9	5	1979.680		1338	17.385	3.022E+02	2.326E+04									
1979	10	4	1979.758		1450	19.130	3.660E+02	2.774E+04	5	6.77E+01	1.06E+03	5.14E+03	7.94E+04	69.79	82.7	-1.184	15.474
1979	11	7	1979.853		1419	18.973	3.600E+02	2.692E+04									
1979	12	6	1979.930		1032	14.281	2.039E+02	1.474E+04									
1980	1	2	1980.005		740	9.985	9.970E+01	7.389E+03									
1980	1	30	1980.082		495	5.297	2.806E+01	2.622E+03									
1980	3	7	1980.180		443	5.139	2.641E+01	2.277E+03									
1980	4	3	1980.255		449	4.886	2.387E+01	2.194E+03									
1980	5	1	1980.332		415	4.667	2.178E+01	1.937E+03	4	4.43E+01	5.94E+02	3.60E+03	4.81E+04	79.01	26.1	-0.331	13.669
1980	5	30	1980.410		600	7.826	6.124E+01	4.695E+03									
1980	7	4	1980.505		1186	14.069	1.979E+02	1.669E+04									
1980	8	7	1980.600		1401	17.702	3.134E+02	2.479E+04									
1980	9	3	1980.675		1359	17.702	3.134E+02	2.406E+04									
1980	10	9	1980.772		1336	17.702	3.134E+02	2.365E+04									
1980	11	5	1980.847		1374	18.328	3.359E+02	2.518E+04	6	6.40E+01	8.76E+02	4.75E+03	6.51E+04	74.74	-6.5	0.087	14.450
1980	12	4	1980.925		1354	18.081	3.269E+02	2.448E+04									
1981	1	8	1981.022		745	10.571	1.117E+02	7.872E+03									
1981	2	3	1981.094		538	7.428	5.517E+01	3.994E+03									
1981	3	6	1981.178		380	5.149	2.651E+01	1.954E+03									
1981	4	2	1981.253		358	4.487	2.013E+01	1.606E+03	6	7.10E+01	9.93E+02	5.65E+03	7.83E+04	74.29	63.0	-0.847	14.537
1981	5	8	1981.350		561	6.441	4.149E+01	3.616E+03									
1981	6	4	1981.425		869	10.350	1.071E+02	8.999E+03									
1981	7	10	1981.522		1282	16.090	2.589E+02	2.063E+04									
1981	8	6	1981.597		1276	16.502	2.723E+02	2.105E+04									
1981	9	2	1981.672		1306	17.130	2.934E+02	2.237E+04									
1981	10	8	1981.769		1297	17.209	2.962E+02	2.232E+04									
1981	11	4	1981.844		1369	18.277	3.341E+02	2.501E+04									
1981	12	3	1981.922		1374	18.491	3.419E+02	2.540E+04	6	6.63E+01	9.20E+02	4.73E+03	6.67E+04	76.61	-57.2	0.747	14.097
1982	1	6	1982.016		1356	18.398	3.385E+02	2.494E+04									
1982	2	9	1982.111		776	11.262	1.268E+02	8.744E+03									
1982	3	5	1982.175		494	7.504	5.631E+01	3.708E+03									
1982	4	8	1982.269		367	5.469	2.990E+01	2.006E+03									
1982	5	7	1982.347		368	5.157	2.659E+01	1.898E+03	6	7.62E+01	1.11E+03	5.94E+03	8.64E+04	78.79	-11.4	0.144	13.707
1982	6	3	1982.422		571	7.192	5.173E+01	4.104E+03									
1982	7	9	1982.519		1133	13.991	1.957E+02	1.585E+04									
1982	8	5	1982.594		1229	15.608	2.436E+02	1.918E+04									
1982	9	1	1982.669		1248	16.122	2.599E+02	2.013E+04									
1982	10	7	1982.766		1388	18.155	3.296E+02	2.521E+04									
1982	11	3	1982.842		1386	18.385	3.380E+02	2.549E+04									
1982	12	2	1982.919		1373	18.385	3.380E+02	2.524E+04	6	8.86E+01	1.36E+03	6.62E+03	1.01E+05	71.28	50.6	-0.710	15.152
1983	1	5	1983.014		1312	17.700	3.133E+02	2.323E+04									
1983	2	1	1983.089		1149	15.622	2.440E+02	1.796E+04									
1983	3	4	1983.172		1047	14.038	1.971E+02	1.470E+04									
1983	5	1	1983.332		911	12.144	1.475E+02	1.106E+04									

Table 2
South Kimball Pressure Summary
Best Fit Analysis
Dawn Metered Volumes

							Bestfit Lines										
Year	Month	Day	Fractional Year	Pressure (psi)	P/Zavg (psi)	Physical Balance (bcf)	x2	xy	n	I	m	Y	Z	slope (psi/bcf)	Y Intercept (psi)	X Intercept (bcf)	GIP (bcf)
1983	5	6	1983.344		828	10.741	1.154E+02	8.891E+03	4	5.66E+01	8.38E+02	4.45E+03	6.60E+04	79.79	-15.2	0.191	13.536
1983	6	2	1983.419		915	11.495	1.321E+02	1.051E+04									
1983	7	8	1983.516		1325	16.590	2.752E+02	2.198E+04									
1983	8	4	1983.592		1385	17.745	3.149E+02	2.458E+04									
1983	9	7	1983.686		1379	17.864	3.191E+02	2.463E+04									
1983	11	9	1983.858		1373	17.973	3.230E+02	2.467E+04	6	6.60E+01	8.80E+02	5.21E+03	6.82E+04	70.09	98.2	-1.401	15.410
1983	12	8	1983.936		1301	16.940	2.870E+02	2.204E+04									
1984	1	4	1984.011		868	11.592	1.344E+02	1.006E+04									
1984	1	31	1984.086		706	8.887	7.898E+01	6.278E+03									
1984	3	3	1984.169		509	6.065	3.678E+01	3.084E+03									
1984	5	4	1984.339		456	4.507	2.032E+01	2.056E+03	6	8.37E+01	1.31E+03	6.76E+03	1.04E+05	67.65	182.0	-2.690	15.965
1984	6	7	1984.433		950	10.672	1.139E+02	1.013E+04									
1984	7	6	1984.511		1365	16.542	2.736E+02	2.258E+04									
1984	8	2	1984.586		1301	16.542	2.736E+02	2.152E+04									
1984	9	5	1984.680		1314	17.206	2.960E+02	2.260E+04									
1984	10	4	1984.758		1371	18.265	3.336E+02	2.504E+04									
1984	11	7	1984.853		1405	18.957	3.594E+02	2.664E+04									
1984	12	6	1984.930		1393	18.955	3.593E+02	2.641E+04									
1985	1	2	1985.005		1386	18.955	3.593E+02	2.627E+04	4	4.14E+01	5.38E+02	2.94E+03	3.87E+04	74.75	-37.9	0.507	14.448
1985	2	12	1985.119		682	9.913	9.827E+01	6.756E+03									
1985	3	8	1985.183		514	7.338	5.384E+01	3.774E+03									
1985	4	2	1985.253		360	5.170	2.673E+01	1.859E+03									
1985	5	3	1985.336		402	5.170	2.673E+01	2.076E+03									
1985	6	6	1985.430		429	5.170	2.673E+01	2.216E+03									
1985	7	5	1985.508		444	5.170	2.673E+01	2.297E+03	4	4.05E+01	4.91E+02	3.29E+03	3.98E+04	79.74	14.9	-0.186	13.543
1985	9	1	1985.668		596	8.087	6.541E+01	4.823E+03									
1985	9	4	1985.678		850	9.838	9.679E+01	8.363E+03									
1985	11	5	1985.847		1397	17.379	3.020E+02	2.427E+04									
1985	12	5	1985.928		1373	17.379	3.020E+02	2.386E+04	6	5.45E+01	6.91E+02	4.47E+03	5.50E+04	73.56	76.9	-1.045	14.682
1986	1	2	1986.005		1252	16.010	2.563E+02	2.005E+04									
1986	2	4	1986.097		702	8.926	7.967E+01	6.266E+03									
1986	3	7	1986.180		469	5.585	3.120E+01	2.621E+03									
1986	4	3	1986.255		320	3.369	1.135E+01	1.080E+03									
1986	5	9	1986.353		350	3.187	1.015E+01	1.115E+03	5	6.22E+01	9.27E+02	5.38E+03	7.79E+04	71.77	183.6	-2.558	15.048
1986	6	5	1986.428		925	8.868	7.865E+01	8.200E+03									
1986	7	4	1986.505		1409	16.468	2.712E+02	2.320E+04									
1986	8	7	1986.600		1330	16.470	2.713E+02	2.190E+04									
1986	9	10	1986.694		1368	17.188	2.954E+02	2.351E+04									
1986	10	2	1986.753		1355	17.193	2.956E+02	2.330E+04									
1986	11	5	1986.847		1384	17.718	3.139E+02	2.453E+04	6	6.86E+01	9.63E+02	5.37E+03	7.53E+04	77.33	11.2	-0.145	13.967
1986	12	4	1986.925		1337	17.129	2.934E+02	2.290E+04									
1987	1	7	1987.019		1184	15.040	2.262E+02	1.781E+04									
1987	2	3	1987.094		689	9.151	8.375E+01	6.303E+03									
1987	3	6	1987.178		413	5.335	2.846E+01	2.204E+03									
1987	4	2	1987.253		362	4.192	1.757E+01	1.518E+03	6	5.83E+01	6.53E+02	4.97E+03	5.49E+04	77.61	73.1	-0.942	13.916

Table 2
South Kimball Pressure Summary
Best Fit Analysis
Dawn Metered Volumes

									Bestfit Lines								
Year	Month	Day	Fractional Year	Pressure (psi)	P/Zavg (psi)	Physical Balance (bcf)	x2	xy	n	I	m	Y	Z	slope (psi/bcf)	Y Intercept (psi)	X Intercept (bcf)	GIP (bcf)
1987	5	6	1987.344		712	8.020	6.431E+01	5.708E+03									
1987	6	2	1987.419		708	8.019	6.431E+01	5.681E+03									
1987	7	8	1987.516		833	9.485	8.996E+01	7.903E+03									
1987	8	4	1987.592		1047	12.432	1.546E+02	1.301E+04									
1987	9	2	1987.672		1303	16.185	2.620E+02	2.109E+04									
1987	10	6	1987.764		1303	16.645	2.771E+02	2.169E+04									
1987	11	2	1987.839		1345	17.305	2.995E+02	2.328E+04									
1987	12	31	1987.999		1349	17.545	3.078E+02	2.366E+04									
1988	1	4	1988.011		1340	17.544	3.078E+02	2.350E+04	4	3.71E+01	4.48E+02	2.98E+03	3.55E+04	74.89	50.7	-0.677	14.421
1988	2	6	1988.103		827	9.388	8.813E+01	7.766E+03									
1988	2	29	1988.163		433	5.543	3.072E+01	2.403E+03									
1988	4	5	1988.260		383	4.658	2.170E+01	1.784E+03									
1988	5	4	1988.340		411	4.658	2.170E+01	1.914E+03									
1988	6	2	1988.420		430	4.658	2.170E+01	2.003E+03	4	4.28E+01	5.73E+02	3.64E+03	4.78E+04	77.01	84.9	-1.102	14.025
1988	7	2	1988.500		573	6.310	3.982E+01	3.616E+03									
1988	8	3	1988.590		1235	14.326	2.052E+02	1.769E+04									
1988	9	2	1988.670		1398	17.514	3.067E+02	2.448E+04									
1988	10	1	1988.750		1385	17.756	3.153E+02	2.459E+04									
1988	11	3	1988.840		1362	17.755	3.153E+02	2.418E+04									
1988	11	29	1988.911		1355	17.755	3.153E+02	2.406E+04	6	6.32E+01	7.92E+02	4.97E+03	6.12E+04	69.84	92.9	-1.330	15.464
1988	12	26	1988.987		1135	15.080	2.274E+02	1.712E+04									
1989	1	23	1989.063		848	11.164	1.246E+02	9.467E+03									
1989	2	27	1989.159		593	7.416	5.500E+01	4.398E+03									
1989	4	4	1989.258		559	6.490	4.212E+01	3.628E+03									
1989	5	2	1989.333		478	5.250	2.757E+01	2.510E+03									
1989	5	30	1989.412		654	7.038	4.954E+01	4.603E+03									
1989	7	4	1989.508		655	7.038	4.954E+01	4.609E+03	4	4.39E+01	5.43E+02	3.89E+03	4.75E+04	78.53	111.5	-1.420	13.753
1989	8	1	1989.585		701	7.531	5.672E+01	5.281E+03									
1989	8	29	1989.660		1148	12.830	1.646E+02	1.473E+04									
1989	10	3	1989.755		1388	16.481	2.716E+02	2.288E+04									
1989	10	31	1989.832		1361	16.480	2.716E+02	2.244E+04									
1989	11	27	1989.907		1348	16.480	2.716E+02	2.222E+04	5	3.90E+01	4.09E+02	3.44E+03	3.46E+04	73.67	113.6	-1.542	14.660
1990	1	1	1990.003		635	7.893	6.230E+01	5.013E+03									
1990	1	29	1990.079		580	6.393	4.087E+01	3.706E+03									
1990	2	25	1990.155		470	4.709	2.217E+01	2.214E+03									
1990	3	28	1990.238		406	3.504	1.228E+01	1.424E+03									
1990	5	1	1990.332		482	4.001	1.601E+01	1.928E+03									
1990	5	30	1990.410		491	4.001	1.601E+01	1.964E+03									
1990	6	26	1990.485		499	4.001	1.601E+01	1.995E+03	5	5.84E+01	8.16E+02	5.36E+03	7.21E+04	70.83	245.6	-3.468	15.248
1990	7	31	1990.582		770	7.070	4.999E+01	5.444E+03									
1990	8	28	1990.657		1314	14.228	2.024E+02	1.870E+04									
1990	9	24	1990.732		1363	15.942	2.541E+02	2.173E+04									
1990	10	30	1990.829		1416	17.118	2.930E+02	2.423E+04									
1990	12	4	1990.925		1391	17.118	2.930E+02	2.381E+04									
1991	1	1	1991.002		1378	17.118	2.930E+02	2.359E+04	3	3.33E+01	4.32E+02	2.68E+03	3.47E+04	78.55	23.3	-0.297	13.750

Table 2
South Kimball Pressure Summary
Best Fit Analysis
Dawn Metered Volumes

							Bestfit Lines										
Year	Month	Day	Fractional Year	Pressure (psi)	P/Zavg (psi)	Physical Balance (bcf)	x2	xy	n	I	m	Y	Z	slope (psi/bcf)	Y Intercept (psi)	X Intercept (bcf)	GIP (bcf)
1991	1	28	1991.077		790	10.117	1.024E+02	7.996E+03									
1991	2	24	1991.152		516	6.046	3.655E+01	3.118E+03									
1991	4	2	1991.253		569	6.045	3.654E+01	3.441E+03									
1991	4	30	1991.329		588	6.045	3.654E+01	3.557E+03	6	8.58E+01	1.34E+03	7.16E+03	1.10E+05	68.96	206.5	-2.995	15.662
1991	6	4	1991.425		1046	11.337	1.285E+02	1.185E+04									
1991	7	2	1991.503		1384	16.493	2.720E+02	2.282E+04									
1991	7	30	1991.579		1344	16.593	2.753E+02	2.231E+04									
1991	9	2	1991.672		1387	17.428	3.037E+02	2.417E+04									
1991	9	30	1991.749		1407	17.904	3.206E+02	2.519E+04									
1991	11	4	1991.844		1393	17.904	3.206E+02	2.494E+04									
1991	12	3	1991.922		1358	17.553	3.081E+02	2.383E+04									
1991	12	31	1991.999		1353	17.553	3.081E+02	2.375E+04	5	4.03E+01	4.72E+02	3.14E+03	3.61E+04	73.21	38.2	-0.522	14.752
1992	2	2	1992.092		760	10.520	1.107E+02	7.996E+03									
1992	3	4	1992.172		409	5.492	3.017E+01	2.246E+03									
1992	4	7	1992.266		312	3.583	1.284E+01	1.119E+03									
1992	5	6	1992.344		307	3.152	9.935E+00	9.691E+02	7	6.39E+01	8.21E+02	5.70E+03	7.08E+04	78.88	93.7	-1.188	13.692
1992	6	2	1992.419		331	3.152	9.935E+00	1.043E+03									
1992	6	30	1992.496		348	3.152	9.935E+00	1.098E+03									
1992	8	4	1992.592		769	7.980	6.368E+01	6.139E+03									
1992	9	1	1992.668		1163	13.090	1.714E+02	1.523E+04									
1992	9	30	1992.749		1392	16.459	2.709E+02	2.290E+04									
1992	11	2	1992.839		1384	16.903	2.857E+02	2.340E+04	6	5.45E+01	6.79E+02	4.64E+03	5.60E+04	75.51	86.6	-1.147	14.303
1992	12	15	1992.955		1244	15.450	2.387E+02	1.922E+04									
1993	1	18	1993.049		830	10.064	1.013E+02	8.350E+03									
1993	2	14	1993.124		492	5.662	3.206E+01	2.783E+03									
1993	3	17	1993.208		359	3.585	1.285E+01	1.286E+03									
1993	4	20	1993.302		329	2.870	8.234E+00	9.450E+02									
1993	5	19	1993.380		362	2.992	8.955E+00	1.084E+03									
1993	6	15	1993.455		377	2.992	8.955E+00	1.127E+03									
1993	6	29	1993.493		382	2.992	8.955E+00	1.144E+03									
1993	7	13	1993.533		389	2.992	8.955E+00	1.166E+03									
1993	7	28	1993.571		398	2.992	8.955E+00	1.192E+03	8	7.57E+01	8.81E+02	7.31E+03	8.22E+04	79.31	163.2	-2.057	13.618
1993	8	10	1993.608		426	3.400	1.156E+01	1.447E+03									
1993	8	31	1993.666		635	5.945	3.534E+01	3.773E+03									
1993	9	13	1993.702		893	9.053	8.196E+01	8.086E+03									
1993	9	27	1993.741		1124	11.901	1.416E+02	1.338E+04									
1993	10	12	1993.780		1220	13.380	1.790E+02	1.632E+04									
1993	11	1	1993.836		1311	14.471	2.094E+02	1.898E+04									
1993	11	15	1993.874		1306	14.597	2.131E+02	1.906E+04									
1993	11	29	1993.913		1294	14.597	2.131E+02	1.890E+04	9	6.67E+01	7.19E+02	6.51E+03	6.53E+04	76.16	158.6	-2.083	14.181
1993	12	14	1993.952		1277	14.485	2.098E+02	1.850E+04									
1993	12	28	1993.991		1147	13.134	1.725E+02	1.507E+04									
1994	1	10	1994.027		747	8.350	6.972E+01	6.234E+03									
1994	1	30	1994.082		432	4.216	1.778E+01	1.820E+03									
1994	2	13	1994.122		413	3.516	1.236E+01	1.451E+03									

Table 2
South Kimball Pressure Summary
Best Fit Analysis
Dawn Metered Volumes

							Bestfit Lines										
Year	Month	Day	Fractional Year	Pressure (psi)	P/Zavg (psi)	Physical Balance (bcf)	x2	xy	n	I	m	Y	Z	slope (psi/bcf)	Y Intercept (psi)	X Intercept (bcf)	GIP (bcf)
1994	2	27	1994.160		393	2.878	8.284E+00	1.130E+03									
1994	3	16	1994.205		402	2.842	8.074E+00	1.141E+03									
1994	3	30	1994.243		407	2.727	7.439E+00	1.109E+03									
1994	4	12	1994.280		437	3.432	1.178E+01	1.499E+03									
1994	5	4	1994.339		489	3.432	1.178E+01	1.678E+03									
1994	5	18	1994.377		548	4.069	1.656E+01	2.231E+03									
1994	6	1	1994.416		549	4.069	1.656E+01	2.233E+03									
1994	6	14	1994.452		550	4.069	1.656E+01	2.238E+03									
1994	6	28	1994.491		552	4.069	1.656E+01	2.245E+03									
1994	7	13	1994.530		554	4.069	1.656E+01	2.253E+03									
1994	8	2	1994.586		556	4.069	1.656E+01	2.263E+03									
1994	8	16	1994.624		559	4.069	1.656E+01	2.275E+03	8	9.00E+01	1.19E+03	9.00E+03	1.15E+05	75.26	277.7	-3.690	14.350
1994	8	30	1994.663		587	4.315	1.862E+01	2.534E+03									
1994	9	19	1994.719		909	7.924	6.279E+01	7.205E+03									
1994	10	4	1994.758		1266	12.483	1.558E+02	1.581E+04									
1994	10	18	1994.797		1383	14.385	2.069E+02	1.990E+04									
1994	11	1	1994.835		1436	15.419	2.378E+02	2.214E+04									
1994	11	14	1994.872		1434	15.684	2.460E+02	2.249E+04									
1994	11	28	1994.910		1420	15.722	2.472E+02	2.233E+04	7	6.99E+01	8.44E+02	6.67E+03	7.80E+04	78.11	172.0	-2.202	13.827
1994	12	13	1994.950		1383	15.472	2.394E+02	2.139E+04									
1995	1	2	1995.005		1192	13.210	1.745E+02	1.575E+04									
1995	1	16	1995.044		911	9.697	9.402E+01	8.832E+03									
1995	1	30	1995.082		716	7.141	5.100E+01	5.111E+03									
1995	2	12	1995.119		536	4.730	2.238E+01	2.535E+03									
1995	2	27	1995.160		508	3.948	1.559E+01	2.005E+03									
1995	3	15	1995.202		529	3.948	1.559E+01	2.089E+03									
1995	4	2	1995.253		552	3.948	1.559E+01	2.179E+03									
1995	4	18	1995.297		561	3.948	1.559E+01	2.217E+03									
1995	5	3	1995.336		578	4.055	1.644E+01	2.344E+03									
1995	5	19	1995.380		639	4.697	2.206E+01	2.999E+03									
1995	5	31	1995.413		640	4.697	2.206E+01	3.007E+03									
1995	6	13	1995.450		642	4.697	2.206E+01	3.017E+03									
1995	6	27	1995.488		645	4.697	2.206E+01	3.028E+03									
1995	7	12	1995.527		647	4.697	2.206E+01	3.040E+03									
1995	8	3	1995.589		657	4.954	2.454E+01	3.253E+03									
1995	8	15	1995.622		663	4.977	2.477E+01	3.299E+03	7	6.75E+01	7.62E+02	7.34E+03	7.96E+04	79.27	283.7	-3.578	13.625
1995	8	31	1995.666		677	5.049	2.550E+01	3.416E+03									
1995	9	11	1995.697		831	6.745	4.550E+01	5.608E+03									
1995	9	27	1995.741		977	8.569	7.342E+01	8.369E+03									
1995	10	17	1995.794		1374	13.365	1.786E+02	1.836E+04									
1995	11	1	1995.836		1410	14.330	2.054E+02	2.021E+04									
1995	11	13	1995.869		1404	14.464	2.092E+02	2.031E+04									
1995	11	29	1995.913		1387	14.464	2.092E+02	2.006E+04									
1995	12	19	1995.966		1372	14.403	2.074E+02	1.976E+04	9	4.64E+01	4.73E+02	5.97E+03	4.81E+04	74.21	279.9	-3.771	14.552
1995	12	28	1995.991		1211	12.587	1.584E+02	1.524E+04									

Table 2
South Kimball Pressure Summary
Best Fit Analysis
Dawn Metered Volumes

									Bestfit Lines								
Year	Month	Day	Fractional Year	Pressure (psi)	P/Zavg (psi)	Physical Balance (bcf)	x2	xy	n	I	m	Y	Z	slope (psi/bcf)	Y Intercept (psi)	X Intercept (bcf)	GIP (bcf)
1996	1	15	1996.041		845	7.911	6.259E+01	6.683E+03									
1996	1	30	1996.082		638	4.967	2.467E+01	3.167E+03									
1996	2	11	1996.116		530	3.571	1.275E+01	1.894E+03									
1996	2	27	1996.160		465	2.457	6.035E+00	1.141E+03									
1996	3	13	1996.197		353	1.088	1.183E+00	3.835E+02									
1996	3	29	1996.241		280	-0.088	7.753E-03	-2.467E+01									
1996	4	16	1996.291		272	-0.452	2.043E-01	-1.232E+02									
1996	5	5	1996.342		281	-0.589	3.469E-01	-1.652E+02	13	1.17E+02	1.42E+03	1.34E+04	1.48E+05	73.17	374.1	-5.112	14.759
1996	5	22	1996.388		423	0.823	6.770E-01	3.481E+02									
1996	5	31	1996.413		527	2.002	4.007E+00	1.055E+03									
1996	6	11	1996.444		698	4.009	1.607E+01	2.796E+03									
1996	6	27	1996.488		1019	8.120	6.593E+01	8.271E+03									
1996	7	17	1996.541		1247	11.244	1.264E+02	1.402E+04									
1996	8	1	1996.585		1240	11.582	1.342E+02	1.437E+04									
1996	8	20	1996.635		1222	11.582	1.342E+02	1.416E+04									
1996	9	2	1996.672		1279	12.355	1.526E+02	1.580E+04									
1996	9	16	1996.711		1342	13.304	1.770E+02	1.785E+04									
1996	9	30	1996.749		1360	13.779	1.899E+02	1.875E+04									
1996	10	15	1996.788		1379	14.157	2.004E+02	1.952E+04									
1996	10	29	1996.827		1417	14.749	2.175E+02	2.090E+04									
1996	11	18	1996.883		1370	14.435	2.084E+02	1.978E+04									
1996	11	29	1996.913		1368	14.435	2.084E+02	1.975E+04									
1996	12	17	1996.961		1364	14.435	2.084E+02	1.969E+04									
1997	1	1	1997.003		1359	14.435	2.084E+02	1.962E+04	9	5.74E+01	6.23E+02	6.50E+03	6.08E+04	75.05	243.7	-3.247	14.391
1997	1	8	1997.022		1251	13.360	1.785E+02	1.672E+04									
1997	1	10	1997.027		1154	12.210	1.491E+02	1.409E+04									
1997	1	20	1997.055		752	7.285	5.307E+01	5.478E+03									
1997	1	29	1997.079		562	4.683	2.193E+01	2.633E+03									
1997	2	9	1997.111		459	3.071	9.431E+00	1.409E+03									
1997	2	25	1997.155		349	1.357	1.843E+00	4.743E+02									
1997	3	12	1997.194		349	1.108	1.229E+00	3.868E+02									
1997	3	30	1997.243		265	-0.115	1.329E-02	-3.054E+01									
1997	4	22	1997.308		281	-0.293	8.594E-02	-8.224E+01									
1997	5	1	1997.332		289	-0.293	8.594E-02	-8.483E+01									
1997	5	7	1997.347		293	-0.293	8.594E-02	-8.598E+01									
1997	5	14	1997.366		312	-0.174	3.043E-02	-5.442E+01									
1997	5	30	1997.410		347	0.107	1.140E-02	3.701E+01									
1997	6	10	1997.441		362	0.230	5.277E-02	8.325E+01									
1997	6	17	1997.461		366	0.230	5.277E-02	8.398E+01									
1997	6	24	1997.480		368	0.230	5.277E-02	8.457E+01									
1997	7	8	1997.519		373	0.230	5.277E-02	8.573E+01	10	5.51E+01	6.07E+02	8.13E+03	6.87E+04	78.97	377.3	-4.778	13.677
1997	7	23	1997.558		379	0.230	5.277E-02	8.697E+01									
1997	8	5	1997.594		384	0.270	7.311E-02	1.038E+02									
1997	8	19	1997.633		437	0.812	6.588E-01	3.550E+02									
1997	9	1	1997.669		525	1.686	2.842E+00	8.844E+02									

Table 2
South Kimball Pressure Summary
Best Fit Analysis
Dawn Metered Volumes

							Bestfit Lines										
Year	Month	Day	Fractional Year	Pressure (psi)	P/Zavg (psi)	Physical Balance (bcf)	x2	xy	n	I	m	Y	Z	slope (psi/bcf)	Y Intercept (psi)	X Intercept (bcf)	GIP (bcf)
1997	9	15	1997.708		725	3.927	1.542E+01	2.845E+03									
1997	9	29	1997.746		1135	8.925	7.966E+01	1.013E+04									
1997	10	14	1997.786		1403	12.689	1.610E+02	1.781E+04									
1997	10	28	1997.824		1383	13.076	1.710E+02	1.808E+04									
1997	11	10	1997.861		1382	13.278	1.763E+02	1.835E+04									
1997	11	24	1997.899		1368	13.278	1.763E+02	1.816E+04									
1997	12	9	1997.939		1358	13.278	1.763E+02	1.803E+04									
1997	12	23	1997.977		1351	13.278	1.763E+02	1.793E+04	7	5.97E+01	6.07E+02	6.61E+03	6.45E+04	82.35	243.1	-2.952	13.115
1998	1	5	1998.014		1316	12.975	1.683E+02	1.708E+04									
1998	1	19	1998.052		1161	11.278	1.272E+02	1.310E+04									
1998	2	8	1998.108		872	7.804	6.090E+01	6.807E+03									
1998	2	15	1998.127		765	6.508	4.235E+01	4.976E+03									
1998	3	4	1998.172		641	4.748	2.254E+01	3.045E+03									
1998	3	18	1998.211		509	3.070	9.424E+00	1.561E+03									
1998	4	7	1998.266		533	2.957	8.744E+00	1.575E+03	16	1.55E+02	1.78E+03	1.73E+04	1.89E+05	77.09	336.1	-4.359	14.009
1998	4	14	1998.286		568	3.237	1.048E+01	1.839E+03									
1998	4	28	1998.324		704	4.802	2.305E+01	3.378E+03									
1998	5	13	1998.363		839	6.326	4.002E+01	5.310E+03									
1998	5	27	1998.402		829	6.349	4.031E+01	5.262E+03									
1998	6	9	1998.439		857	6.640	4.409E+01	5.687E+03									
1998	6	23	1998.477		879	6.938	4.814E+01	6.101E+03									
1998	7	7	1998.516		1028	8.641	7.467E+01	8.885E+03									
1998	7	22	1998.555		1205	10.873	1.182E+02	1.310E+04									
1998	8	4	1998.592		1411	13.348	1.782E+02	1.883E+04									
1998	8	18	1998.630		1417	14.138	1.999E+02	2.003E+04									
1998	9	1	1998.668		1402	13.799	1.904E+02	1.934E+04									
1998	9	14	1998.705		1392	13.799	1.904E+02	1.921E+04									
1998	9	28	1998.743		1380	13.799	1.904E+02	1.904E+04									
1998	10	13	1998.783		1435	14.529	2.111E+02	2.086E+04									
1998	10	27	1998.821		1432	14.620	2.137E+02	2.094E+04									
1998	11	9	1998.858		1425	14.620	2.137E+02	2.083E+04									
1998	11	23	1998.896		1419	14.620	2.137E+02	2.075E+04									
1998	12	8	1998.936		1407	14.586	2.128E+02	2.053E+04									
1998	12	22	1998.974		1392	14.363	2.063E+02	2.000E+04	8	7.46E+01	8.43E+02	7.89E+03	8.50E+04	78.04	257.6	-3.301	13.840
1999	1	11	1999.030		1373	14.230	2.025E+02	1.954E+04									
1999	1	18	1999.049		1245	12.718	1.618E+02	1.583E+04									
1999	1	31	1999.086		1144	11.435	1.308E+02	1.308E+04									
1999	2	14	1999.124		967	9.197	8.458E+01	8.890E+03									
1999	3	3	1999.169		670	5.505	3.030E+01	3.690E+03									
1999	3	10	1999.189		584	4.310	1.857E+01	2.516E+03									
1999	3	31	1999.246		511	2.883	8.310E+00	1.472E+03	15	1.30E+02	1.34E+03	1.54E+04	1.50E+05	79.51	335.6	-4.221	13.584
1999	4	13	1999.283		645	4.118	1.696E+01	2.654E+03									
1999	4	27	1999.321		701	4.644	2.157E+01	3.255E+03									
1999	5	12	1999.361		798	5.716	3.267E+01	4.559E+03									
1999	5	26	1999.399		797	5.716	3.267E+01	4.558E+03									

Table 2
South Kimball Pressure Summary
Best Fit Analysis
Dawn Metered Volumes

							Bestfit Lines										
Year	Month	Day	Fractional Year	Pressure (psi)	P/Zavg (psi)	Physical Balance (bcf)	x2	xy	n	I	m	Y	Z	slope (psi/bcf)	Y Intercept (psi)	X Intercept (bcf)	GIP (bcf)
1999	6	8	1999.436		825	5.993	3.592E+01	4.946E+03									
1999	6	22	1999.474		869	6.437	4.143E+01	5.596E+03									
1999	7	7	1999.514		1024	8.200	6.724E+01	8.394E+03									
1999	7	20	1999.552		1196	10.437	1.089E+02	1.248E+04									
1999	8	3	1999.589		1246	11.253	1.266E+02	1.402E+04									
1999	8	17	1999.627		1237	11.253	1.266E+02	1.392E+04									
1999	8	30	1999.663		1272	11.691	1.367E+02	1.487E+04									
1999	9	13	1999.702		1409	13.480	1.817E+02	1.899E+04									
1999	9	27	1999.741		1430	13.952	1.947E+02	1.995E+04									
1999	10	12	1999.780		1425	14.425	2.081E+02	2.056E+04									
1999	10	27	1999.821		1426	14.425	2.081E+02	2.057E+04									
1999	11	8	1999.855		1416	14.425	2.081E+02	2.042E+04									
1999	11	22	1999.894		1412	14.435	2.084E+02	2.038E+04	8	6.15E+01	7.45E+02	7.28E+03	7.63E+04	74.79	334.9	-4.477	14.441
1999	12	7	1999.933		1338	13.628	1.857E+02	1.824E+04									
1999	12	21	1999.971		1340	13.502	1.823E+02	1.809E+04									
2000	1	3	2000.008		1189	10.690	1.143E+02	1.271E+04									
2000	1	17	2000.047		787	6.535	4.270E+01	5.146E+03									
2000	1	31	2000.085		574	3.307	1.093E+01	1.899E+03									
2000	2	20	2000.141		294	-0.224	5.019E-02	-6.581E+01									
2000	3	8	2000.183		344	-0.363	1.318E-01	-1.249E+02									
2000	3	22	2000.221		368	-0.363	1.318E-01	-1.337E+02									
2000	4	4	2000.258		412	-0.018	3.224E-04	-7.406E+00									
2000	4	18	2000.297		427	0.014	2.003E-04	6.046E+00									
2000	5	17	2000.374		486	0.524	2.745E-01	2.546E+02									
2000	5	24	2000.394		485	0.524	2.745E-01	2.539E+02									
2000	6	6	2000.430		493	0.524	2.745E-01	2.581E+02	9	3.22E+01	2.31E+02	6.75E+03	3.32E+04	78.57	468.4	-5.962	13.747
2000	6	14	2000.452		521	0.886	7.844E-01	4.616E+02									
2000	6	19	2000.466		550	1.184	1.403E+00	6.509E+02									
2000	6	26	2000.485		621	1.799	3.238E+00	1.118E+03									
2000	7	16	2000.540		649	2.131	4.543E+00	1.384E+03									
2000	7	20	2000.551		680	2.656	7.055E+00	1.805E+03									
2000	7	24	2000.562		738	3.127	9.780E+00	2.308E+03									
2000	8	15	2000.622		1124	8.256	6.817E+01	9.284E+03									
2000	9	1	2000.669		1371	11.651	1.357E+02	1.597E+04									
2000	9	15	2000.707		1404	12.457	1.552E+02	1.749E+04									
2000	10	1	2000.751		1378	12.614	1.591E+02	1.738E+04									
2000	10	15	2000.789		1414	13.264	1.759E+02	1.875E+04									
2000	11	1	2000.836		1408	13.492	1.820E+02	1.899E+04									
2000	11	15	2000.874		1436	13.713	1.880E+02	1.969E+04									
2000	12	1	2000.918		1410	13.670	1.869E+02	1.927E+04									
2000	12	15	2000.956		1404	13.670	1.869E+02	1.919E+04	6	4.59E+01	5.12E+02	5.55E+03	5.50E+04	77.66	331.5	-4.268	13.906
2000	12	31	2001.000		1328	12.821	1.644E+02	1.702E+04									
2001	1	15	2001.041		1191	11.189	1.252E+02	1.332E+04									
2001	2	1	2001.088		755	5.550	3.080E+01	4.191E+03									
2001	2	16	2001.129		488	2.048	4.193E+00	1.000E+03									

Table 2
South Kimball Pressure Summary
Best Fit Analysis
Dawn Metered Volumes

									Bestfit Lines								
Year	Month	Day	Fractional Year	Pressure (psi)	P/Zavg (psi)	Physical Balance (bcf)	x2	xy	n	I	m	Y	Z	slope (psi/bcf)	Y Intercept (psi)	X Intercept (bcf)	GIP (bcf)
2001	3	1	2001.164		388	0.618	3.825E-01	2.399E+02									
2001	3	9	2001.186		361	0.122	1.478E-02	4.386E+01									
2001	3	27	2001.236		335	-0.564	3.177E-01	-1.888E+02									
2001	4	15	2001.288		358	-0.564	3.177E-01	-2.017E+02									
2001	5	1	2001.332		375	-0.564	3.177E-01	-2.116E+02									
2001	5	15	2001.370		388	-0.564	3.177E-01	-2.186E+02									
2001	6	1	2001.416		516	0.807	6.506E-01	4.163E+02	6	3.78E+01	3.79E+02	5.69E+03	4.66E+04	76.60	465.3	-6.074	14.099
2001	6	15	2001.455		610	1.803	3.251E+00	1.099E+03									
2001	7	1	2001.499		684	2.875	8.268E+00	1.966E+03									
2001	7	15	2001.537		1034	7.275	5.292E+01	7.520E+03									
2001	8	1	2001.584		1416	12.131	1.472E+02	1.717E+04									
2001	8	16	2001.625		1428	12.911	1.667E+02	1.844E+04									
2001	8	27	2001.655		1399	12.911	1.667E+02	1.806E+04									
2001	9	17	2001.712		1385	13.130	1.724E+02	1.818E+04									
2001	10	1	2001.751		1420	13.741	1.888E+02	1.951E+04									
2001	10	16	2001.792		1467	14.430	2.082E+02	2.117E+04									
2001	10	31	2001.833		1381	13.246	1.754E+02	1.829E+04									
2001	11	15	2001.874		1393	13.869	1.924E+02	1.932E+04									
2001	11	27	2001.907		1450	14.555	2.119E+02	2.110E+04									
2001	12	15	2001.956		1457	14.809	2.193E+02	2.158E+04									
2001	12	31	2002.000		1449	14.809	2.193E+02	2.145E+04									
2002	1	15	2002.041		1416	14.312	2.048E+02	2.027E+04	4	4.02E+01	4.41E+02	4.35E+03	4.66E+04	78.86	295.1	-3.742	13.695
2002	1	31	2002.085		1218	11.534	1.330E+02	1.405E+04									
2002	2	14	2002.123		850	7.365	5.424E+01	6.263E+03									
2002	2	28	2002.162		864	6.973	4.862E+01	6.022E+03									
2002	3	5	2002.175		857	6.960	4.845E+01	5.967E+03									
2002	3	28	2002.238		878	6.879	4.732E+01	6.041E+03									
2002	4	15	2002.288		892	6.899	4.760E+01	6.151E+03									
2002	4	30	2002.329		899	6.899	4.760E+01	6.205E+03									
2002	5	15	2002.370		902	6.899	4.760E+01	6.221E+03									
2002	5	24	2002.395		905	6.899	4.760E+01	6.242E+03									
2002	6	5	2002.427		907	7.063	4.989E+01	6.410E+03	6	6.09E+01	6.44E+02	6.92E+03	7.22E+04	75.29	388.6	-5.162	14.345
2002	6	15	2002.455		1025	8.318	6.920E+01	8.529E+03									
2002	6	30	2002.496		1116	9.624	9.262E+01	1.074E+04									
2002	7	15	2002.537		1229	11.083	1.228E+02	1.362E+04									
2002	7	24	2002.562		1285	11.841	1.402E+02	1.522E+04									
2002	8	19	2002.633		1356	13.009	1.692E+02	1.765E+04									
2002	8	31	2002.666		1357	13.037	1.700E+02	1.770E+04									
2002	9	15	2002.707		1348	13.037	1.700E+02	1.758E+04									
2002	9	30	2002.748		1342	13.037	1.700E+02	1.750E+04									

Table 2
South Kimball Pressure Summary
Best Fit Analysis
Dawn Metered Volumes

							Bestfit Lines										
Year	Month	Day	Fractional Year	Pressure (psi)	P/Zavg (psi)	Physical Balance (bcf)	x2	xy	n	I	m	Y	Z	slope (psi/bcf)	Y Intercept (psi)	X Intercept (bcf)	GIP (bcf)
2002	10	15	2002.789		1360	13.290	1.766E+02	1.807E+04	8	7.05E+01	7.69E+02	8.05E+03	8.25E+04	78.16	317.5	-4.063	13.819
2002	10	31	2002.833		1272	12.223	1.494E+02	1.555E+04									
2002	11	15	2002.874		1263	11.964	1.431E+02	1.511E+04									
2002	11	30	2002.915		1213	11.529	1.329E+02	1.399E+04									
2002	12	15	2002.956		1085	9.900	9.800E+01	1.074E+04									
2002	12	31	2003.000		901	7.520	5.655E+01	6.772E+03									
2003	1	15	2003.041		578	3.367	1.134E+01	1.948E+03									
2003	1	31	2003.085		380	0.731	5.343E-01	2.777E+02									
2003	2	15	2003.126		322	-0.243	5.905E-02	-7.823E+01									
2003	2	28	2003.162		348	-0.243	5.905E-02	-8.446E+01									
2003	3	15	2003.203		367	-0.255	6.511E-02	-9.352E+01									
2003	3	31	2003.247		381	-0.322	1.038E-01	-1.228E+02									
2003	4	16	2003.290		320	-1.070	1.145E+00	-3.425E+02									
2003	4	30	2003.329		428	0.071	4.984E-03	3.023E+01	6	3.83E+01	3.75E+02	5.58E+03	4.58E+04	77.55	435.2	-5.611	13.927
2003	5	15	2003.370		574	1.836	3.371E+00	1.054E+03									
2003	5	31	2003.414		798	4.450	1.981E+01	3.550E+03									
2003	6	15	2003.455		1073	8.087	6.541E+01	8.676E+03									
2003	6	30	2003.496		1302	11.162	1.246E+02	1.454E+04									
2003	7	15	2003.537		1408	12.723	1.619E+02	1.792E+04									
2003	7	31	2003.581		1381	12.723	1.619E+02	1.757E+04									

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South Kimball Pressure Summary
Best Fit Analysis
Dawn Metered Volumes

									Bestfit Lines								
Year	Month	Day	Fractional Year	Pressure (psi)	P/Zavg (psi)	Physical Balance (bcf)	x2	xy	n	I	m	Y	Z	slope (psi/bcf)	Y Intercept (psi)	X Intercept (bcf)	GIP (bcf)
2003	8	15	2003.622		1367	12.798	1.638E+02	1.750E+04									
2003	8	31	2003.666		1383	13.079	1.711E+02	1.809E+04									
2003	9	15	2003.707		1401	13.397	1.795E+02	1.877E+04									
2003	9	30	2003.748		1392	13.397	1.795E+02	1.865E+04									
2003	10	15	2003.789		1424	13.835	1.914E+02	1.970E+04									
2003	10	31	2003.833		1411	13.835	1.914E+02	1.953E+04									
2003	11	15	2003.874		1427	14.092	1.986E+02	2.011E+04									
2003	11	30	2003.914	1136	1444	14.387	2.070E+02	2.078E+04	7	5.35E+01	6.250E+02	6.42E+03	6.581E+04	77.49	324.6	-4.189	13.937
2003	12	15	2003.956	1053	1325	12.973	1.683E+02	1.719E+04									
2003	12	31	2003.999	1054	1327	12.973	1.683E+02	1.722E+04									
2004	1	15	2004.041	800	974	8.261	6.825E+01	8.043E+03									
2004	1	31	2004.085	495	579	3.467	1.202E+01	2.008E+03									
2004	2	15	2004.126	335	386	0.844	7.126E-01	3.261E+02									
2004	2	29	2004.164	334	386	0.640	4.097E-01	2.469E+02									
2004	3	15	2004.203	357	412	0.640	4.097E-01	2.640E+02									
2004	3	31	2004.246	516	606	2.430	5.905E+00	1.472E+03									
2004	4	15	2004.287	492	575	2.089	4.366E+00	1.202E+03									
2004	4	30	2004.329	510	599	2.565	6.579E+00	1.535E+03									
2004	5	15	2004.370	180	210	2.887	8.337E+00	6.057E+02									
2004	5	31	2004.413	561	662	2.887	8.337E+00	1.911E+03									
2004	6	15	2004.454	565	667	2.887	8.337E+00	1.926E+03									
2004	6	30	2004.496	570	673	2.887	8.337E+00	1.943E+03	5	3.08E+01	2.205E+02	4.70E+03	3.143E+04	79.70	449.4	-5.639	13.550
2004	7	15	2004.537	701	842	4.823	2.327E+01	4.059E+03									
2004	7	31	2004.580	727	877	5.310	2.819E+01	4.654E+03									
2004	8	15	2004.621	871	1071	7.862	6.181E+01	8.420E+03									
2004	8	31	2004.665	994	1242	9.945	9.890E+01	1.235E+04									
2004	9	15	2004.706	984	1228	9.945	9.890E+01	1.221E+04									
2004	9	30	2004.747	981	1224	9.945	9.890E+01	1.217E+04									
2004	10	15	2004.789	1027	1289	10.856	1.179E+02	1.399E+04									
2004	10	31	2004.832	1057	1331	11.370	1.293E+02	1.513E+04	8	5.15E+01	4.894E+02	7.60E+03	6.082E+04	75.40	464.5	-6.161	14.323
2004	11	15	2004.873	988	1234	10.363	1.074E+02	1.279E+04									
2004	11	30	2004.914	991	1238	10.157	1.032E+02	1.258E+04									
2004	12	15	2004.956	960	1194	9.674	9.359E+01	1.155E+04									
2004	12	31	2004.999	767	931	6.386	4.079E+01	5.943E+03									
2005	1	15	2005.041	642	765	3.802	1.445E+01	2.909E+03									
2005	1	31	2005.085	423	492	0.458	2.097E-01	2.253E+02									
2005	2	15	2005.126	358	414	-0.728	5.305E-01	-3.015E+02									
2005	2	28	2005.162	365	422	-0.907	8.218E-01	-3.824E+02									

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Best Fit Analysis
Dawn Metered Volumes

							Bestfit Lines										
Year	Month	Day	Fractional Year	Pressure (psi)	P/Zavg (psi)	Physical Balance (bcf)	x2	xy	n	I	m	Y	Z	slope (psi/bcf)	Y Intercept (psi)	X Intercept (bcf)	GIP (bcf)
2005	3	15	2005.203	382	442	-0.907	8.218E-01	-4.007E+02	9	9.272	5.081E+01	5627	9.181E+03	82.03002	540.6750583	-6.5911853	13.1659
2005	3	31	2005.246	424	493	-0.335	1.123E-01	-1.652E+02									
2005	4	15	2005.287	417	485	-0.680	4.622E-01	-3.294E+02									
2005	4	30	2005.329	436	508	-0.501	2.511E-01	-2.543E+02									
2005	5	15	2005.370	454	530	-0.296	8.755E-02	-1.567E+02									
2005	5	31	2005.413	557	653	1.177	1.384E+00	7.680E+02									
2005	6	15	2005.454	618	730	2.149	4.617E+00	1.568E+03									
2005	6	30	2005.496	651	771	2.669	7.121E+00	2.058E+03									
2005	7	15	2005.537	837	1016	5.996	3.595E+01	6.093E+03									
2005	7	31	2005.580	995	1234	8.943	7.998E+01	1.104E+04									
2005	8	15	2005.621	1011	1257	9.452	8.934E+01	1.188E+04									
2005	8	31	2005.665	996	1236	9.452	8.934E+01	1.168E+04									
2005	9	15	2005.706	992	1229	9.452	8.934E+01	1.162E+04									
2005	9	30	2005.747	990	1227	9.503	9.030E+01	1.166E+04									
2005	10	15	2005.789	1093	1374	11.403	1.300E+02	1.566E+04									
2005	10	31	2005.832	986	1222	9.638	9.289E+01	1.178E+04									
2005	11	15	2005.873	1012	1257	9.967	9.935E+01	1.253E+04	6	34.731	2.675E+02	5731	3.785E+04	70.312357	548.1983969	-7.7966153	15.36
2005	11	30	2005.914	955	1178	8.963	8.033E+01	1.056E+04									
2005	12	15	2005.956	836	1015	6.871	4.721E+01	6.976E+03									
2005	12	31	2005.999	794	959	5.764	3.323E+01	5.526E+03									
2006	1	15	2006.041	622	735	2.679	7.174E+00	1.968E+03									
2006	1	31	2006.085	504	587	0.487	2.376E-01	2.861E+02									
2006	2	15	2006.126	487	566	-0.317	1.003E-01	-1.793E+02									
2006	2	28	2006.162	504	587	-0.434	1.885E-01	-2.549E+02									
2006	3	15	2006.203	507	591	-0.695	4.828E-01	-4.104E+02									
2006	3	31	2006.246	522	609	-0.672	4.522E-01	-4.098E+02									
2006	4	15	2006.287	563	660	-0.058	3.357E-03	-3.825E+01									
2006	4	30	2006.329	659	781	1.105	1.221E+00	8.631E+02									
2006	5	15	2006.370	659	781	1.111	1.234E+00	8.677E+02	6	17.177	7.862E+01	5555	1.828E+04	80.941612	694.0361829	-8.5745288	13.343
2006	5	31	2006.413	659	781	1.111	1.234E+00	8.677E+02									
2006	6	15	2006.454	678	807	1.389	1.929E+00	1.120E+03									
2006	6	30	2006.496	721	862	1.960	3.843E+00	1.689E+03									
2006	7	15	2006.537	868	1059	4.573	2.091E+01	4.841E+03									
2006	7	31	2006.580	1017	1265	7.033	4.946E+01	8.899E+03									
2006	8	15	2006.621	1002	1244	7.127	5.080E+01	8.869E+03									
2006	8	31	2006.665	1000	1240	7.156	5.120E+01	8.876E+03									
2006	9	15	2006.706	997	1237	7.156	5.120E+01	8.852E+03									
2006	9	30	2006.747	997	1237	7.156	5.120E+01	8.854E+03									
2006	10	15	2006.789	1016	1263	7.460	5.566E+01	9.422E+03									
2006	10	31	2006.832	990	1227	7.068	4.996E+01	8.675E+03									
2006	11	15	2006.873	1044	1303	7.729	5.974E+01	1.007E+04									
2006	11	30	2006.914	1085	1361	8.486	7.201E+01	1.155E+04									
2006	12	15	2006.956	995	1234	7.005	4.907E+01	8.643E+03									
2006	12	31	2006.999	1033	1288	7.641	5.839E+01	9.842E+03									
2007	1	15	2007.041	1020	1269	6.951	4.832E+01	8.821E+03	4	4.011	6.792E+01	3113	8.331E+03	81.525866	696.568247	-8.544138	13.2473

Table 2
South Kimball Pressure Summary
Best Fit Analysis
Dawn Metered Volumes

									Bestfit Lines								
Year	Month	Day	Fractional Year	Pressure (psi)	P/Zavg (psi)	Physical Balance (bcf)	x2	xy	n	I	m	Y	Z	slope (psi/bcf)	Y Intercept (psi)	X Intercept (bcf)	GIP (bcf)
2007	1	31	2007.085	721	862	2.139	4.574E+00	1.844E+03									
2007	2	15	2007.126	490	570	-1.507	2.272E+00	-8.584E+02									
2007	2	28	2007.162	359	413	-3.572	1.276E+01	-1.474E+03									
2007	3	15	2007.203	357	410	-3.866	1.495E+01	-1.585E+03									
2007	3	31	2007.246	378	435	-3.866	1.495E+01	-1.682E+03									
2007	4	15	2007.287	392	451	-3.866	1.495E+01	-1.745E+03									
2007	4	30	2007.329	403	464	-3.866	1.495E+01	-1.795E+03	5	2.763	5.536E+01	4149	6.512E+03	78.373103	786.4155706	-10.034253	13.7802
2007	5	15	2007.370	586	688	-1.383	1.912E+00	-9.517E+02									
2007	5	31	2007.413	673	800	-0.053	2.813E-03	-4.242E+01									
2007	6	15	2007.454	802	970	2.304	5.308E+00	2.234E+03									
2007	6	30	2007.496	990	1227	5.761	3.319E+01	7.067E+03									
2007	7	15	2007.537	990	1227	5.994	3.593E+01	7.354E+03									
2007	7	31	2007.580	974	1205	5.994	3.593E+01	7.222E+03									
2007	8	15	2007.621	990	1227	6.520	4.251E+01	8.001E+03									
2007	8	31	2007.665	999	1239	6.617	4.378E+01	8.200E+03									
2007	9	15	2007.706	997	1237	6.617	4.378E+01	8.187E+03									
2007	9	30	2007.747	998	1238	6.617	4.378E+01	8.189E+03									
2007	10	15	2007.789	999	1239	6.617	4.378E+01	8.198E+03									
2007	10	31	2007.832	1024	1275	7.065	4.992E+01	9.005E+03									
2007	11	15	2007.873	1032	1286	7.183	5.160E+01	9.238E+03									
2007	11	30	2007.914	972	1202	6.217	3.865E+01	7.472E+03									
2007	12	15	2007.956	925	1137	4.868	2.370E+01	5.533E+03									
2007	12	31	2007.999	796	961	2.792	7.795E+00	2.682E+03									

1) Storage Slope and GIP Averages

Pre-1990 Average:	74.80	14.439
1990-1999 Average:	76.36	14.143
2000-2008 Average:	77.90	13.864
1990-2008 Average:	77.02	14.022

Table 3
Kimball Colinville Reservoir
Extended Shut-in Surveys

Year	Month	58.857 Day	Fractional Year	Shut-in Time (days)	South Kimball (psig)	Mid Kimball (psig)	Average Reef (psig)	dP/dT Reef (psi/d)	A-1 K21 (psig)	dP/dT A-1 (psi/d)	fraction A-1	Days to Crossover	Crossover Pressure (psig)	Reservoir P/Z (psi)	Physical Balance (bcf)	Physical Balance Intercept (bcf)
Weighting Factor:					**39.62%**	**60.38%**										
1973	10	18	1973.797	3	946	951	949.0		631							
1973	10	26	1973.819	11	945	947	946.2	-0.35	648	2.13	0.165					
1973	11	2	1973.838	18	942	947	945.0	-0.17	662	2.00	0.085					
1973	11	6	1973.849	22	940	944	942.4	-0.65								
1973	11	13	1973.868	29	940	942	941.2	-0.17								
1973	11	20	1973.888	36	938	940	939.2	-0.29								
1973	12	4	1973.926	50	934	937	935.8	-0.24	721	1.84	0.132					
			Average Changes after			11 d SI		-0.27		1.87	0.142	100	909	1123	43.540	-0.033
1976	10	13	1976.784	1	1056	1056	1056.4		889							
1976	10	20	1976.803	8	1055	1055	1054.5	-0.27	898	1.21	0.219					
1976	10	27	1976.822	15	1052	1053	1052.8	-0.25	906	1.20	0.204					
1976	11	2	1976.839	21	1053	1052	1052.8	0.00	913	1.20	-0.002					
1976	11	10	1976.861	29	1052	1052	1052.0	-0.10	922	1.10	0.090					
1976	11	17	1976.880	36	1051	1051	1051.1	-0.13	929	0.91	0.141					
			Average Changes after			8 d SI		-0.12		1.10	0.110	100	1039	1305	50.432	-0.213
						29 d SI		-0.13		0.91	0.141	117	1036	1301	50.432	-0.051
1980	10	29	1980.828	1	1089	1088	1088.4		893							
1980	11	5	1980.847	8	1087	1087	1087.1	-0.19	903	1.46	0.133					
1980	11	12	1980.866	15	1084	1086	1085.4	-0.24	913	1.37	0.176					
1980	11	19	1980.885	22	1083	1085	1084.1	-0.18	922	1.30	0.136					
1980	11	26	1980.904	29	1081	1084	1082.9	-0.18	930	1.20	0.152					
			Average Changes after			15 d SI		-0.18		1.25	0.144	107	1064	1341	54.347	2.321
						22 d SI		-0.18		1.20	0.152	111	1063	1340	54.347	2.360
1982	10	20	1982.803	2	1103	1105	1104.0		861							
1982	10	27	1982.822	9	1099	1103	1101.4	-0.36	874	1.87	0.195					
1982	11	3	1982.841	16	1096	1102	1099.8	-0.24	887	1.86	0.127					
1982	11	10	1982.860	23	1093	1101	1098.1	-0.25	899	1.70	0.144					
1982	11	17	1982.879	30	1092	1101	1097.2	-0.12	909	1.39	0.086					
1982	11	24	1982.899	37	1087	1100	1094.6	-0.37	920	1.66	0.225					
1982	12	1	1982.918	44	1086	1100	1094.2	-0.06	930	1.40	0.041					
1982	12	8	1982.937	51	1085	1099	1093.0	-0.18	939	1.21	0.150					
			Average Changes after			16 d SI		-0.20		1.47	0.133	93	1075	1357	56.047	3.401
						44 d SI		-0.18		1.21	0.150	110	1073	1354	56.047	3.517

Table 3
Kimball Colinville Reservoir
Extended Shut-in Surveys

Year	Month	58.857 Day	Fractional Year	Shut-in Time (days)	South Kimball (psig)	Mid Kimball (psig)	Average Reef (psig)	dP/dT Reef (psi/d)	A-1 K21 (psig)	dP/dT A-1 (psi/d)	fraction A-1	Days to Crossover	Crossover Pressure (psig)	Reservoir P/Z (psi)	Physical Balance (bcf)	Physical Balance Intercept (bcf)
Weighting Factor:					**39.62%**	**60.38%**										
1983	7	13	1983.532	0	1114	1113	1113.1		853							
1983	7	20	1983.551	7	1105	1111	1108.6	-0.64	862	1.29	0.497					
1983	7	27	1983.570	14	1099	1110	1105.5	-0.45	874	1.64	0.272					
1983	8	3	1983.589	21	1095	1108	1103.0	-0.36	886	1.80	0.198					
1983	8	10	1983.608	28	1092	1107	1101.3	-0.25	898	1.76	0.142					
1983	8	24	1983.647	42	1087	1106	1098.7	-0.19	921	1.63	0.114					
1983	8	31	1983.666	49	1085	1106	1097.4	-0.18	932	1.54	0.118					
			Average Changes after			14 d SI		-0.23		1.67	0.139	87	1077	1359	56.644	3.920
						42 d SI		-0.18		1.54	0.118	96	1080	1364	56.644	3.726
1984	10	31	1984.833	2	1112	1113	1112.3		920							
1984	11	7	1984.852	9	1109	1110	1109.3	-0.43	930	1.44	0.295					
1984	11	14	1984.872	16	1106	1108	1107.1	-0.32	940	1.40	0.228					
1984	11	21	1984.891	23	1104	1106	1105.1	-0.27	949	1.27	0.216					
1984	11	28	1984.910	30	1102	1105	1103.7	-0.20	958	1.27	0.159					
1984	12	5	1984.929	37	1101	1104	1102.8	-0.14	966	1.16	0.121					
1984	12	12	1984.948	44	1100	1104	1102.1	-0.09	974	1.14	0.077					
1984	12	19	1984.967	51	1098	1103	1100.6	-0.22	981	0.94	0.233					
1984	12	27	1984.989	58	1096	1102	1099.5	-0.16	987	0.96	0.170					
1985	1	2	1985.005	65	1095	1101	1098.9	-0.08	992	0.70	0.114					
			Average Changes after			16 d SI		-0.17		1.06	0.157	87	1084	1369	57.211	4.099
						58 d SI		-0.08		0.70	0.114	137	1088	1375	57.211	3.867
1985	4	16	1985.290	0	334	395	370.5		834							
1985	4	23	1985.310	7	340	393	371.9	0.21	817	-2.47	0.084					
1985	4	30	1985.329	14	347	396	376.3	0.62	801	-2.33	0.266					
1985	5	7	1985.348	21	352	399	380.2	0.56	785	-2.24	0.248					
1985	5	14	1985.367	27	357	401	383.5	0.56	770	-2.43	0.231					
1985	5	21	1985.386	34	361	403	386.4	0.41	756	-2.07	0.197					
1985	5	29	1985.408	42	367	405	389.5	0.39	741	-1.85	0.210					
			Average Changes after			14 d SI		0.47		-2.13	0.222	135	453	528	24.221	3.737
						34 d SI		0.39		-1.85	0.210	157	451	525	24.221	3.853

Table 3
Kimball Colinville Reservoir
Extended Shut-in Surveys

Year	Month	58.857 Day	Fractional Year	Shut-in Time (days)	South Kimball (psig)	Mid Kimball (psig)	Average Reef (psig)	dP/dT Reef (psi/d)	A-1 K21 (psig)	dP/dT A-1 (psi/d)	fraction A-1	Days to Crossover	Crossover Pressure (psig)	Reservoir P/Z (psi)	Physical Balance (bcf)	Physical Balance Intercept (bcf)
Weighting Factor:					**39.62%**	**60.38%**										
1985	10	30	1985.830	4	1108	1104	1105.6		711							
1985	11	5	1985.847	10	1103	1103	1103.0	-0.43	731	3.30	0.130					
1985	11	12	1985.866	17	1098	1102	1100.0	-0.43	753	3.17	0.135					
1985	11	19	1985.885	24	1094	1102	1098.7	-0.19	775	3.10	0.062					
1985	11	27	1985.907	32	1090	1100	1096.1	-0.32	797	2.78	0.117					
1985	12	4	1985.926	39	1087	1099	1094.3	-0.26	814	2.46	0.104					
1985	12	11	1985.945	46	1084	1099	1092.9	-0.20	831	2.36	0.083					
			Average Changes after			10 d SI		-0.28		2.77	0.101	86	1069	1348	56.475	4.178
						39 d SI		-0.20		2.36	0.083	103	1073	1354	56.475	3.945
1987	4	28	1987.323	0	605	606	605.7		766							
1987	5	1	1987.332	3	603	603	603.0	-0.91	761	-1.77	-0.513					
1987	5	4	1987.340	6	601	602	601.5	-0.51	755	-1.93	-0.265					
1987	5	6	1987.345	8	600	602	601.3	-0.06	752	-1.30	-0.045					
1987	5	8	1987.351	10	599	603	601.2	-0.06	749	-1.75	-0.033					
1987	5	13	1987.364	15	598	602	600.6	-0.14	742	-1.44	-0.094					
1987	5	17	1987.375	19	598	603	600.8	0.06	739	-0.65	0.086					
1987	5	22	1987.389	24	598	603	600.9	0.03	732	-1.46	0.019					
1987	5	29	1987.408	31	598	604	601.3	0.05	725	-0.91	0.056					
1987	6	5	1987.427	38	598	604	601.5	0.04	719	-0.84	0.044					
1987	6	10	1987.441	43	598	604	601.7	0.04	716	-0.72	0.050					
1987	6	15	1987.455	48	599	605	602.4	0.13	713	-0.66	0.194					
			Average Changes after			15 d SI		0.05		-0.88	0.062	118	609	723	33.187	5.137
						43 d SI		0.13		-0.66	0.194	140	620	737	33.187	4.594
1987	11	6	1987.849	1	1079	1102	1093.1		858							
1987	11	9	1987.858	4	1077	1100	1091.0	-0.70	863	1.43	0.488					
1987	11	11	1987.863	6	1076	1099	1090.2	-0.43	866	1.45	0.296					
1987	11	16	1987.877	11	1074	1098	1088.2	-0.40	873	1.52	0.260					
1987	11	18	1987.882	13	1073	1097	1087.4	-0.42	877	1.70	0.247					
1987	11	23	1987.896	18	1071	1096	1086.3	-0.22	884	1.46	0.147					
1987	11	30	1987.915	25	1069	1095	1084.9	-0.19	895	1.56	0.125					
1987	12	7	1987.934	32	1068	1094	1083.6	-0.19	905	1.43	0.136					
1987	12	14	1987.953	39	1067	1093	1082.6	-0.14	914	1.26	0.113					
1987	12	18	1987.964	43	1066	1093	1081.9	-0.17	918	1.17	0.145					
1987	12	23	1987.978	48	1065	1092	1081.3	-0.12	925	1.24	0.093					
			Average Changes after			13 d SI		-0.17		1.37	0.126	102	1064	1341	56.760	4.735
						43 d SI		-0.12		1.24	0.093	116	1068	1347	56.760	4.502

Table 3
Kimball Colinville Reservoir
Extended Shut-in Surveys

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Weighting Factor:					**39.62%**	**60.38%**										
1988	3	30	1988.246	1	326	346	337.6		831							
1988	4	4	1988.260	6	332	348	341.6	0.80	819	-2.26	0.353					
1988	4	11	1988.279	13	339	353	347.8	0.88	803	-2.39	0.371					
1988	4	18	1988.298	20	346	357	352.7	0.69	787	-2.27	0.305					
1988	4	25	1988.317	27	351	360	356.7	0.57	772	-2.14	0.266					
1988	5	2	1988.336	34	356	363	360.2	0.50	757	-2.06	0.245					
1988	5	9	1988.355	41	361	365	363.5	0.47	744	-1.99	0.235					
1988	5	16	1988.374	48	365	367	366.2	0.39	731	-1.84	0.210					
1988	5	30	1988.413	62	371	370	370.8	0.33	707	-1.72	0.192					
1988	6	6	1988.432	69	375	372	373.1	0.33	696	-1.49	0.221					
			Average Changes after-			13 d SI		0.45		-1.90	0.237	137	435	506	24.161	4.530
						62 d SI		0.33		-1.49	0.221	178	431	501	24.161	4.724
1988	9	26	1988.738	0	1095	1129	1115.5		773							
1988	9	30	1988.749	4	1095	1125	1113.2	-0.56	784	2.85	0.196					
1988	10	3	1988.757	7	1090	1122	1109.5	-1.25	792	2.57	0.487					
1988	10	7	1988.768	11	1088	1121	1107.8	-0.41	803	2.72	0.150					
1988	10	10	1988.776	14	1087	1119	1106.7	-0.39	811	2.63	0.150					
1988	10	14	1988.787	18	1086	1118	1105.0	-0.40	820	2.22	0.182					
1988	10	21	1988.806	25	1084	1115	1102.3	-0.39	835	2.13	0.182					
1988	10	28	1988.825	32	1081	1113	1100.4	-0.28	850	2.19	0.129					
1988	11	4	1988.844	39	1079	1112	1099.0	-0.20	864	2.01	0.098					
1988	11	14	1988.872	49	1077	1110	1096.8	-0.22	881	1.73	0.125					
1988	11	21	1988.891	56	1075	1109	1095.6	-0.17	892	1.57	0.111					
1988	11	28	1988.910	63	1074	1108	1094.3	-0.18	903	1.57	0.116					
1988	12	5	1988.929	70	1072	1107	1093.0	-0.19	912	1.19	0.156					
			Average Changes after-			11 d SI		-0.25		1.84	0.136	87	1071	1351	57.731	5.317
						63 d SI		-0.19		1.19	0.156	132	1069	1348	57.731	5.434
1989	5	29	1989.408	5	555	566	561.1		712							
1989	6	5	1989.427	12	554	566	561.1	0.00	703	-1.27	-0.004					
1989	6	12	1989.447	19	553	567	561.6	0.07	696	-1.07	0.067					
1989	6	19	1989.466	26	554	568	562.2	0.08	689	-0.97	0.082					
1989	6	26	1989.485	33	555	569	563.3	0.15	684	-0.71	0.216					
			Average Changes after-			12 d SI		0.10		-0.92	0.111	118	575	679	32.181	5.838
						26 d SI		0.15		-0.71	0.216	139	585	692	32.181	5.334

Table 3
Kimball Colinville Reservoir
Extended Shut-in Surveys

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Weighting Factor:					**39.62%**	**60.38%**										
1989	9	27	1989.740	0	1106	1116	1111.8		699							
1989	10	2	1989.753	5	1097	1113	1106.5	-1.05	717	3.68	0.285					
1989	10	9	1989.773	12	1090	1111	1102.9	-0.51	738	2.92	0.176					
1989	10	16	1989.792	19	1086	1110	1100.6	-0.33	759	3.04	0.109					
1989	10	23	1989.811	26	1081	1108	1097.5	-0.43	778	2.67	0.161					
1989	10	30	1989.830	33	1078	1108	1096.1	-0.21	797	2.70	0.077					
1989	11	6	1989.849	40	1076	1106	1094.2	-0.27	813	2.37	0.113					
1989	11	13	1989.868	47	1073	1106	1092.7	-0.21	829	2.28	0.094					
1989	11	20	1989.888	54	1071	1105	1091.6	-0.16	844	2.10	0.078					
1989	11	27	1989.907	61	1069	1104	1089.9	-0.24	857	1.83	0.130					
			Average Changes after-			12 d SI		-0.26		2.43	0.109	87	1067	1345	57.932	5.751
						54 d SI		-0.24		1.83	0.130	113	1063	1340	57.932	5.945
1990	4	27	1990.321	1	415	414	414.3		685							
1990	4	30	1990.329	4	415	416	415.3	0.36	681	-1.42	0.250					
1990	5	7	1990.348	11	417	419	417.7	0.33	671	-1.36	0.244					
1990	5	14	1990.367	18	418	420	419.5	0.25	662	-1.30	0.191					
1990	5	23	1990.392	27	421	423	422.0	0.28	651	-1.21	0.229					
1990	5	28	1990.405	32	422	424	423.2	0.25	645	-1.14	0.217					
1990	6	4	1990.425	39	424	425	424.6	0.19	638	-1.06	0.181					
1990	6	11	1990.444	46	425	426	425.8	0.18	631	-1.03	0.178					
1990	6	18	1990.463	53	427	428	427.5	0.23	625	-0.89	0.264					
1990	6	25	1990.482	60	429	429	428.6	0.16	618	-0.93	0.169					
			Average Changes after			11 d SI		0.22		-1.08	0.204	145	461	538	26.874	6.001
						53 d SI		0.16		-0.93	0.169	175	456	532	26.874	6.234
1990	10	22	1990.808	0	1121	1115	1117.1		754							
1990	10	29	1990.827	7	1116	1110	1112.7	-0.63	775	2.99	0.211					
1990	11	5	1990.847	14	1111	1107	1108.7	-0.56	795	2.83	0.200					
1990	11	12	1990.866	21	1107	1104	1105.5	-0.46	813	2.64	0.175					
1990	11	19	1990.885	28	1105	1105	1104.6	-0.12	831	2.54	0.049					
1990	11	26	1990.904	35	1101	1103	1102.0	-0.37	847	2.26	0.166					
1990	12	3	1990.923	42	1099	1101	1100.3	-0.24	863	2.26	0.106					
1990	12	10	1990.942	49	1096	1101	1099.0	-0.19	875	1.81	0.107					
1990	12	17	1990.962	56	1094	1100	1097.3	-0.23	888	1.80	0.130					
1990	12	24	1990.981	63	1093	1099	1096.7	-0.09	900	1.74	0.054					
1990	12	31	1991.000	70	1090	1097	1094.3	-0.33	910	1.40	0.236					
			Average Changes after			14 d SI		-0.26		2.06	0.125	80	1074	1355	58.857	6.288
						56 d SI		-0.21		1.57	0.135	103	1072	1353	58.857	6.366

Table 3
Kimball Colinville Reservoir
Extended Shut-in Surveys

Year	Month	58.857 Day	Fractional Year	Shut-in Time (days)	South Kimball (psig)	Mid Kimball (psig)	Average Reef (psig)	dP/dT Reef (psi/d)	A-1 K21 (psig)	dP/dT A-1 (psi/d)	fraction A-1	Days to Crossover	Crossover Pressure (psig)	Reservoir P/Z (psi)	Physical Balance (bcf)	Physical Balance Intercept (bcf)
Weighting Factor:					**39.62%**	**60.38%**										
1991	3	25	1991.230	0	482	475	477.3		831							
1991	4	1	1991.249	7	487	485	485.6	1.19	818	-1.96	0.609					
1991	4	8	1991.268	14	492	489	490.1	0.64	805	-1.87	0.343					
1991	4	15	1991.288	21	495	492	493.6	0.50	792	-1.86	0.267					
1991	4	22	1991.307	28	499	495	496.8	0.46	780	-1.63	0.282					
1991	4	29	1991.326	35	502	497	499.2	0.34	768	-1.69	0.200					
1991	5	6	1991.345	42	505	499	501.2	0.29	758	-1.51	0.194					
1991	5	13	1991.364	49	508	501	503.5	0.33	748	-1.43	0.230					
			Average Changes after			14 d SI		0.38		-1.62	0.236	122	550	648	31.106	5.966
						35 d SI		0.31		-1.47	0.211	137	546	644	31.106	6.121
1991	11	15	1991.874	1	1076	1074	1074.8		980							
1991	11	18	1991.882	3	1077	1074	1075.1	0.10	982	0.54	-0.186					
1991	11	25	1991.901	10	1077	1074	1074.8	-0.04	987	0.79	0.047					
1991	12	2	1991.921	17	1076	1074	1074.8	-0.01	992	0.66	0.012					
1991	12	9	1991.940	24	1075	1074	1074.0	-0.12	996	0.59	0.200					
1991	12	16	1991.959	31	1073	1073	1073.2	-0.11	999	0.40	0.284					
1991	12	23	1991.978	38	1073	1074	1073.5	0.04	1003	0.60	-0.072					
1991	12	30	1991.997	45	1072	1073	1072.8	-0.10	1006	0.40	0.249					
1992	1	6	1992.016	52	1072	1073	1072.5	-0.04	1009	0.47	0.090					
			Average Changes after			10 d SI		-0.06		0.52	0.108	111	1066	1344	58.866	6.724
						38 d SI		-0.07		0.44	0.163	126	1064	1342	58.866	6.802
1992	4	20	1992.303	1	251	239	243.5		815							
1992	4	27	1992.323	8	260	245	251.0	1.08	798	-2.53	0.427					
1992	5	4	1992.342	15	267	250	256.8	0.83	780	-2.46	0.338					
1992	5	11	1992.361	22	272	254	261.5	0.67	764	-2.30	0.293					
1992	5	18	1992.380	29	278	257	265.4	0.55	749	-2.26	0.244					
1992	5	25	1992.399	36	283	260	268.8	0.49	734	-2.03	0.243					
1992	6	1	1992.418	43	287	262	271.7	0.42	720	-2.07	0.201					
1992	6	8	1992.437	50	291	264	274.8	0.44	707	-1.87	0.233					
			Average Changes after			15 d SI		0.51		-2.11	0.244	165	359	415	22.712	6.611
						36 d SI		0.43		-1.97	0.216	180	352	407	22.712	6.922

Table 3
Kimball Colinville Reservoir
Extended Shut-in Surveys

Year	Month	58.857 Day	Fractional Year	Shut-in Time (days)	South Kimball (psig)	Mid Kimball (psig)	Average Reef (psig)	dP/dT Reef (psi/d)	A-1 K21 (psig)	dP/dT A-1 (psi/d)	fraction A-1	Days to Crossover	Crossover Pressure (psig)	Reservoir P/Z (psi)	Physical Balance (bcf)	Physical Balance Intercept (bcf)
Weighting Factor:					**39.62%**	**60.38%**										
1992	10	19	1992.801	2	1101	1110	1106.5		729							
1992	10	26	1992.820	9	1099	1108	1103.9	-0.36	752	3.29	0.110					
1992	11	2	1992.839	16	1094	1105	1101.0	-0.42	772	2.94	0.142					
1992	11	9	1992.858	23	1090	1104	1098.4	-0.37	792	2.74	0.134					
1992	11	16	1992.877	30	1087	1102	1096.3	-0.31	810	2.61	0.119					
1992	11	23	1992.896	37	1084	1101	1094.6	-0.23	827	2.47	0.094					
1992	11	30	1992.916	44	1082	1101	1093.5	-0.16	843	2.20	0.075					
			Average Changes after			16 d SI		-0.27		2.51	0.107	90	1069	1348	59.810	7.513
						30 d SI		-0.20		2.34	0.085	99	1074	1356	59.810	7.202
1993	4	26	1993.318	2	302	297	299.3		718							
1993	5	3	1993.337	9	306	300	302.3	0.42	704	-1.93	0.219					
1993	5	10	1993.356	16	310	302	305.0	0.40	692	-1.79	0.223					
1993	5	17	1993.375	23	314	303	307.6	0.36	680	-1.73	0.211					
1993	5	24	1993.395	30	318	305	310.0	0.34	660	-2.81	0.122					
1993	5	31	1993.414	37	321	307	312.3	0.33	658	-0.31	1.061					
1993	6	7	1993.433	44	324	308	314.3	0.28	647	-1.53	0.186					
1993	6	14	1993.452	51	326	309	316.1	0.25	638	-1.36	0.185					
			Average Changes after			16 d SI		0.32		-1.55	0.204	172	371	433	24.354	7.555
						37 d SI		0.27		-1.44	0.186	188	366	424	24.354	7.904
1993	11	15	1993.874	1	1039	1085	1066.6		665							
1993	11	22	1993.893	8	1035	1084	1064.2	-0.35	686	3.03	0.115					
1993	11	29	1993.912	15	1031	1083	1062.2	-0.28	707	2.91	0.096					
1993	12	6	1993.932	22	1028	1082	1060.5	-0.25	726	2.80	0.090					
			Average Changes after			15 d SI		-0.25		2.80	0.090	109	1033	1297	58.080	7.761
						30 d SI		not available								
1994	5	16	1994.373	7	470	434	447.9		629							
1994	5	23	1994.392	14	470	435	448.6	0.11	622	-1.01	0.111					
1994	5	30	1994.411	21	470	436	449.5	0.13	616	-0.84	0.150					
1994	6	6	1994.430	28	471	437	450.5	0.13	611	-0.77	0.171					
1994	6	13	1994.449	35	471	438	451.2	0.11	606	-0.71	0.156					
1994	6	20	1994.468	42	472	439	452.3	0.15	601	-0.66	0.235					
1994	6	27	1994.488	49	473	440	452.9	0.09	596	-0.66	0.135					
1994	7	4	1994.507	56	473	441	453.8	0.12	593	-0.54	0.226					
			Average Changes after			21 d SI		0.12		-0.67	0.182	176	475	555	29.971	8.439
						42 d SI		0.11		-0.60	0.176	197	475	555	29.971	8.439

Table 3
Kimball Colinville Reservoir
Extended Shut-in Surveys

Year	Month	58.857 Day	Fractional Year	Shut-in Time (days)	South Kimball (psig)	Mid Kimball (psig)	Average Reef (psig)	dP/dT Reef (psi/d)	A-1 K21 (psig)	dP/dT A-1 (psi/d)	fraction A-1	Days to Crossover	Crossover Pressure (psig)	Reservoir P/Z (psi)	Physical Balance (bcf)	Physical Balance Intercept (bcf)
Weighting Factor:					**39.62%**	**60.38%**										
1994	11	21	1994.890	3	1124	1132	1128.6		708							
1994	11	28	1994.910	10	1120	1130	1126.1	-0.36	734	3.70	0.098					
1994	12	5	1994.929	17	1115	1129	1123.3	-0.40	757	3.21	0.123					
									(interpolated)							
			Average Changes after			10 d SI		-0.40		3.21	0.123	102	1083	1368	61.976	8.902
						30 d SI		not available								
1995	6	9	1995.438	3	545	553	549.9		666							
1995	6	12	1995.447	6	545	553	550.0	0.07	665	-0.57	0.117					
1995	6	14	1995.452	8	547	553	550.5	0.22	663	-0.85	0.256					
1995	6	16	1995.458	10	546	553	550.3	-0.11	661	-0.75	-0.145					
1995	6	19	1995.466	13	546	554	550.7	0.15	660	-0.47	0.314					
1995	6	21	1995.471	15	547	554	551.1	0.20	658	-0.85	0.235					
1995	6	23	1995.477	17	547	554	551.3	0.08	657	-0.65	0.122					
1995	6	26	1995.485	20	547	554	551.5	0.07	655	-0.67	0.100					
1995	6	28	1995.490	22	548	554	551.6	0.06	654	-0.60	0.099					
1995	6	30	1995.496	24	548	555	551.9	0.17	653	-0.50	0.340					
1995	7	3	1995.504	27	548	555	552.1	0.06	651	-0.60	0.100					
1995	7	5	1995.510	29	549	555	552.3	0.12	650	-0.60	0.200					
1995	7	7	1995.515	31	549	555	552.7	0.19	649	-0.40	0.474					
1995	7	10	1995.523	34	549	555	552.8	0.03	647	-0.67	0.040					
			Average Changes after			15 d SI		0.09		-0.59	0.150	138	565	667	34.757	8.880
						29 d SI		0.09		-0.56	0.164	144	566	668	34.757	8.841
1995	11	6	1995.849	1	1113	1117	1115.3		692							
1995	11	8	1995.855	3	1113	1119	1116.6	0.67	699	3.65	-0.185					
1995	11	10	1995.860	5	1111	1119	1115.4	-0.60	706	3.40	0.175					
1995	11	13	1995.868	8	1108	1118	1114.3	-0.38	716	3.47	0.109					
1995	11	17	1995.879	12	1104	1116	1111.5	-0.71	730	3.33	0.214					
1995	11	20	1995.888	15	1102	1115	1109.8	-0.56	739	3.10	0.182					
1995	11	22	1995.893	17	1102	1117	1110.8	0.52	746	3.60	-0.145					
1995	11	24	1995.899	19	1098	1114	1107.7	-1.57	753	3.25	0.483					
1995	11	27	1995.907	22	1098	1115	1108.3	0.21	762	3.23	-0.065					
1995	11	29	1995.912	24	1096	1115	1107.3	-0.48	767	2.25	0.213					
1995	12	4	1995.926	29	1097	1117	1108.9	0.31	783	3.20	-0.096					
1995	12	6	1995.932	31	1095	1115	1107.1	-0.87	788	2.60	0.335					
1995	12	8	1995.937	33	1094	1114	1106.1	-0.54	794	2.70	0.200					
1995	12	11	1995.945	36	1093	1114	1105.9	-0.06	802	2.70	0.022					
			Average Changes after			15 d SI		-0.19		2.98	0.062	96	1088	1375	61.566	8.221
						31 d SI		-0.25		2.70	0.093	103	1080	1364	61.566	8.648

Table 3
Kimball Colinville Reservoir
Extended Shut-in Surveys

Year	Month	58.857 Day	Fractional Year	Shut-in Time (days)	South Kimball (psig)	Mid Kimball (psig)	Average Reef (psig)	dP/dT Reef (psi/d)	A-1 K21 (psig)	dP/dT A-1 (psi/d)	fraction A-1	Days to Crossover	Crossover Pressure (psig)	Reservoir P/Z (psi)	Physical Balance (bcf)	Physical Balance Intercept (bcf)
Weighting Factor:					**39.62%**	**60.38%**										
Spring 1996																
No extended shut-in performed																
1996	11	18	1996.883	3	1084	1079	1081.3		888							
1996	11	20	1996.888	5	1086	1080	1082.3	0.51	892	2.10	-0.242					
1996	11	22	1996.894	7	1085	1080	1081.9	-0.21	896	1.70	0.123					
1996	11	25	1996.902	10	1085	1080	1081.7	-0.05	900	1.60	0.029					
1996	11	27	1996.907	12	1084	1081	1082.0	0.15	904	1.65	-0.092					
1996	11	29	1996.913	14	1083	1080	1081.1	-0.48	906	1.00	0.479					
1996	12	2	1996.921	17	1083	1081	1081.8	0.25	915	3.07	-0.083					
1996	12	9	1996.940	19	1081	1080	1080.4	-0.74	921	3.10	0.238					
1996	12	11	1996.945	21	1080	1080	1080.0	-0.16	924	1.70	0.093					
1996	12	13	1996.951	23	1080	1080	1080.0	-0.01	926	0.95	0.010					
1996	12	16	1996.959	26	1080	1080	1079.8	-0.09	930	1.27	0.069					
1996	12	18	1996.965	28	1079	1080	1079.9	0.08	932	1.05	-0.079					
1996	12	20	1996.970	30	1081	1082	1081.5	0.79	937	2.60	-0.303					
1996	12	23	1996.978	33	1078	1079	1078.8	-0.89	938	0.33	2.658					
1996	12	25	1996.984	35	1078	1080	1079.1	0.14	939	0.35	-0.402					
1996	12	27	1996.989	37	1077	1079	1078.4	-0.35	943	1.80	0.193					
1996	12	30	1996.997	40	1077	1078	1077.7	-0.25	945	0.83	0.297					
1997	1	1	1997.003	42	1077	1078	1077.6	-0.03	947	1.10	0.027					
Average Changes after						14 d SI		-0.12		1.49	0.082	81	1068	1347	61.924	9.665
						28 d SI		-0.16		1.09	0.151	104	1061	1337	61.924	10.053
1997	6	6	1997.430	7	313	306	308.7		665							
1997	6	9	1997.438	9	314	306	309.1	0.22	659	-2.90	0.075					
1997	6	11	1997.444	11	315	306	309.5	0.21	656	-1.35	0.154					
1997	6	13	1997.449	13	316	306	310.2	0.35	656	0.00						
1997	6	16	1997.458	16	317	307	310.7	0.17	649	-2.47	0.067					
1997	6	18	1997.463	18	317	307	311.0	0.13	646	-1.60	0.081					
1997	6	23	1997.477	23	319	307	311.9	0.20	638	-1.48	0.132					
1997	6	25	1997.482	25	320	308	312.6	0.33	635	-1.40	0.235					
1997	6	27	1997.488	27	320	308	312.8	0.08	633	-1.45	0.055					
1997	6	30	1997.496	30	321	308	313.5	0.23	629	-1.27	0.184					
1997	7	2	1997.501	32	322	308	313.8	0.19	626	-1.35	0.140					
1997	7	4	1997.507	34	323	309	314.4	0.30	624	-1.25	0.240					
1997	7	7	1997.515	37	323	309	314.7	0.08	620	-1.33	0.059					
1997	7	9	1997.521	39	324	309	315.2	0.25	617	-1.05	0.237					
Average Changes after						9 d SI		0.20		-1.38	0.146	191	354	409	26.198	10.330
						25 d SI		0.18		-1.29	0.143	206	353	408	26.198	10.369

Table 3
Kimball Colinville Reservoir
Extended Shut-in Surveys

Year	Month	58.857 Day	Fractional Year	Shut-in Time (days)	South Kimball (psig)	Mid Kimball (psig)	Average Reef (psig)	dP/dT Reef (psi/d)	A-1 K21 (psig)	dP/dT A-1 (psi/d)	fraction A-1	Days to Crossover	Crossover Pressure (psig)	Reservoir P/Z (psi)	Physical Balance (bcf)	Physical Balance Intercept (bcf)
Weighting Factor:					**39.62%**	**60.38%**										
1997	11	1	1997.836	0	1094	1129	1115.2		611							
1997	11	4	1997.844	3	1098	1127	1115.8	0.19	623	3.87	-0.048					
1997	11	7	1997.852	6	1095	1127	1114.2	-0.54	635	4.05	0.133					
1997	11	10	1997.860	9	1093	1126	1112.7	-0.50	648	4.37	0.116					
1997	11	13	1997.868	12	1091	1125	1111.6	-0.37	659	3.80	0.096					
1997	11	16	1997.877	15	1088	1124	1109.9	-0.56	671	3.80	0.148					
1997	11	19	1997.885	18	1086	1123	1108.5	-0.47	681	3.30	0.143					
1997	11	22	1997.893	21	1085	1123	1107.7	-0.25	693	4.07	0.061					
1997	11	25	1997.901	24	1082	1122	1106.3	-0.48	703	3.32	0.144					
1997	11	28	1997.910	27	1081	1122	1105.7	-0.19	713	3.34	0.058					
1997	12	1	1997.918	30	1079	1120	1103.8	-0.64	723	3.34	0.192					
1997	12	4	1997.926	33	1078	1121	1103.7	-0.02	733	3.30	0.005					
1997	12	7	1997.934	36	1076	1120	1102.5	-0.40	742	3.02	0.132					
1997	12	10	1997.942	39	1075	1120	1102.0	-0.18	750	2.88	0.062					
1997	12	13	1997.951	42	1074	1119	1100.9	-0.37	759	2.72	0.137					
			Average Changes after			3 d SI		-0.38		3.49	0.110	89	1067	1346	62.712	10.492
						21 d SI		-0.33		3.13	0.104	99	1069	1348	62.712	10.414
1998	5	11	1998.359	0	699	703	701.4		730							
1998	5	13	1998.364	2	697	696	696.7	-2.37	730	-0.25	-9.476					
1998	5	15	1998.370	4	695	694	694.2	-1.24	728	-0.75	-1.655					
1998	5	17	1998.375	6	694	692	692.7	-0.73	726	-1.25	-0.584					
1998	5	19	1998.381	8	693	691	691.7	-0.51	725	-0.50	-1.019					
1998	5	21	1998.386	10	692	691	691.4	-0.18	723	-0.90	-0.200					
1998	5	23	1998.392	12	692	691	691.0	-0.19	722	-0.60	-0.316					
1998	5	25	1998.397	14	691	690	690.3	-0.32	720	-0.70	-0.457					
1998	5	27	1998.403	16	690	689	689.7	-0.32	720	-0.35	-0.914					
1998	5	29	1998.408	18	690	689	689.6	-0.07	719	-0.35	-0.199					
1998	6	1	1998.416	20	689	689	689.1	-0.23	716	-1.40	-0.164					
			Average Changes after			6 d SI		-0.26		-0.69	-0.379	63	673	805	42.705	11.474
						14 d SI		-0.21		-0.70	-0.295	54	678	812	42.705	11.202

Table 3
Kimball Colinville Reservoir
Extended Shut-in Surveys

Year	Month	58.857 Day	Fractional Year	Shut-in Time (days)	South Kimball (psig)	Mid Kimball (psig)	Average Reef (psig)	dP/dT Reef (psi/d)	A-1 K21 (psig)	dP/dT A-1 (psi/d)	fraction A-1	Days to Crossover	Crossover Pressure (psig)	Reservoir P/Z (psi)	Physical Balance (bcf)	Physical Balance Intercept (bcf)
Weighting Factor:					**39.62%**	**60.38%**										
1998	8	11	1998.611	0	1125	1127	1126.2		749							
1998	8	15	1998.622	4	1120	1125	1123.1	-0.78	759	2.35	0.333					
1998	8	19	1998.633	8	1116	1124	1120.9	-0.56	770	2.83	0.197					
1998	8	23	1998.644	12	1112	1122	1118.3	-0.66	781	2.67	0.246					
1998	8	27	1998.655	16	1110	1122	1116.8	-0.37	792	2.88	0.128					
1998	8	31	1998.666	20	1106	1120	1114.6	-0.54	804	2.88	0.189					
1998	9	4	1998.677	24	1105	1120	1113.7	-0.22	814	2.53	0.089					
1998	9	8	1998.688	28	1103	1119	1112.4	-0.33	825	2.72	0.121					
1998	9	12	1998.699	32	1102	1118	1111.6	-0.21	835	2.53	0.081					
1998	9	16	1998.710	36	1098	1117	1109.3	-0.56	844	2.25	0.250					
1998	9	19	1998.718	39	1098	1117	1109.3	0.00	851	2.33	0.000					
1998	9	22	1998.726	42	1097	1115	1108.1	-0.41	857	2.13	0.191					
1998	9	25	1998.734	45	1096	1116	1108.1	0.01	864	2.17	-0.004					
1998	9	28	1998.742	48	1091	1114	1104.7	-1.16	871	2.23	0.518					
1998	10	1	1998.751	51	1092	1112	1103.7	-0.32	872	0.43	0.745					
			Average Changes after			4	d SI	-0.41		2.40	0.172	82	1070	1349	63.690	11.353
						28	d SI	-0.38		2.04	0.185	96	1067	1346	63.690	11.470
1999	5	6	1999.345	0	670	667	668.3		839							
1999	5	8	1999.351	2	668	668	668.0	-0.15	835	-2.00	-0.074					
1999	5	10	1999.356	4	667	668	667.7	-0.12	832	-1.25	-0.094					
1999	5	11	1999.359	5	667	668	667.6	-0.18	830	-1.80	-0.101					
1999	5	12	1999.362	6	667	668	667.8	0.22	829	-1.50	0.148					
1999	5	13	1999.364	7	667	668	667.8	0.02	828	-1.20	0.017					
1999	5	14	1999.367	8	667	669	667.9	0.10	826	-1.50	0.068					
1999	5	15	1999.370	9	667	669	668.0	0.12	825	-1.50	0.081					
1999	5	16	1999.373	10	667	669	668.1	0.08	832	7.60	-0.011					
1999	5	17	1999.375	11	667	669	668.1	0.02	822	-10.70	0.002					
1999	5	18	1999.378	12	666	669	668.1	-0.06	820	-1.40	-0.042					
			Average Changes after			5	d SI	0.07		-1.46	0.050	99	675	808	43.070	11.723
						9	d SI	0.01		-1.50	0.010	100	670	801	43.070	11.994

Table 3
Kimball Colinville Reservoir
Extended Shut-in Surveys

Year	Month	58.857 Day	Fractional Year	Shut-in Time (days)	South Kimball (psig)	Mid Kimball (psig)	Average Reef (psig)	dP/dT Reef (psi/d)	A-1 K21 (psig)	dP/dT A-1 (psi/d)	fraction A-1	Days to Crossover	Crossover Pressure (psig)	Reservoir P/Z (psi)	Physical Balance (bcf)	Physical Balance Intercept (bcf)
Weighting Factor:					**39.62%**	**60.38%**										
1999	10	2	1999.753	0	1129	1130	1129.8		882							
1999	10	5	1999.762	3	1126	1128	1127.2	-0.87	888	1.77	0.490					
1999	10	8	1999.770	6	1125	1129	1127.3	0.02	840	-15.93	0.001					
1999	10	11	1999.778	9	1123	1128	1126.2	-0.36	900	20.10	0.018					
1999	10	15	1999.789	13	1124	1130	1127.7	0.38	908	1.95	-0.195					
1999	10	19	1999.800	17	1123	1130	1127.1	-0.15	915	1.83	0.084					
1999	10	23	1999.811	21	1121	1130	1126.2	-0.23	922	1.80	0.127					
1999	10	27	1999.822	25	1121	1130	1126.1	-0.02	929	1.75	0.012					
1999	10	31	1999.833	29	1120	1129	1125.2	-0.24	936	1.70	0.144					
1999	11	4	1999.844	33	1118	1129	1124.7	-0.12	943	1.72	0.069					
1999	11	8	1999.855	37	1116	1128	1123.5	-0.28	948	1.20	0.237					
1999	11	12	1999.866	41	1116	1128	1123.5	-0.02	955	1.80	0.011					
1999	11	15	1999.874	44	1114	1128	1122.6	-0.28	958	1.03	0.269					
1999	11	18	1999.882	47	1113	1128	1121.8	-0.29	961	1.07	0.268					
1999	11	21	1999.890	50	1113	1128	1121.9	0.04	966	1.63	-0.025					
			Average Changes after			9 d SI		-0.11		1.61	0.065	90	1112	1410	65.573	10.871
						25 d SI		-0.17		1.48	0.115	95	1106	1401	65.573	11.220
2000	4	23	2000.312	0	366	413	394.0		773							
2000	4	26	2000.320	3	367	416	396.4	0.78	767	-2.13	0.366					
2000	4	29	2000.328	6	406	418	413.1	5.57	761	-1.90	2.930					
2000	5	2	2000.336	9	416	421	418.9	1.94	755	-1.93	1.002					
2000	5	5	2000.344	12	409	426	419.2	0.10	749	-2.03	0.047					
2000	5	8	2000.353	15	409	427	419.6	0.15	743	-1.87	0.080					
2000	5	11	2000.361	18	418	428	423.8	1.39	739	-1.63	0.851					
2000	5	14	2000.369	21	419	428	424.8	0.33	733	-1.70	0.192					
2000	5	17	2000.377	24	415	429	423.1	-0.55	728	-1.67	-0.328					
2000	5	21	2000.388	28	425	430	427.8	1.17	722	-1.65	0.707					
2000	5	25	2000.399	32	419	430	425.6	-0.54	716	-1.50	-0.359					
2000	5	28	2000.407	35	423	431	428.0	0.79	711	-1.50	0.525					
2000	5	31	2000.416	38	418	431	426.0	-0.67	706	-1.63	-0.412					
2000	6	3	2000.424	41	421	433	427.8	0.60	703	-1.27	0.477					
2000	6	6	2000.432	44	424	433	429.3	0.50	698	-1.43	0.351					
			Average Changes after			9 d SI		0.30		-1.62	0.183	140	471	550	32.928	11.590
						24 d SI		0.31		-1.51	0.205	148	475	555	32.928	11.394

Table 3
Kimball Colinville Reservoir
Extended Shut-in Surveys

Year	Month	58.857 Day	Fractional Year	Shut-in Time (days)	South Kimball (psig)	Mid Kimball (psig)	Average Reef (psig)	dP/dT Reef (psi/d)	A-1 K21 (psig)	dP/dT A-1 (psi/d)	fraction A-1	Days to Crossover	Crossover Pressure (psig)	Reservoir P/Z (psi)	Physical Balance (bcf)	Physical Balance Intercept (bcf)
Weighting Factor:					**39.62%**	**60.38%**										
2000	11	24	2000.899	0	1115	1108	1110.3		878							
2000	11	26	2000.905	2	1114	1107	1109.6	-0.37	882	2.40	0.155					
2000	11	28	2000.910	4	1113	1106	1109.0	-0.32	886	2.05	0.156					
2000	11	30	2000.916	6	1113	1106	1108.4	-0.28	890	1.95	0.143					
2000	12	2	2000.921	8	1111	1105	1107.7	-0.36	894	1.80	0.199					
2000	12	4	2000.926	10	1110	1105	1107.0	-0.32	898	1.85	0.172					
2000	12	6	2000.932	12	1111	1106	1107.7	0.34	902	2.30	-0.147					
2000	12	8	2000.937	14	1109	1104	1106.3	-0.69	905	1.40	0.492					
2000	12	10	2000.943	16	1109	1104	1106.1	-0.10	909	1.90	0.052					
2000	12	12	2000.948	18	1108	1104	1105.4	-0.39	912	1.55	0.251					
2000	12	14	2000.954	20	1108	1104	1105.2	-0.08	916	1.80	0.044					
2000	12	16	2000.959	22	1107	1104	1105.1	-0.06	919	1.90	0.031					
2000	12	18	2000.965	24	1107	1104	1105.1	0.01	923	1.65	-0.006					
			Average Changes after			6 d SI		-0.18		1.79	0.102	92	1088	1376	64.642	11.274
						18 d SI		-0.04		1.78	0.024	100	1101	1394	64.642	10.578
2001	4	28	2001.323	0	322	491	424.4		765							
2001	5	1	2001.332	3	325	489	424.2	-0.07	760	-1.80	-0.041					
2001	5	4	2001.340	6	328	489	425.2	0.33	753	-2.13	0.155					
2001	5	7	2001.348	9	330	489	426.0	0.26	747	-2.23	0.115					
2001	5	10	2001.356	12	332	489	427.1	0.37	741	-1.90	0.195					
2001	5	13	2001.364	15	334	490	428.0	0.32	734	-2.23	0.142					
2001	5	16	2001.373	18	337	490	429.2	0.38	729	-1.70	0.226					
2001	5	19	2001.381	21	339	490	430.3	0.38	723	-2.00	0.189					
2001	5	22	2001.389	24	341	490	430.8	0.16	717	-1.97	0.084					
2001	5	24	2001.395	26	342	491	431.6	0.40	714	-1.70	0.234					
			Average Changes after			9 d SI		0.33		-1.93	0.172	125	473	553	33.282	11.847
						24 d SI		0.40		-1.70	0.234	134	485	567	33.282	11.269
2001	12	14	24012.000	0	1145	1144	1144.3		956							
2001	12	16	24012.000	2	1145	1143	1143.8	-0.24	959	1.44	0.165					
2001	12	18	24012.000	4	1144	1143	1143.3	-0.27	962	1.47	0.183					
2001	12	20	24012.000	6	1143	1143	1142.6	-0.36								
2001	12	22	24012.000	8	1142	1142	1142.0	-0.30								
2001	12	24	24012.000	10	1141	1142	1141.7	-0.17								
2001	12	26	24012.000	12	1141	1141	1141.0	-0.31								
2001	12	28	24012.000	14	1140	1141	1140.8	-0.09								
2001	12	30	24012.000	16	1139	1141	1140.4	-0.24								
2002	1	1	24012.000	19	1139	1141	1140.4	0.00	982							
2002	1	5	2002.000	21	1138	1141	1139.5	-0.45								
			Average Changes after			0 d SI		-0.21		1.36	0.153	101	1119	1420	66.891	11.793
						4 d SI		-0.20		1.33	0.147	104	1120	1421	66.891	11.752

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Weighting Factor:					**39.62%**	**60.38%**										
2002	4	1	6006.000	0	733	729	730.3		928							
2002	4	5	8008.000	4	734	732	732.8	0.64	921	-1.66	0.386					
2002	4	9	8008.000	8	736	734	734.8	0.50	915	-1.45	0.345					
2002	4	15	8008.000	14	738	737	737.4	0.43	907	-1.43	0.299					
2002	4	19	8008.000	18	739	738	738.2	0.19	902	-1.23	0.156					
2002	4	22	8008.000	21	741	739	739.9	0.57	898	-1.31	0.433					
2002	4	26	8008.000	25	741	740	740.6	0.17	893	-1.20	0.141					
2002	4	30	8008.000	29	744	741	742.1	0.38	889	-0.97	0.393					
2002	5	3	10010.000	32	744	741	742.1	0.01	885	-1.27	0.008					
2002	5	6	10010.000	35	745	742	743.0	0.28	883	-0.94	0.301					
2002	5	13	10010.000	42	746	743	744.4	0.21	876	-0.96	0.220					
2002	5	15	10010.000	45	746	743	744.3	-0.05	874	-0.67	-0.081					
2002	5	18	10010.000	48	748	744	745.4	0.38	871	-0.90	0.421					
2002	5	24	10010.000	54	748	744	745.6	0.03	866	-0.88	0.037					
			Average Changes after			14 d SI		0.20		-1.02	0.201	98	766	928	47.500	11.485
						42 d SI		0.10		-0.83	0.117	130	758	918	47.500	11.873
2002	8	24	2002.647	0	1078	1078	1077.6		884							
2002	8	27	2002.655	3	1077	1077	1077.1	-0.16	888	1.38	0.119					
2002	8	30	2002.663	6	1075	1076	1075.8	-0.44	892	1.42	0.314					
2002	9	2	2002.671	9	1074	1076	1075.0	-0.28	897	1.38	0.203					
2002	9	5	2002.679	12	1072	1075	1074.0	-0.31	901	1.42	0.217					
2002	9	8	2002.688	15	1071	1075	1073.2	-0.27	905	1.38	0.199					
2002	9	11	2002.696	18	1070	1074	1072.5	-0.25	909	1.46	0.171					
2002	9	14	2002.704	21	1069	1074	1071.9	-0.20	913	1.38	0.147					
2002	9	17	2002.712	24	1069	1074	1071.8	-0.03	918	1.42	0.021					
2002	9	21	2002.723	28	1067	1073	1070.6	-0.30	922	1.17	0.253					
2002	9	24	2002.732	31	1067	1073	1070.6	-0.01	927	1.46	0.008					
2002	9	27	2002.740	34	1066	1072	1069.6	-0.33	930	1.00	0.329					
2002	9	30	2002.748	37	1065	1072	1069.1	-0.15	933	1.17	0.131					
			Average Changes after			15 d SI		-0.19		1.29	0.145	92	1052	1324	63.344	11.988
						28 d SI		-0.16		1.21	0.136	99	1053	1325	63.344	11.936

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Year	Month	58.857 Day	Fractional Year	Shut-in Time (days)	South Kimball (psig)	Mid Kimball (psig)	Average Reef (psig)	dP/dT Reef (psi/d)	A-1 K21 (psig)	dP/dT A-1 (psi/d)	fraction A-1	Days to Crossover	Crossover Pressure (psig)	Reservoir P/Z (psi)	Physical Balance (bcf)	Physical Balance Intercept (bcf)
Weighting Factor:					**39.62%**	**60.38%**										
2003	3	13	2003.197	0	316	274	290.8		811							
2003	3	16	2003.205	3	318	275	292.2	0.48	804	-2.38	0.201					
2003	3	18	2003.211	5	320	278	294.3	1.02	799	-2.19	0.466					
2003	3	21	2003.219	8	322	280	296.9	0.88	792	-2.42	0.364					
2003	3	24	2003.227	11	325	282	299.1	0.73	785	-2.35	0.310					
2003	3	27	2003.236	14	327	284	301.2	0.70	778	-2.31	0.304					
2003	3	30	2003.244	17	329	286	303.0	0.60	772	-2.13	0.280					
			Average Changes after			5 d SI		0.73		-2.30	0.316	155	415	483	29.077	10.356
						11 d SI		0.65		-2.22	0.293	163	409	475	29.076	10.653
2003	7	13	2003.532	0	1112	1109	1110.3		683							
2003	7	16	2003.540	3	1109	1108	1108.6	-0.58	690	2.31	0.251					
2003	7	19	2003.548	6	1105	1106	1105.8	-0.93	699	2.94	0.315					
2003	7	22	2003.556	9	1101	1104	1102.6	-1.07	707	2.73	0.392					
2003	7	25	2003.564	12	1098	1103	1100.8	-0.59	717	3.23	0.184					
2003	7	28	2003.573	15	1094	1101	1098.2	-0.87	726	3.10	0.280					
2003	7	31	2003.581	18	1092	1099	1096.5	-0.57	735	2.98	0.191					
2003	8	3	2003.589	21	1090	1099	1095.3	-0.40	744	3.17	0.127					
2003	8	6	2003.597	24	1088	1097	1093.6	-0.57	754	3.08	0.185					
2003	8	9	2003.605	27	1086	1097	1092.3	-0.44	763	3.06	0.142					
2003	8	12	2003.614	30	1084	1096	1091.3	-0.34	772	2.94	0.116					
2003	8	14	2003.619	32	1083	1095	1090.2	-0.52	777	2.91	0.180					
			Average Changes after			12 d SI		-0.53		3.04	0.174	88	1044	1312	64.063	13.152
						24 d SI		-0.42		2.98	0.142	92	1051	1323	64.063	12.733
2003	9	7	2003.685	0	1112	1108	1109.2		837							
2003	9	10	2003.693	3	1109	1111	1110.3	0.38	843	2.06	-0.183					
2003	9	13	2003.701	6	1107	1110	1108.4	-0.62	848	1.46	0.428					
2003	9	16	2003.710	9	1106	1109	1108.0	-0.15	854	2.25	0.065					
2003	9	19	2003.718	12	1104	1109	1106.6	-0.45	860	1.98	0.228					
2003	9	22	2003.726	15	1103	1108	1105.9	-0.24	866	2.00	0.122					
2003	9	25	2003.734	18	1102	1108	1105.4	-0.16	873	2.06	0.079					
2003	9	28	2003.742	21	1101	1108	1104.8	-0.19	879	2.02	0.096					
2003	10	1	2003.751	24	1100	1107	1104.5	-0.11	886	2.34	0.047					
2003	10	4	2003.759	27	1099	1107	1103.5	-0.35	890	1.35	0.256					
2003	10	7	2003.767	30	1097	1106	1102.7	-0.25	895	1.60	0.153					
2003	10	9	2003.773	32	1097	1106	1102.6	-0.04	898	1.97	0.022					
			Average Changes after			12 d SI		-0.20		1.90	0.105	97	1083	1368	65.330	12.237
						24 d SI		-0.23		1.60	0.145	111	1077	1359	65.330	12.597

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Weighting Factor:					**39.62%**	**60.38%**										
2004	4	9	2004.273	0	487	488	487.7		813							
2004	4	12	2004.281	3	491	491	490.7	1.00	806	-2.23	0.448					
2004	4	15	2004.290	6	492	492	491.6	0.31	800	-2.08	0.148					
2004	4	18	2004.298	9	493	492	492.3	0.20	794	-1.83	0.111					
2004	4	21	2004.306	12	494	492	493.1	0.29	789	-1.67	0.174					
2004	4	24	2004.314	15	495	493	493.7	0.20	784	-1.79	0.111					
2004	4	28	2004.325	19	496	493	494.4	0.18	776	-1.92	0.092					
			Average Changes after			9	d SI	0.22		-1.81	0.121	139	525	617	36.607	12.688
						15	d SI	0.18		-1.92	0.092	134	518	608	36.607	13.004
2004	5	13	2004.366	0	552	684	631.6		753							
2004	5	22	2004.391	9	559	694	640.4	0.98	741	-1.35	0.723					
2004	5	26	2004.402	13	560	692	639.5	-0.23	736	-1.14	-0.200					
2004	5	30	2004.413	17	561	691	639.4	-0.03	732	-1.00	-0.027					
2004	6	3	2004.423	21	562	690	639.0	-0.09	728	-1.09	-0.084					
2004	6	7	2004.434	25	563	688	638.5	-0.12	724	-1.06	-0.117					
2004	6	11	2004.445	29	564	688	638.7	0.03	720	-0.95	0.034					
2004	6	14	2004.454	32	565	687	638.7	0.00	717	-0.96	-0.002					
2004	6	18	2004.464	36	566	687	638.8	0.03	714	-0.84	0.035					
2004	6	21	2004.473	39	567	686	639.1	0.12	712	-0.67	0.185					
2004	7	1	2004.500	49	570	685	639.0	-0.01	703	-0.85	-0.014					
			Average Changes after			13	d SI	-0.01		-0.92	-0.014	71	638	760	42.344	12.864
						36	d SI	0.02		-0.81	0.024	78	641	763	42.344	12.743
2004	9	3	2004.675	0	991	1168	1097.5		704							
2004	9	6	2004.683	3	988	1168	1096.8	-0.26	709	1.67	0.158					
2004	9	9	2004.691	6	987	1165	1094.5	-0.77	714	1.65	0.467					
2004	9	12	2004.699	9	986	1164	1093.2	-0.41	720	2.08	0.197					
2004	9	15	2004.708	12	984	1161	1091.2	-0.69	725	1.75	0.395					
2004	9	18	2004.716	15	984	1160	1090.2	-0.31	734	2.75	0.111					
2004	9	21	2004.724	18	983	1158	1088.8	-0.48	738	1.38	0.346					
2004	9	22	2004.727	19	983	1158	1088.5	-0.30	740	2.13	0.143					
			Average Changes after			9	d SI	-0.47		1.98	0.239	142	1021	1280	64.075	14.401
						18	d SI	-0.30		2.13	0.143	143	1045	1314	64.075	13.106

Table 3
Kimball Colinville Reservoir
Extended Shut-in Surveys

Year	Month	58.857 Day	Fractional Year	Shut-in Time (days)	South Kimball (psig)	Mid Kimball (psig)	Average Reef (psig)	dP/dT Reef (psi/d)	A-1 K21 (psig)	dP/dT A-1 (psi/d)	fraction A-1	Days to Crossover	Crossover Pressure (psig)	Reservoir P/Z (psi)	Physical Balance (bcf)	Physical Balance Intercept (bcf)
Weighting Factor:					**39.62%**	**60.38%**										
2005	4	17	2005.293	0	425	387	401.7		719							
2005	4	20	2005.301	3	433	387	405.5	1.27	714	-1.71	0.745					
2005	4	23	2005.309	6	434	388	406.4	0.30	710	-1.42	0.209					
2005	4	26	2005.318	9	435	389	407.3	0.31	706	-1.38	0.227					
2005	4	29	2005.326	12	436	390	408.1	0.26	701	-1.69	0.153					
2005	5	2	2005.334	15	437	391	408.9	0.28	697	-1.33	0.208					
2005	5	5	2005.342	18	438	392	409.8	0.29	692	-1.46	0.196					
			Average Changes after			6	d SI	0.28		-1.46	0.194	162	456	531	33.035	12.430
						15	d SI	0.29		-1.46	0.196	162	456	532	33.035	12.412
2005	9	16	2005.7091	0	991	1180	1105.0		747							
2005	9	19	2005.7173	3	991	1178	1103.9	-0.34	753	2.13	0.158					
2005	9	22	2005.7255	6	991	1175	1102.1	-0.62	759	2.00	0.312					
2005	9	25	2005.7337	9	990	1173	1100.7	-0.46	765	1.94	0.235					
2005	9	28	2005.742	12	991	1172	1099.9	-0.27	771	2.06	0.131					
2005	9	29	2005.7447	17	991	1171	1099.5	-0.08	773	0.38	0.222					
			Average Changes after			3	d SI	-0.32		1.42	0.224	188	1040	1307	64.773	14.085
			Average Changes after			12	d SI	-0.08		0.38	0.222	712	1040	1307	64.773	14.058

Complete Buildup Pressures unavailable for Spring and Fall 2006

Table 3
Kimball Colinville Reservoir
Extended Shut-in Surveys

Year	Month	58.857 Day	Fractional Year	Shut-in Time (days)	South Kimball (psig)	Mid Kimball (psig)	Average Reef (psig)	dP/dT Reef (psi/d)	A-1 K21 (psig)	dP/dT A-1 (psi/d)	fraction A-1	Days to Crossover	Crossover Pressure (psig)	Reservoir P/Z (psi)	Physical Balance (bcf)	Physical Balance Intercept (bcf)
Weighting Factor:					**39.62%**	**60.38%**										
2007	4	2	2007.2519	0	380	499	451.9		826							
2007	4	5	2007.2601	3	383	499	452.7	0.25	818	-2.75	0.091					
2007	4	8	2007.2683	6	385	499	453.8	0.38	811	-2.40	0.160					
2007	4	11	2007.2765	9	388	499	455.3	0.49	804	-2.23	0.219					
2007	4	14	2007.2847	12	399	500	459.9	1.54	797	-2.27	0.679					
			Shut in irregular. Operation makes extrapolations invalid.													
2007	9	9	2007.6899	0	997	1180	1107.3		815							
2007	9	12	2007.6982	3	997	1183	1109.5	0.72	820	1.65	-0.435					
2007	9	15	2007.7064	6	997	1181	1108.1	-0.46	824	1.38	0.335					
2007	9	18	2007.7146	9	997	1179	1106.8	-0.43	828	1.52	0.281					
2007	9	21	2007.7228	12	997	1177	1105.8	-0.34	833	1.42	0.240					
2007	9	24	2007.731	15	997	1175	1104.8	-0.33	836	1.27	0.257					
2007	9	27	2007.7392	18	997	1173	1103.4	-0.48	840	1.27	0.379					
2007	9	30	2007.7474	21	998	1173	1103.3	-0.02	844	1.42	0.016					
2007	10	3	2007.7556	24	997	1171	1102.1	-0.39	848	1.15	0.344					
2007	10	6	2007.7639	27	998	1170	1101.4	-0.24	851	1.17	0.201					
2007	10	9	2007.7721	30	998	1168	1100.8	-0.21	855	1.23	0.174					
2007	10	12	2007.7803	33	998	1168	1100.5	-0.10	858	1.15	0.089					
2007	10	15	2007.7885	36	999	1167	1100.2	-0.09	862	1.27	0.073					
2007	10	17	2007.794	40	998	1166	1099.2	-0.24	864	0.39	0.610					
			Average Changes after			6 d SI		-0.26		1.18	0.221	163	1057	1331	64.871	13.250
			Average Changes after			33 d SI		-0.18		0.77	0.229	249	1055	1329	64.871	13.323

Table 4
Kimball Colinville Pressure Summary
Best Fit Analysis
Dawn Metered Volumes

0.3461 South Kimball
0.1265 A-1
0.5274 Mid Kimball
0.0000 Colinville

Year	Month	Day	Fractional Year	P/Zavg (psi)	Physical Balance (bcf)		Bestfit Lines x2	xy	n	I	m	Y	Z	slope (psi/bcf)	Y Intercept (psi)	X Intercept (bcf)	GIP for P/Z= 1080 (bcf)	Avg Slope Intercept	Selected Spring Intercept	Selected Fall Intercept
1966	6	1.08	1966.417	324		11.210	1.257E+02	3.632E+03												
1966	7	5.56	1966.511	356		12.308	1.515E+02	4.382E+03												
1969	4	25.6	1969.317	407		15.362	2.360E+02	6.256E+03	7	1.19E+02	2.09E+03	3.14E+03	5.53E+04	26.42	-0.1	0.003	40.884	-0.439		
1969	4	29.6	1969.328	403		15.362	2.360E+02	6.189E+03										-0.269	-0.354	
1969	11	3.21	1969.842	589		22.263	4.957E+02	1.312E+04										-0.597		-0.597
1969	12	1.6	1969.919	576		21.863	4.780E+02	1.260E+04										-0.494		
1970	2	4.49	1970.097	408		15.373	2.363E+02	6.266E+03										-0.441		
1970	3	6.9	1970.181	380		14.500	2.103E+02	5.513E+03										-0.250		
1970	4	4.29	1970.258	376		14.161	2.005E+02	5.331E+03	12	3.05E+02	8.74E+03	7.95E+03	2.28E+05	25.56	13.6	-0.531	42.247	-0.444	-0.347	
1970	5	5.72	1970.344	387		15.273	2.333E+02	5.913E+03										0.253		
1970	6	6.15	1970.431	443		17.171	2.949E+02	7.613E+03										-0.028		
1970	6	25.4	1970.483	539		20.901	4.368E+02	1.127E+04										-0.020		
1970	7	9.61	1970.522	616		23.168	5.368E+02	1.427E+04										-0.722		
1970	9	3.37	1970.675	980		38.073	1.450E+03	3.732E+04										0.049		
1970	10	0.75	1970.750	1019		39.698	1.576E+03	4.047E+04										0.147		
1970	11	0.17	1970.833	1027		39.841	1.587E+03	4.092E+04										-0.009		0.069
1971	1	5.07	1971.014	866		32.721	1.071E+03	2.833E+04										-0.868		
1971	2	8.54	1971.108	625		23.050	5.313E+02	1.440E+04										-1.189		
1971	3	4.87	1971.175	561		21.249	4.515E+02	1.193E+04										-0.526		
1971	4	2.26	1971.253	508		19.269	3.713E+02	9.796E+03										-0.455		
1971	5	8.76	1971.353	479		17.937	3.217E+02	8.592E+03	13	3.33E+02	9.71E+03	8.75E+03	2.54E+05	25.13	29.5	-1.173	42.973	-0.648	-0.551	
1971	6	3.11	1971.422	481		18.155	3.296E+02	8.727E+03										-0.494		
1971	6	16.3	1971.458	548		20.645	4.262E+02	1.131E+04										-0.610		
1971	7	2.51	1971.503	629		23.536	5.539E+02	1.481E+04										-0.879		
1971	8	3.96	1971.592	821		32.778	1.074E+03	2.692E+04										0.915		
1971	9	3.37	1971.675	1021		39.668	1.574E+03	4.052E+04										0.042		
1971	10	1.76	1971.753	1033		39.941	1.595E+03	4.125E+04										-0.129		-0.043
1971	11	3.21	1971.842	1065		41.055	1.686E+03	4.373E+04										-0.272		
1971	12	14.8	1971.956	790		29.492	8.698E+02	2.331E+04										-1.170		
1972	1	6.08	1972.017	647		23.400	5.475E+02	1.513E+04										-1.688		
1972	2	1.44	1972.089	491		18.286	3.344E+02	8.979E+03										-0.765		
1972	3	3.86	1972.172	399		15.134	2.290E+02	6.045E+03										-0.362		
1972	4	6.32	1972.264	348		13.022	1.696E+02	4.536E+03										-0.491		
1972	5	3.69	1972.339	333		12.617	1.592E+02	4.207E+03	6	1.19E+02	2.66E+03	3.19E+03	7.09E+04	25.53	25.7	-1.008	42.302	-0.319	-0.405	
1972	7	5.56	1972.511	628		22.848	5.220E+02	1.434E+04										-1.500		
1972	9	6.42	1972.683	851		32.766	1.074E+03	2.790E+04										-0.265		-0.265
1973	1	3.04	1973.008	590		22.065	4.869E+02	1.301E+04										-0.816		
1973	3	2.85	1973.169	359		13.159	1.731E+02	4.729E+03										-0.785		
1973	4	3.28	1973.256	432		15.572	2.425E+02	6.723E+03										-1.177		
1973	5	2.68	1973.336	496		18.883	3.566E+02	9.363E+03	10	3.22E+02	1.12E+04	8.44E+03	2.92E+05	24.89	41.6	-1.670	43.389	-0.355	-0.766	
1973	6	2.1	1973.419	622		22.593	5.104E+02	1.405E+04										-1.527		
1973	7	6.57	1973.514	712		27.092	7.340E+02	1.929E+04										-0.529		
1973	9	0.33	1973.667	903		35.020	1.226E+03	3.162E+04										-0.008		

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0.3461 South Kimball
0.1265 A-1
0.5274 Mid Kimball
0.0000 Colinville

Year	Month	Day	Fractional Year	P/Zavg (psi)	Physical Balance (bcf)	Bestfit Lines x2	xy	n	l	m	Y	Z	slope (psi/bcf)	Y Intercept (psi)	X Intercept (bcf)	GIP for P/Z= 1080 (bcf)	Avg Slope Intercept	Selected Spring Intercept	Selected Fall Intercept
1973	10	19	1973.800	1122	43.540	1.896E+03	4.885E+04										0.015		
1973	11	1.18	1973.836	1124	43.540	1.896E+03	4.896E+04										-0.082		
1973	12	4.64	1973.928	1124	43.538	1.896E+03	4.894E+04										-0.069		-0.051
1974	2	0.43	1974.086	954	36.177	1.309E+03	3.451E+04										-0.837		
1974	3	5.89	1974.178	763	28.680	8.226E+02	2.188E+04										-0.916		
1974	4	3.28	1974.256	620	23.316	5.436E+02	1.447E+04										-0.756		
1974	5	2.68	1974.336	656	24.536	6.020E+02	1.608E+04	12	4.17E+02	1.54E+04	1.09E+04	4.01E+05	25.32	27.5	-1.085	42.649	-0.896	-0.826	
1974	6	6.15	1974.431	821	30.817	9.497E+02	2.529E+04										-1.016		
1974	7	4.54	1974.508	1023	39.078	1.527E+03	3.999E+04										-0.625		
1974	8	1.93	1974.586	1073	41.390	1.713E+03	4.441E+04										-0.240		
1974	9	4.39	1974.678	1167	44.985	2.024E+03	5.249E+04										-0.281		
1974	10	1.76	1974.753	1193	46.113	2.126E+03	5.500E+04										-0.161		
1974	11	1.18	1974.836	1135	43.856	1.923E+03	4.976E+04										-0.164		-0.164
1974	12	2.61	1974.922	997	38.544	1.486E+03	3.842E+04										-0.127		
1975	1	2.03	1975.006	878	33.561	1.126E+03	2.948E+04										-0.514		
1975	2	2.46	1975.092	793	30.297	9.179E+02	2.402E+04										-0.456		
1975	3	5.89	1975.178	667	25.114	6.307E+02	1.675E+04										-0.763		
1975	4	3.28	1975.256	484	18.540	3.437E+02	8.965E+03										-0.220		
1975	5	2.68	1975.336	417	16.206	2.626E+02	6.754E+03	21	8.56E+02	3.71E+04	2.22E+04	9.60E+05	25.32	22.5	-0.887	42.646	0.037	-0.091	
1975	6	3.11	1975.422	709	26.545	7.046E+02	1.883E+04										-0.975		
1975	7	10.6	1975.525	1000	37.828	1.431E+03	3.782E+04										-0.959		
1975	8	7	1975.600	1036	40.339	1.627E+03	4.178E+04										0.156		
1975	9	2.36	1975.672	1157	44.866	2.013E+03	5.193E+04										-0.038		
1975	9	11.5	1975.697	1192	46.199	2.134E+03	5.506E+04										-0.034		
1975	9	18.6	1975.717	1223	47.495	2.256E+03	5.811E+04										0.029		
1975	10	0.75	1975.750	1272	49.257	2.426E+03	6.266E+04										-0.097		
1975	10	8.86	1975.772	1266	49.187	2.419E+03	6.228E+04										0.062		
1975	10	16	1975.792	1276	49.529	2.453E+03	6.318E+04										0.041		
1975	11	19.4	1975.886	1273	49.475	2.448E+03	6.298E+04										0.085		
1975	11	26.5	1975.906	1270	49.292	2.430E+03	6.258E+04										0.034		
1975	12	3.62	1975.925	1264	49.075	2.408E+03	6.201E+04										0.054		0.044
1975	12	10.7	1975.944	1255	48.772	2.379E+03	6.123E+04										0.068		
1975	12	17.8	1975.964	1229	47.571	2.263E+03	5.846E+04										-0.106		
1975	12	24.9	1975.983	1164	45.162	2.040E+03	5.258E+04										-0.005		
1976	1	0	1976.000	1133	43.888	1.926E+03	4.971E+04										-0.058		
1976	1	21.3	1976.058	948	36.429	1.327E+03	3.453E+04										-0.339		
1976	1	28.4	1976.078	887	34.181	1.168E+03	3.033E+04										-0.249		
1976	3	19.1	1976.214	610	23.114	5.342E+02	1.409E+04										-0.536		
1976	4	1.25	1976.250	580	21.991	4.836E+02	1.275E+04										-0.495		
1976	5	0.65	1976.331	640	24.200	5.856E+02	1.548E+04	31	1.21E+03	5.20E+04	3.13E+04	1.34E+06	26.35	-23.4	0.890	40.990	-0.619	-0.557	
1976	6	2.1	1976.419	801	30.415	9.251E+02	2.435E+04										-0.650		
1976	6	17.3	1976.461	934	35.510	1.261E+03	3.316E+04										-0.720		
1976	6	24.4	1976.481	997	37.979	1.442E+03	3.786E+04										-0.693		

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Dawn Metered Volumes

0.3461 South Kimball
0.1265 A-1
0.5274 Mid Kimball
0.0000 Colinville

Year	Month	Day	Fractional Year	P/Zavg (psi)	Physical Balance (bcf)	Bestfit Lines x2	xy	n	l	m	Y	Z	slope (psi/bcf)	Y Intercept (psi)	X Intercept (bcf)	GIP for P/Z= 1080 (bcf)	Avg Slope Intercept	Selected Spring Intercept	Selected Fall Intercept
1976	7	6.57	1976.514	1113	42.401	1.798E+03	4.718E+04										-0.769		
1976	7	22.8	1976.558	1166	44.689	1.997E+03	5.211E+04										-0.548		
1976	7	29.9	1976.578	1178	45.553	2.075E+03	5.366E+04										-0.148		
1976	8	4.97	1976.594	1218	46.887	2.198E+03	5.709E+04										-0.356		
1976	8	12.1	1976.614	1232	47.642	2.270E+03	5.872E+04										-0.171		
1976	8	19.2	1976.633	1258	48.724	2.374E+03	6.131E+04										-0.090		
1976	8	26.3	1976.653	1278	49.442	2.445E+03	6.318E+04										-0.132		
1976	9	1.35	1976.669	1281	49.632	2.463E+03	6.358E+04										-0.063		
1976	9	7.43	1976.686	1293	50.103	2.510E+03	6.481E+04										-0.080		
1976	9	22.6	1976.728	1291	50.103	2.510E+03	6.467E+04										0.026		
1976	9	29.7	1976.747	1293	50.153	2.515E+03	6.485E+04										-0.009		
1976	10	7.85	1976.769	1298	50.387	2.539E+03	6.540E+04										0.028		
1976	10	13.9	1976.786	1301	50.451	2.545E+03	6.561E+04										-0.004		-0.027
1976	11	24.5	1976.900	1298	50.336	2.534E+03	6.535E+04										-0.033		
1976	12	6.67	1976.933	1235	47.895	2.294E+03	5.914E+04										-0.008		
1976	12	8.69	1976.939	1213	46.994	2.208E+03	5.702E+04										-0.083		
1976	12	15.8	1976.958	1155	45.052	2.030E+03	5.204E+04										0.242		
1976	12	22.9	1976.978	1109	43.040	1.852E+03	4.771E+04										0.032		
1976	12	30	1976.997	1067	41.494	1.722E+03	4.427E+04										0.103		
1977	1	5.07	1977.014	1018	39.927	1.594E+03	4.067E+04										0.413		
1977	1	21.3	1977.058	825	32.665	1.067E+03	2.695E+04										0.660		
1977	2	0.43	1977.086	649	26.230	6.880E+02	1.702E+04										1.056		
1977	2	15.6	1977.128	532	21.295	4.535E+02	1.133E+04										0.652		
1977	2	27.8	1977.161	436	17.599	3.097E+02	7.677E+03										0.677		
1977	3	11	1977.192	386	15.930	2.538E+02	6.156E+03										0.940		
1977	3	18.1	1977.211	397	15.988	2.556E+02	6.351E+03										0.578		
1977	4	1.25	1977.250	379	15.692	2.462E+02	5.942E+03										1.001		
1977	4	7.33	1977.267	408	16.189	2.621E+02	6.599E+03	36	1.46E+03	6.46E+04	3.67E+04	1.63E+06	25.21	1.0	-0.041	42.836	0.374	0.687	
1977	4	14.4	1977.286	439	17.786	3.163E+02	7.812E+03										0.746		
1977	4	21.5	1977.306	501	20.092	4.037E+02	1.006E+04										0.658		
1977	4	28.6	1977.325	552	21.769	4.739E+02	1.201E+04										0.365		
1977	5	5.72	1977.344	595	23.316	5.436E+02	1.387E+04										0.235		
1977	5	7.75	1977.350	602	23.853	5.690E+02	1.436E+04										0.496		
1977	5	12.8	1977.364	626	24.600	6.052E+02	1.541E+04										0.296		
1977	5	19.9	1977.383	687	27.007	7.294E+02	1.855E+04										0.357		
1977	5	27	1977.403	774	29.930	8.958E+02	2.318E+04										-0.113		
1977	6	2.1	1977.419	842	32.799	1.076E+03	2.761E+04										0.136		
1977	6	9.19	1977.439	895	34.894	1.218E+03	3.123E+04										0.169		
1977	6	16.3	1977.458	943	36.846	1.358E+03	3.475E+04										0.260		
1977	6	23.4	1977.478	979	38.396	1.474E+03	3.760E+04										0.403		
1977	7	0.49	1977.497	1016	39.868	1.589E+03	4.049E+04										0.462		
1977	7	14.7	1977.536	1134	44.605	1.990E+03	5.057E+04										0.619		
1977	7	21.8	1977.556	1166	45.907	2.107E+03	5.352E+04										0.677		

Table 4
Kimball Colinville Pressure Summary
Best Fit Analysis
Dawn Metered Volumes

0.3461 South Kimball
0.1265 A-1
0.5274 Mid Kimball
0.0000 Colinville

Year	Month	Day	Fractional Year	P/Zavg (psi)	Physical Balance (bcf)		Bestfit Lines x2	xy	n	I	m	Y	Z	slope (psi/bcf)	Y Intercept (psi)	X Intercept (bcf)	GIP for P/Z= 1080 (bcf)	Avg Slope Intercept	Selected Spring Intercept	Selected Fall Intercept
1977	8	2.94	1977.589	1245		49.195	2.420E+03	6.124E+04										0.898		
1977	8	11.1	1977.611	1253		49.597	2.460E+03	6.214E+04										0.987		
1977	8	18.2	1977.631	1262		50.012	2.501E+03	6.311E+04										1.055		
1977	8	25.3	1977.650	1273		50.437	2.544E+03	6.418E+04										1.066		
1977	9	1.35	1977.669	1284		50.970	2.598E+03	6.545E+04										1.152		
1977	9	7.43	1977.686	1309		51.883	2.692E+03	6.794E+04										1.081		
1977	9	14.5	1977.706	1318		52.280	2.733E+03	6.893E+04										1.131		
1977	9	21.6	1977.725	1330		52.947	2.803E+03	7.041E+04										1.353		
1977	10	12.9	1977.783	1336		53.140	2.824E+03	7.099E+04										1.310		
1977	10	20	1977.803	1339		53.212	2.832E+03	7.125E+04										1.268		
1977	10	27.1	1977.822	1346		53.451	2.857E+03	7.196E+04										1.219		
1977	11	2.19	1977.839	1350		53.575	2.870E+03	7.232E+04										1.203		1.211
1977	11	16.4	1977.878	1336		53.176	2.828E+03	7.106E+04										1.331		
1977	11	23.5	1977.897	1337		53.032	2.812E+03	7.092E+04										1.149		
1977	12	0.58	1977.917	1331		52.830	2.791E+03	7.031E+04										1.197		
1977	12	21.9	1977.975	1285		51.081	2.609E+03	6.565E+04										1.220		
1978	1	4	1978.011	1260		50.021	2.502E+03	6.301E+04										1.153		
1978	2	0.42	1978.086	1039		41.681	1.737E+03	4.332E+04										1.360		
1978	3	2.83	1978.169	776		31.737	1.007E+03	2.463E+04										1.627		
1978	4	6.25	1978.264	555		22.993	5.287E+02	1.276E+04										1.458		
1978	5	3.67	1978.339	554		22.556	5.088E+02	1.250E+04	12	5.15E+02	2.35E+04	1.29E+04	5.91E+05	25.82	-30.3	1.175	41.821	1.055	1.256	
1978	6	8.09	1978.436	850		33.433	1.118E+03	2.842E+04										0.451		
1978	7	6.5	1978.514	1118		43.904	1.928E+03	4.907E+04										0.543		
1978	8	2.92	1978.589	1136		45.162	2.040E+03	5.131E+04										1.084		
1978	9	6.34	1978.683	1253		49.495	2.450E+03	6.200E+04										0.896		
1978	10	2.75	1978.755	1333		52.840	2.792E+03	7.041E+04										1.140		
1978	11	1.17	1978.836	1376		54.592	2.980E+03	7.510E+04										1.225		
1978	12	6.59	1978.933	1384		54.892	3.013E+03	7.595E+04										1.213		1.219
1979	1	3	1979.008	1382		54.586	2.980E+03	7.543E+04										0.977		
1979	2	6.42	1979.103	1077		43.405	1.884E+03	4.673E+04										1.634		
1979	2	27.4	1979.160	792		32.149	1.034E+03	2.547E+04										1.411		
1979	4	5.25	1979.261	680		27.900	7.784E+02	1.896E+04										1.532		
1979	5	3.67	1979.339	680		27.927	7.799E+02	1.899E+04	12	5.00E+02	2.22E+04	1.23E+04	5.50E+05	26.01	-53.6	2.062	41.530	1.547	1.539	
1979	6	7.09	1979.433	878		35.656	1.271E+03	3.130E+04										1.603		
1979	7	5.5	1979.511	1094		44.026	1.938E+03	4.817E+04										1.575		
1979	8	1.92	1979.586	1237		49.651	2.465E+03	6.143E+04										1.651		
1979	9	5.34	1979.680	1276		51.389	2.641E+03	6.559E+04										1.871		
1979	10	3.75	1979.758	1379		55.409	3.070E+03	7.639E+04										1.921		1.896
1979	11	7.17	1979.853	1342		53.743	2.888E+03	7.210E+04										1.696		
1979	12	5.59	1979.930	1211		49.051	2.406E+03	5.941E+04										2.058		
1980	1	2	1980.005	1100		44.755	2.003E+03	4.924E+04										2.075		
1980	2	1.12	1980.088	992		37.668	1.419E+03	3.738E+04										-0.834		
1980	3	6.84	1980.180	673		28.713	8.244E+02	1.933E+04										2.600		

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Year	Month	Day	Fractional Year	P/Zavg (psi)	Physical Balance (bcf)	Bestfit Lines x2	xy	n	I	m	Y	Z	slope (psi/bcf)	Y Intercept (psi)	X Intercept (bcf)	GIP for P/Z= 1080 (bcf)	Avg Slope Intercept	Selected Spring Intercept	Selected Fall Intercept
1980	4	3.25	1980.255	484	21.540	4.640E+02	1.043E+04										2.754		
1980	5	1.27	1980.332	474	21.321	4.546E+02	1.010E+04	12	4.72E+02	2.03E+04	1.14E+04	4.94E+05	26.73	-102.2	3.823	40.397	2.937	2.845	
1980	6	0.84	1980.416	540	24.480	5.993E+02	1.321E+04										3.538		
1980	7	3.5	1980.505	811	33.035	1.091E+03	2.679E+04										1.579		
1980	8	6.92	1980.600	1137	45.681	2.087E+03	5.192E+04										1.583		
1980	9	3.33	1980.675	1253	50.575	2.558E+03	6.338E+04										1.960		
1980	10	8.75	1980.772	1321	52.990	2.808E+03	7.001E+04										1.735		
1980	11	5.17	1980.847	1341	54.347	2.954E+03	7.288E+04										2.317		2.338
1980	12	3.58	1980.925	1338	54.099	2.927E+03	7.239E+04										2.188		
1981	1	8	1981.022	1093	45.222	2.045E+03	4.944E+04										2.803		
1981	2	3.42	1981.094	820	34.783	1.210E+03	2.852E+04										2.971		
1981	3	5.84	1981.178	669	29.251	8.556E+02	1.958E+04										3.287		
1981	4	2.25	1981.253	606	26.608	7.080E+02	1.611E+04										3.113		
1981	5	7.67	1981.350	642	27.705	7.675E+02	1.780E+04	12	5.09E+02	2.33E+04	1.22E+04	5.63E+05	26.10	-87.9	3.367	41.387	2.779	2.946	
1981	6	4.08	1981.425	757	31.998	1.024E+03	2.422E+04										2.637		
1981	7	9.5	1981.522	1038	42.664	1.820E+03	4.429E+04										2.392		
1981	8	5.92	1981.597	1228	50.290	2.529E+03	6.175E+04										2.652		
1981	9	2.33	1981.672	1260	51.694	2.672E+03	6.514E+04										2.803		
1981	10	7.75	1981.769	1298	53.162	2.826E+03	6.898E+04										2.823		
1981	11	4.17	1981.844	1339	54.831	3.006E+03	7.343E+04										2.878		2.918
1981	12	2.58	1981.922	1346	55.083	3.034E+03	7.414E+04										2.866		
1982	1	6	1982.016	1320	54.048	2.921E+03	7.135E+04										2.832		
1982	2	9.42	1982.111	858	36.354	1.322E+03	3.121E+04										3.049		
1982	3	4.83	1982.175	667	29.207	8.531E+02	1.948E+04										3.329		
1982	4	8.25	1982.269	484	22.327	4.985E+02	1.080E+04										3.555		
1982	5	6.67	1982.347	574	25.523	6.514E+02	1.465E+04	11	5.33E+02	2.68E+04	1.28E+04	6.42E+05	25.39	-69.2	2.727	42.544	3.252	3.403	
1982	6	3.08	1982.422	858	36.229	1.313E+03	3.110E+04										2.925		
1982	7	8.5	1982.519	1137	47.262	2.234E+03	5.374E+04										3.150		
1982	8	4.92	1982.594	1193	49.820	2.482E+03	5.942E+04										3.550		
1982	9	1.33	1982.669	1206	50.350	2.535E+03	6.074E+04										3.548		
1982	10	6.75	1982.766	1342	55.555	3.086E+03	7.458E+04										3.472		
1982	11	3.17	1982.842	1354	56.082	3.145E+03	7.595E+04										3.543		
1982	12	1.58	1982.919	1355	56.047	3.141E+03	7.593E+04										3.485		3.501
1983	1	5	1983.014	1337	55.362	3.065E+03	7.403E+04										3.487		
1983	2	1.42	1983.089	1258	52.459	2.752E+03	6.601E+04										3.639		
1983	3	3.83	1983.172	1160	48.556	2.358E+03	5.632E+04										3.555		
1983	5	1.27	1983.332	1063	44.929	2.019E+03	4.775E+04	11	5.37E+02	2.69E+04	1.28E+04	6.41E+05	26.10	-114.5	4.385	41.372	3.694	3.625	
1983	5	5.67	1983.344	1029	43.572	1.899E+03	4.485E+04										3.642		
1983	6	2.08	1983.419	1092	46.003	2.116E+03	5.022E+04										3.650		
1983	7	7.5	1983.516	1337	55.449	3.075E+03	7.411E+04										3.592		
1983	8	3.92	1983.592	1358	56.644	3.208E+03	7.693E+04										3.954		3.840
1983	9	7.34	1983.686	1363	56.762	3.222E+03	7.737E+04										3.882		
1983	11	9.17	1983.858	1368	56.872	3.234E+03	7.782E+04										3.785		

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Year	Month	Day	Fractional Year	P/Zavg (psi)	Physical Balance (bcf)	Bestfit Lines x2	xy	n	I	m	Y	Z	slope (psi/bcf)	Y Intercept (psi)	X Intercept (bcf)	GIP for P/Z= 1080 (bcf)	Avg Slope Intercept	Selected Spring Intercept	Selected Fall Intercept
1983	12	7.59	1983.936	1345	55.839	3.118E+03	7.509E+04										3.669		
1984	1	4	1984.011	1128	48.141	2.318E+03	5.432E+04										4.367		
1984	2	1	1984.086	981	41.124	1.691E+03	4.035E+04										3.057		
1984	3	2.83	1984.169	706	32.071	1.029E+03	2.263E+04										4.697		
1984	5	3.67	1984.339	437	21.177	4.485E+02	9.251E+03	12	4.93E+02	2.22E+04	1.14E+04	5.20E+05	26.30	-126.9	4.827	41.071	4.228	4.013	
1984	6	7.09	1984.433	607	27.342	7.476E+02	1.659E+04										3.797		
1984	7	5.5	1984.511	762	33.211	1.103E+03	2.530E+04										3.663		
1984	8	1.92	1984.586	846	36.166	1.308E+03	3.059E+04										3.356		
1984	9	5.34	1984.680	1110	46.305	2.144E+03	5.140E+04										3.243		
1984	10	3.75	1984.758	1324	54.934	3.018E+03	7.271E+04										3.581		
1984	11	7.17	1984.853	1374	57.213	3.273E+03	7.860E+04										3.915		
1984	12	5.59	1984.930	1372	57.212	3.273E+03	7.848E+04										3.990		
1985	1	2	1985.005	1372	57.211	3.273E+03	7.847E+04										3.997		3.932
1985	2	12.4	1985.119	944	41.415	1.715E+03	3.911E+04										4.775		
1985	3	7.84	1985.183	739	33.338	1.111E+03	2.462E+04										4.685		
1985	4	2.25	1985.253	549	27.228	7.413E+02	1.496E+04										5.916		
1985	5	2.67	1985.336	505	24.221	5.867E+02	1.222E+04	11	4.27E+02	1.84E+04	9.61E+03	4.20E+05	25.91	-132.2	5.104	41.687	4.642		
1985	6	6.09	1985.430	508	24.221	5.867E+02	1.230E+04										4.526	4.131	
1985	7	4.5	1985.508	527	24.961	6.231E+02	1.316E+04										4.499		
1985	8	25.6	1985.651	747	35.896	1.289E+03	2.682E+04										6.905		
1985	9	4.34	1985.678	1067	45.700	2.089E+03	4.877E+04										4.298		
1985	11	5.17	1985.847	1332	56.477	3.190E+03	7.520E+04										4.816		
1985	12	4.59	1985.928	1335	56.475	3.189E+03	7.538E+04										4.692		4.318
1986	1	2	1986.005	1300	55.107	3.037E+03	7.166E+04										4.656		
1986	2	4.42	1986.097	1025	44.691	1.997E+03	4.581E+04										4.924		
1986	3	6.84	1986.180	727	33.284	1.108E+03	2.419E+04										5.091		
1986	4	3.25	1986.255	540	26.153	6.840E+02	1.412E+04										5.204		
1986	5	8.67	1986.353	525	25.256	6.379E+02	1.327E+04	12	5.40E+02	2.60E+04	1.25E+04	6.09E+05	25.99	-125.3	4.818	41.547	4.876	4.876	
1986	6	5.09	1986.428	720	30.937	9.571E+02	2.227E+04										3.011		
1986	7	3.5	1986.505	996	42.484	1.805E+03	4.230E+04										3.853		
1986	8	6.92	1986.600	1256	52.942	2.803E+03	6.651E+04										4.200		
1986	9	10.3	1986.694	1332	56.111	3.148E+03	7.473E+04										4.438		
1986	10	1.75	1986.753	1337	56.304	3.170E+03	7.527E+04										4.439		
1986	11	5.17	1986.847	1362	57.312	3.285E+03	7.806E+04										4.473		4.307
1986	12	3.58	1986.925	1349	56.723	3.218E+03	7.651E+04										4.395		
1987	1	7	1987.019	1295	54.635	2.985E+03	7.076E+04										4.386		
1987	2	3.42	1987.094	1055	45.906	2.107E+03	4.843E+04										4.975		
1987	3	5.84	1987.178	730	33.702	1.136E+03	2.460E+04										5.388		
1987	4	2.25	1987.253	579	27.741	7.696E+02	1.605E+04										5.293		
1987	5	5.67	1987.344	738	33.187	1.101E+03	2.450E+04	12	5.11E+02	2.32E+04	1.17E+04	5.37E+05	26.09	-136.3	5.226	41.401	4.541		
1987	6	16.2	1987.458	732	33.187	1.101E+03	2.429E+04										4.790	4.963	
1987	7	7.5	1987.516	775	34.651	1.201E+03	2.685E+04										4.590		
1987	8	3.92	1987.592	849	37.598	1.414E+03	3.193E+04										4.647		

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1987	9	2.33	1987.672	1044	44.773	2.005E+03	4.673E+04										4.285		
1987	10	5.75	1987.764	1298	54.923	3.017E+03	7.132E+04										4.547		
1987	11	2.17	1987.839	1329	56.326	3.173E+03	7.483E+04										4.785		
1987	12	30.6	1987.999	1337	56.694	3.214E+03	7.583E+04										4.806		4.654
1988	1	4	1988.011	1335	56.238	3.163E+03	7.507E+04										4.451		
1988	1	29.2	1988.080	1091	47.756	2.281E+03	5.208E+04										5.442		
1988	3	1	1988.163	694	31.457	9.895E+02	2.183E+04										4.535		
1988	4	5.25	1988.261	471	24.162	5.838E+02	1.138E+04										5.886		
1988	6	7.04	1988.433	483	24.161	5.838E+02	1.168E+04	12	5.23E+02	2.46E+04	1.19E+04	5.65E+05	26.08	-147.1	5.640	41.412	5.412	4.971	
1988	7	1.14	1988.499	528	25.867	6.691E+02	1.365E+04										5.391		
1988	8	1.89	1988.586	950	39.619	1.570E+03	3.764E+04										2.762		
1988	9	1.19	1988.669	1266	51.772	2.680E+03	6.555E+04										2.651		
1988	10	0.75	1988.750	1353	57.739	3.334E+03	7.812E+04										5.247		
1988	11	0.78	1988.835	1348	57.731	3.333E+03	7.781E+04										5.445		
1988	11	28.5	1988.911	1350	57.731	3.333E+03	7.797E+04										5.338		5.386
1988	12	26.3	1988.987	1252	54.410	2.960E+03	6.810E+04										5.854		
1989	1	23	1989.063	1139	50.154	2.515E+03	5.711E+04										5.976		
1989	2	27	1989.159	872	40.230	1.618E+03	3.509E+04										6.392		
1989	4	4.17	1989.258	693	32.829	1.078E+03	2.275E+04										5.945		
1989	5	1.55	1989.333	633	30.475	9.287E+02	1.931E+04										5.898		
1989	6	27.1	1989.488	684	32.181	1.036E+03	2.202E+04	12	5.13E+02	2.34E+04	1.13E+04	5.20E+05	26.11	-176.7	6.767	41.364	5.637	5.737	
1989	7	4.5	1989.508	707	33.016	1.090E+03	2.335E+04										5.576		
1989	8	1.5	1989.585	970	43.398	1.883E+03	4.210E+04										5.761		
1989	8	28.9	1989.660	1226	53.171	2.827E+03	6.517E+04										5.617		
1989	10	2.75	1989.755	1334	57.933	3.356E+03	7.726E+04										6.194		
1989	10	30.7	1989.832	1334	57.932	3.356E+03	7.728E+04										6.178		
1989	11	27.2	1989.907	1337	57.932	3.356E+03	7.743E+04										6.077		6.011
1990	1	1	1990.003	922	43.061	1.854E+03	3.968E+04										7.310		
1990	1	29	1990.079	882	40.769	1.662E+03	3.594E+04										6.569		
1990	2	25.4	1990.155	752	36.246	1.314E+03	2.725E+04										7.078		
1990	3	27.8	1990.238	598	30.270	9.162E+02	1.809E+04										7.085		
1990	5	1.25	1990.332	524	26.874	7.222E+02	1.409E+04										6.527		
1990	6	26.1	1990.485	529	26.873	7.222E+02	1.421E+04	10	4.45E+02	2.13E+04	9.82E+03	4.75E+05	25.77	-165.5	6.422	41.911	6.365	6.183	
1990	7	30.3	1990.579	624	30.015	9.009E+02	1.871E+04										5.825		
1990	8	27.9	1990.657	906	40.194	1.616E+03	3.640E+04										5.056		
1990	9	24.3	1990.732	1215	52.824	2.790E+03	6.417E+04										5.695		
1990	10	29.7	1990.829	1351	58.857	3.464E+03	7.953E+04										6.435		
1990	12	3.58	1990.925	1351	58.857	3.464E+03	7.949E+04										6.460		
1991	1	0.58	1991.002	1351	58.857	3.464E+03	7.954E+04										6.429		6.398
1991	1	28	1991.077	1066	48.786	2.380E+03	5.201E+04										7.431		
1991	2	24.4	1991.152	803	38.808	1.506E+03	3.115E+04										7.663		
1991	4	2.25	1991.253	622	31.106	9.676E+02	1.936E+04										6.961		
1991	4	29.9	1991.329	629	31.106	9.676E+02	1.955E+04	13	6.03E+02	3.04E+04	1.31E+04	6.74E+05	26.57	-222.0	8.357	40.651	6.721	6.344	

Table 4
Kimball Colinville Pressure Summary
Best Fit Analysis
Dawn Metered Volumes

0.3461 South Kimball
0.1265 A-1
0.5274 Mid Kimball
0.0000 Colinville

Year	Month	Day	Fractional Year	P/Zavg (psi)	Physical Balance (bcf)	Bestfit Lines x2	xy	n	I	m	Y	Z	slope (psi/bcf)	Y Intercept (psi)	X Intercept (bcf)	GIP for P/Z= 1080 (bcf)	Avg Slope Intercept	Selected Spring Intercept	Selected Fall Intercept
1991	6	4.08	1991.425	792	36.648	1.343E+03	2.903E+04										5.916		
1991	7	2.5	1991.503	1131	49.638	2.464E+03	5.612E+04										5.774		
1991	7	30.5	1991.579	1278	56.114	3.149E+03	7.171E+04										6.537		
1991	9	2.33	1991.672	1341	59.150	3.499E+03	7.932E+04										7.121		
1991	9	29.8	1991.748	1362	59.678	3.561E+03	8.126E+04										6.849		
1991	11	4.17	1991.844	1370	60.303	3.636E+03	8.261E+04										7.154		
1991	12	2.58	1991.922	1342	58.867	3.465E+03	7.897E+04										6.819		
1991	12	30.6	1991.999	1341	58.866	3.465E+03	7.897E+04										6.822		6.812
1992	2	2.42	1992.092	1083	50.200	2.520E+03	5.439E+04										8.169		
1992	3	3.83	1992.172	673	34.880	1.217E+03	2.346E+04										8.784		
1992	4	7.25	1992.266	402	24.372	5.940E+02	9.794E+03										8.781		
1992	5	5.67	1992.344	379	22.712	5.158E+02	8.600E+03										8.022		
1992	6	2.08	1992.419	382	22.712	5.158E+02	8.683E+03	11	4.57E+02	2.12E+04	9.51E+03	4.53E+05	26.16	-223.3	8.539	41.290	7.879	7.245	
1992	6	30	1992.496	463	25.851	6.683E+02	1.198E+04										7.872		
1992	8	3.92	1992.592	884	41.551	1.726E+03	3.672E+04										7.262		
1992	9	0.92	1992.668	1158	52.407	2.746E+03	6.068E+04										7.486		
1992	9	29.8	1992.748	1288	57.764	3.337E+03	7.441E+04										7.785		
1992	11	2.17	1992.839	1336	59.810	3.577E+03	7.991E+04										7.975		7.589
1992	12	14.6	1992.955	1298	58.357	3.406E+03	7.576E+04										7.989		
1993	1	18	1993.049	1107	50.829	2.584E+03	5.626E+04										7.884		
1993	2	14.4	1993.124	726	37.226	1.386E+03	2.704E+04										9.046		
1993	3	16.8	1993.208	457	26.614	7.083E+02	1.217E+04										8.873		
1993	4	20.2	1993.302	405	24.231	5.871E+02	9.820E+03										8.508		
1993	5	18.7	1993.380	413	24.354	5.931E+02	1.006E+04										8.335		
1993	6	15.1	1993.455	415	24.354	5.931E+02	1.010E+04	20	8.87E+02	4.21E+04	1.84E+04	8.88E+05	25.67	-218.2	8.499	42.068	8.266	7.911	
1993	6	29.1	1993.493	457	25.981	6.750E+02	1.188E+04										8.247		
1993	7	13.5	1993.533	616	31.274	9.781E+02	1.927E+04										7.367		
1993	7	27.5	1993.571	747	36.288	1.317E+03	2.710E+04										7.315		
1993	8	9.92	1993.608	832	40.180	1.614E+03	3.343E+04										7.904		
1993	8	30.5	1993.664	966	45.881	2.105E+03	4.433E+04										8.395		
1993	9	13.3	1993.702	1111	51.454	2.648E+03	5.714E+04										8.369		
1993	9	27.3	1993.741	1203	55.207	3.048E+03	6.640E+04										8.545		
1993	10	11.8	1993.780	1236	56.782	3.224E+03	7.018E+04										8.831		
1993	11	1.17	1993.836	1273	57.954	3.359E+03	7.376E+04										8.574		
1993	11	15.2	1993.874	1275	58.080	3.373E+03	7.407E+04										8.605		
1993	11	29.2	1993.913	1277	58.080	3.373E+03	7.415E+04										8.548		8.155
1993	12	13.6	1993.952	1275	57.967	3.360E+03	7.393E+04										8.489		
1993	12	27.6	1993.991	1234	56.617	3.205E+03	6.987E+04										8.741		
1994	1	10	1994.027	1097	51.832	2.687E+03	5.685E+04										9.280		
1994	1	30.5	1994.084	892	44.070	1.942E+03	3.929E+04										9.481		
1994	2	13.4	1994.122	785	40.081	1.607E+03	3.147E+04										9.620		
1994	2	27.4	1994.160	653	34.662	1.201E+03	2.262E+04										9.344		
1994	3	15.8	1994.205	559	31.294	9.793E+02	1.749E+04										9.611		

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0.3461 South Kimball
0.1265 A-1
0.5274 Mid Kimball
0.0000 Colinville

Year	Month	Day	Fractional Year	P/Zavg (psi)	Physical Balance (bcf)	Bestfit Lines x2	xy	n	I	m	Y	Z	slope (psi/bcf)	Y Intercept (psi)	X Intercept (bcf)	GIP for P/Z= 1080 (bcf)	Avg Slope Intercept	Selected Spring Intercept	Selected Fall Intercept
1994	3	29.8	1994.243	508	29.047	8.437E+02	1.477E+04										9.321		
1994	4	12.3	1994.280	501	28.991	8.405E+02	1.452E+04										9.560		
1994	5	3.67	1994.339	526	29.181	8.515E+02	1.535E+04										8.768		
1994	5	17.7	1994.377	550	29.972	8.983E+02	1.650E+04										8.615		
1994	6	0.67	1994.416	550	29.972	8.983E+02	1.649E+04										8.629		
1994	6	14.1	1994.452	550	29.972	8.983E+02	1.649E+04										8.624		
1994	6	28.1	1994.491	551	29.971	8.983E+02	1.650E+04										8.611		
1994	7	12.5	1994.530	551	29.971	8.983E+02	1.652E+04	19	9.05E+02	4.56E+04	1.89E+04	9.64E+05	25.58	-224.1	8.760	42.216	8.584	8.512	
1994	8	1.92	1994.586	595	31.394	9.856E+02	1.866E+04										8.329		
1994	8	15.9	1994.624	675	34.373	1.181E+03	2.318E+04										8.205		
1994	8	29.9	1994.663	838	40.949	1.677E+03	3.433E+04										8.421		
1994	9	19.3	1994.719	1092	50.560	2.556E+03	5.521E+04										8.196		
1994	10	3.75	1994.758	1250	56.912	3.239E+03	7.115E+04										8.410		
1994	10	17.8	1994.797	1313	59.818	3.578E+03	7.854E+04										8.876		
1994	11	0.75	1994.835	1350	61.413	3.772E+03	8.292E+04										9.033		
1994	11	14.2	1994.872	1359	61.918	3.834E+03	8.413E+04										9.203		
1994	11	28.2	1994.910	1361	61.976	3.841E+03	8.436E+04										9.165		9.034
1994	12	12.6	1994.950	1354	61.726	3.810E+03	8.359E+04										9.188		
1995	1	2	1995.005	1293	59.463	3.536E+03	7.691E+04										9.287		
1995	1	16	1995.044	1142	53.849	2.900E+03	6.149E+04										9.551		
1995	1	30	1995.082	1014	49.311	2.432E+03	5.000E+04										9.971		
1995	2	12.4	1995.119	874	43.505	1.893E+03	3.803E+04										9.594		
1995	2	27.4	1995.160	793	40.657	1.653E+03	3.224E+04										9.893		
1995	3	14.8	1995.202	700	36.769	1.352E+03	2.573E+04										9.616		
1995	4	2.25	1995.253	698	36.258	1.315E+03	2.529E+04										9.193		
1995	4	18.3	1995.297	632	33.798	1.142E+03	2.137E+04										9.266		
1995	5	2.67	1995.336	638	33.845	1.145E+03	2.160E+04										9.087		
1995	5	18.7	1995.380	658	34.487	1.189E+03	2.270E+04										8.956		
1995	5	30.7	1995.413	658	34.487	1.189E+03	2.270E+04										8.947		
1995	6	13.1	1995.450	667	34.757	1.208E+03	2.317E+04										8.897		
1995	6	27.1	1995.488	667	34.757	1.208E+03	2.317E+04										8.899		
1995	7	11.5	1995.527	667	34.757	1.208E+03	2.317E+04	20	9.25E+02	4.60E+04	1.89E+04	9.58E+05	26.59	-286.5	10.775	40.620	8.893	8.867	
1995	8	2.92	1995.589	760	38.454	1.479E+03	2.924E+04										8.950		
1995	8	14.9	1995.622	832	40.956	1.677E+03	3.409E+04										8.666		
1995	8	30.9	1995.666	922	44.881	2.014E+03	4.140E+04										9.092		
1995	9	11.3	1995.697	1038	49.009	2.402E+03	5.088E+04										8.735		
1995	9	27.3	1995.741	1150	54.058	2.922E+03	6.216E+04										9.449		
1995	10	16.8	1995.794	1330	60.556	3.667E+03	8.056E+04										8.947		
1995	11	1.17	1995.836	1348	61.736	3.811E+03	8.324E+04										9.425		
1995	11	13.2	1995.869	1343	61.566	3.790E+03	8.271E+04										9.448		
1995	11	29.2	1995.913	1343	61.566	3.790E+03	8.269E+04										9.457		9.052
1995	12	18.6	1995.966	1346	61.505	3.783E+03	8.278E+04										9.287		
1995	12	27.6	1995.991	1294	59.689	3.563E+03	7.722E+04										9.500		

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0.1265 A-1
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Year	Month	Day	Fractional Year	P/Zavg (psi)	Physical Balance (bcf)	Bestfit Lines x2	xy	n	I	m	Y	Z	slope (psi/bcf)	Y Intercept (psi)	X Intercept (bcf)	GIP for P/Z= 1080 (bcf)	Avg Slope Intercept	Selected Spring Intercept	Selected Fall Intercept
1996	1	15	1996.041	1162	54.886	3.012E+03	6.376E+04										9.816		
1996	1	31	1996.085	1024	49.131	2.414E+03	5.029E+04										9.421		
1996	2	11.4	1996.116	863	43.794	1.918E+03	3.778E+04										10.329		
1996	2	27.4	1996.160	734	38.868	1.511E+03	2.851E+04										10.409		
1996	3	12.8	1996.197	545	32.479	1.055E+03	1.770E+04										11.342		
1996	3	28.8	1996.241	455	28.511	8.129E+02	1.296E+04										10.873		
1996	4	16.3	1996.291	357	24.621	6.062E+02	8.784E+03										10.779		
1996	5	4.67	1996.342	351	23.940	5.731E+02	8.408E+03	26	1.24E+03	6.48E+04	2.51E+04	1.34E+06	26.09	-279.2	10.700	41.394	10.314		
1996	5	21.7	1996.388	456	27.107	7.348E+02	1.237E+04										9.410	9.862	
1996	5	30.7	1996.413	549	31.279	9.784E+02	1.717E+04										9.977		
1996	6	11.1	1996.444	703	36.002	1.296E+03	2.531E+04										8.723		
1996	6	27.1	1996.488	954	46.264	2.140E+03	4.414E+04										9.248		
1996	7	16.5	1996.541	1194	55.413	3.071E+03	6.616E+04										9.090		
1996	8	1.5	1996.585	1197	56.303	3.170E+03	6.737E+04										9.882		
1996	8	19.9	1996.635	1193	56.303	3.170E+03	6.716E+04										10.026		
1996	9	2.33	1996.672	1230	57.574	3.315E+03	7.082E+04										9.854		
1996	9	16.3	1996.711	1286	59.757	3.571E+03	7.688E+04										9.847		
1996	10	0.33	1996.749	1308	60.807	3.698E+03	7.952E+04										10.075		
1996	10	14.7	1996.788	1330	61.686	3.805E+03	8.206E+04										10.078		
1996	10	28.8	1996.827	1367	63.067	3.977E+03	8.621E+04										10.034		
1996	11	18.2	1996.883	1331	61.924	3.835E+03	8.244E+04										10.276		
1996	11	29.2	1996.913	1334	61.924	3.835E+03	8.261E+04										10.165		
1996	12	16.6	1996.961	1337	61.924	3.835E+03	8.278E+04										10.061		10.057
1997	1	1	1997.003	1337	61.924	3.835E+03	8.280E+04										10.045		
1997	1	8	1997.022	1299	60.788	3.695E+03	7.898E+04										10.380		
1997	1	10	1997.027	1253	59.223	3.507E+03	7.419E+04										10.623		
1997	1	20	1997.055	995	50.054	2.505E+03	4.981E+04										11.449		
1997	1	29	1997.079	832	43.748	1.914E+03	3.638E+04										11.489		
1997	2	9.42	1997.111	651	36.661	1.344E+03	2.387E+04										11.398		
1997	2	25.4	1997.155	507	30.851	9.518E+02	1.565E+04										11.172		
1997	3	11.8	1997.194	437	28.083	7.887E+02	1.226E+04										11.148		
1997	3	29.8	1997.243	358	24.928	6.214E+02	8.923E+03										11.042		
1997	4	22.3	1997.308	359	24.558	6.031E+02	8.818E+03										10.627		
1997	5	1.25	1997.332	362	24.588	6.046E+02	8.889E+03										10.563		
1997	5	6.67	1997.347	361	24.564	6.034E+02	8.868E+03	25	1.06E+03	5.03E+04	2.05E+04	1.01E+06	25.39	-256.6	10.106	42.539	10.557		
1997	5	13.7	1997.366	376	24.965	6.233E+02	9.390E+03										10.373		
1997	5	29.7	1997.410	402	25.832	6.673E+02	1.039E+04										10.226		
1997	6	10.1	1997.441	411	26.198	6.863E+02	1.077E+04										10.253		
1997	6	17.1	1997.461	411	26.198	6.863E+02	1.077E+04										10.254	10.292	
1997	6	24.1	1997.480	411	26.198	6.863E+02	1.075E+04										10.272		
1997	7	8.5	1997.519	410	26.198	6.863E+02	1.075E+04										10.281		
1997	7	22.5	1997.558	447	27.460	7.541E+02	1.228E+04										10.114		
1997	8	4.92	1997.594	546	30.940	9.573E+02	1.688E+04										9.773		

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Year	Month	Day	Fractional Year	P/Zavg (psi)	Physical Balance (bcf)	Bestfit Lines x2	xy	n	I	m	Y	Z	slope (psi/bcf)	Y Intercept (psi)	X Intercept (bcf)	GIP for P/Z= 1080 (bcf)	Avg Slope Intercept	Selected Spring Intercept	Selected Fall Intercept
1997	8	18.9	1997.633	681	36.129	1.305E+03	2.462E+04										9.696		
1997	9	1.33	1997.669	846	42.393	1.797E+03	3.588E+04										9.558		
1997	9	15.3	1997.708	1023	49.459	2.446E+03	5.060E+04										9.769		
1997	9	29.3	1997.746	1223	57.336	3.287E+03	7.012E+04										9.888		
1997	10	13.7	1997.786	1327	61.943	3.837E+03	8.219E+04										10.467		
1997	10	27.8	1997.824	1325	62.510	3.908E+03	8.285E+04										11.092		
1997	11	10.2	1997.861	1330	62.712	3.933E+03	8.340E+04										11.115		
1997	11	24.2	1997.899	1333	62.712	3.933E+03	8.359E+04										11.000		
1997	12	8.58	1997.939	1333	62.712	3.933E+03	8.361E+04										10.988		10.701
1997	12	22.6	1997.977	1312	61.968	3.840E+03	8.130E+04										11.069		
1998	1	5	1998.014	1232	58.823	3.460E+03	7.248E+04										11.019		
1998	1	19	1998.052	1047	52.179	2.723E+03	5.465E+04										11.546		
1998	2	8.42	1998.108	745	40.476	1.638E+03	3.017E+04										11.557		
1998	2	15.4	1998.127	702	38.666	1.495E+03	2.713E+04										11.443		
1998	3	3.83	1998.172	656	36.511	1.333E+03	2.396E+04										11.046		
1998	3	17.8	1998.211	571	33.581	1.128E+03	1.919E+04										11.411		
1998	4	7.25	1998.266	582	33.408	1.116E+03	1.946E+04	27	1.48E+03	8.40E+04	3.08E+04	1.76E+06	25.93	-281.1	10.839	41.649	10.812		
1998	4	14.2	1998.286	606	34.066	1.160E+03	2.063E+04										10.569		
1998	4	28.3	1998.324	706	37.658	1.418E+03	2.657E+04										10.286		
1998	5	12.7	1998.363	847	42.676	1.821E+03	3.616E+04										9.800		
1998	5	26.7	1998.402	833	42.705	1.824E+03	3.557E+04										10.387	10.931	
1998	6	9.08	1998.439	868	43.937	1.930E+03	3.814E+04										10.263		
1998	6	23.1	1998.477	1008	49.358	2.436E+03	4.977E+04										10.237		
1998	7	7.5	1998.516	1114	53.384	2.850E+03	5.946E+04										10.173		
1998	7	21.5	1998.555	1237	58.240	3.392E+03	7.204E+04										10.252		
1998	8	3.92	1998.592	1348	62.348	3.887E+03	8.403E+04										10.062		
1998	8	17.9	1998.630	1360	63.556	4.039E+03	8.643E+04										10.798		
1998	9	0.92	1998.668	1359	63.352	4.013E+03	8.606E+04										10.647		
1998	9	14.3	1998.705	1359	63.352	4.013E+03	8.612E+04										10.611		
1998	9	28.3	1998.743	1358	63.351	4.013E+03	8.600E+04										10.685		11.077
1998	10	12.7	1998.783	1393	64.525	4.164E+03	8.985E+04										10.500		
1998	10	26.8	1998.821	1398	64.723	4.189E+03	9.046E+04										10.502		
1998	11	9.17	1998.858	1397	64.681	4.184E+03	9.036E+04										10.481		
1998	11	23.2	1998.896	1395	64.548	4.166E+03	9.003E+04										10.436		
1998	12	7.58	1998.936	1386	64.269	4.131E+03	8.906E+04										10.509		
1998	12	21.6	1998.974	1377	63.706	4.059E+03	8.771E+04										10.295		
1999	1	11	1999.030	1372	63.572	4.041E+03	8.723E+04										10.336		
1999	1	18	1999.049	1317	61.659	3.802E+03	8.123E+04										10.551		
1999	2	1	1999.086	1282	60.376	3.645E+03	7.743E+04										10.620		
1999	2	14.4	1999.124	1206	57.736	3.334E+03	6.964E+04										10.939		
1999	3	2.83	1999.169	1014	50.790	2.580E+03	5.149E+04										11.459		
1999	3	9.83	1999.189	916	47.293	2.237E+03	4.333E+04										11.747		
1999	3	30.8	1999.246	732	39.926	1.594E+03	2.922E+04	26	1.38E+03	7.65E+04	2.79E+04	1.57E+06	26.54	-337.2	12.704	40.690	11.535		

Table 4
Kimball Colinville Pressure Summary
Best Fit Analysis
Dawn Metered Volumes

0.3461 South Kimball
0.1265 A-1
0.5274 Mid Kimball
0.0000 Colinville

Year	Month	Day	Fractional Year	P/Zavg (psi)	Physical Balance (bcf)	Bestfit Lines x2	xy	n	I	m	Y	Z	slope (psi/bcf)	Y Intercept (psi)	X Intercept (bcf)	GIP for P/Z= 1080 (bcf)	Avg Slope Intercept	Selected Spring Intercept	Selected Fall Intercept
1999	4	13.2	1999.283	779	41.130	1.692E+03	3.203E+04										10.914		
1999	4	27.3	1999.321	795	41.657	1.735E+03	3.313E+04										10.798		
1999	5	11.7	1999.361	826	43.070	1.855E+03	3.558E+04										11.020	11.371	
1999	5	25.7	1999.399	832	43.010	1.850E+03	3.580E+04										10.720		
1999	6	8.08	1999.436	931	46.514	2.164E+03	4.329E+04										10.410		
1999	6	22.1	1999.474	1022	50.139	2.514E+03	5.124E+04										10.494		
1999	7	6.5	1999.514	1144	54.887	3.013E+03	6.278E+04										10.513		
1999	7	20.5	1999.552	1249	59.141	3.498E+03	7.387E+04										10.684		
1999	8	2.92	1999.589	1291	61.145	3.739E+03	7.892E+04										11.070		
1999	8	16.9	1999.627	1287	61.145	3.739E+03	7.867E+04										11.228		
1999	8	30.5	1999.664	1299	61.583	3.792E+03	8.003E+04										11.167		
1999	9	13.3	1999.702	1368	64.169	4.118E+03	8.781E+04										11.077		
1999	9	27.3	1999.741	1386	64.958	4.219E+03	9.005E+04										11.172		
1999	10	11.8	1999.780	1390	65.573	4.300E+03	9.113E+04										11.656		
1999	10	26.8	1999.821	1396	65.573	4.300E+03	9.153E+04										11.417		11.318
1999	11	8.17	1999.855	1395	65.573	4.300E+03	9.146E+04										11.460		
1999	11	22.2	1999.894	1397	65.583	4.301E+03	9.160E+04										11.397		
1999	12	6.58	1999.933	1373	64.604	4.174E+03	8.870E+04										11.341		
1999	12	20.6	1999.971	1330	63.137	3.986E+03	8.396E+04										11.548		
2000	1	3	2000.008	1236	59.762	3.572E+03	7.387E+04										11.810		
2000	1	17	2000.047	1032	52.905	2.799E+03	5.462E+04										12.849		
2000	1	31	2000.085	774	43.478	1.890E+03	3.364E+04										13.457		
2000	2	20.4	2000.141	516	34.180	1.168E+03	1.762E+04										14.175		
2000	3	7.83	2000.183	542	33.896	1.149E+03	1.838E+04										12.860		
2000	3	21.8	2000.221	531	32.942	1.085E+03	1.750E+04										12.334		
2000	4	4.25	2000.258	574	34.252	1.173E+03	1.964E+04										12.002		
2000	4	18.3	2000.297	536	32.690	1.069E+03	1.752E+04										11.893		
2000	5	16.7	2000.374	542	32.928	1.084E+03	1.786E+04										11.887	11.640	
2000	5	30.6	2000.413	542	32.928	1.084E+03	1.785E+04										11.894	11.742	
2000	6	5	2000.427	542	32.928	1.084E+03	1.785E+04	16	8.44E+02	4.68E+04	1.69E+04	9.50E+05	26.40	-339.0	12.842	40.909	11.894	11.742	
2000	8	30.8	2000.665	893	46.418	2.155E+03	4.143E+04										11.786		
2000	9	15	2000.707	1073	52.638	2.771E+03	5.651E+04										10.992		
2000	9	30	2000.749	1182	57.640	3.322E+03	6.816E+04										11.765		
2000	10	15	2000.789	1300	61.961	3.839E+03	8.053E+04										11.541		
2000	10	30.7	2000.832	1368	64.719	4.189E+03	8.853E+04										11.651		
2000	11	15	2000.874	1382	65.073	4.235E+03	8.995E+04										11.446		
2000	11	30	2000.915	1366	64.642	4.179E+03	8.827E+04										11.662		11.468
2000	12	18.5	2000.966	1367	64.642	4.179E+03	8.837E+04										11.603		11.090
2001	1	4	2001.011	1328	63.267	4.003E+03	8.404E+04										11.734		
2001	1	15	2001.041	1292	61.925	3.835E+03	8.003E+04										11.787		
2001	2	1	2001.086	1111	55.143	3.041E+03	6.124E+04										12.057		
2001	2	14	2001.123	908	47.822	2.287E+03	4.342E+04										12.596		
2001	2	28	2001.160	675	38.610	1.491E+03	2.607E+04										12.414		

Table 4
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Best Fit Analysis
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0.1265 A-1
0.5274 Mid Kimball
0.0000 Colinville

Year	Month	Day	Fractional Year	P/Zavg (psi)	Physical Balance (bcf)	Bestfit Lines x2	xy	n	I	m	Y	Z	slope (psi/bcf)	Y Intercept (psi)	X Intercept (bcf)	GIP for P/Z= 1080 (bcf)	Avg Slope Intercept	Selected Spring Intercept	Selected Fall Intercept
2001	3	15	2001.203	555	34.172	1.168E+03	1.896E+04										12.644		
2001	3	29	2001.246	508	32.151	1.034E+03	1.633E+04										12.442		
2001	4	15	2001.288	523	32.393	1.049E+03	1.694E+04										12.111		
2001	4	29	2001.329	549	33.282	1.108E+03	1.826E+04										11.998		
2001	5	15	2001.370	538	33.282	1.108E+03	1.789E+04	19	1.05E+03	5.98E+04	2.12E+04	1.23E+06	26.09	-318.4	12.203	41.396	12.427	11.848	
2001	5	29	2001.413	573	34.345	1.180E+03	1.969E+04										12.098		
2001	6	11	2001.447	628	35.977	1.294E+03	2.259E+04										11.615		
2001	8	1	2001.586	917	46.670	2.178E+03	4.281E+04										11.080		
2001	8	16.1	2001.625	992	49.800	2.480E+03	4.939E+04										11.323		
2001	8	27	2001.657	1043	52.155	2.720E+03	5.442E+04										11.677		
2001	9	17	2001.712	1264	60.504	3.661E+03	7.648E+04										11.464		
2001	10	1	2001.751	1362	64.333	4.139E+03	8.764E+04										11.479		
2001	10	16	2001.792	1412	66.214	4.384E+03	9.346E+04										11.453		
2001	10	31	2001.833	1348	63.332	4.011E+03	8.539E+04										11.022		
2001	11	15	2001.874	1357	64.516	4.162E+03	8.756E+04										11.861		
2001	11	30	2001.915	1409	66.507	4.423E+03	9.369E+04										11.855		
2001	12	5	2001.929	1420	66.815	4.464E+03	9.487E+04										11.730		
2002	1	1	2002.003	1422	66.891	4.474E+03	9.512E+04										11.721		11.737
2002	2	4	2002.096	1281	61.035	3.725E+03	7.816E+04										11.352		
2002	2	15	2002.126	1163	57.429	3.298E+03	6.680E+04										12.301		
2002	2	28	2002.162	1126	55.291	3.057E+03	6.223E+04										11.625		
2002	3	5	2002.175	1061	52.732	2.781E+03	5.593E+04										11.585		
2002	3	28	2002.238	907	47.480	2.254E+03	4.307E+04										12.284		
2002	4	15	2002.288	920	47.500	2.256E+03	4.368E+04										11.824		
2002	4	30	2002.329	922	47.500	2.256E+03	4.379E+04										11.732		
2002	5	15	2002.370	922	47.500	2.256E+03	4.379E+04										11.737	11.805	
2002	6	1	2002.416	937	48.212	2.324E+03	4.516E+04	20	1.06E+03	5.87E+04	2.11E+04	1.18E+06	26.62	-357.4	13.426	40.576	11.869	11.871	
2002	6	15	2002.455	1012	51.088	2.610E+03	5.169E+04										11.836		
2002	6	30	2002.496	1099	54.525	2.973E+03	5.994E+04										11.876		
2002	7	15	2002.537	1199	58.320	3.401E+03	6.993E+04										11.804		
2002	7	28	2002.573	1252	60.361	3.643E+03	7.555E+04										11.804		
2002	8	15	2002.622	1289	61.996	3.844E+03	7.989E+04										12.004		
2002	8	24	2002.647	1326	63.344	4.012E+03	8.400E+04										11.897		
2002	9	15	2002.707	1324	63.344	4.012E+03	8.387E+04										11.975		
2002	9	30	2002.748	1324	63.344	4.012E+03	8.387E+04										11.974		11.955
2002	10	15	2002.789	1335	63.692	4.057E+03	8.504E+04										11.894		
2002	10	31	2002.833	1282	61.538	3.787E+03	7.889E+04										11.803		
2002	11	15	2002.874	1262	60.533	3.664E+03	7.641E+04										11.563		
2002	11	30	2002.915	1228	59.773	3.573E+03	7.340E+04										12.128		
2002	12	15	2002.956	1163	57.131	3.264E+03	6.642E+04										12.030		
2002	12	30	2002.997	1100	54.797	3.003E+03	6.027E+04										12.125		
2003	1	15	2003.041	898	47.333	2.240E+03	4.249E+04										12.509		
2003	1	31	2003.085	644	38.015	1.445E+03	2.450E+04										13.014		

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0.5274 Mid Kimball
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Year	Month	Day	Fractional Year	P/Zavg (psi)	Physical Balance (bcf)	Bestfit Lines x2	xy	n	I	m	Y	Z	slope (psi/bcf)	Y Intercept (psi)	X Intercept (bcf)	GIP for P/Z= 1080 (bcf)	Avg Slope Intercept	Selected Spring Intercept	Selected Fall Intercept
2003	2	15	2003.126	511	32.653	1.066E+03	1.669E+04										12.828		
2003	2	28	2003.162	457	30.650	9.394E+02	1.401E+04										12.913		
2003	3	15	2003.203	418	29.077	8.454E+02	1.216E+04										12.848	12.116	
2003	3	31	2003.247	424	29.009	8.415E+02	1.230E+04										12.560		
2003	4	16	2003.290	398	28.107	7.900E+02	1.120E+04	22	1.19E+03	6.89E+04	2.37E+04	1.39E+06	25.85	-325.5	12.593	41.780	12.653	11.653	
2003	4	30	2003.329	479	30.962	9.587E+02	1.482E+04										12.398		
2003	5	15	2003.370	600	35.624	1.269E+03	2.136E+04										12.359		
2003	5	31	2003.414	790	42.521	1.808E+03	3.361E+04										11.856		
2003	6	15	2003.455	1032	52.137	2.718E+03	5.382E+04										12.090		
2003	6	30	2003.496	1235	60.162	3.620E+03	7.433E+04										12.230		
2003	7	13	2003.532	1333	64.063	4.104E+03	8.538E+04										12.357		
2003	7	31	2003.581	1324	64.063	4.104E+03	8.482E+04										12.693		
2003	8	15	2003.622	1324	64.137	4.114E+03	8.490E+04										12.780		
2003	8	31	2003.666	1334	64.491	4.159E+03	8.604E+04										12.732		
2003	9	15	2003.707	1358	65.330	4.268E+03	8.873E+04										12.638		
2003	9	30	2003.748	1359	65.330	4.268E+03	8.880E+04										12.593		12.595
2003	10	15	2003.789	1373	65.768	4.325E+03	9.032E+04										12.488		
2003	10	31	2003.833	1373	65.768	4.325E+03	9.028E+04										12.509		
2003	11	12	2003.866	1389	66.542	4.428E+03	9.243E+04										12.653		
2003	11	30	2003.915	1411	67.121	4.505E+03	9.471E+04										12.382		
2003	12	14	2003.953	1310	63.352	4.014E+03	8.299E+04										12.530		
2003	12	29	2003.995	1315	63.352	4.014E+03	8.331E+04										12.334		
2004	1	14	2004.038	1101	53.764	2.891E+03	5.918E+04										11.056		
2004	1	31	2004.085	765	42.585	1.813E+03	3.256E+04										12.923		
2004	2	15	2004.126	585	35.731	1.277E+03	2.090E+04										13.043		
2004	2	29	2004.164	538	34.000	1.156E+03	1.831E+04										13.112		
2004	3	15	2004.205	582	35.211	1.240E+03	2.051E+04										12.617		
2004	3	30	2004.246	635	37.310	1.392E+03	2.371E+04										12.660		
2004	4	15	2004.290	626	36.607	1.340E+03	2.291E+04										12.330		
2004	4	30	2004.331	638	37.792	1.428E+03	2.411E+04										13.043		
2004	5	14	2004.369	788	42.344	1.793E+03	3.338E+04										11.757		
2004	5	31	2004.415	777	42.344	1.793E+03	3.292E+04										12.184		
2004	6	15	2004.456	774	42.344	1.793E+03	3.278E+04										12.309	12.526	
2004	7	1	2004.500	772	42.344	1.793E+03	3.271E+04	18	9.85E+02	5.62E+04	1.93E+04	1.12E+06	25.98	-346.3	13.332	41.575	12.378	12.560	
2004	7	15	2004.538	873	46.340	2.147E+03	4.046E+04										12.464		
2004	7	31	2004.582	1050	53.240	2.834E+03	5.593E+04										12.486		
2004	8	15	2004.623	1195	59.036	3.485E+03	7.056E+04										12.665		
2004	8	31	2004.667	1315	63.744	4.063E+03	8.383E+04										12.721		
2004	9	15	2004.708	1317	64.075	4.106E+03	8.437E+04										12.987		13.046
2004	9	30	2004.749	1319	64.236	4.126E+03	8.473E+04										13.060		
2004	10	15	2004.790	1356	65.717	4.319E+03	8.914E+04										13.095		
2004	10	31	2004.833	1372	66.231	4.387E+03	9.084E+04										13.018		
2004	11	15	2004.874	1339	65.224	4.254E+03	8.736E+04										13.260		

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Year	Month	Day	Fractional Year	P/Zavg (psi)	Physical Balance (bcf)	Bestfit Lines x2	xy	n	I	m	Y	Z	slope (psi/bcf)	Y Intercept (psi)	X Intercept (bcf)	GIP for P/Z= 1080 (bcf)	Avg Slope Intercept	Selected Spring Intercept	Selected Fall Intercept
2004	11	30	2004.915	1342	65.018	4.227E+03	8.727E+04										12.946		
2004	12	15	2004.956	1327	64.535	4.165E+03	8.562E+04										13.063		
2004	12	31	2005.000	1182	59.252	3.511E+03	7.006E+04										13.377		
2005	1	15	2005.041	1101	55.437	3.073E+03	6.103E+04										12.724		
2005	1	31	2005.085	791	44.031	1.939E+03	3.484E+04										13.329		
2005	2	15	2005.126	646	38.723	1.500E+03	2.500E+04										13.676		
2005	2	28	2005.162	549	34.731	1.206E+03	1.906E+04										13.437		
2005	3	12	2005.195	502	32.938	1.085E+03	1.653E+04										13.468		
2005	3	31	2005.246	517	33.201	1.102E+03	1.716E+04										13.150		
2005	4	15	2005.287	514	32.856	1.080E+03	1.688E+04										12.922		
2005	4	30	2005.329	521	33.035	1.091E+03	1.720E+04	23	1.22E+03	6.77E+04	2.38E+04	1.33E+06	25.09	-300.0	11.959	43.054	12.841	12.728	
2005	5	15	2005.370	569	34.826	1.213E+03	1.982E+04										12.750		
2005	5	31	2005.413	670	38.521	1.484E+03	2.581E+04										12.528		
2005	6	15	2005.454	706	40.027	1.602E+03	2.828E+04										12.618		
2005	6	30	2005.496	721	40.572	1.646E+03	2.924E+04										12.610		
2005	7	15	2005.537	811	44.196	1.953E+03	3.582E+04										12.748		
2005	7	31	2005.580	972	50.601	2.560E+03	4.920E+04										12.881		
2005	8	15	2005.621	1128	56.616	3.205E+03	6.388E+04										12.839		
2005	8	31	2005.665	1265	62.383	3.892E+03	7.893E+04										13.295		
2005	9	15	2005.706	1326	64.732	4.190E+03	8.585E+04										13.281		
2005	9	30	2005.747	1326	64.824	4.202E+03	8.596E+04										13.378		13.718
2005	10	15	2005.789	1377	66.733	4.453E+03	9.191E+04										13.302		
2005	10	31	2005.832	1333	65.224	4.254E+03	8.695E+04										13.504		
2005	11	15	2005.873	1346	65.554	4.297E+03	8.821E+04										13.349		
2005	11	30	2005.914	1318	64.549	4.167E+03	8.505E+04										13.432		
2005	12	15	2005.956	1247	62.004	3.844E+03	7.733E+04										13.615		
2005	12	31	2005.999	1221	60.752	3.691E+03	7.417E+04										13.387		
2006	1	15	2006.041	1137	57.377	3.292E+03	6.522E+04										13.279		
2006	1	31	2006.085	1054	54.300	2.948E+03	5.721E+04										13.424		
2006	2	15	2006.126	1016	52.796	2.787E+03	5.366E+04										13.363		
2006	2	28	2006.162	984	50.973	2.598E+03	5.016E+04										12.794		
2006	3	15	2006.203	933	48.394	2.342E+03	4.516E+04										12.187		
2006	3	31	2006.246	801	44.136	1.948E+03	3.536E+04										13.057		
2006	4	15	2006.287	770	42.860	1.837E+03	3.298E+04	23	1.27E+03	7.32E+04	2.53E+04	1.47E+06	25.97	-341.6	13.150	41.580	13.003		
2006	4	30	2006.329	838	45.343	2.056E+03	3.800E+04										12.832		
2006	5	15	2006.370	848	45.644	2.083E+03	3.870E+04										12.753		
2006	5	31	2006.413	847	45.644	2.083E+03	3.865E+04										12.796	12.775	
2006	6	15	2006.454	931	48.690	2.371E+03	4.535E+04										12.554		
2006	6	30	2006.496	1034	52.724	2.780E+03	5.454E+04										12.593		
2006	7	15	2006.537	1141	56.853	3.232E+03	6.486E+04										12.591		
2006	7	31	2006.580	1226	60.178	3.621E+03	7.380E+04										12.598		
2006	8	15	2006.621	1282	62.336	3.886E+03	7.992E+04										12.595		
2006	8	31	2006.665	1335	64.499	4.160E+03	8.610E+04										12.708		

Table 4
Kimball Colinville Pressure Summary
Best Fit Analysis
Dawn Metered Volumes

0.3461 South Kimball
0.1265 A-1
0.5274 Mid Kimball
0.0000 Colinville

Year	Month	Day	Fractional Year	P/Zavg (psi)	Physical Balance (bcf)	Bestfit Lines x2	xy	n	I	m	Y	Z	slope (psi/bcf)	Y Intercept (psi)	X Intercept (bcf)	GIP for P/Z= 1080 (bcf)	Avg Slope Intercept	Selected Spring Intercept	Selected Fall Intercept
2006	9	15	2006.706	1326	64.610	4.174E+03	8.569E+04										13.157		
2006	9	30	2006.747	1330	64.793	4.198E+03	8.618E+04										13.191		
2006	10	15	2006.789	1340	65.276	4.261E+03	8.745E+04										13.300		
2006	10	31	2006.832	1324	64.884	4.210E+03	8.591E+04										13.517		13.409
2006	11	15	2006.873	1366	65.545	4.296E+03	8.954E+04										12.546		
2006	11	30	2006.914	1386	66.301	4.396E+03	9.190E+04										12.523		
2006	12	15	2006.956	1324	64.364	4.143E+03	8.523E+04										12.989		
2006	12	31	2006.999	1351	65.000	4.225E+03	8.783E+04										12.574		
2007	1	15	2007.041	1345	64.310	4.136E+03	8.650E+04										12.127		
2007	1	31	2007.085	1062	53.580	2.871E+03	5.688E+04										12.397		
2007	2	15	2007.126	744	41.934	1.758E+03	3.120E+04										13.073		
2007	2	28	2007.162	580	35.810	1.282E+03	2.076E+04										13.323		
2007	3	15	2007.203	527	33.664	1.133E+03	1.773E+04										13.225		
2007	3	31	2007.246	575	35.260	1.243E+03	2.028E+04	19	1.02E+03	5.75E+04	2.02E+04	1.15E+06	25.56	-312.0	12.203	42.248	12.942		
2007	4	15	2007.287	585	35.273	1.244E+03	2.062E+04										12.590	12.766	
2007	4	30	2007.329	610	36.269	1.315E+03	2.212E+04										12.609		
2007	5	15	2007.370	698	39.394	1.552E+03	2.749E+04										12.317		
2007	5	31	2007.413	773	42.030	1.767E+03	3.250E+04										12.034		
2007	6	15	2007.454	839	44.728	2.001E+03	3.754E+04										12.162		
2007	6	30	2007.496	941	48.662	2.368E+03	4.578E+04										12.164		
2007	7	15	2007.537	990	50.695	2.570E+03	5.020E+04										12.275		
2007	7	31	2007.580	1105	55.350	3.064E+03	6.119E+04										12.461		
2007	8	15	2007.621	1225	60.215	3.626E+03	7.374E+04										12.707		
2007	8	31	2007.665	1330	64.179	4.119E+03	8.537E+04										12.573		
2007	9	15	2007.706	1346	64.871	4.208E+03	8.731E+04										12.654		
2007	9	30	2007.747	1343	64.871	4.208E+03	8.714E+04										12.755		
2007	10	15	2007.789	1342	64.871	4.208E+03	8.708E+04										12.791		13.057
2007	10	31	2007.832	1363	65.676	4.313E+03	8.953E+04										12.788		
2007	11	15	2007.873	1367	65.793	4.329E+03	8.991E+04										12.774		
2007	11	30	2007.914	1336	64.532	4.164E+03	8.620E+04										12.706		
2007	12	15	2007.956	1265	61.317	3.760E+03	7.757E+04										12.236		
2007	12	31	2007.999	1191	59.055	3.487E+03	7.034E+04										12.846		

1) Storage Slope and GIP Averages

	slope (psi/bcf)	GIP for P/Z= 1080 (bcf)
Pre-1990 Average:	25.83	41.817
1990-1999 Average:	26.03	41.492
2000-2008 Average:	25.94	41.627
1990-2008 Average:	25.99	41.552

TABLE 5
SECKERTON
PRESSURE SUMMARY
1964 THROUGH 2007 STORAGE CYCLES
DAWN METERED VOLUMES

Year	Month	Day	Fractional Year	Physical Balance (bcf)	SI Time (weeks)	Average WH Press (psig)	Extrap. WH Press (psig)	Avg P/Z (psia)	Slope (psi/bcf)	Spring Intercept (bcf)	Fall Intercept (bcf)	GIP for Pi/Zi= 1,080 (bcf)
1964	6	1	1964.416	5.993	NA	422	422	490	86.50	0.359		12.486
1969	4	29	1969.326	4.701	4	342	357	413	86.50	-0.041		12.486
1969	12	1	1969.917	12.558	8	900	892	1,100	87.40		-0.077	12.357
1970	7	31	1970.580	5.111	12	400	404	469	84.70	-0.274		12.751
1970	10	31	1970.832	13.052	3	942	928	1,150	85.73		-0.158	12.598
1971	7	1	1971.498	5.841	10	440	446	519	87.38	-0.126		12.360
1971	12	14	1971.953	12.898	2	920	902	1,113	84.15		0.105	12.834
1972	7	4	1972.507	3.783	9	295	302	348	83.93	-0.217		12.867
1972	11	6	1972.849	8.710	1	670	648	773	86.13		-0.168	12.539
1973	6	1	1973.416	5.153	6	410	421	489	79.65	-0.468		13.560
1973	10	24	1973.813	13.411	1	974	950	1,180	83.66		-0.150	12.909
1974	5	1	1974.331	6.193	5	481	495	579	83.22	-0.464		12.978
1974	11	1	1974.835	14.305	8	1,026	1,018	1,276	85.83		-0.355	12.583
1975	6	2	1975.419	4.979	10	388	394	457	87.82	-0.268		12.298
1975	11	12	1975.865	14.522	4	1,050	1,045	1,314	89.83		-0.578	12.022
1976	7	5	1976.509	4.502	13	374	377	437	87.57	-0.513		12.333
1976	9	22	1976.726	14.106	2	1,046	1,028	1,290	88.86		-0.717	12.154
1977	7	20	1977.550	3.119	16	297	297	342	86.24	-0.815		12.523
1977	11	23	1977.895	14.763	3	1,098	1,084	1,370	88.21		-0.975	12.244
1978	7	4	1978.507	4.285	20	404	404	469	85.97	-1.100		12.563
1978	10	23	1978.810	14.809	4	1,106	1,094	1,384	86.95		-1.093	12.421
1979	7	19	1979.548	4.280	19	404	404	469	86.91	-1.105		12.427
1979	10	17	1979.794	14.218	1.5	1,078	1,058	1,332	86.91		-1.094	12.427
1980	7	30	1980.578	4.433	19	407	407	472	87.90	-0.994		12.287
1980	10	15	1980.789	14.549	1	1,089	1,067	1,345	86.29		-0.910	12.516
1981	7	22	1981.556	3.915	23	359	359	415	87.46	-0.855		12.348
1981	11	4	1981.843	14.769	4	1,090	1,078	1,361	87.14		-0.871	12.394
1982	7	14	1982.534	3.930	18	346	346	400	88.68	-0.662		12.178
1982	11	3	1982.841	14.077	4	1,036	1,024	1,284	87.17		-0.681	12.390
1983	6	29	1983.493	4.358	12	380	384	445	86.36	-0.753		12.505
1983	10	26	1983.819	14.915	6	1,084	1,074	1,355	86.24		-0.659	12.524
1984	6	20	1984.468	3.119	11	273	278	321	87.71	-0.564		12.313
1984	11	7	1984.851	14.883	9	1,080	1,073	1,354	87.83		-0.675	12.296
1985	5	8	1985.350	3.931	7	330	339	392	87.86	-0.568		12.292
1985	11	5	1985.846	15.283	5	1,099	1,088	1,375	86.64		-0.520	12.465
1986	6	25	1986.482	3.447	17	300	300	346	86.96	-0.527		12.419
1986	12	3	1986.923	14.998	8	1,080	1,072	1,352	87.14		-0.543	12.394
1987	4	27	1987.320	3.877	9	315	322	372	88.19	-0.392		12.246
1987	10	12	1987.780	14.970	13	1,070	1,067	1,345	87.78		-0.490	12.304
1988	5	6	1988.345	4.176	11	335	340	393	88.25	-0.336		12.238
1988	10	24	1988.813	15.273	15	1,081	1,080	1,364	87.51		-0.399	12.342
1989	5	10	1989.356	5.243	11	404	409	475	88.64	-0.211		12.184
1989	10	11	1989.778	15.329	10	1,077	1,071	1,351	86.88		-0.196	12.431
1990	4	25	1990.315	4.576	10	342	348	402	88.24	-0.044		12.239
1990	10	3	1990.756	15.342	12	1,069	1,065	1,342	87.34		-0.084	12.366
1991	4	24	1991.312	4.108	11	298	303	349	88.40	0.094		12.218
1991	11	15	1991.873	15.560	5	1,076	1,065	1,342	86.72		0.133	12.454
1992	4	29	1992.326	4.180	11	295	300	346	87.57	0.206		12.333
1992	10	28	1992.824	15.794	14	1,083	1,081	1,365	87.77		0.105	12.305
1993	4	28	1993.323	5.008	11	350	355	410	88.53	0.293		12.200
1993	10	27	1993.821	15.714	15	1,069	1,068	1,347	87.46		0.238	12.349
1994	6	1	1994.416	5.467	5	375	386	447	87.78	0.329		12.303
1994	10	19	1994.799	16.166	7	1,083	1,074	1,355	84.88		0.591	12.724
1995	6	1	1995.416	5.499	15	366	367	425	87.25	0.620		12.379
1995	9	30	1995.747	16.067	2	1,080	1,062	1,338	86.44		0.690	12.495
1996	6	11	1996.444	4.324	13	276	279	322	86.55	0.628		12.478
1996	11	18	1996.882	15.068	3	1,027	1,013	1,269	88.13		0.489	12.254
1997	6	8	1997.435	4.573	12	292	296	341	88.37	0.653		12.222
1997	11	10	1997.860	16.749	4	1,110	1,098	1,389	86.09		0.782	12.545
1998	5	27	1998.402	6.315	16	405	405	470	88.13	0.916		12.255
1998	12	16	1998.958	16.938	8	1,100	1,092	1,381	85.76		1.069	12.594
1999	7	22	1999.556	5.812	22	366	366	424	86.06	0.947		12.550
1999	12	20	1999.969	16.736	4	1,101	1,088	1,375	87.12		0.933	12.396
2000	6	22	2000.474	5.597	16	342	342	398	87.75	1.028		12.307

TABLE 5
SECKERTON
PRESSURE SUMMARY
1964 THROUGH 2007 STORAGE CYCLES
DAWN METERED VOLUMES

Year	Month	Day	Fractional Year	Physical Balance (bcf)	SI Time (weeks)	Average WH Press (psig)	Extrap. WH Press (psig)	Avg P/Z (psia)	Slope (psi/bcf)	Spring Intercept (bcf)	Fall Intercept (bcf)	GIP for Pi/Zi= 1,080 (bcf)	
2000	11	15	2000.873	17.113	4	1,106	1,102	1,408	87.69		0.938	12.316	
2001	6	5	2001.427	5.993	6	353	360	420	88.86	1.174		12.154	*2
2001	11	23	2001.895	17.029	4	1,098	1,098	1,402	89.05		0.914	12.128	
2002	6	30	2002.496	7.420	4	462	461	542	89.54	1.194		12.062	
2002	12	8	2002.936	12.453	2	801	801	984	87.80		1.147	12.300	
2003	8	30	2003.663	5.542	21	324	340	396	85.11	0.996		12.690	*2
2003	12	6	2003.931	16.623	5	1,074	1,072	1,365	87.46		0.939	12.348	
2004	8	23	2004.643	5.950	27	362	364	424	88.13	1.076		12.255	*2
2004	11	29	2004.912	16.719	4	1,089	1,086	1,385	89.21		0.804	12.106	
2005	5	31	2005.413	5.952	3	364	364	424	89.22	1.078		12.104	*2
2005	11	23	2005.895	16.683	5	1,089	1,078	1,352	86.44		1.233	12.495	
2006	3	25	2006.230	6.256	3	360	374	430	88.40	1.340		12.218	
2006	10	10	2006.775	16.453	2	1,070	1,052	1,314	86.72		1.431	12.454	
2007	8	7	2007.600	6.194	16	357	358	412	87.98	1.488		12.275	*2
2007	11	6	2007.849	17.513	2	1,130	1,112	1,401	87.37		1.504	12.361	

1) Storage Slope and GIP Averages

Pre-1990 Average:	86.72	12.453
1990-1999 Average:	87.23	12.381
2000-2008 Average:	87.92	12.284
1980-2008 Average:	87.50	12.343

2) Spring intercept only an estimate as solution gas injection was occurring

TABLE 6
CORUNNA
PRESSURE SUMMARY
1964 THROUGH 2007 STORAGE CYCLES
DAWN METERED VOLUMES

Year	Month	Day	Fractional Year	Physical Balance (bcf)	SI Time (weeks)	Average WH Press (psig)	Extrap. WH Press (psig)	Avg P/Z (psia)	Slope (psi/bcf)		Spring Intercept (bcf)	Fall Intercept (bcf)	GIP for Pi/Zi= 1,080 (bcf)
1964	6	9	1964.441	2.289	NA	279	279	322		219.03	0.820		4.931
1969	4	23	1969.313	3.291	3	375	387	448		219.03	1.243		4.931
1969	12	1	1969.919	6.114	6	886	879	1,082		224.25		1.187	4.816
1970	7	31	1970.585	3.329	15	388	389	451		226.52	1.276		4.768
1970	10	31	1970.835	6.317	4	928	917	1,134		228.72		1.150	4.722
1971	6	2	1971.422	3.651	8	450	455	530		226.47	1.235		4.769
1972	1	6	1972.016	6.433	8	925	920	1,138		218.56		1.247	4.942
1972	11	6	1972.850	3.225	30	395	395	458		212.07	1.138		5.093
1973	6	1	1973.419	2.435	21	257	257	296		204.76	1.085		5.275
1973	11	1	1973.836	6.677	3	979	966	1,203		213.66		1.198	5.055
1974	6	5	1974.430	4.122	11	546	548	645		218.04	1.181		4.953
1974	11	1	1974.836	6.818	8	1,006	1,001	1,252		224.82		1.116	4.804
1975	7	9	1975.525	3.182	15	400	401	465		216.33	1.063		4.992
1975	11	12	1975.866	7.378	6	1,045	1,038	1,304		199.93		1.437	5.402
1976	3	31	1976.252	4.009	12	492	494	578		215.45	1.375		5.013
1976	10	13	1976.786	7.341	6	1,050	1,047	1,317		221.71		1.342	4.871
1977	7	13	1977.536	3.177	14	344	345	399		220.54	1.361		4.897
1977	11	14	1977.872	7.722	2	1,102	1,086	1,372		214.28		1.469	5.040
1978	6	28	1978.493	3.648	23	428	428	498		214.74	1.381		5.029
1978	10	23	1978.813	7.653	4	1,093	1,082	1,367		217.00		1.427	4.977
1979	7	10	1979.527	3.618	23	413	413	480		219.87	1.433		4.912
1979	10	24	1979.816	7.781	4	1,102	1,091	1,380		216.21		1.496	4.995
1980	7	30	1980.582	3.787	22	435	435	506		218.67	1.481		4.939
1980	10	22	1980.810	7.227	2	1,081	1,065	1,342		243.06		1.112	4.443
1981	7	15	1981.541	2.985	23	346	346	400		222.20	1.164		4.861
1981	10	28	1981.827	7.254	3	1,080	1,067	1,345		221.46		1.126	4.877
1982	7	21	1982.558	2.965	24	372	372	431		213.27	1.004		5.064
1982	11	10	1982.861	6.954	6	1,044	1,037	1,303		218.62		1.020	4.940
1983	7	13	1983.536	3.078	22	388	388	450		220.06	1.029		4.908
1983	10	26	1983.821	7.137	6	1,083	1,076	1,358		223.83		0.950	4.825
1984	6	27	1984.491	3.058	18	380	380	440		225.08	1.053		4.798
1984	11	7	1984.853	7.283	9	1,086	1,082	1,367		219.30		1.057	4.925
1985	5	29	1985.413	3.418	16	421	421	489		227.00	1.189		4.758
1985	11	5	1985.847	7.501	6	1,085	1,078	1,361		213.50		1.301	5.059
1986	8	6	1986.600	3.063	24	347	347	401		216.32	1.237		4.993
1986	11	5	1986.847	7.228	0.5	1,071	1,048	1,318		220.24		1.223	4.904
1987	5	11	1987.363	2.976	14	331	332	383		219.84	1.229		4.913
1987	11	4	1987.844	7.341	4	1,079	1,068	1,347		220.69		1.206	4.894
1988	4	18	1988.299	3.051	12	334	336	388		223.47	1.283		4.833
1988	10	10	1988.777	7.062	13	1,036	1,035	1,300		227.35		1.140	4.750
1989	5	10	1989.361	3.006	15	352	353	408		219.89	1.147		4.912
1989	10	11	1989.780	7.462	10	1,077	1,074	1,355		212.58		1.287	5.081
1990	5	16	1990.377	3.037	13	328	330	381		220.15	1.300		4.906
1990	11	7	1990.853	7.512	17	1,068	1,067	1,345		215.47		1.383	5.012
1991	7	10	1991.527	3.216	22	342	342	395		221.22	1.416		4.882
1991	10	23	1991.813	7.461	6	1,076	1,069	1,348		224.55		1.318	4.810
1992	3	25	1992.235	3.134	10	328	331	382		223.27	1.393		4.837
1992	10	28	1992.827	7.466	14	1,068	1,067	1,345		222.35		1.337	4.857
1993	4	28	1993.327	3.229	14	344	345	399		223.45	1.413		4.833
1993	10	27	1993.824	7.317	10	1,052	1,049	1,320		225.29		1.305	4.794
1994	6	29	1994.496	3.159	19	361	361	418		216.96	1.257		4.978
1994	10	17	1994.797	7.319	7	1,056	1,050	1,321		217.19		1.301	4.973
1995	6	2	1995.422	3.680	17	441	441	513		221.91	1.341		4.867
1995	10	11	1995.780	7.283	5	1,042	1,033	1,297		217.47		1.374	4.966
1996	7	3	1996.508	2.904	15	290	291	336		219.58	1.376		4.918
1996	10	31	1996.835	7.703	4	1,092	1,081	1,365		214.59		1.483	5.033
1997	6	8	1997.439	3.074	10	290	293	338		221.95	1.535		4.866
1997	10	26	1997.821	7.891	6	1,094	1,087	1,374		215.07		1.632	5.022
1998	8	7	1998.603	3.577	25	371	371	429		218.92	1.620		4.933
1998	12	10	1998.944	7.919	7	1,090	1,084	1,370		216.53		1.679	4.988
1999	7	1	1999.503	3.619	21	379	379	439		216.42	1.619		4.990
1999	11	1	1999.836	7.857	9	1,074	1,070	1,350		214.86		1.708	5.027
2000	6	22	2000.475	3.581	17	365	368	426		216.00	1.640		5.000
2000	10	25	2000.817	7.943	8	1,087	1,085	1,371		215.56		1.697	5.010
2001	4	15	2001.288	3.304	3	295	295	340		222.28	1.755		4.859
2001	12	10	2001.942	8.069	7	1,107	1,107	1,403		223.05		1.678	4.842
2002	6	20	2002.468	3.615	18	351	350	404		224.10	1.772		4.819
2002	11	16	2002.877	8.051	5	1,102	1,100	1,392		222.69		1.707	4.850
2003	8	14	2003.619	3.243	18	278	285	329		221.27	1.746		4.881
2003	12	6	2003.932	7.987	5	1,084	1,082	1,367		218.83		1.760	4.935
2004	5	18	2004.380	3.325	13	287	295	340		220.20	1.775		4.905
2004	11	29	2004.912	8.228	12	1,095	1,095	1,385		213.15		1.917	5.067

TABLE 6
CORUNNA
PRESSURE SUMMARY
1964 THROUGH 2007 STORAGE CYCLES
DAWN METERED VOLUMES

Year	Month	Day	Fractional Year	Physical Balance (bcf)	SI Time (weeks)	Average WH Press (psig)	Extrap. WH Press (psig)	Avg P/Z (psia)	Slope (psi/bcf)		Spring Intercept (bcf)	Fall Intercept (bcf)	GIP for Pi/Zi= 1,080 (bcf)	
2005	5	31	2005.413	3.598	17	324	324	374		218.41	1.894		4.945	*2
2005	10	11	2005.778	7.909	2	1,074	1,058	1,324		220.33		1.899	4.902	
2006	3	19	2006.214	3.707	8	339	345	397		220.66	1.907		4.894	*2
2006	11	30	2006.914	8.029	6	1,089	1,081	1,357		222.10		1.871	4.863	
2007	4	4	2007.257	3.813	6	359	367	423		221.53	1.895		4.875	*2
2007	10	4	2007.758	7.708	2	1,049	1,031	1,285		221.47		1.874	4.876	

1) Storage Slope and GIP Averages

Pre-1990 Average:	219.49	4.921
1990-1999 Average:	219.53	4.920
2000-2008 Average:	220.38	4.901
1980-2008 Average:	220.27	4.903

2) Estimate only as continuous solution gas withdrawal takes place

TABLE 7
WILKESPORT
PRESSURE SUMMARY
1978 THROUGH 2007 STORAGE CYCLES
DAWN METERED VOLUMES

Year	Month	Day	Fractional Year	Physical Balance (bcf)	SI Time (weeks)	Average WH Press (psig)	Extrap. WH Press (psig)	Avg P/Z (psia)	Slope (psi/bcf)	Spring Intercept (bcf)	Fall Intercept (bcf)	GIP for Pi/Zi= 1,080 (bcf)	
1978	7	20	1978.555	0.000	20+	27	30	47	139.30	-0.334		7.753	
1978	11	22	1978.894	9.366	3	1,071	1,057	1,331	137.15		-0.185	7.875	
1979	6	22	1979.477	2.898	16	188	376	435	138.48	-0.225		7.799	
1979	12	12	1979.950	9.686	12	1,077	1,074	1,355	135.53		-0.039	7.969	
1980	4	9	1980.275	2.786	1	379	360	416	136.08	-0.200		7.936	
1980	11	5	1980.847	9.729	14	1,086	1,085	1,371	137.50		-0.109	7.855	
1981	3	31	1981.252	2.726	2	348	324	374	142.36	0.043		7.586	
1981	9	16	1981.711	9.104	8	1,016	1,010	1,264					
1981	12	2	1981.922	9.952	8	1,092	1,087	1,374	138.35		0.094	7.806	
1982	3	31	1982.252	2.869	3	369	349	403					
1982	6	16	1982.461	2.653	8	338	329	380	136.18	-0.071		7.931	
1982	11	24	1982.899	9.678	8	1,069	1,063	1,340	136.63		0.065	7.904	
1983	6	29	1983.496	3.082	8	371	368	426	138.54	0.027		7.796	
1983	12	14	1983.955	8.586	6	979	970	1,208	142.14		-0.084	7.598	
1984	5	23	1984.396	2.409	8	307	286	330	142.21	0.044		7.595	
1984	12	5	1984.930	9.985	12	1,095	1,093	1,382	138.94		0.065	7.773	
1985	4	17	1985.297	2.821	4	348	331	382	139.60	0.079		7.736	
1985	9	18	1985.716	9.840	14	1,072	1,070	1,350	137.82		0.155	7.836	
1985	11	27	1985.907	10.202	8	1,102	1,100	1,392					
1986	4	16	1986.294	2.526	3	308	300	346	136.32	0.045		7.923	
1986	9	24	1986.732	9.905	12	1,084	1,082	1,367	138.33		0.098	7.807	
1987	1	14	1987.038	10.142	14	1,103	1,103	1,397					
1987	4	20	1987.305	2.985	5	333	344	397	139.61	0.134		7.736	
1987	9	28	1987.743	9.469	16	1,045	1,045	1,314	141.34		0.040	7.641	
1987	11	18	1987.883	10.063	4	1,098	1,095	1,385					
1988	3	18	1988.216	5.353	7	608	617	733	141.19	0.097		7.649	
1988	10	10	1988.777	9.984	19	1,085	1,085	1,371	137.80		0.146	7.837	
1989	4	5	1989.264	3.266	13	180	362	419	141.73	0.262		7.620	
1989	10	20	1989.805	9.876	16	1,067	1,066	1,344	139.95		0.233	7.717	
1990	4	25	1990.318	2.831	13	150	301	347	141.48	0.341		7.633	
1990	9	14	1990.705	9.941	13	1,072	1,070	1,350	141.00		0.257	7.660	
1991	4	26	1991.321	3.023	9	161	328	379	140.35	0.307		7.695	
1991	8	30	1991.666	10.200	9	1,081	1,078	1,361	136.87		0.434	7.891	
1992	3	27	1992.241	3.006	11	149	302	348	140.77	0.508		7.672	
1992	10	9	1992.775	10.037	17	1,056	1,057	1,331	139.79		0.485	7.726	
1993	4	30	1993.332	2.866	11	130	265	306	143.01	0.674		7.552	
1993	11	19	1993.885	10.584	13	1,096	1,095	1,385	139.89		0.644	7.720	
1994	4	15	1994.291	2.892	5	282	295	340	135.88	0.453		7.948	
1994	10	14	1994.788	10.389	6	1,096	1,091	1,380	138.65		0.490	7.790	
1995	4	28	1995.327	3.180	11	334	338	390	137.20	0.379		7.872	
1995	9	8	1995.689	9.756	8	1,052	1,048	1,318	141.09		0.296	7.654	
1996	4	18	1996.299	2.502	11	257	261	301	140.23	0.343		7.701	
1996	11	1	1996.836	10.261	4	1,101	1,095	1,385	139.73		0.321	7.729	
1997	3	17	1997.213	2.858	7	286	295	340	141.16	0.418		7.651	
1997	10	12	1997.783	10.560	6	1,111	1,106	1,401	137.74		0.506	7.841	
1998	3	25	1998.235	3.125	9	315	321	371	138.60	0.467		7.792	
1998	12	8	1998.939	10.722	16	1,121	1,121	1,423	138.49		0.514	7.799	
1999	4	30	1999.332	3.178	0	326	332	383	137.76	0.428		7.840	
1999	10	7	1999.767	10.105	5	1,082	1,076	1,358	140.71		0.359	7.675	
2000	4	30	2000.331	3.769	8	389	396	459	141.87	0.475		7.612	
2000	9	14	2000.705	10.264	11	1,082	1,080	1,364	139.28		0.477	7.754	
2001	4	26	2001.318	3.152	2	297	319	368	140.00	0.511		7.714	
2001	8	25	2001.649	11.037	4	1,162	1,156	1,473	140.15		0.465	7.706	
2002	5	31	2002.414	9.004	4	958	958	1,191	138.59	0.458		7.793	
2002	12	17	2002.962	11.236	16	1,164	1,165	1,486	138.32		0.570	7.808	
2003	5	28	2003.405	3.300	8	323	325	375	140.01	0.609		7.714	
2003	12	31	2004.000	11.025	17	1,146	1,145	1,457	140.07		0.568	7.710	
2004	3	18	2004.213	4.471	3	445	450	524	142.37	0.711		7.586	
2004	11	30	2004.914	11.355	21	1,173	1,171	1,495	141.06		0.626	7.657	
2005	4	14	2005.285	5.127	5	516	517	607	142.65	0.775		7.571	
2006	1	2	2006.005	11.393	19	1,164	1,164	1,476	138.68		0.817	7.788	
2006	3	18	2006.211	9.263	6	935	943	1,161	147.76	0.846		7.309	*2
2006	8	6	2006.597	11.467	7	1,159	1,165	1,478	143.86		0.874	7.507	
2007	3	26	2007.233	8.445	1	849	872	1,064	137.01	0.978		7.883	*2

TABLE 7
WILKESPORT
PRESSURE SUMMARY
1978 THROUGH 2007 STORAGE CYCLES
DAWN METERED VOLUMES

Year	Month	Day	Fractional Year	Physical Balance (bcf)	SI Time (weeks)	Average WH Press (psig)	Extrap. WH Press (psig)	Avg P/Z (psia)	Slope (psi/bcf)	Spring Intercept (bcf)	Fall Intercept (bcf)	GIP for Pi/Zi= 1,080 (bcf)
2007	12	26	2007.986	11.688	24	1,167	1,167	1,480	128.23		1.082	8.422

1) Storage Slope and GIP Averages

Pre-1990 Average:		139.06	7.766
1990-1999 Average:		139.52	7.741
2000-2006 Average:		140.25	7.700
1980-2006 Average:		139.54	7.740

2) Insufficient buildup. Intercepts estimated from fall data

TABLE 8
DOW MOORE
PRESSURE SUMMARY
1988 THROUGH 2005 STORAGE CYCLES
DAWN METERED VOLUMES

Year	Month	Day	Fractional Year	Physical Balance (bcf)	SI Time (weeks)	Average WH Press (psig)	Extrap. WH Press (psig)	Avg P/Z (psia)	Slope (psi/bcf)	Spring Intercept (bcf)	Fall Intercept (bcf)	GIP for Pi/Zi= 1,192 (bcf)
58												
1988	9	1	1988.669	2.352	NA	147	148	174	57.51	-0.681		20.724
1989	1	9	1989.025	17.387	12	836	835	1,021	56.31		-0.433	21.166
1989	7	26	1989.571	5.395	5	296	307	354	55.63	-0.772		21.427
1990	1	11	1990.030	22.872	12	1,054	1,053	1,326	55.60		-0.278	21.438
1990	6	16	1990.461	10.107	8	496	504	591	57.58	-0.191		20.698
1990	12	19	1990.969	25.531	17	1,141	1,141	1,452	55.84		0.180	21.343
1991	7	17	1991.547	17.007	12	793	796	969	56.60	0.103		21.057
1991	11	20	1991.888	25.363	8	1,126	1,124	1,427	54.74		0.444	21.776
1992	5	20	1992.388	5.563	4	247	259	299	56.97	0.357		20.921
1993	1	28	1993.077	24.667	14	1,094	1,094	1,383	56.77		0.502	20.997
1993	7	6	1993.516	10.664	9	504	505	592	56.53	0.347		21.084
1993	12	22	1993.977	29.896	8	1,295	1,293	1,677	56.43		0.610	21.123
1994	5	9	1994.358	7.611	4	333	345	399	57.35	0.663		20.782
1995	2	1	1995.086	33.686	12	1,424	1,423	1,872	56.49		0.995	21.100
1995	5	8	1995.355	10.849	4	476	488	571	56.96	0.898		20.923
1995	11	28	1995.910	34.179	6	1,436	1,434	1,888	56.47		1.203	21.108
1996	6	6	1996.433	6.346	10	247	253	291	57.38	1.274		20.773
1996	11	26	1996.905	33.922	5	1,424	1,420	1,868	57.18		1.296	20.845
1997	5	26	1997.405	7.795	5	305	316	364	57.56	1.450		20.708
1997	11	24	1997.899	34.509	12	1,432	1,431	1,884	56.90		1.603	20.949
1998	4	23	1998.313	20.529	4	866	879	1,081	57.41	1.656		20.761
1998	12	21	1998.974	35.113	16	1,437	1,437	1,893	55.65		2.050	
1999	4	29	1999.329	9.957	3	379	393	456	57.13	2.017		20.861
2000	1	12	2000.030	35.196	16	1,434	1,434	1,889	56.77		2.212	20.996
2000	5	5	2000.342	11.538	1	428	444	517	57.97			20.560
2000	5	5	SELECTED SPRING 2000 DISCREPANCY							2.301 **		
2000	7	9	2000.519	21.895	2	919	912	1,127	58.88			20.242
2000	8	28	2000.656	21.890	7	916	916	1,132	59.41		2.122	20.061
2000	11	29	2000.910	35.041	4	1,426	1,421	1,869	56.05		2.391	21.264
2001	2	27	2001.156	10.708	3	372	385	446	58.48	2.935		20.380
2001	5	3	2001.334	8.225	4	252	259	299	59.42	3.022		20.060
2001	9	27	2001.737	35.559	5	1,435	1,435	1,890	58.21		2.554	20.476
2002	5	18	2002.375	29.803	1	1,204	1,206	1,547	59.61	2.803		19.996
2002	8	31	2002.663	35.787	4	1,438	1,435	1,890	57.39		2.777	20.770
2003	6	9	2003.436	13.362	6	495	497	582	58.34	3.218		20.430
2003	11	30	2003.912	35.799	9	1,432	1,430	1,883	57.98		2.919	20.558
2004	5	12	2004.361	15.350	1	579	579	685	58.57	3.061 *2		20.350
2005	1	17	2005.047	36.213	19	1,435	1,435	1,890	57.77		3.203	20.632
2005	5	26	2005.400	15.200	4	558	566	664	58.34	3.682		20.431
2006	1	24	2006.066	36.597	16	1,437	1,438	1,883	56.99		3.932	20.916
2006	4	22	2006.307	19.512	1	723	739	886	58.41	4.154		20.405
2007	1	24	2007.066	37.103	24	1,434	1,434	1,878	56.41		4.537	21.130
2007	5	14	2007.367	14.869	4	491	504	587	58.07	4.693		20.526
2007	12	29	2007.994	37.443	15	1,435	1,435	1,879	57.22		4.865	20.829

1) Storage Slope and GIP Averages

Pre-1990 Average:	56.48	21.102
1990-1999 Average:	56.68	21.030
2000-2008 Average:	58.06	20.530
1990-2008 Average:	57.66	20.671

2) Compare the 2003 spring intercept with the 2004 value as the 2003 intercept was a large change from previous

TABLE 9
BLACK CREEK
PRESSURE SUMMARY
1997 THROUGH 2005 STORAGE CYCLES
DAWN METERED VOLUMES

Year	Month	Day	Fractional Year	Physical Balance (bcf)	SI Time (weeks)	Average WH Press (psig)	Extrap. WH Press (psig)	Avg P/Z (psia)	Slope (psi/bcf)	Spring Intercept (bcf)	Fall Intercept (bcf)	GIP for Pi/Zi= 1,274 (bcf)
1997	8	1	1997.669	0.176	NA	198	198	234	1409.06	0.015		0.904
1998	8	1	1998.669	0.660	46	765	765	943	1465.98	0.009		0.869
1998	12	1	1999.002	1.012	6	1,107	1,103	1428	1428.12		0.015	0.892
1999	4	1	1999.336	0.313	6	416	423	494	1336.51	-0.028		0.953
1999	10	1	1999.748	1.032	21	1,179	1,177	1525	1434.92		-0.033	0.888
2000	4	30	2000.328	0.390	3	495	505	593	1451.95	-0.020		0.877
2000	11	13	2000.866	1.149	18	1,268	1,268	1655	1398.68		-0.006	0.911
2001	2	20	2001.137	0.276	4	389	395	461	1366.30			0.932
2001	5	31	2001.411	0.186	10	296	298	346	1280.12	-0.053		0.995
2001	8	27	2001.652	1.049	6	1,289	1,286	1682	1547.92		-0.126	0.823
2002	5	31	2002.411	0.783	10	1,023	1,024	1296	1455.99	-0.111		0.875
2002	8	24	2002.644	1.048	3	1,272	1,272	1661	1378.79		-0.111	0.924
2003	5	11	2003.356	0.267	5	415	417	488	1500.38	-0.071		0.849
2003	11	30	2003.912	1.081	23	1,274	1,272	1661	1440.46		-0.079	0.884
2004	3	25	2004.230	0.229	5	326	325	378	1505.65	-0.032		0.846
2004	10	16	2004.791	1.111	14	1,295	1,295	1696	1493.07		-0.073	0.853
2005	5	17	2005.375	0.678	6	787	788	966	1685.77	0.011		0.756
2005	11	17	2005.879	1.221	14	1,297	1,296	1682	1319.55		0.036	0.965
2006	5	3	2006.337	1.028	3	1,115	1,121	1414	1390.61	0.032		0.916
2006	10	12	2006.780	1.240	16	1,291	1,290	1662	1168.78		0.070	1.090
2007	3	26	2007.233	0.614	3	641	648	768	1427.43	0.073		0.893
2007	12	31	2007.999	1.268	26	1,285	1,285	1654	1355.68		0.103	0.940

1) Storage Slope and GIP Averages

Pre - 2000 Average:	1414.92	0.900
Pre - 2008 Average:	1420.08	0.897

TABLE 10
COVENY
PRESSURE SUMMARY
1997 THROUGH 2005 STORAGE CYCLES
DAWN METERED VOLUMES

Year	Month	Day	Fractional Year	Physical Balance (bcf)	SI Time (weeks)	Average WH Press (psig)	Extrap. WH Press (psig)	Avg P/Z (psia)	Slope (psi/bcf)	Spring Intercept (bcf)	Fall Intercept (bcf)	GIP for Pi/Zi= 1,199 (bcf)
1997	8	1	1997.669	1.661	NA	441	441	521	314.94	0.008		3.807
1998	8	1	1998.669	2.511	45	655	655	793	320.31	-0.005		3.743
1998	12	1	1999.002	4.363	5	1,062	1,057	1352	301.24		0.072	3.980
1999	4	1	1999.336	3.000	6	736	742	903	328.74	0.136		3.647
1999	10	1	1999.836	4.688	23	1,096	1,094	1399	293.58		0.246	4.084
2000	4	1	2000.336	1.806	4	422	430	501	311.61	0.218		3.848
2000	8	1	2000.669	4.749	8	1,113	1,108	1411	309.31			3.876
2000	9	5	2000.763	4.749	10	1,111	1,107	1415	310.50		0.257	3.862
2000	10	19	2000.885	4.920	6	1,143	1,136	1457	307.07			3.905
2001	3	17	2001.296	1.663	8	341	344	400	324.44	0.394		3.696
2001	6	7	2001.519	1.549	11	323	326	379	319.89			3.748
2001	8	27	2001.740	4.837	1	1,119	1,112	1423	322.10		0.320	3.722
2002	5	31	2002.414	4.993	10	1,129	1,128	1446	309.95	0.408		3.868
2002	8	23	2002.644	5.127	3	1,153	1,153	1483	308.71		0.417	3.884
2003	3	10	2003.189	1.805	3	331	345	402	325.61	0.532		3.682
2003	8	31	2003.666	5.065	10	1,127	1,126	1443	319.50		0.483	3.753
2004	3	29	2004.243	2.055	4	385	398	465	324.92	0.580		3.690
2004	12	12	2004.947	5.317	14	1,163	1,163	1497	316.48		0.562	3.789
2005	5	20	2005.383	2.587	4	520	520	615	323.14	0.636		3.710
2005	11	24	2005.898	5.403	8	1,164	1,162	1473	304.55		0.734	3.937
2006	3	6	2006.178	3.027	4	586	591	695	327.50	0.825		3.661
2006	10	24	2006.813	5.500	9	1,160	1,158	1467	312.09		0.851	3.842
2007	3	25	2007.230	2.468	3	434	441	510	315.36	0.850		3.802
2007	11	17	2007.879	5.440	17	1,153	1,153	1460	319.58		0.811	3.752

1) Storage Slope and GIP Averages

Pre - 2000 Average:	311.76	3.846
Pre - 2008 Average:	315.46	3.801

TABLE 11
LADYSMITH
PRESSURE SUMMARY
1999 THROUGH 2005 STORAGE CYCLES
DAWN METERED VOLUMES

Year	Month	Day	Fractional Year	Physical Balance (bcf)	SI Time (weeks)	Average WH Press (psig)	Extrap. WH Press (psig)	Avg P/Z (psia)	Slope (psi/bcf)	Spring Intercept (bcf)	Fall Intercept (bcf)	GIP for Pi/Zi= 839 (bcf)
1999	2	3	1999.175	3.279	65	667	667	839	210.60	-0.747		3.984
1999	9	24	1999.729	2.746	9	585	586	729	205.96		-0.750	4.074
1999	10	29	1999.825	4.601	2	902	894	1123	215.24		-0.787	3.898
2000	1	2	2000.003	5.681	5	1,057	1,053	1355	214.46			3.912
2000	5	1	2000.331	1.288	4	374	376	440	206.24			4.068
2000	6	19	2000.464	1.588	7	436	437	514	202.09	-0.881		4.152
2000	11	19	2000.883	6.526	7	1,190	1,190	1555	210.79		-0.934	3.980
2001	3	25	2001.227	1.684	7	452	453	532	211.31	-0.870		3.970
2001	10	29	2001.825	7.207	4	1,293	1,292	1691	209.86		-0.905	3.998
2002	6	30	2002.493	2.209	20	555	555	660	206.38	-0.957		4.065
2002	11	26	2002.901	6.904	5	1,258	1,257	1638	208.37		-0.953	4.027
2003	8	1	2003.581	1.630	6	477	477	562	204.03	-1.067		4.112
2003	11	14	2003.869	7.079	6	1,298	1,297	1699	208.65		-1.070	4.021
2004	8	29	2004.658	1.603	21	461	462	543	211.02	-1.005		3.976
2004	11	30	2004.914	7.237	7	1,294	1,293	1693	204.01		-0.882	4.113
2005	5	31	2005.413	1.699	20	467	467	549	206.43	-0.938		4.064
2005	11	17	2005.879	7.353	5	1,310	1,308	1689	201.58		-0.816	4.162
2006	9	7	2006.684	1.736	36	475	475	552	202.51	-0.932		4.143
2006	11	11	2006.862	5.256	4	1,014	1,012	1258	200.82		-0.831	4.178
2007	7	1	2007.498	1.780	14	480	481	559	201.37	-0.921		4.166
2007	11	27	2007.906	7.359	15	1,300	1,300	1677	200.40		-0.749	4.187

1) Storage Slope and GIP Averages

	Pre - 2000 Average:								210.60			3.984
	Pre - 2008 Average:								206.77			4.058

Table 12
Tecumseh Storage Pools
Spring Inventory Discrepancy History on Physical Balances

Calendar Year	Spring Storage Physical Balance Intercepts (bcf)									Cumulative Inventory Discrepancies Since 1964 (bcf)								
	Kimball/ Colinville	Corunna	Seckerton	Wilkesport	Dow Moore	Black Creek	Coveny	Ladysmith	Total All Pools	Kimball/ Colinville	Corunna	Seckerton	Wilkesport	Dow Moore	Black Creek	Coveny	Ladysmith	Total All Pools
1964	0.062	0.820	0.359						1.241	0.000	0.000	0.000						0.000
1969	-0.354	1.243	-0.041						0.848	-0.416	0.423	-0.400						-0.393
1970	-0.347	1.276	-0.274						0.655	-0.409	0.455	-0.632						-0.586
1971	-0.551	1.235	-0.126						0.557	-0.613	0.415	-0.485						-0.683
1972	-0.405	1.138	-0.217						0.516	-0.467	0.318	-0.576						-0.725
1973	-0.766	1.085	-0.468						-0.149	-0.828	0.265	-0.826						-1.389
1974	-0.826	1.181	-0.464						-0.109	-0.888	0.361	-0.823						-1.350
1975	-0.091	1.063	-0.268						0.704	-0.153	0.243	-0.626						-0.537
1976	-0.557	1.375	-0.513						0.305	-0.619	0.555	-0.872						-0.936
1977	0.687	1.361	-0.815						1.234	0.625	0.541	-1.173						-0.007
1978	1.256	1.381	-1.100	-0.334					1.204	1.194	0.561	-1.458	0.000					0.297
1979	1.539	1.433	-1.105	-0.225					1.643	1.477	0.613	-1.464	0.109					0.736
1980	2.845	1.481	-0.994	-0.200					3.132	2.783	0.661	-1.352	0.133					2.225
1981	2.946	1.164	-0.855	0.043					3.298	2.884	0.344	-1.213	0.377					2.391
1982	3.403	1.004	-0.662	-0.071					3.674	3.341	0.184	-1.021	0.262					2.766
1983	3.625	1.029	-0.753	0.027					3.929	3.563	0.209	-1.111	0.361					3.022
1984	4.013	1.053	-0.564	0.044					4.546	3.951	0.233	-0.922	0.377					3.639
1985	4.131	1.189	-0.568	0.079					4.832	4.069	0.369	-0.926	0.413					3.925
1986	4.876	1.237	-0.527	0.045					5.630	4.814	0.416	-0.885	0.379					4.723
1987	4.963	1.229	-0.392	0.134					5.934	4.901	0.409	-0.751	0.468					5.027
1988	4.971	1.283	-0.336	0.097	-0.681				5.334	4.909	0.463	-0.694	0.430	0.000				5.108
1989	5.737	1.147	-0.211	0.262	-0.772				6.164	5.675	0.327	-0.569	0.596	-0.091				5.937
1990	6.183	1.300	-0.044	0.341	-0.191				7.590	6.121	0.480	-0.402	0.675	0.490				7.364
1991	6.344	1.416	0.094	0.307	0.103				8.264	6.282	0.596	-0.264	0.641	0.784				8.038
1992	7.245	1.393	0.206	0.508	0.357				9.710	7.183	0.573	-0.152	0.842	1.038				9.484
1993	7.911	1.413	0.293	0.674	0.347				10.638	7.849	0.593	-0.065	1.008	1.028				10.412
1994	8.512	1.257	0.329	0.453	0.663				11.214	8.450	0.437	-0.029	0.786	1.344				10.988
1995	8.867	1.341	0.620	0.379	0.898				12.105	8.805	0.520	0.262	0.713	1.579				11.879
1996	9.410	1.376	0.628	0.343	1.274				13.030	9.348	0.556	0.269	0.676	1.955				12.804
1997	10.292	1.535	0.653	0.418	1.450	0.015	0.008		14.371	10.230	0.714	0.294	0.752	2.131	0.000	0.000		14.121
1998	10.931	1.620	0.916	0.467	1.656	0.009	-0.005		15.594	10.869	0.800	0.558	0.801	2.337	-0.006	-0.013		15.345
1999	11.371	1.619	0.947	0.428	2.017	-0.028	0.136	-0.747	15.744	11.309	0.799	0.588	0.762	2.698	-0.042	0.128	0.000	16.242
2000	11.742	1.640	1.028	0.475	2.301	-0.020	0.218	-0.881	16.505	11.680	0.820	0.669	0.809	2.982	-0.034	0.210	-0.134	17.002
2001	11.848	1.755	1.174	0.511	2.935	-0.053	0.394	-0.870	17.694	11.786	0.935	0.815	0.845	3.616	-0.068	0.385	-0.123	18.192
2002	11.805	1.772	1.194	0.458	2.803	-0.111	0.408	-0.957	17.370	11.743	0.951	0.836	0.792	3.483	-0.126	0.399	-0.211	17.868
2003	12.116	1.746	0.996	0.609	3.218	-0.071	0.532	-1.067	18.080	12.054	0.926	0.638	0.942	3.899	-0.085	0.523	-0.320	18.577
2004	12.526	1.775	1.076	0.711	3.061	-0.032	0.580	-1.005	18.692	12.464	0.955	0.717	1.045	3.742	-0.047	0.572	-0.258	19.190
2005	12.728	1.894	1.078	0.775	3.682	0.011	0.636	-0.938	19.865	12.666	1.074	0.719	1.108	4.362	-0.003	0.628	-0.191	20.363
2006	12.775	1.907	1.340	0.846	4.154	0.032	0.825	-0.932	20.946	12.713	1.086	0.981	1.179	4.835	0.018	0.816	-0.185	21.444
2007	12.766	1.895	1.488	0.978	4.693	0.073	0.850	-0.921	21.822	12.704	1.075	1.129	1.312	5.374	0.059	0.842	-0.175	22.319

Table 12 Continued

Cycle Year	Storage Cycle Year Injection Volumes (bcf)									Storage Cycle Inventory Discrepancy %								
	Kimball/ Colinville	Corunna	Seckerton	Wilkesport	Dow Moore	Black Creek	Coveny	Ladysmith	Total All Pools	Kimball/ Colinville	Corunna	Seckerton	Wilkesport	Dow Moore	Black Creek	Coveny	Ladysmith	Total All Pools
1978/79	36.054	4.047	10.826	9.311					60.238	0.78%	1.30%	-0.05%	1.17%					0.73%
1979/80	31.012	4.339	10.477	6.790					52.619	4.21%	1.09%	1.06%	0.36%					2.83%
1980/81	35.692	3.521	10.682	7.231					57.126	0.28%	-9.01%	1.30%	3.36%					0.29%
1981/82	29.790	4.306	11.209	7.227					52.531	1.54%	-3.72%	1.72%	-1.58%					0.72%
1982/83	35.526	4.577	11.010	7.250					58.363	0.62%	0.56%	-0.82%	1.36%					0.44%
1983/84	14.833	4.113	10.821	5.567					35.334	2.62%	0.58%	1.74%	0.29%					1.74%
1984/85	41.312	4.417	11.831	7.582					65.142	0.29%	3.08%	-0.03%	0.47%					0.44%
1985/86	33.160	4.341	11.715	7.442					56.658	2.24%	1.09%	0.35%	-0.46%					1.41%
1986/87	33.565	4.722	11.736	7.700					57.723	0.26%	-0.16%	1.15%	1.15%					0.53%
1987/88	30.929	4.432	11.691	7.376	0.000				54.429	0.02%	1.22%	0.48%	-0.50%					0.15%
1988/89	33.869	4.088	11.266	5.832	14.682				69.737	2.26%	-3.34%	1.11%	2.84%	-0.62%				1.19%
1989/90	27.806	7.326	11.262	7.240	17.499				71.133	1.60%	2.10%	1.48%	1.10%	3.32%				2.01%
1990/91	33.337	4.622	11.786	7.281	15.434				72.459	0.48%	2.50%	1.17%	-0.47%	1.90%				0.93%
1991/92	29.589	4.359	12.033	7.738	9.079				62.798	3.05%	-0.54%	0.93%	2.60%	2.80%				2.30%
1992/93	37.281	4.538	11.747	7.908	19.196				80.670	1.78%	0.44%	0.74%	2.10%	-0.05%				1.15%
1993/94	36.998	4.938	12.144	8.147	21.241				83.468	1.62%	-3.16%	0.30%	-2.72%	1.49%				0.69%
1994/95	33.861	4.418	11.542	7.710	26.620				84.150	1.05%	1.90%	2.52%	-0.95%	0.88%				1.06%
1995/96	28.999	3.900	11.171	7.329	25.119				76.518	1.87%	0.90%	0.07%	-0.50%	1.50%				1.21%
1996/97	40.010	4.850	11.418	7.766	28.063				92.108	2.20%	3.28%	0.22%	0.97%	0.63%				1.43%
1997/98	40.043	5.028	12.267	8.578	27.712	0.484	0.850		94.964	1.60%	1.71%	2.15%	0.57%	0.74%	-1.23%	-1.56%		1.29%
1998/99	34.046	4.646	10.979	7.410	15.532	0.356	1.877		74.846	1.29%	-0.03%	0.28%	-0.53%	2.32%	-10.22%	7.50%		1.20%
1999/00	27.594	5.478	12.214	8.165	26.255	1.171	1.798	2.981	85.657	1.34%	0.39%	0.66%	0.58%	1.08%	0.70%	4.57%	-4.50%	0.89%
2000/01	33.484	4.639	11.890	7.403	23.509	0.965	3.182	5.462	90.536	0.32%	2.48%	1.23%	0.48%	2.70%	-3.51%	5.52%	0.20%	1.31%
2001/02	39.626	5.146	12.258	8.148	27.512	1.054	3.519	6.751	104.014	-0.11%	0.32%	0.17%	-0.65%	-0.48%	-5.51%	0.40%	-1.30%	-0.31%
2002/03	17.885	4.616	10.801	3.442	7.746	0.876	0.220	5.358	50.944	1.74%	-0.56%	-1.83%	4.38%	5.36%	4.66%	56.31%	-2.05%	1.39%
2003/04	44.184	4.860	11.721	7.822	22.449	2.156	3.457	6.237	102.886	0.93%	0.60%	0.68%	1.31%	-0.70%	1.77%	1.40%	1.00%	0.60%
2004/05	31.757	4.937	11.298	6.929	21.329	1.807	3.267	5.634	86.958	0.64%	2.41%	0.02%	0.92%	2.91%	2.41%	1.71%	1.18%	1.35%
2005/06	35.573	4.740	11.288	6.345	21.399	1.298	4.016	5.654	90.312	0.13%	0.26%	2.32%	1.12%	2.21%	1.63%	4.69%	0.11%	1.20%
2006/07	27.774	4.577	11.752	4.560	18.434	0.451	2.302	4.121	73.971	-0.03%	-0.26%	1.26%	2.91%	2.92%	9.05%	1.11%	0.26%	1.18%

Table 12 Continued

	Storage Cycle Cumulative Injection Volumes since 1978 (bcf)									Cumulative Inventory Discrepancies since 1978 (% of Injected Volumes)								
Cycle Year	Kimball/ Colinville	Corunna	Seckerton	Wilkesport	Dow Moore	Black Creek	Coveny	Ladysmith	Total	Kimball/ Colinville	Corunna	Seckerton	Wilkesport	Dow Moore	Black Creek	Coveny	Ladysmith	Total
1978/79	36.054	4.047	10.826	9.311					60.238	0.78%	1.30%	-0.05%	1.17%					0.73%
1979/80	67.066	8.386	21.303	16.101					112.857	2.37%	1.19%	0.50%	0.83%					1.71%
1980/81	102.758	11.907	31.985	23.333					169.983	1.64%	-1.83%	0.77%	1.61%					1.23%
1981/82	132.548	16.212	43.195	30.559					222.514	1.62%	-2.33%	1.01%	0.86%					1.11%
1982/83	168.074	20.789	54.204	37.809					280.877	1.41%	-1.69%	0.64%	0.96%					0.97%
1983/84	182.908	24.902	65.026	43.376					316.211	1.51%	-1.32%	0.82%	0.87%					1.06%
1984/85	224.220	29.319	76.856	50.958					381.352	1.28%	-0.65%	0.69%	0.81%					0.95%
1985/86	257.380	33.659	88.572	58.400					438.011	1.41%	-0.43%	0.65%	0.65%					1.01%
1986/87	290.945	38.381	100.308	66.100					495.734	1.27%	-0.40%	0.71%	0.71%					0.95%
1987/88	321.874	42.814	111.999	73.476	0.000				550.163	1.15%	-0.23%	0.68%	0.59%					0.87%
1988/89	355.744	46.901	123.265	79.308	14.682				619.899	1.26%	-0.50%	0.72%	0.75%	-0.62%				0.91%
1989/90	383.549	54.227	134.527	86.548	32.181				691.032	1.28%	-0.15%	0.78%	0.78%	1.52%				1.02%
1990/91	416.886	58.849	146.313	93.829	47.615				763.492	1.22%	0.06%	0.82%	0.68%	1.65%				1.01%
1991/92	446.475	63.208	158.346	101.567	56.694				826.290	1.34%	0.02%	0.82%	0.83%	1.83%				1.11%
1992/93	483.756	67.746	170.093	109.475	75.890				906.960	1.38%	0.05%	0.82%	0.92%	1.35%				1.12%
1993/94	520.754	72.685	182.237	117.622	97.130				990.428	1.39%	-0.17%	0.78%	0.67%	1.38%				1.08%
1994/95	554.614	77.103	193.779	125.332	123.750				1074.578	1.37%	-0.05%	0.89%	0.57%	1.28%				1.08%
1995/96	583.613	81.002	204.950	132.662	148.869				1151.096	1.40%	-0.01%	0.84%	0.51%	1.31%				1.09%
1996/97	623.623	85.853	216.368	140.428	176.933	0.000	0.000		1243.204	1.45%	0.18%	0.81%	0.54%	1.20%				1.11%
1997/98	663.666	90.881	228.635	149.006	204.645	0.484	0.850		1338.168	1.46%	0.26%	0.88%	0.54%	1.14%	-1.23%	-1.56%		1.13%
1998/99	697.713	95.527	239.614	156.416	220.177	0.840	2.728		1413.014	1.45%	0.25%	0.85%	0.49%	1.23%	-5.04%	4.68%		1.12%
1999/00	725.307	101.005	251.828	164.581	246.432	2.011	4.525	2.981	1498.671	1.45%	0.26%	0.84%	0.49%	1.21%	-1.70%	4.63%	-4.50%	1.11%
2000/01	758.791	105.644	263.718	171.984	269.942	2.977	7.707	8.444	1589.207	1.40%	0.35%	0.86%	0.49%	1.34%	-2.28%	5.00%	-1.46%	1.11%
2001/02	798.417	110.790	275.977	180.133	297.454	4.030	11.227	15.195	1693.221	1.32%	0.35%	0.83%	0.44%	1.17%	-3.13%	3.56%	-1.39%	1.03%
2002/03	816.302	115.406	286.778	183.574	305.200	4.907	11.447	20.552	1744.165	1.33%	0.32%	0.73%	0.51%	1.28%	-1.74%	4.57%	-1.56%	1.04%
2003/04	860.486	120.266	298.499	191.396	327.649	7.063	14.903	26.789	1847.052	1.31%	0.33%	0.73%	0.55%	1.14%	-0.67%	3.84%	-0.96%	1.01%
2004/05	892.242	125.203	309.797	198.325	348.977	8.870	18.171	32.424	1934.010	1.29%	0.41%	0.70%	0.56%	1.25%	-0.04%	3.45%	-0.59%	1.02%
2005/06	927.815	129.943	321.085	204.670	370.376	10.168	22.186	38.078	2024.322	1.24%	0.40%	0.76%	0.58%	1.31%	0.18%	3.68%	-0.49%	1.01%
2006/07	955.589	134.520	332.838	209.230	388.810	10.619	24.488	42.199	2098.293	1.20%	0.38%	0.78%	0.63%	1.38%	0.55%	3.44%	-0.41%	1.01%

Table 13
Tecumseh Storage Pools
Fall Inventory Discrepancy History on Physical Balances

Calendar Year	Fall Storage Physical Balance Intercepts (bcf)									Cumulative Inventory Discrepancies Since 1964 (bcf)								
	Kimball/ Colinville	Corunna	Seckerton	Wilkesport	Dow Moore	Black Creek	Coveny	Ladysmith	Total All Pools	Kimball/ Colinville	Corunna	Seckerton	Wilkesport	Dow Moore	Black Creek	Coveny	Ladysmith	Total All Pools
1964	0.062	0.820	0.357						1.239	0.000	0.000	0.000						0.000
1969	-0.597	1.187	-0.077						0.513	-0.659	0.367	-0.434						-0.726
1970	0.069	1.150	-0.158						1.061	0.007	0.330	-0.515						-0.178
1971	-0.043	1.247	0.105						1.309	-0.105	0.427	-0.252						0.070
1972	-0.265	1.138	-0.168						0.705	-0.327	0.318	-0.525						-0.534
1973	-0.051	1.198	-0.150						0.997	-0.113	0.378	-0.507						-0.242
1974	-0.164	1.116	-0.355						0.597	-0.226	0.296	-0.712						-0.642
1975	0.044	1.437	-0.578						0.903	-0.018	0.617	-0.935						-0.336
1976	-0.027	1.342	-0.717						0.598	-0.089	0.522	-1.074						-0.641
1977	1.211	1.469	-0.975	-0.334					1.371	1.149	0.649	-1.332						0.466
1978	1.219	1.427	-1.093	-0.186					1.367	1.157	0.607	-1.450	0.148					0.462
1979	1.896	1.496	-1.094	-0.040					2.258	1.834	0.676	-1.451	0.294					1.353
1980	2.338	1.112	-0.910	-0.109					2.431	2.276	0.292	-1.267	0.225					1.526
1981	2.918	1.126	-0.871	0.094					3.267	2.856	0.306	-1.228	0.428					2.362
1982	3.501	1.020	-0.681	0.065					3.905	3.439	0.200	-1.038	0.399					3.000
1983	3.840	0.950	-0.659	-0.084					4.047	3.778	0.130	-1.016	0.250					3.142
1984	3.932	1.057	-0.675	0.065					4.379	3.870	0.237	-1.032	0.399					3.474
1985	4.318	1.301	-0.520	0.155					5.254	4.256	0.481	-0.877	0.489					4.349
1986	4.307	1.223	-0.543	0.098					5.085	4.245	0.403	-0.900	0.432					4.180
1987	4.654	1.206	-0.490	0.040	-0.683				4.727	4.592	0.386	-0.847	0.374					4.505
1988	5.386	1.140	-0.399	0.146	-0.433				5.840	5.324	0.320	-0.756	0.480	0.250				5.618
1989	6.011	1.287	-0.196	0.233	-0.278				7.057	5.949	0.467	-0.553	0.567	0.405				6.835
1990	6.398	1.383	-0.084	0.256	0.180				8.133	6.336	0.563	-0.441	0.590	0.863				7.911
1991	6.812	1.318	0.133	0.433	0.444				9.140	6.750	0.498	-0.224	0.767	1.127				8.918
1992	7.589	1.337	0.105	0.485	0.502				10.018	7.527	0.517	-0.252	0.819	1.185				9.796
1993	8.155	1.305	0.238	0.643	0.610				10.951	8.093	0.485	-0.119	0.977	1.293				10.729
1994	9.034	1.301	0.591	0.490	0.995				12.411	8.972	0.481	0.234	0.824	1.678				12.189
1995	9.052	1.374	0.690	0.296	1.203				12.615	8.990	0.554	0.333	0.630	1.886				12.393
1996	10.057	1.483	0.489	0.321	1.296				13.646	9.995	0.663	0.132	0.655	1.979				13.424
1997	10.701	1.632	0.782	0.506	1.603	0.015	0.008		15.247	10.639	0.812	0.425	0.840	2.286	0.000	0.000		15.002
1998	11.077	1.679	1.069	0.513	2.050	0.015	0.072	-0.742	15.733	11.015	0.859	0.712	0.847	2.733	0.000	0.064		16.230
1999	11.318	1.708	0.933	0.359	2.212	-0.033	0.246	-0.785	15.958	11.256	0.888	0.576	0.693	2.895	-0.048	0.238	-0.043	16.455
2000	11.468	1.697	0.938	0.477	2.391	-0.006	0.257	-0.931	16.291	11.406	0.877	0.581	0.811	3.074	-0.021	0.249	-0.189	16.788
2001	11.737	1.678	0.914	0.465	2.554	-0.126	0.320	-0.902	16.640	11.675	0.858	0.557	0.799	3.237	-0.141	0.312	-0.160	17.137
2002	11.955	1.707	1.147	0.570	2.777	-0.111	0.417	-0.950	17.512	11.893	0.887	0.790	0.904	3.460	-0.126	0.409	-0.208	18.009
2003	12.595	1.760	0.939	0.568	2.919	-0.079	0.483	-1.070	18.115	12.533	0.940	0.582	0.902	3.602	-0.093	0.474	-0.328	18.612
2004	13.046	1.917	0.804	0.626	3.203	-0.073	0.562	-0.882	19.203	12.984	1.097	0.447	0.960	3.886	-0.087	0.554	-0.140	19.700
2005	13.718	1.899	1.233	0.817	3.932	0.036	0.734	-0.816	21.554	13.656	1.079	0.876	1.151	4.615	0.022	0.725	-0.074	22.051
2006	13.409	1.871	1.431	0.874	4.537	0.070	0.851	-0.831	22.212	13.347	1.051	1.074	1.208	5.220	0.055	0.843	-0.089	22.709
2007	13.057	1.874	1.504	1.082	4.865	0.103	0.811	-0.749	22.546	12.995	1.054	1.147	1.416	5.548	0.088	0.803	-0.007	23.043

Table 13 Continued

Cycle Year	Annual Injection Volumes (bcf)									Annual Inventory Discrepancy %								
	Kimball/ Colinville	Corunna	Seckerton	Wilkesport	Dow Moore	Black Creek	Coveny	Ladysmith	Total All Pools	Kimball/ Colinville	Corunna	Seckerton	Wilkesport	Dow Moore	Black Creek	Coveny	Ladysmith	Total All Pools
1979	31.016	4.264	10.571	6.790					52.642	2.18%	1.62%	-0.01%	2.15%					1.69%
1980	34.449	3.610	10.573	7.183					55.815	1.28%	-10.64%	1.74%	-0.96%					0.31%
1981	30.661	4.292	11.209	7.275					53.437	1.89%	0.33%	0.35%	2.79%					1.56%
1982	35.572	4.538	11.044	7.250					58.405	1.64%	-2.34%	1.72%	-0.40%					1.09%
1983	14.893	4.127	10.845	5.517					35.382	2.28%	-1.70%	0.20%	-2.70%					0.40%
1984	38.251	4.372	11.846	7.632					62.101	0.24%	2.45%	-0.14%	1.95%					0.53%
1985	35.777	4.355	11.716	7.442					59.290	1.08%	5.60%	1.32%	1.21%					1.48%
1986	34.015	4.759	11.758	7.700					58.232	-0.03%	-1.64%	-0.20%	-0.74%					-0.29%
1987	31.146	4.451	11.666	7.326					54.589	1.11%	-0.38%	0.45%	-0.79%					0.60%
1988	33.413	4.083	11.212	5.882	14.682				69.272	2.19%	-1.62%	0.81%	1.80%					1.61%
1989	28.304	7.233	11.361	7.240	17.499				71.638	2.21%	2.03%	1.79%	1.20%	0.89%				1.70%
1990	33.337	4.654	11.786	7.281	15.434				72.492	1.16%	2.06%	0.95%	0.32%	2.97%				1.48%
1991	29.586	4.422	11.968	7.738	9.079				62.793	1.40%	-1.47%	1.81%	2.29%	2.91%				1.60%
1992	37.284	4.560	11.727	7.908	19.196				80.675	2.08%	0.42%	-0.24%	0.66%	0.30%				1.09%
1993	36.998	4.846	12.225	8.147	20.999				83.215	1.53%	-0.66%	1.09%	1.94%	0.51%				1.12%
1994	33.861	4.490	11.483	7.710	26.861				84.405	2.60%	-0.09%	3.07%	-1.98%	1.43%				1.73%
1995	28.999	3.920	11.233	7.329	24.986				76.467	0.06%	1.86%	0.88%	-2.65%	0.83%				0.27%
1996	40.010	4.809	11.405	7.766	28.197				92.187	2.51%	2.27%	-1.76%	0.32%	0.33%				1.12%
1997	38.934	5.070	12.281	8.112	27.570				91.967	1.65%	2.94%	2.39%	2.28%	1.11%				1.72%
1998	34.767	4.601	10.869	7.744	15.448	0.353	1.875		75.658	1.08%	1.02%	2.64%	0.09%	2.89%	0.12%	3.39%		1.62%
1999	26.279	5.372	12.324	8.157	26.479	0.722	1.799		81.132	0.92%	0.54%	-1.10%	-1.89%	0.61%	-6.65%	9.67%		0.28%
2000	35.134	4.791	11.573	7.542	23.511	1.417	3.182	5.309	92.459	0.43%	-0.23%	0.04%	1.56%	0.76%	1.90%	0.35%	-2.75%	0.36%
2001	39.393	5.146	12.251	8.149	27.512	0.944	3.519	6.907	103.821	0.68%	-0.37%	-0.20%	-0.15%	0.59%	-12.72%	1.79%	0.42%	0.34%
2002	17.974	4.494	10.904	3.442	7.598	0.956	0.177	4.768	50.313	1.21%	0.65%	2.14%	3.05%	2.94%	1.57%	54.89%	-1.01%	1.73%
2003	40.419	4.982	11.711	7.762	22.597	1.577	3.457	6.842	99.346	1.58%	1.07%	-1.78%	-0.03%	0.63%	2.03%	1.90%	-1.76%	0.61%
2004	35.148	4.937	11.354	6.989	21.329	1.754	3.311	5.647	90.469	1.28%	3.18%	-1.19%	0.82%	1.33%	0.35%	2.40%	3.32%	1.20%
2005	36.101	4.740	11.239	6.272	21.399	1.633	2.901	5.654	89.938	1.86%	-0.38%	3.82%	3.05%	3.41%	6.68%	5.92%	1.18%	2.61%
2006	25.666	4.577	11.773	3.890	18.434	0.548	2.735	4.058	71.680	-1.20%	-0.62%	1.68%	1.47%	3.28%	6.13%	4.28%	-0.36%	0.92%
2007	34.266	4.891	11.939	4.620	22.575	0.836	3.218	5.642	87.987	-1.03%	0.06%	0.61%	4.50%	1.45%	3.94%	-1.24%	1.44%	0.38%

Table 13 Continued

Cycle Year	Annual Cumulative Injection Volumes since 1978 (bcf)									Cumulative Inventory Discrepancies since 1978 (% of Injected Volumes)								
	Kimball/ Colinville	Corunna	Seckerton	Wilkesport	Dow Moore	Black Creek	Coveny	Ladysmith	Total	Kimball/ Colinville	Corunna	Seckerton	Wilkesport	Dow Moore	Black Creek	Coveny	Ladysmith	Total
1979	31.016	4.264	10.571	6.790					52.642	2.18%	1.62%	-0.01%	2.15%					1.69%
1980	65.466	7.874	21.144	13.973					108.457	1.71%	-4.00%	0.87%	0.55%					0.98%
1981	96.127	12.166	32.353	21.248					161.894	1.77%	-2.47%	0.69%	1.32%					1.17%
1982	131.699	16.704	43.397	28.498					220.298	1.73%	-2.44%	0.95%	0.88%					1.15%
1983	146.593	20.831	54.242	34.015					255.681	1.79%	-2.29%	0.80%	0.30%					1.05%
1984	184.844	25.203	66.088	41.647					317.782	1.47%	-1.47%	0.63%	0.60%					0.95%
1985	220.621	29.557	77.805	49.089					377.072	1.40%	-0.43%	0.74%	0.69%					1.03%
1986	254.636	34.317	89.563	56.789					435.304	1.21%	-0.59%	0.61%	0.50%					0.85%
1987	285.782	38.768	101.229	64.115					489.893	1.20%	-0.57%	0.60%	0.35%					0.69%
1988	319.195	42.850	112.441	69.997	14.682				559.165	1.31%	-0.67%	0.62%	0.47%					0.88%
1989	347.499	50.083	123.802	77.237	32.181				630.803	1.38%	-0.28%	0.72%	0.54%	1.26%				0.97%
1990	380.836	54.738	135.589	84.518	47.615				703.295	1.36%	-0.08%	0.74%	0.52%	1.81%				1.02%
1991	410.422	59.160	147.557	92.256	56.694				766.088	1.36%	-0.18%	0.83%	0.67%	1.99%				1.07%
1992	447.706	63.719	159.284	100.164	75.890				846.763	1.42%	-0.14%	0.75%	0.67%	1.56%				1.07%
1993	484.704	68.565	171.509	108.311	96.889				929.978	1.43%	-0.18%	0.78%	0.77%	1.33%				1.08%
1994	518.564	73.055	182.992	116.021	123.750				1014.383	1.51%	-0.17%	0.92%	0.58%	1.36%				1.13%
1995	547.563	76.975	194.225	123.351	148.735				1090.850	1.43%	-0.07%	0.92%	0.39%	1.27%				1.07%
1996	587.573	81.785	205.630	131.117	176.933				1183.037	1.50%	0.07%	0.77%	0.39%	1.12%				1.07%
1997	626.507	86.854	217.910	139.229	204.503	0.000	0.000		1275.004	1.51%	0.24%	0.86%	0.50%	1.12%				1.12%
1998	661.273	91.455	228.780	146.973	219.952	0.353	1.875		1350.661	1.49%	0.28%	0.95%	0.48%	1.24%	0.12%	3.39%		1.14%
1999	687.553	96.827	241.104	155.130	246.431	1.075	3.675		1431.794	1.47%	0.29%	0.84%	0.35%	1.17%	-4.43%	6.46%		1.09%
2000	722.687	101.617	252.677	162.672	269.942	2.492	6.857	5.309	1524.253	1.42%	0.27%	0.80%	0.41%	1.14%	-0.83%	3.62%	-3.56%	1.05%
2001	762.080	106.763	264.928	170.821	297.454	3.436	10.376	12.216	1628.074	1.38%	0.24%	0.76%	0.38%	1.09%	-4.09%	3.00%	-1.31%	1.01%
2002	780.054	111.257	275.832	174.263	305.052	4.391	10.553	16.984	1678.386	1.38%	0.25%	0.81%	0.43%	1.13%	-2.86%	3.87%	-1.22%	1.03%
2003	820.473	116.239	287.543	182.025	327.649	5.968	14.010	23.826	1777.732	1.39%	0.29%	0.71%	0.41%	1.10%	-1.57%	3.38%	-1.38%	1.00%
2004	855.621	121.176	298.896	189.014	348.977	7.723	17.320	29.473	1868.201	1.38%	0.40%	0.63%	0.43%	1.11%	-1.13%	3.20%	-0.48%	1.00%
2005	891.721	125.916	310.135	195.286	370.376	9.356	20.221	35.127	1958.139	1.40%	0.37%	0.75%	0.51%	1.25%	0.23%	3.59%	-0.21%	1.06%
2006	917.387	130.493	321.908	199.176	388.810	9.904	22.956	39.185	2029.819	1.33%	0.34%	0.78%	0.53%	1.34%	0.56%	3.67%	-0.23%	1.04%
2007	951.654	135.384	333.847	203.796	411.385	10.740	26.174	44.827	2117.807	1.24%	0.33%	0.78%	0.62%	1.35%	0.82%	3.07%	-0.02%	1.01%

Table 14
Tecumseh Storage Pools
Annual Spring Inventory Discrepancy Balance
Best Estimate Scenario

Year	Min. Cum. Kimball/Col Meter Error (bcf)	Cumulative E.Kimball Migration (bcf)	Cum. K/C Gas Loss &/or Meter Error (bcf)	Cumulative Cor/Sec Migration (bcf)	Cumulative Corunna/Seck Meter Error (bcf)	Cumulative Wilkesport Meter Error (bcf)	Cumulative Dow Moore Migration (bcf)	Cumulative Dow Moore Meter Error (bcf)	Cumulative Black Creek Meter Error (bcf)	Cumulative Coveny Migration (bcf)	Cumulative Coveny Meter Error (bcf)	Cumulative Ladysmith Meter Error (bcf)
1964	0.000	0.000	0.000	0.000	0.000		0.000	0.000				
1969	0.000	-0.370	0.000	0.024	0.000		0.000	0.000				
1970	0.000	-0.379	0.000	-0.177	0.000		0.000	0.000				
1971	0.000	-0.278	0.002	-0.070	0.000		0.000	0.000				
1972	0.000	-0.194	0.003	-0.257	0.000		0.000	0.000				
1973	0.000	-0.146	0.003	-0.561	0.000		0.000	0.000				
1974	0.000	-0.011	0.010	-0.462	0.000		0.000	0.000				
1975	0.000	0.126	0.025	-0.383	0.000		0.000	0.000				
1976	0.000	0.328	0.081	-0.316	0.000		0.000	0.000				
1977	0.000	0.475	0.140	-0.632	0.000		0.000	0.000				
1978	0.000	0.606	0.215	-0.897	0.000	0.000	0.000	0.000				
1979	0.216	0.788	0.473	-0.897	0.047	0.109	0.000	0.000				
1980	0.402	0.876	1.505	-0.897	0.206	0.133	0.000	0.000				
1981	0.616	0.999	1.269	-0.897	0.028	0.377	0.000	0.000				
1982	0.794	1.140	1.407	-0.897	0.060	0.262	0.000	0.000				
1983	1.007	1.295	1.260	-0.897	-0.004	0.361	0.000	0.000				
1984	1.096	1.400	1.454	-0.897	0.209	0.377	0.000	0.000				
1985	1.344	1.513	1.212	-0.897	0.341	0.413	0.000	0.000				
1986	1.543	1.469	1.802	-0.897	0.429	0.379	0.000	0.000				
1987	1.744	1.580	1.578	-0.897	0.556	0.468	0.000	0.000				
1988	1.929	1.581	1.399	-0.897	0.666	0.430	0.000	0.000				
1989	2.132	1.632	1.911	-0.897	0.655	0.596	0.119	-0.210				
1990	2.299	1.564	2.258	-0.897	0.978	0.675	0.316	0.174				
1991	2.498	1.619	2.164	-0.897	1.230	0.641	0.497	0.288				
1992	2.676	1.711	2.797	-0.897	1.318	0.842	0.529	0.509				
1993	2.899	1.677	3.275	-0.897	1.425	1.008	0.432	0.597				
1994	3.176	1.560	3.725	-0.897	1.305	0.786	0.417	0.927				
1995	3.429	1.541	3.835	-0.897	1.680	0.713	0.577	1.002				
1996	3.646	1.497	4.205	-0.897	1.723	0.676	0.586	1.369				
1997	3.945	1.537	4.747	-0.897	1.907	0.752	0.504	1.627	0.000	0.000	0.000	
1998	4.325	1.535	5.008	-0.897	2.256	0.801	0.604	1.734	-0.006	0.041	-0.055	
1999	4.649	1.657	5.003	-0.897	2.285	0.762	0.710	1.988	-0.042	0.114	0.012	0.000
2000	4.911	1.690	5.079	-0.897	2.387	0.809	0.742	2.240	-0.034	0.135	0.075	-0.134
2001	5.034	1.704	5.047	-0.897	2.648	0.845	0.591	3.026	-0.068	0.170	0.216	-0.123
2002	5.181	1.831	4.731	-0.897	2.685	0.792	0.675	2.810	-0.126	0.223	0.172	-0.211
2003	5.247	1.820	4.987	-0.897	2.462	0.942	0.833	3.066	-0.085	0.244	0.280	-0.320
2004	5.410	1.881	5.172	-0.897	2.570	1.045	0.790	2.952	-0.047	0.250	0.322	-0.258
2005	5.528	1.828	5.310	-0.897	2.691	1.108	0.708	3.654	-0.003	0.233	0.395	-0.191
2006	5.528	1.815	5.370	-0.897	2.965	1.179	0.758	4.077	0.018	0.229	0.588	-0.185
2007	5.528	1.850	5.326	-0.897	3.101	1.312	0.770	4.604	0.059	0.222	0.620	-0.175

* Note - Best Estimate minimum Kimball Colinville meter error set to match Corunna/Seckerton errors of:
0.60% from 1978 through 1993
0.75% from 1994 through 1997
0.95% from 1998 through 2000
0.37% from 2001 through 2005
0.00% from 2006-2007 there were minimal discrepancies at KC, therefore set minimum meter error to zero.
Kimball Colinville migration derived from mathematical models.
Kimball Colinville gas losses &/or meter error set at cumulative spring discrepancies (table 4) minus migration minus minimum meter error.

Table 14 (continued)

FISCAL YEARLY VOLUMES:

Fiscal Year		Kim-Col Meter Error (bcf)	E.Kimball Migration (bcf)	Gas Loss or Meter Error (bcf)	Cor/Sec Migration (bcf)	Cor/Sec Meter Error (bcf)	Wilkesport Meter Error (bcf)	Dow Moore Migration (bcf)	Dow Moore Meter Error (bcf)	Black Meter Error (bcf)	Coveny Migration (bcf)	Coveny Meter Error (bcf)	Ladysmith Meter Error (bcf)	Total Shortfalls (bcf)	Cumulative Shortfalls (bcf)
1964	-1969	0.000	-0.370	0.000	0.024	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	-0.346	-0.346
1969	-1970	0.000	-0.009	0.000	-0.201	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	-0.210	-0.556
1970	-1971	0.000	0.101	0.002	0.107	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.209	-0.346
1971	-1972	0.000	0.084	0.001	-0.187	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	-0.102	-0.449
1972	-1973	0.000	0.048	0.000	-0.304	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	-0.256	-0.705
1973	-1974	0.000	0.135	0.007	0.099	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.241	-0.463
1974	-1975	0.000	0.137	0.015	0.079	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.231	-0.233
1975	-1976	0.000	0.202	0.056	0.067	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.325	0.092
1976	-1977	0.000	0.147	0.060	-0.315	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	-0.109	-0.017
1977	-1978	0.000	0.131	0.075	-0.266	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	-0.060	-0.077
1978	-1979	0.216	0.182	0.259	0.000	0.047	0.109	0.000	0.000	0.000	0.000	0.000	0.000	0.813	0.736
1979	-1980	0.186	0.088	1.032	0.000	0.159	0.024	0.000	0.000	0.000	0.000	0.000	0.000	1.489	2.225
1980	-1981	0.214	0.123	-0.236	0.000	-0.178	0.243	0.000	0.000	0.000	0.000	0.000	0.000	0.166	2.391
1981	-1982	0.179	0.141	0.138	0.000	0.032	-0.114	0.000	0.000	0.000	0.000	0.000	0.000	0.376	2.767
1982	-1983	0.213	0.155	-0.147	0.000	-0.065	0.099	0.000	0.000	0.000	0.000	0.000	0.000	0.255	3.022
1983	-1984	0.089	0.105	0.194	0.000	0.213	0.016	0.000	0.000	0.000	0.000	0.000	0.000	0.617	3.639
1984	-1985	0.248	0.113	-0.242	0.000	0.132	0.035	0.000	0.000	0.000	0.000	0.000	0.000	0.286	3.925
1985	-1986	0.199	-0.044	0.590	0.000	0.088	-0.034	0.000	0.000	0.000	0.000	0.000	0.000	0.799	4.724
1986	-1987	0.201	0.111	-0.224	0.000	0.127	0.089	0.000	0.000	0.000	0.000	0.000	0.000	0.304	5.028
1987	-1988	0.185	0.001	-0.179	0.000	0.110	-0.037	0.000	0.000	0.000	0.000	0.000	0.000	0.081	5.108
1988	-1989	0.203	0.051	0.512	0.000	-0.012	0.165	0.119	-0.210	0.000	0.000	0.000	0.000	0.829	5.938
1989	-1990	0.167	-0.068	0.347	0.000	0.323	0.079	0.197	0.384	0.000	0.000	0.000	0.000	1.429	7.367
1990	-1991	0.200	0.055	-0.094	0.000	0.252	-0.034	0.181	0.113	0.000	0.000	0.000	0.000	0.673	8.040
1991	-1992	0.177	0.092	0.632	0.000	0.088	0.201	0.032	0.222	0.000	0.000	0.000	0.000	1.445	9.484
1992	-1993	0.223	-0.034	0.478	0.000	0.107	0.166	-0.097	0.087	0.000	0.000	0.000	0.000	0.931	10.416
1993	-1994	0.277	-0.117	0.450	0.000	-0.120	-0.222	-0.015	0.331	0.000	0.000	0.000	0.000	0.583	10.999
1994	-1995	0.253	-0.018	0.110	0.000	0.375	-0.073	0.160	0.075	0.000	0.000	0.000	0.000	0.881	11.880
1995	-1996	0.217	-0.045	0.371	0.000	0.043	-0.037	0.009	0.367	0.000	0.000	0.000	0.000	0.925	12.805
1996	-1997	0.299	0.041	0.542	0.000	0.184	0.075	-0.082	0.259	0.000	0.000	0.000	0.000	1.318	14.122
1997	-1998	0.380	-0.002	0.261	0.000	0.349	0.049	0.100	0.106	-0.006	0.041	-0.055	0.000	1.223	15.345
1998	-1999	0.323	0.122	-0.004	0.000	0.029	-0.039	0.106	0.254	-0.036	0.073	0.067	0.000	0.895	16.241
1999	-2000	0.262	0.033	0.076	0.000	0.102	0.047	0.032	0.252	0.008	0.021	0.063	-0.134	0.762	17.002
2000	-2001	0.124	0.014	-0.032	0.000	0.261	0.036	-0.151	0.785	-0.034	0.035	0.141	0.011	1.190	18.193
2001	-2002	0.146	0.127	-0.317	0.000	0.036	-0.053	0.084	-0.216	-0.058	0.053	-0.044	-0.087	-0.328	17.865
2002	-2003	0.066	-0.011	0.256	0.000	-0.223	0.151	0.158	0.257	0.041	0.021	0.108	-0.110	0.714	18.579
2003	-2004	0.163	0.061	0.186	0.000	0.109	0.102	-0.043	-0.115	0.038	0.006	0.042	0.062	0.611	19.190
2004	-2005	0.117	-0.053	0.138	0.000	0.120	0.063	-0.082	0.702	0.044	-0.017	0.073	0.066	1.172	20.362
2005	-2006	0.000	-0.013	0.060	0.000	0.275	0.071	0.050	0.423	0.021	-0.004	0.193	0.006	1.082	21.444
2006	-2007	0.000	0.035	-0.043	0.000	0.136	0.132	0.012	0.527	0.041	-0.007	0.032	0.011	0.875	22.319
TOTALS		5.528	1.850	5.326	-0.897	3.101	1.312	0.770	4.604	0.059	0.222	0.620	-0.175	22.319	

Table 15
Tecumseh Storage Pools
Annual Fall Inventory Discrepancy Balance
Best Estimate Scenario

Year	Min. Cum. Kimball/Col Meter Error (bcf)	Cumulative E.Kimball Migration (bcf)	Cum. K/C Gas Loss &/or Meter Error (bcf)	Cumulative Cor/Sec Migration (bcf)	Cumulative Corunna/Seck Meter Error (bcf)	Cumulative Wilkesport Meter Error (bcf)	Cumulative Dow Moore Migration (bcf)	Cumulative Dow Moore Meter Error (bcf)	Cumulative Black Creek Meter Error (bcf)	Cumulative Coveny Migration (bcf)	Cumulative Coveny Meter Error (bcf)	Cumulative Ladysmith Meter Error (bcf)
1964	0.000	0.000	0.000	0.000	0.000		0.000	0.000				
1969	0.000	-0.371	-0.288	-0.067	0.000		0.000	0.000				
1970	0.000	-0.318	0.325	-0.185	0.000		0.000	0.000				
1971	0.000	-0.178	0.073	0.175	0.000		0.000	0.000				
1972	0.000	-0.162	-0.165	-0.207	0.000		0.000	0.000				
1973	0.000	-0.057	-0.056	-0.129	0.000		0.000	0.000				
1974	0.000	0.118	-0.344	-0.416	0.000		0.000	0.000				
1975	0.000	0.283	-0.301	-0.318	0.000		0.000	0.000				
1976	0.000	0.498	-0.587	-0.552	0.000		0.000	0.000				
1977	0.000	0.618	0.531	-0.683	0.000		0.000	0.000				
1978	0.000	0.765	0.392	-0.843	0.000	0.148	0.000	0.000				
1979	0.156	0.912	0.766	-0.843	0.068	0.294	0.000	0.000				
1980	0.330	1.016	0.931	-0.843	-0.132	0.225	0.000	0.000				
1981	0.484	1.118	1.254	-0.843	-0.079	0.428	0.000	0.000				
1982	0.663	1.230	1.546	-0.843	0.005	0.399	0.000	0.000				
1983	0.738	1.439	1.601	-0.843	-0.043	0.250	0.000	0.000				
1984	0.931	1.525	1.414	-0.843	0.048	0.399	0.000	0.000				
1985	1.111	1.496	1.649	-0.843	0.447	0.489	0.000	0.000				
1986	1.282	1.592	1.370	-0.843	0.346	0.432	0.000	0.000				
1987	1.439	1.599	1.554	-0.843	0.382	0.374	0.000	0.000				
1988	1.607	1.674	2.042	-0.843	0.407	0.480	0.000	0.000				
1989	1.750	1.655	2.544	-0.843	0.757	0.567	0.184	0.221				
1990	1.918	1.634	2.784	-0.843	0.965	0.590	0.433	0.430				
1991	2.067	1.724	2.959	-0.843	1.117	0.767	0.588	0.539				
1992	2.255	1.727	3.545	-0.843	1.108	0.819	0.478	0.707				
1993	2.441	1.644	4.008	-0.843	1.209	0.977	0.448	0.845				
1994	2.897	1.584	4.491	-0.843	1.558	0.824	0.597	1.081				
1995	3.287	1.572	4.131	-0.843	1.730	0.630	0.668	1.218				
1996	3.826	1.610	4.559	-0.843	1.638	0.655	0.602	1.377				
1997	4.350	1.555	4.734	-0.843	2.080	0.840	0.565	1.721	0.000	0.000	0.000	
1998	4.505	1.670	4.840	-0.843	2.414	0.847	0.789	1.944	0.002	0.079	-0.013	
1999	4.623	1.768	4.866	-0.843	2.307	0.693	0.815	2.080	-0.046	0.128	0.112	-0.043
2000	4.779	1.771	4.856	-0.843	2.301	0.811	0.678	2.396	-0.019	0.153	0.098	-0.189
2001	4.831	1.823	5.021	-0.843	2.258	0.799	0.658	2.579	-0.139	0.204	0.110	-0.160
2002	4.854	1.917	5.122	-0.843	2.520	0.904	0.819	2.641	-0.124	0.240	0.171	-0.208
2003	4.907	1.957	5.669	-0.843	2.365	0.902	0.873	2.729	-0.092	0.252	0.225	-0.325
2004	4.953	1.908	6.123	-0.843	2.387	0.970	0.771	3.115	-0.088	0.243	0.313	-0.106
2005	5.528	1.846	6.282	-0.843	2.798	1.151	0.796	3.819	0.022	0.237	0.488	-0.074
2006	5.528	1.854	5.965	-0.843	2.968	1.208	0.829	4.390	0.055	0.235	0.608	-0.089
2007	5.528	1.871	5.596	-0.843	3.044	1.416	0.839	4.708	0.088	0.233	0.570	-0.007

* Note - Best Estimate minimum Kimball Colinville meter error set to match Corunna/Seckerton errors of:
0.50% from 1978 through 1993
1.35% from 1994 through 1997
0.45% from 1998 through 2000
0.13% from 2001 through 2004
0.00% from 2005-2007 there were minimal discrepancies at KC, therefore set minimum meter error to zero.
Kimball ıKimball Colinville gas losses &/or meter error set at cumulative fall discrepancies (table 4) minus migration minus minimum meter error.
Kimball Colinville gas losses &/or meter error set at cumulative fall discrepancies (table 4) minus migration minus minimum meter error.

Table 15 (continued)

FISCAL YEARLY VOLUMES:

Year	Kim-Col Meter Error (bcf)	E.Kimball Migration (bcf)	Gas Loss or Meter Error (bcf)	Cor/Sec Migration (bcf)	Cor/Sec Meter Error (bcf)	Wilkesport Meter Error (bcf)	Dow Moore Migration (bcf)	Dow Moore Meter Error (bcf)	Black Meter Error (bcf)	Coveny Migration (bcf)	Coveny Meter Error (bcf)	Ladysmith Meter Error (bcf)	Total Shortfalls (bcf)	Cumulative Shortfalls (bcf)
1964 -1969	0.000	-0.371	-0.288	-0.067	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	-0.726	-0.726
-1970	0.000	0.053	0.613	-0.118	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.548	-0.178
-1971	0.000	0.140	-0.252	0.360	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.248	0.070
-1972	0.000	0.016	-0.238	-0.382	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	-0.604	-0.534
-1973	0.000	0.105	0.109	0.078	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.292	-0.242
-1974	0.000	0.175	-0.288	-0.287	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	-0.400	-0.642
-1975	0.000	0.165	0.042	0.098	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.305	-0.336
-1976	0.000	0.215	-0.286	-0.234	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	-0.305	-0.641
-1977	0.000	0.120	1.119	-0.131	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	1.108	0.466
-1978	0.000	0.147	-0.139	-0.160	0.000	0.148	0.000	0.000	0.000	0.000	0.000	0.000	-0.004	0.462
-1979	0.156	0.147	0.374	0.000	0.068	0.146	0.000	0.000	0.000	0.000	0.000	0.000	0.891	1.353
-1980	0.173	0.104	0.165	0.000	-0.200	-0.069	0.000	0.000	0.000	0.000	0.000	0.000	0.173	1.526
-1981	0.154	0.102	0.324	0.000	0.053	0.203	0.000	0.000	0.000	0.000	0.000	0.000	0.836	2.362
-1982	0.179	0.112	0.291	0.000	0.084	-0.029	0.000	0.000	0.000	0.000	0.000	0.000	0.637	3.000
-1983	0.075	0.209	0.055	0.000	-0.048	-0.149	0.000	0.000	0.000	0.000	0.000	0.000	0.142	3.142
-1984	0.193	0.086	-0.187	0.000	0.091	0.149	0.000	0.000	0.000	0.000	0.000	0.000	0.332	3.474
-1985	0.180	-0.029	0.235	0.000	0.399	0.090	0.000	0.000	0.000	0.000	0.000	0.000	0.875	4.349
-1986	0.171	0.096	-0.279	0.000	-0.101	-0.057	0.000	0.000	0.000	0.000	0.000	0.000	-0.170	4.180
-1987	0.157	0.007	0.183	0.000	0.036	-0.058	0.000	0.000	0.000	0.000	0.000	0.000	0.325	4.505
-1988	0.168	0.075	0.489	0.000	0.025	0.106	0.000	0.000	0.000	0.000	0.000	0.000	0.863	5.368
-1989	0.143	-0.019	0.502	0.000	0.350	0.087	0.184	0.221	0.000	0.000	0.000	0.000	1.467	6.835
-1990	0.168	-0.021	0.240	0.000	0.208	0.023	0.249	0.209	0.000	0.000	0.000	0.000	1.075	7.911
-1991	0.149	0.090	0.176	0.000	0.152	0.177	0.155	0.109	0.000	0.000	0.000	0.000	1.008	8.918
-1992	0.188	0.003	0.586	0.000	-0.009	0.052	-0.110	0.168	0.000	0.000	0.000	0.000	0.878	9.796
-1993	0.186	-0.083	0.462	0.000	0.101	0.158	-0.030	0.138	0.000	0.000	0.000	0.000	0.933	10.729
-1994	0.456	-0.060	0.483	0.000	0.349	-0.153	0.149	0.236	0.000	0.000	0.000	0.000	1.460	12.189
-1995	0.390	-0.012	-0.360	0.000	0.172	-0.194	0.071	0.137	0.000	0.000	0.000	0.000	0.204	12.393
-1996	0.539	0.038	0.428	0.000	-0.092	0.025	-0.066	0.159	0.000	0.000	0.000	0.000	1.031	13.424
-1997	0.524	-0.055	0.175	0.000	0.442	0.185	-0.037	0.344	0.000	0.000	0.000	0.000	1.578	15.002
-1998	0.155	0.115	0.106	0.000	0.334	0.007	0.224	0.223	0.002	0.079	-0.013	0.000	1.233	16.235
-1999	0.117	0.098	0.026	0.000	-0.107	-0.154	0.026	0.136	-0.048	0.049	0.125	-0.043	0.225	16.459
-2000	0.157	0.003	-0.010	0.000	-0.006	0.118	-0.137	0.316	0.027	0.025	-0.014	-0.146	0.333	16.792
-2001	0.052	0.052	0.165	0.000	-0.043	-0.012	-0.020	0.183	-0.120	0.051	0.012	0.029	0.349	17.141
-2002	0.023	0.094	0.101	0.000	0.262	0.105	0.161	0.062	0.015	0.036	0.061	-0.048	0.872	18.013
-2003	0.053	0.040	0.548	0.000	-0.155	-0.002	0.054	0.088	0.032	0.012	0.054	-0.117	0.606	18.619
-2004	0.046	-0.049	0.454	0.000	0.022	0.068	-0.102	0.386	0.004	-0.009	0.088	0.219	1.127	19.747
-2005	0.575	-0.062	0.159	0.000	0.411	0.181	0.025	0.704	0.110	-0.006	0.175	0.032	2.304	22.051
-2006	0.000	0.008	-0.317	0.000	0.170	0.057	0.033	0.572	0.034	-0.003	0.120	-0.015	0.658	22.709
-2007	0.000	0.017	-0.369	0.000	0.076	0.208	0.010	0.318	0.033	-0.002	-0.038	0.081	0.334	23.043
TOTALS	5.528	1.871	5.596	-0.843	3.044	1.416	0.839	4.708	0.088	0.233	0.570	-0.007	23.043	

APPENDIX I

INJECTION/WITHDRAWAL HISTORY

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TABLE A1-2	INJECTION/WITHDRAWAL HISTORY - REMAINING POOLS	132

Table A1-1
Injection/Withdrawal History
Kimball Colinville Reservoir
1979 to 2007
Oilfield Units - Dawn Metered Volumes

Date			Injection			Withdrawals			Physical Balance			Paper Balance Adjustments				Paper Balance		
Year	Month	Fractional Year	South (mcf)	Mid (mcf)	Total (mcf)	South (mcf)	Mid (mcf)	Total (mcf)	South (mcf)	Mid (mcf)	Total (mcf)	South Adj. (mcf)	South Cum. Adj. (mcf)	Mid Adj. (mcf)	Mid Cum. Adj. (mcf)	South (mcf)	Mid (mcf)	Total (mcf)
1979	1	1979.085	0	0	0	4009730	4009730	8019459	14827725	32000239	46827964	0	0	0	0	14827725	32000239	46827964
1979	2	1979.162	0	0	0	7052281	7052281	14104562	7775444	24947958	32723402	0	0	0	0	7775444	24947958	32723402
1979	3	1979.246	1928	1928	3856	2120445	2120445	4240889	5656927	22829442	28486369	0	0	0	0	5656927	22829442	28486369
1979	4	1979.329	1017368	1017368	2034736	1340467	1340467	2680934	5333828	22506343	27840171	0	0	0	0	5333828	22506343	27840171
1979	5	1979.413	3117961	3117961	6235922	4960	4960	9920	8446829	25619344	34066173	0	0	0	0	8446829	25619344	34066173
1979	6	1979.496	4395817	4395817	8791634	9757	9757	19514	12832889	30005404	42838293	0	0	0	0	12832889	30005404	42838293
1979	7	1979.580	3417829	3417829	6835657	11354	11354	22709	16239363	33411878	49651241	0	0	0	0	16239363	33411878	49651241
1979	8	1979.665	603064	593836	1196901	7021	2295	9316	16835406	34003420	50838826	0	0	0	0	16835406	34003420	50838826
1979	9	1979.747	2338898	1965847	4304744	44101	0	44101	19130203	35969266	55099469	0	0	0	0	19130203	35969266	55099469
1979	10	1979.832	0	1605330	1605330	0	2804448	2804448	19130203	34770149	53900352	0	0	0	0	19130203	34770149	53900352
1979	11	1979.914	0	0	0	3416221	237	3416457	15713982	34769912	50483894	0	0	0	0	15713982	34769912	50483894
1979	12	1979.999	7381	0	7381	5548648	0	5548648	10172715	34769912	44942628	0	0	0	0	10172715	34769912	44942628
1980	1	1980.085	0	0	0	3882946	725561	4608507	6289769	34044351	40334120	0	0	0	0	6289769	34044351	40334120
1980	2	1980.164	0	0	0	1133518	8596029	9729547	5156251	25448323	30604574	0	0	0	0	5156251	25448323	30604574
1980	3	1980.246	0	0	0	205708	8789929	8995637	4950543	16658394	21608937	0	0	0	0	4950543	16658394	21608937
1980	4	1980.329	226377	0	226377	921124	4141	925265	4255796	16654253	20910049	0	0	0	0	4255796	16654253	20910049
1980	5	1980.413	2912380	0	2912380	10273	0	10273	7157903	16654253	23812156	0	0	0	0	7157903	16654253	23812156
1980	6	1980.496	6510265	2003735	8514000	13901	0	13901	13654267	18657988	32312255	0	0	0	0	13654267	18657988	32312255
1980	7	1980.580	4068240	7514735	11582974	20192	660	20852	17702315	26172062	43874377	0	0	0	0	17702315	26172062	43874377
1980	8	1980.665	0	6510742	6510742	0	17340	17340	17702315	32665465	50367780	0	0	0	0	17702315	32665465	50367780
1980	9	1980.747	0	2428816	2428816	0	0	0	17702315	35094281	52796596	0	0	0	0	17702315	35094281	52796596
1980	10	1980.832	634150	1640013	2274163	8511	715550	724061	18327954	36018744	54346698	0	0	0	0	18327954	36018744	54346698
1980	11	1980.914	0	0	0	0	1116	1116	18327954	36017629	54345583	0	0	0	0	18327954	36017629	54345583
1980	12	1980.999	0	0	0	5980175	131622	6111798	12347779	35886006	48233785	0	0	0	0	12347779	35886006	48233785
1981	1	1981.085	0	0	0	4295054	7087320	11382374	8052725	28798686	36851411	0	0	0	0	8052725	28798686	36851411
1981	2	1981.162	0	364254	364254	2536088	4314050	6850138	5516637	24848891	30365527	0	0	0	0	5516637	24848891	30365527
1981	3	1981.246	0	878177	878177	1029981	3605525	4635506	4486656	22121543	26608199	0	0	0	0	4486656	22121543	26608199
1981	4	1981.329	1467315	21886	1489201	0	880069	880069	5953971	21263361	27217331	0	0	0	0	5953971	21263361	27217331
1981	5	1981.413	3748641	317703	4066344	6792	448	7240	9695820	21580616	31276435	0	0	0	0	9695820	21580616	31276435
1981	6	1981.496	6347388	2627916	8975304	19984	0	19984	16023224	24208532	40231755	0	0	0	0	16023224	24208532	40231755
1981	7	1981.580	479924	8884097	9364021	1161	19744	20905	16501987	33072885	49574872	0	0	0	0	16501987	33072885	49574872
1981	8	1981.665	627842	1496982	2124823	0	5687	5687	17129828	34564180	51694008	0	0	0	0	17129828	34564180	51694008
1981	9	1981.747	79409	1095429	1174838	0	1804	1804	17209238	35657804	52867042	0	0	0	0	17209238	35657804	52867042
1981	10	1981.832	872088	846318	1718406	1292	4903	6195	18080033	36499219	54579252	0	0	0	0	18080033	36499219	54579252
1981	11	1981.914	413856	92220	506075	2813	0	2813	18491075	36591439	55082514	0	0	0	0	18491075	36591439	55082514
1981	12	1981.999	0	0	0	93039	636328	729367	18398037	35955111	54353147	0	0	0	0	18398037	35955111	54353147
1982	1	1982.085	350007	0	350007	4738326	8675219	13413545	14009718	27279892	41289610	0	0	0	0	14009718	27279892	41289610
1982	2	1982.162	0	0	0	5839417	4693067	10532484	8170301	22586825	30757126	0	0	0	0	8170301	22586825	30757126
1982	3	1982.246	0	20598	20598	2212581	4298531	6511113	5957720	18308892	24266611	0	0	0	0	5957720	18308892	24266611
1982	4	1982.329	0	2588054	2588054	801066	2314572	3115638	5156654	18582374	23739027	0	0	0	0	5156654	18582374	23739027
1982	5	1982.413	1905955	9981375	11887331	148	8507	8656	7062461	28555241	35617702	0	0	0	0	7062461	28555241	35617702
1982	6	1982.496	5128322	4729843	9858165	4105	13231	17336	12186677	33271854	45458531	0	0	0	0	12186677	33271854	45458531
1982	7	1982.580	3433642	943543	4377185	11886	3890	15776	15608433	34211507	49819940	0	0	0	0	15608433	34211507	49819940
1982	8	1982.665	513234	16729	529963	0	0	0	16121667	34228236	50349903	0	0	0	0	16121667	34228236	50349903

Table A1-1
Injection/Withdrawal History
Kimball Colinville Reservoir
1979 to 2007
Oilfield Units - Dawn Metered Volumes

Date			Injection			Withdrawals			Physical Balance			Paper Balance Adjustments				Paper Balance		
Year	Month	Fractional Year	South (mcf)	Mid (mcf)	Total (mcf)	South (mcf)	Mid (mcf)	Total (mcf)	South (mcf)	Mid (mcf)	Total (mcf)	South Adj. (mcf)	South Cum. Adj. (mcf)	Mid Adj. (mcf)	Mid Cum. Adj. (mcf)	South (mcf)	Mid (mcf)	Total (mcf)
1982	9	1982.747	1714043	2704872	4418914	0	26334	26334	17835710	36906774	54742483	0	0	0	0	17835710	36906774	54742483
1982	10	1982.832	549185	795323	1344507	0	5270	5270	18384894	37696826	56081720	7600000	7600000	-7600000	-7600000	25984894	30096826	56081720
1982	11	1982.914	0	0	0	0	34605	34605	18384894	37662220	56047115	0	7600000	0	-7600000	25984894	30062220	56047115
1982	12	1982.999	197360	0	197360	726740	0	726740	17855513	37662220	55517734	0	7600000	0	-7600000	25455513	30062220	55517734
1983	1	1983.085	324767	0	324767	2528128	825240	3353368	15652153	36836980	52489133	0	7600000	0	-7600000	23252153	29236980	52489133
1983	2	1983.162	0	0	0	1614110	2319024	3933133	14038043	34517957	48556000	0	7600000	0	-7600000	21638043	26917957	48556000
1983	3	1983.246	0	0	0	1774139	1665303	3439442	12263904	32852654	45116558	0	7600000	0	-7600000	19863904	25252654	45116558
1983	4	1983.329	142389	271597	413986	1763238	454402	2217640	10643056	32669849	43312905	0	7600000	0	-7600000	18243056	25069849	43312905
1983	5	1983.413	975674	2146685	3122360	123281	429413	552693	11495449	34387122	45882571	0	7600000	0	-7600000	19095449	26787122	45882571
1983	6	1983.496	4257268	3905563	8162832	23362	4804	28166	15729355	38287881	54017236	0	7600000	0	-7600000	23329355	30687881	54017236
1983	7	1983.580	2026451	610647	2637098	10731	0	10731	17745075	38898527	56643602	0	7600000	0	-7600000	25345075	31298527	56643602
1983	8	1983.665	0	0	0	0	0	0	17745075	38898527	56643602	0	7600000	0	-7600000	25345075	31298527	56643602
1983	9	1983.747	120259	0	120259	0	0	0	17865334	38898527	56763861	0	7600000	0	-7600000	25465334	31298527	56763861
1983	10	1983.832	112066	0	112066	4169	0	4169	17973231	38898527	56871758	0	7600000	0	-7600000	25573231	31298527	56871758
1983	11	1983.914	127	0	127	448906	0	448906	17524452	38898527	56422979	0	7600000	0	-7600000	25124452	31298527	56422979
1983	12	1983.999	0	0	0	5625819	2187984	7813803	11898633	36710544	48609177	0	7600000	0	-7600000	19498633	29110544	48609177
1984	1	1984.085	264756	0	264756	3191754	3314639	6506393	8971635	33395904	42367540	0	7600000	0	-7600000	16571635	25795904	42367540
1984	2	1984.164	0	0	0	2626183	7054861	9681043	6345453	26341044	32686496	0	7600000	0	-7600000	13945453	18741044	32686496
1984	3	1984.246	0	0	0	3580348	9671646	13251994	2765105	16669397	19434502	0	7600000	0	-7600000	10365105	9069397	19434502
1984	4	1984.329	1743222	0	1743222	844	0	844	4507483	16669397	21176880	0	7600000	0	-7600000	12107483	9069397	21176880
1984	5	1984.413	4133112	0	4133112	900	0	900	8639695	16669397	25309092	0	7600000	0	-7600000	16239695	9069397	25309092
1984	6	1984.496	7926765	0	7926765	24368	0	24368	16542092	16669397	33211489	0	7600000	0	-7600000	24142092	9069397	33211489
1984	7	1984.580	0	2671039	2671039	0	10082	10082	16542092	19330354	35872446	0	7600000	0	-7600000	24142092	11730354	35872446
1984	8	1984.665	247882	8174340	8422222	0	37292	37292	16789974	27467403	44257377	0	7600000	0	-7600000	24389974	19867403	44257377
1984	9	1984.747	1475254	8896293	10371548	0	33892	33892	18265228	36329804	54595032	0	7600000	0	-7600000	25865228	28729804	54595032
1984	10	1984.832	695587	2023154	2718741	4180	96837	101017	18956636	38256120	57212756	0	7600000	0	-7600000	26556636	30656120	57212756
1984	11	1984.914	0	0	0	1144	0	1144	18955492	38256120	57211613	0	7600000	0	-7600000	26555492	30656120	57211613
1984	12	1984.999	0	0	0	208	0	208	18955284	38256120	57211404	0	7600000	0	-7600000	26555284	30656120	57211404
1985	1	1985.085	324767	0	324767	7775868	2163845	9939713	11504182	36092276	47596458	0	7600000	0	-7600000	19104182	28492276	47596458
1985	2	1985.162	0	0	0	2862034	8445912	11307946	8642148	27646363	36288512	0	7600000	0	-7600000	16242148	20046363	36288512
1985	3	1985.246	2000565	1000000	3000565	5472451	6089078	11561529	5170262	22557285	27727547	0	7600000	0	-7600000	12770262	14957285	27727547
1985	4	1985.329	0	115737	115737	0	3622176	3622176	5170262	19050847	24221109	0	7600000	0	-7600000	12770262	11450847	24221109
1985	5	1985.413	0	0	0	0	0	0	5170262	19050847	24221109	0	7600000	0	-7600000	12770262	11450847	24221109
1985	6	1985.496	0	308246	308246	0	0	0	5170262	19359093	24529355	0	7600000	0	-7600000	12770262	11759093	24529355
1985	7	1985.580	1658942	6908808	8567749	1405	0	1405	6827799	26267900	33095699	0	7600000	0	-7600000	14427799	18667900	33095699
1985	8	1985.665	2585996	8291034	10877030	1334	24488	25823	9412461	34534446	43946906	0	7600000	0	-7600000	17012461	26934446	43946906
1985	9	1985.747	6098980	4314293	10413273	16877	26172	43049	15494563	38822567	54317130	0	7600000	0	-7600000	23094563	31222567	54317130
1985	10	1985.832	1894292	275501	2169793	9881	491	10371	17378974	39097578	56476552	0	7600000	0	-7600000	24978974	31497578	56476552
1985	11	1985.914	0	0	0	0	1454	1454	17378974	39096123	56475098	0	7600000	0	-7600000	24978974	31496123	56475098
1985	12	1985.999	0	0	0	1368536	0	1368536	16010438	39096123	55106561	0	7600000	0	-7600000	23610438	31496123	55106561
1986	1	1986.085	0	335357	335357	6341323	2728880	9070203	9669115	36702601	46371716	0	7600000	0	-7600000	17269115	29102601	46371716
1986	2	1986.162	0	0	0	3519267	8337751	11857018	6149848	28364850	34514698	0	7600000	0	-7600000	13749848	20764850	34514698
1986	3	1986.246	0	373143	373143	2780856	6088965	8869821	3368991	22649029	26018020	0	7600000	0	-7600000	10968991	15049029	26018020
1986	4	1986.329	123599	404346	527944	317661	984330	1301991	3174929	22069044	25243973	0	7600000	0	-7600000	10774929	14469044	25243973

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Injection/Withdrawal History
Kimball Colinville Reservoir
1979 to 2007
Oilfield Units - Dawn Metered Volumes

Date			Injection			Withdrawals			Physical Balance			Paper Balance Adjustments				Paper Balance		
Year	Month	Fractional Year	South (mcf)	Mid (mcf)	Total (mcf)	South (mcf)	Mid (mcf)	Total (mcf)	South (mcf)	Mid (mcf)	Total (mcf)	South Adj. (mcf)	South Cum. Adj. (mcf)	Mid Adj. (mcf)	Mid Cum. Adj. (mcf)	South (mcf)	Mid (mcf)	Total (mcf)
1986	5	1986.413	4448334	0	4448334	858	0	858	7622405	22069044	29691449	0	7600000	0	-7600000	15222405	14469044	29691449
1986	6	1986.496	8737941	3301444	12039385	29917	0	29917	16330429	25370488	41700916	0	7600000	0	-7600000	23930429	17770488	41700916
1986	7	1986.580	141030	9478735	9619765	995	22825	23821	16470463	34826397	51296860	0	7600000	0	-7600000	24070463	27226397	51296860
1986	8	1986.665	401359	4124876	4526236	477	28452	28929	16871346	38922821	55794167	0	7600000	0	-7600000	24471346	31322821	55794167
1986	9	1986.747	364445	109687	474132	42827	0	42827	17192964	39032508	56225472	0	7600000	0	-7600000	24792964	31432508	56225472
1986	10	1986.832	579907	562147	1142054	19147	0	19147	17753724	39594655	57348378	0	7600000	0	-7600000	25353724	31994655	57348378
1986	11	1986.914	528551	0	528551	744366	0	744366	17537909	39594655	57132564	0	7600000	0	-7600000	25137909	31994655	57132564
1986	12	1986.999	0	0	0	1964374	0	1964374	15573534	39594655	55168189	0	7600000	0	-7600000	23173534	31994655	55168189
1987	1	1987.085	0	0	0	5897938	2365430	8263368	9675596	37229225	46904821	0	7600000	0	-7600000	17275596	29629225	46904821
1987	2	1987.162	13555	0	13555	3798309	7784228	11582537	5890842	29444997	35335840	0	7600000	0	-7600000	13490842	21844997	35335840
1987	3	1987.246	42516	202584	245100	1741475	5694747	7436222	4191884	23952834	28144718	0	7600000	0	-7600000	11791884	16352834	28144718
1987	4	1987.329	3828272	3048373	6876645	625	1833755	1834379	8019531	25167452	33186983	0	7600000	0	-7600000	15619531	17567452	33186983
1987	5	1987.413	0	0	0	332	0	332	8019199	25167452	33186651	0	7600000	0	-7600000	15619199	17567452	33186651
1987	6	1987.496	924382	0	924382	402	1317	1719	8943179	25166135	34109315	0	7600000	0	-7600000	16543179	17566135	34109315
1987	7	1987.580	2515871	0	2515871	3495	0	3495	11455556	25166135	36621691	0	7600000	0	-7600000	19055556	17566135	36621691
1987	8	1987.665	4717552	3238393	7955945	19207	1666	20873	16153900	28402862	44556762	0	7600000	0	-7600000	23753900	20802862	44556762
1987	9	1987.747	491966	9363778	9855743	671	34457	35128	16645195	37732183	54377378	0	7600000	0	-7600000	24245195	30132183	54377378
1987	10	1987.832	635163	1659665	2294828	635	371516	372151	17279723	39020333	56300055	0	7600000	0	-7600000	24879723	31420333	56300055
1987	11	1987.914	265776	197681	463457	695	2337	3032	17544803	39215676	56760479	0	7600000	0	-7600000	25144803	31615676	56760479
1987	12	1987.999	0	0	0	664	65398	66062	17544139	39150278	56694418	0	7600000	0	-7600000	25144139	31550278	56694418
1988	1	1988.085	0	0	0	6329744	2609055	8938799	11214395	36541224	47755619	0	7600000	0	-7600000	18814395	28941224	47755619
1988	2	1988.164	8313	0	8313	5377718	9752842	15130560	5844990	26788382	32633372	0	7600000	0	-7600000	13444990	19188382	32633372
1988	3	1988.246	34090	0	34090	1221173	7284146	8505320	4657907	19504235	24162142	0	7600000	0	-7600000	12257907	11904235	24162142
1988	4	1988.329	0	0	0	85	1003	1087	4657822	19503233	24161055	0	7600000	0	-7600000	12257822	11903233	24161055
1988	5	1988.413	0	0	0	92	0	92	4657730	19503233	24160963	0	7600000	0	-7600000	12257730	11903233	24160963
1988	6	1988.496	1652542	54063	1706605	85	0	85	6310187	19557296	25867483	0	7600000	0	-7600000	13910187	11957296	25867483
1988	7	1988.580	8034235	5742993	13777227	18307	0	18307	14326115	25300289	39626404	0	7600000	0	-7600000	21926115	17700289	39626404
1988	8	1988.665	3215469	10814925	14030394	27245	16627	43872	17514339	36098587	53612926	0	7600000	0	-7600000	25114339	28498587	53612926
1988	9	1988.747	241708	5455482	5697190	438	1570580	1571018	17755609	39983489	57739098	0	7600000	0	-7600000	25355609	32383489	57739098
1988	10	1988.832	0	0	0	304	7427	7731	17755305	39976062	57731367	0	7600000	-300000	-7900000	25355305	32076062	57431367
1988	11	1988.914	0	0	0	417	0	417	17754888	39976062	57730950	0	7600000	0	-7900000	25354888	32076062	57430950
1988	12	1988.999	0	0	0	3253636	944821	4198457	14501253	39031241	53532493	0	7600000	0	-7900000	22101253	31131241	53232493
1989	1	1989.085	0	0	0	3664456	339929	4004384	10836797	38691312	49528109	0	7600000	0	-7900000	18436797	30791312	49228109
1989	2	1989.162	0	0	0	3420421	6332505	9752926	7416375	32358807	39775182	0	7600000	0	-7900000	15016375	24458807	39475182
1989	3	1989.246	498824	0	498824	1371322	6020266	7391588	6543878	26338541	32882419	0	7600000	0	-7900000	14143878	18438541	32582419
1989	4	1989.329	18473	0	18473	1311978	1113570	2425547	5250374	25224971	30475345	0	7600000	0	-7900000	12850374	17324971	30175345
1989	5	1989.413	1911208	0	1911208	123115	82964	206079	7038467	25142007	32180474	0	7600000	0	-7900000	14638467	17242007	31880474
1989	6	1989.496	0	191683	191683	124	0	124	7038343	25333690	32372033	0	7600000	0	-7900000	14638343	17433690	32072033
1989	7	1989.580	493515	10581672	11075187	367	48712	49079	7531491	35866651	43398142	0	7600000	0	-7900000	15131491	27966651	43098142
1989	8	1989.665	5929646	4942068	10871713	473	37105	37578	13460664	40771614	54232278	0	7600000	0	-7900000	21060664	32871614	53932278
1989	9	1989.747	3052453	684824	3737278	31877	4748	36625	16481241	41451690	57932931	0	7600000	0	-7900000	24081241	33551690	57632931
1989	10	1989.832	0	0	0	808	0	808	16480432	41451690	57932122	0	7600000	0	-7900000	24080432	33551690	57632122
1989	11	1989.914	0	0	0	78064	0	78064	16402368	41451690	57854058	0	7600000	0	-7900000	24002368	33551690	57554058
1989	12	1989.999	0	0	0	8509228	6283440	14792668	7893140	35168250	43061390	0	7600000	0	-7900000	15493140	27268250	42761390

Table A1-1
Injection/Withdrawal History
Kimball Colinville Reservoir
1979 to 2007
Oilfield Units - Dawn Metered Volumes

Date			Injection			Withdrawals			Physical Balance			Paper Balance Adjustments				Paper Balance		
Year	Month	Fractional Year	South (mcf)	Mid (mcf)	Total (mcf)	South (mcf)	Mid (mcf)	Total (mcf)	South (mcf)	Mid (mcf)	Total (mcf)	South Adj. (mcf)	South Cum. Adj. (mcf)	Mid Adj. (mcf)	Mid Cum. Adj. (mcf)	South (mcf)	Mid (mcf)	Total (mcf)
1990	1	1990.085	0	0	0	1713760	896007	2609768	6179380	34272242	40451623	0	7600000	0	-7900000	13779380	26372242	40151623
1990	2	1990.162	0	0	0	1803463	3608560	5412023	4375917	30663682	35039599	0	7600000	0	-7900000	11975917	22763682	34739599
1990	3	1990.246	0	0	0	1032035	5436886	6468921	3343882	25226796	28570678	0	7600000	0	-7900000	10943882	17326796	28270678
1990	4	1990.329	657957	0	657957	438	2354275	2354713	4001401	22872521	26873922	0	7600000	0	-7900000	11601401	14972521	26573922
1990	5	1990.413	0	0	0	297	0	297	4001104	22872521	26873625	0	7600000	0	-7900000	11601104	14972521	26573625
1990	6	1990.496	0	0	0	282	0	282	4000822	22872521	26873343	0	7600000	0	-7900000	11600822	14972521	26573343
1990	7	1990.580	3454660	628915	4083575	31340	556700	588040	7424142	22944736	30368878	0	7600000	0	-7900000	15024142	15044736	30068878
1990	8	1990.665	7571975	4915850	12487825	16454	30811	47264	14979663	27829776	42809438	-381753	7218247	0	-7900000	22197910	19929776	42127685
1990	9	1990.747	1047388	11452090	12499478	14389	25904	40292	16012662	39255962	55268623	0	7218247	0	-7900000	23230909	31355962	54586870
1990	10	1990.832	1109224	2498627	3607851	3445	15878	19324	17118440	41738710	58857151	0	7218247	0	-7900000	24336687	33838710	58175398
1990	11	1990.914	0	0	0	0	102	102	17118440	41738608	58857048	0	7218247	0	-7900000	24336687	33838608	58175295
1990	12	1990.999	0	0	0	0	0	0	17118440	41738608	58857048	0	7218247	0	-7900000	24336687	33838608	58175295
1991	1	1991.085	0	0	0	8254621	3957759	12212380	8863820	37780849	46644668	0	7218247	0	-7900000	16082067	29880849	45962915
1991	2	1991.162	1034	0	1034	2819024	6851684	9670707	6045830	30929165	36974995	0	7218247	0	-7900000	13264077	23029165	36293242
1991	3	1991.246	-1034	0	-1034	0	5868010	5868010	6044796	25061154	31105950	0	7218247	0	-7900000	13263043	17161154	30424197
1991	4	1991.329	0	0	0	0	0	0	6044796	25061154	31105950	0	7218247	0	-7900000	13263043	17161154	30424197
1991	5	1991.413	4630419	74954	4705373	0	0	0	10675215	25136108	35811323	0	7218247	0	-7900000	17893462	17236108	35129570
1991	6	1991.496	5837765	8019645	13857410	20291	10735	31026	16492689	33145018	49637707	0	7218247	0	-7900000	23710936	25245018	48955954
1991	7	1991.580	100515	6800378	6900893	0	31418	31418	16593204	39913978	56507182	0	7218247	0	-7900000	23811451	32013978	55825429
1991	8	1991.665	1145083	1523757	2668840	310209	16157	326366	17428078	41421579	58849656	-177408	7040839	-243935	-8143935	24468917	33277643	57746560
1991	9	1991.747	475900	352047	827948	0	0	0	17903978	41773626	59677604	-1938668	5102171	-2676331	-10820266	23006149	30953360	53959509
1991	10	1991.832	0	625688	625688	0	0	0	17903978	42399314	60303292	0	5102171	0	-10820266	23006149	31579048	54585197
1991	11	1991.914	0	0	0	350699	1085558	1436257	17553279	41313756	58867035	0	5102171	0	-10820266	22655450	30493490	53148940
1991	12	1991.999	0	0	0	0	706	706	17553279	41313050	58866329	0	5102171	0	-10820266	22655450	30492784	53148234
1992	1	1992.085	0	0	0	6192975	1678519	7871495	11360304	39634531	50994834	0	5102171	0	-10820266	16462475	28814264	45276739
1992	2	1992.164	0	0	0	5752386	10203463	15955849	5607917	29431068	35038985	0	5102171	0	-10820266	10710088	18610801	29320890
1992	3	1992.246	0	2683	2683	2024516	8043561	10068078	3583401	21390189	24973590	0	5102171	0	-10820266	8685572	10569923	19255495
1992	4	1992.329	0	0	0	431365	1830412	2261776	3152036	19559778	22711814	0	5102171	0	-10820266	8254207	8739511	16993719
1992	5	1992.413	0	0	0	0	88	88	3152036	19559689	22711726	0	5102171	0	-10820266	8254207	8739423	16993630
1992	6	1992.496	0	3159958	3159958	0	20778	20778	3152036	22698870	25850906	0	5102171	0	-10820266	8254207	11878604	20132811
1992	7	1992.580	4556121	9136603	13692725	0	21975	21975	7708157	31813498	39521656	0	5102171	0	-10820266	12810328	20993232	33803561
1992	8	1992.665	5409309	7511021	12920330	27220	7869	35089	13090246	39316651	52406896	-58567	5043604	-6156	-10826423	18133849	28490228	46624077
1992	9	1992.747	3465854	1988863	5454716	97254	138	97391	16458846	41305376	57764221	-364427	4679176	0	-10826423	21138022	30478953	51616975
1992	10	1992.832	451822	1601836	2053657	7777	159	7936	16902890	42907052	59809943	0	4679176	0	-10826423	21582067	32080630	53662696
1992	11	1992.914	0	0	0	0	155	155	16902890	42906897	59809788	0	4679176	0	-10826423	21582067	32080474	53662541
1992	12	1992.999	0	0	0	2737871	178128	2915998	14165020	42728769	56893789	0	4679176	0	-10826423	18844196	31902347	50746543
1993	1	1993.085	0	0	0	6624527	5046353	11670880	7540493	37682416	45222909	0	4679176	0	-10826423	12219669	26855993	39075662
1993	2	1993.162	0	0	0	3512560	11376197	14888757	4027933	26306219	30334152	0	4679176	0	-10826423	8707109	15479797	24186906
1993	3	1993.246	0	0	0	1043226	5301031	6344257	2984707	21005189	23989896	0	4679176	0	-10826423	7663883	10178766	17842649
1993	4	1993.329	1106781	2162327	3269108	1098997	1806160	2905157	2992491	21361356	24353846	0	4679176	-357297	-11183719	7671667	10177636	17849303
1993	5	1993.413	0	0	0	0	92	92	2992491	21361264	24353755	0	4679176	0	-11183719	7671667	10177545	17849211
1993	6	1993.496	0	2323210	2323210	0	95	95	2992491	23684379	26676870	0	4679176	0	-11183719	7671667	12500659	20172326
1993	7	1993.580	24823	11438294	11463118	0	102	102	3017314	35122571	38139885	0	4679176	0	-11183719	7696490	23938851	31635342
1993	8	1993.665	2927333	5096622	8023955	0	92	92	5944648	40219101	46163748	-722377	3956799	0	-11183719	9901447	29035381	38936828

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Injection/Withdrawal History
Kimball Colinville Reservoir
1979 to 2007
Oilfield Units - Dawn Metered Volumes

Date			Injection			Withdrawals			Physical Balance			Paper Balance Adjustments				Paper Balance		
Year	Month	Fractional Year	South (mcf)	Mid (mcf)	Total (mcf)	South (mcf)	Mid (mcf)	Total (mcf)	South (mcf)	Mid (mcf)	Total (mcf)	South Adj. (mcf)	South Cum. Adj. (mcf)	Mid Adj. (mcf)	Mid Cum. Adj. (mcf)	South (mcf)	Mid (mcf)	Total (mcf)
1993	9	1993.747	5990839	3086720	9077559	470	159	628	11935018	43305662	55240679	0	3956799	0	-11183719	15891817	32121942	48013759
1993	10	1993.832	2536808	177164	2713972	653	169	823	14471173	43482656	57953829	0	3956799	0	-11183719	18427972	32298937	50726908
1993	11	1993.914	126659	0	126659	452	155	607	14597380	43482501	58079881	0	3956799	0	-11183719	18554179	32298781	50852960
1993	12	1993.999	0	0	0	3098327	166	3098493	11499053	43482335	54981388	0	3956799	0	-11183719	15455852	32298616	47754468
1994	1	1994.085	0	0	0	7469412	3628495	11097907	4029641	39853840	43883481	0	3956799	0	-11183719	7986440	28670121	36656561
1994	2	1994.162	0	0	0	1151440	8070538	9221978	2878201	31783302	34661503	0	3956799	0	-11183719	6835000	20599583	27434583
1994	3	1994.246	0	0	0	150812	5636236	5787048	2727389	26147066	28874455	0	3956799	0	-11183719	6684188	14963347	21647535
1994	4	1994.329	705023	286420	991443	297	684567	684863	3432116	25748919	29181035	0	3956799	0	-11183719	7388915	14565200	21954115
1994	5	1994.413	636819	154229	791048	0	473	473	4068935	25902675	29971610	0	3956799	0	-11183719	8025734	14718956	22744689
1994	6	1994.496	0	0	0	0	519	519	4068935	25902156	29971091	0	3956799	0	-11183719	8025734	14718437	22744171
1994	7	1994.580	0	1423634	1423634	0	512	512	4068935	27325278	31394213	0	3956799	0	-11183719	8025734	16141559	24167293
1994	8	1994.665	448652	10242809	10691461	0	21696	21696	4517586	37546392	42063978	0	3956799	-682223	-11865942	8474385	25680450	34154835
1994	9	1994.747	7471876	6917149	14389025	0	34683	34683	11989462	44428858	56418320	0	3956799	0	-11865942	15946261	32562916	48509177
1994	10	1994.832	3429910	1575272	5005182	0	10145	10145	15419372	45993984	61413356	0	3956799	0	-11865942	19376171	34128042	53504214
1994	11	1994.914	303110	265779	568889	508	6036	6545	15721974	46253727	61975701	0	3956799	0	-11865942	19678773	34387785	54066558
1994	12	1994.999	0	0	0	2470238	522	2470760	13251736	46253205	59504941	0	3956799	0	-11865942	17208535	34387263	51595798
1995	1	1995.085	0	0	0	6448595	4614491	11063086	6803141	41638714	48441855	-225597	3731202	0	-11865942	10534343	29772772	40307115
1995	2	1995.162	0	0	0	2854720	5343596	8198316	3948421	36295117	40243539	0	3731202	0	-11865942	7679624	24429175	32108799
1995	3	1995.246	0	0	0	0	3985301	3985301	3948421	32309816	36258238	0	3731202	0	-11865942	7679624	20443875	28123498
1995	4	1995.329	106689	0	106689	364	2519518	2519881	4054747	29790299	33845046	0	3731202	0	-11865942	7785950	17924357	25710306
1995	5	1995.413	642597	0	642597	81	226	307	4697264	29790073	34487336	0	3731202	0	-11865942	8428466	17924131	26352597
1995	6	1995.496	0	290734	290734	0	21262	21262	4697264	30059545	34756808	0	3731202	0	-11865942	8428466	18193603	26622069
1995	7	1995.580	47589	3377549	3425138	0	17015	17015	4744852	33420078	38164931	381753	4112955	300000	-11565942	8857808	21854137	30711944
1995	8	1995.665	304434	7140137	7444571	0	728830	728830	5049286	39831385	44880672	0	4112955	-675409	-12241351	9162242	27590034	36752276
1995	9	1995.747	4245076	6019380	10264456	0	69168	69168	9294362	45781597	55075959	0	4112955	0	-12241351	13407317	33540246	46947563
1995	10	1995.832	5043363	1647317	6690681	7441	23193	30634	14330284	47405722	61736005	0	4112955	0	-12241351	18443239	35164370	53607610
1995	11	1995.914	133998	0	133998	621	303678	304300	14463661	47102043	61565704	0	4112955	0	-12241351	18576616	34860692	53437308
1995	12	1995.999	0	0	0	3002725	205	3002930	11460936	47101839	58562774	0	4112955	0	-12241351	15573891	34860487	50434378
1996	1	1996.085	0	0	0	6493611	2937892	9431502	4967325	44163947	49131272	0	4112955	0	-12241351	9080280	31922595	41002876
1996	2	1996.164	0	0	0	2703121	8727086	11430207	2264204	35436860	37701065	0	4112955	0	-12241351	6377160	23195509	29572669
1996	3	1996.246	0	0	0	2360604	7516538	9877143	-96400	27920322	27823922	0	4112955	0	-12241351	4016555	15678971	19695526
1996	4	1996.329	0	12087	12087	586363	3403431	3989795	-682763	24528978	23846214	0	4112955	0	-12241351	3430192	12287626	15717818
1996	5	1996.413	2938044	4500445	7438488	406	5242	5648	2254874	29024180	31279055	0	4112955	0	-12241351	6367830	16782829	23150659
1996	6	1996.496	6576193	10718586	17294779	0	20351	20351	8831068	39722415	48553483	0	4112955	0	-12241351	12944023	27481064	40425087
1996	7	1996.580	2751363	5024530	7775893	32	26084	26116	11582398	44720862	56303260	0	4112955	0	-12241351	15695354	32479511	48174865
1996	8	1996.665	645414	315419	960834	0	653	653	12227813	45035628	57263441	0	4112955	0	-12241351	16340768	32794277	49135045
1996	9	1996.747	1551409	2056139	3607547	0	63916	63916	13779221	47027852	60807073	5582000	9694956	-5645425	-17886776	23474177	29141075	52615252
1996	10	1996.832	1149153	1672600	2821752	81107	249117	330225	14847267	48451334	63298601	0	9694956	0	-17886776	24542223	30564557	55106780
1996	11	1996.914	0	98373	98373	411942	1060827	1472769	14435325	47488880	61924204	0	9694956	0	-17886776	24130280	29602103	53732384
1996	12	1996.999	0	0	0	0	568	568	14435325	47488311	61923636	0	9694956	0	-17886776	24130280	29601535	53731815
1997	1	1997.085	0	0	0	10246413	10184909	20431322	4188911	37303402	41492314	0	9694956	0	-17886776	13883867	19416626	33300493
1997	2	1997.162	0	0	0	2831425	8488111	11319535	1357487	28815292	30172778	0	9694956	0	-17886776	11052442	10928515	21980957
1997	3	1997.246	0	0	0	1523828	3841440	5365268	-166341	24973852	24807511	0	9694956	0	-17886776	9528614	7087076	16615690
1997	4	1997.329	0	29561	29561	126807	122575	249382	-293149	24880838	24587689	0	9694956	0	-17886776	9401807	6994062	16395868

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Kimball Colinville Reservoir
1979 to 2007
Oilfield Units - Dawn Metered Volumes

Date			Injection			Withdrawals			Physical Balance			Paper Balance Adjustments				Paper Balance		
Year	Month	Fractional Year	South (mcf)	Mid (mcf)	Total (mcf)	South (mcf)	Mid (mcf)	Total (mcf)	South (mcf)	Mid (mcf)	Total (mcf)	South Adj. (mcf)	South Cum. Adj. (mcf)	Mid Adj. (mcf)	Mid Cum. Adj. (mcf)	South (mcf)	Mid (mcf)	Total (mcf)
1997	5	1997.413	522871	1111261	1634132	7	24234	24241	229716	25967865	26197581	0	9694956	0	-17886776	9924671	8081089	18005760
1997	6	1997.496	0	0	0	0	88	88	229716	25967777	26197492	0	9694956	0	-17886776	9924671	8081000	18005672
1997	7	1997.580	0	3508507	3508507	4	7	11	229712	29476277	29705989	0	9694956	0	-17886776	9924668	11589501	21514168
1997	8	1997.665	1456068	11231001	12687069	0	201	201	1685780	40707077	42392857	0	9694956	0	-17886776	11380736	22820301	34201037
1997	9	1997.747	8197501	8100967	16298468	310509	47299	357809	9572772	48760745	58333517	-471481	9223475	160971	-17725805	18796247	31034940	49831187
1997	10	1997.832	3895083	726903	4621985	341793	53671	395464	13126062	49433976	62560038	0	9223475	0	-17725805	22349537	31708171	54057708
1997	11	1997.914	151807	2295	154102	339	2330	2669	13277530	49433941	62711471	0	9223475	0	-17725805	22501005	31708136	54209142
1997	12	1997.999	0	0	0	302817	3097607	3400424	12974713	46336334	59311048	0	9223475	0	-17725805	22198188	28610530	50808718
1998	1	1998.085	0	0	0	3691524	11818095	15509619	9283189	34518239	43801428	0	9223475	0	-17725805	18506664	16792434	35299098
1998	2	1998.162	0	0	0	4621982	2755013	7376994	4661207	31763227	36424434	0	9223475	0	-17725805	13884682	14037422	27922104
1998	3	1998.246	479353	629960	1109312	2183532	1942619	4126151	2957028	30450568	33407595	0	9223475	0	-17725805	12180503	12724763	24905266
1998	4	1998.329	2054441	3003241	5057681	11	3901	3911	5011458	33449908	38461366	0	9223475	0	-17725805	14234933	15724103	29959036
1998	5	1998.413	1344493	2917756	4262249	85	18759	18844	6355866	36348905	42704771	0	9223475	0	-17725805	15579341	18623100	34202441
1998	6	1998.496	1371477	7805878	9177355	21	27718	27739	7727322	44127064	51854387	0	9223475	0	-17725805	16950797	26401260	43352057
1998	7	1998.580	5704744	4874305	10579049	95	40031	40126	13431971	48961338	62393309	-544412	8679063	0	-17725805	22111034	31235533	53346567
1998	8	1998.665	1398447	596650	1995097	692467	5821	698288	14137951	49552167	63690118	-1186466	7492597	493999	-17231806	21630549	32320361	53950909
1998	9	1998.747	0	0	0	0	642	642	14137951	49551524	63689476	0	7492597	0	-17231806	21630549	32319718	53950267
1998	10	1998.832	837722	756111	1593833	17191	204113	221304	14958482	50103522	65062004	0	7492597	0	-17231806	22451080	32871716	55322796
1998	11	1998.914	82124	397105	479229	139290	792961	932251	14901316	49707667	64608983	0	7492597	0	-17231806	22393913	32475861	54869774
1998	12	1998.999	111490	109468	220958	310714	474287	785001	14702093	49342847	64044940	0	7492597	0	-17231806	22194690	32111041	54305732
1999	1	1999.085	0	0	0	2928481	402386	3330867	11773612	48940461	60714073	0	7492597	0	-17231806	19266209	31708655	50974865
1999	2	1999.162	0	0	0	5930397	3654635	9585032	5843215	45285826	51129041	0	7492597	0	-17231806	13335812	28054020	41389832
1999	3	1999.246	389032	4	389036	2621975	8242389	10864364	3610272	37043440	40653712	0	7492597	0	-17231806	11102869	19811634	30914504
1999	4	1999.329	1398768	53	1398821	205	30839	31043	5008835	37012655	42021490	0	7492597	0	-17231806	12501433	19780849	32282281
1999	5	1999.413	1303985	2343978	3647963	0	388	388	6312821	39356244	45669065	0	7492597	0	-17231806	13805418	22124438	35929856
1999	6	1999.496	1410417	7438799	8849216	0	816002	816002	7723238	45979041	53702279	-1326003	6166595	510202	-16721604	13889833	29257437	43147270
1999	7	1999.580	3868646	3913019	7781665	0	0	0	11591884	49892060	61483944	0	6166595	0	-16721604	17758479	33170456	50928935
1999	8	1999.665	616058	0	616058	0	0	0	12207942	49892060	62100002	0	6166595	0	-16721604	18374537	33170456	51544993
1999	9	1999.747	2201197	1237292	3438488	0	0	0	14409139	51129352	65538491	0	6166595	0	-16721604	20575734	34407748	54983481
1999	10	1999.832	15939	18821	34760	0	0	0	14425077	51148173	65573251	0	6166595	0	-16721604	20591672	34426569	55018242
1999	11	1999.914	123279	0	123279	420098	0	420098	14128259	51148173	65276432	0	6166595	0	-16721604	20294854	34426569	54721423
1999	12	1999.999	0	0	0	3349322	2076322	5425645	10778936	49071851	59850787	0	6166595	0	-16721604	16945531	32350247	49295778
2000	1	2000.085	0	0	0	7472439	8900439	16372879	3306497	40171412	43477909	0	6166595	0	-16721604	9473092	23449808	32922900
2000	2	2000.164	0	102531	102531	3598064	5978095	9576160	-291567	34295847	34004280	0	6166595	0	-16721604	5875027	17574243	23449271
2000	3	2000.246	275824	1325596	1601420	71429	1351910	1423340	-87173	34269533	34182360	0	6166595	0	-16721604	6079422	17547929	23627351
2000	4	2000.329	1138801	10421	1149222	527743	1876024	2403767	523886	32403930	32927816	0	6166595	0	-16721604	6690481	15682326	22372806
2000	5	2000.413	0	0	0	0	0	0	523886	32403930	32927816	0	6166595	0	-16721604	6690481	15682326	22372806
2000	6	2000.496	1276173	0	1276173	0	0	0	1800059	32403930	34203989	0	6166595	0	-16721604	7966654	15682326	23648980
2000	7	2000.580	2301168	138759	2439927	4737	0	4737	4096490	32542689	36639179	0	6166595	0	-16721604	10263085	15821085	26084170
2000	8	2000.665	7414545	2363963	9778509	0	0	0	11511035	34906652	46417688	-274309	5892286	-395965	-17117569	17403321	17789083	35192404
2000	9	2000.747	1018999	10203180	11222179	0	0	0	12530034	45109832	57639866	0	5892286	0	-17117569	18422319	27992263	46414583
2000	10	2000.832	828398	6250760	7079159	0	0	0	13358432	51360593	64719025	0	5892286	0	-17117569	19250718	34243023	53493741
2000	11	2000.914	485000	0	485000	173214	388685	561899	13670218	50971908	64642126	0	5892286	0	-17117569	19562504	33854338	53416842
2000	12	2000.999	0	0	0	848882	0	848882	12821336	50971908	63793244	0	5892286	0	-17117569	18713622	33854338	52567960

Table A1-1
Injection/Withdrawal History
Kimball Colinville Reservoir
1979 to 2007
Oilfield Units - Dawn Metered Volumes

Date			Injection			Withdrawals			Physical Balance			Paper Balance Adjustments				Paper Balance		
Year	Month	Fractional Year	South (mcf)	Mid (mcf)	Total (mcf)	South (mcf)	Mid (mcf)	Total (mcf)	South (mcf)	Mid (mcf)	Total (mcf)	South Adj. (mcf)	South Cum. Adj. (mcf)	Mid Adj. (mcf)	Mid Cum. Adj. (mcf)	South (mcf)	Mid (mcf)	Total (mcf)
2001	1	2001.085	0	0	0	6957131	1330580	8287712	5864205	49641327	55505532	0	5892286	0	-17117569	11756491	32523758	44280249
2001	2	2001.162	0	0	0	5173264	11722790	16896054	690940	37918538	38609478	0	5892286	0	-17117569	6583226	20800968	27384195
2001	3	2001.246	0	53887	53887	1254556	5481058	6735614	-563616	32491366	31927750	0	5892286	0	-17117569	5328670	15373797	20702467
2001	4	2001.329	0	2367996	2367996	0	1013492	1013492	-563616	33845870	33282254	0	5892286	0	-17117569	5328670	16728301	22056971
2001	5	2001.413	1259091	273	1259363	0	0	0	695475	33846142	34541617	0	5892286	0	-17117569	6587760	16728573	23316334
2001	6	2001.496	1973581	327585	2301165	0	0	0	2669055	34173727	36842782	0	5892286	0	-17117569	8561341	17056158	25617499
2001	7	2001.580	9316642	340726	9657368	0	0	0	11985698	34514453	46500151	0	5892286	0	-17117569	17877983	17396884	35274867
2001	8	2001.665	925506	6335247	7260753	0	0	0	12911203	40849700	53760903	-248960	5643326	-414271	-17531840	18554529	23317860	41872389
2001	9	2001.747	794768	9624664	10419432	0	0	0	13705971	50474364	64180335	0	5643326	0	-17531840	19349296	32942524	52291821
2001	10	2001.832	818352	1695475	2513827	1278576	2084073	3362649	13245747	50085767	63331514	0	5643326	0	-17531840	18889072	32553927	51442999
2001	11	2001.914	1433475	1742174	3175649	0	0	0	14679222	51827941	66507163	0	5643326	0	-17531840	20322547	34296101	54618648
2001	12	2001.999	129596	254182	383778	0	0	0	14808818	52082123	66890941	0	5643326	0	-17531840	20452143	34550283	55002426
2002	1	2002.085	0	0	0	3275070	91878	3366949	11533748	51990245	63523992	0	5643326	0	-17531840	17177073	34458404	51635478
2002	2	2002.162	266358	0	266358	4827484	3671755	8499239	6972622	48318490	55291111	0	5643326	0	-17531840	12615947	30786650	43402597
2002	3	2002.246	20030	328	20358	93452	7718066	7811518	6899199	40600752	47499951	0	5643326	0	-17531840	12542525	23068912	35611437
2002	4	2002.329	0	0	0	0	0	0	6899199	40600752	47499951	0	5643326	0	-17531840	12542525	23068912	35611437
2002	5	2002.413	88220	467659	555879	0	0	0	6987419	41068411	48055830	0	5643326	0	-17531840	12630744	23536571	36167315
2002	6	2002.496	2636752	3832860	6469611	0	0	0	9624170	44901271	54525441	0	5643326	0	-17531840	15267496	27369431	42636927
2002	7	2002.580	2322868	3512277	5835146	0	0	0	11947039	48413548	60360587	0	5643326	0	-17531840	17590364	30881708	48472073
2002	8	2002.665	1090087	1893220	2983308	0	0	0	13037126	50306769	63343895	-248960	5394366	-414271	-17946111	18431492	32360657	50792149
2002	9	2002.747	0	0	0	0	0	0	13037126	50306769	63343895	0	5394366	0	-17946111	18431492	32360657	50792149
2002	10	2002.832	253013	94880	347894	1067029	1086837	2153866	12223111	49314812	61537923	0	5394366	0	-17946111	17617477	31368700	48986177
2002	11	2002.914	533293	864978	1398271	1227351	1936283	3163634	11529052	48243507	59772559	0	5394366	0	-17946111	16923418	30297396	47220814
2002	12	2002.999	0	96925	96925	4008973	1109067	5118040	7520079	47231366	54751445	0	5394366	0	-17946111	12914445	29285254	42199699
2003	1	2003.085	0	0	0	6789143	9946960	16736104	730936	37284405	38015341	0	5394366	0	-17946111	6125302	19338294	25463596
2003	2	2003.162	0	197840	197840	973937	6589363	7563300	-243001	30892882	30649881	0	5394366	0	-17946111	5151364	12946771	18098135
2003	3	2003.246	0	0	0	79149	1561454	1640604	-322151	29331428	29009277	0	5394366	0	-17946111	5072215	11385317	16457532
2003	4	2003.329	1155062	2174865	3329926	762316	614564	1376880	70595	30891729	30962323	0	5394366	0	-17946111	5464960	12945617	18410578
2003	5	2003.413	4379758	7178956	11558714	0	0	0	4450353	38070685	42521037	0	5394366	0	-17946111	9844718	20124573	29969292
2003	6	2003.496	6711320	10930055	17641375	0	0	0	11161673	49000740	60162413	0	5394366	0	-17946111	16556039	31054628	47610667
2003	7	2003.580	1561715	2338383	3900098	0	0	0	12723388	51339123	64062511	0	5394366	0	-17946111	18117754	33393012	51510766
2003	8	2003.665	355772	73170	428942	0	0	0	13079161	51412293	64491454	-248960	5145406	-414271	-18360382	18224566	33051911	51276477
2003	9	2003.747	317902	520178	838080	0	0	0	13397063	51932470	65329534	0	5145406	0	-18360382	18542469	33572088	52114557
2003	10	2003.832	438349	0	438349	0	0	0	13835412	51932470	65767883	0	5145406	0	-18360382	18980818	33572088	52552906
2003	11	2003.914	572363	1513343	2085706	20546	711608	732154	14387229	52734206	67121435	0	5145406	0	-18360382	19532635	34373823	53906458
2003	12	2003.999	0	0	0	1414652	2354357	3769009	12972577	50379848	63352426	0	5145406	0	-18360382	18117983	32019466	50137449
2004	1	2004.085	300	0	300	9505647	11262521	20768168	3467231	39117328	42584558	0	5145406	0	-18360382	8612636	20756945	29369581
2004	2	2004.164	0	0	0	2827133	5757285	8584418	640098	33360042	34000140	0	5145406	0	-18360382	5785504	14999660	20785163
2004	3	2004.246	1789985	2172640	3962625	0	652456	652456	2430083	34880226	37310309	0	5145406	0	-18360382	7575488	16519844	24095333
2004	4	2004.329	503469	897954	1401422	368581	551421	920002	2564971	35226758	37791729	0	5145406	0	-18360382	7710377	16866376	24576753
2004	5	2004.413	322470	4230108	4552578	0	0	0	2887441	39456867	42344308	0	5145406	0	-18360382	8032847	21096484	29129331
2004	6	2004.496	0	0	0	0	0	0	2887441	39456867	42344308	0	5145406	0	-18360382	8032847	21096484	29129331
2004	7	2004.580	2422067	8473288	10895355	0	0	0	5309509	47930154	53239663	0	5145406	0	-18360382	10454914	29569772	40024686
2004	8	2004.665	4635181	5868754	10503935	0	0	0	9944690	53798909	63743598	-230664	4914742	-370549	-18730932	14859431	35067977	49927408

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Injection/Withdrawal History
Kimball Colinville Reservoir
1979 to 2007
Oilfield Units - Dawn Metered Volumes

Date			Injection			Withdrawals			Physical Balance			Paper Balance Adjustments				Paper Balance		
Year	Month	Fractional Year	South (mcf)	Mid (mcf)	Total (mcf)	South (mcf)	Mid (mcf)	Total (mcf)	South (mcf)	Mid (mcf)	Total (mcf)	South Adj. (mcf)	South Cum. Adj. (mcf)	Mid Adj. (mcf)	Mid Cum. Adj. (mcf)	South (mcf)	Mid (mcf)	Total (mcf)
2004	9	2004.747	0	491911	491911	0	0	0	9944690	54290819	64235509	0	4914742	0	-18730932	14859431	35559888	50419319
2004	10	2004.832	1428792	570106	1998898	3498	0	3498	11369984	54860925	66230909	0	4914742	0	-18730932	16284725	36129994	52414719
2004	11	2004.914	1340442	0	1340442	2553245	0	2553245	10157181	54860925	65018107	0	4914742	0	-18730932	15071923	36129994	51201917
2004	12	2004.999	685	0	685	3771504	1995375	5766879	6386362	52865551	59251913	0	4914742	0	-18730932	11301104	34134619	45435723
2005	1	2005.085	0	0	0	5928434	9292708	15221142	457928	43572843	44030771	0	4914742	0	-18730932	5372669	24841912	30214581
2005	2	2005.162	0	0	0	1364440	7935225	9299666	-906513	35637618	34731106	0	4914742	0	-18730932	4008229	16906687	20914916
2005	3	2005.246	571362	0	571362	0	2101582	2101582	-335151	33536036	33200886	0	4914742	0	-18730932	4579591	14805105	19384696
2005	4	2005.329	418687	0	418687	584590	0	584590	-501053	33536036	33034983	0	4914742	0	-18730932	4413688	14805105	19218793
2005	5	2005.413	1677631	3808713	5486344	0	0	0	1176578	37344749	38521327	0	4914742	0	-18730932	6091319	18613818	24705137
2005	6	2005.496	1491946	558259	2050205	0	0	0	2668523	37903008	40571532	0	4914742	0	-18730932	7583265	19172077	26755342
2005	7	2005.580	6274871	3754978	10029849	0	0	0	8943394	41657986	50601381	0	4914742	0	-18730932	13858136	22927055	36785191
2005	8	2005.665	508446	11272896	11781342	0	0	0	9451841	52930882	62382723	-215145	4699597	-379829	-19110760	14151438	33820122	47971560
2005	9	2005.747	50704	2390092	2440796	0	0	0	9502545	55320974	64823519	0	4699597	0	-19110760	14202142	36210214	50412356
2005	10	2005.832	2071207	265182	2336388	1935568	0	1935568	9638183	55586156	65224339	0	4699597	0	-19110760	14337780	36475396	50813176
2005	11	2005.914	985435	108	985542	1660710	0	1660710	8962907	55586264	64549171	0	4699597	0	-19110760	13662504	36475504	50138008
2005	12	2005.999	0	0	0	3198524	598773	3797297	5764383	54987491	60751874	0	4699597	0	-19110760	10463980	35876731	46340711
2006	1	2006.085	0	0	0	5276932	1175441	6452373	487451	53812049	54299500	0	4699597	0	-19110760	5187048	34701289	39888337
2006	2	2006.162	0	0	0	921628	2404854	3326482	-434177	51407195	50973018	0	4699597	0	-19110760	4265420	32296435	36561855
2006	3	2006.246	43660	0	43660	281963	6599026	6880989	-672480	44808170	44135690	0	4699597	0	-19110760	4027117	25697410	29724527
2006	4	2006.329	1777248	1320324	3097572	0	1890231	1890231	1104769	44238263	45343031	0	4699597	0	-19110760	5804365	25127502	30931868
2006	5	2006.413	5866	296169	302035	0	1370	1370	1110634	44533062	45643696	0	4699597	0	-19110760	5810231	25422302	31232533
2006	6	2006.496	849610	6231053	7080663	0	0	0	1960244	50764116	52724360	0	4699597	0	-19110760	6659841	31653355	38313196
2006	7	2006.580	5072814	2380640	7453454	0	0	0	7033057	53144756	60177813	0	4699597	0	-19110760	11732654	34033996	45766650
2006	8	2006.665	122697	4198670	4321367	0	0	0	7155754	57343426	64499180	-135814	4563783	-239774	-19350534	11719537	37992892	49712429
2006	9	2006.747	0	293355	293355	0	0	0	7155754	57636781	64792535	0	4563783	0	-19350534	11719537	38286247	50005784
2006	10	2006.832	304618	178700	483318	392021	0	392021	7068351	57815481	64883832	0	4563783	0	-19350534	11632134	38464947	50097081
2006	11	2006.914	1954188	0	1954188	536856	0	536856	8485683	57815481	66301164	0	4563783	0	-19350534	13049466	38464947	51514413
2006	12	2006.999	636237	0	636237	1480563	456914	1937477	7641358	57358567	64999925	0	4563783	0	-19350534	12205141	38008033	50213174
2007	1	2007.085	298407	0	298407	5801124	5917402	11718526	2138640	51441165	53579806	0	4563783	0	-19350534	6702423	32090632	38793055
2007	2	2007.162	0	0	0	5710562	12059465	17770026	-3571921	39381701	35809779	0	4563783	0	-19350534	991861	20031167	21023028
2007	3	2007.246	0	1853294	1853294	294150	2108966	2403115	-3866071	39126029	35259958	0	4563783	0	-19350534	697712	19775495	20473207
2007	4	2007.329	0	1478214	1478214	0	469610	469610	-3866071	40134633	36268562	0	4563783	0	-19350534	697712	20784099	21481811
2007	5	2007.413	3813030	1948805	5761834	0	0	0	-53042	42083438	42030396	0	4563783	0	-19350534	4510741	22732904	27243645
2007	6	2007.496	5814026	817889	6631914	0	0	0	5760984	42901327	48662311	0	4563783	0	-19350534	10324767	23550793	33875560
2007	7	2007.580	232899	6454861	6687760	0	0	0	5993883	49356187	55350071	0	4563783	0	-19350534	10557666	30005654	40563320
2007	8	2007.665	622664	8206056	8828720	0	0	0	6616547	57562244	64178790	-135814	4427969	-239774	-19590308	11044516	37971936	49016452
2007	9	2007.747	0	692324	692324	0	0	0	6616547	58254568	64871115	0	4427969	0	-19590308	11044516	38664260	49708776
2007	10	2007.832	884660	355813	1240473	435973	0	435973	7065234	58610381	65675615	0	4427969	0	-19590308	11493203	39020073	50513277
2007	11	2007.914	793492	0	793492	1641532	295912	1937444	6217194	58314469	64531664	0	4427969	0	-19590308	10645163	38724162	49369325
2007	12	2007.999	0	0	0	3425311	2051350	5476661	2791883	56263120	59055003	0	4427969	0	-19590308	7219852	36672812	43892664

Table A1-2
Injection/Withdrawal Volumes History
Corunna, Wilkesport, Seckerton, Dow Moore, Black Creek, Coveny and Ladysmith Reservoirs
1979 to 2007

			Monthly Injection									Monthly Withdrawal								
Year	Month	Fractional Year	Corunna (MCF)	Wilkesport (MCF)	Seckerton (MCF)	Dow Moore (MCF)	Black Creek (MCF)	Coveny (MCF)	Ladysmith (MCF)	Total Injection (MCF)	Cumulative Injection (MCF)	Corunna (MCF)	Wilkesport (MCF)	Seckerton (MCF)	Dow Moore (MCF)	Black Creek (MCF)	Coveny (MCF)	Ladysmith (MCF)	Total Withdrawals (MCF)	Cumulative Withdrawals (MCF)
1979	1	1979.085	12,939	0	21,422	0	0	0	0	34,361	34,361	765,763	1,775,073	4,457,344	0	0	0	0	6,998,180	6,998,180
1979	2	1979.162	7,133	0	32,602	0	0	0	0	39,735	74,096	11,095	1,241,594	1,703,244	0	0	0	0	2,955,933	9,954,113
1979	3	1979.246	0	0	47,557	0	0	0	0	47,557	121,653	16,309	3,856	30,176	0	0	0	0	50,341	10,004,454
1979	4	1979.329	0	0	41,835	0	0	0	0	41,835	163,488	15,614	0	24,975	0	0	0	0	40,589	10,045,043
1979	5	1979.413	0	0	55,627	0	0	0	0	55,627	219,115	20,072	0	34,097	0	0	0	0	54,169	10,099,212
1979	6	1979.496	0	500,385	75,939	0	0	0	0	576,324	795,439	19,387	2,782	52,439	0	0	0	0	74,608	10,173,820
1979	7	1979.580	1,572,720	2,430,916	518,166	0	0	0	0	4,521,802	5,317,240	8,578	0	20,076	0	0	0	0	28,654	10,202,474
1979	8	1979.665	1,992,799	3,265,479	4,629,226	0	0	0	0	9,887,504	15,204,744	18,536	0	388	0	0	0	0	18,925	10,221,398
1979	9	1979.747	623,839	593,596	4,544,581	0	0	0	0	5,762,016	20,966,760	0	0	0	0	0	0	0	0	10,221,398
1979	10	1979.832	0	0	390,621	0	0	0	0	390,621	21,357,381	357,939	0	1,085,152	0	0	0	0	1,443,092	11,664,490
1979	11	1979.914	0	0	0	0	0	0	0	0	21,357,381	224,414	0	139,925	0	0	0	0	364,339	12,028,829
1979	12	1979.999	55,013	0	213,390	0	0	0	0	268,402	21,625,783	1,263,097	62,691	1,908,186	0	0	0	0	3,233,973	15,262,803
1980	1	1980.085	0	0	0	0	0	0	0	0	21,625,783	1,644,578	1,008,380	3,293,889	0	0	0	0	5,946,848	21,209,650
1980	2	1980.164	46,223	0	0	0	0	0	0	46,223	21,672,006	592,114	3,669,193	3,221,248	0	0	0	0	7,482,554	28,692,205
1980	3	1980.246	48,104	0	7,918	0	0	0	0	56,022	21,728,028	14,699	2,213,224	587,451	0	0	0	0	2,815,373	31,507,578
1980	4	1980.329	66,475	999,280	0	0	0	0	0	1,065,755	22,793,783	25,032	186,356	40,907	0	0	0	0	252,295	31,759,873
1980	5	1980.413	2,877	4,410,897	77,355	0	0	0	0	4,491,129	27,284,912	32,964	0	46,837	0	0	0	0	79,801	31,839,674
1980	6	1980.496	0	928,880	70,951	0	0	0	0	999,831	28,284,743	29,201	0	41,058	0	0	0	0	70,259	31,909,933
1980	7	1980.580	0	843,639	132,918	0	0	0	0	976,557	29,261,299	28,608	0	47,006	0	0	0	0	75,614	31,985,547
1980	8	1980.665	2,190,779	0	4,134,588	0	0	0	0	6,325,367	35,586,666	3,403	0	0	0	0	0	0	3,403	31,988,950
1980	9	1980.747	1,019,610	0	5,315,716	0	0	0	0	6,335,325	41,921,992	1,200	0	31,389	0	0	0	0	32,590	32,021,540
1980	10	1980.832	235,534	0	833,522	0	0	0	0	1,069,055	42,991,047	310,611	0	455,698	0	0	0	0	766,309	32,787,849
1980	11	1980.914	0	0	0	0	0	0	0	0	42,991,047	611,632	252,249	1,308,906	0	0	0	0	2,172,787	34,960,635
1980	12	1980.999	0	0	0	0	0	0	0	0	42,991,047	2,513,778	1,159,129	5,146,004	0	0	0	0	8,818,911	43,779,546
1981	1	1981.085	5,945	0	39,989	0	0	0	0	45,933	43,036,981	709,683	3,661,999	3,917,583	0	0	0	0	8,289,265	52,068,811
1981	2	1981.162	0	0	34,506	0	0	0	0	34,506	43,071,487	11,063	1,317,717	110,986	0	0	0	0	1,439,766	53,508,577
1981	3	1981.246	0	48,461	42,237	0	0	0	0	90,698	43,162,185	19,532	660,382	22,070	0	0	0	0	701,984	54,210,561
1981	4	1981.329	0	2,250,830	50,222	0	0	0	0	2,301,052	45,463,237	24,192	0	25,812	0	0	0	0	50,004	54,260,565
1981	5	1981.413	0	3,123,966	54,451	0	0	0	0	3,178,417	48,641,654	23,387	0	30,412	0	0	0	0	53,798	54,314,363
1981	6	1981.496	0	983,317	60,993	0	0	0	0	1,044,310	49,685,964	25,078	0	35,347	0	0	0	0	60,424	54,374,787
1981	7	1981.580	791,994	20,563	833,370	0	0	0	0	1,645,926	51,331,890	15,077	0	30,147	0	0	0	0	45,224	54,420,011
1981	8	1981.665	2,084,747	0	5,774,996	0	0	0	0	7,859,743	59,191,633	4,081	0	10,731	0	0	0	0	14,812	54,434,823
1981	9	1981.747	1,311,646	847,910	4,042,767	0	0	0	0	6,202,323	65,393,956	0	0	27,909	0	0	0	0	27,909	54,462,732
1981	10	1981.832	97,543	0	275,191	0	0	0	0	372,734	65,766,690	40,306	0	3,237	0	0	0	0	43,543	54,506,276
1981	11	1981.914	0	0	0	0	0	0	0	0	65,766,690	1,172,585	0	1,233,380	0	0	0	0	2,405,966	56,912,241
1981	12	1981.999	0	0	0	0	0	0	0	0	65,766,690	2,001,451	1,541,147	4,364,551	0	0	0	0	7,907,148	64,819,390
1982	1	1982.085	19,574	0	23,835	0	0	0	0	43,409	65,810,099	1,058,282	3,386,141	4,051,239	0	0	0	0	8,495,662	73,315,051
1982	2	1982.162	0	0	50,462	0	0	0	0	50,462	65,860,562	11,261	1,847,497	1,261,314	0	0	0	0	3,120,072	76,435,123
1982	3	1982.246	0	0	43,205	0	0	0	0	43,205	65,903,766	16,718	308,229	51,193	0	0	0	0	376,140	76,811,264
1982	4	1982.329	32,050	0	4,607	0	0	0	0	36,656	65,940,422	13,884	215,808	22,688	0	0	0	0	252,379	77,063,643
1982	5	1982.413	8,892	0	31,432	0	0	0	0	40,324	65,980,746	14,459	0	25,717	0	0	0	0	40,176	77,103,819
1982	6	1982.496	0	355,733	51,532	0	0	0	0	407,265	66,388,011	17,806	0	33,635	0	0	0	0	51,440	77,155,259
1982	7	1982.580	957,967	4,191,348	800,152	0	0	0	0	5,949,467	72,337,478	14,869	0	28,922	0	0	0	0	43,791	77,199,049
1982	8	1982.665	2,875,049	2,278,399	3,863,153	0	0	0	0	9,016,602	81,354,080	18,536	0	1,048	0	0	0	0	19,585	77,218,634
1982	9	1982.747	189,865	200,752	5,522,088	0	0	0	0	5,912,705	87,266,785	0	0	8,409	0	0	0	0	8,409	77,227,043
1982	10	1982.832	0	0	0	0	0	0	0	0	87,266,785	604	1,931	0	0	0	0	0	2,535	77,229,578
1982	11	1982.914	112,002	0	240,875	0	0	0	0	352,877	87,619,662	1,089,505	53,297	882,544	0	0	0	0	2,025,346	79,254,924
1982	12	1982.999	342,414	223,966	413,146	0	0	0	0	979,526	88,599,188	1,788,972	1,223,115	3,348,662	0	0	0	0	6,360,749	85,615,673
1983	1	1983.085	26,020	0	0	0	0	0	0	26,020	88,625,208	1,433,684	2,416,789	2,837,556	0	0	0	0	6,688,030	92,303,702
1983	2	1983.162	32,540	0	22,232	0	0	0	0	54,773	88,679,980	18,014	540,529	2,191,944	0	0	0	0	2,750,487	95,054,189
1983	3	1983.246	0	0	60,703	0	0	0	0	60,703	88,740,684	18,773	1,414,893	1,221,329	0	0	0	0	2,654,995	97,709,184
1983	4	1983.329	0	0	52,591	0	0	0	0	52,591	88,793,275	15,282	1,171,032	37,034	0	0	0	0	1,223,348	98,932,532
1983	5	1983.413	0	0	48,348	0	0	0	0	48,348	88,841,623	10,294	0	37,906	0	0	0	0	48,200	98,980,732
1983	6	1983.496	0	0	106,100	0	0	0	0	106,100	88,947,723	14,865	0	49,816	0	0	0	0	64,682	99,045,413
1983	7	1983.580	1,515,956	1,059,920	4,535,710	0	0	0	0	7,111,586	96,059,308	9,627	2,626	23,284	0	0	0	0	35,537	99,080,951
1983	8	1983.665	1,961,060	684,662	4,530,270	0	0	0	0	7,175,992	103,235,300	0	0	20,933	0	0	0	0	20,933	99,101,884
1983	9	1983.747	591,531	2,431,075	1,488,661	0	0	0	0	4,511,268	107,746,568	0	4,522	9,577	0	0	0	0	14,099	99,115,983
1983	10	1983.832	0	1,218,420	0	0	0	0	0	1,218,420	108,964,988	0	4,988	0	0	0	0	0	4,988	99,120,971
1983	11	1983.914	0	122,776	0	0	0	0	0	122,776	109,087,764	1,139,269	487	2,140,119	0	0	0	0	3,279,875	102,400,846
1983	12	1983.999	0	0	304	0	0	0	0	304	109,088,068	1,841,704	1,674,598	5,549,160	0	0	0	0	9,065,462	111,466,308
1984	1	1984.085	1,867	14,209	35,304	0	0	0	0	51,380	109,139,448	882,837	2,090,931	2,272,684	0	0	0	0	5,246,452	116,712,760
1984	2	1984.164	19,288	35,463	23,789	0	0	0	0	78,541	109,217,989	280,694	1,800,152	947,070	0	0	0	0	3,027,916	119,740,676
1984	3	1984.246	23,023	0	0	0	0	0	0	23,023	109,241,012	9,672	661,208	915,275	0	0	0	0	1,586,155	121,326,831
1984	4	1984.329	25,184	0	0	0	0	0	0	25,184	109,266,196	13,114	0	12,408	0	0	0	0	25,522	121,352,354
1984	5	1984.413	33,984	76,712	0	0	0	0	0	110,696	109,376,892	14,611	0	19,292	0	0	0	0	33,903	121,386,256
1984	6	1984.496	217,414	2,983,084	1,148,549	0	0	0	0	4,349,047	113,725,939	21,541	0	20,510	0	0	0	0	42,050	121,428,307
1984	7	1984.580	2,621,512	3,040,596	6,777,033	0	0	0	0	12,439,141	126,165,080	19,885	6,361	2,213	0	0	0	0	28,459	121,456,766
1984	8	1984.665	1,427,566	1,481,566	3,861,607	0	0	0	0	6,770,739	132,935,819	0	0	0	0	0	0	0	0	121,456,766
1984	9	1984.747	0	0	0	0	0	0	0	0	132,935,819	0	0	0	0	0	0	0	0	121,456,766
1984	10	1984.832	0	0	0	0	0	0	0	0	132,935,819	0	0	0	0	0	0	0	0	121,456,766
1984	11	1984.914	1,938	0	0	0	0	0	0	1,938	132,937,757	592,640	0	770,404	0	0	0	0	1,363,044	122,819,810
1984	12	1984.999	0	0	0	0	0	0	0	0	132,937,757	1,978,834	703,774	3,268,339	0	0	0	0	5,950,946	128,770,756
1985	1	1985.085	0	0	43,632	0	0	0	0	43,632	132,981,389	1,403,219	4,207,328	5,660,181	0	0	0	0	11,270,729	140,041,484
1985	2	1985.162	46,604	0	0	0	0	0	0	46,604	133,027,993	15,716	1,927,690	874,481	0	0	0	0	2,817,887	142,859,371
1985	3	1985.246	42,633	0	0	0	0	0	0	42,633	133,070,626	18,028	325,388	461,081	0	0	0	0	804,497	143,663,869
1985	4	1985.329	43,939	2,261,476	61,187	0	0	0	0	2,366,602	135,437,228	20,774	1,521	22,882	0	0	0	0	45,178	143,709,047
1985	5	1985.413	49,774	4,712,684	2,319,843	0	0	0	0	7,082,300	142,519,528	20,947	16,235	28,534	0	0	0	0	65,716	143,774,763
1985	6	1985.496	2,522,592	62,645	6,744,370	0	0	0	0	9,329,607	151,849,135	0	0	20,136	0	0	0	0	20,136	143,794,898
1985	7	1985.580	1,267,972	0	1,913,171	0	0	0	0	3,181,142	155,030,277	0	0	11,427	0	0	0	0	11,427	143,806,325
1985	8	1985.665	29,144	0	14,378	0	0	0	0	43,522	155,073,799	349	0	0	0	0	0	0	349	143,806,674
1985	9	1985.747	263,718	362,931	421,004	0	0	0	0	1,047,652	156,121,452	0	0	0	0	0	0	0	0	143,806,674
1985	10	1985.832	0	0	0	0	0	0	0	0	156,121,452	0	92	0	0	0	0	0	92	143,806,766
1985	11	1985.914	88,277	42,361	100,371	0	0	0	0	231,008	156,352,460	1,547,229	42,721	1,645,577	0	0	0	0	3,235,527	147,042,293
1985	12	1985.999	0	0	98,539	0	0	0	0	98,539	156,450,999	2,341,471	3,220,347	6,134,475	0	0	0	0	11,696,293	158,738,586
1986	1	1986.085	30,708	0	17,604	0	0	0	0	48,313	156,499,311	720,072	2,531,171	3,291,401	0	0	0	0	6,542,643	165,281,230
1986	2	1986.162	12,825	0	25,028	0	0	0	0	37,853	156,537,164	85,167	1,556,216	939,971	0	0	0	0	2,581,354	167,862,584
1986	3	1986.246	31,612	0	0	0	0	0	0	31,612	156,568,776	6,877	368,314	24,732	0	0	0	0	399,922	168,262,506
1986	4	1986.329	31,178	2,799,340	0	0	0	0	0	2,830,518	159,399,293	11,003	5,369	20,104	0	0	0	0	36,476	168,298,982
1986	5	1986.413	34,086	4,491,591	0	0	0	0	0	4,525,678	163,924,971	12,115	79,031	21,897	0	0	0	0	113,044	168,412,026
1986	6	1986.496	40,052	172,893	12,380	0	0	0	0	225,325	164,150,296	13,690	0	26,243	0	0	0	0	39,932	168,451,958
1986	7	1986.580	42,799	0	2,168,353	0	0	0	0	2,211,152	166,361,448	11,861	0	30,839	0	0	0	0	42,700	168,494,658
1986	8	1986.665	1,031,569	0	6,597,331	0	0	0	0	7,628,901	173,990,348	0	0	9,450	0	0	0	0	9,450	168,504,108
1986	9	1986.747	1,599,961	236,307	2,937,228	0	0	0	0	4,773,496	178,763,844	1,116	0	97,349	0	0	0	0	98,464	168,602,572
1986	10	1986.832	1,587,624	0	0	0	0	0	0	1,587,624	180,351,468	99,478	0	0	0	0	0	0	99,478	168,702,050

Table A1-2
Injection/Withdrawal Volumes History
Corunna, Wilkesport, Seckerton, Dow Moore, Black Creek, Coveny and Ladysmith Reservoirs
1979 to 2007

			Monthly Injection									Monthly Withdrawal								
Year	Month	Fractional Year	Corunna (MCF)	Wilkesport (MCF)	Seckerton (MCF)	Dow Moore (MCF)	Black Creek (MCF)	Coveny (MCF)	Ladysmith (MCF)	Total Injection (MCF)	Cumulative Injection (MCF)	Corunna (MCF)	Wilkesport (MCF)	Seckerton (MCF)	Dow Moore (MCF)	Black Creek (MCF)	Coveny (MCF)	Ladysmith (MCF)	Total Withdrawals (MCF)	Cumulative Withdrawals (MCF)
1986	11	1986.914	316,870	0	0	0	0	0	0	316,870	180,668,338	358,363	0	0	0	0	0	0	358,363	169,060,413
1986	12	1986.999	0	0	0	0	0	0	0	0	180,668,338	2,241,983	0	4,342,262	0	0	0	0	6,584,245	175,644,658
1987	1	1987.085	37,860	0	0	0	0	0	0	37,860	180,706,198	1,936,748	2,584,824	5,116,348	0	0	0	0	9,637,920	185,282,578
1987	2	1987.162	0	0	21,018	0	0	0	0	21,018	180,727,216	10,424	3,680,232	1,648,761	0	0	0	0	5,339,417	190,621,995
1987	3	1987.246	0	0	0	0	0	0	0	0	180,727,216	10,181	892,033	34,309	0	0	0	0	936,522	191,558,517
1987	4	1987.329	4,021	1,322,155	14,452	0	0	0	0	1,340,628	182,067,844	7,127	127	26,617	0	0	0	0	33,871	191,592,388
1987	5	1987.413	1,258,737	5,163,082	8,635,689	0	0	0	0	15,057,508	197,125,353	12,154	388	59,072	0	0	0	0	71,615	191,664,003
1987	6	1987.496	2,107,106	0	2,544,790	0	0	0	0	4,651,896	201,777,248	1,843	0	17,117	0	0	0	0	18,960	191,682,963
1987	7	1987.580	0	0	0	0	0	0	0	0	201,777,248	406	0	0	0	0	0	0	406	191,683,369
1987	8	1987.665	668,776	0	0	0	0	0	0	668,776	202,446,025	0	0	0	0	0	0	0	0	191,683,369
1987	9	1987.747	246,901	189,279	0	0	0	0	0	436,180	202,882,204	0	0	0	0	0	0	0	0	191,683,369
1987	10	1987.832	98,877	651,447	362,973	0	0	0	0	1,113,298	203,995,502	847	247,105	0	0	0	0	0	247,953	191,931,321
1987	11	1987.914	28,978	0	86,935	0	0	0	0	115,914	204,111,416	1,586,861	142,957	2,371,481	0	0	0	0	4,101,299	196,032,620
1987	12	1987.999	0	0	0	0	0	0	0	0	204,111,416	1,688,157	811,169	3,799,082	0	0	0	0	6,298,408	202,331,028
1988	1	1988.085	18,780	0	8,645	0	0	0	0	27,425	204,138,841	1,040,847	3,755,525	3,483,102	0	0	0	0	8,279,473	210,610,501
1988	2	1988.164	0	0	37,662	0	0	0	0	37,662	204,176,503	9,743	0	1,597,081	0	0	0	0	1,606,824	212,217,325
1988	3	1988.246	0	49,947	0	0	0	0	0	49,947	204,226,450	11,981	446,456	22,204	0	0	0	0	480,641	212,697,966
1988	4	1988.329	27,630	924,195	0	0	0	0	0	951,825	205,178,275	46,004	650,794	16,824	0	0	0	0	713,623	213,411,588
1988	5	1988.413	356,389	4,780,006	5,485,152	0	0	0	0	10,621,548	215,799,823	7,339	26,207	21,149	0	0	0	0	54,695	213,466,283
1988	6	1988.496	2,810,686	0	4,796,279	0	0	0	0	7,606,965	223,406,788	35	0	32,745	0	0	0	0	32,780	213,499,064
1988	7	1988.580	869,659	0	877,125	0	0	0	0	1,746,785	225,153,572	42	0	7,427	0	0	0	0	7,470	213,506,533
1988	8	1988.665	0	0	0	0	0	0	0	0	225,153,572	258	0	0	0	0	0	0	258	213,506,791
1988	9	1988.747	0	0	0	11,457,155	0	0	0	11,457,155	236,610,727	198	0	0	6,351	0	0	0	6,549	213,513,340
1988	10	1988.832	0	0	7,427	3,594,507	0	0	0	3,601,934	240,212,662	343,932	1,418,469	16,175	10,678	0	0	0	1,789,254	215,302,594
1988	11	1988.914	0	128,036	0	0	0	0	0	128,036	240,340,698	1,125,229	2,801,832	563,139	0	0	0	0	4,490,201	219,792,794
1988	12	1988.999	0	0	0	0	0	0	0	0	240,340,698	1,875,812	2,252,418	4,361,794	0	0	0	0	8,490,024	228,282,818
1989	1	1989.085	16,048	0	0	0	0	0	0	16,048	240,356,746	703,562	373,697	2,998,503	3,703,308	0	0	0	7,779,070	236,061,889
1989	2	1989.162	7,604	0	41,609	0	0	0	0	49,213	240,405,958	9,761	0	2,159,962	3,521,036	0	0	0	5,690,759	241,752,647
1989	3	1989.246	0	0	57,999	0	0	0	0	57,999	240,463,957	9,535	0	49,008	2,713,019	0	0	0	2,771,562	244,524,209
1989	4	1989.329	0	823,267	60,844	0	0	0	0	884,111	241,348,069	11,543	332	49,343	0	0	0	0	61,219	244,585,427
1989	5	1989.413	276,518	3,462,945	1,637,348	0	0	0	0	5,376,811	246,724,879	11,141	213,485	44,172	264,999	0	0	0	533,797	245,119,224
1989	6	1989.496	2,790,783	2,575,981	5,762,030	0	0	0	0	11,128,795	257,853,674	11	37,691	10,223	1,788,859	0	0	0	1,836,783	246,956,008
1989	7	1989.580	1,400,074	0	2,741,065	0	0	0	0	4,141,140	261,994,814	39	0	0	1,977	0	0	0	2,016	246,958,023
1989	8	1989.665	0	0	0	4,133,102	0	0	0	4,133,102	266,127,915	49	0	0	0	0	0	0	49	246,958,073
1989	9	1989.747	2,053,858	0	0	10,094,002	0	0	0	12,147,861	278,275,776	2,053,954	0	0	6,079	0	0	0	2,060,032	249,018,105
1989	10	1989.832	524,273	378,459	851,737	3,272,384	0	0	0	5,026,853	283,302,629	496,618	0	641,281	14,607	0	0	0	1,152,506	250,170,612
1989	11	1989.914	163,647	0	208,688	0	0	0	0	372,335	283,674,964	2,009,372	1,573,750	4,508,165	0	0	0	0	8,091,288	258,261,900
1989	12	1989.999	0	0	212	0	0	0	0	212	283,675,176	1,872,783	4,828,509	3,564,523	0	0	0	0	10,265,815	268,527,714
1990	1	1990.085	50,844	0	0	0	0	0	0	50,844	283,726,019	785,004	1,021,632	1,862,263	2,115,568	0	0	0	5,784,468	274,312,182
1990	2	1990.162	40,730	0	0	0	0	0	0	40,730	283,766,749	75,748	0	1,218,759	5,802,595	0	0	0	7,097,102	281,409,284
1990	3	1990.246	25,681	0	0	0	0	0	0	25,681	283,792,431	6,442	0	19,211	3,702,870	0	0	0	3,728,523	285,137,807
1990	4	1990.329	20,390	1,283,762	765,659	0	0	0	0	2,069,811	285,862,242	4,889	152	15,476	1,144,592	0	0	0	1,165,109	286,302,915
1990	5	1990.413	1,256,326	5,065,606	2,614,809	0	0	0	0	8,936,741	294,798,983	1,581	16,027	13,894	0	0	0	0	31,502	286,334,418
1990	6	1990.496	2,783,571	781,457	5,772,663	1,931,852	0	0	0	11,269,543	306,068,525	26,380	4,564	4,434	0	0	0	0	35,378	286,369,796
1990	7	1990.580	476,691	0	1,647,328	10,534,492	0	0	0	12,658,511	318,727,036	13,450	7	0	0	0	0	0	13,457	286,383,253
1990	8	1990.665	0	0	0	2,967,297	0	0	0	2,967,297	321,694,334	0	7	0	7,967	0	0	0	7,974	286,391,227
1990	9	1990.747	0	150,109	0	0	0	0	0	150,109	321,844,443	4	11	0	0	0	0	0	14	286,391,241
1990	10	1990.832	0	0	302,531	0	0	0	0	302,531	322,146,974	0	7	2,319	0	0	0	0	2,326	286,393,567
1990	11	1990.914	0	0	624,527	0	0	0	0	624,527	322,771,501	643,593	7	3,468,536	1,673	0	0	0	4,113,810	290,507,377
1990	12	1990.999	0	0	58,853	0	0	0	0	58,853	322,830,354	2,113,245	2,823,122	4,728,082	1,681,100	0	0	0	11,345,549	301,852,926
1991	1	1991.085	20,937	0	0	0	0	0	0	20,937	322,851,291	1,572,448	3,038,150	3,746,396	1,879,811	0	0	0	10,236,805	312,089,730
1991	2	1991.162	44,207	0	0	0	0	0	0	44,207	322,895,498	110,520	1,206,481	260,558	652,545	0	0	0	2,230,104	314,319,835
1991	3	1991.246	19,391	0	0	0	0	0	0	19,391	322,914,889	5,405	0	13,972	2,045,902	0	0	0	2,065,279	316,385,113
1991	4	1991.329	4,367	894,617	70,707	719,892	0	0	0	1,689,583	324,604,472	7,275	360	13,570	2,984,358	0	0	0	3,005,563	319,390,677
1991	5	1991.413	39,297	5,670,517	842,124	0	0	0	0	6,551,938	331,156,410	9,161	25,049	30,080	0	0	0	0	64,290	319,454,966
1991	6	1991.496	47,720	641,002	15,271	0	0	0	0	703,993	331,860,402	9,683	4,014	38,001	0	0	0	0	51,698	319,506,664
1991	7	1991.580	1,702,224	0	1,731,301	2,142,647	0	0	0	5,576,172	337,436,574	1,338	0	6,354	0	0	0	0	7,692	319,514,356
1991	8	1991.665	2,162,161	0	4,989,632	4,171,096	0	0	0	11,322,889	348,759,463	254	0	19,288	39	0	0	0	19,582	319,533,938
1991	9	1991.747	381,937	217,033	3,803,488	2,045,407	0	0	0	6,447,864	355,207,328	462	0	351,698	2,739	0	0	0	354,899	319,888,837
1991	10	1991.832	0	314,583	515,515	0	0	0	0	830,097	356,037,425	73,323	984,221	57,710	0	0	0	0	1,115,253	321,004,091
1991	11	1991.914	0	0	0	0	0	0	0	0	356,037,425	2,627,372	4,024,089	2,678,890	243,865	0	0	0	9,574,216	330,578,307
1991	12	1991.999	0	0	0	0	0	0	0	0	356,037,425	1,498,542	2,452,513	5,491,115	6,539,696	0	0	0	15,981,866	346,560,173
1992	1	1992.085	21,689	0	0	0	0	0	0	21,689	356,059,114	142,124	264,971	2,520,880	7,481,033	0	0	0	10,409,009	356,969,182
1992	2	1992.164	0	0	39,657	0	0	0	0	39,657	356,098,771	6,654	0	735,968	1,678,459	0	0	0	2,421,082	359,390,263
1992	3	1992.246	0	0	25,237	0	0	0	0	25,237	356,124,007	15,839	40,744	18,028	2,294,719	0	0	0	2,369,331	361,759,594
1992	4	1992.329	1,193	815,525	33,395	0	0	0	0	850,113	356,974,120	183,896	373,108	16,002	1,562,797	0	0	0	2,135,802	363,895,396
1992	5	1992.413	467,414	5,419,874	2,632,304	1,171,519	0	0	0	9,691,111	366,665,232	3,417	86,914	32,208	67,199	0	0	0	189,738	364,085,134
1992	6	1992.496	2,999,333	1,307,385	6,959,736	0	0	0	0	11,266,454	377,931,685	692	11,187	0	0	0	0	0	11,879	364,097,013
1992	7	1992.580	1,070,051	0	2,037,151	126,938	0	0	0	3,234,139	381,165,825	893	0	0	0	0	0	0	893	364,097,906
1992	8	1992.665	0	0	0	3,029,815	0	0	0	3,029,815	384,195,640	925	0	0	0	0	0	0	925	364,098,831
1992	9	1992.747	0	0	0	10,196,731	0	0	0	10,196,731	394,392,371	886	0	0	1,200	0	0	0	2,086	364,100,917
1992	10	1992.832	0	365,084	0	4,670,676	0	0	0	5,035,760	399,428,130	55,680	496,975	0	22,543	0	0	0	575,198	364,676,115
1992	11	1992.914	0	0	0	0	0	0	0	0	399,428,130	2,376,518	3,263,068	1,565,483	0	0	0	0	7,205,069	371,881,184
1992	12	1992.999	0	0	0	0	0	0	0	0	399,428,130	1,207,999	2,431,937	4,422,585	0	0	0	0	8,062,521	379,943,705
1993	1	1993.085	0	0	0	0	0	0	0	0	399,428,130	579,102	1,097,218	3,895,527	332,897	0	0	0	5,904,744	385,848,450
1993	2	1993.162	0	0	40,829	0	0	0	0	40,829	399,468,959	5,782	246,300	891,997	6,203,604	0	0	0	7,347,684	393,196,134
1993	3	1993.246	0	0	43,593	0	0	0	0	43,593	399,512,552	11,642	0	94,828	8,008,723	0	0	0	8,115,193	401,311,327
1993	4	1993.329	720,513	406,015	1,397,840	954,356	0	0	0	3,478,724	402,991,276	741,295	406,015	1,376,970	1,027,079	0	0	0	3,551,359	404,862,686
1993	5	1993.413	193,731	5,983,267	5,086,663	615,151	0	0	0	11,878,812	414,870,089	8,239	17,442	35,746	141	0	0	0	61,568	404,924,254
1993	6	1993.496	2,206,580	1,291,030	5,257,703	0	0	0	0	8,755,313	423,625,402	1,638	6,449	22,405	0	0	0	0	30,493	404,954,747
1993	7	1993.580	1,056,273	0	398,736	4,425,632	0	0	0	5,880,641	429,506,043	6,347	0	0	15,356	0	0	0	21,703	404,976,450
1993	8	1993.665	668,681	467,170	0	8,559,641	0	0	0	9,695,492	439,201,535	21	53	0	48,535	0	0	0	48,609	405,025,059
1993	9	1993.747	0	0	0	4,082,106	0	0	0	4,082,106	443,283,641	0	0	0	41,376	0	0	0	41,376	405,066,435
1993	10	1993.832	0	0	0	2,362,126	0	0	0	2,362,126	445,645,767	0	0	0	21,325	0	0	0	21,325	405,087,760
1993	11	1993.914	0	0	0	0	0	0	0	0	445,645,767	1,432,025	404,924	2,008,405	71,092	0	0	0	3,916,447	409,004,207
1993	12	1993.999	0	0	0	0	0	0	0	0	445,645,767	1,855,581	3,072,960	5,364,968	769,447	0	0	0	11,062,955	420,067,162
1994	1	1994.085	12,669	0	3,163	0	0	0	0	15,832	445,661,599	776,147	2,923,306	2,528,587	12,789,696	0	0	0	19,017,735	439,084,898
1994	2	1994.162	32,967	0	0	241,574	0	0	0	274,541	445,936,140	213,820	1,137,027	479,836	6,068,053	0	0	0	7,898,736	446,983,634
1994	3	1994.246	47,014	0	0	0	0	0	0	47,014	445,983,154	18,635	153,082	84,058	2,377,651	0	0	0	2,633,426	449,617,060
1994	4	1994.329	49,234	1,680,147	263,255	0	0	0	0	1,992,636	447,975,790	26,094	473	23,662	522,067	0	0	0	572,296	450,189,356
1994	5	1994.413	45,107	3,073,535	0	1,885,971	0	0	0	5,004,614	452,980,404	22,631	5,352	23,383	635	0	0	0	52,002	450,241,358
1994	6	1994.496	20,866	2,497,190	1,336,356	11,076,684	0	0	0	14,931,096	467,911,500	9,199	0	12,327	456,358	0	0	0	477,884	450,719,242
1994	7	1994.580	2,558,455	0	6,938,358	6,384,588	0	0	0	15,881,400	483,792,900	0	0	21,752	28,046	0	0	0	49,799	450,769,040
1994	8	1994.665	1,591,838	251,539	2,461,702	2,949,767	0	0	0	7,254,847	491,047,747	1,765	0	3,862	24,375	0	0	0	30,002	450,799,043

Table A1-2
Injection/Withdrawal Volumes History
Corunna, Wilkesport, Seckerton, Dow Moore, Black Creek, Coveny and Ladysmith Reservoirs
1979 to 2007

			Monthly Injection									Monthly Withdrawal								
Year	Month	Fractional Year	Corunna (MCF)	Wilkesport (MCF)	Seckerton (MCF)	Dow Moore (MCF)	Black Creek (MCF)	Coveny (MCF)	Ladysmith (MCF)	Total Injection (MCF)	Cumulative Injection (MCF)	Corunna (MCF)	Wilkesport (MCF)	Seckerton (MCF)	Dow Moore (MCF)	Black Creek (MCF)	Coveny (MCF)	Ladysmith (MCF)	Total Withdrawals (MCF)	Cumulative Withdrawals (MCF)
1994	9	1994.747	0	0	0	0	0	0	0	0	491,047,747	0	0	371	0	0	0	0	371	450,799,413
1994	10	1994.832	131,866	207,869	479,886	3,834,295	0	0	0	4,653,915	495,701,662	0	0	0	35,216	0	0	0	35,216	450,834,629
1994	11	1994.914	0	0	0	488,435	0	0	0	488,435	496,190,097	724,986	838,499	1,721,477	0	0	0	0	3,284,962	454,119,591
1994	12	1994.999	0	0	0	0	0	0	0	0	496,190,097	1,945,485	3,389,830	5,204,804	0	0	0	0	10,540,119	464,659,711
1995	1	1995.085	9,196	0	0	0	0	0	0	9,196	496,199,293	1,112,775	2,542,446	3,353,046	0	0	0	0	7,008,267	471,667,978
1995	2	1995.162	11,406	0	20,284	0	0	0	0	31,689	496,230,983	6,806	646,329	887,348	16,018,406	0	0	0	17,558,889	489,226,867
1995	3	1995.246	0	0	41,906	0	0	0	0	41,906	496,272,888	14,657	0	27,750	5,936,399	0	0	0	5,978,805	495,205,672
1995	4	1995.329	2,866	31,160	38,051	0	0	0	0	72,077	496,344,965	10,424	335	30,994	882,364	0	0	0	924,117	496,129,790
1995	5	1995.413	35,816	690,416	5,832	6,646,894	0	0	0	7,378,957	503,723,923	15,726	6,019	27,079	6,389	0	0	0	55,214	496,185,003
1995	6	1995.496	96,636	4,824,989	2,123,327	5,234,711	0	0	0	12,279,663	516,003,586	5,457	4,907	25,434	317,901	0	0	0	353,700	496,538,703
1995	7	1995.580	2,103,816	1,040,709	5,656,686	2,651,123	0	0	0	11,452,333	527,455,919	0	0	307	21,452	0	0	0	21,759	496,560,462
1995	8	1995.665	1,259,002	0	2,187,119	4,077,909	0	0	0	7,524,029	534,979,948	0	0	402	194,260	0	0	0	194,663	496,755,125
1995	9	1995.747	149,393	395,707	627,895	4,602,739	0	0	0	5,775,734	540,755,683	0	0	385	0	0	0	0	385	496,755,510
1995	10	1995.832	252,030	346,378	531,834	658,327	0	0	0	1,788,570	542,544,252	1,105	0	385	1,271	0	0	0	2,761	496,758,270
1995	11	1995.914	0	0	0	1,113,817	0	0	0	1,113,817	543,658,069	2,295,619	1,719,747	5,844,818	1,439,212	0	0	0	11,299,396	508,057,667
1995	12	1995.999	0	0	0	0	0	0	0	0	543,658,069	1,443,847	4,230,034	4,722,829	14,947,705	0	0	0	25,344,415	533,402,082
1996	1	1996.085	0	0	0	0	0	0	0	0	543,658,069	527,588	1,637,122	1,193,311	8,171,339	0	0	0	11,529,360	544,931,442
1996	2	1996.164	0	0	0	113,781	0	0	0	113,781	543,771,850	213,834	213,386	371,484	3,632,530	0	0	0	4,431,234	549,362,676
1996	3	1996.246	0	0	0	20,181	0	0	0	20,181	543,792,032	121,749	0	159,757	889,837	0	0	0	1,171,343	550,534,019
1996	4	1996.329	0	0	13,986	0	0	0	0	13,986	543,806,018	7,586	195,898	6,965	0	0	0	0	210,449	550,744,468
1996	5	1996.413	0	0	30,729	0	0	0	0	30,729	543,836,747	10,682	4	20,820	4	0	0	0	31,509	550,775,977
1996	6	1996.496	0	0	233,924	1,354,346	0	0	0	1,588,270	545,425,017	8,695	0	11,692	0	0	0	0	20,386	550,796,363
1996	7	1996.580	607,205	1,952,249	3,140,755	7,273,824	0	0	0	12,974,033	558,399,050	3,841	6,802	162	26,991	0	0	0	37,797	550,834,160
1996	8	1996.665	2,632,420	3,444,077	575,374	11,363,905	0	0	0	18,015,776	576,414,826	6,795	0	12,098	49,043	0	0	0	67,936	550,902,096
1996	9	1996.747	1,569,620	2,369,790	4,859,665	5,870,725	0	0	0	14,669,800	591,084,626	7	0	591,062	388,414	0	0	0	979,483	551,881,579
1996	10	1996.832	0	0	2,550,081	2,200,498	0	0	0	4,750,579	595,835,205	0	0	0	23,719	0	0	0	23,719	551,905,298
1996	11	1996.914	0	0	0	0	0	0	0	0	595,835,205	2,756,361	3,656,517	2,349,142	356,891	0	0	0	9,118,911	561,024,209
1996	12	1996.999	0	0	0	0	0	0	0	0	595,835,205	1,372,130	2,431,280	4,147,367	6,368,113	0	0	0	14,318,889	575,343,098
1997	1	1997.085	0	0	0	0	0	0	0	0	595,835,205	228,361	1,246,999	3,082,773	4,266,305	0	0	0	8,824,439	584,167,537
1997	2	1997.162	26,119	0	0	0	0	0	0	26,119	595,861,324	7,999	68,476	281,089	8,203,057	0	0	0	8,560,622	592,728,159
1997	3	1997.246	15,056	0	13,760	0	0	0	0	28,816	595,890,140	320,669	289,569	631,760	5,445,347	0	0	0	6,687,345	599,415,503
1997	4	1997.329	15,652	185,092	24,940	0	0	0	0	225,685	596,115,825	19,129	41,242	22,038	1,486,459	0	0	0	1,568,868	600,984,372
1997	5	1997.413	39,226	4,816,171	1,557	995,354	0	0	0	5,852,309	601,968,133	20,566	4,960	21,149	0	0	0	0	46,675	601,031,046
1997	6	1997.496	619,458	2,310,880	1,373,521	11,871,823	0	0	0	16,175,681	618,143,815	13,721	0	10,004	24,428	0	0	0	48,154	601,079,200
1997	7	1997.580	2,529,864	438,506	6,071,258	7,540,663	0	0	0	16,580,292	634,724,106	4	18	21	88,354	0	0	0	88,397	601,167,597
1997	8	1997.665	1,256,252	286,992	2,883,737	6,286,903	0	0	0	10,713,884	645,437,990	0	0	0	110,333	0	0	0	110,333	601,277,929
1997	9	1997.747	568,060	0	1,425,346	514,283	165,917	0	0	2,673,606	648,111,595	142,975	7	99	488,118	0	480	0	631,679	601,909,608
1997	10	1997.832	0	74,703	432,233	265,472	317,993	850,289	0	1,940,691	650,052,287	495,390	662,571	466	49,598	0	0	0	1,208,024	603,117,632
1997	11	1997.914	0	0	0	48,750	0	0	0	48,750	650,101,037	2,025,837	3,646,639	2,220,259	463,361	0	0	0	8,356,096	611,473,728
1997	12	1997.999	0	0	54,473	47,229	0	0	0	101,701	650,202,738	1,413,065	2,463,848	5,021,848	1,996,657	0	0	0	10,895,418	622,369,146
1998	1	1998.085	0	0	0	47,229	0	0	0	47,229	650,249,967	437,818	736,565	2,879,413	368,180	0	0	0	4,421,975	626,791,121
1998	2	1998.162	0	0	0	47,229	0	0	0	47,229	650,297,196	0	0	382,092	3,326,341	0	0	0	3,708,433	630,499,554
1998	3	1998.246	0	465,871	0	47,472	0	0	0	513,344	650,810,540	11	2,012	124	8,063,192	0	0	0	8,065,338	638,564,893
1998	4	1998.329	23,630	616,581	28,523	1,314,213	0	0	0	1,982,947	652,793,487	15,423	519	13,457	69,966	0	0	0	99,365	638,664,257
1998	5	1998.413	33,885	4,432,760	114,216	8,848,361	0	0	0	13,429,222	666,222,709	30,062	883	27,333	84,189	0	0	0	142,466	638,806,724
1998	6	1998.496	34,715	1,609,793	27,030	2,320,325	0	0	0	3,991,863	670,214,572	25,042	25	37,062	52,397	71	0	0	114,597	638,921,320
1998	7	1998.580	59,351	0	576,091	2,083,279	0	0	0	2,718,721	672,933,293	22,716	0	37,083	92,463	0	0	0	152,263	639,073,583
1998	8	1998.665	1,588,718	357,563	5,804,797	198,616	0	0	0	7,949,694	680,882,987	81	0	4,278	198,683	0	0	0	203,043	639,276,626
1998	9	1998.747	2,194,465	0	2,762,133	136,790	86,183	382,378	0	5,561,949	686,444,936	25	0	12,853	136,843	113	219	0	150,053	639,426,679
1998	10	1998.832	650,332	193,501	1,494,807	404,900	240,066	1,136,713	0	4,120,319	690,565,255	91,824	69,970	37,436	88,612	116	678	0	288,637	639,715,316
1998	11	1998.914	0	0	0	0	26,740	334,990	0	361,730	690,926,986	0	5,140	4	0	113	498	0	5,754	639,721,070
1998	12	1998.999	11	159	0	4	0	21,378	0	21,551	690,948,537	1,591,327	4,244,839	2,444,687	3,606,961	0	64	0	11,887,878	651,608,948
1999	1	1999.085	0	0	0	0	611	957	0	1,567	690,950,104	2,541,069	2,981,509	6,443,173	13,650,522	231,089	204,967	0	26,052,330	677,661,277
1999	2	1999.162	37,546	28,226	18,960	0	159	4	0	84,895	691,034,999	244,447	559,545	2,212,860	7,060,823	134,821	63,365	27,923	10,303,784	687,965,062
1999	3	1999.246	7,413	103,205	90,868	225,759	2,305	883	0	430,433	691,465,432	35,237	11	63,863	1,951,641	336,600	1,117,929	103,205	3,608,486	691,573,548
1999	4	1999.329	106,372	110,152	4	888,397	0	4	0	1,104,928	692,570,360	31,301	0	75,706	99	0	18	109,418	216,542	691,790,090
1999	5	1999.413	21,113	453,248	67,912	10,910,866	694,881	1,290,204	0	13,438,224	706,008,583	13,750	0	78,114	275	14	21	105,366	197,540	691,987,629
1999	6	1999.496	60,011	184,972	97,720	6,903,025	23,637	399,428	0	7,668,794	713,677,378	75,177	81,192	82,907	113,439	0	0	103,781	456,495	692,444,125
1999	7	1999.580	1,665,494	1,555,899	380,405	4,173,927	0	0	0	7,775,724	721,453,101	9,962	14	61,836	297	0	2,196	82,957	157,261	692,601,386
1999	8	1999.665	2,570,852	4,819,793	561,300	1,950,724	0	0	0	9,902,669	731,355,770	0	4,748	55,553	11,745	0	0	0	72,045	692,673,431
1999	9	1999.747	11,903	0	7,694,631	1,247,956	0	0	953,118	9,907,608	741,263,378	0	794	0	208	0	0	0	1,003	692,674,434
1999	10	1999.832	0	188,098	2,272,092	0	0	462	1,179,245	3,639,898	744,903,276	0	244,076	911,481	0	0	21	0	1,155,578	693,830,012
1999	11	1999.914	720,217	656,872	1,140,368	178,819	0	107,455	809,862	3,613,593	748,516,868	931,135	951,765	93,697	18	44,109	18	6,837	2,027,579	695,857,591
1999	12	1999.999	170,827	56,223	0	0	0	25	8,590	235,664	748,752,533	2,903,563	4,452,364	3,762,581	0	0	1,349,732	9,073	12,477,313	708,334,904
2000	1	2000.085	20,000	4	0	1,094	212	64	12,049	33,423	748,785,955	868,186	414,945	5,592,672	6,418,345	319,473	1,281,626	1,209,876	16,105,124	724,440,028
2000	2	2000.164	67,200	112,020	0	0	213,068	56	8,640	400,984	749,186,940	620,626	1,273,496	1,637,117	7,795,097	305,510	293,402	2,619,555	14,544,802	738,984,829
2000	3	2000.246	64,100	27,933	0	0	239,654	0	9,990	341,678	749,528,617	42,486	52,161	86,086	5,207,659	251,284	65,395	593,515	6,298,587	745,283,416
2000	4	2000.329	66,000	79,760	0	0	0	0	9,900	155,660	749,684,278	50,735	68,608	20,785	4,238,193	174,453	0	10,590	4,563,364	749,846,780
2000	5	2000.413	79,300	4,965,687	0	3,294,870	736,157	1,775,735	310,600	11,162,350	760,846,628	61,627	0	23,377	0	5,408	8,804	10,943	110,159	749,956,939
2000	6	2000.496	738,259	1,529,592	1,369,935	7,062,117	28,552	1,176,914	770,767	12,676,137	773,522,765	45,762	0	21,622	0	18	215	10,590	78,207	750,035,146
2000	7	2000.580	2,237,436	0	5,965,077	0	0	0	2,501,973	10,704,486	784,227,251	0	0	0	5,203	0	0	7,413	12,616	750,047,763
2000	8	2000.665	1,428,236	0	3,751,719	533,348	0	0	975,619	6,688,921	790,916,172	0	0	0	0	0	0	0	0	750,047,763
2000	9	2000.747	0	633,703	65,416	6,849,371	0	170,744	709,653	8,428,888	799,345,060	0	0	0	0	0	0	2,362	2,362	750,050,124
2000	10	2000.832	90,014	193,298	367,115	5,766,183	0	58,582	0	6,475,192	805,820,252	0	0	0	0	0	0	0	0	750,050,124
2000	11	2000.914	0	0	0	3,007	32,985	0	0	35,993	805,856,244	1,340,643	0	2,810,160	130	254,467	938,622	943,488	6,287,509	756,337,633
2000	12	2000.999	0	0	53,990	540	166,821	0	0	221,351	806,077,595	2,184,539	1,540,434	5,879,571	14,123,834	525,200	1,865,244	3,400,262	29,519,083	785,856,716
2001	1	2001.085	0	1,010	108,860	0	731	0	0	110,600	806,188,195	432,598	1,194,065	1,776,476	9,280,229	294,131	511,456	681,160	14,170,115	800,026,831
2001	2	2001.162	0	424	100,929	0	0	0	183,956	285,308	806,473,504	338,875	3,390,451	674,762	1,069,740	53,864	0	212	5,527,904	805,554,735
2001	3	2001.246	0	0	106,970	0	0	0	0	106,970	806,580,474	376,148	1,692,479	780,620	2,080,547	36,239	114,636	332,444	5,413,113	810,967,848
2001	4	2001.329	345,035	503,318	402,123	0	0	0	514,418	1,764,894	808,345,367	77,822	123,133	51,460	262,537	0	0	209,488	724,440	811,692,288
2001	5	2001.413	0	2,029,948	107,719	8,528,853	0	0	0	10,666,520	819,011,888	76,628	0	36,617	0	0	0	234	113,479	811,805,767
2001	6	2001.496	0	3,729,332	100,790	10,226,677	861,124	1,405,347	0	16,323,269	835,335,157	144,157	0	37,758	0	58,811	0	227	240,954	812,046,720
2001	7	2001.580	0	1,622,767	1,896,093	5,459,099	60,693	1,880,839	0	10,919,490	846,254,647	51,143	0	22,467	0	0	3,601	234	77,445	812,124,166
2001	8	2001.665	2,717,673	64,775	3,246,070	3,119,020	0	5,918	3,334,237	12,487,694	858,742,341	29,345	0	13,043	0	0	0	234	42,622	812,166,788
2001	9	2001.747	1,849,229	81,639	4,642,655	122,761	0	151,315	2,200,714	9,048,311	867,790,652	0	0	0	0	1,998	0	0	1,998	812,168,786
2001	10	2001.832	194,382	70,948	1,232,475	55,665	18,380	37,948	16,286	1,626,083	869,416,735	0	0	0	0	0	0	29,477	29,477	812,198,263
2001	11	2001.914	0	0	214,239	0	0	0	650,879	865,118	870,281,853	0	0	0	0	0	0	569,454	569,454	812,767,717
2001	12	2001.999	39,257	45,245	91,751	0	2,633	37,993	6,283	223,162	870,505,015	1,248,365	0	1,825,362	0	36,482	0	1,504,901	4,615,110	817,382,826
2002	1	2002.085	0	0	114,399	0	109,679	0	3,057	227,136	870,732,150	2,586,018	0	5,436,762	65,557	338,089	0	3,270,295	11,696,721	829,079,547
2002	2	2002.162	0	254	105,871	0	0	0	16,471	122,596	870,854,746	476,511	1,549,521	2,825,315	979,462	6,735	0	292,065	6,129,609	835,209,156
2002	3	2002.246	0	0	104,028	0	1,271	0	8,306	113,605	870,968,351	51,288	523,302	1,102,566	1,181,008	13,783	71,592	9,220	2,952,760	838,161,917
2002	4	2002.329	0	1,049,313	294,945	991,275	0	0	2,545	2,338,078	873,306,429	57,828	1,432,636	43,410	4,029,761	0	0	6,458	5,570,093	843,732,010
2002	5	2002.413	0	160,026	731,010	1,777,108	0	0	2,831	2,670,976	875,977,405	54,576	0	53,847	1,288,842	0	0	5,867	1,403,132	845,135,142
2002	6	2002.496	17,920	757,117	93,176	2,048,324	192,213	105,558	8,271	3,222,579	879,199,984	27,483	0	71,199	3,474	0	0	9,173	111,329	845,246,470

Table A1-2
Injection/Withdrawal Volumes History
Corunna, Wilkesport, Seckerton, Dow Moore, Black Creek, Coveny and Ladysmith Reservoirs
1979 to 2007

			Monthly Injection									Monthly Withdrawal								
Year	Month	Fractional Year	Corunna (MCF)	Wilkesport (MCF)	Seckerton (MCF)	Dow Moore (MCF)	Black Creek (MCF)	Coveny (MCF)	Ladysmith (MCF)	Total Injection (MCF)	Cumulative Injection (MCF)	Corunna (MCF)	Wilkesport (MCF)	Seckerton (MCF)	Dow Moore (MCF)	Black Creek (MCF)	Coveny (MCF)	Ladysmith (MCF)	Total Withdrawals (MCF)	Cumulative Withdrawals (MCF)
2002	7	2002.580	467,567	1,393,573	85,424	2,654,245	0	0	1,454	4,602,264	883,802,248	44,583	0	46,394	0	0	0	11,205	102,182	845,348,652
2002	8	2002.665	2,720,562	81,277	2,241,753	127,459	92,833	71,156	1,067,064	6,402,104	890,204,352	4,525	0	77,370	0	0	0	7,214	89,109	845,437,761
2002	9	2002.747	957,618	527	4,715,449	0	0	0	3,172,751	8,846,344	899,050,696	0	0	0	0	0	0	0	0	845,437,761
2002	10	2002.832	329,843	0	2,405,273	0	0	0	485,658	3,220,774	902,271,470	0	0	2,299,148	0	0	0	13,531	2,312,680	847,750,441
2002	11	2002.914	473	0	12,253	0	83,027	0	0	95,753	902,367,223	734,006	0	2,004,186	0	123,143	275,073	1,274,681	4,411,089	852,161,530
2002	12	2002.999	0	0	0	0	476,698	0	0	476,698	902,843,921	2,930,467	1,235,103	3,499,700	0	1,011,395	2,389,223	3,301,929	14,367,816	866,529,346
2003	1	2003.085	0	0	104,236	0	1,440	0	0	105,676	902,949,597	627,784	4,860,518	2,741,531	2,505,942	190,763	412,589	378,418	11,717,545	878,246,891
2003	2	2003.162	0	0	49,322	0	0	0	0	49,322	902,998,920	293,554	1,837,479	852,900	8,716,124	0	287,571	711,115	12,698,745	890,945,636
2003	3	2003.246	122,137	0	68,375	147,940	29,895	43,305	617,249	1,028,901	904,027,821	42,094	29,416	127,389	7,348,941	4,660	3,720	483,155	8,039,377	898,985,013
2003	4	2003.329	0	36,324	63,401	11,410	974	0	397,420	509,529	904,537,350	124,392	10,498	188,784	4,013,696	64,082	0	5,819	4,407,270	903,392,283
2003	5	2003.413	27,623	61,271	75,695	0	776,958	1,973,910	215,003	3,130,461	907,667,811	71,863	0	16,715	0	0	8,553	378,865	475,996	903,868,279
2003	6	2003.496	24,909	1,383,569	74,100	1,862,511	37,039	1,254,976	40,659	4,677,764	912,345,574	82,432	0	18,097	0	0	0	9,473	110,001	903,978,281
2003	7	2003.580	0	1,538,372	72,638	10,646,770	0	0	8,472	12,266,253	924,611,827	53,125	0	25,321	0	0	0	9,455	87,901	904,066,181
2003	8	2003.665	674,306	3,729,046	195,398	6,675,406	0	0	3,243,197	14,517,354	939,129,181	59,803	0	26,498	0	0	0	7,696	93,997	904,160,178
2003	9	2003.747	3,633,029	1,013,077	6,788,233	3,252,654	0	0	2,310,261	16,997,254	956,126,435	26,556	0	44,390	0	0	0	314	71,261	904,231,439
2003	10	2003.832	481,141	0	4,174,555	0	0	149,466	9,418	4,814,580	960,941,015	0	0	0	0	0	23,950	0	23,950	904,255,389
2003	11	2003.914	18,796	0	45,143	0	0	35,115	0	99,054	961,040,069	0	0	0	0	0	0	105,823	105,823	904,361,212
2003	12	2003.999	0	0	0	0	730,518	0	0	730,518	961,770,586	2,243,419	0	5,268,337	0	1,226,724	894,729	3,404,294	13,037,503	917,398,715
2004	1	2004.085	0	0	55,359	0	350,724	191	6,354	412,627	962,183,213	1,812,181	2,987,484	4,704,635	5,403,516	621,055	1,796,967	1,367,621	18,693,459	936,092,174
2004	2	2004.164	0	0	82,886	0	0	1,094	5,002	88,983	962,272,196	457,411	3,566,215	988,950	8,274,636	85,390	522,557	109,688	14,004,847	950,097,021
2004	3	2004.246	0	60,208	94,020	0	260,132	42,098	1,225	457,682	962,729,878	59,250	95,326	40,884	4,105,812	0	0	407,767	4,709,039	954,806,060
2004	4	2004.329	0	3,247,015	89,468	465,496	630,287	1,084,434	0	5,516,700	968,246,578	56,291	226	38,885	3,001,242	136,693	5,038	198,844	3,437,220	958,243,279
2004	5	2004.413	2,213,109	2,851,366	85,993	5,199,383	109,414	1,737,352	0	12,196,617	980,443,195	49,152	2,619	42,493	129,673	3,001	0	0	226,937	958,470,217
2004	6	2004.496	2,035,916	430,787	55,923	5,634,604	0	218,626	0	8,375,855	988,819,051	12,516	6,824	48,596	0	0	0	293	68,228	958,538,445
2004	7	2004.580	593,799	319,852	56,619	5,732,711	22,402	201,988	0	6,927,372	995,746,422	3,914	0	58,007	0	0	0	0	61,921	958,600,366
2004	8	2004.665	0	0	1,233,924	4,204,401	0	0	429,488	5,867,813	1,001,614,235	1,788	0	61,270	0	0	0	0	63,058	958,663,424
2004	9	2004.747	94,261	40,306	7,969,397	92,018	0	24,719	4,782,149	13,002,850	1,014,617,085	0	0	5,268	0	0	0	0	5,268	958,668,692
2004	10	2004.832	0	39,679	1,630,269	0	0	0	422,714	2,092,662	1,016,709,748	0	392	0	0	40,038	0	0	40,430	958,709,122
2004	11	2004.914	0	0	0	0	17,755	0	0	17,755	1,016,727,502	4,288	325	193	0	5,772	0	0	10,578	958,719,700
2004	12	2004.999	0	0	0	0	363,658	0	0	363,658	1,017,091,160	3,308,341	6,813	7,152,011	0	291,421	1,088,042	4,924,618	16,771,245	975,490,945
2005	1	2005.085	0	0	38,245	0	248,683	0	0	286,928	1,017,378,088	1,172,102	3,467,921	3,506,946	2,224,221	302,644	291,657	613,537	11,579,027	987,069,973
2005	2	2005.162	0	0	67,093	0	415,197	0	0	482,290	1,017,860,378	27,590	1,665,438	45,148	9,776,321	440,645	935,136	0	12,890,277	999,960,250
2005	3	2005.246	0	0	71,212	0	0	0	0	71,212	1,017,931,590	35,161	1,087,724	310,449	7,250,287	318,365	499,756	0	9,501,742	1,009,461,992
2005	4	2005.329	0	1,377,666	80,856	0	204	85,138	0	1,543,865	1,019,475,455	41,630	0	45,021	1,762,563	79,266	0	7	1,928,488	1,011,390,480
2005	5	2005.413	0	1,500,968	81,428	677,250	475,500	978,703	0	3,713,849	1,023,189,304	40,657	3,209	46,561	0	0	0	0	90,427	1,011,480,906
2005	6	2005.496	0	2,447,939	88,919	9,951,094	36,073	1,605,508	0	14,129,534	1,037,318,838	43,941	0	50,417	0	0	0	0	94,358	1,011,575,265
2005	7	2005.580	0	809,397	91,665	6,976,787	0	104,222	0	7,982,071	1,045,300,909	46,313	0	50,983	0	0	0	0	97,296	1,011,672,561
2005	8	2005.665	1,124,977	136,035	85,806	3,650,585	30,652	71,542	260,345	5,359,941	1,050,660,850	40,766	3,283	50,666	0	0	0	268	94,984	1,011,767,545
2005	9	2005.747	3,319,183	0	6,319,973	0	0	55,818	4,511,856	14,206,830	1,064,867,680	2,593	0	15,024	0	0	0	0	17,616	1,011,785,161
2005	10	2005.832	295,593	0	4,313,080	141,422	0	0	881,738	5,631,833	1,070,499,513	0	0	0	0	0	0	0	0	1,011,785,161
2005	11	2005.914	357	0	436	1,562	0	0	245	2,599	1,070,502,112	756,220	0	996,414	1,780	102,393	187,343	1,445,523	3,489,673	1,015,274,834
2005	12	2005.999	0	0	0	0	427,009	0	0	427,009	1,070,929,121	2,764,481	0	4,123,003	0	680,451	1,300,969	4,170,628	13,039,531	1,028,314,365
2006	1	2006.085	0	0	43,452	0	328,721	51,091	0	423,263	1,071,352,384	920,088	2,072,614	4,193,035	176,003	37,910	1,007,487	906	8,408,043	1,036,722,408
2006	2	2006.162	0	0	84,884	0	0	68,505	0	153,390	1,071,505,773	33,309	56,526	1,084,027	9,432,581	7,722	0	0	10,614,166	1,047,336,574
2006	3	2006.246	0	72,536	97,508	0	0	995,167	0	1,165,211	1,072,670,984	41,152	320,714	250,461	6,919,551	72,331	0	0	7,604,209	1,054,940,783
2006	4	2006.329	0	0	79,328	215,825	0	0	0	295,153	1,072,966,137	40,251	814,400	181,754	1,399,384	49,156	0	0	2,484,945	1,057,425,728
2006	5	2006.413	0	2,791,030	90,976	8,843,479	138,452	857,711	0	12,721,647	1,085,687,784	46,662	0	47,570	0	1,564	0	0	95,796	1,057,521,524
2006	6	2006.496	0	475,530	96,046	5,127,907	80,568	514,643	0	6,294,694	1,091,982,478	51,026	0	51,087	0	3,544	180	0	105,838	1,057,627,362
2006	7	2006.580	0	0	95,249	3,492,111	0	11,225	0	3,598,585	1,095,581,063	51,818	0	49,411	0	0	0	0	101,229	1,057,728,590
2006	8	2006.665	0	205,351	2,536,070	754,989	0	94,438	0	3,590,847	1,099,171,910	46,929	0	47,995	0	0	0	0	94,924	1,057,823,514
2006	9	2006.747	4,017,865	0	7,671,443	0	0	0	1,866,230	13,555,538	1,112,727,448	432	0	1,306	0	0	0	0	1,739	1,057,825,253
2006	10	2006.832	559,163	0	791,265	0	0	0	1,632,798	2,983,226	1,115,710,674	0	1,095,333	570,401	0	329,724	621,572	0	2,617,030	1,060,442,283
2006	11	2006.914	0	345,325	185,616	0	0	0	558,996	1,089,937	1,116,800,610	0	285	820,251	0	0	12,367	194,485	1,027,388	1,061,469,671
2006	12	2006.999	0	0	720	0	0	142,362	0	143,082	1,116,943,693	1,471,396	0	3,249,947	0	0	418,480	1,359,896	6,499,719	1,067,969,389
2007	1	2007.085	0	0	0	0	0	189,701	635	190,336	1,117,134,029	1,743,643	0	4,235,022	403,960	78,815	1,440,462	1,933,031	9,834,934	1,077,804,323
2007	2	2007.162	0	0	89,367	0	0	0	681	90,048	1,117,224,077	907,615	1,486,819	2,008,530	12,441,917	92,853	843,361	483,345	18,264,439	1,096,068,762
2007	3	2007.246	0	742,499	116,143	0	231,585	491,503	61,875	1,643,604	1,118,867,682	61,379	990,433	327,813	5,831,411	125,366	27,751	106,513	7,470,666	1,103,539,428
2007	4	2007.329	0	2,163,462	100,328	0	525,572	925,543	0	3,714,905	1,122,582,586	209,179	1,377,587	489,709	3,553,712	181,801	56,283	0	5,868,271	1,109,407,700
2007	5	2007.413	0	1,505,737	100,586	5,337,502	47,632	1,349,065	0	8,340,523	1,130,923,109	50,648	0	50,648	3,858	0	413	0	105,566	1,109,513,266
2007	6	2007.496	17,369	0	87,507	10,462,129	31,275	148,751	0	10,747,031	1,141,670,140	39,231	0	39,231	0	0	0	0	78,462	1,109,591,729
2007	7	2007.580	0	208,327	85,315	5,106,481	0	113,447	4,841,362	10,354,933	1,152,025,072	35,959	0	35,959	0	0	0	0	71,918	1,109,663,646
2007	8	2007.665	1,443,606	0	258,742	1,497,058	0	0	737,548	3,936,953	1,155,962,026	27,741	0	27,741	0	0	0	0	55,483	1,109,719,129
2007	9	2007.747	2,765,460	0	6,826,699	171,511	0	0	0	9,763,670	1,165,725,696	1,558	0	1,558	0	0	0	0	3,116	1,109,722,244
2007	10	2007.832	664,442	0	4,274,564	0	0	0	0	4,939,006	1,170,664,702	0	0	0	0	0	0	0	0	1,109,722,244
2007	11	2007.914	0	0	0	0	0	0	0	0	1,170,664,702	1,054,001	0	3,155,136	0	0	0	441,786	4,650,924	1,114,373,168
2007	12	2007.999	0	0	0	0	0	0	0	0	1,170,664,702	2,522,060	0	5,573,746	0	0	321	2,314,889	10,411,016	1,124,784,184
June 1/05 to Dec 31/07			**13,543,571**	**14,781,802**	**34,611,687**	**61,730,442**	**2,353,039**	**8,768,945**	**15,354,308**			**9,434,329**	**8,221,203**	**23,049,963**	**40,164,158**	**1,763,630**	**5,916,668**	**10,136,382**		

Table A1-2
Injection/Withdrawal Volumes History
Corunna, Wilkesport, Seckerton, Dow Moore, Black Creek, Coveny and Ladysmith Reservoirs
1979 to 2007
Balances

			Physical Balances							Paper Balance Adjustments														Paper Balances						
Year	Month	Fractional Year	Corunna (MCF)	Wilkesport (MCF)	Seckerton (MCF)	Dow Moore (MCF)	Black Creek (MCF)	Coveny (MCF)	Ladysmith (MCF)	Corunna Adj. (MCF)	Corunna Cum. Adj. (MCF)	Wilkesport Adj. (MCF)	Wilkesport Cum. Adj. (MCF)	Seckerton Adj. (MCF)	Seckerton Cum. Adj. (MCF)	Dow Moore Adj. (MCF)	Dow Moore Cum. Adj. (MCF)	Black Creek Adj. (MCF)	Black Creek Cum. Adj. (MCF)	Coveny Adj. (MCF)	Coveny Cum. Adj. (MCF)	Ladysmith Adj. (MCF)	Ladysmith Cum. Adj. (MCF)	Paper Corunna (MCF)	Paper Wilkesport (MCF)	Paper Seckerton (MCF)	Paper Dow Moore (MCF)	Paper Black Creek (MCF)	Paper Coveny (MCF)	Paper Ladysmith (MCF)
1979	1	1979.085	3,693,685	4,143,746	5,870,908	2,352,016	176,010	1,661,000	3,279,000	-906,301	-906,301	0	0	906,301	906,301	0	0	0	0	0	0	-3,279,000	-3,279,000	2,787,384	4,143,746	6,777,209	2,352,016	176,010	1,661,000	0
1979	2	1979.162	3,689,723	2,902,152	4,200,266	2,352,016	176,010	1,661,000	3,279,000	0	-906,301	0	0	0	906,301	0	0	0	0	0	0	0	-3,279,000	2,783,422	2,902,152	5,106,567	2,352,016	176,010	1,661,000	0
1979	3	1979.246	3,673,414	2,898,296	4,217,647	2,352,016	176,010	1,661,000	3,279,000	0	-906,301	0	0	0	906,301	0	0	0	0	0	0	0	-3,279,000	2,767,113	2,898,296	5,123,948	2,352,016	176,010	1,661,000	0
1979	4	1979.329	3,657,801	2,898,296	4,234,506	2,352,016	176,010	1,661,000	3,279,000	0	-906,301	0	0	0	906,301	0	0	0	0	0	0	0	-3,279,000	2,751,499	2,898,296	5,140,808	2,352,016	176,010	1,661,000	0
1979	5	1979.413	3,637,729	2,898,296	4,256,036	2,352,016	176,010	1,661,000	3,279,000	0	-906,301	0	0	0	906,301	0	0	0	0	0	0	0	-3,279,000	2,731,427	2,898,296	5,162,338	2,352,016	176,010	1,661,000	0
1979	6	1979.496	3,618,341	3,395,899	4,279,536	2,352,016	176,010	1,661,000	3,279,000	0	-906,301	0	0	0	906,301	0	0	0	0	0	0	0	-3,279,000	2,712,040	3,395,899	5,185,837	2,352,016	176,010	1,661,000	0
1979	7	1979.580	5,182,483	5,826,815	4,777,626	2,352,016	176,010	1,661,000	3,279,000	0	-906,301	0	0	0	906,301	0	0	0	0	0	0	0	-3,279,000	4,276,182	5,826,815	5,683,928	2,352,016	176,010	1,661,000	0
1979	8	1979.665	7,156,745	9,092,295	9,406,464	2,352,016	176,010	1,661,000	3,279,000	0	-906,301	0	0	0	906,301	0	0	0	0	0	0	0	-3,279,000	6,250,444	9,092,295	10,312,765	2,352,016	176,010	1,661,000	0
1979	9	1979.747	7,780,584	9,685,891	13,951,045	2,352,016	176,010	1,661,000	3,279,000	0	-906,301	0	0	0	906,301	0	0	0	0	0	0	0	-3,279,000	6,874,283	9,685,891	14,857,346	2,352,016	176,010	1,661,000	0
1979	10	1979.832	7,422,645	9,685,891	13,256,513	2,352,016	176,010	1,661,000	3,279,000	0	-906,301	0	0	0	906,301	0	0	0	0	0	0	0	-3,279,000	6,516,343	9,685,891	14,162,814	2,352,016	176,010	1,661,000	0
1979	11	1979.914	7,198,231	9,685,891	13,116,588	2,352,016	176,010	1,661,000	3,279,000	0	-906,301	0	0	0	906,301	0	0	0	0	0	0	0	-3,279,000	6,291,929	9,685,891	14,022,889	2,352,016	176,010	1,661,000	0
1979	12	1979.999	5,990,147	9,623,201	11,421,791	2,352,016	176,010	1,661,000	3,279,000	0	-906,301	0	0	0	906,301	0	0	0	0	0	0	0	-3,279,000	5,083,846	9,623,201	12,328,092	2,352,016	176,010	1,661,000	0
1980	1	1980.085	4,345,569	8,614,820	8,127,902	2,352,016	176,010	1,661,000	3,279,000	0	-906,301	0	0	0	906,301	0	0	0	0	0	0	0	-3,279,000	3,439,268	8,614,820	9,034,203	2,352,016	176,010	1,661,000	0
1980	2	1980.164	3,799,678	4,945,627	4,906,654	2,352,016	176,010	1,661,000	3,279,000	0	-906,301	0	0	0	906,301	0	0	0	0	0	0	0	-3,279,000	2,893,377	4,945,627	5,812,955	2,352,016	176,010	1,661,000	0
1980	3	1980.246	3,833,083	2,732,404	4,327,122	2,352,016	176,010	1,661,000	3,279,000	0	-906,301	0	0	0	906,301	0	0	0	0	0	0	0	-3,279,000	2,926,782	2,732,404	5,233,423	2,352,016	176,010	1,661,000	0
1980	4	1980.329	3,874,526	3,545,327	4,286,215	2,352,016	176,010	1,661,000	3,279,000	0	-906,301	0	0	0	906,301	0	0	0	0	0	0	0	-3,279,000	2,968,225	3,545,327	5,192,516	2,352,016	176,010	1,661,000	0
1980	5	1980.413	3,844,439	7,956,225	4,316,733	2,352,016	176,010	1,661,000	3,279,000	0	-906,301	0	0	0	906,301	0	0	0	0	0	0	0	-3,279,000	2,938,138	7,956,225	5,223,034	2,352,016	176,010	1,661,000	0
1980	6	1980.496	3,815,239	8,885,104	4,346,625	2,352,016	176,010	1,661,000	3,279,000	0	-906,301	0	0	0	906,301	0	0	0	0	0	0	0	-3,279,000	2,908,937	8,885,104	5,252,926	2,352,016	176,010	1,661,000	0
1980	7	1980.580	3,786,631	9,728,743	4,432,537	2,352,016	176,010	1,661,000	3,279,000	0	-906,301	0	0	0	906,301	0	0	0	0	0	0	0	-3,279,000	2,880,330	9,728,743	5,338,838	2,352,016	176,010	1,661,000	0
1980	8	1980.665	5,974,007	9,728,743	8,567,124	2,352,016	176,010	1,661,000	3,279,000	0	-906,301	0	0	0	906,301	0	0	0	0	0	0	0	-3,279,000	5,067,706	9,728,743	9,473,426	2,352,016	176,010	1,661,000	0
1980	9	1980.747	6,992,417	9,728,743	13,851,451	2,352,016	176,010	1,661,000	3,279,000	0	-906,301	0	0	0	906,301	0	0	0	0	0	0	0	-3,279,000	6,086,115	9,728,743	14,757,752	2,352,016	176,010	1,661,000	0
1980	10	1980.832	6,917,339	9,728,743	14,229,275	2,352,016	176,010	1,661,000	3,279,000	0	-906,301	0	0	0	906,301	0	0	0	0	0	0	0	-3,279,000	6,011,038	9,728,743	15,135,576	2,352,016	176,010	1,661,000	0
1980	11	1980.914	6,305,707	9,476,494	12,920,369	2,352,016	176,010	1,661,000	3,279,000	0	-906,301	0	0	0	906,301	0	0	0	0	0	0	0	-3,279,000	5,399,406	9,476,494	13,826,670	2,352,016	176,010	1,661,000	0
1980	12	1980.999	3,791,929	8,317,365	7,774,365	2,352,016	176,010	1,661,000	3,279,000	0	-906,301	0	0	0	906,301	0	0	0	0	0	0	0	-3,279,000	2,885,628	8,317,365	8,680,666	2,352,016	176,010	1,661,000	0
1981	1	1981.085	3,088,191	4,655,367	3,896,770	2,352,016	176,010	1,661,000	3,279,000	0	-906,301	0	0	0	906,301	0	0	0	0	0	0	0	-3,279,000	2,181,890	4,655,367	4,803,071	2,352,016	176,010	1,661,000	0
1981	2	1981.162	3,077,128	3,337,649	3,820,291	2,352,016	176,010	1,661,000	3,279,000	0	-906,301	0	0	0	906,301	0	0	0	0	0	0	0	-3,279,000	2,170,827	3,337,649	4,726,592	2,352,016	176,010	1,661,000	0
1981	3	1981.246	3,057,596	2,725,728	3,840,458	2,352,016	176,010	1,661,000	3,279,000	0	-906,301	0	0	0	906,301	0	0	0	0	0	0	0	-3,279,000	2,151,295	2,725,728	4,746,759	2,352,016	176,010	1,661,000	0
1981	4	1981.329	3,033,404	4,976,558	3,864,869	2,352,016	176,010	1,661,000	3,279,000	0	-906,301	0	0	0	906,301	0	0	0	0	0	0	0	-3,279,000	2,127,103	4,976,558	4,771,170	2,352,016	176,010	1,661,000	0
1981	5	1981.413	3,010,018	8,100,523	3,888,908	2,352,016	176,010	1,661,000	3,279,000	0	-906,301	0	0	0	906,301	0	0	0	0	0	0	0	-3,279,000	2,103,716	8,100,523	4,795,210	2,352,016	176,010	1,661,000	0
1981	6	1981.496	2,984,940	9,083,840	3,914,554	2,352,016	176,010	1,661,000	3,279,000	0	-906,301	0	0	0	906,301	0	0	0	0	0	0	0	-3,279,000	2,078,639	9,083,840	4,820,856	2,352,016	176,010	1,661,000	0
1981	7	1981.580	3,761,857	9,104,403	4,717,777	2,352,016	176,010	1,661,000	3,279,000	0	-906,301	0	0	0	906,301	0	0	0	0	0	0	0	-3,279,000	2,855,556	9,104,403	5,624,079	2,352,016	176,010	1,661,000	0
1981	8	1981.665	5,842,522	9,104,403	10,482,042	2,352,016	176,010	1,661,000	3,279,000	0	-906,301	0	0	0	906,301	0	0	0	0	0	0	0	-3,279,000	4,936,221	9,104,403	11,388,344	2,352,016	176,010	1,661,000	0
1981	9	1981.747	7,154,168	9,952,313	14,496,901	2,352,016	176,010	1,661,000	3,279,000	0	-906,301	0	0	0	906,301	0	0	0	0	0	0	0	-3,279,000	6,247,867	9,952,313	15,403,202	2,352,016	176,010	1,661,000	0
1981	10	1981.832	7,211,405	9,952,313	14,768,854	2,352,016	176,010	1,661,000	3,279,000	0	-906,301	0	0	0	906,301	0	0	0	0	0	0	0	-3,279,000	6,305,104	9,952,313	15,675,155	2,352,016	176,010	1,661,000	0
1981	11	1981.914	6,038,819	9,952,313	13,535,474	2,352,016	176,010	1,661,000	3,279,000	0	-906,301	0	0	0	906,301	0	0	0	0	0	0	0	-3,279,000	5,132,518	9,952,313	14,441,775	2,352,016	176,010	1,661,000	0
1981	12	1981.999	4,037,369	8,411,167	9,170,923	2,352,016	176,010	1,661,000	3,279,000	0	-906,301	0	0	0	906,301	0	0	0	0	0	0	0	-3,279,000	3,131,067	8,411,167	10,077,224	2,352,016	176,010	1,661,000	0
1982	1	1982.085	2,998,661	5,025,026	5,143,519	2,352,016	176,010	1,661,000	3,279,000	0	-906,301	0	0	0	906,301	0	0	0	0	0	0	0	-3,279,000	2,092,360	5,025,026	6,049,820	2,352,016	176,010	1,661,000	0
1982	2	1982.162	2,987,400	3,177,529	3,932,667	2,352,016	176,010	1,661,000	3,279,000	0	-906,301	0	0	0	906,301	0	0	0	0	0	0	0	-3,279,000	2,081,099	3,177,529	4,838,968	2,352,016	176,010	1,661,000	0
1982	3	1982.246	2,970,682	2,869,300	3,924,679	2,352,016	176,010	1,661,000	3,279,000	0	-906,301	0	0	0	906,301	0	0	0	0	0	0	0	-3,279,000	2,064,381	2,869,300	4,830,980	2,352,016	176,010	1,661,000	0
1982	4	1982.329	2,988,848	2,653,492	3,906,598	2,352,016	176,010	1,661,000	3,279,000	0	-906,301	0	0	0	906,301	0	0	0	0	0	0	0	-3,279,000	2,082,546	2,653,492	4,812,899	2,352,016	176,010	1,661,000	0
1982	5	1982.413	2,983,281	2,653,492	3,912,313	2,352,016	176,010	1,661,000	3,279,000	0	-906,301	0	0	0	906,301	0	0	0	0	0	0	0	-3,279,000	2,076,980	2,653,492	4,818,614	2,352,016	176,010	1,661,000	0
1982	6	1982.496	2,965,475	3,009,225	3,930,210	2,352,016	176,010	1,661,000	3,279,000	0	-906,301	0	0	0	906,301	0	0	0	0	0	0	0	-3,279,000	2,059,174	3,009,225	4,836,512	2,352,016	176,010	1,661,000	0
1982	7	1982.580	3,908,574	7,200,573	4,701,440	2,352,016	176,010	1,661,000	3,279,000	0	-906,301	0	0	0	906,301	0	0	0	0	0	0	0	-3,279,000	3,002,273	7,200,573	5,607,741	2,352,016	176,010	1,661,000	0
1982	8	1982.665	6,765,087	9,478,972	8,563,545	2,352,016	176,010	1,661,000	3,279,000	0	-906,301	0	0	0	906,301	0	0	0	0	0	0	0	-3,279,000	5,858,786	9,478,972	9,469,846	2,352,016	176,010	1,661,000	0
1982	9	1982.747	6,954,952	9,679,724	14,077,224	2,352,016	176,010	1,661,000	3,279,000	0	-906,301	0	0	0	906,301	0	0	0	0	0	0	0	-3,279,000	6,048,651	9,679,724	14,983,525	2,352,016	176,010	1,661,000	0
1982	10	1982.832	6,954,348	9,677,793	14,077,224	2,352,016	176,010	1,661,000	3,279,000	0	-906,301	0	0	0	906,301	0	0	0	0	0	0	0	-3,279,000	6,048,047	9,677,793	14,983,525	2,352,016	176,010	1,661,000	0
1982	11	1982.914	5,976,845	9,624,496	13,435,555	2,352,016	176,010	1,661,000	3,279,000	0	-906,301	0	0	0	906,301	0	0	0	0	0	0	0	-3,279,000	5,070,544	9,624,496	14,341,856	2,352,016	176,010	1,661,000	0
1982	12	1982.999	4,530,287	8,625,347	10,500,039	2,352,016	176,010	1,661,000	3,279,000	0	-906,301	0	0	0	906,301	0	0	0	0	0	0	0	-3,279,000	3,623,986	8,625,347	11,406,340	2,352,016	176,010	1,661,000	0
1983	1	1983.085	3,122,623	6,208,558	7,662,482	2,352,016	176,010	1,661,000	3,279,000	0	-906,301	0	0	0	906,301	0	0	0	0	0	0	0	-3,279,000	2,216,322	6,208,558	8,568,783	2,352,016	176,010	1,661,000	0
1983	2	1983.162	3,137,150	5,668,029	5,492,770	2,352,016	176,010	1,661,000	3,279,000	0	-906,301	0	0	-54,500	851,801	0	0	0	0	0	0	0	-3,279,000	2,230,849	5,668,029	6,344,571	2,352,016	176,010	1,661,000	0
1983	3	1983.246	3,118,377	4,253,136	4,332,145	2,352,016	176,010	1,661,000	3,279,000	0	-906,301	0	0	0	851,801	0	0	0	0	0	0	0	-3,279,000	2,212,076	4,253,136	5,183,946	2,352,016	176,010	1,661,000	0
1983	4	1983.329	3,103,095	3,082,104	4,347,702	2,352,016	176,010	1,661,000	3,279,000	0	-906,301	0	0	0	851,801	0	0	0	0	0	0	0	-3,279,000	2,196,794	3,082,104	5,199,503	2,352,016	176,010	1,661,000	0
1983	5	1983.413	3,092,801	3,082,104	4,358,144	2,352,016	176,010	1,661,000	3,279,000	0	-906,301	0	0	0	851,801	0	0	0	0	0	0	0	-3,279,000	2,186,500	3,082,104	5,209,945	2,352,016	176,010	1,661,000	0
1983	6	1983.496	3,077,936	3,082,104	4,414,427	2,352,016	176,010	1,661,000	3,279,000	0	-906,301	0	0	0	851,801	0	0	0	0	0	0	0	-3,279,000	2,171,635	3,082,104	5,266,228	2,352,016	176,010	1,661,000	0
1983	7	1983.580	4,584,266	4,139,397	8,926,853	2,352,016	176,010	1,661,000	3,279,000	0	-906,301	0	0	0	851,801	0	0	0	0	0	0	0	-3,279,000	3,677,964	4,139,397	9,778,654	2,352,016	176,010	1,661,000	0
1983	8	1983.665	6,545,325	4,824,058	13,436,190	2,352,016	176,010	1,661,000	3,279,000	0	-906,301	0	0	0	851,801	0	0	0	0	0	0	0	-3,279,000	5,639,024	4,824,058	14,287,991	2,352,016	176,010	1,661,000	0
1983	9	1983.747	7,136,857	7,250,612	14,915,275	2,352,016	176,010	1,661,000	3,279,000	0	-906,301	0	0	0	851,801	0	0	0	0	0	0	0	-3,279,000	6,230,556	7,250,612	14,767,075	2,352,016	176,010	1,661,000	0
1983	10	1983.832	7,136,857	8,464,044	14,915,275	2,352,016	176,010	1,661,000	3,279,000	0	-906,301	0	0	0	851,801	0	0	0	0	0	0	0	-3,279,000	6,230,556	8,464,044	15,767,075	2,352,016	176,010	1,661,000	0
1983	11	1983.914	5,997,588	8,586,333	12,775,155	2,352,016	176,010	1,661,000	3,279,000	0	-906,301	0	0	0	851,801	0	0	0	0	0	0	0	-3,279,000	5,091,287	8,586,333	13,626,956	2,352,016	176,010	1,661,000	0
1983	12	1983.999	4,155,884	6,911,735	7,226,299	2,352,016	176,010	1,661,000	3,279,000	0	-906,301	0	0	0	851,801	0	0	0	0	0	0	0	-3,279,000	3,249,583	6,911,735	8,078,100	2,352,016	176,010	1,661,000	0
1984	1	1984.085	3,274,914	4,835,012	4,988,919	2,352,016	176,010	1,661,000	3,279,000	0	-906,301	0	0	0	851,801	0	0	0	0	0	0	0	-3,279,000	2,368,613	4,835,012	5,840,720	2,352,016	176,010	1,661,000	0
1984	2	1984.164	3,013,509	3,070,324	4,065,638	2,352,016	176,010	1,661,000	3,279,000	0	-906,301	0	0	0	851,801	0	0	0	0	0	0	0	-3,279,000	2,107,208	3,070,324	4,917,439	2,352,016	176,010	1,661,000	0
1984	3	1984.246	3,026,860	2,409,116	3,150,364	2,352,016	176,010	1,661,000	3,279,000	0	-906,301	0	0	0	851,801	0	0	0	0	0	0	0	-3,279,000	2,120,558	2,409,116	4,002,164	2,352,016	176,010	1,661,000	0
1984	4	1984.329	3,038,929	2,409,116	3,137,955	2,352,016	176,010	1,661,000	3,279,000	0	-906,301	0	0	0	851,801	0	0	0	0	0	0	0	-3,279,000	2,132,628	2,409,116	3,989,756	2,352,016	176,010	1,661,000	0
1984	5	1984.413	3,058,302	2,485,828	3,118,663	2,352,016	176,010	1,661,000	3,279,000	0	-906,301	0	0	0	851,801	0	0	0	0	0	0	0	-3,279,000	2,152,001	2,485,828	3,970,464	2,352,016	176,010	1,661,000	0
1984	6	1984.496	3,254,175	5,468,912	4,246,703	2,352,016	176,010	1,661,000	3,279,000	0	-906,301	0	0	0	851,801	0	0	0	0	0	0	0	-3,279,000	2,347,874	5,468,912	5,098,504	2,352,016	176,010	1,661,000	0
1984	7	1984.580	5,855,803	8,503,146	11,021,523	2,352,016	176,010	1,661,000	3,279,000	0	-906,301	0	0	0	851,801	0	0	0	0	0	0	0	-3,279,000	4,949,501	8,503,146	11,873,324	2,352,016	176,010	1,661,000	0
1984	8	1984.665	7,283,369	9,984,712	14,883,130	2,352,016	176,010	1,661,000	3,279,000	0	-906,301	0	0	0	851,801	0	0	0	0	0	0	0	-3,279,000	6,377,068	9,984,712	15,734,931	2,352,016	176,010	1,661,000	0
1984	9	1984.747	7,283,369	9,984,712	14,883,130	2,352,016	176,010	1,661,000	3,279,000	0	-906,301	0	0	0	851,801	0	0	0	0	0	0	0	-3,279,000	6,377,068	9,984,712	15,734,931	2,352,016	176,010	1,661,000	0
1984	10	1984.832	7,283,369	9,984,712	14,883,130	2,352,016	176,010	1,661,000	3,279,000	0	-906,301	0	0	0	851,801	0	0	0	0	0	0	0	-3,279,000	6,377,068	9,984,712	15,734,931	2,352,016	176,010	1,661,000	0
1984	11	1984.914	6,692,667	9,984,712	14,112,726	2,352,016	176,010	1,661,000	3,279,000	0	-906,301	0	0	0	851,801	0	0	0	0	0	0	0	-3,279,000	5,786,366	9,984,712	14,964,527	2,352,016	176,010	1,661,000	0
1984	12	1984.999	4,713,834	9,280,939	10,844,387	2,352,016	176,010	1,661,000	3,279,000	0	-906,301	0	0	0	851,801	0	0	0	0	0	0	0	-3,279,000	3,807,532	9,280,939	11,696,188	2,352,016	176,010	1,661,000	0
1985	1	1985.085	3,310,614	5,073,610	5,227,838	2,352,016	176,010	1,661,000	3,279,000	0	-906,301	0	0	0	851,801	0	0	0	0	0	0	0	-3,279,000	2,404,313	5,073,610	6,079,639	2,352,016	176,010	1,661,000	0
1985	2	1985.162	3,341,502	3,145,920	4,353,357	2,352,016	176,010	1,661,000	3,279,000	0	-906,301	0	0	0	851,801	0	0	0	0	0	0	0	-3,279,000	2,435,201	3,145,920	5,205,158	2,352,016	176,010	1,661,000	0
1985	3	1985.246	3,366,107	2,820,532	3,892,276	2,352,016	176,010	1,661,000	3,279,000	0	-906,301	0	0	0	851,801	0	0	0	0	0	0	0	-3,279,000	2,459,806	2,820,532	4,744,077	2,352,016	176,010	1,661,000	0
1985	4	1985.329	3,389,271	5,080,487	3,930,581	2,352,016	176,010	1,661,000	3,279,000	0	-906,301	0	0	0	851,801	0	0	0	0	0	0	0	-3,279,000	2,482,970	5,080,487	4,782,382	2,352,016	176,010	1,661,000	0
1985	5	1985.413	3,418,098	9,776,936	6,221,890	2,352,016	176,010	1,661,000	3,279,000	0	-906,301	0	0	0	851,801	0	0	0	0	0	0	0	-3,279,000	2,511,797	9,776,936	7,073,691	2,352,016	176,010	1,661,000	0
1985	6	1985.496	5,940,690	9,839,580	12,946,124	2,352,016	176,010	1,661,000	3,279,000	0	-906,301	0	0	0	851,801	0	0	0	0	0	0	0	-3,279,000	5,034,389	9,839,580	13,797,925	2,352,016	176,010	1,661,000	0
1985	7	1985.580	7,208,662	9,839,580	14,847,868	2,352,016	176,010	1,661,000	3,279,000	0	-906,301	0	0	0	851,801	0	0	0	0	0	0	0	-3,279,000	6,302,361	9,839,580	15,699,669	2,352,016	176,010	1,661,000	0
1985	8	1985.665	7,237,457	9,839,580	14,862,246	2,352,016	176,010	1,661,000	3,279,000	0	-906,301	0	0	0	851,801	0	0	0	0	0	0	0	-3,279,000	6,331,156	9,839,580	15,714,047	2,352,016	176,010	1,661,000	0
1985	9	1985.747	7,501,175	10,202,511	15,283,250	2,352,016	176,010	1,661,000	3,279,000	0	-906,301	0	0	0	851,801	0	0	0	0	0	0	0	-3,279,000	6,594,874	10,202,511	16,135,051	2,352,016	176,010	1,661,000	0
1985	10	1985.832	7,501,175	10,202,419	15,283,250	2,352,016	176,010	1,661,000	3,279,000	0	-906,301	0	0	0	851,801	0	0	0	0	0	0	0	-3,279,000	6,594,874	10,202,419	16,135,051	2,352,016	176,010	1,661,000	0
1985	11	1985.914	6,042,222	10,202,059	13,738,044	2,352,016	176,010	1,661,000	3,279,000	0	-906,301

Table A1-2
Injection/Withdrawal Volumes History
Corunna, Wilkesport, Seckerton, Dow Moore, Black Creek, Coventy and Ladysmith Reservoirs
1979 to 2007
Balances

			Physical Balances							Paper Balance Adjustments												Paper Balances						
Year	Month	Fractional Year	Corunna (MCF)	Wilkesport (MCF)	Seckerton (MCF)	Dow Moore (MCF)	Black Creek (MCF)	Coveny (MCF)	Ladysmith (MCF)	Corunna Adj. (MCF)	Corunna Cum. Adj. (MCF)	Wilkesport Adj. (MCF)	Wilkesport Cum. Adj. (MCF)	Seckerton Adj. (MCF)	Seckerton Cum. Adj. (MCF)	Dow Moore Adj. (MCF)	Dow Moore Cum. Adj. (MCF)	Black Creek Adj. (MCF)	Black Creek Cum. Adj. (MCF)	Coveny Adj. (MCF)	Coveny Cum. Adj. (MCF)	Ladysmith Adj. (MCF)	Ladysmith Cum. Adj. (MCF)	Paper Corunna (MCF)	Paper Wilkesport (MCF)	Paper Seckerton (MCF)	Paper Dow Moore (MCF)	Paper Black Creek (MCF)	Paper Coveny (MCF)	Paper Ladysmith (MCF)
1986	11	1986.914	7,140,295	10,141,741	14,998,048	2,352,016	176,010	1,661,000	3,279,000	0	-906,301	0	0	0	851,801	0	0	0	0	0	0	0	-3,279,000	6,233,994	10,141,741	15,849,849	2,352,016	176,010	1,661,000	0
1986	12	1986.999	4,898,312	10,141,741	10,655,786	2,352,016	176,010	1,661,000	3,279,000	0	-906,301	0	0	0	851,801	0	0	0	0	0	0	0	-3,279,000	3,992,011	10,141,741	11,507,587	2,352,016	176,010	1,661,000	0
1987	1	1987.085	2,999,424	7,556,916	5,539,438	2,352,016	176,010	1,661,000	3,279,000	0	-906,301	0	0	0	851,801	0	0	0	0	0	0	0	-3,279,000	2,093,123	7,556,916	6,391,239	2,352,016	176,010	1,661,000	0
1987	2	1987.162	2,988,999	3,876,685	3,911,695	2,352,016	176,010	1,661,000	3,279,000	0	-906,301	0	0	0	851,801	0	0	0	0	0	0	0	-3,279,000	2,082,698	3,876,685	4,763,496	2,352,016	176,010	1,661,000	0
1987	3	1987.246	2,978,819	2,984,652	3,877,386	2,352,016	176,010	1,661,000	3,279,000	0	-906,301	0	0	0	851,801	0	0	0	0	0	0	0	-3,279,000	2,072,518	2,984,652	4,729,187	2,352,016	176,010	1,661,000	0
1987	4	1987.329	2,975,712	4,306,680	3,865,222	2,352,016	176,010	1,661,000	3,279,000	0	-906,301	0	0	0	851,801	0	0	0	0	0	0	0	-3,279,000	2,069,411	4,306,680	4,717,023	2,352,016	176,010	1,661,000	0
1987	5	1987.413	4,222,295	9,469,374	12,441,838	2,352,016	176,010	1,661,000	3,279,000	0	-906,301	0	0	0	851,801	0	0	0	0	0	0	0	-3,279,000	3,315,994	9,469,374	13,293,639	2,352,016	176,010	1,661,000	0
1987	6	1987.496	6,327,558	9,469,374	14,969,511	2,352,016	176,010	1,661,000	3,279,000	0	-906,301	0	0	0	851,801	0	0	0	0	0	0	0	-3,279,000	5,421,257	9,469,374	15,821,312	2,352,016	176,010	1,661,000	0
1987	7	1987.580	6,327,153	9,469,374	14,969,511	2,352,016	176,010	1,661,000	3,279,000	0	-906,301	0	0	0	851,801	0	0	0	0	0	0	0	-3,279,000	5,420,851	9,469,374	15,821,312	2,352,016	176,010	1,661,000	0
1987	8	1987.665	6,995,929	9,469,374	14,969,511	2,352,016	176,010	1,661,000	3,279,000	0	-906,301	0	0	0	851,801	0	0	0	0	0	0	0	-3,279,000	6,089,628	9,469,374	15,821,312	2,352,016	176,010	1,661,000	0
1987	9	1987.747	7,242,830	9,658,653	14,969,511	2,352,016	176,010	1,661,000	3,279,000	0	-906,301	0	0	0	851,801	0	0	0	0	0	0	0	-3,279,000	6,336,528	9,658,653	15,821,312	2,352,016	176,010	1,661,000	0
1987	10	1987.832	7,340,860	10,062,995	15,332,484	2,352,016	176,010	1,661,000	3,279,000	0	-906,301	0	0	0	851,801	0	0	0	0	0	0	0	-3,279,000	6,434,559	10,062,995	16,184,285	2,352,016	176,010	1,661,000	0
1987	11	1987.914	5,782,977	9,920,038	13,047,938	2,352,016	176,010	1,661,000	3,279,000	0	-906,301	0	0	0	851,801	0	0	0	0	0	0	0	-3,279,000	4,876,676	9,920,038	13,899,739	2,352,016	176,010	1,661,000	0
1987	12	1987.999	4,094,821	9,108,869	9,248,856	2,352,016	176,010	1,661,000	3,279,000	0	-906,301	0	0	0	851,801	0	0	0	0	0	0	0	-3,279,000	3,188,519	9,108,869	10,100,657	2,352,016	176,010	1,661,000	0
1988	1	1988.085	3,072,754	5,353,344	5,774,400	2,352,016	176,010	1,661,000	3,279,000	0	-906,301	0	0	0	851,801	0	0	0	0	0	0	0	-3,279,000	2,166,453	5,353,344	6,626,201	2,352,016	176,010	1,661,000	0
1988	2	1988.164	3,063,011	5,353,344	4,214,982	2,352,016	176,010	1,661,000	3,279,000	0	-906,301	0	0	0	851,801	0	0	0	0	0	0	0	-3,279,000	2,156,710	5,353,344	5,066,782	2,352,016	176,010	1,661,000	0
1988	3	1988.246	3,051,030	4,956,835	4,192,777	2,352,016	176,010	1,661,000	3,279,000	0	-906,301	0	0	0	851,801	0	0	0	0	0	0	0	-3,279,000	2,144,729	4,956,835	5,044,578	2,352,016	176,010	1,661,000	0
1988	4	1988.329	3,032,656	5,230,236	4,175,953	2,352,016	176,010	1,661,000	3,279,000	0	-906,301	0	0	0	851,801	0	0	0	0	0	0	0	-3,279,000	2,126,355	5,230,236	5,027,754	2,352,016	176,010	1,661,000	0
1988	5	1988.413	3,381,706	9,984,034	9,639,957	2,352,016	176,010	1,661,000	3,279,000	0	-906,301	0	0	0	851,801	0	0	0	0	0	0	0	-3,279,000	2,475,405	9,984,034	10,491,758	2,352,016	176,010	1,661,000	0
1988	6	1988.496	6,192,357	9,984,034	14,403,491	2,352,016	176,010	1,661,000	3,279,000	0	-906,301	0	0	0	851,801	0	0	0	0	0	0	0	-3,279,000	5,286,055	9,984,034	15,255,292	2,352,016	176,010	1,661,000	0
1988	7	1988.580	7,061,974	9,984,034	15,273,189	2,352,016	176,010	1,661,000	3,279,000	0	-906,301	0	0	0	851,801	0	0	0	0	0	0	0	-3,279,000	6,155,673	9,984,034	16,124,990	2,352,016	176,010	1,661,000	0
1988	8	1988.665	7,061,716	9,984,034	15,273,189	2,352,016	176,010	1,661,000	3,279,000	0	-906,301	0	0	0	851,801	0	0	0	0	0	0	0	-3,279,000	6,155,415	9,984,034	16,124,990	2,352,016	176,010	1,661,000	0
1988	9	1988.747	7,061,518	9,984,034	15,273,189	13,802,820	176,010	1,661,000	3,279,000	906,301	0	0	0	-906,301	-54,500	0	0	0	0	0	0	0	-3,279,000	7,061,518	9,984,034	15,218,689	13,802,820	176,010	1,661,000	0
1988	10	1988.832	6,717,587	8,565,565	15,264,442	17,386,649	176,010	1,661,000	3,279,000	0	0	0	0	0	-54,500	0	0	0	0	0	0	0	-3,279,000	6,717,587	8,565,565	15,209,941	17,386,649	176,010	1,661,000	0
1988	11	1988.914	5,592,357	5,891,769	14,701,303	17,386,649	176,010	1,661,000	3,279,000	0	0	0	0	0	-54,500	0	0	0	0	0	0	0	-3,279,000	5,592,357	5,891,769	14,646,802	17,386,649	176,010	1,661,000	0
1988	12	1988.999	3,716,545	3,639,351	10,339,509	17,386,649	176,010	1,661,000	3,279,000	0	0	0	0	0	-54,500	0	0	0	0	0	0	0	-3,279,000	3,716,545	3,639,351	10,285,008	17,386,649	176,010	1,661,000	0
1989	1	1989.085	3,029,031	3,265,653	7,341,005	13,683,341	176,010	1,661,000	3,279,000	0	0	0	0	0	-54,500	0	0	0	0	0	0	0	-3,279,000	3,029,031	3,265,653	7,286,505	13,683,341	176,010	1,661,000	0
1989	2	1989.162	3,026,874	3,265,653	5,222,652	10,162,305	176,010	1,661,000	3,279,000	0	0	0	0	0	-54,500	0	0	0	0	0	0	0	-3,279,000	3,026,874	3,265,653	5,168,152	10,162,305	176,010	1,661,000	0
1989	3	1989.246	3,017,339	3,265,653	5,231,644	7,449,286	176,010	1,661,000	3,279,000	0	0	0	0	0	-54,500	0	0	0	0	0	0	0	-3,279,000	3,017,339	3,265,653	5,177,143	7,449,286	176,010	1,661,000	0
1989	4	1989.329	3,005,796	4,088,588	5,243,145	7,449,286	176,010	1,661,000	3,279,000	0	0	0	0	0	-54,500	0	0	0	0	0	0	0	-3,279,000	3,005,796	4,088,588	5,188,644	7,449,286	176,010	1,661,000	0
1989	5	1989.413	3,271,173	7,338,048	6,836,321	7,184,287	176,010	1,661,000	3,279,000	0	0	0	0	0	-54,500	0	0	0	0	0	0	0	-3,279,000	3,271,173	7,338,048	6,781,821	7,184,287	176,010	1,661,000	0
1989	6	1989.496	6,061,945	9,876,339	12,588,128	5,395,428	176,010	1,661,000	3,279,000	0	0	0	0	-300,000	-354,500	0	0	0	0	0	0	0	-3,279,000	6,061,945	9,876,339	12,233,628	5,395,428	176,010	1,661,000	0
1989	7	1989.580	7,461,981	9,876,339	15,329,194	5,393,451	176,010	1,661,000	3,279,000	0	0	0	0	0	-354,500	0	0	0	0	0	0	0	-3,279,000	7,461,981	9,876,339	14,974,693	5,393,451	176,010	1,661,000	0
1989	8	1989.665	7,461,931	9,876,339	15,329,194	9,526,553	176,010	1,661,000	3,279,000	0	0	0	0	0	-354,500	0	0	0	0	0	0	0	-3,279,000	7,461,931	9,876,339	14,974,693	9,526,553	176,010	1,661,000	0
1989	9	1989.747	7,461,836	9,876,339	15,329,194	19,614,476	176,010	1,661,000	3,279,000	0	0	0	0	0	-354,500	0	0	0	0	0	0	0	-3,279,000	7,461,836	9,876,339	14,974,693	19,614,476	176,010	1,661,000	0
1989	10	1989.832	7,489,491	10,254,798	15,539,650	22,872,253	176,010	1,661,000	3,279,000	0	0	0	0	0	-354,500	0	0	0	0	0	0	0	-3,279,000	7,489,491	10,254,798	15,185,149	22,872,253	176,010	1,661,000	0
1989	11	1989.914	5,643,766	8,681,048	11,240,172	22,872,253	176,010	1,661,000	3,279,000	0	0	0	0	0	-354,500	0	0	0	0	0	0	0	-3,279,000	5,643,766	8,681,048	10,885,672	22,872,253	176,010	1,661,000	0
1989	12	1989.999	3,770,982	3,852,539	7,675,861	22,872,253	176,010	1,661,000	3,279,000	0	0	0	0	0	-354,500	0	0	0	0	0	0	0	-3,279,000	3,770,982	3,852,539	7,321,361	22,872,253	176,010	1,661,000	0
1990	1	1990.085	3,036,822	2,830,907	5,813,598	20,756,685	176,010	1,661,000	3,279,000	0	0	0	0	0	-354,500	0	0	0	0	0	0	0	-3,279,000	3,036,822	2,830,907	5,459,097	20,756,685	176,010	1,661,000	0
1990	2	1990.162	3,001,804	2,830,907	4,594,839	14,954,091	176,010	1,661,000	3,279,000	0	0	0	0	0	-354,500	0	0	0	0	0	0	0	-3,279,000	3,001,804	2,830,907	4,240,339	14,954,091	176,010	1,661,000	0
1990	3	1990.246	3,021,042	2,830,907	4,575,628	11,251,221	176,010	1,661,000	3,279,000	0	0	0	0	0	-354,500	0	0	0	0	0	0	0	-3,279,000	3,021,042	2,830,907	4,221,128	11,251,221	176,010	1,661,000	0
1990	4	1990.329	3,036,543	4,114,516	5,325,812	10,106,629	176,010	1,661,000	3,279,000	0	0	0	0	0	-354,500	0	0	0	0	0	0	0	-3,279,000	3,036,543	4,114,516	4,971,312	10,106,629	176,010	1,661,000	0
1990	5	1990.413	4,291,287	9,164,096	7,926,726	10,106,629	176,010	1,661,000	3,279,000	0	0	0	0	0	-354,500	0	0	0	0	0	0	0	-3,279,000	4,291,287	9,164,096	7,572,226	10,106,629	176,010	1,661,000	0
1990	6	1990.496	7,048,478	9,940,988	13,694,955	12,038,481	176,010	1,661,000	3,279,000	0	0	0	0	0	-354,500	0	0	0	0	0	0	0	-3,279,000	7,048,478	9,940,988	13,340,455	12,038,481	176,010	1,661,000	0
1990	7	1990.580	7,511,720	9,940,981	15,342,283	22,572,973	176,010	1,661,000	3,279,000	0	0	0	0	0	-354,500	0	0	0	0	0	0	0	-3,279,000	7,511,720	9,940,981	14,987,783	22,572,973	176,010	1,661,000	0
1990	8	1990.665	7,511,720	9,940,974	15,342,283	25,532,303	176,010	1,661,000	3,279,000	0	0	0	0	0	-354,500	0	0	0	0	0	0	0	-3,279,000	7,511,720	9,940,974	14,987,783	25,532,303	176,010	1,661,000	0
1990	9	1990.747	7,511,716	10,091,073	15,342,283	25,532,303	176,010	1,661,000	3,279,000	0	0	0	0	0	-354,500	0	0	0	0	0	0	0	-3,279,000	7,511,716	10,091,073	14,987,783	25,532,303	176,010	1,661,000	0
1990	10	1990.832	7,511,716	10,091,066	15,642,495	25,532,303	176,010	1,661,000	3,279,000	0	0	0	0	0	-354,500	0	0	0	0	0	0	0	-3,279,000	7,511,716	10,091,066	15,287,995	25,532,303	176,010	1,661,000	0
1990	11	1990.914	6,868,123	10,091,059	12,798,486	25,530,630	176,010	1,661,000	3,279,000	0	0	0	0	0	-354,500	0	0	0	0	0	0	0	-3,279,000	6,868,123	10,091,059	12,443,985	25,530,630	176,010	1,661,000	0
1990	12	1990.999	4,754,878	7,267,937	8,129,257	23,849,530	176,010	1,661,000	3,279,000	0	0	0	0	0	-354,500	0	0	0	0	0	0	0	-3,279,000	4,754,878	7,267,937	7,774,757	23,849,530	176,010	1,661,000	0
1991	1	1991.085	3,203,367	4,229,788	4,382,861	21,969,719	176,010	1,661,000	3,279,000	0	0	0	0	0	-354,500	0	0	0	0	0	0	0	-3,279,000	3,203,367	4,229,788	4,028,361	21,969,719	176,010	1,661,000	0
1991	2	1991.162	3,137,055	3,023,306	4,122,303	21,317,173	176,010	1,661,000	3,279,000	0	0	0	0	0	-354,500	0	0	0	0	0	0	0	-3,279,000	3,137,055	3,023,306	3,767,803	21,317,173	176,010	1,661,000	0
1991	3	1991.246	3,151,041	3,023,306	4,108,331	19,271,271	176,010	1,661,000	3,279,000	0	0	0	0	0	-354,500	0	0	0	0	0	0	0	-3,279,000	3,151,041	3,023,306	3,753,831	19,271,271	176,010	1,661,000	0
1991	4	1991.329	3,148,132	3,917,563	4,165,469	17,006,805	176,010	1,661,000	3,279,000	0	0	0	0	0	-354,500	0	0	0	0	0	0	0	-3,279,000	3,148,132	3,917,563	3,810,968	17,006,805	176,010	1,661,000	0
1991	5	1991.413	3,178,269	9,563,030	4,977,513	17,006,805	176,010	1,661,000	3,279,000	0	0	0	0	0	-354,500	0	0	0	0	0	0	0	-3,279,000	3,178,269	9,563,030	4,623,013	17,006,805	176,010	1,661,000	0
1991	6	1991.496	3,216,305	10,200,018	4,954,783	17,006,805	176,010	1,661,000	3,279,000	0	0	0	0	0	-354,500	0	0	0	0	0	0	0	-3,279,000	3,216,305	10,200,018	4,600,283	17,006,805	176,010	1,661,000	0
1991	7	1991.580	4,917,191	10,200,018	6,679,730	19,149,452	176,010	1,661,000	3,279,000	0	0	0	0	0	-354,500	0	0	0	0	0	0	0	-3,279,000	4,917,191	10,200,018	6,325,230	19,149,452	176,010	1,661,000	0
1991	8	1991.665	7,079,098	10,200,018	11,650,074	23,320,509	176,010	1,661,000	3,279,000	0	0	0	0	-262,574	-617,074	0	0	0	0	0	0	0	-3,279,000	7,079,098	10,200,018	11,033,000	23,320,509	176,010	1,661,000	0
1991	9	1991.747	7,460,572	10,417,051	15,101,864	25,363,177	176,010	1,661,000	3,279,000	-1,297,000	-1,297,000	-339,000	-339,000	128,001	-489,074	0	0	0	0	0	0	0	-3,279,000	6,163,572	10,078,051	14,612,790	25,363,177	176,010	1,661,000	0
1991	10	1991.832	7,387,249	9,747,413	15,559,669	25,363,177	176,010	1,661,000	3,279,000	0	-1,297,000	0	-339,000	0	-489,074	0	0	0	0	0	0	0	-3,279,000	6,090,249	9,408,413	15,070,595	25,363,177	176,010	1,661,000	0
1991	11	1991.914	4,759,877	5,723,324	12,880,779	25,119,313	176,010	1,661,000	3,279,000	0	-1,297,000	0	-339,000	0	-489,074	0	0	0	0	0	0	0	-3,279,000	3,462,877	5,384,324	12,391,705	25,119,313	176,010	1,661,000	0
1991	12	1991.999	3,261,335	3,270,811	7,389,664	18,579,617	176,010	1,661,000	3,279,000	0	-1,297,000	0	-339,000	0	-489,074	0	0	0	0	0	0	0	-3,279,000	1,964,335	2,931,810	6,900,590	18,579,617	176,010	1,661,000	0
1992	1	1992.085	3,140,899	3,005,840	4,868,783	11,098,584	176,010	1,661,000	3,279,000	0	-1,297,000	0	-339,000	0	-489,074	0	0	0	0	0	0	0	-3,279,000	1,843,899	2,666,839	4,379,710	11,098,584	176,010	1,661,000	0
1992	2	1992.164	3,134,245	3,005,840	4,172,472	9,420,125	176,010	1,661,000	3,279,000	0	-1,297,000	0	-339,000	0	-489,074	0	0	0	0	0	0	0	-3,279,000	1,837,245	2,666,839	3,683,399	9,420,125	176,010	1,661,000	0
1992	3	1992.246	3,118,406	2,965,095	4,179,681	7,125,406	176,010	1,661,000	3,279,000	0	-1,297,000	0	-339,000	0	-489,074	0	0	0	0	0	0	0	-3,279,000	1,821,406	2,626,095	3,690,607	7,125,406	176,010	1,661,000	0
1992	4	1992.329	2,935,703	3,407,513	4,197,074	5,562,609	176,010	1,661,000	3,279,000	0	-1,297,000	0	-339,000	0	-489,074	0	0	0	0	0	0	0	-3,279,000	1,638,703	3,068,512	3,708,000	5,562,609	176,010	1,661,000	0
1992	5	1992.413	3,399,700	8,740,473	6,797,169	6,666,930	176,010	1,661,000	3,279,000	0	-1,297,000	0	-339,000	0	-489,074	0	0	0	0	0	0	0	-3,279,000	2,102,700	8,401,473	6,308,095	6,666,930	176,010	1,661,000	0
1992	6	1992.496	6,398,341	10,036,671	13,756,905	6,666,930	176,010	1,661,000	3,279,000	0	-1,297,000	0	-339,000	0	-489,074	0	0	0	0	0	0	0	-3,279,000	5,101,341	9,697,671	13,267,831	6,666,930	176,010	1,661,000	0
1992	7	1992.580	7,467,498	10,036,671	15,794,055	6,793,868	176,010	1,661,000	3,279,000	0	-1,297,000	0	-339,000	0	-489,074	0	0	0	0	0	0	0	-3,279,000	6,170,498	9,697,671	15,304,981	6,793,868	176,010	1,661,000	0
1992	8	1992.665	7,466,573	10,036,671	15,794,055	9,823,683	176,010	1,661,000	3,279,000	0	-1,297,000	0	-339,000	0	-489,074	-237,288	-237,288	0	0	0	0	0	-3,279,000	6,169,573	9,697,671	15,304,981	9,586,395	176,010	1,661,000	0
1992	9	1992.747	7,465,687	10,036,671	15,794,055	20,019,214	176,010	1,661,000	3,279,000	0	-1,297,000	0	-339,000	0	-489,074	-32,374	-269,663	0	0	0	0	0	-3,279,000	6,168,687	9,697,671	15,304,981	19,749,551	176,010	1,661,000	0
1992	10	1992.832	7,410,007	9,904,780	15,794,055	24,667,346	176,010	1,661,000	3,279,000	0	-1,297,000	0	-339,000	0	-489,074	0	-269,663	0	0	0	0	0	-3,279,000	6,113,007	9,565,780	15,304,981	24,397,684	176,010	1,661,000	0
1992	11	1992.914	5,033,490	6,641,712	14,228,572	24,667,346	176,010	1,661,000	3,279,000	0	-1,297,000	0	-339,000	0	-489,074	0	-269,663	0	0	0	0	0	-3,279,000	3,736,490	6,302,712	13,739,499	24,397,684	176,010	1,661,000	0
1992	12	1992.999	3,825,490	4,209,776	9,805,987	24,667,346	176,010	1,661,000	3,279,000	0	-1,297,000	0	-339,000	0	-489,074	0	-269,663	0	0	0	0	0	-3,279,000	2,528,490	3,870,775	9,316,913	24,397,684	176,010	1,661,000	0
1993	1	1993.085	3,246,388	3,112,557	5,910,460	24,334,450	176,010	1,661,000	3,279,000	0	-1,297,000	0	-339,000	0	-489,074	0	-269,663	0	0	0	0	0	-3,279,000	1,949,388	2,773,557	5,421,386	24,064,787	176,010	1,661,000	0
1993	2	1993.162	3,240,606	2,866,257	5,059,291	18,130,845	176,010	1,661,000	3,279,000	0	-1,297,000	0	-339,000	0	-489,074	0	-269,663	0	0	0	0	0	-3,279,000	1,943,606	2,527,256	4,570,217	17,861,183	176,010	1,661,000	0
1993	3	1993.246	3,228,964	2,866,257	5,008,056	10,122,123	176,010	1,661,000	3,279,000	0	-1,297,000	0	-339,000	0	-489,074	0	-269,663	0	0	0	0	0	-3,279,000	1,931,964	2,527,256	4,518,982	9,852,460	176,010	1,661,000	0
1993	4	1993.329	3,208,182	2,866,257	5,028,925	10,049,400	176,010	1,661,000	3,279,000	0	-1,297,000	0	-339,000	0	-489,074	0	-269,663	0	0	0	0	0	-3,279,000	1,911,182	2,527,256	4,539,852	9,779,737	176,010	1,661,000	0
1993	5	1993.413	3,393,674	8,832,082	10,079,843	10,664,409	176,010	1,661,000	3,279,000	0	-1,297,000	0	-339,000	0	-489,074	0	-269,663	0	0	0	0	0	-3,279,000	2,096,674	8,493,082	9,590,769	10,394,747	176,010	1,661,000	0
1993	6	1993.496	5,593,616	10,116,663	15,315,140	10,664,409	176,010	1,661,000	3,279,000	0	-1,297,000	0	-339,000	0	-489,074	0	-269,663	0	0	0	0	0	-3,279,000	4,301,616	9,777,662	14,826,067	10,394,747	176,010	1,661,000	0
1993	7	1993.580	6,648,542	10,116,663	15,713,877	15,074,685	176,010	1,661,000	3,279,000	0	-1,297,000	0	-339,000	0	-489,074	0	-269,663	0	0	0	0	0	-3,279,000	5,351,542	9,777,662	15,224,803	14,805,023	176,010	1,661,000	0
1993	8	1993.665	7,317,202	10,583,780	15,713,877	23,585,791	176,010	1,661,000	3,279,000	0	-1,297,000	0	-339,000	0	-489,074	0	-269,663	0	0	0	0	0	-3,279,000	6,020,202	10,244,780	15,224,803	23,316,129	176,010	1,661,000	0
1993	9	1993.747	7,317,202

Table A1-2
Injection/Withdrawal Volumes History
Corunna, Wilkesport, Seckerton, Dow Moore, Black Creek, Coveny and Ladysmith Reservoirs
1979 to 2007
Balances

			Physical Balances							Paper Balance Adjustments												Paper Balances						
										Corunna	Corunna	Wilkesport	Wilkesport	Seckerton	Seckerton	Dow Moore	Dow Moore	Black Creek	Black Creek	Coveny	Coveny	Ladysmith	Ladysmith						
Year	Month	Fractional Year	Corunna (MCF)	Wilkesport (MCF)	Seckerton (MCF)	Dow Moore (MCF)	Black Creek (MCF)	Coveny (MCF)	Ladysmith (MCF)	Adj. (MCF)	Cum. Adj. (MCF)	Adj. (MCF)	Cum. Adj. (MCF)	Adj. (MCF)	Cum. Adj. (MCF)	Adj. (MCF)	Cum. Adj. (MCF)	Adj. (MCF)	Cum. Adj. (MCF)	Adj. (MCF)	Cum. Adj. (MCF)	Adj. (MCF)	Cum. Adj. (MCF)	Paper Corunna (MCF)	Paper Wilkesport (MCF)	Paper Seckerton (MCF)	Paper Dow Moore (MCF)	Paper Black Creek (MCF)	Paper Coveny (MCF)	Paper Ladysmith (MCF)
1994	9	1994.747	7,319,454	10,389,068	16,165,501	29,398,485	176,010	1,661,000	3,279,000	0	-1,297,000	0	-339,000	0	-489,074	0	-440,871	0	0	0	0	0	-3,279,000	6,022,454	10,050,068	15,676,427	28,957,614	176,010	1,661,000	0
1994	10	1994.832	7,451,320	10,596,937	16,645,386	33,197,564	176,010	1,661,000	3,279,000	0	-1,297,000	0	-339,000	0	-489,074	0	-440,871	0	0	0	0	0	-3,279,000	6,154,320	10,257,936	16,156,312	32,756,693	176,010	1,661,000	0
1994	11	1994.914	6,726,334	9,758,438	14,923,909	33,685,999	176,010	1,661,000	3,279,000	0	-1,297,000	0	-339,000	0	-489,074	0	-440,871	0	0	0	0	0	-3,279,000	5,429,334	9,419,437	14,434,835	33,245,128	176,010	1,661,000	0
1994	12	1994.999	4,780,849	6,368,608	9,719,105	33,685,999	176,010	1,661,000	3,279,000	0	-1,297,000	0	-339,000	0	-489,074	0	-440,871	0	0	0	0	0	-3,279,000	3,483,849	6,029,608	9,230,031	33,245,128	176,010	1,661,000	0
1995	1	1995.085	3,677,270	3,826,162	6,366,058	33,685,999	176,010	1,661,000	3,279,000	0	-1,297,000	0	-339,000	0	-489,074	0	-440,871	0	0	0	0	0	-3,279,000	2,380,270	3,487,162	5,876,984	33,245,128	176,010	1,661,000	0
1995	2	1995.162	3,681,869	3,179,833	5,498,994	17,667,594	176,010	1,661,000	3,279,000	0	-1,297,000	0	-339,000	0	-489,074	0	-440,871	0	0	0	0	0	-3,279,000	2,384,869	2,840,833	5,009,920	17,226,722	176,010	1,661,000	0
1995	3	1995.246	3,667,212	3,179,833	5,513,149	11,731,195	176,010	1,661,000	3,279,000	0	-1,297,000	0	-339,000	0	-489,074	0	-440,871	0	0	0	0	0	-3,279,000	2,370,212	2,840,833	5,024,076	11,290,324	176,010	1,661,000	0
1995	4	1995.329	3,659,654	3,210,658	5,520,206	10,848,831	176,010	1,661,000	3,279,000	0	-1,297,000	0	-339,000	0	-489,074	0	-440,871	0	0	0	0	0	-3,279,000	2,362,654	2,871,658	5,031,132	10,407,960	176,010	1,661,000	0
1995	5	1995.413	3,679,744	3,895,055	5,498,959	17,489,335	176,010	1,661,000	3,279,000	0	-1,297,000	0	-339,000	0	-489,074	0	-440,871	0	0	0	0	0	-3,279,000	2,382,744	3,556,055	5,009,885	17,048,464	176,010	1,661,000	0
1995	6	1995.496	3,770,922	8,715,138	7,596,851	22,406,146	176,010	1,661,000	3,279,000	0	-1,297,000	0	-339,000	0	-489,074	0	-440,871	0	0	0	0	0	-3,279,000	2,473,922	8,376,137	7,107,777	21,965,274	176,010	1,661,000	0
1995	7	1995.580	5,874,738	9,755,847	13,253,230	25,035,816	176,010	1,661,000	3,279,000	0	-1,297,000	0	-339,000	300,000	-189,074	0	-440,871	0	0	0	0	0	-3,279,000	4,577,738	9,416,846	13,064,156	24,594,945	176,010	1,661,000	0
1995	8	1995.665	7,133,740	9,755,847	15,439,946	28,919,464	176,010	1,661,000	3,279,000	0	-1,297,000	0	-339,000	0	-189,074	-194,260	-635,131	0	0	0	0	0	-3,279,000	5,836,740	9,416,846	15,250,872	28,284,333	176,010	1,661,000	0
1995	9	1995.747	7,283,133	10,151,554	16,067,456	33,522,204	176,010	1,661,000	3,279,000	0	-1,297,000	0	-339,000	0	-189,074	0	-635,131	0	0	0	0	0	-3,279,000	5,986,133	9,812,554	15,878,382	32,887,073	176,010	1,661,000	0
1995	10	1995.832	7,534,058	10,497,932	16,598,906	34,179,260	176,010	1,661,000	3,279,000	0	-1,297,000	0	-339,000	0	-189,074	0	-635,131	0	0	0	0	0	-3,279,000	6,237,058	10,158,932	16,409,832	33,544,129	176,010	1,661,000	0
1995	11	1995.914	5,238,439	8,778,185	10,754,088	33,853,865	176,010	1,661,000	3,279,000	0	-1,297,000	0	-339,000	0	-189,074	0	-635,131	0	0	0	0	0	-3,279,000	3,941,439	8,439,185	10,565,014	33,218,734	176,010	1,661,000	0
1995	12	1995.999	3,794,592	4,548,151	6,031,259	18,906,160	176,010	1,661,000	3,279,000	0	-1,297,000	0	-339,000	0	-189,074	0	-635,131	0	0	0	0	0	-3,279,000	2,497,592	4,209,151	5,842,185	18,271,028	176,010	1,661,000	0
1996	1	1996.085	3,267,004	2,911,029	4,837,948	10,734,820	176,010	1,661,000	3,279,000	0	-1,297,000	0	-339,000	0	-189,074	0	-635,131	0	0	0	0	0	-3,279,000	1,970,004	2,572,028	4,648,874	10,099,689	176,010	1,661,000	0
1996	2	1996.164	3,053,170	2,697,643	4,466,464	7,216,072	176,010	1,661,000	3,279,000	0	-1,297,000	0	-339,000	0	-189,074	0	-635,131	0	0	0	0	0	-3,279,000	1,756,170	2,358,642	4,277,390	6,580,941	176,010	1,661,000	0
1996	3	1996.246	2,931,421	2,697,643	4,306,707	6,346,417	176,010	1,661,000	3,279,000	0	-1,297,000	0	-339,000	0	-189,074	0	-635,131	0	0	0	0	0	-3,279,000	1,634,421	2,358,642	4,117,633	5,711,285	176,010	1,661,000	0
1996	4	1996.329	2,923,835	2,501,745	4,313,728	6,346,417	176,010	1,661,000	3,279,000	0	-1,297,000	0	-339,000	0	-189,074	0	-635,131	0	0	0	0	0	-3,279,000	1,626,835	2,162,744	4,124,655	5,711,285	176,010	1,661,000	0
1996	5	1996.413	2,913,153	2,501,741	4,323,637	6,346,413	176,010	1,661,000	3,279,000	0	-1,297,000	0	-339,000	0	-189,074	0	-635,131	0	0	0	0	0	-3,279,000	1,616,153	2,162,741	4,134,563	5,711,282	176,010	1,661,000	0
1996	6	1996.496	2,904,458	2,501,741	4,545,870	7,700,759	176,010	1,661,000	3,279,000	0	-1,297,000	0	-339,000	0	-189,074	0	-635,131	0	0	0	0	0	-3,279,000	1,607,458	2,162,741	4,356,796	7,065,627	176,010	1,661,000	0
1996	7	1996.580	3,507,822	4,447,187	7,686,462	14,947,592	176,010	1,661,000	3,279,000	0	-1,297,000	0	-339,000	0	-189,074	0	-635,131	0	0	0	0	0	-3,279,000	2,210,822	4,108,187	7,497,388	14,312,461	176,010	1,661,000	0
1996	8	1996.665	6,133,447	7,891,264	8,249,739	26,262,454	176,010	1,661,000	3,279,000	0	-1,297,000	0	-339,000	0	-189,074	0	-635,131	0	0	0	0	0	-3,279,000	4,836,447	7,552,264	8,060,665	25,627,322	176,010	1,661,000	0
1996	9	1996.747	7,703,060	10,261,053	12,518,342	31,744,765	176,010	1,661,000	3,279,000	0	-1,297,000	0	-339,000	-591,055	-780,129	-206,937	-842,068	0	0	0	0	0	-3,279,000	6,406,060	9,922,053	11,738,214	30,902,697	176,010	1,661,000	0
1996	10	1996.832	7,703,060	10,261,053	15,068,423	33,921,544	176,010	1,661,000	3,279,000	0	-1,297,000	0	-339,000	0	-780,129	0	-842,068	0	0	0	0	0	-3,279,000	6,406,060	9,922,053	14,288,295	33,079,476	176,010	1,661,000	0
1996	11	1996.914	4,940,599	6,604,537	12,719,281	33,564,053	176,010	1,661,000	3,279,000	0	-1,297,000	0	-339,000	0	-780,129	0	-842,068	0	0	0	0	0	-3,279,000	3,649,999	6,265,537	11,939,153	32,722,585	176,010	1,661,000	0
1996	12	1996.999	3,574,569	4,173,257	8,571,915	27,196,540	176,010	1,661,000	3,279,000	0	-1,297,000	0	-339,000	0	-780,129	0	-842,068	0	0	0	0	0	-3,279,000	2,277,569	3,834,257	7,791,786	26,354,472	176,010	1,661,000	0
1997	1	1997.085	3,346,208	2,926,257	5,489,141	22,930,235	176,010	1,661,000	3,279,000	0	-1,297,000	0	-339,000	0	-780,129	0	-842,068	0	0	0	0	0	-3,279,000	2,049,208	2,587,257	4,709,013	22,088,167	176,010	1,661,000	0
1997	2	1997.162	3,364,328	2,857,781	5,208,052	14,727,178	176,010	1,661,000	3,279,000	0	-1,297,000	0	-339,000	0	-780,129	0	-842,068	0	0	0	0	0	-3,279,000	2,067,328	2,518,781	4,427,923	13,885,110	176,010	1,661,000	0
1997	3	1997.246	3,058,715	2,568,212	4,590,052	9,281,830	176,010	1,661,000	3,279,000	0	-1,297,000	0	-339,000	0	-780,129	0	-842,068	0	0	0	0	0	-3,279,000	1,761,715	2,229,212	3,809,924	8,439,762	176,010	1,661,000	0
1997	4	1997.329	3,055,238	2,712,063	4,592,954	7,795,372	176,010	1,661,000	3,279,000	0	-1,297,000	0	-339,000	0	-780,129	0	-842,068	0	0	0	0	0	-3,279,000	1,758,238	2,373,063	3,812,825	6,953,304	176,010	1,661,000	0
1997	5	1997.413	3,073,898	7,523,275	4,573,362	8,790,726	176,010	1,661,000	3,279,000	0	-1,297,000	0	-339,000	0	-780,129	0	-842,068	0	0	0	0	0	-3,279,000	1,776,898	7,184,274	3,793,233	7,948,658	176,010	1,661,000	0
1997	6	1997.496	3,679,635	9,834,154	5,936,879	20,638,121	176,010	1,661,000	3,279,000	0	-1,297,000	0	-339,000	0	-780,129	0	-842,068	0	0	0	0	0	-3,279,000	2,382,635	9,495,154	5,156,750	19,796,053	176,010	1,661,000	0
1997	7	1997.580	6,209,496	10,272,643	12,008,116	28,090,430	176,010	1,661,000	3,279,000	0	-1,297,000	0	-339,000	0	-780,129	0	-842,068	0	0	0	0	0	-3,279,000	4,912,496	9,933,642	11,227,987	27,248,362	176,010	1,661,000	0
1997	8	1997.665	7,465,747	10,559,634	14,891,853	34,267,000	176,010	1,661,000	3,279,000	0	-1,297,000	0	-339,000	0	-780,129	0	-842,068	0	0	0	0	0	-3,279,000	6,168,747	10,220,634	14,111,724	33,424,933	176,010	1,661,000	0
1997	9	1997.747	7,890,832	10,559,627	16,317,100	34,293,165	341,927	1,660,520	3,279,000	-142,968	-1,439,968	0	-339,000	0	-780,129	-438,114	-1,280,182	0	0	0	0	0	-3,279,000	6,450,864	10,220,627	15,536,971	33,012,983	341,927	1,660,520	0
1997	10	1997.832	7,395,442	9,971,760	16,748,867	34,509,040	659,920	2,510,809	3,279,000	0	-1,439,968	0	-339,000	0	-780,129	0	-1,280,182	0	0	0	0	0	-3,279,000	5,955,474	9,632,760	15,968,738	33,228,858	659,920	2,510,809	0
1997	11	1997.914	5,369,605	6,325,121	14,528,608	34,094,429	659,920	2,510,809	3,279,000	0	-1,439,968	0	-339,000	0	-780,129	0	-1,280,182	0	0	0	0	0	-3,279,000	3,929,637	5,986,120	13,748,479	32,814,247	659,920	2,510,809	0
1997	12	1997.999	3,956,541	3,861,272	9,561,233	32,145,001	659,920	2,510,809	3,279,000	0	-1,439,968	0	-339,000	0	-780,129	0	-1,280,182	0	0	0	0	0	-3,279,000	2,516,573	3,522,272	8,781,104	30,864,819	659,920	2,510,809	0
1998	1	1998.085	3,518,723	3,124,708	6,681,820	31,824,050	659,920	2,510,809	3,279,000	0	-1,439,968	0	-339,000	0	-780,129	0	-1,280,182	0	0	0	0	0	-3,279,000	2,078,755	2,785,707	5,901,691	30,543,868	659,920	2,510,809	0
1998	2	1998.162	3,518,723	3,124,708	6,299,728	28,544,938	659,920	2,510,809	3,279,000	0	-1,439,968	0	-339,000	0	-780,129	0	-1,280,182	0	0	0	0	0	-3,279,000	2,078,755	2,785,707	5,519,599	27,264,755	659,920	2,510,809	0
1998	3	1998.246	3,518,712	3,588,567	6,299,605	20,529,218	659,920	2,510,809	3,279,000	0	-1,439,968	0	-339,000	0	-780,129	0	-1,280,182	0	0	0	0	0	-3,279,000	2,078,744	3,249,567	5,519,476	19,249,036	659,920	2,510,809	0
1998	4	1998.329	3,526,920	4,204,629	6,314,671	21,773,465	659,920	2,510,809	3,279,000	0	-1,439,968	1,260	-337,740	0	-780,129	12,354	-1,267,828	0	0	0	0	0	-3,279,000	2,086,952	3,866,889	5,534,542	20,505,637	659,920	2,510,809	0
1998	5	1998.413	3,530,743	8,636,506	6,401,554	30,537,637	659,920	2,510,809	3,279,000	0	-1,439,968	46,126	-291,614	868	-779,261	83,674	-1,184,153	0	0	0	0	0	-3,279,000	2,090,775	8,344,893	5,622,293	29,353,484	659,920	2,510,809	0
1998	6	1998.496	3,540,415	10,246,275	6,391,521	32,805,565	659,849	2,510,809	3,279,000	0	-1,439,968	16,700	-274,913	0	-779,261	21,584	-1,162,569	0	0	0	0	0	-3,279,000	2,100,447	9,971,361	5,612,260	31,642,996	659,849	2,510,809	0
1998	7	1998.580	3,577,050	10,246,275	6,930,528	34,796,381	659,849	2,510,809	3,279,000	0	-1,439,968	260,001	-14,913	5,634	-773,627	-111,806	-1,274,375	0	0	0	0	0	-3,279,000	2,137,082	10,231,362	6,156,902	33,522,006	659,849	2,510,809	0
1998	8	1998.665	5,165,687	10,603,838	12,731,047	34,796,314	659,849	2,510,809	3,279,000	15,578	-1,424,390	3,708	-11,204	56,040	-717,586	-198,616	-1,472,991	0	0	0	0	0	-3,279,000	3,741,297	10,592,633	12,013,460	33,323,323	659,849	2,510,809	0
1998	9	1998.747	7,360,127	10,603,838	15,480,327	34,796,261	745,920	2,892,968	3,279,000	-15,578	-1,439,968	-67,795	-79,000	-62,542	-780,129	-136,787	-1,609,778	0	0	0	0	0	-3,279,000	5,920,159	10,524,838	14,700,198	33,186,483	745,920	2,892,968	0
1998	10	1998.832	7,918,635	10,727,369	16,937,697	35,112,549	985,870	4,029,003	3,279,000	0	-1,439,968	0	-79,000	0	-780,129	0	-1,609,778	0	0	0	0	0	-3,279,000	6,478,667	10,648,370	16,157,569	33,502,771	985,870	4,029,003	0
1998	11	1998.914	7,918,635	10,722,230	16,937,694	35,112,549	1,012,497	4,363,496	3,279,000	0	-1,439,968	0	-79,000	0	-780,129	0	-1,609,778	0	0	0	0	0	-3,279,000	6,478,667	10,643,230	16,157,565	33,502,771	1,012,497	4,363,496	0
1998	12	1998.999	6,327,319	6,477,549	14,493,007	31,505,591	1,012,497	4,384,810	3,279,000	0	-1,439,968	0	-79,000	0	-780,129	0	-1,609,778	0	0	0	0	0	-3,279,000	4,887,351	6,398,550	13,712,878	29,895,813	1,012,497	4,384,810	0
1999	1	1999.085	3,786,250	3,496,040	8,049,834	17,855,069	782,018	4,180,800	3,279,000	0	-1,439,968	0	-79,000	0	-780,129	0	-1,609,778	0	0	0	0	0	-3,279,000	2,346,282	3,417,040	7,269,705	16,245,291	782,018	4,180,800	0
1999	2	1999.162	3,579,349	2,964,721	5,855,934	10,794,246	647,356	4,117,439	3,251,077	0	-1,439,968	0	-79,000	0	-780,129	0	-1,609,778	0	0	0	0	27,923	-3,251,077	2,139,380	2,885,722	5,075,805	9,184,467	647,356	4,117,439	0
1999	3	1999.246	3,551,524	3,067,916	5,882,939	9,068,363	313,062	3,000,392	3,147,872	0	-1,439,968	0	-79,000	0	-780,129	0	-1,609,778	0	0	0	0	103,205	-3,147,872	2,111,556	2,988,916	5,102,810	7,458,585	313,062	3,000,392	0
1999	4	1999.329	3,626,595	3,178,058	5,807,236	9,956,661	313,062	3,000,378	3,038,454	0	-1,439,968	0	-79,000	0	-780,129	0	-1,609,778	0	0	0	0	109,418	-3,038,454	2,186,627	3,099,069	5,027,108	8,346,883	313,062	3,000,378	0
1999	5	1999.413	3,633,959	3,631,316	5,797,034	20,867,251	1,007,929	4,290,561	2,933,088	0	-1,439,968	0	-79,000	0	-780,129	0	-1,609,778	0	0	0	0	105,366	-2,933,088	2,193,991	3,552,316	5,016,906	19,257,473	1,007,929	4,290,561	0
1999	6	1999.496	3,611,794	3,735,097	5,811,847	27,656,837	1,031,566	4,689,389	2,829,307	-60,011	-1,499,979	-81,192	-160,191	0	-780,129	-113,210	-1,722,988	0	0	0	0	103,781	-2,829,307	2,118,814	3,574,905	5,031,718	25,933,850	1,031,566	4,689,989	0
1999	7	1999.580	5,274,325	5,290,981	6,130,415	31,830,468	1,031,566	4,687,793	2,746,350	0	-1,499,979	0	-160,191	0	-780,129	0	-1,722,988	0	0	0	0	82,957	-2,746,350	3,774,346	5,130,790	5,350,286	30,107,480	1,031,566	4,687,793	0
1999	8	1999.665	7,845,177	10,106,027	6,636,162	33,769,447	1,031,566	4,687,793	2,746,350	0	-1,499,979	0	-160,191	0	-780,129	-11,437	-1,734,425	0	0	0	0	0	-2,746,350	6,345,198	9,945,835	5,856,033	32,035,022	1,031,566	4,687,793	0
1999	9	1999.747	7,857,081	10,105,232	14,330,793	35,017,195	1,031,566	4,687,793	3,699,468	0	-1,499,979	0	-160,191	0	-780,129	0	-1,734,425	0	0	0	0	13,671	-2,732,679	6,357,101	9,945,041	13,550,664	33,282,769	1,031,566	4,687,793	966,789
1999	10	1999.832	7,857,081	10,049,254	15,691,404	35,017,195	1,031,566	4,688,235	4,878,713	0	-1,499,979	0	-160,191	0	-780,129	0	-1,734,425	0	0	0	0	0	-2,732,679	6,357,101	9,889,063	14,911,275	33,282,769	1,031,566	4,688,235	2,146,034
1999	11	1999.914	7,646,163	9,754,361	16,738,075	35,195,996	987,457	4,795,671	5,681,738	0	-1,499,979	0	-160,191	0	-780,129	0	-1,734,425	0	0	0	0	0	-2,732,679	6,146,183	9,594,170	15,957,946	33,461,571	987,457	4,795,671	2,949,059
1999	12	1999.999	4,913,426	5,358,220	12,975,494	35,195,996	987,457	3,445,964	5,681,255	0	-1,499,979	0	-160,191	0	-780,129	0	-1,734,425	0	0	0	0	0	-2,732,679	3,413,447	5,198,029	12,195,365	33,461,571	987,457	3,445,964	2,948,576
2000	1	2000.085	4,065,240	4,943,278	7,382,822	28,778,745	668,196	2,164,401	4,483,429	0	-1,499,979	0	-160,191	0	-780,129	0	-1,734,425	0	0	0	0	2,197,000	-535,679	2,565,261	4,783,087	6,602,693	27,044,319	668,196	2,164,401	3,947,750
2000	2	2000.164	3,511,815	3,781,802	5,745,705	20,983,648	575,754	1,871,055	1,872,515	0	-1,499,979	0	-160,191	0	-780,129	0	-1,734,425	0	0	0	0	0	-535,679	2,011,835	3,621,611	4,965,577	19,249,223	575,754	1,871,055	1,336,836
2000	3	2000.246	3,533,429	3,757,574	5,659,619	15,775,989	564,125	1,805,660	1,288,989	0	-1,499,979	0	-160,191	0	-780,129	0	-1,734,425	0	0	0	0	0	-535,679	2,033,449	3,597,383	4,879,490	14,041,563	564,125	1,805,660	753,310
2000	4	2000.329	3,548,694	3,768,727	5,638,834	11,537,795	389,672	1,805,660	1,288,299	0	-1,499,979	0	-160,191	0	-780,129	0	-1,734,425	0	0	0	0	0	-535,679	2,048,715	3,608,535	4,858,705	9,803,370	389,672	1,805,660	752,620
2000	5	2000.413	3,566,367	8,734,413	5,615,456	14,832,666	1,120,422	3,572,592	1,587,956	0	-1,499,979	0	-160,191	0	-780,129	0	-1,734,425	0	0	0	0	0	-535,679	2,066,388	8,574,222	4,835,328	13,098,240	1,120,422	3,572,592	1,052,277
2000	6	2000.496	4,258,865	10,264,006	6,963,770	21,894,783	1,148,956	4,749,290	2,348,134	0	-1,499,979	0	-160,191	0	-780,129	0	-1,734,425	0	0	0	0	0	-535,679	2,758,885	10,103,814	6,183,641	20,160,358	1,148,956	4,749,290	1,812,455
2000	7	2000.580	6,496,301	10,264,006	12,928,846	21,889,580	1,148,956	4,749,290	4,842,694	0	-1,499,979	0	-160,191	0	-780,129	0	-1,734,425	0	0	0	0	0	-535,679	4,996,321	10,103,814	12,148,718	20,155,155	1,148,956	4,749,290	4,307,015
2000	8	2000.665	7,924,536	10,264,006	16,680,565	22,422,928	1,148,956	4,749,290	5,818,312	-35,671	-1,535,650	-57,198	-217,389	-79,815	-859,944	-202,751	-1,937,177	-6,634	-6,634	-26,986	-26,986	-15,498	-551,177	6,388,886	10,046,616	15,820,621	20,485,751	1,142,322	4,722,305	5,267,135
2000	9	2000.747	7,924,536	10,897,709	16,745,982	29,272,299	1,148,956	4,920,034	6,525,604	0	-1,535,650	0	-217,389	0	-859,944	0	-1,937,177	0	-6,634	0	-26,986	0	-551,177	6,388,886	10,680,320	15,886,038	27,335,122	1,142,322	4,893,049	5,974,426
2000	10	2000.832	8,014,550	11,091,007	17,113,097	35,038,482	1,148,956	4,978,616	6,525,604	0	-1,535,650	0	-217,389	0	-859,944	0	-1,937,177	0	-6,634	0	-26,986	0	-551,177	6,478,900	10,873,618	16,253,152	33,101,305	1,142,322	4,951,631	5,974,426
2000	11	2000.914	6,673,908	11,091,007	14,302,936	35,041,359	927,474	4,039,994	5,582,116	0	-1,535,650	0	-217,389	0	-859,944	0	-1,937,177	0	-6,634	0	-26,986	0	-551,177	5,138,257	10,873,618	13,442,992	33,104,183	920,840	4,013,009	5,030,939
2000	12	2000.999	4,489,369	9,550,573	8,477,356	20,918,065	569,095	2,174,751	2,181,854	0	-1,535,650	0	-217,389	0	-859,944	0	-1,937,177	0	-6,634	0	-26,986	0	-551,177	2,953,719	9,333,184	7,617,412	18,980,888	562,461	2,147,765	1,630,677
2001	1	2001.085	4,056,771	8,357,518	6,809,740	11,637,836	275,695	1,663,295	1,500,694	0	-1,535,650	0	-217,389	0	-859,944	0	-1,937,177	0	-6,634	0	-26,986	0	-551,177	2,521,121	8,140,129	5,949,795	9,700,659	269,061	1,636,309	949,516
2001	2	2001.162	3,717,896	4,967,491	6,235,907	10,568,096	221,831	1,663,295	1,684,438	0	-1,535,650	0	-217,389	0	-859,944	0	-1,937,177	0	-6,634	0	-26,986	0	-551,177	2,182,246	4,750,101	5,375,963	8,630,920	215,197	1,636,309	1,133,261
2001	3	2001.246	3,341,748	3,275,012	5,562,257	8,487,549

Table A1-2
Injection/Withdrawal Volumes History
Corunna, Wilkesport, Seckerton, Dow Moore, Black Creek, Coveny and Ladysmith Reservoirs
1979 to 2007
Balances

			Physical Balances							Paper Balance Adjustments												Paper Balances						
Year	Month	Fractional Year	Corunna (MCF)	Wilkesport (MCF)	Seckerton (MCF)	Dow Moore (MCF)	Black Creek (MCF)	Coveny (MCF)	Ladysmith (MCF)	Corunna Adj. (MCF)	Corunna Cum. Adj. (MCF)	Wilkesport Adj. (MCF)	Wilkesport Cum. Adj. (MCF)	Seckerton Adj. (MCF)	Seckerton Cum. Adj. (MCF)	Dow Moore Adj. (MCF)	Dow Moore Cum. Adj. (MCF)	Black Creek Adj. (MCF)	Black Creek Cum. Adj. (MCF)	Coveny Adj. (MCF)	Coveny Cum. Adj. (MCF)	Ladysmith Adj. (MCF)	Ladysmith Cum. Adj. (MCF)	Paper Corunna (MCF)	Paper Wilkesport (MCF)	Paper Seckerton (MCF)	Paper Dow Moore (MCF)	Paper Black Creek (MCF)	Paper Coveny (MCF)	Paper Ladysmith (MCF)
2002	7	2002.580	4,047,063	11,154,675	7,458,823	35,659,936	975,686	5,098,384	2,199,213	0	-1,570,810	0	-281,644	0	-941,046	0	-2,142,292	0	-13,593	0	-54,436	0	-586,052	2,476,253	10,873,031	6,517,777	33,517,643	962,093	5,043,948	1,613,160
2002	8	2002.665	6,763,100	11,235,952	9,623,206	35,787,395	1,068,519	5,169,540	3,259,062	-35,159	-1,605,969	-64,255	-345,899	-81,102	-1,022,148	-205,116	-2,347,408	-6,959	-20,552	-27,451	-81,887	-34,875	-620,927	5,157,131	10,890,053	8,601,058	33,439,987	1,047,968	5,087,653	2,638,135
2002	9	2002.747	7,720,718	11,236,479	14,338,655	35,787,395	1,068,519	5,169,540	6,431,813	0	-1,605,969	0	-345,899	0	-1,022,148	0	-2,347,408	0	-20,552	0	-81,887	0	-620,927	6,114,749	10,890,580	13,316,507	33,439,987	1,047,968	5,087,653	5,810,886
2002	10	2002.832	8,050,561	11,236,479	14,444,780	35,787,395	1,068,519	5,169,540	6,903,939	0	-1,605,969	0	-345,899	0	-1,022,148	0	-2,347,408	0	-20,552	0	-81,887	0	-620,927	6,444,592	10,890,580	13,422,632	33,439,987	1,047,968	5,087,653	6,283,012
2002	11	2002.914	7,317,028	11,236,479	12,452,846	35,787,395	1,028,404	4,894,466	5,629,258	0	-1,605,969	0	-345,899	0	-1,022,148	0	-2,347,408	0	-20,552	0	-81,887	0	-620,927	5,711,059	10,890,580	11,430,698	33,439,987	1,007,852	4,812,580	5,008,331
2002	12	2002.999	4,386,562	10,001,376	8,953,147	35,787,395	493,707	2,505,244	2,327,329	0	-1,605,969	0	-345,899	0	-1,022,148	0	-2,347,408	0	-20,552	0	-81,887	0	-620,927	2,780,593	9,655,478	7,930,998	33,439,987	473,155	2,423,357	1,706,402
2003	1	2003.085	3,758,778	5,140,858	6,315,851	33,281,453	304,384	2,092,655	1,948,911	0	-1,605,969	0	-345,899	0	-1,022,148	0	-2,347,408	0	-20,552	0	-81,887	0	-620,927	2,152,809	4,794,960	5,293,703	30,934,045	283,833	2,010,768	1,327,984
2003	2	2003.162	3,465,223	3,303,379	5,512,273	24,565,329	304,384	1,805,083	1,237,796	0	-1,605,969	0	-345,899	0	-1,022,148	0	-2,347,408	0	-20,552	0	-81,887	0	-620,927	1,859,254	2,957,480	4,490,125	22,217,920	283,833	1,723,197	616,868
2003	3	2003.246	3,545,266	3,273,963	5,453,259	17,364,328	329,619	1,844,668	1,371,889	0	-1,605,969	0	-345,899	0	-1,022,148	0	-2,347,408	0	-20,552	0	-81,887	0	-620,927	1,939,297	2,928,064	4,431,111	15,016,919	309,067	1,762,781	750,962
2003	4	2003.329	3,420,874	3,299,789	5,327,876	13,362,041	266,512	1,844,668	1,763,491	0	-1,605,969	0	-345,899	0	-1,022,148	0	-2,347,408	0	-20,552	0	-81,887	0	-620,927	1,814,905	2,953,890	4,305,727	11,014,633	245,960	1,762,781	1,142,563
2003	5	2003.413	3,376,635	3,361,060	5,386,856	13,362,041	1,043,470	3,810,025	1,599,629	0	-1,605,969	0	-345,899	0	-1,022,148	0	-2,347,408	0	-20,552	0	-81,887	0	-620,927	1,770,666	3,015,161	4,364,708	11,014,633	1,022,918	3,728,138	978,702
2003	6	2003.496	3,319,112	4,744,629	5,442,859	15,224,553	1,080,509	5,065,000	1,630,816	0	-1,605,969	0	-345,899	0	-1,022,148	0	-2,347,408	0	-20,552	0	-81,887	0	-620,927	1,713,143	4,398,730	4,420,711	12,877,144	1,059,957	4,983,114	1,009,888
2003	7	2003.580	3,265,988	6,283,001	5,490,177	25,871,323	1,080,509	5,065,000	1,629,833	0	-1,605,969	0	-345,899	0	-1,022,148	0	-2,347,408	0	-20,552	0	-81,887	0	-620,927	1,660,019	5,937,102	4,468,028	23,523,915	1,059,957	4,983,114	1,008,905
2003	8	2003.665	3,880,491	10,012,047	5,659,077	32,546,728	1,080,509	5,065,000	4,865,334	-35,159	-1,641,128	-64,255	-410,153	-81,102	-1,103,250	-205,116	-2,552,524	-6,959	-27,511	-27,451	-109,337	-34,875	-655,802	2,239,363	9,601,893	4,555,826	29,994,204	1,052,998	4,955,663	4,209,532
2003	9	2003.747	7,486,964	11,025,124	12,402,919	35,799,382	1,080,509	5,065,000	7,175,281	0	-1,641,128	0	-410,153	0	-1,103,250	0	-2,552,524	0	-27,511	0	-109,337	0	-655,802	5,845,835	10,614,970	11,299,669	33,246,858	1,052,998	4,955,663	6,519,479
2003	10	2003.832	7,968,105	11,025,124	16,577,474	35,799,382	1,080,509	5,190,517	7,184,699	0	-1,641,128	0	-410,153	0	-1,103,250	0	-2,552,524	0	-27,511	0	-109,337	0	-655,802	6,326,977	10,614,970	15,474,224	33,246,858	1,052,998	5,081,179	6,528,897
2003	11	2003.914	7,986,901	11,025,124	16,622,617	35,799,382	1,080,509	5,225,632	7,078,876	0	-1,641,128	0	-410,153	0	-1,103,250	0	-2,552,524	0	-27,511	0	-109,337	0	-655,802	6,345,773	10,614,970	15,519,367	33,246,858	1,052,998	5,116,294	6,423,074
2003	12	2003.999	5,743,482	11,025,124	11,354,280	35,799,382	584,302	4,330,903	3,674,582	0	-1,641,128	0	-410,153	0	-1,103,250	0	-2,552,524	0	-27,511	0	-109,337	0	-655,802	4,102,354	10,614,970	10,251,030	33,246,858	556,791	4,221,565	3,018,780
2004	1	2004.085	3,931,301	8,037,640	6,705,004	30,395,866	313,971	2,534,126	2,313,315	0	-1,641,128	0	-410,153	0	-1,103,250	0	-2,552,524	0	-27,511	0	-109,337	0	-655,802	2,290,173	7,627,486	5,601,754	27,843,342	286,460	2,424,789	1,657,513
2004	2	2004.164	3,471,890	4,471,425	5,798,940	22,121,236	228,581	2,012,664	2,208,629	0	-1,641,128	0	-410,153	0	-1,103,250	0	-2,552,524	0	-27,511	0	-109,337	0	-655,802	1,832,762	4,061,272	4,695,690	19,568,706	201,070	1,903,327	1,552,827
2004	3	2004.246	3,414,640	4,436,307	5,852,076	18,015,418	488,713	2,054,762	1,802,088	0	-1,641,128	0	-410,153	0	-1,103,250	0	-2,552,524	0	-27,511	0	-109,337	0	-655,802	1,773,512	4,026,153	4,748,826	15,462,894	461,202	1,945,424	1,146,285
2004	4	2004.329	3,358,349	7,683,096	5,902,659	15,479,672	982,306	3,134,157	1,603,243	0	-1,641,128	0	-410,153	0	-1,103,250	0	-2,552,524	0	-27,511	0	-109,337	0	-655,802	1,717,220	7,272,942	4,799,409	12,927,148	954,796	3,024,820	947,441
2004	5	2004.413	5,522,306	10,531,843	5,946,159	20,549,383	1,088,720	4,871,509	1,603,243	0	-1,641,128	0	-410,153	0	-1,103,250	0	-2,552,524	0	-27,511	0	-109,337	0	-655,802	3,881,178	10,121,689	4,842,909	17,996,859	1,061,209	4,762,172	947,441
2004	6	2004.496	7,545,706	10,955,806	5,953,486	26,183,986	1,088,720	5,090,135	1,602,950	0	-1,641,128	0	-410,153	0	-1,103,250	0	-2,552,524	0	-27,511	0	-109,337	0	-655,802	5,904,578	10,545,652	4,850,236	23,631,462	1,061,209	4,980,798	947,148
2004	7	2004.580	8,135,591	11,275,657	5,952,098	31,916,697	1,111,122	5,292,123	1,602,950	0	-1,641,128	0	-410,153	0	-1,103,250	0	-2,552,524	0	-27,511	0	-109,337	0	-655,802	6,494,463	10,865,504	4,848,848	29,364,173	1,083,612	5,182,786	947,148
2004	8	2004.665	8,133,803	11,275,657	7,124,752	36,121,098	1,111,122	5,292,123	2,032,438	-35,287	-1,676,416	-61,618	-471,772	-88,419	-1,191,669	-208,648	-2,761,172	-7,371	-34,881	-28,410	-137,748	-46,193	-701,996	6,457,388	10,803,886	5,933,082	33,359,926	1,076,241	5,154,376	1,330,443
2004	9	2004.747	8,228,065	11,315,963	15,088,881	36,213,116	1,111,122	5,316,842	6,814,587	0	-1,676,416	0	-471,772	0	-1,191,669	0	-2,761,172	0	-34,881	0	-137,748	0	-701,996	6,551,649	10,844,192	13,897,212	33,451,944	1,076,241	5,179,094	6,112,592
2004	10	2004.832	8,228,065	11,355,251	16,719,151	36,213,116	1,071,085	5,316,842	7,237,301	0	-1,676,416	0	-471,772	0	-1,191,669	0	-2,761,172	0	-34,881	0	-137,748	0	-701,996	6,551,649	10,883,479	15,527,481	33,451,944	1,036,203	5,179,094	6,535,305
2004	11	2004.914	8,223,777	11,354,926	16,718,957	36,213,116	1,083,068	5,316,842	7,237,301	0	-1,676,416	0	-471,772	0	-1,191,669	0	-2,761,172	0	-34,881	0	-137,748	0	-701,996	6,547,361	10,883,154	15,527,288	33,451,944	1,048,186	5,179,094	6,535,305
2004	12	2004.999	4,915,435	11,348,113	9,566,946	36,213,116	1,155,304	4,228,801	2,312,683	0	-1,676,416	0	-471,772	0	-1,191,669	0	-2,761,172	0	-34,881	0	-137,748	0	-701,996	3,239,020	10,876,342	8,375,277	33,451,944	1,120,423	4,091,053	1,610,687
2005	1	2005.085	3,743,334	7,880,192	6,098,246	33,988,895	1,101,343	3,937,144	1,699,146	0	-1,676,416	0	-471,772	0	-1,191,669	0	-2,761,172	0	-34,881	0	-137,748	0	-701,996	2,066,918	7,408,421	4,906,576	31,227,723	1,066,462	3,799,396	997,150
2005	2	2005.162	3,715,744	6,214,755	6,120,191	24,212,574	1,075,895	3,002,008	1,699,146	0	-1,676,416	0	-471,772	0	-1,191,669	0	-2,761,172	0	-34,881	0	-137,748	0	-701,996	2,039,328	5,742,983	4,928,521	21,451,401	1,041,014	2,864,261	997,150
2005	3	2005.246	3,680,583	5,127,031	5,880,954	16,962,286	757,530	2,502,252	1,699,146	0	-1,676,416	0	-471,772	0	-1,191,669	0	-2,761,172	0	-34,881	0	-137,748	0	-701,996	2,004,167	4,655,259	4,689,285	14,201,114	722,649	2,364,505	997,150
2005	4	2005.329	3,638,952	6,504,697	5,916,789	15,199,723	678,468	2,587,391	1,699,139	0	-1,676,416	0	-471,772	0	-1,191,669	0	-2,761,172	0	-34,881	0	-137,748	0	-701,996	1,962,536	6,032,925	4,725,120	12,438,551	643,587	2,449,643	997,143
2005	5	2005.413	3,598,295	8,002,456	5,951,656	15,876,973	1,153,968	3,566,094	1,699,139	0	-1,676,416	0	-471,772	0	-1,191,669	0	-2,761,172	0	-34,881	0	-137,748	0	-701,996	1,921,880	7,530,684	4,759,987	13,115,801	1,119,087	3,428,346	997,143
2005	6	2005.496	3,554,355	10,450,395	5,990,158	25,828,067	1,190,041	5,171,602	1,699,139	0	-1,676,416	0	-471,772	0	-1,191,669	0	-2,761,172	0	-34,881	0	-137,748	0	-701,996	1,877,939	9,978,623	4,798,489	23,066,895	1,155,160	5,033,854	997,143
2005	7	2005.580	3,508,042	11,259,792	6,030,840	32,804,854	1,190,041	5,275,824	1,699,139	0	-1,676,416	0	-471,772	0	-1,191,669	0	-2,761,172	0	-34,881	0	-137,748	0	-701,996	1,831,626	10,788,020	4,839,171	30,043,682	1,155,160	5,138,076	997,143
2005	8	2005.665	4,592,252	11,392,544	6,065,980	36,455,439	1,220,693	5,347,366	1,959,216	-33,586	-1,710,002	-62,034	-533,806	-77,994	-1,269,664	-202,613	-2,963,785	-27,841	-62,722	-6,951	-144,699	-55,272	-757,268	2,882,250	10,858,738	4,796,316	33,491,654	1,157,971	5,202,668	1,201,948
2005	9	2005.747	7,908,842	11,392,544	12,370,929	36,455,439	1,220,693	5,403,184	6,471,071	0	-1,710,002	0	-533,806	0	-1,269,664	0	-2,963,785	0	-62,722	0	-144,699	0	-757,268	6,198,841	10,858,738	11,101,265	33,491,654	1,157,971	5,258,486	5,713,804
2005	10	2005.832	8,204,436	11,392,544	16,684,009	36,596,861	1,220,693	5,403,184	7,352,809	0	-1,710,002	0	-533,806	0	-1,269,664	0	-2,963,785	0	-62,722	0	-144,699	0	-757,268	6,494,434	10,858,738	15,414,345	33,633,076	1,157,971	5,258,486	6,595,541
2005	11	2005.914	7,448,573	11,392,544	15,688,031	36,596,642	1,118,300	5,215,841	5,907,531	0	-1,710,002	0	-533,806	0	-1,269,664	0	-2,963,785	0	-62,722	0	-144,699	0	-757,268	5,738,571	10,858,738	14,418,367	33,632,857	1,055,578	5,071,142	5,150,263
2005	12	2005.999	4,684,091	11,392,544	11,565,028	36,596,642	864,859	3,914,872	1,736,903	0	-1,710,002	0	-533,806	0	-1,269,664	0	-2,963,785	0	-62,722	0	-144,699	0	-757,268	2,974,089	10,858,738	10,295,364	33,632,857	802,136	3,770,174	979,636
2006	1	2006.085	3,764,003	9,319,930	7,415,445	36,420,639	1,155,669	2,958,476	1,735,997	0	-1,710,002	0	-533,806	0	-1,269,664	0	-2,963,785	0	-62,722	0	-144,699	0	-757,268	2,054,001	8,786,124	6,145,781	33,456,855	1,092,947	2,813,778	978,729
2006	2	2006.162	3,730,694	9,263,404	6,416,302	26,988,058	1,147,948	3,026,982	1,735,997	0	-1,710,002	0	-533,806	0	-1,269,664	0	-2,963,785	0	-62,722	0	-144,699	0	-757,268	2,020,692	8,729,598	5,146,638	24,024,273	1,085,226	2,882,283	978,729
2006	3	2006.246	3,689,542	9,015,225	6,263,349	20,068,507	1,075,616	4,022,149	1,735,997	0	-1,710,002	0	-533,806	0	-1,269,664	0	-2,963,785	0	-62,722	0	-144,699	0	-757,268	1,979,540	8,481,419	4,993,685	17,104,722	1,012,894	3,877,450	978,729
2006	4	2006.329	3,649,291	8,200,825	6,160,923	18,884,947	1,026,461	4,022,149	1,735,997	0	-1,710,002	0	-533,806	0	-1,269,664	0	-2,963,785	0	-62,722	0	-144,699	0	-757,268	1,939,289	7,667,019	4,891,260	15,921,162	963,739	3,877,450	978,729
2006	5	2006.413	3,602,629	10,991,855	6,204,329	27,728,426	1,163,349	4,879,860	1,735,997	0	-1,710,002	0	-533,806	0	-1,269,664	0	-2,963,785	0	-62,722	0	-144,699	0	-757,268	1,892,628	10,458,049	4,934,665	24,764,641	1,100,627	4,735,161	978,729
2006	6	2006.496	3,551,603	11,467,385	6,249,288	32,856,333	1,240,373	5,394,322	1,735,997	0	-1,710,002	0	-533,806	0	-1,269,664	0	-2,963,785	0	-62,722	0	-144,699	0	-757,268	1,841,601	10,933,579	4,979,624	29,892,548	1,177,650	5,249,624	978,729
2006	7	2006.580	3,499,786	11,467,385	6,295,125	36,348,444	1,240,373	5,405,547	1,735,997	0	-1,710,002	0	-533,806	0	-1,269,664	0	-2,963,785	0	-62,722	0	-144,699	0	-757,268	1,789,784	10,933,579	5,025,461	33,384,659	1,177,650	5,260,848	978,729
2006	8	2006.665	3,452,857	11,672,736	8,783,200	37,103,433	1,240,373	5,499,985	1,735,997	-33,369	-1,743,371	-61,634	-595,440	-77,491	-1,347,155	-201,305	-3,165,090	-27,661	-90,384	-6,906	-151,605	-54,915	-812,183	1,709,485	11,077,296	7,436,045	33,938,343	1,149,989	5,348,380	923,814
2006	9	2006.747	7,470,289	11,672,736	16,453,336	37,103,433	1,240,373	5,499,985	3,602,227	0	-1,743,371	0	-595,440	0	-1,347,155	0	-3,165,090	0	-90,384	0	-151,605	0	-812,183	5,726,918	11,077,296	15,106,182	33,938,343	1,149,989	5,348,380	2,790,044
2006	10	2006.832	8,029,452	10,577,403	16,674,201	37,103,433	910,648	4,878,413	5,235,025	0	-1,743,371	0	-595,440	0	-1,347,155	0	-3,165,090	0	-90,384	0	-151,605	0	-812,183	6,286,081	9,981,963	15,327,046	33,938,343	820,265	4,726,808	4,422,842
2006	11	2006.914	8,029,452	10,922,443	16,039,566	37,103,433	910,648	4,866,046	5,599,536	0	-1,743,371	0	-595,440	0	-1,347,155	0	-3,165,090	0	-90,384	0	-151,605	0	-812,183	6,286,081	10,327,003	14,692,411	33,938,343	820,265	4,714,441	4,787,353
2006	12	2006.999	6,558,056	10,922,443	12,790,339	37,103,433	910,648	4,589,928	4,239,640	0	-1,743,371	0	-595,440	0	-1,347,155	0	-3,165,090	0	-90,384	0	-151,605	0	-812,183	4,814,684	10,327,003	11,443,184	33,938,343	820,265	4,438,323	3,427,457
2007	1	2007.085	4,814,413	10,922,443	8,555,317	36,699,473	831,833	3,339,167	2,307,244	0	-1,743,371	0	-595,440	0	-1,347,155	0	-3,165,090	0	-90,384	0	-151,605	0	-812,183	3,071,041	10,327,003	7,208,162	33,534,383	741,450	3,187,562	1,495,061
2007	2	2007.162	3,906,798	9,435,624	6,636,154	24,257,556	738,980	2,495,806	1,824,580	0	-1,743,371	0	-595,440	0	-1,347,155	0	-3,165,090	0	-90,384	0	-151,605	0	-812,183	2,163,427	8,840,184	5,289,000	21,092,466	648,596	2,344,201	1,012,397
2007	3	2007.246	3,845,419	9,187,691	6,424,484	18,426,145	845,199	2,959,558	1,779,941	0	-1,743,371	0	-595,440	0	-1,347,155	0	-3,165,090	0	-90,384	0	-151,605	0	-812,183	2,102,047	8,592,251	5,077,330	15,261,055	754,816	2,807,953	967,758
2007	4	2007.329	3,636,240	9,973,566	6,035,104	14,872,433	1,188,969	3,828,817	1,779,941	0	-1,743,371	0	-595,440	0	-1,347,155	0	-3,165,090	0	-90,384	0	-151,605	0	-812,183	1,892,868	9,378,126	4,687,949	11,707,343	1,098,596	3,677,212	967,758
2007	5	2007.413	3,585,592	11,479,303	6,085,042	20,206,077	1,236,602	5,177,469	1,779,941	0	-1,743,371	0	-595,440	0	-1,347,155	0	-3,165,090	0	-90,384	0	-151,605	0	-812,183	1,842,221	10,883,863	4,737,887	17,040,987	1,146,218	5,025,864	967,758
2007	6	2007.496	3,563,730	11,479,303	6,133,318	30,668,206	1,267,877	5,326,220	1,779,941	0	-1,743,371	0	-595,440	0	-1,347,155	0	-3,165,090	0	-90,384	0	-151,605	0	-812,183	1,820,359	10,883,863	4,786,163	27,503,116	1,177,493	5,174,615	967,758
2007	7	2007.580	3,527,771	11,687,630	6,182,674	35,774,687	1,267,877	5,439,668	6,621,303	0	-1,743,371	0	-595,440	0	-1,347,155	0	-3,165,090	0	-90,384	0	-151,605	0	-812,183	1,784,400	11,092,190	4,835,520	32,609,597	1,177,493	5,288,063	5,809,120
2007	8	2007.665	4,943,635	11,687,630	6,413,674	37,271,745	1,267,877	5,439,668	7,358,851	-33,369	-1,776,741	-61,634	-657,074	-77,491	-1,424,646	-201,305	-3,366,396	-27,661	-118,045	-6,906	-158,511	-54,915	-867,098	3,166,895	11,030,556	4,989,029	33,905,350	1,149,832	5,281,156	6,491,753
2007	9	2007.747	7,707,537	11,687,630	13,238,816	37,443,257	1,267,877	5,439,668	7,358,851	0	-1,776,741	0	-657,074	0	-1,424,646	0	-3,366,396	0	-118,045	0	-158,511	0	-867,098	5,930,797	11,030,556	11,814,170	34,076,861	1,149,832	5,281,156	6,491,753
2007	10	2007.832	8,371,980	11,687,630	17,513,380	37,443,257	1,267,877	5,439,668	7,358,851	0	-1,776,741	0	-657,074	0	-1,424,646	0	-3,366,396	0	-118,045	0	-158,511	0	-867,098	6,595,239	11,030,556	16,088,734	34,076,861	1,149,832	5,281,156	6,491,753
2007	11	2007.914	7,317,978	11,687,630	14,358,244	37,443,257	1,267,877	5,439,668	6,917,065	0	-1,776,741	0	-657,074	0	-1,424,646	0	-3,366,396	0	-118,045	0	-158,511	0	-867,098	5,541,237	11,030,556	12,933,598	34,076,861	1,149,832	5,281,156	6,049,966
2007	12	2007.999	4,795,918	11,687,630	8,784,497	37,443,257	1,267,877	5,439,347	4,602,176	0	-1,776,741	0	-657,074	0	-1,424,646	0	-3,366,396	0	-118,045	0	-158,511	0	-867,098	3,019,177	11,030,556	7,359,851	34,076,861	1,149,832	5,280,836	3,735,078

APPENDIX II

METER ADJUSTMENT HISTORIES

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A2-1
Injection/Withdrawal Meter Adjustment History
All Storage Pools

Date		Monthly Injection Adjustments											Monthly Withdrawal Adjustments										
Year	Mnth	South Kimball (mcf)	Mid Kimball (mcf)	Subtotal Kim/Col (mcf)	Corunna (mcf)	Wilk. (mcf)	Seckerton (mcf)	Dow Moore (mcf)	Black Creek (mcf)	Coveny (mcf)	Ladysmith (mcf)	Total (mcf)	South Kimball (mcf)	Mid Kimball (mcf)	Subtotal Kim/Col (mcf)	Corunna (mcf)	Wilk. (mcf)	Seckerton (mcf)	Dow Moore (mcf)	Black Creek (mcf)	Coveny (mcf)	Ladysmith (mcf)	Total (mcf)
1964	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
1964	2	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
1964	3	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
1964	4	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
1964	5	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
1964	6	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
1964	7	0	0	0	-20742	0	-24545	0	0	0	0	-45287	0	0	0	0	0	0	0	0	0	0	0
1964	8	0	0	0	-21405	0	-25526	0	0	0	0	-46931	0	0	0	0	0	0	0	0	0	0	0
1964	9	0	0	0	0	0	-11023	0	0	0	0	-11023	0	0	0	0	0	0	0	0	0	0	0
1964	10	0	0	1432	590	0	542	0	0	0	0	2564	0	0	0	0	0	0	0	0	0	0	0
1964	11	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	295	0	0	0	0	295
1964	12	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	-19143	0	0	0	0	-19143
1964	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	-3582	0	-12737	0	0	0	0	-16319
1965	2	0	0	0	0	0	0	0	0	0	0	0	0	0	0	-8655	0	-5538	0	0	0	0	-14193
1965	3	0	0	0	0	0	0	0	0	0	0	0	0	0	0	-6319	0	-4915	0	0	0	0	-11234
1965	4	0	0	0	0	0	0	0	0	0	0	0	0	0	6167	8391	0	0	0	0	0	0	14558
1965	5	0	0	0	0	0	-8025	0	0	0	0	-8025	0	0	0	0	0	0	0	0	0	0	0
1965	6	0	0	0	1719	0	40205	0	0	0	0	41924	0	0	0	0	0	0	0	0	0	0	0
1965	7	0	0	0	10690	0	4300	0	0	0	0	14990	0	0	0	0	0	0	0	0	0	0	0
1965	8	0	0	0	2516	0	42470	0	0	0	0	44986	0	0	0	0	0	0	0	0	0	0	0
1965	9	0	0	0	-4505	0	-5615	0	0	0	0	-10120	0	0	0	0	0	0	0	0	0	0	0
1965	10	0	0	0	-306	0	-487	0	0	0	0	-793	0	0	0	0	0	0	0	0	0	0	0
1965	11	0	0	0	-2772	0	0	0	0	0	0	-2772	0	0	0	0	0	5310	0	0	0	0	5310
1965	12	0	0	0	0	0	0	0	0	0	0	0	0	0	0	4242	0	11181	0	0	0	0	15423
1966	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	774	0	602	0	0	0	0	1376
1966	2	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1378	0	17499	0	0	0	0	18877
1966	3	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1290	0	12579	0	0	0	0	13869
1966	4	0	0	-4682	0	0	0	0	0	0	0	-4682	0	0	0	0	0	5144	0	0	0	0	5144
1966	5	0	0	9392	0	0	0	0	0	0	0	9392	0	0	0	0	0	1773	0	0	0	0	1773
1966	6	0	0	21197	0	0	52482	0	0	0	0	73679	0	0	0	0	0	0	0	0	0	0	0
1966	7	0	0	4597	0	0	120044	0	0	0	0	124641	0	0	0	0	0	0	0	0	0	0	0
1966	8	0	0	608	26370	0	19290	0	0	0	0	46268	0	0	0	0	0	0	0	0	0	0	0
1966	9	0	0	-33605	-13683	0	-3020	0	0	0	0	-50308	0	0	0	0	0	0	0	0	0	0	0
1966	10	0	0	4342	25	0	0	0	0	0	0	4367	0	0	-2165	0	0	0	0	0	0	0	-2165
1966	11	0	0	0	0	0	0	0	0	0	0	0	0	0	1172	618	0	0	0	0	0	0	1790
1966	12	0	0	0	0	0	0	0	0	0	0	0	0	0	5865	10079	0	1256	0	0	0	0	17200
1967	1	0	0	0	0	0	0	0	0	0	0	0	0	0	-2614	-1849	0	-4219	0	0	0	0	-8682
1967	2	0	0	0	0	0	0	0	0	0	0	0	0	0	-12477	-2080	0	-54761	0	0	0	0	-69318
1967	3	0	0	0	0	0	0	0	0	0	0	0	0	0	0	-1928	0	-24036	0	0	0	0	-25964
1967	4	0	0	0	0	0	-8088	0	0	0	0	-8088	0	0	7550	169	0	14711	0	0	0	0	22430
1967	5	0	0	0	0	0	3866	0	0	0	0	3866	0	0	0	0	0	738	0	0	0	0	738
1967	6	0	0	0	0	0	67599	0	0	0	0	67599	0	0	0	0	0	0	0	0	0	0	0
1967	7	0	0	0	0	0	68528	0	0	0	0	68528	0	0	0	0	0	0	0	0	0	0	0
1967	8	0	0	0	24974	0	8960	0	0	0	0	33934	0	0	0	0	0	0	0	0	0	0	0
1967	9	0	0	9675	6479	0	1954	0	0	0	0	18108	0	0	0	0	0	0	0	0	0	0	0
1967	10	0	0	529	5	0	0	0	0	0	0	534	0	0	0	0	0	0	0	0	0	0	0

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Injection/Withdrawal Meter Adjustment History
All Storage Pools

Date		Monthly Injection Adjustments											Monthly Withdrawal Adjustments										
Year	Mnth	South Kimball (mcf)	Mid Kimball (mcf)	Subtotal Kim/Col (mcf)	Corunna (mcf)	Wilk. (mcf)	Seckerton (mcf)	Dow Moore (mcf)	Black Creek (mcf)	Coveny (mcf)	Ladysmith (mcf)	Total (mcf)	South Kimball (mcf)	Mid Kimball (mcf)	Subtotal Kim/Col (mcf)	Corunna (mcf)	Wilk. (mcf)	Seckerton (mcf)	Dow Moore (mcf)	Black Creek (mcf)	Coveny (mcf)	Ladysmith (mcf)	Total (mcf)
1967	11	0	0	50	0	0	0	0	0	0	0	50	0	0	2369	82	0	3312	0	0	0	0	5763
1967	12	0	0	0	0	0	0	0	0	0	0	0	0	0	27131	0	0	27202	0	0	0	0	54333
1968	1	0	0	0	0	0	0	0	0	0	0	0	0	0	25501	9262	0	43841	0	0	0	0	78604
1968	2	0	0	0	0	0	0	0	0	0	0	0	0	0	-1997	-2376	0	-3523	0	0	0	0	-7896
1968	3	0	0	0	0	0	0	0	0	0	0	0	0	0	-2022	-1554	0	-3724	0	0	0	0	-7300
1968	4	0	0	186	21612	0	0	0	0	0	0	21798	0	0	1161	4668	0	2819	0	0	0	0	8648
1968	5	0	0	0	10386	0	0	0	0	0	0	10386	0	0	0	843	0	3372	0	0	0	0	4215
1968	6	0	0	-2914	-17751	0	0	0	0	0	0	-20665	0	0	0	0	0	0	0	0	0	0	0
1968	7	0	0	-12227	-517	0	-4043	0	0	0	0	-16787	0	0	0	0	0	0	0	0	0	0	0
1968	8	0	0	6860	0	0	5099	0	0	0	0	11959	0	0	0	0	0	0	0	0	0	0	0
1968	9	0	0	1443	0	0	498	0	0	0	0	1941	0	0	0	0	0	0	0	0	0	0	0
1968	10	0	0	3717	0	0	4046	0	0	0	0	7763	0	0	6626	0	0	0	0	0	0	0	6626
1968	11	0	0	8498	0	0	1035	0	0	0	0	9533	0	0	-5567	-156	0	-95	0	0	0	0	-5818
1968	12	0	0	0	0	0	0	0	0	0	0	0	0	0	-13939	-3114	0	-12348	0	0	0	0	-29401
1969	1	0	0	0	0	0	0	0	0	0	0	0	0	0	-23662	-15117	0	-18962	0	0	0	0	-57741
1969	2	0	0	0	0	0	0	0	0	0	0	0	0	0	-34621	-15367	0	-21587	0	0	0	0	-71575
1969	3	0	0	0	0	0	0	0	0	0	0	0	0	0	-29841	-21379	0	-60128	0	0	0	0	-111348
1969	4	0	0	-9982	0	0	0	0	0	0	0	-9982	0	0	1314	0	0	2398	0	0	0	0	3712
1969	5	0	0	7047	0	0	0	0	0	0	0	7047	0	0	0	0	0	0	0	0	0	0	0
1969	6	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
1969	7	0	0	-60551	0	0	-1731	0	0	0	0	-62282	0	0	0	0	0	0	0	0	0	0	0
1969	8	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
1969	9	0	0	-3112	-1121	0	-14051	0	0	0	0	-18284	0	0	0	0	0	0	0	0	0	0	0
1969	10	0	0	-675	-2623	0	-237	0	0	0	0	-3535	0	0	-335	0	0	0	0	0	0	0	-335
1969	11	0	0	0	0	0	0	0	0	0	0	0	0	0	-7072	0	0	0	0	0	0	0	-7072
1969	12	0	0	0	0	0	0	0	0	0	0	0	0	0	31882	0	0	9857	0	0	0	0	41739
1970	1	0	0	0	0	0	0	0	0	0	0	0	0	0	-5403	-601	0	-3665	0	0	0	0	-9669
1970	2	0	0	0	0	0	0	0	0	0	0	0	0	0	25155	25174	0	46907	0	0	0	0	97236
1970	3	0	0	0	0	0	0	0	0	0	0	0	0	0	-3643	-8107	0	-16755	0	0	0	0	-28505
1970	4	0	0	0	0	0	0	0	0	0	0	0	0	0	0	-9173	0	-8028	0	0	0	0	-17201
1970	5	0	0	-11639	0	0	0	0	0	0	0	-11639	0	0	0	0	0	0	0	0	0	0	0
1970	6	0	0	-89362	0	0	0	0	0	0	0	-89362	0	0	0	0	0	0	0	0	0	0	0
1970	7	0	0	-69738	0	0	0	0	0	0	0	-69738	0	0	0	0	0	0	0	0	0	0	0
1970	8	0	0	-17315	-204	0	-2493	0	0	0	0	-20012	0	0	0	0	0	0	0	0	0	0	0
1970	9	0	0	-25441	-39316	0	-91322	0	0	0	0	-156079	0	0	0	0	0	0	0	0	0	0	0
1970	10	0	0	-1380	-3431	0	-3981	0	0	0	0	-8792	0	0	0	0	0	0	0	0	0	0	0
1970	11	0	0	0	0	0	0	0	0	0	0	0	0	0	-5706	-930	0	-2175	0	0	0	0	-8811
1970	12	0	0	0	0	0	0	0	0	0	0	0	0	0	-120402	-354	0	-1529	0	0	0	0	-122285
1971	1	0	0	0	0	0	0	0	0	0	0	0	0	0	-85787	-189	0	-9961	0	0	0	0	-95937
1971	2	0	0	0	0	0	0	0	0	0	0	0	0	0	-25628	-8164	0	-19017	0	0	0	0	-52809
1971	3	0	0	0	0	0	0	0	0	0	0	0	0	0	-18078	-10074	0	-22729	0	0	0	0	-50881
1971	4	0	0	0	0	0	0	0	0	0	0	0	0	0	-15286	-1515	0	-4640	0	0	0	0	-21441
1971	5	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
1971	6	0	0	-53545	0	0	-279	0	0	0	0	-53824	0	0	0	0	0	0	0	0	0	0	0
1971	7	0	0	-113758	0	0	-675	0	0	0	0	-114433	0	0	0	0	0	0	0	0	0	0	0
1971	8	0	0	-41993	-476	0	-17816	0	0	0	0	-60285	0	0	0	0	0	0	0	0	0	0	0
1971	9	0	0	1704	10707	0	21678	0	0	0	0	34089	0	0	0	0	0	0	0	0	0	0	0

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Injection/Withdrawal Meter Adjustment History
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Date		Monthly Injection Adjustments											Monthly Withdrawal Adjustments										
Year	Mnth	South Kimball (mcf)	Mid Kimball (mcf)	Subtotal Kim/Col (mcf)	Corunna (mcf)	Wilk. (mcf)	Seckerton (mcf)	Dow Moore (mcf)	Black Creek (mcf)	Coveny (mcf)	Ladysmith (mcf)	Total (mcf)	South Kimball (mcf)	Mid Kimball (mcf)	Subtotal Kim/Col (mcf)	Corunna (mcf)	Wilk. (mcf)	Seckerton (mcf)	Dow Moore (mcf)	Black Creek (mcf)	Coveny (mcf)	Ladysmith (mcf)	Total (mcf)
1971	10	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
1971	11	0	0	-9456	-4056	0	0	0	0	0	0	-13512	0	0	-4751	0	0	-85	0	0	0	0	-4836
1971	12	0	0	0	0	0	0	0	0	0	0	0	0	0	3555	0	0	241	0	0	0	0	3796
1972	1	0	0	0	0	0	0	0	0	0	0	0	0	0	-46986	-4378	0	-29419	0	0	0	0	-80783
1972	2	0	0	0	0	0	0	0	0	0	0	0	0	0	-54406	-25030	0	-40314	0	0	0	0	-119750
1972	3	0	0	0	0	0	0	0	0	0	0	0	0	0	-61676	-32742	0	-54158	0	0	0	0	-148576
1972	4	0	0	-711	0	0	0	0	0	0	0	-711	0	0	-31116	0	0	-14097	0	0	0	0	-45213
1972	5	0	0	-38089	0	0	0	0	0	0	0	-38089	0	0	-3257	0	0	0	0	0	0	0	-3257
1972	6	0	0	-95291	0	0	0	0	0	0	0	-95291	0	0	2375	0	0	0	0	0	0	0	2375
1972	7	0	0	-13509	0	0	-785	0	0	0	0	-14294	0	0	0	0	0	0	0	0	0	0	0
1972	8	0	0	-54514	0	0	-22	0	0	0	0	-54536	0	0	0	0	0	0	0	0	0	0	0
1972	9	0	0	-23036	0	0	-19826	0	0	0	0	-42862	0	0	0	0	0	0	0	0	0	0	0
1972	10	0	0	0	0	0	15998	0	0	0	0	15998	0	0	-32005	0	0	-586	0	0	0	0	-32591
1972	11	0	0	0	0	0	0	0	0	0	0	0	0	0	-81559	0	0	0	0	0	0	0	-81559
1972	12	0	0	0	0	0	0	0	0	0	0	0	0	0	-36360	-988	0	-1843	0	0	0	0	-39191
1973	1	0	0	0	0	0	0	0	0	0	0	0	0	0	-16521	0	0	-4342	0	0	0	0	-20863
1973	2	0	0	0	0	0	0	0	0	0	0	0	0	0	18613	0	0	9762	0	0	0	0	28375
1973	3	0	0	12613	0	0	0	0	0	0	0	12613	0	0	7781	0	0	4108	0	0	0	0	11889
1973	4	0	0	89716	0	0	0	0	0	0	0	89716	0	0	10248	0	0	1179	0	0	0	0	11427
1973	5	0	0	99746	0	0	0	0	0	0	0	99746	0	0	0	0	0	0	0	0	0	0	0
1973	6	0	0	111294	110381	0	3267	0	0	0	0	224942	0	0	0	0	0	0	0	0	0	0	0
1973	7	0	0	187067	1617	0	88346	0	0	0	0	277030	0	0	0	0	0	0	0	0	0	0	0
1973	8	0	0	64550	1077	0	78018	0	0	0	0	143645	0	0	0	0	0	0	0	0	0	0	0
1973	9	0	0	16284	485	0	1461	0	0	0	0	18230	0	0	0	0	0	0	0	0	0	0	0
1973	10	0	0	8463	1239	0	3282	0	0	0	0	12984	0	0	0	0	0	-970	0	0	0	0	-970
1973	11	0	0	0	0	0	-4131	0	0	0	0	-4131	0	0	0	-1681	0	-56694	0	0	0	0	-58375
1973	12	0	0	0	0	0	0	0	0	0	0	0	0	0	-58472	-22732	0	-63090	0	0	0	0	-144294
1974	1	0	0	0	0	0	0	0	0	0	0	0	0	0	-57935	-15339	0	-23731	0	0	0	0	-97005
1974	2	0	0	0	0	0	0	0	0	0	0	0	0	0	-119548	-2432	0	-8350	0	0	0	0	-130330
1974	3	0	0	-938	0	0	0	0	0	0	0	-938	0	0	6403	173	0	719	0	0	0	0	7295
1974	4	0	0	28571	0	0	0	0	0	0	0	28571	0	0	27029	0	0	126	0	0	0	0	27155
1974	5	0	0	29685	0	0	0	0	0	0	0	29685	0	0	-2506	0	0	0	0	0	0	0	-2506
1974	6	0	0	169587	810	0	1671	0	0	0	0	172068	0	0	-3868	0	0	0	0	0	0	0	-3868
1974	7	0	0	9815	4665	0	17648	0	0	0	0	32128	0	0	1320	0	0	0	0	0	0	0	1320
1974	8	0	0	6295	2559	0	6112	0	0	0	0	14966	0	0	0	0	0	0	0	0	0	0	0
1974	9	0	0	17220	883	0	12	0	0	0	0	18115	0	0	367	0	0	0	0	0	0	0	367
1974	10	0	0	-5232	0	0	0	0	0	0	0	-5232	0	0	-13031	0	0	0	0	0	0	0	-13031
1974	11	0	0	0	0	0	0	0	0	0	0	0	0	0	-6668	-744	0	-161	0	0	0	0	-7573
1974	12	0	0	0	0	0	0	0	0	0	0	0	0	0	53248	15863	0	134	0	0	0	0	69245
1975	1	0	0	0	0	0	0	0	0	0	0	0	0	0	28054	8869	0	40633	0	0	0	0	77556
1975	2	0	0	0	0	0	0	0	0	0	0	0	0	0	25610	2873	0	25572	0	0	0	0	54055
1975	3	0	0	0	0	0	0	0	0	0	0	0	0	0	-54091	-1537	0	-6479	0	0	0	0	-62107
1975	4	0	0	6846	0	0	0	0	0	0	0	6846	0	0	-67446	0	0	0	0	0	0	0	-67446
1975	5	0	0	90018	0	0	0	0	0	0	0	90018	0	0	0	0	0	0	0	0	0	0	0
1975	6	0	0	119157	447	0	0	0	0	0	0	119604	0	0	0	0	0	0	0	0	0	0	0
1975	7	0	0	27658	13602	0	22042	0	0	0	0	63302	0	0	0	0	0	0	0	0	0	0	0
1975	8	0	0	-30352	-10783	0	-28106	0	0	0	0	-69241	0	0	0	0	0	0	0	0	0	0	0

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Injection/Withdrawal Meter Adjustment History
All Storage Pools

Date		Monthly Injection Adjustments											Monthly Withdrawal Adjustments										
Year	Mnth	South Kimball (mcf)	Mid Kimball (mcf)	Subtotal Kim/Col (mcf)	Corunna (mcf)	Wilk. (mcf)	Seckerton (mcf)	Dow Moore (mcf)	Black Creek (mcf)	Coveny (mcf)	Ladysmith (mcf)	Total (mcf)	South Kimball (mcf)	Mid Kimball (mcf)	Subtotal Kim/Col (mcf)	Corunna (mcf)	Wilk. (mcf)	Seckerton (mcf)	Dow Moore (mcf)	Black Creek (mcf)	Coveny (mcf)	Ladysmith (mcf)	Total (mcf)
1975	9	0	0	40269	3953	0	7125	0	0	0	0	51347	0	0	0	0	0	0	0	0	0	0	0
1975	10	0	0	1886	0	0	886	0	0	0	0	2772	0	0	-126	0	0	0	0	0	0	0	-126
1975	11	0	0	0	0	0	1338	0	0	0	0	1338	0	0	982	4484	0	5659	0	0	0	0	11125
1975	12	0	0	0	0	0	0	0	0	0	0	0	0	0	44875	16911	0	25555	0	0	0	0	87341
1976	1	0	0	0	0	0	0	0	0	0	0	0	0	0	71332	508	0	23879	0	0	0	0	95719
1976	2	0	0	0	0	0	0	0	0	0	0	0	0	0	59230	0	0	16525	0	0	0	0	75755
1976	3	0	0	656	0	0	0	0	0	0	0	656	0	0	72584	0	0	4812	0	0	0	0	77396
1976	4	0	0	107158	0	0	0	0	0	0	0	107158	0	0	-43080	-5616	0	0	0	0	0	0	-48696
1976	5	0	0	17931	0	0	0	0	0	0	0	17931	0	0	-6999	-1877	0	0	0	0	0	0	-8876
1976	6	0	0	-67997	0	0	0	0	0	0	0	-67997	0	0	0	0	0	0	0	0	0	0	0
1976	7	0	0	11753	5100	0	8009	0	0	0	0	24862	0	0	0	0	0	0	0	0	0	0	0
1976	8	0	0	-23096	-6558	0	-37392	0	0	0	0	-67046	0	0	0	0	0	0	0	0	0	0	0
1976	9	0	0	-15468	-4221	0	-5962	0	0	0	0	-25651	0	0	0	0	0	0	0	0	0	0	0
1976	10	0	0	-12046	-1254	0	-7830	0	0	0	0	-21130	0	0	-73	-7553	0	-28989	0	0	0	0	-36615
1976	11	0	0	0	0	0	0	0	0	0	0	0	0	0	-16690	-37680	0	-63118	0	0	0	0	-117488
1976	12	0	0	0	0	0	0	0	0	0	0	0	0	0	-107436	-13119	0	-39653	0	0	0	0	-160208
1977	1	0	0	0	0	0	0	0	0	0	0	0	0	0	-42407	-1356	0	-5974	0	0	0	0	-49737
1977	2	0	0	0	0	0	0	0	0	0	0	0	0	0	-221545	-10038	0	-23058	0	0	0	0	-254641
1977	3	0	0	-10775	-3366	0	-6920	0	0	0	0	-21061	0	0	-66493	-3888	0	-11568	0	0	0	0	-81949
1977	4	0	0	-16207	0	0	0	0	0	0	0	-16207	0	0	-2035	0	0	0	0	0	0	0	-2035
1977	5	0	0	205296	0	0	0	0	0	0	0	205296	0	0	0	0	0	0	0	0	0	0	0
1977	6	0	0	191155	0	0	0	0	0	0	0	191155	0	0	0	0	0	0	0	0	0	0	0
1977	7	0	0	203458	59927	0	6325	0	0	0	0	269710	0	0	0	0	0	0	0	0	0	0	0
1977	8	0	0	52558	42632	0	139073	0	0	0	0	234263	0	0	0	0	0	0	0	0	0	0	0
1977	9	0	0	-7413	-417	0	-15047	0	0	0	0	-22877	0	0	0	0	0	0	0	0	0	0	0
1977	10	0	0	7625	2931	0	17843	0	0	0	0	28399	0	0	0	0	0	0	0	0	0	0	0
1977	11	0	0	4997	0	0	0	0	0	0	0	4997	0	0	29284	27809	0	28756	0	0	0	0	85849
1977	12	0	0	-5201	0	0	0	0	0	0	0	-5201	0	0	30472	30041	0	74057	0	0	0	0	134570
1978	1	0	0	0	0	0	0	0	0	0	0	0	0	0	26503	2922	0	13035	0	0	0	0	42460
1978	2	0	0	0	0	0	0	0	0	0	0	0	0	0	21678	0	0	442	0	0	0	0	22120
1978	3	0	0	0	0	0	0	0	0	0	0	0	0	0	30673	0	0	0	0	0	0	0	30673
1978	4	0	0	11216	0	0	0	0	0	0	0	11216	0	0	22962	0	0	0	0	0	0	0	22962
1978	5	0	0	139372	0	0	0	0	0	0	0	139372	0	0	-299	0	0	0	0	0	0	0	-299
1978	6	0	0	144249	0	0	0	0	0	0	0	144249	0	0	0	0	0	0	0	0	0	0	0
1978	7	0	0	26341	22318	2560	67556	0	0	0	0	118775	0	0	0	0	0	0	0	0	0	0	0
1978	8	0	0	43995	19551	49913	40181	0	0	0	0	153640	0	0	0	0	0	0	0	0	0	0	0
1978	9	0	0	83576	4580	69914	9840	0	0	0	0	167910	0	0	0	0	0	0	0	0	0	0	0
1978	10	0	0	33023	0	26861	0	0	0	0	0	59884	0	0	0	-946	-120	-2334	0	0	0	0	-3400
1978	11	0	0	-6325	-2836	0	0	0	0	0	0	-9161	0	0	76	2601	1158	3090	0	0	0	0	6925
1978	12	0	0	0	0	0	0	0	0	0	0	0	0	0	88	3591	5609	5563	0	0	0	0	14851
1979	1	0	0	0	0	0	0	0	0	0	0	0	0	0	-5322	-490	-1178	-2930	0	0	0	0	-9920
1979	2	0	0	0	0	0	0	0	0	0	0	0	0	0	143744	0	12654	16886	0	0	0	0	173284
1979	3	0	0	0	0	0	0	0	0	0	0	0	0	0	-1303	0	0	0	0	0	0	0	-1303
1979	4	0	0	-14565	0	0	0	0	0	0	0	-14565	0	0	35410	0	0	0	0	0	0	0	35410
1979	5	0	0	131220	0	0	0	0	0	0	0	131220	0	0	0	0	0	0	0	0	0	0	0
1979	6	0	0	151860	0	8663	0	0	0	0	0	160523	0	0	0	0	0	0	0	0	0	0	0
1979	7	0	0	89869	20739	32064	6453	0	0	0	0	149125	0	0	0	0	0	0	0	0	0	0	0

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Injection/Withdrawal Meter Adjustment History
All Storage Pools

Date		Monthly Injection Adjustments											Monthly Withdrawal Adjustments										
Year	Mnth	South Kimball (mcf)	Mid Kimball (mcf)	Subtotal Kim/Col (mcf)	Corunna (mcf)	Wilk. (mcf)	Seckerton (mcf)	Dow Moore (mcf)	Black Creek (mcf)	Coveny (mcf)	Ladysmith (mcf)	Total (mcf)	South Kimball (mcf)	Mid Kimball (mcf)	Subtotal Kim/Col (mcf)	Corunna (mcf)	Wilk. (mcf)	Seckerton (mcf)	Dow Moore (mcf)	Black Creek (mcf)	Coveny (mcf)	Ladysmith (mcf)	Total (mcf)
1979	8	2146	2132	4278	7117	11769	16683	0	0	0	0	39848	0	0	0	0	0	0	0	0	0	0	0
1979	9	32734	28043	60777	8899	8469	64829	0	0	0	0	142974	0	0	0	0	0	0	0	0	0	0	0
1979	10	0	25762	25762	0	0	6291	0	0	0	0	32053	0	-32124	-32124	-4113	0	-12461	0	0	0	0	-48697
1979	11	0	0	0	0	0	0	0	0	0	0	0	4568	0	4568	300	0	187	0	0	0	0	5055
1979	12	978	0	978	7297	0	28195	0	0	0	0	36469	-11946	0	-11946	-2722	-134	-4109	0	0	0	0	-18911
1980	1	0	0	0	0	0	0	0	0	0	0	0	-59468	-11113	-70580	-25187	-15444	-50448	0	0	0	0	-161660
1980	2	0	0	0	0	0	0	0	0	0	0	0	-9817	-74513	-84330	-4907	-31975	-27517	0	0	0	0	-148729
1980	3	0	0	0	0	0	0	0	0	0	0	0	1666	72670	74336	0	18296	4501	0	0	0	0	97134
1980	4	1380	0	1380	0	6104	0	0	0	0	0	7484	7854	35	7890	0	1592	0	0	0	0	0	9482
1980	5	46279	0	46279	0	70319	0	0	0	0	0	116598	0	0	0	0	0	0	0	0	0	0	0
1980	6	161995	49746	211741	0	22356	0	0	0	0	0	234097	0	0	0	0	0	0	0	0	0	0	0
1980	7	73599	136561	210160	0	15331	1038	0	0	0	0	226529	0	0	0	0	0	0	0	0	0	0	0
1980	8	0	196805	196805	66295	0	125311	0	0	0	0	388411	0	0	0	0	0	0	0	0	0	0	0
1980	9	0	42216	42216	17703	0	91853	0	0	0	0	151772	0	0	0	0	0	0	0	0	0	0	0
1980	10	4526	11755	16281	1694	0	5962	0	0	0	0	23937	0	1176	1176	512	0	745	0	0	0	0	2432
1980	11	0	0	0	0	0	0	0	0	0	0	0	0	0	0	-9948	-4102	-21286	0	0	0	0	-35336
1980	12	0	0	0	0	0	0	0	0	0	0	0	-25508	-561	-26070	-10721	-4946	-21950	0	0	0	0	-63686
1981	1	0	0	0	0	0	0	0	0	0	0	0	26822	44264	71085	4303	22868	24022	0	0	0	0	122278
1981	2	0	-5676	-5676	0	0	0	0	0	0	0	-5676	-3798	-6467	-10265	0	-1973	-127	0	0	0	0	-12366
1981	3	0	-851	-851	0	46	0	0	0	0	0	-805	1747	6118	7865	0	1123	0	0	0	0	0	8988
1981	4	7099	106	7205	0	10887	0	0	0	0	0	18092	0	-1952	-1952	0	0	0	0	0	0	0	-1952
1981	5	69232	5878	75109	0	57794	0	0	0	0	0	132904	0	0	0	0	0	0	0	0	0	0	0
1981	6	151401	62881	214283	0	23528	0	0	0	0	0	237811	0	0	0	0	0	0	0	0	0	0	0
1981	7	6061	112066	118127	10011	261	9958	0	0	0	0	138358	0	0	0	0	0	0	0	0	0	0	0
1981	8	7420	17629	25049	24598	0	68141	0	0	0	0	117788	0	0	0	0	0	0	0	0	0	0	0
1981	9	1091	15020	16111	18014	11646	55154	0	0	0	0	100925	0	0	0	0	0	0	0	0	0	0	0
1981	10	24312	23507	47818	2722	0	7593	0	0	0	0	58133	0	0	0	-2672	0	0	0	0	0	0	-2672
1981	11	21156	4741	25897	0	0	0	0	0	0	0	25897	0	0	0	18618	0	19581	0	0	0	0	38199
1981	12	0	0	0	0	0	0	0	0	0	0	0	1596	10911	12507	34305	26426	74838	0	0	0	0	148076
1982	1	0	0	0	0	0	0	0	0	0	0	0	10135	20037	30172	2358	7823	9242	0	0	0	0	49594
1982	2	0	0	0	0	0	0	0	0	0	0	0	28964	23277	52242	0	9164	5863	0	0	0	0	67269
1982	3	0	0	0	0	0	0	0	0	0	0	0	-17100	-33532	-50632	0	-2404	-180	0	0	0	0	-53216
1982	4	0	29190	29190	0	0	0	0	0	0	0	29190	-7480	-21862	-29342	0	-2040	0	0	0	0	0	-31382
1982	5	28491	149086	177577	0	0	0	0	0	0	0	177577	0	0	0	0	0	0	0	0	0	0	0
1982	6	123574	113743	237316	0	8578	0	0	0	0	0	245895	0	0	0	0	0	0	0	0	0	0	0
1982	7	73461	20189	93649	20203	89982	16602	0	0	0	0	220436	0	0	0	0	0	0	0	0	0	0	0
1982	8	5288	173	5461	29437	23482	39802	0	0	0	0	98182	0	0	0	0	0	0	0	0	0	0	0
1982	9	24887	38887	63774	2757	2916	80048	0	0	0	0	149495	0	0	0	0	0	0	0	0	0	0	0
1982	10	15501	22314	37814	0	0	0	0	0	0	0	37814	0	0	0	0	0	0	0	0	0	0	0
1982	11	0	0	0	5285	0	11494	0	0	0	0	16778	0	265	265	8387	409	6802	0	0	0	0	15864
1982	12	3784	0	3784	6608	4324	7929	0	0	0	0	22645	21378	0	21378	52718	36056	98641	0	0	0	0	208793
1983	1	0	0	0	0	0	0	0	0	0	0	0	13598	5094	18692	8744	14915	17319	0	0	0	0	59669
1983	2	0	0	0	0	0	0	0	0	0	0	0	335	487	823	0	113	455	0	0	0	0	1391
1983	3	0	0	0	0	0	0	0	0	0	0	0	26052	24456	50508	0	20778	16895	0	0	0	0	88181
1983	4	14466	27524	41990	0	0	0	0	0	0	0	41990	16355	4208	20563	0	10866	0	0	0	0	0	31428
1983	5	31930	70058	101987	0	0	0	0	0	0	0	101987	4699	16140	20838	0	0	0	0	0	0	0	20838
1983	6	62225	57328	119553	0	0	1116	0	0	0	0	120669	0	0	0	0	0	0	0	0	0	0	0

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Injection/Withdrawal Meter Adjustment History
All Storage Pools

Date		Monthly Injection Adjustments											Monthly Withdrawal Adjustments										
Year	Mnth	South Kimball (mcf)	Mid Kimball (mcf)	Subtotal Kim/Col (mcf)	Corunna (mcf)	Wilk. (mcf)	Seckerton (mcf)	Dow Moore (mcf)	Black Creek (mcf)	Coveny (mcf)	Ladysmith (mcf)	Total (mcf)	South Kimball (mcf)	Mid Kimball (mcf)	Subtotal Kim/Col (mcf)	Corunna (mcf)	Wilk. (mcf)	Seckerton (mcf)	Dow Moore (mcf)	Black Creek (mcf)	Coveny (mcf)	Ladysmith (mcf)	Total (mcf)
1983	7	131449	39816	171265	-41545	-27605	90038	0	0	0	0	192153	0	0	0	0	-1836	0	0	0	0	0	-1836
1983	8	0	0	0	15815	5104	33624	0	0	0	0	54543	0	0	0	0	0	0	0	0	0	0	0
1983	9	1701	0	1701	8370	34319	20905	0	0	0	0	65296	0	0	0	0	0	0	0	0	0	0	0
1983	10	311	0	311	0	3452	0	0	0	0	0	3763	0	0	0	0	0	0	0	0	0	0	0
1983	11	0	0	0	0	-2217	0	0	0	0	0	-2217	-2224	0	-2224	-5648	0	-10608	0	0	0	0	-18480
1983	12	0	0	0	0	0	0	0	0	0	0	0	-25289	-9835	-35124	-8278	-7526	-24947	0	0	0	0	-75875
1984	1	0	0	0	0	0	0	0	0	0	0	0	-26942	-30507	-57448	-7858	-19246	-20453	0	0	0	0	-105006
1984	2	0	0	0	0	0	0	0	0	0	0	0	2891	7773	10664	282	1980	960	0	0	0	0	13887
1984	3	0	0	0	0	0	0	0	0	0	0	0	-12468	-33673	-46142	0	-2302	-3138	0	0	0	0	-51581
1984	4	51825	0	51825	0	0	0	0	0	0	0	51825	0	0	0	0	0	0	0	0	0	0	0
1984	5	87500	0	87500	0	1624	0	0	0	0	0	89124	0	0	0	0	0	0	0	0	0	0	0
1984	6	149986	0	149986	3382	56619	21749	0	0	0	0	231735	0	0	0	0	0	0	0	0	0	0	0
1984	7	0	23747	23747	23277	27182	60537	0	0	0	0	134743	0	0	0	0	0	0	0	0	0	0	0
1984	8	2859	93798	96657	16454	17079	44511	0	0	0	0	174700	0	0	0	0	0	0	0	0	0	0	0
1984	9	16867	101317	118183	0	0	0	0	0	0	0	118183	0	0	0	0	0	0	0	0	0	0	0
1984	10	5341	14862	20203	0	0	0	0	0	0	0	20203	0	0	0	0	0	0	0	0	0	0	0
1984	11	0	0	0	1938	0	0	0	0	0	0	1938	0	0	0	-6686	0	-8695	0	0	0	0	-15381
1984	12	0	0	0	0	0	0	0	0	0	0	0	0	0	0	-15532	-5525	-25653	0	0	0	0	-46710
1985	1	0	0	0	0	0	0	0	0	0	0	0	30143	8751	38894	5602	17015	22617	0	0	0	0	84129
1985	2	0	0	0	0	0	0	0	0	0	0	0	26691	79677	106368	0	18130	7936	0	0	0	0	132434
1985	3	0	0	0	0	0	0	0	0	0	0	0	13361	19585	32946	0	1253	1680	0	0	0	0	35880
1985	4	0	2256	2256	0	44059	1193	0	0	0	0	47508	0	32572	32572	0	0	0	0	0	0	0	32572
1985	5	0	0	0	0	23860	11787	0	0	0	0	35647	0	0	0	0	0	0	0	0	0	0	0
1985	6	0	2849	2849	23323	579	62168	0	0	0	0	88919	0	0	0	0	0	0	0	0	0	0	0
1985	7	9764	40702	50466	7470	0	11204	0	0	0	0	69140	0	0	0	0	0	0	0	0	0	0	0
1985	8	24795	79303	104098	275	0	138	0	0	0	0	104511	0	0	0	0	0	0	0	0	0	0	0
1985	9	123846	87316	211162	5369	7388	8571	0	0	0	0	232491	0	0	0	0	0	0	0	0	0	0	0
1985	10	46516	6788	53304	0	0	0	0	0	0	0	53304	0	0	0	0	0	0	0	0	0	0	0
1985	11	0	0	0	-2559	0	-2944	0	0	0	0	-5503	0	0	0	30059	0	32074	0	0	0	0	62133
1985	12	0	0	0	0	0	1105	0	0	0	0	1105	-222	0	-222	-381	-526	-1003	0	0	0	0	-2132
1986	1	0	0	0	0	0	0	0	0	0	0	0	15610	5892	21502	1691	6231	7985	0	0	0	0	37408
1986	2	0	0	0	0	0	0	0	0	0	0	0	16478	39046	55525	353	7286	4148	0	0	0	0	67311
1986	3	0	21060	21060	0	0	0	0	0	0	0	21060	1931	4233	6164	0	254	0	0	0	0	0	6418
1986	4	3216	10520	13736	0	72698	0	0	0	0	0	86434	5122	15868	20990	0	0	0	0	0	0	0	20990
1986	5	72211	0	72211	0	72642	0	0	0	0	0	144853	0	0	0	0	127	0	0	0	0	0	127
1986	6	168215	63774	231990	0	3339	240	0	0	0	0	235569	0	0	0	0	0	0	0	0	0	0	0
1986	7	2701	181880	184581	0	0	41708	0	0	0	0	226288	0	0	0	0	0	0	0	0	0	0	0
1986	8	7424	75861	83285	19101	0	121999	0	0	0	0	224386	0	0	0	0	0	0	0	0	0	0	0
1986	9	5412	1843	7254	26867	3971	48962	0	0	0	0	87055	0	0	0	0	0	-8204	0	0	0	0	-8204
1986	10	6354	6206	12560	17421	0	0	0	0	0	0	29981	-1126	0	-1126	-6870	0	0	0	0	0	0	-7996
1986	11	-4836	0	-4836	-2919	0	0	0	0	0	0	-7756	-15264	0	-15264	-7410	0	0	0	0	0	0	-22674
1986	12	0	0	0	0	0	0	0	0	0	0	0	-14537	0	-14537	-16595	0	-32152	0	0	0	0	-63284
1987	1	0	0	0	0	0	0	0	0	0	0	0	7230	2902	10131	2305	3170	6248	0	0	0	0	21855
1987	2	0	0	0	0	0	0	0	0	0	0	0	36190	74439	110629	0	35195	15335	0	0	0	0	161159
1987	3	0	20524	20524	0	0	0	0	0	0	0	20524	14374	47691	62066	0	7470	0	0	0	0	0	69535
1987	4	33038	27337	60375	0	11540	0	0	0	0	0	71915	0	5694	5694	0	0	0	0	0	0	0	5694
1987	5	0	0	0	14950	62419	101945	0	0	0	0	179314	0	0	0	0	0	0	0	0	0	0	0

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Injection/Withdrawal Meter Adjustment History
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Date		Monthly Injection Adjustments											Monthly Withdrawal Adjustments										
Year	Mnth	South Kimball (mcf)	Mid Kimball (mcf)	Subtotal Kim/Col (mcf)	Corunna (mcf)	Wilk. (mcf)	Seckerton (mcf)	Dow Moore (mcf)	Black Creek (mcf)	Coveny (mcf)	Ladysmith (mcf)	Total (mcf)	South Kimball (mcf)	Mid Kimball (mcf)	Subtotal Kim/Col (mcf)	Corunna (mcf)	Wilk. (mcf)	Seckerton (mcf)	Dow Moore (mcf)	Black Creek (mcf)	Coveny (mcf)	Ladysmith (mcf)	Total (mcf)
1987	6	20573	0	20573	46915	0	56326	0	0	0	0	123814	0	0	0	0	0	0	0	0	0	0	0
1987	7	43441	0	43441	0	0	0	0	0	0	0	43441	0	0	0	0	0	0	0	0	0	0	0
1987	8	79804	54981	134785	11360	0	0	0	0	0	0	146145	0	0	0	0	0	0	0	0	0	0	0
1987	9	9972	188866	198839	4999	3816	0	0	0	0	0	207653	0	0	0	0	0	0	0	0	0	0	0
1987	10	7113	18416	25530	1108	4526	4063	0	0	0	0	35227	0	-9634	-9634	0	0	0	0	0	0	0	-9634
1987	11	597	438	1034	64	0	194	0	0	0	0	1292	0	0	0	3226	289	4826	0	0	0	0	8342
1987	12	0	0	0	0	0	0	0	0	0	0	0	0	-371	-371	-9588	-4610	-21583	0	0	0	0	-36152
1988	1	0	0	0	0	0	0	0	0	0	0	0	6061	2496	8557	985	3594	3308	0	0	0	0	16443
1988	2	0	0	0	0	0	0	0	0	0	0	0	37140	67477	104617	0	0	10608	0	0	0	0	115225
1988	3	0	0	0	0	-1839	0	0	0	0	0	-1839	-10742	-64519	-75261	0	-3954	0	0	0	0	0	-79215
1988	4	0	0	0	0	16161	0	0	0	0	0	16161	0	0	0	49	935	0	0	0	0	0	985
1988	5	0	0	0	3283	47448	54741	0	0	0	0	105472	0	0	0	0	0	0	0	0	0	0	0
1988	6	0	727	727	37853	0	64156	0	0	0	0	102736	0	0	0	0	0	0	0	0	0	0	0
1988	7	84425	48299	132724	9298	0	9383	0	0	0	0	151405	0	0	0	0	0	0	0	0	0	0	0
1988	8	53918	172116	226034	0	0	0	0	0	0	0	226034	0	0	0	0	0	0	0	0	0	0	0
1988	9	1267	20365	21632	0	0	0	41715	0	0	0	63347	0	0	0	0	0	0	0	0	0	0	0
1988	10	0	0	0	0	0	0	3385	0	0	0	3385	0	0	0	-5006	-20658	-237	0	0	0	0	-25900
1988	11	0	0	0	0	2457	0	0	0	0	0	2457	0	0	0	-7508	-18695	-3760	0	0	0	0	-29963
1988	12	0	0	0	0	0	0	0	0	0	0	0	-166	-46	-212	-95	-113	-219	0	0	0	0	-639
1989	1	0	0	0	0	0	0	0	0	0	0	0	21202	1966	23168	3985	2164	17304	21431	0	0	0	68053
1989	2	0	0	0	0	0	0	0	0	0	0	0	12842	23775	36617	0	0	7858	13220	0	0	0	57696
1989	3	11046	0	11046	0	0	0	0	0	0	0	11046	-2605	-11434	-14039	0	0	0	-5154	0	0	0	-19193
1989	4	349	0	349	0	15645	0	0	0	0	0	15995	9768	8292	18060	0	0	0	0	0	0	0	18060
1989	5	23288	0	23288	0	42107	19415	0	0	0	0	84810	127	85	212	0	215	0	0	0	0	0	427
1989	6	0	3336	3336	17449	44285	94952	0	0	0	0	160022	0	0	0	0	0	0	0	0	0	0	0
1989	7	10989	225240	236229	31171	0	61024	0	0	0	0	328424	0	0	0	0	0	0	0	0	0	0	0
1989	8	67199	52390	119588	0	0	0	46841	0	0	0	166429	0	0	0	0	0	0	0	0	0	0	0
1989	9	40024	9005	49029	0	0	0	133543	0	0	0	182572	0	0	0	0	0	0	0	0	0	0	0
1989	10	0	0	0	7191	5267	11858	45351	0	0	0	69666	0	0	0	8024	0	10530	0	0	0	0	18554
1989	11	0	0	0	925	0	1186	0	0	0	0	2111	-1031	0	-1031	-26811	-21018	-60202	0	0	0	0	-109062
1989	12	0	0	0	0	0	0	0	0	0	0	0	-111067	-82004	-193070	-24446	-63026	-46526	0	0	0	0	-327069
1990	1	0	0	0	0	0	0	0	0	0	0	0	-13813	-7223	-21036	-5952	-8236	-14699	-16786	0	0	0	-66708
1990	2	0	0	0	0	0	0	0	0	0	0	0	13552	27122	40674	498	0	8896	43611	0	0	0	93678
1990	3	0	0	0	0	0	0	0	0	0	0	0	-4540	-23930	-28470	0	0	0	-16298	0	0	0	-44768
1990	4	5292	0	5292	0	10329	6160	0	0	0	0	21781	0	-12998	-12998	0	0	0	-6319	0	0	0	-19317
1990	5	0	0	0	4480	18236	9443	0	0	0	0	32159	0	0	0	0	0	0	0	0	0	0	0
1990	6	0	0	0	21721	6121	45443	15218	0	0	0	88503	0	0	0	0	0	0	0	0	0	0	0
1990	7	27789	586	28375	3760	0	13372	85506	0	0	0	131012	0	0	0	0	0	0	0	0	0	0	0
1990	8	104903	67732	172635	0	0	0	41196	0	0	0	213831	0	0	0	0	0	0	0	0	0	0	0
1990	9	14477	160110	174587	0	2104	0	0	0	0	0	176691	0	0	0	0	0	0	0	0	0	0	0
1990	10	14159	31785	45944	0	0	3872	0	0	0	0	49816	0	0	0	0	0	0	0	0	0	0	0
1990	11	0	0	0	0	0	25138	0	0	0	0	25138	0	0	0	-7445	0	-40102	0	0	0	0	-47547
1990	12	0	0	0	0	0	3170	0	0	0	0	3170	0	0	0	-27143	-36257	-60724	-21583	0	0	0	-145707
1991	1	0	0	0	0	0	0	0	0	0	0	0	2171	1041	3212	406	798	985	494	0	0	0	5895
1991	2	0	0	0	0	0	0	0	0	0	0	0	11928	28993	40921	413	5104	946	2761	0	0	0	50145
1991	3	-1034	0	-1034	0	0	0	0	0	0	0	-1034	0	-46085	-46085	0	0	0	-16065	0	0	0	-62151
1991	4	0	0	0	0	19603	1186	15734	0	0	0	36522	0	0	0	0	0	0	-43836	0	0	0	-43836

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Date		Monthly Injection Adjustments											Monthly Withdrawal Adjustments										
Year	Mnth	South Kimball (mcf)	Mid Kimball (mcf)	Subtotal Kim/Col (mcf)	Corunna (mcf)	Wilk. (mcf)	Seckerton (mcf)	Dow Moore (mcf)	Black Creek (mcf)	Coveny (mcf)	Ladysmith (mcf)	Total (mcf)	South Kimball (mcf)	Mid Kimball (mcf)	Subtotal Kim/Col (mcf)	Corunna (mcf)	Wilk. (mcf)	Seckerton (mcf)	Dow Moore (mcf)	Black Creek (mcf)	Coveny (mcf)	Ladysmith (mcf)	Total (mcf)
1991	5	160195	2595	162789	0	195312	29134	0	0	0	0	387235	0	0	0	0	0	0	0	0	0	0	0
1991	6	122818	169077	291895	0	13446	321	0	0	0	0	305662	0	0	0	0	0	0	0	0	0	0	0
1991	7	2033	136942	138976	34284	0	35025	43346	0	0	0	251631	0	0	0	0	0	0	0	0	0	0	0
1991	8	11091	20026	31118	28724	0	66027	55408	0	0	0	181276	0	0	0	0	0	0	0	0	0	0	0
1991	9	5327	3940	9266	4275	2429	38637	22864	0	0	0	77471	0	0	0	0	0	0	0	0	0	0	0
1991	10	0	12278	12278	0	6114	10050	0	0	0	0	28442	0	0	0	625	8433	470	0	0	0	0	9528
1991	11	0	0	0	0	0	0	0	0	0	0	0	-1762	-5450	-7212	-13195	-20210	-13453	-1225	0	0	0	-55295
1991	12	0	0	0	0	0	0	0	0	0	0	0	0	0	0	318	515	1158	1377	0	0	0	3368
1992	1	0	0	0	0	0	0	0	0	0	0	0	13810	3742	17552	314	590	5578	16637	0	0	0	40670
1992	2	0	0	0	0	0	0	0	0	0	0	0	-18960	-33631	-52591	0	0	-2259	-5532	0	0	0	-60382
1992	3	0	0	0	0	0	0	0	0	0	0	0	-5083	-20181	-25265	-21	-102	0	-5394	0	0	0	-30782
1992	4	0	0	0	0	21671	364	0	0	0	0	22035	6594	27983	34577	2736	5705	0	23895	0	0	0	66913
1992	5	0	0	0	5585	69613	33899	14159	0	0	0	123256	0	0	0	0	0	0	0	0	0	0	0
1992	6	0	35622	35622	34033	14710	78978	0	0	0	0	163344	0	0	0	0	0	0	0	0	0	0	0
1992	7	44338	88697	133034	10414	0	19821	1236	0	0	0	164505	0	0	0	0	0	0	0	0	0	0	0
1992	8	58620	81721	140342	0	0	0	32999	0	0	0	173341	0	0	0	0	0	0	0	0	0	0	0
1992	9	19994	11805	31799	0	0	0	60523	0	0	0	92322	0	0	0	0	0	0	0	0	0	0	0
1992	10	4158	15003	19161	0	3421	0	43540	0	0	0	66122	0	0	0	-717	-6453	0	0	0	0	0	-7170
1992	11	0	0	0	0	0	0	0	0	0	0	0	0	0	0	-17573	-24132	-11575	0	0	0	0	-53279
1992	12	0	0	0	0	0	0	0	0	0	0	0	-21957	-1426	-23383	-9687	-19504	-35463	0	0	0	0	-88037
1993	1	0	0	0	0	0	0	0	0	0	0	0	-61395	-46770	-108165	-5366	-10170	-36102	-3085	0	0	0	-162888
1993	2	0	0	0	0	0	0	0	0	0	0	0	1398	4526	5923	0	99	339	2468	0	0	0	8829
1993	3	0	0	0	0	0	0	0	0	0	0	0	-4872	-24749	-29621	0	0	-289	-37391	0	0	0	-67301
1993	4	-943	-5602	-6545	0	0	0	-5581	0	0	0	-12126	109	378	487	0	0	0	755	0	0	0	1243
1993	5	0	0	0	-1260	-48426	-41252	-4992	0	0	0	-95930	0	0	0	0	0	0	0	0	0	0	0
1993	6	0	473	473	452	261	1070	0	0	0	0	2256	0	0	0	0	0	0	0	0	0	0	0
1993	7	198	90744	90942	8331	0	3163	34987	0	0	0	137422	0	0	0	0	0	0	0	0	0	0	0
1993	8	-2358	-4105	-6464	-540	-378	0	-6848	0	0	0	-14230	0	0	0	0	0	0	0	0	0	0	0
1993	9	4917	2535	7452	0	0	0	3318	0	0	0	10770	0	0	0	0	0	0	0	0	0	0	0
1993	10	-367	-28	-395	0	0	0	-339	0	0	0	-734	0	0	0	0	0	0	0	0	0	0	0
1993	11	8695	0	8695	0	0	0	0	0	0	0	8695	0	0	0	-4109	-1161	-5761	-205	0	0	0	-11236
1993	12	0	0	0	0	0	0	0	0	0	0	0	-35993	0	-35993	-21555	-35696	-62320	-8942	0	0	0	-164505
1994	1	0	0	0	0	0	0	0	0	0	0	0	-69260	-33642	-102902	-7092	-27104	-23291	-118593	0	0	0	-278982
1994	2	0	0	0	0	0	0	3664	0	0	0	3664	-19903	-139491	-159394	-3421	-19652	-7801	-104882	0	0	0	-295150
1994	3	0	0	0	0	0	0	0	0	0	0	0	-2768	-103375	-106142	0	-2806	-1003	-43611	0	0	0	-153562
1994	4	12948	5263	18212	0	30863	4836	0	0	0	0	53911	0	14872	14872	0	0	0	11349	0	0	0	26221
1994	5	-7978	-1931	-9909	0	-38435	0	-23620	0	0	0	-71964	0	0	0	0	0	0	0	0	0	0	0
1994	6	0	0	0	0	-12684	-6788	-53950	0	0	0	-73422	0	0	0	0	0	0	0	0	0	0	0
1994	7	0	8109	8109	14569	0	39389	36197	0	0	0	98263	0	0	0	0	0	0	0	0	0	0	0
1994	8	120	2644	2764	413	64	635	755	0	0	0	4631	0	0	0	0	0	0	0	0	0	0	0
1994	9	40377	37193	77570	0	0	0	0	0	0	0	77570	0	0	0	0	0	0	0	0	0	0	0
1994	10	10760	4910	15670	413	653	1504	11918	0	0	0	30157	0	0	0	0	0	0	0	0	0	0	0
1994	11	1070	921	1991	0	0	0	1730	0	0	0	3721	0	0	0	-1052	-1218	-2496	0	0	0	0	-4766
1994	12	0	0	0	0	0	0	0	0	0	0	0	-14177	0	-14177	-11166	-19454	-29864	0	0	0	0	-74661
1995	1	0	0	0	0	0	0	0	0	0	0	0	-9609	-6877	-16485	-1641	-3788	-4984	0	0	0	0	-26899
1995	2	0	0	0	0	0	0	0	0	0	0	0	-23870	-44673	-68543	0	-5405	-7201	-133935	0	0	0	-215084
1995	3	0	0	0	0	0	0	0	0	0	0	0	0	86812	86812	0	0	0	129328	0	0	0	216140

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Date		Monthly Injection Adjustments											Monthly Withdrawal Adjustments										
Year	Mnth	South Kimball (mcf)	Mid Kimball (mcf)	Subtotal Kim/Col (mcf)	Corunna (mcf)	Wilk. (mcf)	Seckerton (mcf)	Dow Moore (mcf)	Black Creek (mcf)	Coveny (mcf)	Ladysmith (mcf)	Total (mcf)	South Kimball (mcf)	Mid Kimball (mcf)	Subtotal Kim/Col (mcf)	Corunna (mcf)	Wilk. (mcf)	Seckerton (mcf)	Dow Moore (mcf)	Black Creek (mcf)	Coveny (mcf)	Ladysmith (mcf)	Total (mcf)
1995	4	-7611	0	-7611	0	0	0	0	0	0	0	-7611	0	63287	63287	0	0	0	22165	0	0	0	85453
1995	5	5334	0	5334	0	5729	0	55115	0	0	0	66178	0	0	0	0	0	0	0	0	0	0	0
1995	6	0	0	0	960	63651	27955	68766	0	0	0	161332	0	0	0	0	0	0	0	0	0	0	0
1995	7	653	46336	46989	29007	14350	77990	36254	0	0	0	204589	0	0	0	0	0	0	0	0	0	0	0
1995	8	4734	99682	104416	19574	0	34002	60378	0	0	0	218371	0	0	0	0	0	0	0	0	0	0	0
1995	9	29098	40787	69885	1027	2711	4303	31548	0	0	0	109475	0	0	0	0	0	0	0	0	0	0	0
1995	10	63527	20492	84019	3163	4370	6707	8289	0	0	0	106548	0	0	0	0	0	0	0	0	0	0	0
1995	11	3647	0	3647	0	0	0	0	0	0	0	3647	0	1458	1458	11035	8267	28096	1564	0	0	0	50420
1995	12	0	0	0	0	0	0	0	0	0	0	0	3459	0	3459	1659	4872	5440	17213	0	0	0	32643
1996	1	0	0	0	0	0	0	0	0	0	0	0	76825	34754	111579	6241	19370	14117	96675	0	0	0	247981
1996	2	0	0	0	0	0	0	0	0	0	0	0	-14922	-48171	-63093	-1183	-1176	-2047	-19422	0	0	0	-86921
1996	3	0	0	0	0	0	0	0	0	0	0	0	-24622	-78392	-103015	-1274	0	-1666	-9069	0	0	0	-115024
1996	4	0	0	0	0	0	0	0	0	0	0	0	-60774	0	-60774	0	-3509	0	-10509	0	0	0	-74792
1996	5	62080	95008	157088	0	0	0	0	0	0	0	157088	0	0	0	0	0	0	0	0	0	0	0
1996	6	118116	192163	310280	0	0	3851	24326	0	0	0	338457	0	0	0	0	0	0	0	0	0	0	0
1996	7	37380	67926	105306	8250	26525	42665	98793	0	0	0	281538	0	0	0	0	0	0	0	0	0	0	0
1996	8	6305	3082	9386	25540	33649	5620	110548	0	0	0	184743	0	0	0	0	0	0	0	0	0	0	0
1996	9	2743	3523	6266	2775	4190	7547	9817	0	0	0	30595	0	0	0	0	0	0	0	0	0	0	0
1996	10	-7392	-9856	-17248	0	0	-17654	-15070	0	0	0	-49972	0	0	0	0	0	0	0	0	0	0	0
1996	11	0	0	0	0	0	0	0	0	0	0	0	-3668	-8656	-12323	-24530	-32544	-20909	-3177	0	0	0	-93483
1996	12	0	0	0	0	0	0	0	0	0	0	0	0	0	0	-7325	-12489	-20859	-31689	0	0	0	-72363
1997	1	0	0	0	0	0	0	0	0	0	0	0	102584	101973	204557	2259	12338	30496	43423	0	0	0	293074
1997	2	0	0	0	0	0	0	0	0	0	0	0	8910	27711	36621	0	215	826	26814	0	0	0	64477
1997	3	0	0	0	0	0	0	0	0	0	0	0	-13930	-21975	-35904	-2799	-2648	-5638	-36635	0	0	0	-83624
1997	4	0	0	0	0	10047	0	0	0	0	0	10047	-3615	-3488	-7103	0	-1168	0	-42368	0	0	0	-50639
1997	5	12274	26087	38361	0	112948	0	23366	0	0	0	174675	0	0	0	0	0	0	0	0	0	0	0
1997	6	0	0	0	9814	38047	22614	195051	0	0	0	265525	0	0	0	0	0	0	0	0	0	0	0
1997	7	0	51543	51543	37168	6442	89194	109482	0	0	0	293829	0	0	0	0	0	0	0	0	0	0	0
1997	8	23408	180560	203968	20199	4614	46360	99301	0	0	0	374442	0	0	0	0	0	0	0	0	0	0	0
1997	9	102330	104490	206820	5514	0	18494	339	2153	0	0	233320	0	0	0	0	0	0	0	0	0	0	0
1997	10	94048	16330	110378	0	1814	10467	5232	7706	20609	0	156206	-4035	0	-4035	-6118	-8179	0	0	0	0	0	-18332
1997	11	-4734	0	-4734	0	0	0	0	0	0	0	-4734	0	0	0	-29695	-53445	-32540	-6075	0	0	0	-121756
1997	12	0	0	0	0	0	0	0	0	0	0	0	-4360	-44574	-48934	-20337	-35460	-72275	-28057	0	0	0	-205062
1998	1	0	0	0	0	0	0	0	0	0	0	0	-8409	-26917	-35325	-999	-1677	-6559	-731	0	0	0	-45291
1998	2	0	0	0	0	0	0	0	0	0	0	0	-64339	-38347	-102686	0	0	-5320	-45644	0	0	0	-153650
1998	3	10061	13217	23277	0	9778	0	4	0	0	0	33059	971	865	1836	0	0	0	3562	0	0	0	5397
1998	4	10043	14678	24721	116	3008	0	6231	0	0	0	34076	0	0	0	0	0	0	0	0	0	0	0
1998	5	34817	75180	109997	0	114738	2316	226698	0	0	0	453749	0	0	0	0	0	0	0	0	0	0	0
1998	6	39579	224432	264011	0	46438	0	65366	0	0	0	375815	0	0	0	0	0	0	0	0	0	0	0
1998	7	98210	83214	181425	0	0	9905	34231	0	0	0	225561	0	0	0	0	0	0	0	0	0	0	0
1998	8	20605	17255	37860	46318	10431	169094	0	0	0	0	263704	0	0	0	0	0	0	0	0	0	0	0
1998	9	0	0	0	26483	0	33179	0	1038	4610	0	65310	0	0	0	0	0	0	0	0	0	0	0
1998	10	6128	4783	10911	4169	921	10880	2362	1790	8483	0	39516	7	7607	7614	0	0	0	0	0	0	0	7614
1998	11	3820	18473	22292	0	0	0	0	1246	15582	0	39120	6474	36865	43339	0	95	0	0	4	25	0	43462
1998	12	6273	6389	12662	0	11	0	0	0	1225	0	13898	4836	7374	12211	24774	66083	38054	56149	0	0	0	197271
1999	1	0	0	0	0	0	0	0	0	0	0	0	58218	7989	66207	50515	59270	128089	271364	4593	4074	0	584111
1999	2	0	0	0	0	2242	0	0	0	0	0	2242	78565	48411	126977	2951	7413	28848	93540	1786	840	0	262355

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Date		Monthly Injection Adjustments											Monthly Withdrawal Adjustments										
Year	Mnth	South Kimball (mcf)	Mid Kimball (mcf)	Subtotal Kim/Col (mcf)	Corunna (mcf)	Wilk. (mcf)	Seckerton (mcf)	Dow Moore (mcf)	Black Creek (mcf)	Coveny (mcf)	Ladysmith (mcf)	Total (mcf)	South Kimball (mcf)	Mid Kimball (mcf)	Subtotal Kim/Col (mcf)	Corunna (mcf)	Wilk. (mcf)	Seckerton (mcf)	Dow Moore (mcf)	Black Creek (mcf)	Coveny (mcf)	Ladysmith (mcf)	Total (mcf)
1999	3	0	-19320	-19320	0	0	0	-8832	-92	32	0	-28212	16637	52302	68939	0	0	0	12384	2136	7095	0	90554
1999	4	36169	0	36169	0	7385	0	22970	0	0	0	66524	-11	-1363	-1373	0	0	0	0	0	0	0	-1373
1999	5	23330	41937	65268	0	10234	0	195213	12433	23083	0	306231	0	0	0	0	0	0	0	0	0	0	0
1999	6	21488	100897	122384	0	6065	0	103438	360	6086	0	238333	0	0	0	0	0	0	0	0	0	0	0
1999	7	52898	53505	106404	22773	25572	4243	57071	0	0	0	216062	0	0	0	0	0	0	0	0	0	0	0
1999	8	9404	0	9404	39240	73567	7724	29600	0	0	0	159535	0	0	0	0	0	0	0	0	0	0	0
1999	9	26892	15116	42008	145	0	93999	15246	0	0	11812	163210	0	0	0	0	0	0	0	0	0	0	0
1999	10	46	55	102	0	768	79216	0	0	4	8877	88965	0	0	0	0	1479	19621	0	0	0	0	21100
1999	11	5826	0	5826	16366	17392	26636	7021	0	5358	17973	96571	1455	0	1455	-23775	-42582	1192	0	-517	0	0	-64227
1999	12	0	0	0	21812	1891	0	0	0	0	0	23703	35792	7359	43150	27600	51817	46664	0	0	13217	0	182447
2000	1	0	0	0	0	0	0	0	0	0	0	0	98513	98865	197377	10521	4094	86842	73252	3680	16903	18686	411355
2000	2	0	81	81	0	-14	0	0	-81	0	0	-15	13763	17971	31734	1595	1582	4902	23983	730	1885	6944	73354
2000	3	5547	16086	21634	0	177	0	0	-2350	0	0	19461	591	18371	18963	0	396	487	57737	-1201	618	-120	76879
2000	4	40086	0	40086	0	2261	0	0	0	0	0	42347	10406	21608	32014	0	686	0	43899	-283	0	0	76316
2000	5	0	0	0	0	42650	0	25328	4108	8791	-1850	79026	0	0	0	0	0	0	0	0	0	0	0
2000	6	12156	0	12156	11218	10493	21965	40778	153	6931	11238	114931	0	0	0	0	0	0	0	0	0	0	0
2000	7	39879	2858	42737	38982	0	128318	0	0	0	53628	263666	0	0	0	0	0	0	0	0	0	0	0
2000	8	123558	37195	160753	23823	0	62140	8500	0	0	14456	269672	0	0	0	0	0	0	0	0	0	0	0
2000	9	16422	128695	145117	0	6773	156	90560	0	1473	10302	254381	0	0	0	0	0	0	0	0	0	0	0
2000	10	27586	131038	158624	894	6928	7421	77882	0	438	0	252187	0	0	0	0	0	0	0	0	0	0	0
2000	11	264	0	264	0	0	0	-339	0	0	0	-75	-5653	4143	-1510	15752	0	30613	3	-2043	-4516	8190	46489
2000	12	0	0	0	0	0	0	0	0	0	0	0	11039	0	11039	15961	17803	46399	147924	7045	14248	23013	283432
2001	1	0	0	0	0	0	0	0	0	0	0	0	119233	20477	139710	7461	20233	29649	168336	5321	9034	11678	391423
2001	2	0	0	0	0	0	0	0	0	0	0	0	74016	184266	258282	5137	50448	9558	10890	952	0	0	335267
2001	3	0	0	0	0	0	0	0	0	0	0	0	19665	74227	93892	4541	24489	11111	32782	652	-194	5416	172690
2001	4	0	59284	59284	12319	1599	8710	0	0	0	17161	99072	0	17014	17014	0	781	-21	2733	0	0	1822	22328
2001	5	18294	4	18298	0	24706	0	212858	0	0	0	255862	0	0	0	0	0	0	0	0	0	0	0
2001	6	28985	3100	32085	0	65525	0	190388	14703	23583	0	326285	0	0	0	0	0	0	0	0	0	0	0
2001	7	164192	4896	169088	0	26127	31337	95244	975	30973	0	353743	0	0	0	0	0	0	0	0	0	0	0
2001	8	19098	121261	140360	49835	1198	64002	59073	0	104	57906	372478	0	0	0	0	0	0	0	0	0	0	0
2001	9	12570	143490	156060	27017	796	70034	2311	0	2223	32904	291345	0	0	0	0	0	0	0	0	0	0	0
2001	10	10438	26578	37015	3454	1137	19919	405	369	748	287	63335	16464	26651	43116	0	0	0	0	0	0	368	43484
2001	11	11468	20109	31577	0	0	2875	0	0	0	16616	51069	0	0	0	0	0	0	0	0	0	13792	13792
2001	12	-2644	1485	-1159	-414	2147	-3321	0	0	-608	539	-2817	0	0	0	9209	0	13172	0	-3835	0	1540	20087
2002	1	0	0	0	0	0	0	0	0	0	0	0	37574	873	38447	25014	0	55484	437	1496	0	31579	152457
2002	2	0	0	0	0	0	0	0	0	0	0	0	65701	56501	122202	5938	20394	41058	10604	109	0	3445	203751
2002	3	0	0	0	0	0	0	0	0	0	0	0	1388	138992	140380	0	6188	23256	27061	-2805	1082	0	195163
2002	4	0	0	0	0	-30329	-10648	-1780	0	0	0	-42757	0	0	0	0	26672	0	84133	0	0	0	110805
2002	5	2301	15202	17503	0	6486	26709	60564	0	0	0	111262	0	0	0	0	0	0	28043	0	0	0	28043
2002	6	22342	-16738	5604	507	8370	0	48603	-2315	-1082	0	59686	0	0	0	0	0	0	0	0	0	0	0
2002	7	45267	67311	112578	1791	19304	0	52741	0	0	0	186414	0	0	0	0	0	0	0	0	0	0	0
2002	8	20195	34144	54340	51097	1268	44930	2304	1560	784	21822	178104	0	0	0	0	0	0	0	0	0	0	0
2002	9	0	0	0	19546	15	81511	0	0	0	66051	167122	0	0	0	0	0	0	0	0	0	0	0
2002	10	4641	-3069	1572	5365	0	38396	0	0	0	36	45369	17103	17041	34143	0	0	51485	0	0	0	576	86204
2002	11	10824	10269	21093	0	0	0	0	0	0	0	21093	16765	30603	47367	1052	0	20912	0	-61	2756	5061	77088
2002	12	0	0	0	0	0	0	0	0	0	0	0	60883	17380	78263	41901	17216	48902	0	13474	-39466	45992	206281
2003	1	0	0	0	0	0	0	0	0	0	0	0	103511	158444	261954	8789	76552	40679	40639	2430	6447	4606	442096

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Date		Monthly Injection Adjustments											Monthly Withdrawal Adjustments										
Year	Mnth	South Kimball (mcf)	Mid Kimball (mcf)	Subtotal Kim/Col (mcf)	Corunna (mcf)	Wilk. (mcf)	Seckerton (mcf)	Dow Moore (mcf)	Black Creek (mcf)	Coveny (mcf)	Ladysmith (mcf)	Total (mcf)	South Kimball (mcf)	Mid Kimball (mcf)	Subtotal Kim/Col (mcf)	Corunna (mcf)	Wilk. (mcf)	Seckerton (mcf)	Dow Moore (mcf)	Black Creek (mcf)	Coveny (mcf)	Ladysmith (mcf)	Total (mcf)
2003	2	0	7015	7015	0	0	0	0	0	0	0	7015	18042	135596	153638	4879	35697	15389	172143	0	5465	17325	404536
2003	3	0	0	0	2814	0	139	6395	394	916	12931	23589	2561	40602	43163	0	1405	1741	169656	142	73	12709	228888
2003	4	25889	61472	87361	0	0	0	544	0	0	13716	101621	13146	13971	27117	1226	180	2957	82483	1094	0	0	115056
2003	5	86398	138985	225383	685	1489	0	0	11687	36431	2705	278380	0	0	0	0	0	0	0	0	0	0	0
2003	6	161896	263001	424897	651	34498	0	42658	785	29895	840	534223	0	0	0	0	0	0	0	0	0	0	0
2003	7	36429	54378	90807	0	29102	0	222109	0	0	0	342018	0	0	0	0	0	0	0	0	0	0	0
2003	8	4537	606	5143	8018	43463	951	78816	0	0	39344	175734	0	0	0	0	0	0	0	0	0	0	0
2003	9	4082	7854	11936	52720	14945	91728	45537	0	0	31781	248646	0	0	0	0	0	0	0	0	0	0	0
2003	10	12876	0	12876	10691	0	53583	0	0	-1798	14	75366	0	0	0	0	0	0	0	0	-633	0	-633
2003	11	1634	6506	8140	221	0	530	0	0	199	0	9089	2042	17811	19852	0	0	0	0	0	0	-3617	16236
2003	12	0	0	0	0	0	0	0	0	0	0	0	16127	28231	44358	29372	0	70166	0	13310	12962	41109	211277
2004	1	0	0	0	0	0	0	0	0	0	0	0	146479	175607	322086	26432	51523	69885	90776	9981	25380	16657	612721
2004	2	0	0	0	0	0	0	0	0	0	0	0	53040	108976	162016	7717	67951	17533	162242	1677	11211	1897	432245
2004	3	36702	23270	59972	0	1118	0	0	4494	619	0	66204	0	8245	8245	0	745	0	58943	0	0	4698	72631
2004	4	10338	15403	25741	0	45755	0	7395	9766	17384	0	106041	6808	9742	16550	0	0	0	46844	2024	-84	3275	68608
2004	5	5713	62747	68460	46910	724	0	108950	2075	34108	0	261226	0	0	0	0	0	0	6724	0	0	0	6724
2004	6	0	0	0	41119	9094	0	116802	0	2850	0	169865	0	0	0	0	0	0	0	0	0	0	0
2004	7	51001	175596	226597	14510	6406	0	120536	541	4021	0	372611	0	0	0	0	0	0	0	0	0	0	0
2004	8	91468	116198	207667	0	0	25628	83845	0	0	9861	327001	0	0	0	0	0	0	0	0	0	0	0
2004	9	0	10645	10645	2451	847	190482	2135	0	499	103372	310431	0	0	0	0	0	0	0	0	0	0	0
2004	10	83810	18662	102473	0	12060	35836	0	0	0	8854	159224	0	0	0	0	0	0	0	7505	0	0	7505
2004	11	11845	0	11845	0	0	0	0	433	0	0	12278	13323	0	13323	59	0	3	0	0	0	0	13385
2004	12	0	0	0	0	0	0	0	0	0	0	0	88233	27498	115732	81721	70	188491	0	2358	13553	114095	516019
2005	1	0	0	0	0	0	0	0	0	0	0	0	82688	128457	211145	16470	48732	49586	29339	3488	4224	8740	371723
2005	2	0	0	0	0	0	0	0	0	0	0	0	28818	178740	207559	0	44540	0	239178	11204	24048	0	526528
2005	3	19406	0	19406	0	0	0	0	0	0	0	19406	0	38598	38598	0	22103	4594	126420	4827	8662	0	205205
2005	4	947	0	947	0	40551	0	0	3	1567	0	43068	12117	0	12117	0	0	0	19383	1216	0	0	32717
2005	5	11343.1	4554.67	15897.8	0	16485.7	0	-8100.3	3317.48	-8687.3	0	18913.36	0	0	0	0	0	0	0	0	0	0	0
2005	6	27475.9	8788.67	36264.6	0	47815.6	0	199799	578.129	28442.8	0	312900	0	0	0	0	0	0	0	0	0	0	0
2005	7	127317	73899.2	201216	0	14286.4	0	133367	0	1952.21	0	350821.4	0	0	0	0	0	0	0	0	0	0	0
2005	8	9876.06	230376	240252	24348.2	2838.01	0	72862.9	557.971	1237.45	5325.474	347422.3	0	0	0	0	0	0	0	0	0	0	0
2005	9	721.918	56637.4	57359.3	78651	0	128314.4	0	0	995.879	101007.8	366328.4	0	0	0	0	0	0	0	0	0	0	0
2005	10	45087.6	1672.18	46759.8	7083.47	0	74256.09	1352.27	0	0	15036.91	144488.5	56784	0	56784	0	0	0	0	0	0	0	56784
2005	11	18765.5	-107.7	18657.8	0	0	-436.095	-1562.5	0	0	-245.414	16413.8	30324	0	30324	8274	0	15603	-889	1302	2445	19990	77050
2005	12	0	0	0	0	0	0	0	0	0	0	0	45912	8802	54714	47184	0	70140	0	13284	20155	75683	281159
2006	1	0	0	0	0	0	0	0	0	-903.7	0	-903.6995	-414850	-202743	-617593	-19555	-134362	-241451	-51793	477	-64541	10	-1128807
2006	2	0	0	0	0	0	0	0	0	-5114.4	0	-5114.374	-139541	-318667	-458208	0	-18979	-128071	-528252	-2413	0	0	-1135923
2006	3	900.366	0	900.366	0	4225.26	0	0	0	9326.51	0	14452.13	-24275	-476737	-501011	0	5143	-14837	-70660	886	0	0	-580479
2006	4	37333.7	-137343	-100010	0	0	0	9170.85	0	0	0	-90838.75	0	16749	16749	0	-4941	1393	-34790	419	0	0	-21170
2006	5	143.311	7236.2	7379.51	0	105280	34.04097	272104	4499.71	26501.5	0	415799.6	0	0	0	0	0	0	0	0	0	0	0
2006	6	15036.3	106555	121591	0	7216.37	0	69865.1	-895.79	310.539	0	198087.1	0	0	0	0	0	0	0	0	0	0	0
2006	7	81960	46550.3	128510	0	0	0	64453.1	0	221.47	0	193184.8	0	0	0	0	0	0	0	0	0	0	0
2006	8	3634.31	104696	108330	0	2237.09	36129.91	12458.5	0	2052.02	0	161207.6	0	0	0	0	0	0	0	0	0	0	0
2006	9	0	6685.03	6685.03	79877.4	0	155760.4	0	0	0	33654.64	275977.5	0	0	0	0	0	0	0	0	0	0	0
2006	10	4568.68	7116.97	11685.6	10613.8	0	15291.02	0	0	0	31940.01	69530.5	1220	0	1220	0	5206	5423	0	2921	3106	0	17876
2006	11	-136566	0	-136566	0	4608.99	4148.89	0	0	0	8868.667	-118939.9	5336	0	5336	0	6	21903	0	0	164	2294	29702
2006	12	73871.6	0	73871.6	0	0	0	0	0	3312.42	0	77184.06	26578	5170	31747	42107	0	89932	0	0	7823	27945	199555

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2007	1	26213.3	0	26213.3	0	0	0	0	0	27472.8	0	53686.11	47926	59258	107184	13098	0	49905	4140	475	13436	13789	202027
2007	2	0	0	0	0	0	0	0	0	0	0	0	76037	158575	234613	10657	22039	23066	175484	1700	11117	5807	484482
2007	3	0	27256.5	27256.5	0	6742.8	0	0	2306.77	6081.9	2911.695	45299.7	4284	33796	38081	0	16403	4795	87942	1541	456	586	149804
2007	4	0	22618.8	22618.8	0	41897.1	0	0	5806.68	7729.82	0	78052.46	0	7862	7862	3777	32159	10610	75831	4885	1299	0	136422
2007	5	83821.7	36989.5	120811	0	30448	0	129739	-1022.6	23044.9	0	303020.7	0	0	0	0	0	0	0	0	0	0	0
2007	6	117125	15449.5	132574	265.556	0	0	214635	429.068	2725.63	0	350630.1	0	0	0	0	0	0	0	0	0	0	0
2007	7	5152.6	117936	123089	0	3314.66	0	87775.4	0	2317.08	80993.82	297489.8	0	0	0	0	0	0	0	0	0	0	0
2007	8	12338.1	158704	171042	30187.8	0	4561.943	27498.1	0	0	14221.29	247510.9	0	0	0	0	0	0	0	0	0	0	0
2007	9	0	14387.4	14387.4	61096.7	0	142445.2	3158.3	0	0	0	221087.6	0	0	0	0	0	0	0	0	0	0	0
2007	10	-22563	-11544	-34107	-11490	0	-31790.4	0	0	0	0	-77387.04	5497	0	5497	0	0	0	0	0	0	0	5497
2007	11	4089.32	0	4089.32	0	0	0	0	0	0	0	4089.324	27510	3964	31474	16558	0	56682	0	0	0	5659	110374
2007	12	0	0	0	0	0	0	0	0	0	0	0	45602	28454	74055	34295	0	75787	0	0	3	31999	216140
Past # years																							
4		1192620	1861452	3054071	461424	527446	927592	2124297	45755	255711	517133	7913429	381281	395003	776283	333060	272172	501902	901784	86733	106771	405253	3383959
7		1826088	2664732	4490820	706857	725063	1522044	3089715	62876	330069	818231	11745674	938731	1139987	2078718	477142	463153	975709	1613603	109966	109121	583235	6410646
10		2459004	3693554	6152558	956973	1229415	2146365	4279103	89510	415139	856892	16125955	1154483	1301780	2456263	501518	516704	1147167	1961329	117967	134372	583235	7418556
13		2834915	4309807	7144722	1062664	1365051	2378926	4744562	89510	415139	856892	18057465	991196	1039686	2030882	461769	420068	1072697	1764736	117967	134372	583235	6585726
4				2.193%	2.414%	1.145%	3.616%	2.541%	0.801%	1.961%	2.389%	2.235%			0.592%	1.740%	0.588%	2.305%	1.077%	1.818%	0.878%	1.930%	0.995%
7				1.950%	2.109%	0.895%	3.409%	2.170%	0.730%	1.653%	2.086%	1.959%			0.908%	1.413%	0.571%	2.373%	1.141%	1.333%	0.565%	1.476%	1.080%
10				1.654%	1.788%	0.961%	2.803%	1.783%	0.843%	1.695%	2.031%	1.702%			0.755%	1.033%	0.446%	1.777%	0.948%	1.098%	0.513%	1.301%	0.880%
13				1.514%	1.591%	0.839%	2.385%	1.516%	0.843%	1.695%	2.031%	1.516%			0.469%	0.741%	0.278%	1.222%	0.614%	1.098%	0.513%	1.301%	0.597%

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Injection/Withdrawal Meter Adjustment History
All Storage Pools

Date		Cumulative Net Adjustments										
Year	Mnth	South Kimball (mcf)	Mid Kimball (mcf)	Subtotal Kim/Col (mcf)	Corunna (mcf)	Wilk. (mcf)	Seckerton (mcf)	Dow Moore (mcf)	Black Creek (mcf)	Coveny (mcf)	Ladysmith (mcf)	Total (mcf)
1964	1	0	0	0	0	0	0	0	0	0	0	0
1964	2	0	0	0	0	0	0	0	0	0	0	0
1964	3	0	0	0	0	0	0	0	0	0	0	0
1964	4	0	0	0	0	0	0	0	0	0	0	0
1964	5	0	0	0	0	0	0	0	0	0	0	0
1964	6	0	0	0	0	0	0	0	0	0	0	0
1964	7	0	0	0	-20742	0	-24545	0	0	0	0	-45287
1964	8	0	0	0	-42147	0	-50071	0	0	0	0	-92218
1964	9	0	0	0	-42147	0	-61094	0	0	0	0	-103241
1964	10	0	0	1432	-41557	0	-60552	0	0	0	0	-100677
1964	11	0	0	1432	-41557	0	-60847	0	0	0	0	-100972
1964	12	0	0	1432	-41557	0	-41704	0	0	0	0	-81829
1964	1	0	0	1432	-37975	0	-28967	0	0	0	0	-65510
1965	2	0	0	1432	-29320	0	-23429	0	0	0	0	-51317
1965	3	0	0	1432	-23001	0	-18514	0	0	0	0	-40083
1965	4	0	0	-4735	-31392	0	-18514	0	0	0	0	-54641
1965	5	0	0	-4735	-31392	0	-26539	0	0	0	0	-62666
1965	6	0	0	-4735	-29673	0	13666	0	0	0	0	-20742
1965	7	0	0	-4735	-18983	0	17966	0	0	0	0	-5752
1965	8	0	0	-4735	-16467	0	60436	0	0	0	0	39234
1965	9	0	0	-4735	-20972	0	54821	0	0	0	0	29114
1965	10	0	0	-4735	-21278	0	54334	0	0	0	0	28321
1965	11	0	0	-4735	-24050	0	49024	0	0	0	0	20239
1965	12	0	0	-4735	-28292	0	37843	0	0	0	0	4816
1966	1	0	0	-4735	-29066	0	37241	0	0	0	0	3440
1966	2	0	0	-4735	-30444	0	19742	0	0	0	0	-15437
1966	3	0	0	-4735	-31734	0	7163	0	0	0	0	-29306
1966	4	0	0	-9417	-31734	0	2019	0	0	0	0	-39132
1966	5	0	0	-25	-31734	0	246	0	0	0	0	-31513
1966	6	0	0	21172	-31734	0	52728	0	0	0	0	42166
1966	7	0	0	25769	-31734	0	172772	0	0	0	0	166807
1966	8	0	0	26377	-5364	0	192062	0	0	0	0	213075
1966	9	0	0	-7228	-19047	0	189042	0	0	0	0	162767
1966	10	0	0	-721	-19022	0	189042	0	0	0	0	169299
1966	11	0	0	-1893	-19640	0	189042	0	0	0	0	167509
1966	12	0	0	-7758	-29719	0	187786	0	0	0	0	150309
1967	1	0	0	-5144	-27870	0	192005	0	0	0	0	158991
1967	2	0	0	7333	-25790	0	246766	0	0	0	0	228309
1967	3	0	0	7333	-23862	0	270802	0	0	0	0	254273
1967	4	0	0	-217	-24031	0	248003	0	0	0	0	223755
1967	5	0	0	-217	-24031	0	251131	0	0	0	0	226883
1967	6	0	0	-217	-24031	0	318730	0	0	0	0	294482
1967	7	0	0	-217	-24031	0	387258	0	0	0	0	363010
1967	8	0	0	-217	943	0	396218	0	0	0	0	396944
1967	9	0	0	9458	7422	0	398172	0	0	0	0	415052
1967	10	0	0	9987	7427	0	398172	0	0	0	0	415586

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Injection/Withdrawal Meter Adjustment History
All Storage Pools

Date		Cumulative Net Adjustments										
Year	Mnth	South Kimball (mcf)	Mid Kimball (mcf)	Subtotal Kim/Col (mcf)	Corunna (mcf)	Wilk. (mcf)	Seckerton (mcf)	Dow Moore (mcf)	Black Creek (mcf)	Coveny (mcf)	Ladysmith (mcf)	Total (mcf)
1967	11	0	0	7668	7345	0	394860	0	0	0	0	409873
1967	12	0	0	-19463	7345	0	367658	0	0	0	0	355540
1968	1	0	0	-44964	-1917	0	323817	0	0	0	0	276936
1968	2	0	0	-42967	459	0	327340	0	0	0	0	284832
1968	3	0	0	-40945	2013	0	331064	0	0	0	0	292132
1968	4	0	0	-41920	18957	0	328245	0	0	0	0	305282
1968	5	0	0	-41920	28500	0	324873	0	0	0	0	311453
1968	6	0	0	-44834	10749	0	324873	0	0	0	0	290788
1968	7	0	0	-57061	10232	0	320830	0	0	0	0	274001
1968	8	0	0	-50201	10232	0	325929	0	0	0	0	285960
1968	9	0	0	-48758	10232	0	326427	0	0	0	0	287901
1968	10	0	0	-51667	10232	0	330473	0	0	0	0	289038
1968	11	0	0	-37602	10388	0	331603	0	0	0	0	304389
1968	12	0	0	-23663	13502	0	343951	0	0	0	0	333790
1969	1	0	0	-1	28619	0	362913	0	0	0	0	391531
1969	2	0	0	34620	43986	0	384500	0	0	0	0	463106
1969	3	0	0	64461	65365	0	444628	0	0	0	0	574454
1969	4	0	0	53165	65365	0	442230	0	0	0	0	560760
1969	5	0	0	60212	65365	0	442230	0	0	0	0	567807
1969	6	0	0	60212	65365	0	442230	0	0	0	0	567807
1969	7	0	0	-339	65365	0	440499	0	0	0	0	505525
1969	8	0	0	-339	65365	0	440499	0	0	0	0	505525
1969	9	0	0	-3451	64244	0	426448	0	0	0	0	487241
1969	10	0	0	-3791	61621	0	426211	0	0	0	0	484041
1969	11	0	0	3281	61621	0	426211	0	0	0	0	491113
1969	12	0	0	-28601	61621	0	416354	0	0	0	0	449374
1970	1	0	0	-23198	62222	0	420019	0	0	0	0	459043
1970	2	0	0	-48353	37048	0	373112	0	0	0	0	361807
1970	3	0	0	-44710	45155	0	389867	0	0	0	0	390312
1970	4	0	0	-44710	54328	0	397895	0	0	0	0	407513
1970	5	0	0	-56349	54328	0	397895	0	0	0	0	395874
1970	6	0	0	-145711	54328	0	397895	0	0	0	0	306512
1970	7	0	0	-215449	54328	0	397895	0	0	0	0	236774
1970	8	0	0	-232764	54124	0	395402	0	0	0	0	216762
1970	9	0	0	-258205	14808	0	304080	0	0	0	0	60683
1970	10	0	0	-259585	11377	0	300099	0	0	0	0	51891
1970	11	0	0	-253879	12307	0	302274	0	0	0	0	60702
1970	12	0	0	-133477	12661	0	303803	0	0	0	0	182987
1971	1	0	0	-47690	12850	0	313764	0	0	0	0	278924
1971	2	0	0	-22062	21014	0	332781	0	0	0	0	331733
1971	3	0	0	-3984	31088	0	355510	0	0	0	0	382614
1971	4	0	0	11302	32603	0	360150	0	0	0	0	404055
1971	5	0	0	11302	32603	0	360150	0	0	0	0	404055
1971	6	0	0	-42243	32603	0	359871	0	0	0	0	350231
1971	7	0	0	-156001	32603	0	359196	0	0	0	0	235798
1971	8	0	0	-197994	32127	0	341380	0	0	0	0	175513
1971	9	0	0	-196290	42834	0	363058	0	0	0	0	209602

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Injection/Withdrawal Meter Adjustment History
All Storage Pools

Date		Cumulative Net Adjustments										
Year	Mnth	South Kimball (mcf)	Mid Kimball (mcf)	Subtotal Kim/Col (mcf)	Corunna (mcf)	Wilk. (mcf)	Seckerton (mcf)	Dow Moore (mcf)	Black Creek (mcf)	Coveny (mcf)	Ladysmith (mcf)	Total (mcf)
1971	10	0	0	-196290	42834	0	363058	0	0	0	0	209602
1971	11	0	0	-200995	38778	0	363143	0	0	0	0	200926
1971	12	0	0	-204550	38778	0	362902	0	0	0	0	197130
1972	1	0	0	-157564	43156	0	392321	0	0	0	0	277913
1972	2	0	0	-103158	68186	0	432635	0	0	0	0	397663
1972	3	0	0	-41482	100928	0	486793	0	0	0	0	546239
1972	4	0	0	-11077	100928	0	500890	0	0	0	0	590741
1972	5	0	0	-45909	100928	0	500890	0	0	0	0	555909
1972	6	0	0	-143575	100928	0	500890	0	0	0	0	458243
1972	7	0	0	-157084	100928	0	500105	0	0	0	0	443949
1972	8	0	0	-211598	100928	0	500083	0	0	0	0	389413
1972	9	0	0	-234634	100928	0	480257	0	0	0	0	346551
1972	10	0	0	-202629	100928	0	496841	0	0	0	0	395140
1972	11	0	0	-121070	100928	0	496841	0	0	0	0	476699
1972	12	0	0	-84710	101916	0	498684	0	0	0	0	515890
1973	1	0	0	-68189	101916	0	503026	0	0	0	0	536753
1973	2	0	0	-86802	101916	0	493264	0	0	0	0	508378
1973	3	0	0	-81970	101916	0	489156	0	0	0	0	509102
1973	4	0	0	-2502	101916	0	487977	0	0	0	0	587391
1973	5	0	0	97244	101916	0	487977	0	0	0	0	687137
1973	6	0	0	208538	212297	0	491244	0	0	0	0	912079
1973	7	0	0	395605	213914	0	579590	0	0	0	0	1189109
1973	8	0	0	460155	214991	0	657608	0	0	0	0	1332754
1973	9	0	0	476439	215476	0	659069	0	0	0	0	1350984
1973	10	0	0	484902	216715	0	663321	0	0	0	0	1364938
1973	11	0	0	484902	218396	0	715884	0	0	0	0	1419182
1973	12	0	0	543374	241128	0	778974	0	0	0	0	1563476
1974	1	0	0	601309	256467	0	802705	0	0	0	0	1660481
1974	2	0	0	720857	258899	0	811055	0	0	0	0	1790811
1974	3	0	0	713516	258726	0	810336	0	0	0	0	1782578
1974	4	0	0	715058	258726	0	810210	0	0	0	0	1783994
1974	5	0	0	747249	258726	0	810210	0	0	0	0	1816185
1974	6	0	0	920704	259536	0	811881	0	0	0	0	1992121
1974	7	0	0	929199	264201	0	829529	0	0	0	0	2022929
1974	8	0	0	935494	266760	0	835641	0	0	0	0	2037895
1974	9	0	0	952347	267643	0	835653	0	0	0	0	2055643
1974	10	0	0	960146	267643	0	835653	0	0	0	0	2063442
1974	11	0	0	966814	268387	0	835814	0	0	0	0	2071015
1974	12	0	0	913566	252524	0	835680	0	0	0	0	2001770
1975	1	0	0	885512	243655	0	795047	0	0	0	0	1924214
1975	2	0	0	859902	240782	0	769475	0	0	0	0	1870159
1975	3	0	0	913993	242319	0	775954	0	0	0	0	1932266
1975	4	0	0	988285	242319	0	775954	0	0	0	0	2006558
1975	5	0	0	1078303	242319	0	775954	0	0	0	0	2096576
1975	6	0	0	1197460	242766	0	775954	0	0	0	0	2216180
1975	7	0	0	1225118	256368	0	797996	0	0	0	0	2279482
1975	8	0	0	1194766	245585	0	769890	0	0	0	0	2210241

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Injection/Withdrawal Meter Adjustment History
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Date		Cumulative Net Adjustments										
Year	Mnth	South Kimball (mcf)	Mid Kimball (mcf)	Subtotal Kim/Col (mcf)	Corunna (mcf)	Wilk. (mcf)	Seckerton (mcf)	Dow Moore (mcf)	Black Creek (mcf)	Coveny (mcf)	Ladysmith (mcf)	Total (mcf)
1975	9	0	0	1235035	249538	0	777015	0	0	0	0	2261588
1975	10	0	0	1237047	249538	0	777901	0	0	0	0	2264486
1975	11	0	0	1236065	245054	0	773580	0	0	0	0	2254699
1975	12	0	0	1191190	228143	0	748025	0	0	0	0	2167358
1976	1	0	0	1119858	227635	0	724146	0	0	0	0	2071639
1976	2	0	0	1060628	227635	0	707621	0	0	0	0	1995884
1976	3	0	0	988700	227635	0	702809	0	0	0	0	1919144
1976	4	0	0	1138938	233251	0	702809	0	0	0	0	2074998
1976	5	0	0	1163868	235128	0	702809	0	0	0	0	2101805
1976	6	0	0	1095871	235128	0	702809	0	0	0	0	2033808
1976	7	0	0	1107624	240228	0	710818	0	0	0	0	2058670
1976	8	0	0	1084528	233670	0	673426	0	0	0	0	1991624
1976	9	0	0	1069060	229449	0	667464	0	0	0	0	1965973
1976	10	0	0	1057087	235748	0	688623	0	0	0	0	1981458
1976	11	0	0	1073777	273428	0	751741	0	0	0	0	2098946
1976	12	0	0	1181213	286547	0	791394	0	0	0	0	2259154
1977	1	0	0	1223620	287903	0	797368	0	0	0	0	2308891
1977	2	0	0	1445165	297941	0	820426	0	0	0	0	2563532
1977	3	0	0	1500883	298463	0	825074	0	0	0	0	2624420
1977	4	0	0	1486711	298463	0	825074	0	0	0	0	2610248
1977	5	0	0	1692007	298463	0	825074	0	0	0	0	2815544
1977	6	0	0	1883162	298463	0	825074	0	0	0	0	3006699
1977	7	0	0	2086620	358390	0	831399	0	0	0	0	3276409
1977	8	0	0	2139178	401022	0	970472	0	0	0	0	3510672
1977	9	0	0	2131765	400605	0	955425	0	0	0	0	3487795
1977	10	0	0	2139390	403536	0	973268	0	0	0	0	3516194
1977	11	0	0	2115103	375727	0	944512	0	0	0	0	3435342
1977	12	0	0	2079430	345686	0	870455	0	0	0	0	3295571
1978	1	0	0	2052927	342764	0	857420	0	0	0	0	3253111
1978	2	0	0	2031249	342764	0	856978	0	0	0	0	3230991
1978	3	0	0	2000576	342764	0	856978	0	0	0	0	3200318
1978	4	0	0	1988830	342764	0	856978	0	0	0	0	3188572
1978	5	0	0	2128501	342764	0	856978	0	0	0	0	3328243
1978	6	0	0	2272750	342764	0	856978	0	0	0	0	3472492
1978	7	0	0	2299091	365082	2560	924534	0	0	0	0	3591267
1978	8	0	0	2343086	384633	52473	964715	0	0	0	0	3744907
1978	9	0	0	2426662	389213	122387	974555	0	0	0	0	3912817
1978	10	0	0	2459685	390159	149368	976889	0	0	0	0	3976101
1978	11	0	0	2453284	384722	148210	973799	0	0	0	0	3960015
1978	12	0	0	2453196	381131	142601	968236	0	0	0	0	3945164
1979	1	0	0	2458518	381621	143779	971166	0	0	0	0	3955084
1979	2	0	0	2314774	381621	131125	954280	0	0	0	0	3781800
1979	3	0	0	2316077	381621	131125	954280	0	0	0	0	3783103
1979	4	0	0	2266102	381621	131125	954280	0	0	0	0	3733128
1979	5	0	0	2397322	381621	131125	954280	0	0	0	0	3864348
1979	6	0	0	2549182	381621	139788	954280	0	0	0	0	4024871
1979	7	0	0	2639051	402360	171851	960733	0	0	0	0	4173995

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Date		Cumulative Net Adjustments										
Year	Mnth	South Kimball (mcf)	Mid Kimball (mcf)	Subtotal Kim/Col (mcf)	Corunna (mcf)	Wilk. (mcf)	Seckerton (mcf)	Dow Moore (mcf)	Black Creek (mcf)	Coveny (mcf)	Ladysmith (mcf)	Total (mcf)
1979	8	2146	2132	2643329	409477	183621	977416	0	0	0	0	4213843
1979	9	34881	30175	2704107	418376	192089	1042245	0	0	0	0	4356817
1979	10	34881	88061	2761993	422489	192089	1060997	0	0	0	0	4437567
1979	11	30313	88061	2757425	422189	192089	1060810	0	0	0	0	4432512
1979	12	43236	88061	2770348	432207	192224	1093113	0	0	0	0	4487892
1980	1	102704	99174	2840929	457394	207668	1143562	0	0	0	0	4649552
1980	2	112521	173687	2925259	462301	239643	1171079	0	0	0	0	4798281
1980	3	110855	101017	2850922	462301	221347	1166578	0	0	0	0	4701148
1980	4	104381	100981	2844413	462301	225858	1166578	0	0	0	0	4699150
1980	5	150660	100981	2890692	462301	296177	1166578	0	0	0	0	4815748
1980	6	312655	150727	3102433	462301	318533	1166578	0	0	0	0	5049845
1980	7	386254	287288	3312593	462301	333864	1167616	0	0	0	0	5276374
1980	8	386254	484093	3509398	528596	333864	1292926	0	0	0	0	5664784
1980	9	386254	526310	3551614	546299	333864	1384779	0	0	0	0	5816556
1980	10	390779	536889	3566719	547482	333864	1389996	0	0	0	0	5838062
1980	11	390779	536889	3566719	557429	337966	1411283	0	0	0	0	5873398
1980	12	416288	537451	3592789	568150	342912	1433233	0	0	0	0	5937084
1981	1	389466	493187	3521704	563847	320044	1409210	0	0	0	0	5814806
1981	2	393265	493978	3526293	563847	322017	1409338	0	0	0	0	5821495
1981	3	391517	487009	3517577	563847	320941	1409338	0	0	0	0	5811703
1981	4	398616	489067	3526734	563847	331827	1409338	0	0	0	0	5831746
1981	5	467848	494945	3601844	563847	389622	1409338	0	0	0	0	5964650
1981	6	619250	557826	3816126	563847	413150	1409338	0	0	0	0	6202461
1981	7	625311	669892	3934253	573858	413411	1419296	0	0	0	0	6340819
1981	8	632731	687521	3959303	598456	413411	1487437	0	0	0	0	6458607
1981	9	633822	702542	3975414	616470	425057	1542591	0	0	0	0	6559532
1981	10	658133	726048	4023232	621864	425057	1550184	0	0	0	0	6620337
1981	11	679289	730789	4049129	603246	425057	1530603	0	0	0	0	6608035
1981	12	677693	719878	4036622	568941	398631	1455765	0	0	0	0	6459959
1982	1	667559	699841	4006450	566583	390808	1446523	0	0	0	0	6410365
1982	2	638594	676564	3954209	566583	381644	1440660	0	0	0	0	6343096
1982	3	655694	710096	4004841	566583	384048	1440840	0	0	0	0	6396311
1982	4	663174	761148	4063373	566583	386088	1440840	0	0	0	0	6456884
1982	5	691665	910234	4240950	566583	386088	1440840	0	0	0	0	6634461
1982	6	815239	1023976	4478266	566583	394666	1440840	0	0	0	0	6880356
1982	7	888700	1044165	4571916	586786	484648	1457442	0	0	0	0	7100791
1982	8	893988	1044338	4577377	616223	508130	1497243	0	0	0	0	7198973
1982	9	918875	1083225	4641151	618980	511046	1577292	0	0	0	0	7348468
1982	10	934376	1105539	4678965	618980	511046	1577292	0	0	0	0	7386283
1982	11	934376	1105274	4678701	615877	510636	1581983	0	0	0	0	7387197
1982	12	916782	1105274	4661107	569767	478905	1491271	0	0	0	0	7201049
1983	1	903184	1100180	4642415	561023	463990	1473952	0	0	0	0	7141380
1983	2	902849	1099693	4641592	561023	463877	1473497	0	0	0	0	7139989
1983	3	876797	1075237	4591084	561023	443099	1456602	0	0	0	0	7051808
1983	4	874908	1098553	4612512	561023	432233	1456602	0	0	0	0	7062370
1983	5	902139	1152471	4693661	561023	432233	1456602	0	0	0	0	7143519
1983	6	964364	1209799	4813214	561023	432233	1457717	0	0	0	0	7264188

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Date		Cumulative Net Adjustments										
Year	Mnth	South Kimball (mcf)	Mid Kimball (mcf)	Subtotal Kim/Col (mcf)	Corunna (mcf)	Wilk. (mcf)	Seckerton (mcf)	Dow Moore (mcf)	Black Creek (mcf)	Coveny (mcf)	Ladysmith (mcf)	Total (mcf)
1983	7	1095813	1249615	4984479	519478	406464	1547755	0	0	0	0	7458176
1983	8	1095813	1249615	4984479	535292	411568	1581379	0	0	0	0	7512719
1983	9	1097515	1249615	4986181	543662	445888	1602284	0	0	0	0	7578015
1983	10	1097825	1249615	4986491	543662	449340	1602284	0	0	0	0	7581778
1983	11	1100049	1249615	4988715	549310	447123	1612892	0	0	0	0	7598041
1983	12	1125339	1259450	5023840	557588	454649	1637839	0	0	0	0	7673917
1984	1	1152280	1289957	5081288	565446	473895	1658293	0	0	0	0	7778922
1984	2	1149389	1282184	5070624	565164	471915	1657332	0	0	0	0	7765035
1984	3	1161858	1315857	5116765	565164	474217	1660471	0	0	0	0	7816616
1984	4	1213683	1315857	5168590	565164	474217	1660471	0	0	0	0	7868442
1984	5	1301183	1315857	5256090	565164	475840	1660471	0	0	0	0	7957565
1984	6	1451168	1315857	5406076	568546	532459	1682219	0	0	0	0	8189301
1984	7	1451168	1339604	5429823	591823	559641	1742757	0	0	0	0	8324044
1984	8	1454028	1433402	5526480	608277	576719	1787268	0	0	0	0	8498744
1984	9	1470895	1534718	5644664	608277	576719	1787268	0	0	0	0	8616927
1984	10	1476236	1549580	5664866	608277	576719	1787268	0	0	0	0	8637130
1984	11	1476236	1549580	5664866	616901	576719	1795962	0	0	0	0	8654448
1984	12	1476236	1549580	5664866	632433	582244	1821615	0	0	0	0	8701158
1985	1	1446092	1540829	5625972	626831	565229	1798998	0	0	0	0	8617030
1985	2	1419401	1461152	5519604	626831	547099	1791062	0	0	0	0	8484595
1985	3	1406040	1441567	5486657	626831	545845	1789382	0	0	0	0	8448715
1985	4	1406040	1411250	5456341	626831	589904	1790575	0	0	0	0	8463651
1985	5	1406040	1411250	5456341	626831	613764	1802362	0	0	0	0	8499298
1985	6	1406040	1414099	5459190	650154	614343	1864530	0	0	0	0	8588217
1985	7	1415804	1454801	5509656	657624	614343	1875735	0	0	0	0	8657357
1985	8	1440599	1534104	5613754	657899	614343	1875872	0	0	0	0	8761869
1985	9	1564445	1621421	5824916	663268	621731	1884443	0	0	0	0	8994359
1985	10	1610961	1628209	5878220	663268	621731	1884443	0	0	0	0	9047664
1985	11	1610961	1628209	5878220	630650	621731	1849425	0	0	0	0	8980027
1985	12	1611183	1628209	5878443	631031	622257	1851533	0	0	0	0	8983264
1986	1	1595573	1622317	5856941	629341	616027	1843548	0	0	0	0	8945856
1986	2	1579095	1583271	5801417	628988	608741	1839400	0	0	0	0	8878545
1986	3	1577164	1600099	5816314	628988	608487	1839400	0	0	0	0	8893187
1986	4	1575258	1594751	5809059	628988	681185	1839400	0	0	0	0	8958631
1986	5	1647469	1594751	5881270	628988	753700	1839400	0	0	0	0	9103358
1986	6	1815684	1658525	6113260	628988	757039	1839640	0	0	0	0	9338927
1986	7	1818385	1840405	6297841	628988	757039	1881348	0	0	0	0	9565215
1986	8	1825808	1916267	6381126	648089	757039	2003347	0	0	0	0	9789601
1986	9	1831220	1918109	6388380	674956	761011	2060513	0	0	0	0	9884860
1986	10	1838700	1924315	6402066	699247	761011	2060513	0	0	0	0	9922836
1986	11	1849128	1924315	6412494	703737	761011	2060513	0	0	0	0	9937755
1986	12	1863665	1924315	6427031	720332	761011	2092665	0	0	0	0	10001038
1987	1	1856435	1921413	6416900	718027	757841	2086417	0	0	0	0	9979184
1987	2	1820245	1846975	6306270	718027	722646	2071082	0	0	0	0	9818025
1987	3	1805871	1819807	6264729	718027	715176	2071082	0	0	0	0	9769013
1987	4	1838909	1841450	6319409	718027	726716	2071082	0	0	0	0	9835234
1987	5	1838909	1841450	6319409	732977	789135	2173027	0	0	0	0	10014548

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Date		South Kimball	Mid Kimball	Subtotal Kim/Col	Corunna	Wilk.	Seckerton	Dow Moore	Black Creek	Coveny	Ladysmith	Total
Year	Mnth	(mcf)	(mcf)	(mcf)	(mcf)	(mcf)	(mcf)	(mcf)	(mcf)	(mcf)	(mcf)	(mcf)
1987	6	1859482	1841450	6339983	779891	789135	2229353	0	0	0	0	10138362
1987	7	1902923	1841450	6383424	779891	789135	2229353	0	0	0	0	10181803
1987	8	1982727	1896431	6518209	791251	789135	2229353	0	0	0	0	10327948
1987	9	1992700	2085297	6717048	796250	792951	2229353	0	0	0	0	10535601
1987	10	1999813	2113347	6752211	797358	797476	2233416	0	0	0	0	10580461
1987	11	2000409	2113785	6753245	794195	797187	2228785	0	0	0	0	10573412
1987	12	2000409	2114156	6753616	803783	801797	2250368	0	0	0	0	10609563
1988	1	1994348	2111660	6745059	802798	798204	2247060	0	0	0	0	10593120
1988	2	1957208	2044182	6640442	802798	798204	2236452	0	0	0	0	10477895
1988	3	1967950	2108702	6715703	802798	800318	2236452	0	0	0	0	10555271
1988	4	1967950	2108702	6715703	802749	815543	2236452	0	0	0	0	10570447
1988	5	1967950	2108702	6715703	806031	862991	2291193	0	0	0	0	10675918
1988	6	1967950	2109429	6716430	843884	862991	2355349	0	0	0	0	10778654
1988	7	2052376	2157727	6849154	853183	862991	2364731	0	0	0	0	10930059
1988	8	2106294	2329843	7075188	853183	862991	2364731	0	0	0	0	11156093
1988	9	2107561	2350208	7096820	853183	862991	2364731	41715	0	0	0	11219441
1988	10	2107561	2350208	7096820	858188	883649	2364968	45100	0	0	0	11248726
1988	11	2107561	2350208	7096820	865697	904801	2368728	45100	0	0	0	11281146
1988	12	2107727	2350254	7097032	865792	904914	2368946	45100	0	0	0	11281785
1989	1	2086526	2348288	7073864	861807	902750	2351642	23669	0	0	0	11213732
1989	2	2073683	2324513	7037247	861807	902750	2343784	10449	0	0	0	11156037
1989	3	2087334	2335947	7062332	861807	902750	2343784	15603	0	0	0	11186275
1989	4	2077916	2327655	7044621	861807	918396	2343784	15603	0	0	0	11184210
1989	5	2101077	2327570	7067697	861807	960287	2363199	15603	0	0	0	11268593
1989	6	2101077	2330906	7071033	879256	1004572	2458151	15603	0	0	0	11428615
1989	7	2112066	2556146	7307262	910426	1004572	2519176	15603	0	0	0	11757039
1989	8	2179264	2608536	7426851	910426	1004572	2519176	62444	0	0	0	11923468
1989	9	2219288	2617541	7475880	910426	1004572	2519176	195986	0	0	0	12106040
1989	10	2219288	2617541	7475880	909593	1009839	2520503	241337	0	0	0	12157152
1989	11	2220319	2617541	7476911	937329	1030857	2581891	241337	0	0	0	12268325
1989	12	2331386	2699545	7669981	961775	1093883	2628418	241337	0	0	0	12595394
1990	1	2345199	2706767	7691017	967727	1102118	2643117	258123	0	0	0	12662102
1990	2	2331647	2679646	7650343	967229	1102118	2634221	214512	0	0	0	12568424
1990	3	2336187	2703576	7678814	967229	1102118	2634221	230811	0	0	0	12613192
1990	4	2341478	2716574	7697103	967229	1112447	2640381	237129	0	0	0	12654289
1990	5	2341478	2716574	7697103	971709	1130684	2649824	237129	0	0	0	12686448
1990	6	2341478	2716574	7697103	993429	1136805	2695267	252348	0	0	0	12774951
1990	7	2369267	2717160	7725478	997189	1136805	2708639	337853	0	0	0	12905963
1990	8	2474170	2784891	7898112	997189	1136805	2708639	379049	0	0	0	13119794
1990	9	2488647	2945001	8072699	997189	1138909	2708639	379049	0	0	0	13296484
1990	10	2502806	2976786	8118643	997189	1138909	2712511	379049	0	0	0	13346301
1990	11	2502806	2976786	8118643	1004634	1138909	2777750	379049	0	0	0	13418985
1990	12	2502806	2976786	8118643	1031776	1175166	2841645	400632	0	0	0	13567863
1991	1	2500635	2975745	8115431	1031370	1174368	2840660	400138	0	0	0	13561967
1991	2	2488707	2946752	8074510	1030957	1169264	2839714	397377	0	0	0	13511823
1991	3	2487673	2992837	8119561	1030957	1169264	2839714	413443	0	0	0	13572939
1991	4	2487673	2992837	8119561	1030957	1188866	2840900	473013	0	0	0	13653298

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Date		Cumulative Net Adjustments										
Year	Mnth	South Kimball (mcf)	Mid Kimball (mcf)	Subtotal Kim/Col (mcf)	Corunna (mcf)	Wilk. (mcf)	Seckerton (mcf)	Dow Moore (mcf)	Black Creek (mcf)	Coveny (mcf)	Ladysmith (mcf)	Total (mcf)
1991	5	2647868	2995432	8282351	1030957	1384179	2870034	473013	0	0	0	14040533
1991	6	2770686	3164509	8574246	1030957	1397625	2870355	473013	0	0	0	14346195
1991	7	2772720	3301451	8713221	1065241	1397625	2905380	516358	0	0	0	14597826
1991	8	2783811	3321477	8744339	1093966	1397625	2971407	571766	0	0	0	14779102
1991	9	2789138	3325417	8753605	1098241	1400053	3010044	594631	0	0	0	14856573
1991	10	2789138	3337694	8765883	1097616	1397734	3019624	594631	0	0	0	14875488
1991	11	2790899	3343145	8773095	1110811	1417944	3033077	595856	0	0	0	14930783
1991	12	2790899	3343145	8773095	1110493	1417428	3031919	594479	0	0	0	14927415
1992	1	2777090	3339403	8755543	1110179	1416839	3026342	577842	0	0	0	14886745
1992	2	2796050	3373034	8808134	1110179	1416839	3028601	583373	0	0	0	14947127
1992	3	2801133	3393215	8833399	1110200	1416941	3028601	588767	0	0	0	14977909
1992	4	2794539	3365232	8798822	1107465	1432908	3028965	564872	0	0	0	14933031
1992	5	2794539	3365232	8798822	1113049	1502521	3062864	579031	0	0	0	15056287
1992	6	2794539	3400854	8834444	1147083	1517231	3141842	579031	0	0	0	15219631
1992	7	2838877	3489551	8967478	1157496	1517231	3161664	580267	0	0	0	15384136
1992	8	2897497	3571272	9107820	1157496	1517231	3161664	613266	0	0	0	15557477
1992	9	2917492	3583077	9139619	1157496	1517231	3161664	673789	0	0	0	15649799
1992	10	2921650	3598080	9158780	1158213	1527104	3161664	717329	0	0	0	15723091
1992	11	2921650	3598080	9158780	1175786	1551236	3173239	717329	0	0	0	15776370
1992	12	2943607	3599506	9182164	1185472	1570740	3208702	717329	0	0	0	15864407
1993	1	3005002	3646276	9290329	1190838	1580910	3244804	720414	0	0	0	16027295
1993	2	3003604	3641750	9284405	1190838	1580811	3244465	717947	0	0	0	16018466
1993	3	3008476	3666500	9314026	1190838	1580811	3244755	755337	0	0	0	16085767
1993	4	3007424	3660520	9306994	1190838	1580811	3244755	749001	0	0	0	16072399
1993	5	3007424	3660520	9306994	1189578	1532385	3203502	744009	0	0	0	15976469
1993	6	3007424	3660993	9307467	1190030	1532646	3204572	744009	0	0	0	15978725
1993	7	3007621	3751737	9398409	1198361	1532646	3207735	778996	0	0	0	16116147
1993	8	3005263	3747631	9391945	1197821	1532269	3207735	772148	0	0	0	16101917
1993	9	3010181	3750166	9399397	1197821	1532269	3207735	775466	0	0	0	16112688
1993	10	3009814	3750138	9399002	1197821	1532269	3207735	775127	0	0	0	16111953
1993	11	3018508	3750138	9407697	1201930	1533430	3213496	775332	0	0	0	16131884
1993	12	3054501	3750138	9443689	1223484	1569126	3275816	784274	0	0	0	16296389
1994	1	3123761	3783779	9546591	1230576	1596230	3299107	902866	0	0	0	16575371
1994	2	3143664	3923270	9705985	1233997	1615882	3306909	1011413	0	0	0	16874185
1994	3	3146431	4026645	9812127	1233997	1618689	3307911	1055023	0	0	0	17027747
1994	4	3159379	4017036	9815466	1233997	1649552	3312748	1043674	0	0	0	17055437
1994	5	3151401	4015105	9805557	1233997	1611117	3312748	1020054	0	0	0	16983473
1994	6	3151401	4015105	9805557	1233997	1598433	3305959	966104	0	0	0	16910051
1994	7	3151401	4023214	9813666	1248565	1598433	3345348	1002302	0	0	0	17008314
1994	8	3151521	4025858	9816430	1248978	1598497	3345983	1003057	0	0	0	17012945
1994	9	3191898	4063051	9894000	1248978	1598497	3345983	1003057	0	0	0	17090515
1994	10	3202658	4067961	9909670	1249391	1599150	3347487	1014975	0	0	0	17120673
1994	11	3203728	4068882	9911661	1250443	1600367	3349983	1016704	0	0	0	17129159
1994	12	3217905	4068882	9925838	1261609	1619822	3379847	1016704	0	0	0	17203820
1995	1	3227513	4075759	9942323	1263250	1623609	3384832	1016704	0	0	0	17230719
1995	2	3251384	4120432	10010867	1263250	1629014	3392033	1150639	0	0	0	17445803
1995	3	3251384	4033620	9924055	1263250	1629014	3392033	1021311	0	0	0	17229664

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Injection/Withdrawal Meter Adjustment History
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Date		Cumulative Net Adjustments										
Year	Mnth	South Kimball (mcf)	Mid Kimball (mcf)	Subtotal Kim/Col (mcf)	Corunna (mcf)	Wilk. (mcf)	Seckerton (mcf)	Dow Moore (mcf)	Black Creek (mcf)	Coveny (mcf)	Ladysmith (mcf)	Total (mcf)
1995	4	3243773	3970333	9853157	1263250	1629014	3392033	999146	0	0	0	17136600
1995	5	3249107	3970333	9858491	1263250	1634743	3392033	1054261	0	0	0	17202779
1995	6	3249107	3970333	9858491	1264211	1698394	3419988	1123027	0	0	0	17364110
1995	7	3249760	4016669	9905480	1293217	1712744	3497978	1159281	0	0	0	17568699
1995	8	3254494	4116351	10009896	1312792	1712744	3531979	1219659	0	0	0	17787070
1995	9	3283592	4157138	10079781	1313819	1715455	3536283	1251207	0	0	0	17896544
1995	10	3347119	4177630	10163800	1316982	1719825	3542990	1259496	0	0	0	18003093
1995	11	3350766	4176172	10165989	1305947	1711558	3514894	1257932	0	0	0	17956319
1995	12	3347307	4176172	10162529	1304288	1706686	3509454	1240719	0	0	0	17923677
1996	1	3270482	4141418	10050951	1298046	1687317	3495337	1144045	0	0	0	17675696
1996	2	3285403	4189590	10114044	1299229	1688492	3497385	1163467	0	0	0	17762617
1996	3	3310025	4267982	10217058	1300503	1688492	3499051	1172536	0	0	0	17877641
1996	4	3370799	4267982	10277832	1300503	1692001	3499051	1183045	0	0	0	17952433
1996	5	3432879	4362991	10434921	1300503	1692001	3499051	1183045	0	0	0	18109521
1996	6	3550995	4555154	10745200	1300503	1692001	3502902	1207371	0	0	0	18447978
1996	7	3588375	4623080	10850506	1308753	1718526	3545567	1306164	0	0	0	18729515
1996	8	3594680	4626161	10859892	1334293	1752175	3551187	1416711	0	0	0	18914258
1996	9	3597423	4629684	10866158	1337068	1756365	3558734	1426529	0	0	0	18944854
1996	10	3590031	4619828	10848910	1337068	1756365	3541080	1411459	0	0	0	18894882
1996	11	3593699	4628484	10861234	1361598	1788909	3561989	1414636	0	0	0	18988365
1996	12	3593699	4628484	10861234	1368923	1801398	3582848	1446325	0	0	0	19060728
1997	1	3491115	4526511	10656676	1366664	1789061	3552352	1402902	0	0	0	18767654
1997	2	3482205	4498800	10620055	1366664	1788845	3551525	1376087	0	0	0	18703177
1997	3	3496135	4520774	10655960	1369463	1791493	3557163	1412722	0	0	0	18786801
1997	4	3499749	4524262	10663062	1369463	1802708	3557163	1455090	0	0	0	18847487
1997	5	3512023	4550349	10701424	1369463	1915656	3557163	1478456	0	0	0	19022162
1997	6	3512023	4550349	10701424	1379277	1953703	3579777	1673507	0	0	0	19287688
1997	7	3512023	4601892	10752966	1416445	1960146	3668971	1782989	0	0	0	19581517
1997	8	3535431	4782452	10956934	1436644	1964760	3715332	1882290	0	0	0	19955959
1997	9	3637761	4886942	11163754	1442158	1964760	3733826	1882628	2153	0	0	20189280
1997	10	3735844	4903272	11278168	1448276	1974753	3744292	1887860	9860	20609	0	20363817
1997	11	3731111	4903272	11273434	1477971	2028199	3776833	1893935	9860	20609	0	20480839
1997	12	3735470	4947847	11322368	1498308	2063658	3849107	1921992	9860	20609	0	20685901
1998	1	3743879	4974763	11357693	1499307	2065335	3855666	1922723	9860	20609	0	20731192
1998	2	3808218	5013111	11460379	1499307	2065335	3860986	1968367	9860	20609	0	20884842
1998	3	3817308	5025462	11481821	1499307	2075113	3860986	1964809	9860	20609	0	20912504
1998	4	3827351	5040140	11506542	1499423	2078121	3860986	1971039	9860	20609	0	20946580
1998	5	3862168	5115321	11616539	1499423	2192859	3863302	2197737	9860	20609	0	21400329
1998	6	3901747	5339752	11880550	1499423	2239297	3863302	2263104	9860	20609	0	21776144
1998	7	3999958	5422967	12061975	1499423	2239297	3873207	2297335	9860	20609	0	22001705
1998	8	4020563	5440222	12099835	1545741	2249729	4042301	2297335	9860	20609	0	22265409
1998	9	4020563	5440222	12099835	1572224	2249729	4075481	2297335	10897	25219	0	22330719
1998	10	4026684	5437398	12103132	1576393	2250650	4086360	2299696	12687	33702	0	22362620
1998	11	4024029	5419006	12082086	1576393	2250555	4086360	2299696	13930	49259	0	22358278
1998	12	4025466	5418021	12082538	1551619	2184482	4048306	2243547	13930	50484	0	22174905
1999	1	3967248	5410032	12016331	1501103	2125212	3920217	1972183	9337	46410	0	21590794
1999	2	3888683	5361621	11889354	1498152	2120041	3891369	1878643	7551	45570	0	21330680

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Cumulative Net Adjustments

Date		South Kimball	Mid Kimball	Subtotal Kim/Col	Corunna	Wilk.	Seckerton	Dow Moore	Black Creek	Coveny	Ladysmith	Total
Year	Mnth	(mcf)	(mcf)	(mcf)	(mcf)	(mcf)	(mcf)	(mcf)	(mcf)	(mcf)	(mcf)	(mcf)
1999	3	3872045	5289999	11801095	1498152	2120041	3891369	1857427	5323	38506	0	21211914
1999	4	3908225	5291362	11838638	1498152	2127425	3891369	1880397	5323	38506	0	21279812
1999	5	3931555	5333299	11903905	1498152	2137659	3891369	2075611	17756	61589	0	21586042
1999	6	3953043	5434196	12026290	1498152	2143724	3891369	2179049	18116	67675	0	21824376
1999	7	4005941	5487701	12132693	1520925	2169296	3895613	2236120	18116	67675	0	22040437
1999	8	4015345	5487701	12142097	1560165	2242863	3903336	2265719	18116	67675	0	22199972
1999	9	4042237	5502817	12184105	1560310	2242863	3997335	2280966	18116	67675	11812	22363182
1999	10	4042284	5502872	12184207	1560310	2242151	4056930	2280966	18116	67679	20688	22431047
1999	11	4046655	5502872	12188578	1600451	2302125	4082375	2287986	18633	73036	38661	22591845
1999	12	4010863	5495514	12145428	1594663	2252199	4035710	2287986	18633	59820	38661	22433100
2000	1	3912350	5396649	11948050	1584142	2248105	3948868	2214734	14953	42917	19975	22021746
2000	2	3898588	5378759	11916397	1582547	2246510	3943967	2190751	14142	41032	13032	21948377
2000	3	3903544	5376474	11919068	1582547	2246291	3943480	2133014	12993	40414	13152	21890958
2000	4	3933223	5354866	11927140	1582547	2247866	3943480	2089115	13276	40414	13152	21856989
2000	5	3933223	5354866	11927140	1582547	2290516	3943480	2114443	17384	49205	11301	21936015
2000	6	3945379	5354866	11939296	1593765	2301009	3965445	2155221	17537	56136	22539	22050947
2000	7	3985258	5357724	11982033	1632747	2301009	4093763	2155221	17537	56136	76168	22314612
2000	8	4108815	5394919	12142785	1656570	2301009	4155903	2163721	17537	56136	90624	22584284
2000	9	4125237	5523615	12287902	1656570	2307781	4156059	2254281	17537	57609	100927	22838665
2000	10	4152824	5654652	12446526	1657463	2314709	4163480	2332162	17537	58047	100927	23090852
2000	11	4158740	5650509	12448300	1641712	2314709	4132867	2331820	19579	62564	92736	23044287
2000	12	4147701	5650509	12437261	1625751	2296906	4086468	2183897	12535	48315	69723	22760855
2001	1	4028468	5630032	12297551	1618290	2276673	4056819	2015561	7213	39281	58045	22369433
2001	2	3954452	5445766	12039268	1613154	2226225	4047261	2004671	6261	39281	58045	22034166
2001	3	3934787	5371538	11945376	1608613	2201735	4036151	1971889	5609	39475	52628	21861476
2001	4	3934787	5413808	11987645	1620931	2202553	4044882	1969156	5609	39475	67967	21938220
2001	5	3953080	5413812	12005943	1620931	2227260	4044882	2182014	5609	39475	67967	22194082
2001	6	3982066	5416912	12038029	1620931	2292785	4044882	2372402	20312	63058	67967	22520367
2001	7	4146258	5421808	12207116	1620931	2318912	4076219	2467646	21287	94031	67967	22874110
2001	8	4165356	5543069	12347476	1670766	2320111	4140221	2526719	21287	94135	125874	23246588
2001	9	4177926	5686559	12503536	1697784	2320907	4210254	2529030	21287	96358	158778	23537933
2001	10	4171899	5686485	12497435	1701238	2322044	4230173	2529434	21656	97106	158697	23557784
2001	11	4183368	5706594	12529013	1701238	2322044	4233048	2529434	21656	97106	161522	23595061
2001	12	4180724	5708079	12527854	1691614	2324191	4216555	2529434	25491	96498	160521	23572157
2002	1	4143150	5707206	12489407	1666600	2324191	4161071	2528997	23995	96498	128942	23419701
2002	2	4077449	5650705	12367205	1660662	2303797	4120013	2518393	23885	96498	125498	23215950
2002	3	4076061	5511713	12226825	1660662	2297609	4096757	2491331	26690	95416	125498	23020787
2002	4	4076061	5511713	12226825	1660662	2240608	4086109	2405418	26690	95416	125498	22867225
2002	5	4078362	5526915	12244328	1660662	2247093	4112818	2437939	26690	95416	125498	22950443
2002	6	4100704	5510177	12249932	1661169	2255464	4112818	2486542	24375	94333	125498	23010129
2002	7	4145971	5577488	12362510	1662960	2274767	4112818	2539282	24375	94333	125498	23196543
2002	8	4166166	5611633	12416850	1714057	2276035	4157747	2541586	25934	95117	147320	23374647
2002	9	4166166	5611633	12416850	1733603	2276051	4239258	2541586	25934	95117	213371	23541769
2002	10	4153705	5591523	12384278	1738968	2276051	4226169	2541586	25934	95117	212830	23500934
2002	11	4147764	5571189	12358004	1737916	2276051	4205257	2541586	25995	92361	207770	23444938
2002	12	4086881	5553810	12279741	1696015	2258835	4156355	2541586	12521	131827	161778	23238658
2003	1	3983370	5395366	12017787	1687226	2182283	4115676	2500947	10091	125380	157172	22796561

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Cumulative Net Adjustments

Date		South Kimball	Mid Kimball	Subtotal Kim/Col	Corunna	Wilk.	Seckerton	Dow Moore	Black Creek	Coveny	Ladysmith	Total
Year	Mnth	(mcf)	(mcf)	(mcf)	(mcf)	(mcf)	(mcf)	(mcf)	(mcf)	(mcf)	(mcf)	(mcf)
2003	2	3965328	5266784	11871163	1682347	2146586	4100286	2328804	10091	119915	139848	22399040
2003	3	3962767	5226182	11828000	1685161	2145181	4098684	2165543	10343	120757	140070	22193740
2003	4	3975511	5273682	11888244	1683935	2145002	4095728	2083604	9249	120757	153787	22180305
2003	5	4061909	5412667	12113627	1684620	2146490	4095728	2083604	20936	157188	156491	22458684
2003	6	4223804	5675669	12538524	1685271	2180988	4095728	2126262	21721	187083	157331	22992907
2003	7	4260234	5730047	12629331	1685271	2210090	4095728	2348371	21721	187083	157331	23334926
2003	8	4264771	5730652	12634474	1693289	2253553	4096679	2427187	21721	187083	196675	23510660
2003	9	4268853	5738507	12646410	1746009	2268497	4188406	2472725	21721	187083	228456	23759306
2003	10	4281729	5738507	12659286	1756700	2268497	4241989	2472725	21721	185919	228469	23835306
2003	11	4281322	5727202	12647574	1756921	2268497	4242519	2472725	21721	186118	232086	23828160
2003	12	4265194	5698971	12603216	1727549	2268497	4172353	2472725	8411	173156	190977	23616882
2004	1	4118715	5523364	12281129	1701117	2216974	4102468	2381948	-1571	147775	174320	23004161
2004	2	4065675	5414387	12119113	1693400	2149023	4084935	2219706	-3248	136564	172423	22571916
2004	3	4102377	5429412	12170840	1693400	2149395	4084935	2160763	1246	137183	167725	22565488
2004	4	4105908	5435073	12180032	1693400	2195150	4084935	2121314	8988	154651	164451	22602921
2004	5	4111621	5497821	12248492	1740309	2195874	4084935	2223540	11064	188759	164451	22857423
2004	6	4111621	5497821	12248492	1781428	2204968	4084935	2340342	11064	191609	164451	23027288
2004	7	4162622	5673417	12475089	1795938	2211374	4084935	2460878	11604	195630	164451	23399899
2004	8	4254090	5789615	12682756	1795938	2211374	4110563	2544723	11604	195630	174311	23726900
2004	9	4254090	5800260	12693400	1798390	2212221	4301045	2546858	11604	196129	277683	24037331
2004	10	4337900	5818922	12795873	1798390	2224281	4336882	2546858	4100	196129	286538	24189050
2004	11	4336422	5818922	12794395	1798330	2224281	4336879	2546858	4532	196129	286538	24187942
2004	12	4248189	5791424	12678664	1716610	2224211	4148389	2546858	2175	182576	172443	23671924
2005	1	4165501	5662967	12467519	1700139	2175479	4098803	2517518	-1313	178352	163703	23300200
2005	2	4136683	5484227	12259960	1700139	2130940	4098803	2278340	-12517	154304	163703	22773672
2005	3	4156089	5445628	12240768	1700139	2108836	4094209	2151920	-17345	145642	163703	22587874
2005	4	4144919	5445628	12229598	1700139	2149387	4094209	2132536	-18558	147209	163703	22598225
2005	5	4156262	5450183	12245496	1700139	2165873	4094209	2124436	-15240	138522	163703	22617138
2005	6	4183738	5458972	12281761	1700139	2213688	4094209	2324235	-14662	166965	163703	22930038
2005	7	4311055	5532871	12482977	1700139	2227975	4094209	2457602	-14662	168917	163703	23280860
2005	8	4320931	5763247	12723229	1724487	2230813	4094209	2530464	-14104	170155	169029	23628282
2005	9	4321653	5819885	12780588	1803138	2230813	4222524	2530464	-14104	171150	270036	23994610
2005	10	4309957	5821557	12770564	1810222	2230813	4296780	2531817	-14104	171150	285073	24082315
2005	11	4298399	5821449	12758898	1801948	2230813	4280740	2531143	-15406	168705	264838	24021679
2005	12	4252487	5812647	12704185	1754764	2230813	4210600	2531143	-28690	148551	189155	23740520
2006	1	4667337	6015390	13321777	1774318	2365175	4452052	2582936	-29167	212188	189145	24868424
2006	2	4806878	6334057	13779985	1774318	2384153	4580123	3111188	-26754	207074	189145	25999233
2006	3	4832053	6810794	14281897	1774318	2383235	4594960	3181848	-27640	216400	189145	26594164
2006	4	4869387	6656701	14165139	1774318	2388176	4593567	3225809	-28059	216400	189145	26524495
2006	5	4869530	6663937	14172518	1774318	2493457	4593601	3497913	-23560	242902	189145	26940294
2006	6	4884566	6770492	14294109	1774318	2500673	4593601	3567779	-24455	243212	189145	27138382
2006	7	4966526	6817042	14422619	1774318	2500673	4593601	3632232	-24455	243434	189145	27331566
2006	8	4970160	6921738	14530949	1774318	2502910	4629731	3644690	-24455	245486	189145	27492774
2006	9	4970160	6928423	14537634	1854196	2502910	4785491	3644690	-24455	245486	222800	27768751
2006	10	4973509	6935540	14548099	1864810	2497704	4795360	3644690	-27376	242380	254740	27820406
2006	11	4831606	6935540	14406197	1864810	2502307	4777605	3644690	-27376	242216	261315	27671764
2006	12	4878900	6930370	14448321	1822703	2502307	4687673	3644690	-27376	237706	233370	27549393

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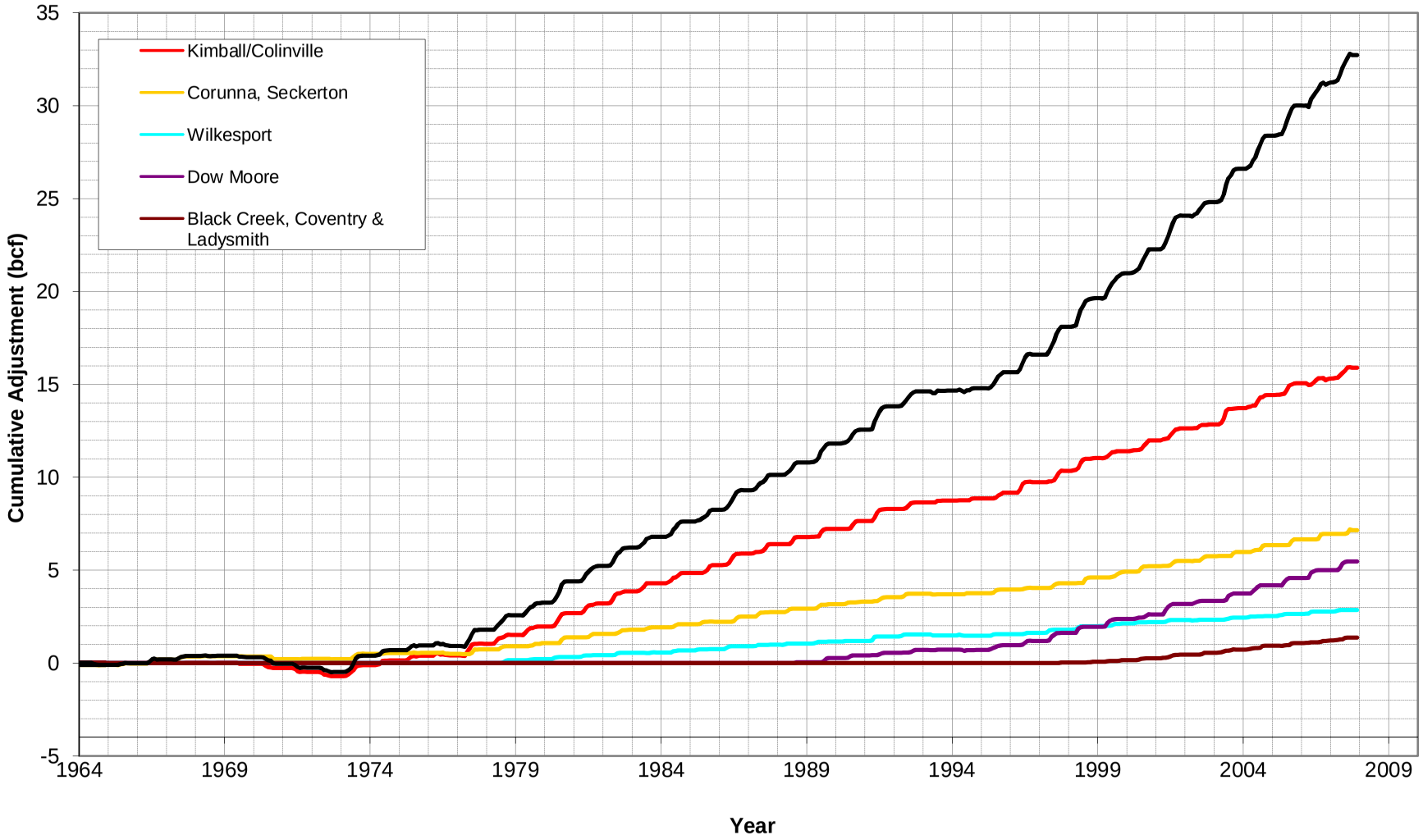
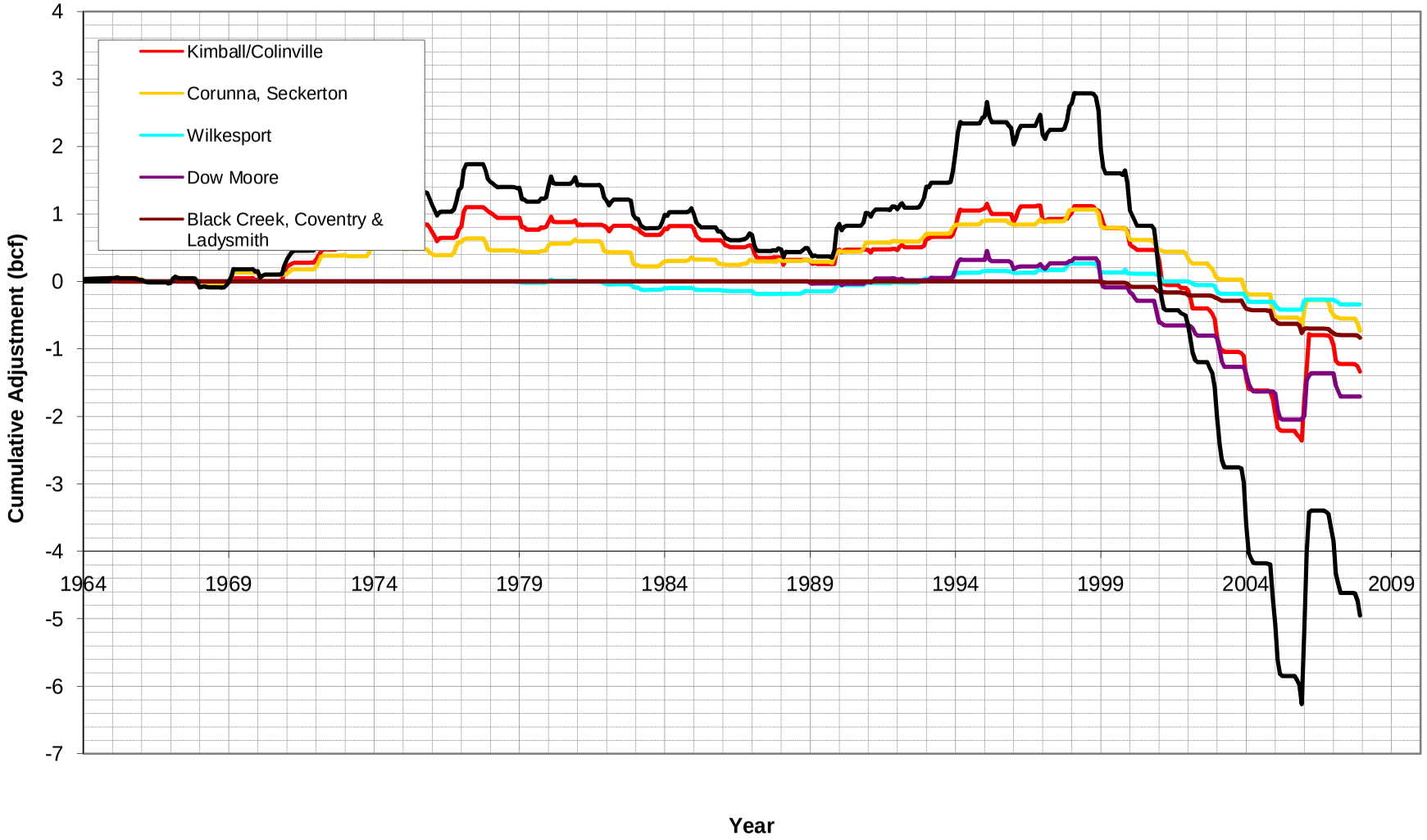
Date		Cumulative Net Adjustments										
Year	Mnth	South Kimball (mcf)	Mid Kimball (mcf)	Subtotal Kim/Col (mcf)	Corunna (mcf)	Wilk. (mcf)	Seckerton (mcf)	Dow Moore (mcf)	Black Creek (mcf)	Coveny (mcf)	Ladysmith (mcf)	Total (mcf)
2007	1	4857187	6871112	14367350	1809605	2502307	4637768	3640550	-27851	251743	219581	27401053
2007	2	4781150	6712537	14132737	1798948	2480268	4614702	3465066	-29551	240626	213774	26916571
2007	3	4776865	6705997	14121913	1798948	2470608	4609907	3377124	-28786	246251	216100	26812067
2007	4	4776865	6720754	14136670	1795171	2480346	4599297	3301293	-27864	252682	216100	26753697
2007	5	4860687	6757744	14257481	1795171	2510794	4599297	3431032	-28886	275727	216100	27056718
2007	6	4977812	6773193	14390056	1795437	2510794	4599297	3645667	-28457	278453	216100	27407348
2007	7	4982965	6891129	14513145	1795437	2514109	4599297	3733443	-28457	280770	297094	27704838
2007	8	4995303	7049833	14684186	1825625	2514109	4603859	3760941	-28457	280770	311316	27952349
2007	9	4995303	7064220	14698574	1886721	2514109	4746305	3764099	-28457	280770	311316	28173436
2007	10	4967243	7052676	14658970	1875232	2514109	4714514	3764099	-28457	280770	311316	28090552
2007	11	4943822	7048712	14631585	1858674	2514109	4657832	3764099	-28457	280770	305656	27984267
2007	12	4898220	7020259	14557529	1824378	2514109	4582045	3764099	-28457	280767	273657	27768128
Past # years												
4		811339	1466449	2277788	128363	255274	425690	1222513	-40978	148940	111879	4529470
7		887357	1524745	2412102	229715	261910	546335	1476113	-47090	220947	234996	5335027
10		1304521	2391774	3696295	455455	712711	999197	2317774	-28457	280767	273657	8707399
13		1843719	3270121	5113840	600894	944983	1306229	2979826	-28457	280767	273657	11471739
4				1.635%	0.672%	0.554%	1.659%	1.462%	-0.717%	1.142%	0.517%	1.279%
7				1.047%	0.685%	0.323%	1.224%	1.037%	-0.547%	1.107%	0.599%	0.890%
10				0.994%	0.851%	0.557%	1.305%	0.966%	-0.268%	1.147%	0.648%	0.919%
13				1.084%	0.900%	0.581%	1.309%	0.952%	-0.268%	1.147%	0.648%	0.963%

Net Meter Adjustment History - Injection



Net Meter Adjustment History - Withdrawal



APPENDIX III

DISCREPANCY HISTORY MATCH MODEL

	Page
MODELLED DISCREPANCY HISTORY MATCH	**168**

Gas Balance MODEL R1-F
Kimball Colinville Storage Reservoir
Discrepancy History Match
E. Kimball Crossflow with Meter Error &Gas Spill

Spill threshhold
1300

		Reservoir P/Z(psia)										E.Kimball+Low Perm Gas Balance				Corunna Seckerton Crossflow				South Spill Model		
Date	dT (years)	SOUTH	A1	MID	AVG	Calc. GIP (bcf)	Inventory GIP (bcf)	Total Discrepancy (bcf)	Adjusted Cumulative Discrep. (bcf)	Cumulative Meter Error (bcf)	Adjusted Inventory GIP (bcf)	P/Z (psia)	Influx 0.0008 (mcfd)	5.0 GIP (bcf)	Cum. Influx (bcf)	Avg P/Z Cor/Sec (psi)	Influx 0.0000 (mcfd)	Cum. Influx (bcf)	Revised K/C Cumulative Discrepancy (bcf)	Gas Spill 0.00855 (mcfd)	Cum. Gas Spill (bcf)	Total Model Adjustments (bcf)
1964.42		236	439	231	259	10.040	10.110	0.070	0.008	0.000	10.110	604		2.796	0.000	1140		0.000	0.008	0	0.000	0.000
1969.32	4.90	417	430	395	407	15.801	15.362	-0.509	-0.501	0.000	15.362	604	-207	2.427	-0.369	424	0	0.000	-0.132	0	0.000	-0.369
1969.33	0.01	405	440	393	403	15.631	15.362	0.170	-0.331	0.000	15.362	524	-119	2.427	-0.370	424	0	0.000	0.039	0	0.000	-0.370
1969.84	0.51	602	499	603	589	22.860	22.263	-0.328	-0.659	0.000	22.263	524	-17	2.423	-0.373	1104	0	0.000	-0.286	0	0.000	-0.373
1969.92	0.08	597	496	582	576	22.357	21.863	0.103	-0.556	0.000	21.863	523	68	2.425	-0.371	1085	0	0.000	-0.185	0	0.000	-0.371
1970.10	0.18	382	513	399	408	15.813	15.373	0.053	-0.503	0.000	15.373	524	-28	2.424	-0.373	788	0	0.000	-0.130	0	0.000	-0.373
1970.18	0.08	353	501	369	380	14.750	14.500	0.191	-0.312	0.000	14.500	523	-111	2.420	-0.376	596	0	0.000	0.064	0	0.000	-0.376
1970.26	0.08	358	479	364	376	14.604	14.161	-0.194	-0.506	0.000	14.161	523	-118	2.417	-0.379	473	0	0.000	-0.126	0	0.000	-0.379
1970.34	0.09	394	464	364	387	15.020	15.273	0.697	0.191	0.000	15.273	522	-105	2.414	-0.383	470	0	0.000	0.574	0	0.000	-0.383
1970.43	0.09	462	455	428	443	17.200	17.171	-0.281	-0.090	0.000	17.171	521	-71	2.411	-0.385	469	0	0.000	0.295	0	0.000	-0.385
1970.48	0.05	485	452	596	539	20.921	20.901	0.008	-0.082	0.000	20.901	521	-38	2.411	-0.386	462	0	0.000	0.304	0	0.000	-0.386
1970.52	0.04	655	451	630	616	23.891	23.168	-0.702	-0.784	0.000	23.168	521	43	2.411	-0.385	456	0	0.000	-0.399	0	0.000	-0.385
1970.68	0.15	1098	510	1015	980	38.024	38.073	0.772	-0.013	0.000	38.073	521	398	2.433	-0.363	587	0	0.000	0.350	0	0.000	-0.363
1970.75	0.08	1123	589	1055	1019	39.552	39.698	0.097	0.085	0.000	39.698	526	768	2.454	-0.342	1124	0	0.000	0.427	0	0.000	-0.342
1970.83	0.08	1112	689	1053	1027	39.850	39.841	-0.155	-0.071	0.000	39.841	530	776	2.478	-0.318	1169	0	0.000	0.248	0	0.000	-0.318
1971.01	0.18	868	835	872	866	33.588	32.721	-0.859	-0.930	0.000	32.721	535	557	2.515	-0.282	1116	0	0.000	-0.648	0	0.000	-0.282
1971.11	0.09	580	822	607	625	24.239	23.050	-0.321	-1.251	0.000	23.050	543	187	2.521	-0.275	1008	0	0.000	-0.975	0	0.000	-0.275
1971.18	0.07	531	802	523	561	21.775	21.249	0.662	-0.588	0.000	21.249	545	10	2.521	-0.275	769	0	0.000	-0.313	0	0.000	-0.275
1971.25	0.08	470	737	478	508	19.724	19.269	0.071	-0.517	0.000	19.269	545	-37	2.520	-0.276	531	0	0.000	-0.241	0	0.000	-0.276
1971.35	0.10	446	692	449	479	18.585	17.937	-0.193	-0.710	0.000	17.937	544	-69	2.518	-0.278	515	0	0.000	-0.431	0	0.000	-0.278
1971.42	0.07	458	667	451	481	18.650	18.155	0.153	-0.556	0.000	18.155	544	-73	2.516	-0.280	516	0	0.000	-0.276	0	0.000	-0.280
1971.46	0.04	648	655	456	548	21.255	20.645	-0.115	-0.672	0.000	20.645	543	8	2.516	-0.280	517	0	0.000	-0.391	0	0.000	-0.280
1971.50	0.04	885	636	460	629	24.415	23.536	-0.270	-0.941	0.000	23.536	543	234	2.520	-0.276	519	0	0.000	-0.665	0	0.000	-0.276
1971.59	0.09	981	674	752	821	31.863	32.778	1.794	0.853	0.000	32.778	544	460	2.535	-0.262	538	0	0.000	1.114	0	0.000	-0.262
1971.68	0.08	1111	727	1033	1021	39.626	39.668	-0.872	-0.020	0.000	39.668	548	637	2.554	-0.242	816	0	0.000	0.223	0	0.000	-0.242
1971.75	0.08	1100	791	1046	1033	40.070	39.941	-0.171	-0.191	0.000	39.941	552	737	2.575	-0.221	1101	0	0.000	0.031	0	0.000	-0.221
1971.84	0.09	1128	861	1073	1065	41.327	41.055	-0.144	-0.334	0.000	41.055	556	748	2.599	-0.197	1168	0	0.000	-0.137	0	0.000	-0.197
1971.96	0.11	763	894	783	790	30.662	29.492	-0.898	-1.232	0.000	29.492	561	465	2.619	-0.178	1141	0	0.000	-1.054	0	0.000	-0.178
1972.02	0.06	561	874	648	647	25.088	23.400	-0.518	-1.750	0.000	23.400	566	97	2.621	-0.175	1057	0	0.000	-1.575	0	0.000	-0.175
1972.09	0.07	405	825	468	491	19.051	18.286	0.924	-0.827	0.000	18.286	566	-70	2.619	-0.177	851	0	0.000	-0.649	0	0.000	-0.177
1972.17	0.08	317	764	366	399	15.496	15.134	0.402	-0.424	0.000	15.134	566	-152	2.614	-0.182	524	0	0.000	-0.242	0	0.000	-0.182
1972.26	0.09	271	703	314	348	13.513	13.022	-0.129	-0.553	0.000	13.022	565	-186	2.608	-0.188	355	0	0.000	-0.365	0	0.000	-0.188
1972.34	0.08	267	663	298	333	12.936	12.617	0.172	-0.381	0.000	12.617	563	-197	2.603	-0.194	350	0	0.000	-0.187	0	0.000	-0.194
1972.51	0.17	910	604	448	628	24.347	22.848	-1.181	-1.562	0.000	22.848	562	24	2.604	-0.192	366	0	0.000	-1.370	0	0.000	-0.192
1972.68	0.17	1012	706	781	851	33.031	32.766	1.235	-0.327	0.000	32.766	563	486	2.635	-0.162	382	0	0.000	-0.165	0	0.000	-0.162
1973.01	0.33	549	797	567	590	22.881	22.065	-0.551	-0.878	0.000	22.065	569	231	2.662	-0.134	653	0	0.000	-0.744	0	0.000	-0.134
1973.17	0.16	296	717	315	359	13.944	13.159	0.031	-0.847	0.000	13.159	575	-119	2.655	-0.141	421	0	0.000	-0.706	0	0.000	-0.141
1973.26	0.09	393	664	401	432	16.749	15.572	-0.392	-1.239	0.000	15.572	574	-169	2.650	-0.146	414	0	0.000	-1.093	0	0.000	-0.146
1973.34	0.08	506	642	454	496	19.238	18.883	0.823	-0.417	0.000	18.883	572	-101	2.647	-0.149	421	0	0.000	-0.267	0	0.000	-0.149
1973.42	0.08	629	617	618	622	24.120	22.593	-1.172	-1.589	0.000	22.593	572	-4	2.647	-0.149	424	0	0.000	-1.440	0	0.000	-0.149
1973.51	0.09	734	611	722	712	27.621	27.092	0.998	-0.591	0.000	27.092	572	110	2.651	-0.146	704	0	0.000	-0.445	0	0.000	-0.146
1973.67	0.15	967	651	921	903	35.027	35.020	0.521	-0.070	0.000	35.020	573	317	2.668	-0.128	1138	0	0.000	0.058	0	0.000	-0.128
1973.80	0.13	1184	751	1170	1122	43.525	43.540	0.023	-0.047	0.000	43.540	576	661	2.700	-0.096	1208	0	0.000	0.049	0	0.000	-0.096
1973.84	0.04	1177	792	1169	1124	43.622	43.540	-0.098	-0.144	0.000	43.540	583	846	2.712	-0.085	1210	0	0.000	-0.060	0	0.000	-0.085
1973.93	0.09	1164	870	1159	1124	43.607	43.538	0.013	-0.131	0.000	43.538	586	823	2.739	-0.057	1079	0	0.000	-0.074	0	0.000	-0.057

Gas Balance MODEL R1-F
Kimball Colinville Storage Reservoir
Discrepancy History Match
E. Kimball Crossflow with Meter Error &Gas Spill

Spill threshhold
1300

		Reservoir P/Z(psia)										E.Kimball+Low Perm Gas Balance				Corunna Seckerton Crossflow				South Spill Model		
Date	dT (years)	SOUTH	A1	MID	AVG	Calc. GIP (bcf)	Inventory GIP (bcf)	Total Discrepancy (bcf)	Adjusted Cumulative Discrep. (bcf)	Cumulative Meter Error (bcf)	Adjusted Inventory GIP (bcf)	P/Z (psia)	Influx 0.0008 (mcfd)	5.0 GIP (bcf)	Cum. Influx (bcf)	Avg P/Z Cor/Sec (psi)	Influx 0.0000 (mcfd)	Cum. Influx (bcf)	Revised K/C Cumulative Discrepancy (bcf)	Gas Spill 0.00855 (mcfd)	Cum. Gas Spill (bcf)	Total Model Adjustments (bcf)
1974.09	0.16	947	950	959	954	37.014	36.177	-0.768	-0.899	0.000	36.177	592	614	2.775	-0.022	666	0	0.000	-0.877	0	0.000	-0.022
1974.18	0.09	724	934	747	763	29.597	28.680	-0.080	-0.978	0.000	28.680	599	275	2.784	-0.012	607	0	0.000	-0.966	0	0.000	-0.012
1974.26	0.08	567	887	591	620	24.072	23.316	0.160	-0.818	0.000	23.316	601	45	2.785	-0.011	579	0	0.000	-0.807	0	0.000	-0.011
1974.34	0.08	624	841	632	656	25.432	24.536	-0.140	-0.958	0.000	24.536	602	-5	2.785	-0.011	588	0	0.000	-0.947	0	0.000	-0.011
1974.43	0.09	825	779	828	821	31.833	30.817	-0.120	-1.078	0.000	30.817	602	131	2.789	-0.007	601	0	0.000	-1.071	0	0.000	-0.007
1974.51	0.08	1056	801	1056	1023	39.703	39.078	0.391	-0.687	0.000	39.078	603	417	2.801	0.005	624	0	0.000	-0.692	0	0.000	0.005
1974.59	0.08	1105	833	1110	1073	41.631	41.390	0.385	-0.302	0.000	41.390	605	642	2.820	0.023	1053	0	0.000	-0.326	0	0.000	0.023
1974.68	0.09	1202	892	1210	1167	45.265	44.985	-0.040	-0.343	0.000	44.985	609	769	2.845	0.049	1296	0	0.000	-0.392	0	0.000	0.049
1974.75	0.08	1229	947	1228	1193	46.274	46.113	0.120	-0.223	0.000	46.113	615	882	2.869	0.073	1281	0	0.000	-0.296	0	0.000	0.073
1974.84	0.08	1160	1000	1151	1135	44.020	43.856	-0.003	-0.226	0.000	43.856	620	837	2.895	0.099	1279	0	0.000	-0.324	0	0.000	0.099
1974.92	0.09	992	1035	991	997	38.671	38.544	0.036	-0.189	0.000	38.544	625	616	2.914	0.118	1264	0	0.000	-0.307	0	0.000	0.118
1975.01	0.08	866	1017	853	878	34.075	33.561	-0.387	-0.576	0.000	33.561	629	375	2.926	0.129	1149	0	0.000	-0.705	0	0.000	0.129
1975.09	0.09	686	977	819	793	30.753	30.297	0.058	-0.518	0.000	30.297	632	163	2.931	0.134	749	0	0.000	-0.653	0	0.000	0.134
1975.18	0.09	615	928	639	667	25.877	25.114	-0.307	-0.825	0.000	25.114	633	18	2.931	0.135	457	0	0.000	-0.960	0	0.000	0.135
1975.26	0.08	433	875	423	484	18.760	18.540	0.543	-0.282	0.000	18.540	633	-101	2.928	0.132	430	0	0.000	-0.414	0	0.000	0.132
1975.34	0.08	359	819	358	417	16.169	16.206	0.256	-0.025	0.000	16.206	633	-195	2.923	0.126	439	0	0.000	-0.152	0	0.000	0.126
1975.42	0.09	696	762	705	709	27.519	26.545	-1.012	-1.037	0.000	26.545	631	-97	2.920	0.123	447	0	0.000	-1.160	0	0.000	0.123
1975.53	0.10	1039	747	1035	1000	38.787	37.828	0.016	-1.021	0.000	37.828	631	284	2.930	0.134	525	0	0.000	-1.155	0	0.000	0.134
1975.60	0.07	1069	786	1074	1036	40.182	40.339	1.115	0.094	0.000	40.339	633	570	2.946	0.150	1029	0	0.000	-0.055	0	0.000	0.150
1975.67	0.07	1204	828	1206	1157	44.904	44.866	-0.194	-0.100	0.000	44.866	636	711	2.965	0.168	1271	0	0.000	-0.268	0	0.000	0.168
1975.70	0.03	1240	849	1242	1192	46.233	46.199	0.004	-0.096	0.000	46.199	640	868	2.973	0.176	1282	0	0.000	-0.272	0	0.000	0.176
1975.72	0.02	1273	866	1276	1223	47.466	47.495	0.062	-0.033	0.000	47.495	642	935	2.979	0.183	1290	0	0.000	-0.216	0	0.000	0.183
1975.75	0.03	1328	899	1325	1272	49.354	49.257	-0.126	-0.159	0.000	49.257	644	1023	2.992	0.195	1305	0	0.000	-0.354	13	0.000	0.196
1975.77	0.02	1317	922	1315	1266	49.125	49.187	0.159	0.000	0.000	49.187	646	1067	3.000	0.204	1315	0	0.000	-0.204	505	0.004	0.208
1975.79	0.02	1325	942	1324	1276	49.489	49.529	-0.022	-0.021	0.000	49.529	648	1061	3.008	0.212	1316	0	0.000	-0.233	470	0.008	0.219
1975.89	0.09	1309	1031	1308	1273	49.390	49.475	0.045	0.023	0.000	49.475	650	1050	3.044	0.248	1196	0	0.000	-0.225	374	0.020	0.268
1975.91	0.02	1302	1045	1302	1270	49.258	49.292	-0.051	-0.028	0.000	49.292	658	1022	3.051	0.255	1135	0	0.000	-0.283	125	0.021	0.276
1975.93	0.02	1293	1059	1293	1264	49.022	49.075	0.019	-0.008	0.000	49.075	659	1001	3.058	0.262	1074	0	0.000	-0.271	0	0.021	0.283
1975.94	0.02	1281	1072	1283	1255	48.703	48.772	0.015	0.006	0.000	48.772	661	977	3.065	0.269	1004	0	0.000	-0.263	0	0.021	0.290
1975.96	0.02	1279	1083	1231	1229	47.677	47.571	-0.174	-0.168	0.000	47.571	662	961	3.072	0.276	934	0	0.000	-0.443	0	0.021	0.297
1975.98	0.02	1277	1093	1108	1164	45.166	45.162	0.101	-0.067	0.000	45.162	664	955	3.079	0.283	863	0	0.000	-0.349	0	0.021	0.304
1976.00	0.02	1274	1102	1048	1133	43.946	43.888	-0.053	-0.120	0.000	43.888	665	948	3.085	0.288	803	0	0.000	-0.408	0	0.021	0.310
1976.06	0.06	1208	1125	734	948	36.769	36.429	-0.282	-0.401	0.000	36.429	666	877	3.103	0.307	641	0	0.000	-0.709	0	0.021	0.328
1976.08	0.02	1077	1131	705	887	34.430	34.181	0.091	-0.311	0.000	34.181	670	687	3.108	0.312	590	0	0.000	-0.623	0	0.021	0.333
1976.21	0.14	739	1083	411	610	23.649	23.114	-0.287	-0.598	0.000	23.114	671	299	3.123	0.327	465	0	0.000	-0.924	0	0.021	0.348
1976.25	0.04	705	1053	384	580	22.486	21.991	0.041	-0.557	0.000	21.991	675	55	3.124	0.328	464	0	0.000	-0.885	0	0.021	0.349
1976.33	0.08	727	991	498	640	24.819	24.200	-0.124	-0.681	0.000	24.200	675	46	3.125	0.329	448	0	0.000	-1.010	0	0.021	0.350
1976.42	0.09	780	935	782	801	31.065	30.415	-0.031	-0.712	0.000	30.415	675	90	3.128	0.332	443	0	0.000	-1.044	0	0.021	0.353
1976.46	0.04	935	915	937	934	36.230	35.510	-0.070	-0.782	0.000	35.510	676	224	3.132	0.335	444	0	0.000	-1.118	0	0.021	0.357
1976.48	0.02	1007	910	1011	997	38.672	37.979	0.027	-0.755	0.000	37.979	676	389	3.134	0.338	445	0	0.000	-1.093	0	0.021	0.359
1976.51	0.03	1137	910	1145	1113	43.170	42.401	-0.075	-0.831	0.000	42.401	677	554	3.141	0.345	448	0	0.000	-1.175	0	0.021	0.366
1976.56	0.04	1201	922	1202	1166	45.237	44.689	0.220	-0.610	0.000	44.689	678	726	3.153	0.357	751	0	0.000	-0.967	0	0.021	0.378
1976.58	0.02	1211	933	1215	1178	45.701	45.553	0.401	-0.210	0.000	45.553	681	794	3.158	0.362	883	0	0.000	-0.572	0	0.021	0.384
1976.59	0.02	1256	946	1258	1218	47.243	46.887	-0.208	-0.418	0.000	46.887	682	846	3.164	0.367	996	0	0.000	-0.785	0	0.021	0.389
1976.61	0.02	1272	959	1272	1232	47.814	47.642	0.185	-0.233	0.000	47.642	683	905	3.170	0.374	1079	0	0.000	-0.607	0	0.021	0.395

Gas Balance MODEL R1-F
Kimball Colinville Storage Reservoir
Discrepancy History Match
E. Kimball Crossflow with Meter Error &Gas Spill

Spill threshhold
1300

		Reservoir P/Z(psia)										E.Kimball+Low Perm Gas Balance				Corunna Seckerton Crossflow				South Spill Model		
Date	dT (years)	SOUTH	A1	MID	AVG	Calc. GIP (bcf)	Inventory GIP (bcf)	Total Discrepancy (bcf)	Adjusted Cumulative Discrep. (bcf)	Cumulative Meter Error (bcf)	Adjusted Inventory GIP (bcf)	P/Z (psia)	Influx 0.0008 (mcfd)	5.0 GIP (bcf)	Cum. Influx (bcf)	Avg P/Z Cor/Sec (psi)	Influx 0.0000 (mcfd)	Cum. Influx (bcf)	Revised K/C Cumulative Discrepancy (bcf)	Gas Spill 0.00855 (mcfd)	Cum. Gas Spill (bcf)	Total Model Adjustments (bcf)
1976.63	0.02	1299	973	1300	1258	48.814	48.724	0.081	-0.152	0.000	48.724	685	947	3.177	0.380	1162	0	0.000	-0.533	0	0.021	0.402
1976.65	0.02	1319	989	1320	1278	49.574	49.442	-0.042	-0.194	0.000	49.442	686	995	3.184	0.388	1244	0	0.000	-0.581	197	0.023	0.410
1976.67	0.02	1320	1004	1321	1281	49.696	49.632	0.069	-0.125	0.000	49.632	688	1016	3.190	0.394	1315	0	0.000	-0.519	439	0.025	0.419
1976.69	0.02	1333	1019	1334	1293	50.183	50.103	-0.017	-0.142	0.000	50.103	689	1029	3.196	0.400	1316	0	0.000	-0.542	597	0.029	0.429
1976.73	0.04	1325	1053	1325	1291	50.077	50.103	0.106	-0.036	0.000	50.103	690	1032	3.212	0.416	1318	0	0.000	-0.452	652	0.039	0.455
1976.75	0.02	1325	1069	1326	1293	50.162	50.153	-0.035	-0.071	0.000	50.153	694	1022	3.219	0.423	1319	0	0.000	-0.494	568	0.043	0.466
1976.77	0.02	1329	1083	1329	1298	50.359	50.387	0.037	-0.034	0.000	50.387	695	1023	3.228	0.431	1319	0	0.000	-0.465	608	0.048	0.479
1976.79	0.02	1330	1096	1330	1301	50.455	50.451	-0.033	-0.066	0.000	50.451	697	1026	3.234	0.437	1270	0	0.000	-0.504	662	0.052	0.489
1976.90	0.11	1318	1159	1319	1298	50.369	50.336	-0.029	-0.095	0.000	50.336	698	1013	3.276	0.480	844	0	0.000	-0.575	537	0.074	0.554
1976.93	0.03	1199	1172	1274	1235	47.903	47.895	0.025	-0.070	0.000	47.895	708	871	3.286	0.490	698	0	0.000	-0.561	0	0.074	0.564
1976.94	0.01	1170	1174	1252	1213	47.077	46.994	-0.075	-0.145	0.000	46.994	710	720	3.288	0.492	682	0	0.000	-0.637	0	0.074	0.566
1976.96	0.02	1044	1179	1222	1155	44.810	45.052	0.325	0.180	0.000	45.052	710	576	3.292	0.496	627	0	0.000	-0.316	0	0.074	0.570
1976.98	0.02	939	1179	1203	1109	43.008	43.040	-0.210	-0.030	0.000	43.040	711	382	3.295	0.498	571	0	0.000	-0.528	0	0.074	0.573
1977.00	0.02	824	1174	1201	1067	41.392	41.494	0.071	0.041	0.000	41.494	712	216	3.296	0.500	515	0	0.000	-0.459	0	0.074	0.574
1977.01	0.02	719	1164	1180	1018	39.514	39.927	0.310	0.351	0.000	39.927	712	71	3.297	0.500	468	0	0.000	-0.149	0	0.074	0.575
1977.06	0.04	491	1125	972	825	32.005	32.665	0.247	0.598	0.000	32.665	712	-113	3.295	0.499	400	0	0.000	0.100	0	0.074	0.573
1977.09	0.03	349	1093	739	649	25.174	26.230	0.396	0.994	0.000	26.230	712	-264	3.292	0.496	358	0	0.000	0.498	0	0.074	0.570
1977.13	0.04	252	1042	594	532	20.643	21.295	-0.405	0.590	0.000	21.295	711	-333	3.287	0.491	335	0	0.000	0.099	0	0.074	0.565
1977.16	0.03	251	1013	419	436	16.922	17.599	0.025	0.615	0.000	17.599	710	-353	3.283	0.487	316	0	0.000	0.128	0	0.074	0.561
1977.19	0.03	266	968	325	386	14.991	15.930	0.263	0.878	0.000	15.930	709	-349	3.279	0.483	300	0	0.000	0.395	0	0.074	0.557
1977.21	0.02	276	945	345	397	15.410	15.988	-0.361	0.516	0.000	15.988	708	-343	3.276	0.480	312	0	0.000	0.036	0	0.074	0.554
1977.25	0.04	284	903	315	379	14.691	15.692	0.423	0.939	0.000	15.692	708	-338	3.272	0.475	335	0	0.000	0.463	0	0.074	0.550
1977.27	0.02	291	885	370	408	15.815	16.189	-0.627	0.312	0.000	16.189	707	-334	3.270	0.473	345	0	0.000	-0.161	0	0.074	0.548
1977.29	0.02	297	867	430	439	17.040	17.786	0.372	0.684	0.000	17.786	706	-330	3.267	0.471	346	0	0.000	0.213	0	0.074	0.545
1977.31	0.02	303	849	548	501	19.434	20.092	-0.088	0.596	0.000	20.092	706	-327	3.265	0.469	348	0	0.000	0.128	0	0.074	0.543
1977.33	0.02	309	832	644	552	21.404	21.769	-0.293	0.303	0.000	21.769	705	-323	3.263	0.466	349	0	0.000	-0.164	0	0.074	0.541
1977.34	0.02	315	815	726	595	23.081	23.316	-0.130	0.173	0.000	23.316	705	-320	3.260	0.464	350	0	0.000	-0.291	0	0.074	0.538
1977.35	0.01	317	812	739	602	23.357	23.853	0.261	0.434	0.000	23.853	704	-317	3.260	0.463	350	0	0.000	-0.029	0	0.074	0.538
1977.36	0.01	392	800	739	626	24.305	24.600	-0.200	0.234	0.000	24.600	704	-296	3.258	0.462	351	0	0.000	-0.228	0	0.074	0.536
1977.38	0.02	516	785	776	687	26.650	27.007	0.061	0.295	0.000	27.007	704	-232	3.257	0.460	352	0	0.000	-0.165	0	0.074	0.535
1977.40	0.02	602	771	888	774	30.043	29.930	-0.470	-0.175	0.000	29.930	703	-146	3.256	0.459	353	0	0.000	-0.635	0	0.074	0.534
1977.42	0.02	625	759	1004	842	32.664	32.799	0.249	0.074	0.000	32.799	703	-95	3.255	0.459	354	0	0.000	-0.385	0	0.074	0.533
1977.44	0.02	652	750	1089	895	34.724	34.894	0.033	0.107	0.000	34.894	703	-69	3.255	0.458	355	0	0.000	-0.351	0	0.074	0.533
1977.46	0.02	704	742	1148	943	36.586	36.846	0.091	0.198	0.000	36.846	703	-27	3.254	0.458	355	0	0.000	-0.260	0	0.074	0.532
1977.48	0.02	742	735	1194	979	37.993	38.396	0.143	0.341	0.000	38.396	703	23	3.254	0.458	356	0	0.000	-0.117	0	0.074	0.533
1977.50	0.02	775	733	1241	1016	39.406	39.868	0.059	0.400	0.000	39.868	703	65	3.255	0.459	357	0	0.000	-0.059	0	0.074	0.533
1977.54	0.04	940	744	1355	1134	43.986	44.605	0.157	0.557	0.000	44.605	703	193	3.258	0.461	445	0	0.000	0.096	0	0.074	0.536
1977.56	0.02	1039	733	1353	1166	45.230	45.907	0.058	0.615	0.000	45.907	704	388	3.260	0.464	491	0	0.000	0.151	0	0.074	0.538
1977.59	0.03	1280	747	1341	1245	48.297	49.195	0.221	0.836	0.000	49.195	704	680	3.269	0.472	570	0	0.000	0.364	0	0.074	0.547
1977.61	0.02	1304	761	1337	1253	48.610	49.597	0.089	0.925	0.000	49.597	706	938	3.276	0.480	705	0	0.000	0.445	0	0.074	0.554
1977.63	0.02	1327	782	1334	1262	48.957	50.012	0.068	0.993	0.000	50.012	708	985	3.283	0.487	822	0	0.000	0.506	347	0.077	0.564
1977.65	0.02	1335	804	1344	1273	49.371	50.437	0.011	1.004	0.000	50.437	709	1016	3.291	0.494	940	0	0.000	0.510	697	0.082	0.576
1977.67	0.02	1348	830	1351	1284	49.818	50.970	0.086	1.090	0.000	50.970	711	1036	3.298	0.502	1058	0	0.000	0.588	937	0.088	0.590
1977.69	0.02	1373	857	1377	1309	50.802	51.883	-0.071	1.019	0.000	51.883	712	1075	3.304	0.508	1149	0	0.000	0.511	1368	0.097	0.605
1977.71	0.02	1378	884	1384	1318	51.149	52.280	0.050	1.069	0.000	52.280	714	1106	3.312	0.516	1203	0	0.000	0.553	1723	0.109	0.625

Gas Balance MODEL R1-F
Kimball Colinville Storage Reservoir
Discrepancy History Match
E. Kimball Crossflow with Meter Error &Gas Spill

Spill threshhold
1300

		Reservoir P/Z(psia)										E.Kimball+Low Perm Gas Balance				Corunna Seckerton Crossflow				South Spill Model		
Date	dT (years)	SOUTH	A1	MID	AVG	Calc. GIP (bcf)	Inventory GIP (bcf)	Total Discrepancy (bcf)	Adjusted Cumulative Discrep. (bcf)	Cumulative Meter Error (bcf)	Adjusted Inventory GIP (bcf)	P/Z (psia)	Influx 0.0008 (mcfd)	5.0 GIP (bcf)	Cum. Influx (bcf)	Avg P/Z Cor/Sec (psi)	Influx 0.0000 (mcfd)	Cum. Influx (bcf)	Revised K/C Cumulative Discrepancy (bcf)	Gas Spill 0.00855 (mcfd)	Cum. Gas Spill (bcf)	Total Model Adjustments (bcf)
1977.73	0.02	1387	910	1393	1330	51.593	52.947	0.222	1.291	0.000	52.947	715	1121	3.320	0.524	1257	0	0.000	0.768	1896	0.122	0.646
1977.78	0.06	1384	985	1388	1336	51.829	53.140	-0.043	1.248	0.000	53.140	717	1126	3.344	0.548	1374	0	0.000	0.701	1970	0.164	0.712
1977.80	0.02	1385	1009	1388	1339	51.945	53.212	-0.043	1.206	0.000	53.212	722	1120	3.352	0.556	1383	0	0.000	0.650	1948	0.178	0.734
1977.82	0.02	1391	1029	1393	1346	52.232	53.451	-0.048	1.157	0.000	53.451	724	1123	3.360	0.564	1391	0	0.000	0.593	2024	0.193	0.756
1977.84	0.02	1396	1049	1392	1350	52.372	53.575	-0.016	1.141	0.000	53.575	726	1133	3.367	0.571	1398	0	0.000	0.570	2148	0.206	0.776
1977.88	0.04	1346	1085	1390	1336	51.845	53.176	0.128	1.269	0.000	53.176	727	1081	3.382	0.586	1324	0	0.000	0.683	1618	0.229	0.815
1977.90	0.02	1346	1100	1389	1337	51.883	53.032	-0.182	1.087	0.000	53.032	731	1024	3.390	0.593	1287	0	0.000	0.494	1036	0.236	0.829
1977.92	0.02	1323	1115	1388	1331	51.633	52.830	0.048	1.135	0.000	52.830	732	996	3.397	0.600	1246	0	0.000	0.535	772	0.241	0.842
1977.98	0.06	1185	1145	1384	1285	49.862	51.081	0.022	1.158	0.000	51.081	734	828	3.414	0.618	918	0	0.000	0.540	0	0.241	0.859
1978.01	0.04	1114	1150	1381	1260	48.868	50.021	-0.067	1.091	0.000	50.021	737	625	3.423	0.626	716	0	0.000	0.465	0	0.241	0.868
1978.09	0.08	630	1145	1282	1039	40.321	41.681	0.207	1.298	0.000	41.681	739	172	3.427	0.631	435	0	0.000	0.667	0	0.241	0.872
1978.17	0.08	440	1028	936	776	30.110	31.737	0.267	1.565	0.000	31.737	740	-209	3.421	0.625	454	0	0.000	0.940	0	0.241	0.866
1978.26	0.09	394	947	567	555	21.535	22.993	-0.169	1.396	0.000	22.993	739	-299	3.411	0.614	465	0	0.000	0.782	0	0.241	0.856
1978.34	0.08	420	878	565	554	21.502	22.556	-0.403	0.993	0.000	22.556	737	-303	3.402	0.606	472	0	0.000	0.387	0	0.241	0.847
1978.44	0.10	850	803	861	850	32.982	33.433	-0.604	0.389	0.066	33.367	735	-111	3.398	0.602	476	0	0.000	-0.279	0	0.241	0.910
1978.51	0.08	1157	799	1168	1118	43.361	43.904	0.092	0.481	0.130	43.774	734	375	3.409	0.613	615	0	0.000	-0.262	0	0.241	0.984
1978.59	0.08	1216	851	1152	1136	44.079	45.162	0.541	1.022	0.138	45.024	736	694	3.428	0.632	1126	0	0.000	0.252	0	0.241	1.011
1978.68	0.09	1358	947	1257	1253	48.599	49.495	-0.188	0.834	0.164	49.331	740	889	3.459	0.662	1380	0	0.000	0.007	0	0.241	1.068
1978.76	0.07	1406	1027	1357	1333	51.700	52.840	0.244	1.078	0.185	52.656	747	1086	3.487	0.691	1401	0	0.000	0.203	1884	0.291	1.167
1978.84	0.08	1421	1110	1409	1376	53.367	54.592	0.084	1.163	0.195	54.397	753	1149	3.521	0.725	1387	0	0.000	0.243	2640	0.369	1.289
1978.93	0.10	1406	1185	1417	1384	53.679	54.892	-0.012	1.151	0.197	54.695	761	1140	3.561	0.765	1109	0	0.000	0.189	2631	0.462	1.424
1979.01	0.08	1390	1226	1414	1382	53.608	54.586	-0.236	0.915	0.197	54.388	769	1095	3.592	0.795	841	0	0.000	-0.077	2259	0.524	1.516
1979.10	0.09	738	1227	1262	1077	41.771	43.405	0.657	1.572	0.197	43.208	776	429	3.606	0.810	508	0	0.000	0.565	0	0.524	1.531
1979.16	0.06	536	1172	869	792	30.738	32.149	-0.223	1.349	0.197	31.952	779	-158	3.603	0.807	434	0	0.000	0.345	0	0.524	1.528
1979.26	0.10	484	1051	719	680	26.368	27.900	0.121	1.470	0.197	27.703	778	-277	3.593	0.796	450	0	0.000	0.476	0	0.524	1.518
1979.34	0.08	483	965	741	680	26.380	27.927	0.015	1.485	0.197	27.730	776	-296	3.584	0.788	457	0	0.000	0.499	0	0.524	1.509
1979.43	0.09	543	887	1095	878	34.053	35.656	0.056	1.541	0.245	35.412	774	-270	3.575	0.779	463	0	0.000	0.518	0	0.524	1.547
1979.51	0.08	903	839	1281	1094	42.451	44.026	-0.028	1.513	0.296	43.731	772	-60	3.573	0.777	470	0	0.000	0.440	0	0.524	1.597
1979.59	0.08	1294	840	1295	1237	48.000	49.651	0.076	1.589	0.330	49.321	772	489	3.587	0.790	620	0	0.000	0.469	0	0.524	1.644
1979.68	0.09	1341	936	1315	1276	49.517	51.389	0.221	1.809	0.341	51.048	775	911	3.618	0.822	1118	0	0.000	0.647	399	0.538	1.700
1979.76	0.08	1453	1022	1416	1379	53.488	55.409	0.049	1.859	0.365	55.044	782	1077	3.649	0.852	1361	0	0.000	0.642	2242	0.601	1.819
1979.85	0.09	1420	1127	1341	1342	52.046	53.743	-0.225	1.634	0.365	53.378	788	1159	3.689	0.892	1274	0	0.000	0.377	3199	0.711	1.969
1979.93	0.08	1029	1173	1340	1211	46.993	49.051	0.362	1.996	0.365	48.686	797	697	3.708	0.912	1205	0	0.000	0.719	0	0.711	1.989
1980.01	0.08	735	1144	1329	1100	42.680	44.755	0.017	2.013	0.365	44.390	801	111	3.711	0.915	998	0	0.000	0.733	0	0.711	1.992
1980.08	0.08	480	1070	1310	992	38.502	37.668	-2.909	-0.896	0.365	37.303	802	-219	3.705	0.909	735	0	0.000	-2.170	0	0.711	1.986
1980.18	0.10	430	968	762	673	26.113	28.713	3.433	2.538	0.365	28.348	800	-347	3.693	0.897	450	0	0.000	1.276	0	0.711	1.973
1980.26	0.08	439	901	414	484	18.787	21.540	0.154	2.692	0.365	21.175	798	-360	3.683	0.887	463	0	0.000	1.440	0	0.711	1.963
1980.33	0.08	403	838	433	474	18.384	21.321	0.183	2.875	0.365	20.956	796	-366	3.673	0.876	471	0	0.000	1.634	0	0.711	1.953
1980.41	0.08	598	786	442	540	20.942	24.480	0.601	3.476	0.384	24.096	793	-304	3.664	0.868	476	0	0.000	2.224	0	0.711	1.964
1980.51	0.10	1186	757	577	811	31.457	33.035	-1.959	1.517	0.437	32.599	791	135	3.669	0.873	480	0	0.000	0.208	0	0.711	2.021
1980.60	0.09	1401	847	1033	1137	44.098	45.681	0.004	1.521	0.514	45.168	792	837	3.698	0.901	542	0	0.000	0.106	0	0.711	2.126
1980.67	0.08	1359	958	1254	1253	48.615	50.575	0.378	1.898	0.544	50.032	799	1017	3.725	0.929	963	0	0.000	0.426	1828	0.762	2.234
1980.77	0.10	1336	1057	1375	1321	51.255	52.990	-0.225	1.673	0.558	52.432	805	938	3.759	0.962	1324	0	0.000	0.153	1073	0.800	2.320
1980.85	0.08	1374	1115	1374	1341	52.030	54.347	0.582	2.255	0.567	53.780	812	946	3.785	0.988	1317	0	0.000	0.700	1244	0.834	2.389
1980.92	0.08	1354	1164	1369	1338	51.911	54.099	-0.129	2.126	0.567	53.532	817	957	3.812	1.016	1165	0	0.000	0.544	1456	0.875	2.457

Gas Balance MODEL R1-F
Kimball Colinville Storage Reservoir
Discrepancy History Match
E. Kimball Crossflow with Meter Error &Gas Spill

Spill threshhold
1300

		Reservoir P/Z(psia)										E.Kimball+Low Perm Gas Balance				Corunna Seckerton Crossflow				South Spill Model		
Date	dT (years)	SOUTH	A1	MID	AVG	Calc. GIP (bcf)	Inventory GIP (bcf)	Total Discrepancy (bcf)	Adjusted Cumulative Discrep. (bcf)	Cumulative Meter Error (bcf)	Adjusted Inventory GIP (bcf)	P/Z (psia)	Influx 0.0008 (mcfd)	5.0 GIP (bcf)	Cum. Influx (bcf)	Avg P/Z Cor/Sec (psi)	Influx 0.0000 (mcfd)	Cum. Influx (bcf)	Revised K/C Cumulative Discrepancy (bcf)	Gas Spill 0.00855 (mcfd)	Cum. Gas Spill (bcf)	Total Model Adjustments (bcf)
1981.02	0.10	745	1181	1301	1093	42.418	45.222	0.616	2.741	0.567	44.655	823	342	3.824	1.028	564	0	0.000	1.147	0	0.875	2.469
1981.09	0.07	538	1115	934	820	31.812	34.783	0.168	2.909	0.567	34.217	826	-215	3.818	1.022	362	0	0.000	1.321	0	0.875	2.464
1981.18	0.08	380	1025	774	669	25.964	29.251	0.315	3.225	0.567	28.684	825	-377	3.807	1.011	388	0	0.000	1.648	0	0.875	2.452
1981.25	0.08	358	942	687	606	23.495	26.608	-0.174	3.051	0.567	26.042	822	-434	3.795	0.999	398	0	0.000	1.486	0	0.875	2.440
1981.35	0.10	561	854	645	642	24.926	27.705	-0.334	2.717	0.573	27.131	820	-370	3.782	0.986	404	0	0.000	1.158	0	0.875	2.434
1981.42	0.08	869	810	670	757	29.362	31.998	-0.142	2.575	0.599	31.399	817	-126	3.778	0.982	407	0	0.000	0.993	0	0.875	2.457
1981.52	0.10	1282	830	928	1038	40.272	42.664	-0.245	2.330	0.664	42.000	816	392	3.792	0.996	409	0	0.000	0.670	0	0.875	2.535
1981.60	0.08	1276	915	1272	1228	47.637	50.290	0.260	2.590	0.711	49.579	819	774	3.813	1.017	606	0	0.000	0.862	0	0.875	2.603
1981.67	0.08	1306	988	1295	1260	48.891	51.694	0.151	2.741	0.720	50.974	824	793	3.835	1.039	1065	0	0.000	0.983	0	0.875	2.634
1981.77	0.10	1297	1065	1354	1298	50.339	53.162	0.019	2.761	0.728	52.433	828	809	3.864	1.068	1391	0	0.000	0.965	31	0.876	2.672
1981.84	0.08	1369	1113	1374	1339	51.953	54.831	0.056	2.816	0.739	54.092	835	868	3.888	1.091	1370	0	0.000	0.986	738	0.896	2.726
1981.92	0.08	1374	1163	1372	1346	52.217	55.083	-0.013	2.804	0.740	54.342	840	943	3.914	1.118	1191	0	0.000	0.945	1624	0.943	2.801
1982.02	0.09	1356	1209	1323	1320	51.215	54.048	-0.033	2.770	0.740	53.307	846	922	3.946	1.150	697	0	0.000	0.880	1472	0.993	2.883
1982.11	0.09	776	1218	826	858	33.305	36.354	0.217	2.987	0.740	35.614	852	333	3.958	1.161	408	0	0.000	1.086	0	0.993	2.895
1982.17	0.06	494	1170	660	667	25.879	29.207	0.279	3.267	0.740	28.467	855	-260	3.952	1.155	375	0	0.000	1.371	0	0.993	2.889
1982.27	0.09	367	1045	426	484	18.772	22.327	0.226	3.493	0.740	21.587	854	-435	3.937	1.140	390	0	0.000	1.612	0	0.993	2.874
1982.35	0.08	368	957	617	574	22.271	25.523	-0.303	3.190	0.760	24.764	850	-473	3.923	1.127	398	0	0.000	1.303	0	0.993	2.880
1982.42	0.08	571	881	1042	858	33.304	36.229	-0.327	2.863	0.825	35.404	847	-400	3.912	1.116	401	0	0.000	0.922	0	0.993	2.934
1982.52	0.10	1133	828	1214	1137	44.113	47.262	0.225	3.088	0.892	46.370	845	7	3.912	1.116	406	0	0.000	1.079	0	0.993	3.002
1982.59	0.08	1229	866	1247	1193	46.270	49.820	0.400	3.488	0.908	48.912	845	544	3.927	1.131	568	0	0.000	1.449	0	0.993	3.032
1982.67	0.08	1248	940	1243	1206	46.802	50.350	-0.002	3.486	0.911	49.439	848	654	3.945	1.149	978	0	0.000	1.425	0	0.993	3.053
1982.77	0.10	1388	1020	1389	1342	52.082	55.555	-0.075	3.410	0.943	54.612	852	812	3.974	1.178	1322	0	0.000	1.290	412	1.008	3.128
1982.84	0.08	1386	1093	1396	1354	52.539	56.082	0.070	3.481	0.946	55.136	858	955	4.000	1.204	1303	0	0.000	1.331	2009	1.063	3.213
1982.92	0.08	1373	1153	1392	1355	52.562	56.047	-0.058	3.423	0.946	55.101	864	929	4.027	1.230	1181	0	0.000	1.246	1822	1.115	3.291
1983.01	0.09	1312	1198	1387	1337	51.875	55.362	0.002	3.425	0.946	54.416	870	841	4.056	1.259	840	0	0.000	1.219	962	1.148	3.353
1983.09	0.08	1149	1212	1341	1258	48.819	52.459	0.153	3.577	0.946	51.513	876	603	4.072	1.276	606	0	0.000	1.355	0	1.148	3.370
1983.17	0.08	1047	1192	1226	1160	45.001	48.556	-0.084	3.493	0.946	47.610	880	349	4.083	1.286	485	0	0.000	1.261	0	1.148	3.380
1983.33	0.16	911	1158	1140	1063	41.235	44.929	0.139	3.632	0.946	43.983	882	147	4.091	1.295	432	0	0.000	1.391	0	1.148	3.389
1983.34	0.01	828	1106	1143	1029	39.930	43.572	-0.052	3.580	0.946	42.626	884	-19	4.091	1.295	434	0	0.000	1.339	0	1.148	3.389
1983.42	0.08	915	1059	1216	1092	42.352	46.003	0.008	3.588	0.961	45.042	884	-18	4.091	1.294	439	0	0.000	1.333	0	1.148	3.403
1983.52	0.10	1325	1038	1416	1337	51.856	55.449	-0.058	3.530	1.019	54.430	884	379	4.104	1.308	473	0	0.000	1.204	0	1.148	3.474
1983.59	0.08	1385	1091	1404	1358	52.689	56.644	0.362	3.892	1.026	55.618	886	843	4.127	1.331	907	0	0.000	1.536	1254	1.182	3.539
1983.69	0.09	1379	1166	1400	1363	52.880	56.762	-0.072	3.820	1.027	55.736	891	896	4.158	1.362	1333	0	0.000	1.432	1882	1.247	3.635
1983.86	0.17	1373	1247	1395	1368	53.086	56.872	-0.097	3.723	1.027	55.845	898	873	4.213	1.417	1342	0	0.000	1.280	1731	1.356	3.800
1983.94	0.08	1301	1267	1392	1345	52.170	55.839	-0.116	3.607	1.027	54.812	910	776	4.235	1.439	1015	0	0.000	1.141	830	1.379	3.845
1984.01	0.08	868	1260	1268	1128	43.774	48.141	0.698	4.305	1.027	47.114	915	275	4.243	1.446	605	0	0.000	1.832	0	1.379	3.853
1984.09	0.08	706	1190	1112	981	38.067	41.124	-1.310	2.995	1.027	40.097	916	-175	4.238	1.441	448	0	0.000	0.527	0	1.379	3.848
1984.17	0.08	509	1103	740	706	27.375	32.071	1.640	4.635	1.027	31.044	915	-376	4.226	1.430	383	0	0.000	2.178	0	1.379	3.837
1984.34	0.17	456	914	310	437	16.949	21.177	-0.468	4.166	1.027	20.150	913	-482	4.196	1.400	343	0	0.000	1.739	0	1.379	3.807
1984.43	0.09	950	836	327	607	23.545	27.342	-0.431	3.735	1.065	26.277	906	-267	4.187	1.391	349	0	0.000	1.279	0	1.379	3.835
1984.51	0.08	1365	846	345	762	29.549	33.211	-0.134	3.601	1.101	32.111	904	416	4.199	1.403	528	0	0.000	1.097	0	1.379	3.883
1984.59	0.08	1301	939	524	846	32.810	36.166	-0.307	3.294	1.119	35.047	907	765	4.220	1.424	1076	0	0.000	0.751	744	1.400	3.942
1984.68	0.09	1314	1028	996	1110	43.062	46.305	-0.113	3.181	1.181	45.125	912	706	4.244	1.448	1391	0	0.000	0.552	163	1.405	4.034
1984.76	0.08	1371	1084	1350	1324	51.353	54.934	0.338	3.519	1.233	53.701	917	773	4.266	1.470	1376	0	0.000	0.816	955	1.432	4.136
1984.85	0.09	1405	1153	1406	1374	53.297	57.213	0.334	3.853	1.247	55.966	922	866	4.296	1.500	1366	0	0.000	1.106	2026	1.502	4.249

Gas Balance MODEL R1-F
Kimball Colinville Storage Reservoir
Discrepancy History Match
E. Kimball Crossflow with Meter Error &Gas Spill

Spill threshhold
1300

		Reservoir P/Z(psia)										E.Kimball+Low Perm Gas Balance				Corunna Seckerton Crossflow				South Spill Model		
Date	dT (years)	SOUTH	A1	MID	AVG	Calc. GIP (bcf)	Inventory GIP (bcf)	Total Discrepancy (bcf)	Adjusted Cumulative Discrep. (bcf)	Cumulative Meter Error (bcf)	Adjusted Inventory GIP (bcf)	P/Z (psia)	Influx 0.0008 (mcfd)	5.0 GIP (bcf)	Cum. Influx (bcf)	Avg P/Z Cor/Sec (psi)	Influx 0.0000 (mcfd)	Cum. Influx (bcf)	Revised K/C Cumulative Discrepancy (bcf)	Gas Spill 0.00855 (mcfd)	Cum. Gas Spill (bcf)	Total Model Adjustments (bcf)
1984.93	0.08	1393	1203	1398	1372	53.222	57.212	0.074	3.928	1.247	55.965	928	882	4.321	1.525	1232	0	0.000	1.156	2293	1.567	4.339
1985.01	0.08	1386	1239	1394	1372	53.214	57.211	0.007	3.935	1.247	55.964	933	852	4.345	1.548	876	0	0.000	1.140	2060	1.624	4.419
1985.12	0.11	682	1224	1050	944	36.640	41.415	0.778	4.713	1.247	40.168	938	154	4.351	1.555	436	0	0.000	1.911	0	1.624	4.425
1985.18	0.06	514	1157	785	739	28.653	33.338	-0.090	4.623	1.247	32.091	940	-419	4.341	1.545	417	0	0.000	1.831	0	1.624	4.416
1985.25	0.07	360	1071	549	549	21.312	27.228	1.231	5.854	1.247	25.981	938	-552	4.327	1.531	397	0	0.000	3.076	0	1.624	4.402
1985.34	0.08	402	975	460	505	19.579	24.221	-1.274	4.580	1.247	22.974	935	-585	4.309	1.513	409	0	0.000	1.820	0	1.624	4.384
1985.43	0.09	429	879	471	508	19.696	24.221	-0.116	4.464	1.247	22.974	931	-558	4.290	1.494	718	0	0.000	1.723	0	1.624	4.365
1985.51	0.08	444	821	512	527	20.462	24.961	-0.026	4.437	1.252	23.710	927	-538	4.275	1.478	1242	0	0.000	1.707	0	1.624	4.354
1985.67	0.16	596	774	840	747	28.992	35.896	2.406	6.843	1.318	34.578	923	-468	4.247	1.451	1352	0	0.000	4.074	0	1.624	4.393
1985.68	0.01	850	747	1286	1067	41.403	45.700	-2.607	4.236	1.378	44.322	917	-259	4.247	1.450	1351	0	0.000	1.407	0	1.624	4.452
1985.85	0.17	1397	882	1397	1332	51.660	56.477	0.519	4.754	1.444	55.033	917	336	4.267	1.471	1385	0	0.000	1.840	0	1.624	4.539
1985.93	0.08	1373	993	1391	1335	51.784	56.475	-0.125	4.630	1.444	55.031	922	858	4.293	1.496	1098	0	0.000	1.689	1947	1.681	4.621
1986.01	0.08	1252	1072	1387	1300	50.450	55.107	-0.035	4.594	1.444	53.663	927	695	4.312	1.516	596	0	0.000	1.634	285	1.689	4.649
1986.10	0.09	702	1093	1221	1025	39.767	44.691	0.268	4.862	1.444	43.247	931	73	4.315	1.518	340	0	0.000	1.900	0	1.689	4.651
1986.18	0.08	469	1036	822	727	28.193	33.284	0.166	5.029	1.444	31.840	932	-420	4.302	1.506	332	0	0.000	2.079	0	1.689	4.639
1986.26	0.08	320	957	584	540	20.949	26.153	0.113	5.142	1.444	24.709	929	-568	4.286	1.490	345	0	0.000	2.208	0	1.689	4.623
1986.35	0.10	350	860	560	525	20.380	25.256	-0.328	4.814	1.444	23.812	926	-598	4.265	1.469	353	0	0.000	1.901	0	1.689	4.602
1986.43	0.08	925	799	566	720	27.926	30.937	-1.864	2.949	1.478	29.459	921	-358	4.255	1.459	358	0	0.000	0.012	0	1.689	4.627
1986.51	0.08	1409	794	773	996	38.631	42.484	0.841	3.791	1.549	40.935	919	412	4.267	1.471	362	0	0.000	0.771	0	1.689	4.709
1986.60	0.09	1330	920	1289	1256	48.741	52.942	0.348	4.138	1.613	51.329	922	823	4.295	1.499	635	0	0.000	1.027	1585	1.744	4.856
1986.69	0.09	1368	1022	1383	1332	51.673	56.111	0.237	4.376	1.632	54.479	928	771	4.322	1.526	1200	0	0.000	1.218	1104	1.782	4.939
1986.75	0.06	1355	1076	1387	1337	51.865	56.304	0.001	4.377	1.633	54.671	934	790	4.339	1.543	1299	0	0.000	1.201	1399	1.812	4.987
1986.85	0.09	1384	1142	1400	1362	52.840	57.312	0.034	4.411	1.639	55.673	937	801	4.366	1.570	1370	0	0.000	1.201	1593	1.866	5.076
1986.92	0.08	1337	1188	1395	1349	52.329	56.723	-0.078	4.333	1.639	55.084	943	774	4.388	1.592	1337	0	0.000	1.101	1376	1.906	5.137
1987.02	0.09	1184	1206	1389	1295	50.249	54.635	-0.008	4.324	1.639	52.996	948	556	4.408	1.611	801	0	0.000	1.074	0	1.906	5.156
1987.09	0.08	689	1181	1265	1055	40.931	45.906	0.589	4.913	1.639	44.267	952	-20	4.407	1.611	395	0	0.000	1.663	0	1.906	5.156
1987.18	0.08	413	1101	848	730	28.314	33.702	0.412	5.326	1.639	32.063	952	-482	4.392	1.596	347	0	0.000	2.091	0	1.906	5.141
1987.25	0.08	362	1011	617	579	22.447	27.741	-0.095	5.231	1.639	26.101	949	-602	4.376	1.580	360	0	0.000	2.012	0	1.906	5.124
1987.34	0.09	712	914	714	738	28.646	33.187	-0.753	4.479	1.673	31.514	945	-487	4.360	1.563	385	0	0.000	1.243	0	1.906	5.141
1987.42	0.08	708	871	716	733	28.435	33.187	0.211	4.690	1.673	31.514	942	-309	4.351	1.555	1093	0	0.000	1.463	0	1.906	5.133
1987.52	0.10	833	851	718	775	30.061	34.651	-0.162	4.528	1.682	32.970	940	-233	4.343	1.547	1315	0	0.000	1.300	0	1.906	5.134
1987.59	0.08	1047	836	723	849	32.951	37.598	0.056	4.585	1.699	35.899	938	2	4.343	1.547	1299	0	0.000	1.339	0	1.906	5.152
1987.67	0.08	1303	879	913	1044	40.488	44.773	-0.362	4.223	1.743	43.030	938	400	4.355	1.558	1339	0	0.000	0.921	0	1.906	5.207
1987.76	0.09	1303	978	1372	1298	50.375	54.923	0.263	4.485	1.805	53.118	941	652	4.376	1.580	1356	0	0.000	1.100	65	1.908	5.293
1987.84	0.08	1345	1044	1386	1329	51.541	56.326	0.237	4.723	1.814	54.512	945	691	4.395	1.599	1377	0	0.000	1.310	537	1.922	5.335
1988.00	0.16	1349	1103	1386	1337	51.889	56.760	0.087	4.810	1.816	54.944	949	733	4.438	1.642	726	0	0.000	1.351	1061	1.984	5.443
1988.01	0.01	1340	1162	1373	1335	51.787	56.238	-0.420	4.389	1.816	54.422	959	717	4.441	1.645	676	0	0.000	0.928	1000	1.989	5.450
1988.08	0.07	827	1179	1242	1091	42.313	47.756	0.991	5.380	1.816	45.939	959	204	4.446	1.650	459	0	0.000	1.914	0	1.989	5.455
1988.16	0.08	433	1116	764	694	26.922	31.457	-0.908	4.473	1.816	29.641	960	-419	4.434	1.637	378	0	0.000	1.019	0	1.989	5.442
1988.26	0.10	383	1000	402	471	18.276	24.162	1.352	5.824	1.816	22.346	958	-602	4.412	1.616	360	0	0.000	2.392	0	1.989	5.421
1988.42	0.16	430	849	429	482	18.718	24.162	-0.442	5.382	1.816	22.346	953	-598	4.377	1.581	385	0	0.000	1.984	0	1.989	5.386
1988.50	0.08	573	791	435	528	20.476	25.867	-0.053	5.329	1.827	24.041	946	-520	4.362	1.566	1093	0	0.000	1.936	0	1.989	5.381
1988.59	0.09	1325	758	750	950	36.857	39.619	-2.629	2.700	1.911	37.708	942	8	4.363	1.566	1315	0	0.000	-0.777	0	1.989	5.466
1988.67	0.08	1398	835	1283	1266	49.121	53.605	1.723	4.422	1.996	51.610	942	773	4.386	1.590	1299	0	0.000	0.837	1399	2.031	5.617
1988.75	0.08	1385	953	1428	1353	52.492	57.732	0.755	5.177	2.021	55.711	947	835	4.411	1.614	1339	0	0.000	1.542	2106	2.093	5.729

Gas Balance MODEL R1-F
Kimball Colinville Storage Reservoir
Discrepancy History Match
E. Kimball Crossflow with Meter Error &Gas Spill

Spill threshhold
1300

		Reservoir P/Z(psia)										E.Kimball+Low Perm Gas Balance				Corunna Seckerton Crossflow				South Spill Model		
Date	dT (years)	SOUTH	A1	MID	AVG	Calc. GIP (bcf)	Inventory GIP (bcf)	Total Discrepancy (bcf)	Adjusted Cumulative Discrep. (bcf)	Cumulative Meter Error (bcf)	Adjusted Inventory GIP (bcf)	P/Z (psia)	Influx 0.0008 (mcfd)	5.0 GIP (bcf)	Cum. Influx (bcf)	Avg P/Z Cor/Sec (psi)	Influx 0.0000 (mcfd)	Cum. Influx (bcf)	Revised K/C Cumulative Discrepancy (bcf)	Gas Spill 0.00855 (mcfd)	Cum. Gas Spill (bcf)	Total Model Adjustments (bcf)
1988.84	0.09	1362	1049	1410	1348	52.286	57.732	0.206	5.384	2.021	55.711	953	787	4.437	1.640	1339	0	0.000	1.722	1680	2.148	5.810
1988.91	0.07	1355	1115	1404	1350	52.394	57.732	-0.107	5.276	2.021	55.711	958	746	4.456	1.659	1339	0	0.000	1.596	1330	2.182	5.863
1988.99	0.08	1135	1156	1351	1252	48.556	54.110	0.215	5.492	2.021	52.089	962	502	4.470	1.674	1339	0	0.000	1.796	0	2.182	5.878
1989.06	0.07	848	1145	1328	1139	44.178	49.854	0.122	5.614	2.021	47.833	966	43	4.471	1.675	1339	0	0.000	1.918	0	2.182	5.879
1989.16	0.10	593	1070	1008	872	33.839	39.930	0.416	6.029	2.021	37.909	966	-331	4.459	1.663	1339	0	0.000	2.345	0	2.182	5.867
1989.26	0.10	559	980	712	693	26.884	32.830	-0.145	5.884	2.021	30.809	963	-479	4.442	1.646	1339	0	0.000	2.217	0	2.182	5.849
1989.33	0.07	478	915	668	633	24.577	30.475	-0.048	5.836	2.021	28.454	959	-524	4.428	1.632	1339	0	0.000	2.183	0	2.182	5.836
1989.41	0.08	654	857	668	687	26.655	32.180	-0.374	5.463	2.032	30.148	957	-478	4.415	1.618	1339	0	0.000	1.813	0	2.182	5.832
1989.51	0.10	655	813	716	707	27.440	33.016	0.052	5.514	2.037	30.979	954	-387	4.401	1.604	1339	0	0.000	1.873	0	2.182	5.823
1989.58	0.08	701	791	1190	970	37.637	42.921	-0.293	5.222	2.097	40.824	951	-357	4.391	1.594	1339	0	0.000	1.530	0	2.182	5.874
1989.66	0.08	1148	783	1383	1226	47.554	53.171	0.333	5.555	2.160	51.011	948	-37	4.390	1.593	1339	0	0.000	1.802	0	2.182	5.935
1989.76	0.10	1388	863	1411	1334	51.739	57.933	0.577	6.132	2.189	55.744	948	567	4.409	1.613	1339	0	0.000	2.330	0	2.182	5.984
1989.83	0.08	1361	970	1403	1334	51.754	57.933	-0.016	6.116	2.189	55.744	952	790	4.431	1.635	1339	0	0.000	2.293	1711	2.230	6.054
1989.91	0.08	1348	1051	1398	1337	51.855	57.932	-0.101	6.015	2.189	55.744	957	739	4.452	1.655	1339	0	0.000	2.171	1244	2.264	6.108
1990.00	0.10	635	1093	1068	922	35.751	43.061	1.233	7.248	2.189	40.873	962	50	4.454	1.657	1339	0	0.000	3.402	0	2.264	6.110
1990.08	0.08	580	1031	1044	882	34.200	40.769	-0.741	6.507	2.189	38.580	962	-445	4.441	1.645	1339	0	0.000	2.674	0	2.264	6.098
1990.15	0.08	470	959	887	752	29.169	36.246	0.508	7.016	2.189	34.058	959	-518	4.427	1.631	1339	0	0.000	3.196	0	2.264	6.084
1990.24	0.08	406	892	652	598	23.185	30.270	0.007	7.023	2.189	28.081	956	-580	4.409	1.613	1339	0	0.000	3.221	0	2.264	6.066
1990.33	0.09	482	816	483	524	20.347	26.874	-0.558	6.465	2.189	24.685	952	-571	4.390	1.593	1339	0	0.000	2.683	0	2.264	6.046
1990.43	0.10	493	760	494	527	20.450	26.874	-0.104	6.362	2.189	24.685	948	-533	4.371	1.575	1339	0	0.000	2.598	0	2.264	6.028
1990.49	0.06	498	734	498	528	20.489	26.874	-0.039	6.323	2.189	24.685	944	-520	4.360	1.564	1339	0	0.000	2.570	0	2.264	6.017
1990.58	0.10	770	701	509	624	24.190	30.013	-0.562	5.760	2.208	27.805	942	-390	4.346	1.550	1339	0	0.000	2.003	0	2.264	6.022
1990.66	0.08	1314	704	686	906	35.138	40.194	-0.766	4.994	2.270	37.924	939	162	4.351	1.554	1339	0	0.000	1.170	0	2.264	6.089
1990.73	0.08	1363	795	1218	1215	47.129	52.824	0.639	5.633	2.347	50.478	940	728	4.371	1.574	1339	0	0.000	1.712	877	2.288	6.210
1990.83	0.10	1416	941	1407	1351	52.422	58.857	0.740	6.373	2.384	56.473	944	835	4.400	1.604	1339	0	0.000	2.386	2056	2.361	6.349
1990.92	0.10	1391	1059	1394	1351	52.397	58.857	0.024	6.398	2.384	56.473	950	857	4.430	1.634	1339	0	0.000	2.380	2383	2.444	6.462
1991.00	0.08	1378	1124	1388	1351	52.428	58.857	-0.031	6.367	2.384	56.473	957	806	4.453	1.656	1339	0	0.000	2.327	1936	2.498	6.539
1991.08	0.08	790	1161	1224	1066	41.356	48.786	1.001	7.369	2.384	46.403	962	204	4.458	1.662	1339	0	0.000	3.323	0	2.498	6.544
1991.15	0.08	516	1104	919	803	31.145	38.808	0.232	7.601	2.384	36.424	963	-400	4.447	1.651	1339	0	0.000	3.566	0	2.498	6.533
1991.25	0.10	569	998	567	622	24.145	31.106	-0.702	6.899	2.384	28.722	961	-505	4.429	1.632	1339	0	0.000	2.883	0	2.498	6.515
1991.33	0.08	588	932	582	629	24.385	31.106	-0.240	6.659	2.384	28.722	957	-467	4.416	1.619	1339	0	0.000	2.656	0	2.498	6.502
1991.42	0.10	1046	869	607	792	30.732	36.648	-0.805	5.854	2.418	34.231	954	-196	4.409	1.613	1339	0	0.000	1.824	0	2.498	6.529
1991.50	0.08	1384	887	1023	1131	43.864	49.638	-0.143	5.712	2.497	47.141	952	453	4.422	1.625	1339	0	0.000	1.590	0	2.498	6.621
1991.58	0.08	1344	978	1306	1278	49.577	56.114	0.763	6.475	2.536	53.578	955	761	4.443	1.647	1339	0	0.000	2.292	1456	2.539	6.722
1991.67	0.09	1387	1075	1375	1341	52.029	58.850	0.284	6.759	2.553	56.297	960	759	4.469	1.672	1339	0	0.000	2.533	1496	2.590	6.815
1991.75	0.08	1407	1139	1386	1362	52.828	59.678	0.029	6.787	2.558	57.120	965	820	4.492	1.695	1339	0	0.000	2.534	2233	2.652	6.906
1991.84	0.10	1393	1204	1395	1370	53.149	60.223	0.224	7.012	2.561	57.662	970	818	4.520	1.724	1339	0	0.000	2.727	2303	2.733	7.018
1991.92	0.08	1358	1239	1356	1342	52.048	58.867	-0.255	6.757	2.561	56.306	976	755	4.542	1.745	1339	0	0.000	2.450	1721	2.781	7.088
1992.00	0.08	1353	1258	1354	1341	52.044	58.867	0.004	6.761	2.561	56.306	981	703	4.561	1.765	1339	0	0.000	2.435	1255	2.817	7.143
1992.09	0.09	760	1264	1252	1083	42.031	49.900	1.046	7.807	2.561	47.339	985	120	4.565	1.769	1339	0	0.000	3.477	0	2.817	7.147
1992.17	0.08	409	1225	713	673	26.095	34.580	0.616	8.423	2.561	32.019	986	-504	4.551	1.754	1339	0	0.000	4.107	0	2.817	7.132
1992.27	0.09	312	1045	306	402	15.591	24.072	-0.003	8.420	2.561	21.511	983	-671	4.527	1.731	1339	0	0.000	4.127	0	2.817	7.109
1992.34	0.08	307	948	289	379	14.690	22.712	-0.460	7.960	2.561	20.150	978	-692	4.508	1.711	1339	0	0.000	3.687	0	2.817	7.089
1992.42	0.08	331	867	300	382	14.832	22.712	-0.142	7.817	2.561	20.150	974	-680	4.489	1.693	1339	0	0.000	3.563	0	2.817	7.071
1992.50	0.08	348	802	458	463	17.979	25.607	-0.251	7.566	2.579	23.028	970	-663	4.471	1.674	1339	0	0.000	3.313	0	2.817	7.070

Gas Balance MODEL R1-F
Kimball Colinville Storage Reservoir
Discrepancy History Match
E. Kimball Crossflow with Meter Error &Gas Spill

Spill threshhold
1300

		Reservoir P/Z(psia)										E.Kimball+Low Perm Gas Balance				Corunna Seckerton Crossflow				South Spill Model		
Date	dT (years)	SOUTH	A1	MID	AVG	Calc. GIP (bcf)	Inventory GIP (bcf)	Total Discrepancy (bcf)	Adjusted Cumulative Discrep. (bcf)	Cumulative Meter Error (bcf)	Adjusted Inventory GIP (bcf)	P/Z (psia)	Influx 0.0008 (mcfd)	5.0 GIP (bcf)	Cum. Influx (bcf)	Avg P/Z Cor/Sec (psi)	Influx 0.0000 (mcfd)	Cum. Influx (bcf)	Revised K/C Cumulative Discrepancy (bcf)	Gas Spill 0.00855 (mcfd)	Cum. Gas Spill (bcf)	Total Model Adjustments (bcf)
1992.59	0.10	769	739	994	884	34.289	41.251	-0.667	6.900	2.674	38.576	966	-499	4.453	1.657	1339	0	0.000	2.568	0	2.817	7.148
1992.67	0.08	1163	729	1257	1158	44.921	52.407	0.524	7.424	2.743	49.664	962	4	4.453	1.657	1339	0	0.000	3.025	0	2.817	7.216
1992.75	0.08	1392	800	1338	1288	49.979	57.764	0.299	7.723	2.775	54.989	962	565	4.470	1.674	1339	0	0.000	3.274	0	2.817	7.265
1992.84	0.09	1384	937	1400	1336	51.835	59.810	0.190	7.913	2.788	57.022	965	798	4.496	1.700	1339	0	0.000	3.426	2021	2.883	7.370
1992.96	0.12	1244	1068	1389	1298	50.368	58.357	0.014	7.927	2.788	55.569	971	632	4.523	1.727	1339	0	0.000	3.413	317	2.896	7.411
1993.05	0.09	830	1107	1289	1107	42.944	50.828	-0.105	7.822	2.788	48.041	977	101	4.526	1.730	1339	0	0.000	3.305	0	2.896	7.414
1993.12	0.08	492	1062	800	726	28.180	37.226	1.162	8.984	2.788	34.439	978	-415	4.515	1.719	1339	0	0.000	4.478	0	2.896	7.403
1993.21	0.08	359	983	396	457	17.740	26.614	-0.173	8.811	2.788	23.826	975	-618	4.496	1.700	1339	0	0.000	4.324	0	2.896	7.384
1993.30	0.09	329	883	341	405	15.723	24.231	-0.365	8.446	2.788	21.443	971	-663	4.473	1.677	1339	0	0.000	3.981	0	2.896	7.361
								0.7750%		99.22%										0.008550		
1993.38	0.08	362	814	350	413	16.019	24.354	-0.173	8.273	2.789	21.565	966	-655	4.455	1.658	1339	0	0.000	3.826	0	2.896	7.343
1993.46	0.08	377	759	357	415	16.087	24.354	-0.068	8.204	2.789	21.565	962	-635	4.437	1.641	1339	0	0.000	3.775	0	2.896	7.326
1993.49	0.04	382	737	439	457	17.734	25.981	-0.020	8.185	2.801	23.180	958	-623	4.429	1.632	1339	0	0.000	3.751	0	2.896	7.330
1993.53	0.04	389	716	741	616	23.907	31.274	-0.880	7.305	2.842	28.432	957	-614	4.420	1.623	1339	0	0.000	2.839	0	2.896	7.362
1993.57	0.04	398	697	987	747	28.973	36.288	-0.052	7.253	2.881	33.407	955	-606	4.411	1.615	1339	0	0.000	2.757	0	2.896	7.393
1993.61	0.04	426	680	1135	832	32.276	40.180	0.588	7.841	2.911	37.268	953	-592	4.403	1.607	1339	0	0.000	3.323	0	2.896	7.415
1993.67	0.06	635	659	1258	966	37.486	45.487	0.097	7.938	2.952	42.534	951	-500	4.393	1.597	1339	0	0.000	3.390	0	2.896	7.445
1993.70	0.04	893	649	1364	1111	43.086	51.060	-0.026	7.913	2.996	48.065	949	-255	4.389	1.593	1339	0	0.000	3.324	0	2.896	7.485
1993.74	0.04	1124	651	1387	1203	46.662	54.813	0.176	8.089	3.025	51.788	948	94	4.391	1.594	1339	0	0.000	3.469	0	2.896	7.516
1993.78	0.04	1220	672	1382	1236	47.952	56.388	0.286	8.375	3.037	53.351	948	379	4.396	1.600	1339	0	0.000	3.738	0	2.896	7.533
1993.84	0.06	1311	738	1376	1273	49.380	57.954	0.137	8.512	3.049	54.905	950	561	4.408	1.611	1339	0	0.000	3.852	0	2.896	7.557
1993.87	0.04	1306	795	1371	1275	49.475	58.080	0.031	8.543	3.050	55.030	952	646	4.417	1.620	1339	0	0.000	3.873	0	2.896	7.567
1993.91	0.04	1294	849	1368	1277	49.532	58.080	-0.057	8.486	3.050	55.030	954	626	4.425	1.629	1339	0	0.000	3.807	0	2.896	7.576
1993.95	0.04	1277	899	1365	1275	49.478	57.967	-0.059	8.427	3.050	54.917	956	593	4.434	1.638	1339	0	0.000	3.739	0	2.896	7.584
1993.99	0.04	1147	940	1362	1234	47.875	56.617	0.252	8.679	3.050	53.567	958	443	4.440	1.644	1339	0	0.000	3.985	0	2.896	7.590
1994.03	0.04	747	969	1357	1097	42.552	51.832	0.539	9.218	3.050	48.782	959	-17	4.440	1.644	1339	0	0.000	4.524	0	2.896	7.590
1994.08	0.06	432	964	1176	892	34.589	44.517	0.648	9.866	3.050	41.467	959	-458	4.430	1.634	1339	0	0.000	5.182	0	2.896	7.580
1994.12	0.04	413	937	993	785	30.461	40.081	-0.308	9.558	3.050	37.031	957	-592	4.422	1.626	1339	0	0.000	4.882	0	2.896	7.573
1994.16	0.04	393	903	763	653	25.318	34.662	-0.277	9.281	3.050	31.612	955	-602	4.414	1.618	1339	0	0.000	4.614	0	2.896	7.564
1994.21	0.04	402	869	588	559	21.683	31.294	0.267	9.549	3.050	28.244	953	-602	4.404	1.608	1339	0	0.000	4.891	0	2.896	7.554
1994.24	0.04	407	837	497	508	19.726	29.047	-0.290	9.259	3.050	25.997	951	-595	4.396	1.599	1339	0	0.000	4.609	0	2.896	7.546
1994.28	0.04	437	807	469	501	19.430	29.051	0.300	9.559	3.050	26.001	949	-580	4.388	1.592	1339	0	0.000	4.917	0	2.896	7.538
1994.34	0.06	489	769	492	526	20.413	29.181	-0.853	8.706	3.051	26.130	948	-549	4.376	1.580	1339	0	0.000	4.075	0	2.896	7.527
1994.38	0.04	548	748	504	550	21.356	29.972	-0.152	8.553	3.057	26.914	945	-502	4.369	1.573	1339	0	0.000	3.923	0	2.896	7.526
1994.42	0.04	549	732	507	550	21.343	29.972	0.013	8.567	3.057	26.914	944	-473	4.363	1.566	1339	0	0.000	3.943	0	2.896	7.520
1994.45	0.04	550	718	510	550	21.347	29.972	-0.005	8.562	3.057	26.914	942	-470	4.356	1.560	1339	0	0.000	3.945	0	2.896	7.514
1994.49	0.04	552	707	512	551	21.360	29.971	-0.013	8.549	3.057	26.914	941	-466	4.350	1.553	1339	0	0.000	3.939	0	2.896	7.507
1994.53	0.04	554	697	515	551	21.387	29.974	-0.024	8.525	3.057	26.917	940	-463	4.343	1.547	1339	0	0.000	3.921	0	2.896	7.500
1994.59	0.06	556	684	598	595	23.065	31.394	-0.258	8.267	3.068	28.326	938	-459	4.334	1.537	1339	0	0.000	3.661	0	2.896	7.502
1994.62	0.04	559	676	750	675	26.168	34.373	-0.124	8.143	3.091	31.281	936	-454	4.327	1.531	1339	0	0.000	3.520	0	2.896	7.519
1994.66	0.04	587	669	1044	838	32.527	40.949	0.217	8.359	3.142	37.806	935	-437	4.321	1.525	1339	0	0.000	3.692	0	2.896	7.564
1994.72	0.06	909	657	1316	1092	42.363	50.560	-0.225	8.134	3.217	47.343	933	-250	4.316	1.520	1339	0	0.000	3.398	0	2.896	7.633
1994.76	0.04	1266	665	1380	1250	48.502	56.912	0.214	8.348	3.266	53.646	932	250	4.320	1.523	1339	0	0.000	3.559	0	2.896	7.686
1994.80	0.04	1383	693	1416	1313	50.941	59.818	0.466	8.814	3.288	56.529	933	708	4.330	1.533	1339	0	0.000	3.993	0	2.896	7.718

Gas Balance MODEL R1-F
Kimball Colinville Storage Reservoir
Discrepancy History Match
E. Kimball Crossflow with Meter Error &Gas Spill

Spill threshhold
1300

		Reservoir P/Z(psia)										E.Kimball+Low Perm Gas Balance			Corunna Seckerton Crossflow					South Spill Model		
Date	dT (years)	SOUTH	A1	MID	AVG	Calc. GIP (bcf)	Inventory GIP (bcf)	Total Discrepancy (bcf)	Adjusted Cumulative Discrep. (bcf)	Cumulative Meter Error (bcf)	Adjusted Inventory GIP (bcf)	P/Z (psia)	Influx 0.0008 (mcfd)	5.0 GIP (bcf)	Cum. Influx (bcf)	Avg P/Z Cor/Sec (psi)	Influx 0.0000 (mcfd)	Cum. Influx (bcf)	Revised K/C Cumulative Discrepancy (bcf)	Gas Spill 0.00855 (mcfd)	Cum. Gas Spill (bcf)	Total Model Adjustments (bcf)
1994.83	0.04	1436	748	1438	1350	52.381	61.413	0.156	8.971	3.301	58.113	935	891	4.342	1.546	1339	0	0.000	4.124	0	2.896	7.743
1994.87	0.04	1434	817	1440	1359	52.714	61.918	0.171	9.141	3.305	58.613	938	945	4.355	1.559	1339	0	0.000	4.278	1132	2.912	7.775
1994.91	0.04	1420	886	1436	1361	52.810	61.976	-0.038	9.103	3.305	58.671	941	923	4.368	1.571	1339	0	0.000	4.227	2351	2.945	7.821
1994.95	0.04	1383	946	1433	1354	52.538	61.726	0.022	9.126	3.305	58.420	943	862	4.380	1.584	1339	0	0.000	4.237	2533	2.981	7.870
1995.01	0.06	1192	1014	1427	1293	50.177	59.463	0.099	9.225	3.305	56.158	946	612	4.393	1.596	1339	0	0.000	4.323	286	2.987	7.888
1995.04	0.04	911	1037	1319	1142	44.299	53.849	0.264	9.489	3.305	50.544	949	166	4.395	1.599	1339	0	0.000	4.585	0	2.987	7.891
1995.08	0.04	716	1036	1205	1014	39.340	49.311	0.420	9.909	3.305	46.006	949	-191	4.392	1.596	1339	0	0.000	5.008	0	2.987	7.888
1995.12	0.04	536	1017	1062	874	33.911	43.505	-0.377	9.532	3.305	40.200	949	-407	4.387	1.591	1339	0	0.000	4.636	0	2.987	7.883
1995.16	0.04	508	986	934	793	30.764	40.657	0.299	9.831	3.305	37.352	948	-501	4.379	1.583	1339	0	0.000	4.943	0	2.987	7.875
1995.20	0.04	529	952	752	700	27.153	36.769	-0.277	9.554	3.305	33.464	946	-502	4.372	1.575	1339	0	0.000	4.673	0	2.987	7.867
1995.25	0.05	552	902	744	698	27.065	36.258	-0.422	9.131	3.305	32.953	944	-481	4.363	1.566	1339	0	0.000	4.260	0	2.987	7.859
1995.30	0.04	561	873	621	632	24.532	33.798	0.072	9.204	3.305	30.493	942	-464	4.355	1.559	1339	0	0.000	4.340	0	2.987	7.851
1995.34	0.04	578	847	628	638	24.758	33.845	-0.179	9.025	3.306	30.540	941	-449	4.349	1.553	1339	0	0.000	4.167	0	2.987	7.845
1995.38	0.04	639	823	631	658	25.531	34.487	-0.131	8.894	3.311	31.177	939	-411	4.342	1.546	1339	0	0.000	4.038	0	2.987	7.843
1995.41	0.03	640	809	634	658	25.540	34.487	-0.009	8.885	3.311	31.177	938	-378	4.338	1.541	1339	0	0.000	4.033	0	2.987	7.839
1995.45	0.04	642	794	652	667	25.860	34.757	-0.050	8.835	3.313	31.444	937	-374	4.333	1.536	1339	0	0.000	3.986	0	2.987	7.836
1995.49	0.04	645	782	653	667	25.858	34.757	0.002	8.837	3.313	31.444	936	-370	4.328	1.531	1339	0	0.000	3.993	0	2.987	7.831
1995.53	0.04	647	771	654	667	25.864	34.757	-0.006	8.831	3.313	31.444	935	-366	4.322	1.526	1339	0	0.000	3.992	0	2.987	7.825
1995.59	0.06	657	757	830	760	29.504	38.245	-0.152	8.679	3.340	34.905	934	-358	4.314	1.518	1339	0	0.000	3.821	0	2.987	7.844
1995.62	0.03	663	750	963	832	32.290	40.747	-0.284	8.395	3.359	37.388	932	-348	4.310	1.514	1339	0	0.000	3.522	0	2.987	7.860
1995.67	0.04	677	743	1127	922	35.788	44.309	0.064	8.459	3.387	40.923	931	-335	4.305	1.508	1339	0	0.000	3.564	0	2.987	7.882
1995.70	0.03	831	738	1246	1038	40.274	48.800	0.005	8.464	3.421	45.379	930	-238	4.302	1.506	1339	0	0.000	3.536	0	2.987	7.914
1995.74	0.04	977	738	1362	1150	44.609	53.487	0.352	8.815	3.458	50.029	929	-37	4.301	1.505	1339	0	0.000	3.852	0	2.987	7.950
1995.79	0.05	1374	760	1438	1330	51.609	60.556	0.070	8.885	3.513	57.044	929	414	4.309	1.513	1339	0	0.000	3.860	0	2.987	8.013
1995.84	0.04	1410	809	1437	1348	52.311	61.736	0.478	9.363	3.522	58.214	931	858	4.323	1.526	1339	0	0.000	4.315	0	2.987	8.035
1995.87	0.03	1404	863	1419	1343	52.118	61.566	0.023	9.386	3.522	58.044	934	889	4.333	1.537	1339	0	0.000	4.327	0	2.987	8.046
1995.91	0.04	1387	930	1413	1343	52.109	61.566	0.009	9.395	3.522	58.044	936	859	4.347	1.551	1339	0	0.000	4.323	1845	3.016	8.089
1995.97	0.05	1372	1000	1412	1346	52.218	61.505	-0.171	9.225	3.522	57.983	939	820	4.363	1.567	1339	0	0.000	4.136	2098	3.057	8.146
1995.99	0.02	1211	1027	1412	1294	50.189	59.689	0.213	9.438	3.522	56.167	942	626	4.369	1.572	1339	0	0.000	4.344	171	3.059	8.153
1996.04	0.05	845	1058	1395	1162	45.070	54.886	0.316	9.754	3.522	51.364	944	134	4.371	1.575	1339	0	0.000	4.658	0	3.059	8.155
1996.08	0.04	638	1047	1271	1024	39.710	49.975	0.449	10.203	3.522	46.454	944	-273	4.367	1.570	1339	0	0.000	5.111	0	3.059	8.151
1996.12	0.03	530	1026	1041	863	33.465	43.794	0.064	10.267	3.522	40.272	943	-440	4.362	1.565	1339	0	0.000	5.180	0	3.059	8.146
1996.16	0.04	465	987	849	734	28.459	38.868	0.080	10.347	3.522	35.347	942	-513	4.353	1.557	1339	0	0.000	5.268	0	3.059	8.138
1996.20	0.04	353	954	573	545	21.137	32.479	0.933	11.280	3.522	28.958	940	-575	4.346	1.549	1339	0	0.000	6.209	0	3.059	8.130
1996.24	0.04	280	915	459	455	17.638	28.511	-0.469	10.811	3.522	24.989	939	-626	4.336	1.539	1339	0	0.000	5.750	0	3.059	8.120
1996.29	0.05	272	867	290	357	13.841	24.621	-0.094	10.717	3.522	21.099	937	-642	4.324	1.528	1339	0	0.000	5.668	0	3.059	8.108
1996.34	0.05	281	817	286	351	13.626	23.940	-0.465	10.252	3.522	20.418	934	-639	4.312	1.516	1339	0	0.000	5.215	0	3.059	8.096
1996.39	0.05	423	778	401	456	17.697	27.107	-0.905	9.347	3.546	23.560	931	-597	4.302	1.506	1339	0	0.000	4.296	0	3.059	8.111
1996.41	0.02	527	759	513	549	21.302	30.352	-0.359	8.988	3.571	26.781	929	-512	4.297	1.501	1339	0	0.000	3.916	0	3.059	8.131
1996.44	0.03	698	730	700	703	27.279	36.002	-0.327	8.661	3.615	32.387	928	-390	4.293	1.497	1339	0	0.000	3.549	0	3.059	8.171
1996.49	0.04	1019	692	975	954	37.016	46.264	0.525	9.186	3.695	42.569	927	-100	4.291	1.495	1339	0	0.000	3.996	0	3.059	8.248
1996.54	0.05	1247	732	1270	1194	46.323	55.413	-0.157	9.028	3.766	51.647	927	339	4.298	1.502	1339	0	0.000	3.761	0	3.059	8.326
1996.58	0.04	1240	771	1270	1197	46.421	56.303	0.792	9.820	3.773	52.531	928	549	4.307	1.510	1339	0	0.000	4.537	0	3.059	8.342
1996.64	0.05	1222	833	1260	1193	46.278	56.303	0.143	9.964	3.773	52.531	930	522	4.316	1.520	1339	0	0.000	4.671	0	3.059	8.351
1996.67	0.04	1279	875	1283	1230	47.720	57.574	-0.172	9.792	3.782	53.791	932	558	4.324	1.528	1339	0	0.000	4.482	0	3.059	8.369

Gas Balance MODEL R1-F
Kimball Colinville Storage Reservoir
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Spill threshhold
1300

		Reservoir P/Z(psia)										E.Kimball+Low Perm Gas Balance				Corunna Seckerton Crossflow				South Spill Model		
Date	dT (years)	SOUTH	A1	MID	AVG	Calc. GIP (bcf)	Inventory GIP (bcf)	Total Discrepancy (bcf)	Adjusted Cumulative Discrep. (bcf)	Cumulative Meter Error (bcf)	Adjusted Inventory GIP (bcf)	P/Z (psia)	Influx 0.0008 (mcfd)	5.0 GIP (bcf)	Cum. Influx (bcf)	Avg P/Z Cor/Sec (psi)	Influx 0.0000 (mcfd)	Cum. Influx (bcf)	Revised K/C Cumulative Discrepancy (bcf)	Gas Spill 0.00855 (mcfd)	Cum. Gas Spill (bcf)	Total Model Adjustments (bcf)
1996.71	0.04	1342	915	1339	1286	49.910	59.757	-0.007	9.785	3.799	55.958	934	677	4.333	1.537	1339	0	0.000	4.449	0	3.059	8.395
1996.75	0.04	1360	954	1358	1308	50.733	60.807	0.228	10.013	3.807	57.000	936	761	4.344	1.548	1339	0	0.000	4.658	0	3.059	8.414
1996.79	0.04	1379	995	1379	1330	51.608	61.686	0.004	10.016	3.814	57.872	938	798	4.355	1.559	1339	0	0.000	4.643	649	3.068	8.441
1996.83	0.04	1417	1036	1414	1367	53.033	63.067	-0.044	9.972	3.825	59.242	941	857	4.367	1.571	1339	0	0.000	4.576	1815	3.093	8.490
1996.88	0.06	1370	1094	1363	1331	51.648	61.924	0.242	10.214	3.825	58.099	943	843	4.385	1.588	1339	0	0.000	4.801	1487	3.124	8.537
1996.91	0.03	1368	1118	1364	1334	51.759	61.924	-0.111	10.104	3.825	58.099	947	785	4.393	1.597	1339	0	0.000	4.682	1676	3.142	8.564
1996.96	0.05	1364	1152	1363	1337	51.863	61.924	-0.104	9.999	3.825	58.099	949	774	4.407	1.610	1339	0	0.000	4.564	2079	3.178	8.614
1997.00	0.04	1359	1177	1361	1337	51.878	61.924	-0.016	9.983	3.825	58.099	952	760	4.418	1.622	1339	0	0.000	4.536	1471	3.201	8.648
1997.02	0.02	1251	1187	1358	1299	50.409	60.788	0.334	10.318	3.825	56.963	954	636	4.423	1.627	1339	0	0.000	4.866	217	3.203	8.654
1997.03	0.01	1154	1190	1332	1253	48.599	59.223	0.244	10.561	3.825	55.398	955	428	4.424	1.627	1339	0	0.000	5.109	0	3.203	8.655
1997.05	0.03	752	1199	1106	995	38.605	50.054	0.826	11.387	3.825	46.229	956	-4	4.424	1.627	1339	0	0.000	5.935	0	3.203	8.655
1997.08	0.02	562	1188	923	832	32.260	43.748	0.039	11.427	3.825	39.923	956	-385	4.420	1.624	1339	0	0.000	5.978	0	3.203	8.652
1997.11	0.03	459	1156	656	651	25.263	36.661	-0.091	11.336	3.825	32.836	955	-521	4.414	1.618	1339	0	0.000	5.893	0	3.203	8.646
1997.15	0.04	349	1101	468	507	19.679	30.851	-0.226	11.110	3.825	27.026	953	-598	4.405	1.608	1339	0	0.000	5.676	0	3.203	8.636
1997.19	0.04	349	1055	346	437	16.936	28.083	-0.024	11.086	3.825	24.258	951	-628	4.396	1.599	1339	0	0.000	5.661	0	3.203	8.627
1997.24	0.05	265	990	267	358	13.886	24.928	-0.105	10.980	3.825	21.103	949	-647	4.384	1.588	1339	0	0.000	5.567	0	3.203	8.615
1997.31	0.06	281	916	277	359	13.931	24.558	-0.415	10.565	3.825	20.733	947	-660	4.369	1.572	1339	0	0.000	5.168	0	3.203	8.600
1997.33	0.02	289	888	283	362	14.025	24.588	-0.065	10.501	3.825	20.763	944	-650	4.363	1.566	1339	0	0.000	5.109	0	3.203	8.594
1997.35	0.01	293	874	283	361	14.007	24.564	-0.006	10.495	3.825	20.738	942	-643	4.359	1.563	1339	0	0.000	5.106	0	3.203	8.591
1997.37	0.02	312	855	303	376	14.592	24.965	-0.183	10.311	3.828	21.137	942	-637	4.355	1.559	1339	0	0.000	4.924	0	3.203	8.589
1997.41	0.04	347	814	340	402	15.606	25.832	-0.147	10.164	3.835	21.997	941	-622	4.345	1.549	1339	0	0.000	4.781	0	3.203	8.586
1997.44	0.03	362	787	353	411	15.944	26.198	0.027	10.191	3.838	22.360	938	-606	4.338	1.542	1339	0	0.000	4.812	0	3.203	8.582
1997.46	0.02	366	774	354	411	15.944	26.198	0.001	10.192	3.838	22.360	937	-597	4.334	1.537	1339	0	0.000	4.817	0	3.203	8.578
								0.7750%		99.22%										0.008550		
1997.48	0.02	368	760	354	411	15.926	26.198	0.018	10.210	3.838	22.360	936	-594	4.330	1.533	1339	0	0.000	4.838	0	3.203	8.574
1997.52	0.04	373	736	356	410	15.917	26.198	0.009	10.219	3.838	22.360	935	-590	4.321	1.525	1339	0	0.000	4.856	0	3.203	8.565
1997.56	0.04	379	714	428	447	17.347	27.460	-0.167	10.052	3.848	23.613	933	-585	4.313	1.517	1339	0	0.000	4.687	0	3.203	8.567
1997.59	0.04	384	695	616	546	21.168	30.940	-0.341	9.711	3.875	27.066	932	-579	4.305	1.509	1339	0	0.000	4.327	0	3.203	8.586
1997.63	0.04	437	677	842	681	26.433	36.129	-0.076	9.634	3.915	32.214	930	-558	4.297	1.501	1339	0	0.000	4.218	0	3.203	8.618
1997.67	0.04	525	662	1102	846	32.835	42.393	-0.138	9.496	3.963	38.430	928	-505	4.291	1.494	1339	0	0.000	4.038	0	3.203	8.660
1997.71	0.04	725	649	1309	1023	39.690	49.459	0.211	9.707	4.018	45.441	927	-376	4.285	1.489	1339	0	0.000	4.200	0	3.203	8.710
1997.75	0.04	1135	643	1420	1223	47.448	57.336	0.119	9.826	4.079	53.257	926	5	4.285	1.489	1339	0	0.000	4.258	0	3.203	8.771
1997.79	0.04	1403	651	1439	1327	51.475	61.943	0.579	10.405	4.115	57.828	926	604	4.294	1.498	1339	0	0.000	4.793	0	3.203	8.815
1997.82	0.04	1383	702	1437	1325	51.418	62.510	0.625	11.030	4.119	58.391	928	866	4.306	1.510	1339	0	0.000	5.401	0	3.203	8.832
1997.86	0.04	1382	772	1429	1330	51.596	62.712	0.023	11.053	4.121	58.591	930	839	4.317	1.521	1339	0	0.000	5.411	0	3.203	8.845
1997.90	0.04	1368	840	1428	1333	51.711	62.712	-0.115	10.938	4.121	58.591	933	819	4.329	1.533	1339	0	0.000	5.285	1968	3.230	8.884
1997.94	0.04	1358	900	1421	1333	51.724	62.712	-0.012	10.926	4.121	58.591	935	789	4.340	1.544	1339	0	0.000	5.261	1607	3.253	8.918
1997.98	0.04	1351	950	1373	1312	50.899	61.968	0.081	11.007	4.121	57.848	937	766	4.351	1.555	1339	0	0.000	5.332	1512	3.275	8.950
1998.01	0.04	1316	995	1234	1232	47.805	58.823	-0.050	10.957	4.121	54.703	940	717	4.361	1.564	1339	0	0.000	5.272	950	3.287	8.972
1998.05	0.04	1161	1030	977	1047	40.634	52.179	0.527	11.484	4.121	48.058	942	519	4.368	1.572	1339	0	0.000	5.791	0	3.287	8.980
1998.11	0.06	872	1054	588	745	28.919	40.476	0.012	11.495	4.121	36.355	943	116	4.370	1.574	1339	0	0.000	5.801	0	3.287	8.982
1998.13	0.02	765	1054	576	702	27.223	38.666	-0.114	11.381	4.121	34.545	944	-177	4.369	1.573	1339	0	0.000	5.688	0	3.287	8.981
1998.17	0.04	641	1038	575	656	25.465	36.511	-0.397	10.984	4.121	32.390	944	-317	4.364	1.568	1339	0	0.000	5.296	0	3.287	8.976
1998.21	0.04	509	1008	508	571	22.171	33.581	0.365	11.349	4.121	29.461	943	-447	4.358	1.561	1339	0	0.000	5.666	0	3.287	8.969

Gas Balance MODEL R1-F
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Spill threshhold
1300

		Reservoir P/Z(psia)										E.Kimball+Low Perm Gas Balance				Corunna Seckerton Crossflow				South Spill Model		
Date	dT (years)	SOUTH	A1	MID	AVG	Calc. GIP (bcf)	Inventory GIP (bcf)	Total Discrepancy (bcf)	Adjusted Cumulative Discrep. (bcf)	Cumulative Meter Error (bcf)	Adjusted Inventory GIP (bcf)	P/Z (psia)	Influx 0.0008 (mcfd)	5.0 GIP (bcf)	Cum. Influx (bcf)	Avg P/Z Cor/Sec (psi)	Influx 0.0000 (mcfd)	Cum. Influx (bcf)	Revised K/C Cumulative Discrepancy (bcf)	Gas Spill 0.00855 (mcfd)	Cum. Gas Spill (bcf)	Total Model Adjustments (bcf)
1998.27	0.06	533	957	525	582	22.596	33.408	-0.599	10.750	4.121	29.287	941	-493	4.347	1.551	1339	0	0.000	5.078	0	3.287	8.959
1998.29	0.02	568	940	550	606	23.497	34.066	-0.243	10.507	4.126	29.940	939	-465	4.344	1.548	1339	0	0.000	4.833	0	3.287	8.961
1998.32	0.04	704	908	658	706	27.372	37.658	-0.284	10.224	4.154	33.504	938	-381	4.339	1.543	1339	0	0.000	4.527	0	3.287	8.984
1998.36	0.04	839	881	845	847	32.876	42.652	-0.509	9.715	4.192	38.460	937	-227	4.336	1.539	1339	0	0.000	3.983	0	3.287	9.019
1998.40	0.04	829	868	827	833	32.317	42.705	0.611	10.325	4.193	38.512	936	-146	4.334	1.537	1339	0	0.000	4.595	0	3.287	9.017
1998.44	0.04	857	861	877	868	33.674	43.958	-0.103	10.222	4.203	39.756	936	-133	4.332	1.535	1339	0	0.000	4.484	0	3.287	9.025
1998.48	0.04	879	858	1129	1008	39.121	49.380	-0.026	10.197	4.245	45.135	936	-98	4.330	1.534	1339	0	0.000	4.418	0	3.287	9.066
1998.52	0.04	1028	858	1231	1114	43.210	53.502	0.033	10.230	4.277	49.226	935	28	4.331	1.535	1339	0	0.000	4.419	0	3.287	9.098
1998.55	0.04	1205	865	1347	1237	47.987	58.359	0.079	10.309	4.314	54.044	935	297	4.335	1.539	1339	0	0.000	4.456	0	3.287	9.140
1998.59	0.04	1411	883	1418	1348	52.286	62.816	0.159	10.468	4.349	58.467	936	668	4.344	1.548	1339	0	0.000	4.572	0	3.287	9.184
1998.63	0.04	1417	927	1426	1360	52.758	63.693	0.405	10.873	4.356	59.337	938	896	4.356	1.560	1339	0	0.000	4.957	0	3.287	9.203
1998.67	0.04	1402	979	1421	1359	52.705	63.693	0.053	10.926	4.356	59.337	941	882	4.369	1.573	1339	0	0.000	4.998	73	3.288	9.216
1998.71	0.04	1392	1027	1418	1359	52.741	63.693	-0.036	10.890	4.356	59.337	944	850	4.380	1.584	1339	0	0.000	4.951	2341	3.320	9.259
1998.74	0.04	1380	1070	1412	1358	52.666	63.692	0.074	10.964	4.356	59.337	946	822	4.392	1.595	1339	0	0.000	5.013	2269	3.352	9.302
1998.78	0.04	1435	1108	1433	1393	54.025	64.867	-0.185	10.780	4.365	60.502	949	867	4.404	1.608	1339	0	0.000	4.807	2755	3.391	9.364
1998.82	0.04	1432	1140	1437	1398	54.222	65.065	0.002	10.781	4.366	60.699	951	923	4.417	1.621	1339	0	0.000	4.794	2600	3.428	9.415
1998.86	0.04	1425	1172	1433	1397	54.200	65.023	-0.020	10.761	4.366	60.657	954	907	4.429	1.633	1339	0	0.000	4.762	2367	3.459	9.459
1998.90	0.04	1419	1200	1425	1395	54.113	64.890	-0.046	10.715	4.366	60.524	957	888	4.442	1.645	1339	0	0.000	4.704	2973	3.501	9.513
1998.94	0.04	1407	1223	1410	1386	53.760	64.610	0.074	10.789	4.366	60.244	959	864	4.454	1.658	1339	0	0.000	4.765	2789	3.541	9.565
1998.97	0.04	1392	1243	1398	1377	53.411	64.048	-0.215	10.574	4.366	59.682	962	830	4.466	1.670	1339	0	0.000	4.539	2520	3.576	9.612
1999.03	0.06	1373	1264	1397	1372	53.236	63.914	0.042	10.616	4.366	59.548	965	788	4.482	1.686	1339	0	0.000	4.564	2223	3.622	9.674
1999.05	0.02	1245	1269	1377	1317	51.108	62.000	0.215	10.830	4.366	57.634	968	624	4.486	1.690	1339	0	0.000	4.774	586	3.626	9.682
1999.09	0.04	1144	1274	1376	1282	49.756	60.717	0.069	10.899	4.366	56.351	969	390	4.492	1.695	1339	0	0.000	4.838	0	3.626	9.687
1999.12	0.04	967	1263	1350	1206	46.798	58.078	0.319	11.218	4.366	53.712	970	138	4.493	1.697	1339	0	0.000	5.155	0	3.626	9.689
1999.17	0.04	670	1241	1185	1014	39.332	51.132	0.520	11.738	4.366	46.766	971	-217	4.490	1.694	1339	0	0.000	5.678	0	3.626	9.686
1999.19	0.02	584	1222	1061	916	35.546	47.634	0.288	12.027	4.366	43.268	970	-438	4.487	1.691	1339	0	0.000	5.970	0	3.626	9.683
1999.25	0.06	511	1151	776	732	28.391	40.268	-0.213	11.814	4.366	35.901	969	-512	4.476	1.680	1339	0	0.000	5.768	0	3.626	9.672
1999.28	0.04	645	1099	790	779	30.217	41.472	-0.621	11.193	4.376	37.096	967	-483	4.470	1.673	1339	0	0.000	5.144	0	3.626	9.675
1999.32	0.04	701	1052	796	795	30.859	41.998	-0.116	11.077	4.380	37.618	965	-385	4.464	1.668	1339	0	0.000	5.030	0	3.626	9.673
1999.36	0.04	798	1018	799	826	32.050	43.070	-0.119	10.959	4.388	38.682	964	-296	4.460	1.664	1339	0	0.000	4.907	0	3.626	9.678
1999.40	0.04	797	991	817	832	32.289	43.351	0.041	11.000	4.390	38.961	963	-234	4.457	1.660	1339	0	0.000	4.949	0	3.626	9.676
1999.44	0.04	825	973	990	931	36.105	46.856	-0.311	10.689	4.417	42.438	963	-215	4.454	1.657	1339	0	0.000	4.614	0	3.626	9.701
1999.47	0.04	869	958	1137	1022	39.645	50.481	0.085	10.774	4.445	46.035	962	-166	4.451	1.655	1339	0	0.000	4.673	0	3.626	9.726
1999.51	0.04	1024	947	1270	1144	44.373	55.228	0.019	10.793	4.482	50.746	962	-23	4.451	1.655	1339	0	0.000	4.656	0	3.626	9.763
1999.55	0.04	1196	944	1357	1249	48.456	59.482	0.171	10.964	4.515	54.967	961	246	4.455	1.658	1339	0	0.000	4.790	0	3.626	9.799
1999.59	0.04	1246	958	1400	1291	50.075	61.487	0.386	11.350	4.531	56.956	962	453	4.461	1.664	1339	0	0.000	5.155	0	3.626	9.821
1999.63	0.04	1237	985	1391	1287	49.917	61.487	0.158	11.508	4.531	56.956	963	492	4.468	1.671	1339	0	0.000	5.306	0	3.626	9.828
1999.67	0.04	1272	1012	1386	1299	50.415	61.924	-0.061	11.447	4.534	57.390	965	516	4.475	1.678	1339	0	0.000	5.234	0	3.626	9.838
1999.70	0.04	1409	1039	1421	1368	53.092	64.510	-0.090	11.356	4.554	59.956	967	691	4.484	1.688	1339	0	0.000	5.114	615	3.634	9.876
1999.74	0.04	1430	1072	1433	1386	53.786	65.299	0.095	11.451	4.560	60.739	969	863	4.496	1.700	1339	0	0.000	5.192	757	3.645	9.905
1999.78	0.04	1425	1111	1433	1390	53.918	65.577	0.146	11.597	4.562	61.015	971	878	4.509	1.712	1339	0	0.000	5.322	1104	3.661	9.936
1999.82	0.04	1426	1150	1435	1396	54.156	65.577	-0.239	11.358	4.562	61.015	974	869	4.522	1.725	1339	0	0.000	5.071	2725	3.702	9.989
1999.86	0.03	1416	1177	1433	1395	54.114	65.577	0.043	11.401	4.562	61.015	977	854	4.532	1.736	1339	0	0.000	5.103	2862	3.737	10.036
1999.89	0.04	1412	1205	1433	1397	54.185	65.577	-0.072	11.329	4.562	61.015	979	834	4.544	1.748	1339	0	0.000	5.019	2756	3.776	10.086
1999.93	0.04	1338	1227	1431	1373	53.264	64.787	0.132	11.461	4.562	60.225	982	744	4.555	1.758	1339	0	0.000	5.140	1882	3.803	10.124

Gas Balance MODEL R1-F
Kimball Colinville Storage Reservoir
Discrepancy History Match
E. Kimball Crossflow with Meter Error &Gas Spill

Spill threshhold
1300

		Reservoir P/Z(psia)									E.Kimball+Low Perm Gas Balance				Corunna Seckerton Crossflow					South Spill Model		
Date	dT (years)	SOUTH	A1	MID	AVG	Calc. GIP (bcf)	Inventory GIP (bcf)	Total Discrepancy (bcf)	Adjusted Cumulative Discrep. (bcf)	Cumulative Meter Error (bcf)	Adjusted Inventory GIP (bcf)	P/Z (psia)	Influx 0.0008 (mcfd)	5.0 GIP (bcf)	Cum. Influx (bcf)	Avg P/Z Cor/Sec (psi)	Influx 0.0000 (mcfd)	Cum. Influx (bcf)	Revised K/C Cumulative Discrepancy (bcf)	Gas Spill 0.00855 (mcfd)	Cum. Gas Spill (bcf)	Total Model Adjustments (bcf)
1999.97	0.04	1340	1243	1344	1330	51.589	63.260	0.148	11.609	4.562	58.698	984	662	4.564	1.768	1339	0	0.000	5.279	1786	3.828	10.158
2000.01	0.04	1189	1252	1263	1236	47.952	59.850	0.227	11.836	4.562	55.288	986	504	4.571	1.775	1339	0	0.000	5.500	11	3.828	10.165
2000.05	0.04	787	1248	1141	1032	40.056	53.700	1.746	13.583	4.562	49.138	987	3	4.571	1.775	1339	0	0.000	7.246	0	3.828	10.165
2000.08	0.04	574	1225	796	774	30.021	43.909	0.244	13.826	4.562	39.347	987	-409	4.565	1.769	1339	0	0.000	7.495	0	3.828	10.159
2000.14	0.06	294	1156	508	516	20.004	34.180	0.287	14.114	4.562	29.618	986	-628	4.552	1.756	1339	0	0.000	7.795	0	3.828	10.146
2000.18	0.04	344	1101	538	542	21.036	33.603	-1.608	12.505	4.562	29.041	983	-694	4.542	1.745	1339	0	0.000	6.198	0	3.828	10.136
2000.22	0.04	368	1050	514	531	20.608	32.940	-0.235	12.270	4.562	28.378	981	-670	4.532	1.736	1339	0	0.000	5.972	0	3.828	10.126
2000.26	0.04	412	1000	577	574	22.250	34.243	-0.339	11.931	4.572	29.671	979	-646	4.524	1.727	1339	0	0.000	5.632	0	3.828	10.128
2000.30	0.04	427	956	507	536	20.797	32.937	0.147	12.078	4.572	28.365	977	-624	4.515	1.719	1339	0	0.000	5.787	0	3.828	10.119
2000.37	0.08	486	883	498	542	21.041	32.928	-0.253	11.826	4.572	28.356	975	-595	4.498	1.702	1339	0	0.000	5.552	0	3.828	10.102
2000.39	0.02	485	868	500	541	20.994	32.928	0.047	11.872	4.572	28.356	972	-570	4.494	1.698	1339	0	0.000	5.602	0	3.828	10.098
2000.43	0.04	493	840	503	542	21.034	32.928	-0.040	11.832	4.572	28.356	971	-563	4.486	1.690	1339	0	0.000	5.569	0	3.828	10.090
								0.8200%		99.18%			0.0008							0.008550		
2000.44	0.01	488	831	505	541	20.972	33.264	0.397	12.229	4.575	28.688	969	-560	4.484	1.687	1339	0	0.000	5.967	0	3.828	10.090
2000.67	0.22	1353	779	618	893	34.632	46.418	-0.505	11.724	4.683	41.735	968	-73	4.478	1.681	1339	0	0.000	5.360	0	3.828	10.192
2000.71	0.04	1404	827	916	1073	41.646	52.638	-0.794	10.930	4.734	47.904	967	770	4.489	1.693	1339	0	0.000	4.503	0	3.828	10.255
2000.75	0.04	1373	890	1127	1182	45.874	57.640	0.774	11.703	4.775	52.865	970	792	4.501	1.705	1339	0	0.000	5.223	0	3.828	10.308
2000.79	0.04	1414	948	1309	1300	50.421	61.961	-0.225	11.479	4.810	57.151	972	799	4.513	1.717	1339	0	0.000	4.951	1907	3.856	10.384
2000.83	0.04	1410	1000	1429	1368	53.068	64.719	0.110	11.589	4.833	59.886	975	836	4.526	1.730	1339	0	0.000	5.026	2470	3.895	10.458
2000.87	0.04	1436	1052	1426	1382	53.627	65.073	-0.204	11.384	4.836	60.237	978	857	4.539	1.743	1339	0	0.000	4.805	2421	3.932	10.511
2000.92	0.04	1410	1097	1401	1366	52.980	64.642	0.216	11.600	4.836	59.806	981	854	4.552	1.756	1339	0	0.000	5.008	2596	3.971	10.563
2000.97	0.05	1403	1142	1398	1367	53.039	64.642	-0.059	11.541	4.836	59.806	983	811	4.567	1.771	1339	0	0.000	4.934	2454	4.016	10.623
2001.01	0.05	1281	1178	1395	1328	51.533	63.267	0.130	11.672	4.836	58.431	987	664	4.578	1.782	1339	0	0.000	5.054	1330	4.038	10.656
2001.04	0.03	1191	1190	1384	1292	50.139	61.925	0.053	11.725	4.836	57.089	989	441	4.583	1.787	1339	0	0.000	5.102	12	4.038	10.661
2001.09	0.04	756	1193	1324	1111	43.087	55.143	0.270	11.995	4.836	50.307	990	-26	4.583	1.786	1339	0	0.000	5.372	0	4.038	10.661
2001.12	0.04	509	1170	1107	908	35.226	47.822	0.539	12.534	4.836	42.986	990	-464	4.576	1.780	1339	0	0.000	5.918	0	4.038	10.655
2001.16	0.04	393	1126	752	675	26.196	38.610	-0.182	12.352	4.836	33.774	988	-620	4.568	1.772	1339	0	0.000	5.744	0	4.038	10.646
2001.20	0.04	346	1073	568	555	21.528	34.172	0.230	12.582	4.836	29.336	987	-671	4.558	1.761	1339	0	0.000	5.985	0	4.038	10.636
2001.25	0.04	333	1024	499	508	19.709	32.151	-0.202	12.380	4.836	27.315	984	-685	4.547	1.750	1339	0	0.000	5.793	0	4.038	10.625
2001.29	0.04	388	968	505	523	20.282	32.393	-0.331	12.049	4.838	27.555	982	-670	4.537	1.740	1339	0	0.000	5.470	0	4.038	10.617
2001.33	0.04	373	925	573	549	21.284	33.282	-0.112	11.936	4.845	28.437	980	-654	4.527	1.730	1339	0	0.000	5.361	0	4.038	10.614
2001.37	0.04	358	882	573	538	20.856	33.282	0.428	12.365	4.845	28.437	978	-660	4.517	1.721	1339	0	0.000	5.799	0	4.038	10.604
2001.41	0.04	471	848	575	573	22.247	34.345	-0.329	12.036	4.854	29.491	976	-626	4.507	1.711	1339	0	0.000	5.471	0	4.038	10.603
2001.45	0.03	612	818	593	628	24.362	35.977	-0.483	11.553	4.867	31.109	974	-525	4.501	1.704	1339	0	0.000	4.981	0	4.038	10.610
2001.59	0.14	1416	786	622	917	35.590	46.670	-0.535	11.018	4.955	41.715	972	65	4.504	1.708	1339	0	0.000	4.355	0	4.038	10.701
2001.63	0.04	1428	823	746	992	38.477	49.800	0.243	11.261	4.981	44.819	973	861	4.516	1.720	1339	0	0.000	4.560	0	4.038	10.739
2001.66	0.03	1399	870	852	1043	40.478	52.155	0.354	11.615	5.000	47.155	975	839	4.526	1.730	1339	0	0.000	4.885	0	4.038	10.768
2001.685	0.028	1380	916	1082	1164	45.169	56.644	-0.202	11.413	5.037	51.607	978	782	4.534	1.738	1339	0	0.000	4.638	2260	4.061	10.836
2001.712	0.027	1385	954	1259	1264	49.040	60.504	-0.011	11.402	5.069	55.435	979	763	4.541	1.745	1339	0	0.000	4.588	2467	4.086	10.900
2001.751	0.038	1420	1003	1411	1362	52.854	64.333	0.015	11.417	5.100	59.233	981	805	4.553	1.756	1339	0	0.000	4.561	2535	4.121	10.978
2001.792	0.041	1467	1050	1462	1412	54.761	66.214	-0.027	11.391	5.115	61.099	983	895	4.566	1.770	1339	0	0.000	4.505	2881	4.165	11.050
2001.795	0.003	1467	1052	1459	1410	54.719	65.871	-0.301	11.089	5.115	60.755	986	946	4.567	1.771	1339	0	0.000	4.203	2936	4.168	11.054
2001.797	0.003	1467	1055	1445	1403	54.450	65.868	0.267	11.356	5.115	60.753	987	943	4.568	1.772	1339	0	0.000	4.469	3368	4.171	11.058
2001.800	0.003	1466	1059	1439	1400	54.330	65.868	0.120	11.476	5.115	60.753	987	942	4.569	1.773	1339	0	0.000	4.588	3943	4.175	11.063

Gas Balance MODEL R1-F
Kimball Colinville Storage Reservoir
Discrepancy History Match
E. Kimball Crossflow with Meter Error &Gas Spill

Spill threshhold
1300

		Reservoir P/Z(psia)										E.Kimball+Low Perm Gas Balance			Corunna Seckerton Crossflow					South Spill Model		
Date	dT (years)	SOUTH	A1	MID	AVG	Calc. GIP (bcf)	Inventory GIP (bcf)	Total Discrepancy (bcf)	Adjusted Cumulative Discrep. (bcf)	Cumulative Meter Error (bcf)	Adjusted Inventory GIP (bcf)	P/Z (psia)	Influx 0.0008 (mcfd)	5.0 GIP (bcf)	Cum. Influx (bcf)	Avg P/Z Cor/Sec (psi)	Influx 0.0000 (mcfd)	Cum. Influx (bcf)	Revised K/C Cumulative Discrepancy (bcf)	Gas Spill 0.00855 (mcfd)	Cum. Gas Spill (bcf)	Total Model Adjustments (bcf)
2001.803	0.003	1465	1062	1439	1400	54.320	65.999	0.140	11.617	5.116	60.882	987	940	4.570	1.774	1339	0	0.000	4.727	3925	4.179	11.069
2001.805	0.003	1464	1065	1444	1403	54.435	66.003	-0.110	11.507	5.116	60.887	987	937	4.571	1.775	1339	0	0.000	4.616	3915	4.183	11.074
2001.808	0.003	1463	1068	1445	1404	54.457	65.955	-0.071	11.436	5.116	60.838	987	934	4.572	1.776	1339	0	0.000	4.544	3894	4.187	11.079
2001.811	0.003	1455	1071	1443	1401	54.334	66.108	0.277	11.712	5.118	60.990	988	924	4.573	1.776	1339	0	0.000	4.818	3781	4.190	11.085
2001.814	0.003	1455	1074	1449	1404	54.454	66.299	0.072	11.784	5.119	61.180	988	914	4.574	1.777	1339	0	0.000	4.887	3765	4.194	11.091
2001.816	0.003	1462	1078	1455	1410	54.690	66.036	-0.500	11.284	5.119	60.917	988	922	4.575	1.778	1339	0	0.000	4.386	3845	4.198	11.096
2001.819	0.003	1444	1080	1455	1403	54.450	65.703	-0.093	11.191	5.119	60.584	988	908	4.576	1.779	1339	0	0.000	4.293	3518	4.201	11.100
2001.822	0.003	1438	1083	1443	1396	54.150	65.435	0.032	11.223	5.119	60.316	988	880	4.576	1.780	1339	0	0.000	4.323	3439	4.205	11.104
2001.825	0.003	1438	1086	1424	1386	53.782	65.074	0.007	11.230	5.119	59.955	988	872	4.577	1.781	1339	0	0.000	4.329	3530	4.208	11.109
2001.827	0.003	1417	1089	1419	1377	53.409	64.791	0.090	11.320	5.119	59.672	989	848	4.578	1.782	1339	0	0.000	4.419	3041	4.212	11.113
2001.830	0.003	1402	1092	1408	1366	52.991	64.050	-0.323	10.997	5.119	58.930	989	807	4.579	1.783	1339	0	0.000	4.095	2794	4.214	11.116
2001.833	0.003	1381	1096	1388	1348	52.309	63.332	-0.037	10.960	5.119	58.212	989	767	4.580	1.783	1339	0	0.000	4.057	2533	4.217	11.119
2001.836	0.003	1353	1099	1368	1329	51.548	63.626	1.056	12.016	5.122	58.504	989	713	4.580	1.784	1339	0	0.000	5.110	1953	4.219	11.125
2001.838	0.003	1359	1101	1367	1331	51.624	63.906	0.204	12.220	5.124	58.782	989	688	4.581	1.785	1339	0	0.000	5.311	1849	4.221	11.129
2001.841	0.003	1376	1104	1376	1341	52.040	64.071	-0.251	11.969	5.125	58.946	990	712	4.582	1.785	1339	0	0.000	5.058	1791	4.222	11.133
2001.844	0.003	1383	1107	1384	1348	52.305	64.071	-0.265	11.704	5.125	58.946	990	738	4.583	1.786	1339	0	0.000	4.792	1550	4.224	11.136
2001.847	0.003	1381	1109	1384	1348	52.314	64.071	-0.009	11.695	5.125	58.946	990	744	4.583	1.787	1339	0	0.000	4.783	1601	4.226	11.138
2001.849	0.003	1381	1111	1384	1348	52.309	64.071	0.004	11.700	5.125	58.946	990	742	4.584	1.788	1339	0	0.000	4.787	1796	4.227	11.140
2001.852	0.003	1382	1115	1385	1350	52.359	64.158	0.037	11.737	5.126	59.032	990	743	4.585	1.788	1339	0	0.000	4.822	1890	4.229	11.144
2001.855	0.003	1387	1117	1386	1353	52.473	64.167	-0.105	11.632	5.126	59.041	990	750	4.586	1.789	1339	0	0.000	4.717	1934	4.231	11.147
2001.858	0.003	1386	1119	1385	1352	52.453	64.176	0.029	11.661	5.126	59.050	990	754	4.586	1.790	1339	0	0.000	4.745	1924	4.233	11.149
2001.860	0.003	1386	1121	1385	1352	52.458	64.176	-0.004	11.656	5.126	59.050	991	753	4.587	1.791	1339	0	0.000	4.740	1934	4.235	11.152
2001.863	0.003	1386	1124	1385	1352	52.467	64.176	-0.009	11.647	5.126	59.050	991	752	4.588	1.791	1339	0	0.000	4.729	1990	4.237	11.155
2001.866	0.003	1385	1126	1385	1352	52.453	64.176	0.014	11.661	5.126	59.050	991	750	4.589	1.792	1339	0	0.000	4.743	1969	4.239	11.157
2001.868	0.003	1385	1128	1385	1352	52.471	64.176	-0.018	11.643	5.126	59.050	991	749	4.589	1.793	1339	0	0.000	4.724	1970	4.241	11.160
2001.871	0.003	1385	1131	1385	1353	52.489	64.347	0.153	11.797	5.128	59.220	991	749	4.590	1.794	1339	0	0.000	4.875	1966	4.243	11.164
2001.874	0.003	1393	1134	1388	1357	52.655	64.516	0.002	11.799	5.129	59.387	991	757	4.591	1.794	1339	0	0.000	4.875	2044	4.245	11.168
2001.877	0.003	1401	1136	1392	1363	52.873	64.516	-0.218	11.581	5.129	59.387	992	774	4.592	1.795	1339	0	0.000	4.657	2143	4.247	11.171
2001.879	0.003	1401	1136	1392	1363	52.872	64.687	0.173	11.753	5.130	59.557	992	783	4.592	1.796	1339	0	0.000	4.827	2142	4.249	11.176
2001.882	0.003	1407	1140	1396	1367	53.048	65.001	0.137	11.891	5.133	59.868	992	789	4.593	1.797	1339	0	0.000	4.961	2301	4.252	11.181
2001.885	0.003	1418	1142	1405	1376	53.390	65.072	-0.271	11.620	5.134	59.938	992	808	4.594	1.798	1339	0	0.000	4.689	2534	4.254	11.185
2001.888	0.003	1421	1143	1409	1379	53.506	65.072	-0.116	11.504	5.134	59.938	992	824	4.595	1.798	1339	0	0.000	4.572	2566	4.257	11.189
2001.890	0.003	1419	1145	1407	1378	53.470	65.072	0.037	11.540	5.134	59.938	992	825	4.596	1.799	1339	0	0.000	4.607	2621	4.259	11.192
2001.893	0.003	1418	1146	1407	1378	53.456	65.186	0.128	11.668	5.134	60.052	993	822	4.596	1.800	1339	0	0.000	4.733	2744	4.262	11.197
2001.896	0.003	1418	1148	1411	1380	53.554	65.439	0.154	11.822	5.137	60.302	993	820	4.597	1.801	1339	0	0.000	4.885	2774	4.265	11.202
2001.899	0.003	1427	1151	1418	1387	53.824	65.711	0.003	11.825	5.139	60.572	993	830	4.598	1.802	1339	0	0.000	4.884	2871	4.268	11.208
2001.901	0.003	1437	1152	1425	1395	54.103	65.960	-0.030	11.795	5.141	60.819	993	851	4.599	1.803	1339	0	0.000	4.851	2971	4.271	11.214
2001.904	0.003	1446	1154	1433	1402	54.394	66.086	-0.165	11.630	5.142	60.944	993	872	4.600	1.803	1339	0	0.000	4.685	3081	4.274	11.219
2001.907	0.003	1450	1157	1437	1406	54.553	66.216	-0.028	11.602	5.143	61.073	994	887	4.601	1.804	1339	0	0.000	4.655	3242	4.277	11.224
2001.910	0.003	1453	1158	1441	1409	54.680	66.216	-0.127	11.475	5.143	61.073	994	896	4.602	1.805	1339	0	0.000	4.526	3403	4.280	11.229
2001.912	0.003	1452	1160	1441	1409	54.669	66.216	0.011	11.485	5.143	61.073	994	898	4.602	1.806	1339	0	0.000	4.536	3503	4.284	11.233
2001.915	0.003	1451	1162	1440	1409	54.653	66.507	0.307	11.793	5.145	61.362	994	896	4.603	1.807	1339	0	0.000	4.840	3540	4.287	11.240
2001.918	0.003	1460	1163	1446	1415	54.907	66.570	-0.192	11.601	5.146	61.424	994	904	4.604	1.808	1339	0	0.000	4.647	3695	4.291	11.245
2001.921	0.003	1460	1165	1450	1418	55.001	66.642	-0.021	11.579	5.146	61.496	995	914	4.605	1.809	1339	0	0.000	4.624	3682	4.295	11.250
2001.923	0.003	1457	1168	1454	1419	55.050	66.645	-0.046	11.533	5.146	61.498	995	911	4.606	1.810	1339	0	0.000	4.577	3630	4.298	11.255

Gas Balance MODEL R1-F
Kimball Colinville Storage Reservoir
Discrepancy History Match
E. Kimball Crossflow with Meter Error &Gas Spill

Spill threshhold
1300

		Reservoir P/Z(psia)										E.Kimball+Low Perm Gas Balance			Corunna Seckerton Crossflow					South Spill Model		
Date	dT (years)	SOUTH	A1	MID	AVG	Calc. GIP (bcf)	Inventory GIP (bcf)	Total Discrepancy (bcf)	Adjusted Cumulative Discrep. (bcf)	Cumulative Meter Error (bcf)	Adjusted Inventory GIP (bcf)	P/Z (psia)	Influx 0.0008 (mcfd)	5.0 GIP (bcf)	Cum. Influx (bcf)	Avg P/Z Cor/Sec (psi)	Influx 0.0000 (mcfd)	Cum. Influx (bcf)	Revised K/C Cumulative Discrepancy (bcf)	Gas Spill 0.00855 (mcfd)	Cum. Gas Spill (bcf)	Total Model Adjustments (bcf)
2001.926	0.003	1459	1170	1454	1420	55.082	66.670	-0.007	11.526	5.147	61.523	995	909	4.607	1.811	1339	0	0.000	4.569	3761	4.302	11.260
2001.929	0.003	1458	1172	1454	1420	55.085	66.815	0.142	11.668	5.148	61.667	995	909	4.608	1.812	1339	0	0.000	4.709	3750	4.306	11.265
2001.932	0.003	1460	1174	1458	1423	55.201	66.815	-0.116	11.552	5.148	61.667	995	910	4.609	1.813	1339	0	0.000	4.592	3737	4.310	11.270
2001.937	0.005	1455	1176	1457	1421	55.122	66.815	0.078	11.630	5.148	61.667	996	906	4.611	1.814	1339	0	0.000	4.668	3696	4.317	11.279
2001.940	0.003	1454	1179	1457	1421	55.119	66.815	0.003	11.634	5.148	61.667	996	899	4.612	1.815	1339	0	0.000	4.671	3677	4.321	11.284
2001.942	0.003	1453	1180	1456	1420	55.098	66.815	0.021	11.655	5.148	61.667	996	897	4.612	1.816	1339	0	0.000	4.691	3688	4.324	11.288
2001.945	0.003	1453	1182	1456	1420	55.095	66.815	0.002	11.658	5.148	61.667	996	895	4.613	1.817	1339	0	0.000	4.693	3618	4.328	11.293
2001.948	0.003	1452	1184	1456	1420	55.097	66.833	0.017	11.674	5.148	61.685	996	893	4.614	1.818	1339	0	0.000	4.708	3606	4.332	11.298
2001.951	0.003	1454	1187	1456	1422	55.155	66.891	0.000	11.674	5.148	61.743	997	895	4.615	1.819	1339	0	0.000	4.707	3620	4.335	11.303
2001.953	0.003	1458	1189	1455	1422	55.185	66.891	-0.031	11.644	5.148	61.743	997	901	4.616	1.820	1339	0	0.000	4.676	3652	4.339	11.307
2001.956	0.003	1457	1190	1455	1423	55.188	66.891	-0.003	11.641	5.148	61.743	997	904	4.617	1.821	1339	0	0.000	4.672	3644	4.343	11.312
2001.959	0.003	1457	1193	1455	1422	55.182	66.891	0.006	11.647	5.148	61.743	997	903	4.618	1.822	1339	0	0.000	4.677	3663	4.346	11.316
2001.962	0.003	1456	1195	1455	1423	55.191	66.891	-0.009	11.638	5.148	61.743	997	901	4.619	1.822	1339	0	0.000	4.667	3698	4.350	11.321
2001.964	0.003	1455	1197	1454	1422	55.176	66.891	0.015	11.653	5.148	61.743	998	899	4.620	1.823	1339	0	0.000	4.681	3686	4.354	11.325
2002.003	0.038	1449	1225	1451	1422	55.170	66.891	0.006	11.659	5.148	61.743	998	891	4.632	1.836	1339	0	0.000	4.675	3601	4.404	11.388
2002.096	0.093	1064	1264	1427	1281	49.683	61.035	-0.370	11.290	5.148	55.887	1001	465	4.648	1.852	1339	0	0.000	4.290	0	4.404	11.404
2002.121	0.025	871	1257	1369	1182	45.872	57.872	0.648	11.938	5.148	52.724	1004	-55	4.647	1.851	1339	0	0.000	4.939	0	4.404	11.404
2002.123	0.003	850	1256	1361	1171	45.439	57.534	0.095	12.034	5.148	52.386	1004	-214	4.647	1.851	1339	0	0.000	5.034	0	4.404	11.403
2002.126	0.003	845	1255	1350	1163	45.128	57.429	0.206	12.239	5.148	52.281	1004	-231	4.647	1.851	1339	0	0.000	5.240	0	4.404	11.403
2002.129	0.003	850	1254	1339	1159	44.976	57.429	0.152	12.391	5.148	52.281	1004	-231	4.647	1.850	1339	0	0.000	5.392	0	4.404	11.403
2002.132	0.003	854	1251	1340	1161	45.028	57.429	-0.052	12.339	5.148	52.281	1004	-225	4.646	1.850	1339	0	0.000	5.340	0	4.404	11.403
2002.134	0.003	858	1249	1341	1162	45.099	57.595	0.095	12.434	5.150	52.445	1004	-220	4.646	1.850	1339	0	0.000	5.434	0	4.404	11.404
2002.137	0.003	870	1248	1341	1166	45.239	57.435	-0.300	12.134	5.150	52.285	1004	-209	4.646	1.850	1339	0	0.000	5.134	0	4.404	11.404
2002.140	0.003	891	1247	1331	1168	45.319	57.329	-0.186	11.948	5.150	52.179	1004	-186	4.646	1.850	1339	0	0.000	4.949	0	4.404	11.403
2002.142	0.003	893	1244	1322	1164	45.149	57.037	-0.122	11.826	5.150	51.887	1004	-169	4.646	1.849	1339	0	0.000	4.827	0	4.404	11.403
2002.145	0.003	895	1241	1308	1157	44.884	56.837	0.065	11.891	5.150	51.687	1003	-166	4.646	1.849	1339	0	0.000	4.892	0	4.404	11.403
2002.148	0.003	897	1239	1296	1151	44.657	56.749	0.139	12.030	5.150	51.599	1003	-163	4.645	1.849	1339	0	0.000	5.031	0	4.404	11.403
2002.151	0.003	900	1237	1291	1149	44.568	56.748	0.088	12.118	5.150	51.598	1003	-159	4.645	1.849	1339	0	0.000	5.119	0	4.404	11.403
2002.153	0.003	902	1235	1292	1150	44.605	56.742	-0.043	12.075	5.150	51.592	1003	-156	4.645	1.849	1339	0	0.000	5.076	0	4.404	11.403
2002.156	0.003	904	1233	1293	1150	44.635	56.475	-0.297	11.778	5.150	51.325	1003	-153	4.645	1.849	1339	0	0.000	4.779	0	4.404	11.402
2002.159	0.003	888	1230	1289	1143	44.346	55.748	-0.437	11.341	5.150	50.599	1003	-163	4.645	1.848	1339	0	0.000	4.343	0	4.404	11.402
2002.162	0.003	864	1228	1273	1126	43.666	55.291	0.222	11.563	5.150	50.141	1003	-191	4.645	1.848	1339	0	0.000	4.565	0	4.404	11.402
2002.164	0.003	848	1225	1255	1110	43.079	54.863	0.159	11.722	5.150	49.713	1003	-219	4.644	1.848	1339	0	0.000	4.724	0	4.404	11.402
2002.167	0.003	850	1223	1232	1099	42.625	54.778	0.369	12.091	5.150	49.628	1003	-229	4.644	1.848	1339	0	0.000	5.093	0	4.404	11.402
2002.170	0.003	853	1221	1223	1095	42.476	54.164	-0.465	11.626	5.150	49.014	1003	-225	4.644	1.848	1339	0	0.000	4.629	0	4.404	11.401
2002.173	0.003	855	1218	1203	1085	42.075	53.370	-0.393	11.233	5.150	48.220	1003	-222	4.644	1.847	1339	0	0.000	4.236	0	4.404	11.401
2002.175	0.003	857	1216	1157	1061	41.147	52.732	0.290	11.523	5.150	47.582	1003	-219	4.643	1.847	1339	0	0.000	4.526	0	4.404	11.401
2002.238	0.063	878	1158	866	907	35.196	47.480	0.699	12.222	5.150	42.330	1003	-203	4.639	1.842	1339	0	0.000	5.230	0	4.404	11.396
2002.249	0.011	884	1149	879	915	35.495	47.500	-0.280	11.943	5.150	42.350	1002	-183	4.638	1.842	1339	0	0.000	4.951	0	4.404	11.396
2002.252	0.003	885	1146	880	915	35.517	47.500	-0.021	11.921	5.150	42.350	1002	-177	4.638	1.842	1339	0	0.000	4.930	0	4.404	11.396
2002.255	0.003	886	1144	881	916	35.549	47.500	-0.033	11.889	5.150	42.350	1002	-175	4.638	1.841	1339	0	0.000	4.897	0	4.404	11.395
2002.258	0.003	885	1142	882	916	35.541	47.500	0.009	11.897	5.150	42.350	1002	-175	4.638	1.841	1339	0	0.000	4.906	0	4.404	11.395
2002.260	0.003	886	1140	883	917	35.567	47.500	-0.027	11.871	5.150	42.350	1002	-175	4.637	1.841	1339	0	0.000	4.879	0	4.404	11.395
2002.268	0.008	888	1134	886	918	35.611	47.500	-0.044	11.827	5.150	42.350	1002	-173	4.637	1.841	1339	0	0.000	4.836	0	4.404	11.395
2002.271	0.003	889	1132	886	918	35.618	47.500	-0.007	11.820	5.150	42.350	1002	-171	4.637	1.840	1339	0	0.000	4.829	0	4.404	11.394

Gas Balance MODEL R1-F
Kimball Colinville Storage Reservoir
Discrepancy History Match
E. Kimball Crossflow with Meter Error &Gas Spill

Spill threshhold
1300

		Reservoir P/Z(psia)										E.Kimball+Low Perm Gas Balance			Corunna Seckerton Crossflow					South Spill Model		
Date	dT (years)	SOUTH	A1	MID	AVG	Calc. GIP (bcf)	Inventory GIP (bcf)	Total Discrepancy (bcf)	Adjusted Cumulative Discrep. (bcf)	Cumulative Meter Error (bcf)	Adjusted Inventory GIP (bcf)	P/Z (psia)	Influx 0.0008 (mcfd)	5.0 GIP (bcf)	Cum. Influx (bcf)	Avg P/Z Cor/Sec (psi)	Influx 0.0000 (mcfd)	Cum. Influx (bcf)	Revised K/C Cumulative Discrepancy (bcf)	Gas Spill 0.00855 (mcfd)	Cum. Gas Spill (bcf)	Total Model Adjustments (bcf)
2002.274	0.003	890	1130	887	919	35.637	47.500	-0.019	11.801	5.150	42.350	1002	-170	4.636	1.840	1339	0	0.000	4.811	0	4.404	11.394
2002.277	0.003	890	1128	888	919	35.656	47.500	-0.019	11.782	5.150	42.350	1001	-169	4.636	1.840	1339	0	0.000	4.792	0	4.404	11.394
2002.288	0.011	892	1120	890	920	35.676	47.500	-0.020	11.762	5.150	42.350	1001	-167	4.636	1.839	1339	0	0.000	4.773	0	4.404	11.393
2002.290	0.003	892	1118	890	919	35.666	47.500	0.009	11.772	5.150	42.350	1001	-166	4.635	1.839	1339	0	0.000	4.782	0	4.404	11.393
2002.293	0.003	892	1117	890	919	35.673	47.500	-0.006	11.765	5.150	42.350	1001	-166	4.635	1.839	1339	0	0.000	4.776	0	4.404	11.393
2002.296	0.003	892	1115	890	919	35.667	47.500	0.005	11.771	5.150	42.350	1001	-165	4.635	1.839	1339	0	0.000	4.782	0	4.404	11.393
2002.299	0.003	893	1113	891	920	35.677	47.500	-0.010	11.761	5.150	42.350	1001	-165	4.635	1.839	1339	0	0.000	4.772	0	4.404	11.393
2002.304	0.005	894	1109	892	920	35.704	47.500	-0.027	11.734	5.150	42.350	1001	-163	4.635	1.838	1339	0	0.000	4.746	0	4.404	11.392
2002.307	0.003	896	1108	893	921	35.727	47.500	-0.023	11.711	5.150	42.350	1001	-161	4.635	1.838	1339	0	0.000	4.723	0	4.404	11.392
2002.318	0.011	896	1101	894	921	35.725	47.500	0.002	11.713	5.150	42.350	1001	-160	4.634	1.838	1339	0	0.000	4.725	0	4.404	11.392
2002.329	0.011	899	1096	895	922	35.768	47.500	-0.043	11.670	5.150	42.350	1001	-157	4.633	1.837	1339	0	0.000	4.683	0	4.404	11.391
2002.332	0.003	898	1094	895	921	35.745	47.500	0.023	11.693	5.150	42.350	1001	-155	4.633	1.837	1339	0	0.000	4.706	0	4.404	11.391
2002.334	0.003	899	1093	896	922	35.758	47.500	-0.012	11.680	5.150	42.350	1001	-156	4.633	1.837	1339	0	0.000	4.694	0	4.404	11.391
2002.337	0.003	899	1091	896	921	35.744	47.500	0.014	11.694	5.150	42.350	1001	-155	4.633	1.836	1339	0	0.000	4.708	0	4.404	11.390
2002.345	0.008	900	1087	897	922	35.763	47.500	-0.019	11.675	5.150	42.350	1001	-154	4.632	1.836	1339	0	0.000	4.689	0	4.404	11.390
2002.364	0.019	903	1077	898	922	35.784	47.500	-0.021	11.654	5.150	42.350	1001	-151	4.631	1.835	1339	0	0.000	4.669	0	4.404	11.389
2002.367	0.003	903	1076	898	922	35.783	47.500	0.001	11.655	5.150	42.350	1000	-149	4.631	1.835	1339	0	0.000	4.670	0	4.404	11.389
2002.370	0.003	902	1075	898	922	35.763	47.500	0.020	11.675	5.150	42.350	1000	-149	4.631	1.835	1339	0	0.000	4.690	0	4.404	11.389
2002.378	0.008	904	1071	899	923	35.796	47.500	-0.033	11.642	5.150	42.350	1000	-148	4.631	1.834	1339	0	0.000	4.657	0	4.404	11.388
2002.395	0.016	905	1064	899	922	35.770	47.500	0.027	11.668	5.150	42.350	1000	-146	4.630	1.833	1339	0	0.000	4.685	0	4.404	11.387
2002.416	0.022	907	1055	928	937	36.343	48.212	0.138	11.807	5.156	43.056	1000	-144	4.628	1.832	1339	0	0.000	4.819	0	4.404	11.392
2002.419	0.003	907	1054	939	943	36.567	48.228	-0.208	11.599	5.156	43.072	1000	-142	4.628	1.832	1339	0	0.000	4.611	0	4.404	11.392
2002.422	0.003	908	1054	941	944	36.606	48.284	0.017	11.616	5.156	43.128	1000	-141	4.628	1.832	1339	0	0.000	4.627	0	4.404	11.392
2002.425	0.003	907	1052	942	944	36.619	48.376	0.079	11.695	5.157	43.219	1000	-141	4.628	1.832	1339	0	0.000	4.706	0	4.404	11.393
2002.427	0.003	907	1051	947	946	36.717	48.478	0.004	11.699	5.158	43.320	1000	-141	4.628	1.832	1339	0	0.000	4.710	0	4.404	11.394
2002.430	0.003	914	1051	948	949	36.826	48.641	0.054	11.753	5.159	43.481	1000	-136	4.628	1.831	1339	0	0.000	4.762	0	4.404	11.395
2002.433	0.003	924	1049	950	954	36.992	48.737	-0.071	11.682	5.160	43.576	1000	-124	4.628	1.831	1339	0	0.000	4.691	0	4.404	11.396
2002.436	0.003	933	1049	951	957	37.128	49.076	0.203	11.885	5.163	43.913	1000	-110	4.628	1.831	1339	0	0.000	4.891	0	4.404	11.398
2002.438	0.003	950	1047	954	964	37.405	49.273	-0.080	11.805	5.165	44.108	1000	-91	4.627	1.831	1339	0	0.000	4.810	0	4.404	11.400
2002.441	0.003	963	1046	959	972	37.694	49.494	-0.068	11.738	5.166	44.327	1000	-68	4.627	1.831	1339	0	0.000	4.740	0	4.404	11.401
2002.444	0.003	971	1045	964	977	37.906	49.777	0.071	11.809	5.169	44.609	1000	-51	4.627	1.831	1339	0	0.000	4.809	0	4.404	11.404
2002.447	0.003	981	1044	973	985	38.202	50.041	-0.032	11.777	5.171	44.870	1000	-37	4.627	1.831	1339	0	0.000	4.775	0	4.404	11.406
2002.449	0.003	991	1044	981	993	38.508	50.379	0.032	11.808	5.174	45.205	999	-21	4.627	1.831	1339	0	0.000	4.804	0	4.404	11.409
2002.452	0.003	1002	1043	992	1002	38.865	50.725	-0.011	11.797	5.176	45.548	999	-5	4.627	1.831	1339	0	0.000	4.790	0	4.404	11.411
2002.455	0.003	1015	1042	1002	1012	39.251	51.088	-0.023	11.774	5.179	45.908	999	15	4.627	1.831	1339	0	0.000	4.764	0	4.404	11.414
2002.458	0.003	1025	1041	1013	1021	39.600	51.388	-0.049	11.725	5.182	46.206	999	33	4.627	1.831	1339	0	0.000	4.713	0	4.404	11.417
2002.460	0.003	1039	1041	1022	1030	39.978	51.388	-0.378	11.347	5.182	46.206	1000	53	4.627	1.831	1339	0	0.000	4.335	0	4.404	11.417
2002.463	0.003	1040	1040	1022	1030	39.964	51.388	0.014	11.362	5.182	46.206	1000	65	4.627	1.831	1339	0	0.000	4.349	0	4.404	11.417
2002.466	0.003	1038	1039	1020	1029	39.916	51.388	0.048	11.410	5.182	46.206	1000	64	4.628	1.831	1339	0	0.000	4.397	0	4.404	11.417
2002.468	0.003	1036	1038	1019	1028	39.868	51.388	0.048	11.458	5.182	46.206	1000	61	4.628	1.831	1339	0	0.000	4.445	0	4.404	11.417
2002.474	0.005	1035	1036	1018	1026	39.802	51.729	0.407	11.865	5.185	46.544	1000	59	4.628	1.831	1339	0	0.000	4.849	0	4.404	11.420
2002.477	0.003	1034	1036	1031	1033	40.062	52.083	0.094	11.958	5.188	46.895	1000	57	4.628	1.831	1339	0	0.000	4.939	0	4.404	11.423
2002.479	0.003	1046	1035	1045	1044	40.496	52.398	-0.118	11.841	5.190	47.208	1000	66	4.628	1.832	1339	0	0.000	4.819	0	4.404	11.426
2002.482	0.003	1058	1035	1053	1053	40.838	52.711	-0.030	11.810	5.193	47.518	1000	86	4.628	1.832	1339	0	0.000	4.786	0	4.404	11.428
2002.485	0.003	1070	1034	1062	1061	41.177	53.062	0.013	11.823	5.196	47.867	1000	106	4.628	1.832	1339	0	0.000	4.796	0	4.404	11.431

Gas Balance MODEL R1-F
Kimball Colinville Storage Reservoir
Discrepancy History Match
E. Kimball Crossflow with Meter Error &Gas Spill

Spill threshhold
1300

		Reservoir P/Z(psia)										E.Kimball+Low Perm Gas Balance			Corunna Seckerton Crossflow					South Spill Model		
Date	dT (years)	SOUTH	A1	MID	AVG	Calc. GIP (bcf)	Inventory GIP (bcf)	Total Discrepancy (bcf)	Adjusted Cumulative Discrep. (bcf)	Cumulative Meter Error (bcf)	Adjusted Inventory GIP (bcf)	P/Z (psia)	Influx 0.0008 (mcfd)	5.0 GIP (bcf)	Cum. Influx (bcf)	Avg P/Z Cor/Sec (psi)	Influx 0.0000 (mcfd)	Cum. Influx (bcf)	Revised K/C Cumulative Discrepancy (bcf)	Gas Spill 0.00855 (mcfd)	Cum. Gas Spill (bcf)	Total Model Adjustments (bcf)
2002.488	0.003	1082	1034	1073	1071	41.555	53.366	-0.074	11.749	5.198	48.168	1000	127	4.628	1.832	1339	0	0.000	4.719	0	4.404	11.434
2002.490	0.003	1093	1033	1082	1079	41.874	53.770	0.085	11.834	5.201	48.569	1000	147	4.628	1.832	1339	0	0.000	4.801	0	4.404	11.437
2002.493	0.003	1104	1033	1092	1089	42.245	54.138	-0.004	11.830	5.204	48.933	1000	166	4.628	1.832	1339	0	0.000	4.794	0	4.404	11.441
2002.496	0.003	1116	1032	1104	1099	42.650	54.525	-0.016	11.814	5.208	49.318	1000	186	4.629	1.832	1339	0	0.000	4.774	0	4.404	11.444
2002.499	0.003	1128	1032	1117	1110	43.068	54.799	-0.145	11.669	5.210	49.589	1000	208	4.629	1.833	1339	0	0.000	4.627	0	4.404	11.446
2002.501	0.003	1137	1032	1125	1117	43.353	55.016	-0.069	11.600	5.212	49.804	1000	226	4.629	1.833	1339	0	0.000	4.556	0	4.404	11.448
2002.504	0.003	1142	1032	1131	1123	43.552	55.257	0.042	11.642	5.214	50.043	1000	239	4.629	1.833	1339	0	0.000	4.596	0	4.404	11.451
2002.507	0.003	1149	1032	1138	1129	43.789	55.499	0.006	11.648	5.216	50.283	1000	251	4.630	1.833	1339	0	0.000	4.599	0	4.404	11.453
2002.510	0.003	1155	1031	1145	1134	43.994	55.797	0.093	11.741	5.218	50.579	1000	263	4.630	1.834	1339	0	0.000	4.690	0	4.404	11.456
2002.512	0.003	1165	1032	1153	1142	44.304	56.200	0.093	11.835	5.221	50.979	1000	277	4.630	1.834	1339	0	0.000	4.780	0	4.404	11.459
2002.515	0.003	1177	1032	1166	1153	44.726	56.566	-0.057	11.778	5.224	51.341	1000	296	4.630	1.834	1339	0	0.000	4.719	0	4.404	11.462
2002.518	0.003	1187	1031	1177	1162	45.087	56.749	-0.178	11.599	5.226	51.523	1000	317	4.631	1.834	1339	0	0.000	4.539	0	4.404	11.464
2002.521	0.003	1193	1032	1184	1168	45.301	56.970	0.008	11.607	5.228	51.742	1000	332	4.631	1.835	1339	0	0.000	4.545	0	4.404	11.466
2002.523	0.003	1197	1032	1188	1172	45.457	57.191	0.065	11.672	5.229	51.961	1000	342	4.631	1.835	1339	0	0.000	4.607	0	4.404	11.469
2002.526	0.003	1205	1033	1196	1178	45.707	57.426	-0.015	11.657	5.231	52.195	1000	353	4.632	1.835	1339	0	0.000	4.590	0	4.404	11.471
2002.529	0.003	1212	1033	1202	1184	45.935	57.638	-0.016	11.641	5.233	52.405	1000	367	4.632	1.836	1339	0	0.000	4.572	0	4.404	11.473
2002.532	0.003	1218	1033	1208	1189	46.130	57.874	0.041	11.682	5.235	52.639	1001	379	4.632	1.836	1339	0	0.000	4.610	0	4.404	11.475
2002.534	0.003	1224	1034	1214	1195	46.357	58.081	-0.020	11.662	5.237	52.844	1001	391	4.633	1.837	1339	0	0.000	4.589	0	4.404	11.477
2002.537	0.003	1229	1034	1219	1199	46.516	58.320	0.081	11.742	5.239	53.082	1001	402	4.633	1.837	1339	0	0.000	4.667	0	4.404	11.480
2002.540	0.003	1238	1035	1228	1207	46.831	58.462	-0.173	11.569	5.240	53.223	1001	415	4.634	1.837	1339	0	0.000	4.492	0	4.404	11.481
2002.542	0.003	1239	1035	1231	1209	46.904	58.602	0.067	11.636	5.241	53.361	1001	426	4.634	1.838	1339	0	0.000	4.557	0	4.404	11.483
2002.548	0.005	1250	1036	1241	1218	47.265	59.105	0.142	11.778	5.245	53.860	1001	438	4.635	1.839	1339	0	0.000	4.694	0	4.404	11.488
2002.551	0.003	1257	1037	1247	1224	47.485	59.398	0.073	11.851	5.248	54.150	1001	455	4.635	1.839	1339	0	0.000	4.765	0	4.404	11.491
2002.553	0.003	1266	1038	1255	1231	47.759	59.685	0.013	11.864	5.250	54.435	1001	471	4.636	1.840	1339	0	0.000	4.775	0	4.404	11.494
2002.556	0.003	1275	1039	1263	1239	48.067	59.849	-0.145	11.719	5.251	54.597	1001	489	4.636	1.840	1339	0	0.000	4.628	0	4.404	11.495
2002.559	0.003	1280	1040	1269	1244	48.249	60.052	0.022	11.741	5.253	54.799	1001	504	4.637	1.841	1339	0	0.000	4.648	0	4.404	11.498
2002.562	0.003	1285	1041	1274	1249	48.444	60.254	0.007	11.749	5.255	55.000	1002	514	4.637	1.841	1339	0	0.000	4.653	0	4.404	11.500
2002.564	0.003	1289	1043	1280	1253	48.618	60.255	-0.174	11.575	5.255	55.000	1002	523	4.638	1.842	1339	0	0.000	4.478	0	4.404	11.500
2002.567	0.003	1289	1043	1280	1253	48.619	60.255	-0.001	11.574	5.255	55.000	1002	527	4.638	1.842	1339	0	0.000	4.477	0	4.404	11.501
2002.570	0.003	1288	1044	1279	1252	48.575	60.287	0.076	11.650	5.255	55.032	1002	525	4.639	1.843	1339	0	0.000	4.553	0	4.404	11.502
2002.573	0.003	1287	1046	1278	1252	48.557	60.361	0.091	11.742	5.255	55.105	1002	523	4.640	1.843	1339	0	0.000	4.643	0	4.404	11.503
2002.575	0.003	1295	1047	1277	1254	48.657	60.361	-0.100	11.642	5.255	55.105	1002	530	4.640	1.844	1339	0	0.000	4.543	0	4.404	11.503
2002.578	0.003	1293	1048	1276	1253	48.621	60.361	0.036	11.678	5.255	55.105	1002	536	4.641	1.844	1339	0	0.000	4.578	0	4.404	11.504
2002.581	0.003	1292	1049	1276	1253	48.606	60.361	0.015	11.693	5.255	55.105	1002	532	4.641	1.845	1339	0	0.000	4.593	0	4.404	11.504
2002.584	0.003	1290	1051	1276	1252	48.581	60.361	0.025	11.718	5.255	55.105	1002	530	4.642	1.845	1339	0	0.000	4.617	0	4.404	11.505
2002.586	0.003	1289	1052	1275	1252	48.571	60.466	0.115	11.833	5.256	55.210	1003	527	4.642	1.846	1339	0	0.000	4.731	0	4.404	11.506
2002.589	0.003	1288	1054	1280	1254	48.656	60.466	-0.085	11.748	5.256	55.210	1003	525	4.643	1.846	1339	0	0.000	4.646	0	4.404	11.507
2002.592	0.003	1288	1055	1280	1254	48.665	60.601	0.125	11.874	5.257	55.344	1003	523	4.643	1.847	1339	0	0.000	4.770	0	4.404	11.508
2002.595	0.003	1286	1057	1285	1256	48.746	60.602	-0.080	11.794	5.257	55.345	1003	520	4.644	1.847	1339	0	0.000	4.689	0	4.404	11.509
2002.597	0.003	1286	1058	1287	1257	48.781	60.688	0.051	11.845	5.258	55.430	1003	518	4.644	1.848	1339	0	0.000	4.739	0	4.404	11.510
2002.600	0.003	1286	1060	1291	1260	48.875	60.834	0.052	11.897	5.259	55.575	1003	517	4.645	1.848	1339	0	0.000	4.789	0	4.404	11.512
2002.603	0.003	1290	1062	1295	1264	49.035	61.033	0.038	11.935	5.261	55.772	1003	521	4.645	1.849	1339	0	0.000	4.825	0	4.404	11.514
2002.605	0.003	1299	1064	1299	1269	49.230	61.204	-0.024	11.911	5.262	55.941	1003	535	4.646	1.850	1339	0	0.000	4.800	0	4.404	11.516
2002.608	0.003	1306	1065	1303	1274	49.429	61.376	-0.027	11.885	5.264	56.112	1003	551	4.646	1.850	1339	0	0.000	4.771	0	4.404	11.518
2002.611	0.003	1311	1066	1306	1278	49.566	61.527	0.014	11.899	5.265	56.262	1004	564	4.647	1.851	1339	0	0.000	4.784	6	4.404	11.520

Gas Balance MODEL R1-F
Kimball Colinville Storage Reservoir
Discrepancy History Match
E. Kimball Crossflow with Meter Error &Gas Spill

Spill threshhold
1300

		Reservoir P/Z(psia)										E.Kimball+Low Perm Gas Balance			Corunna Seckerton Crossflow					South Spill Model		
Date	dT (years)	SOUTH	A1	MID	AVG	Calc. GIP (bcf)	Inventory GIP (bcf)	Total Discrepancy (bcf)	Adjusted Cumulative Discrep. (bcf)	Cumulative Meter Error (bcf)	Adjusted Inventory GIP (bcf)	P/Z (psia)	Influx 0.0008 (mcfd)	5.0 GIP (bcf)	Cum. Influx (bcf)	Avg P/Z Cor/Sec (psi)	Influx 0.0000 (mcfd)	Cum. Influx (bcf)	Revised K/C Cumulative Discrepancy (bcf)	Gas Spill 0.00855 (mcfd)	Cum. Gas Spill (bcf)	Total Model Adjustments (bcf)
2002.614	0.003	1316	1068	1310	1282	49.724	61.527	-0.158	11.741	5.265	56.262	1004	574	4.648	1.851	1339	0	0.000	4.625	163	4.404	11.520
2002.616	0.003	1316	1070	1310	1282	49.724	61.655	0.128	11.870	5.266	56.389	1004	579	4.648	1.852	1339	0	0.000	4.752	240	4.404	11.522
2002.619	0.003	1319	1071	1313	1284	49.830	61.826	0.065	11.935	5.267	56.559	1004	581	4.649	1.852	1339	0	0.000	4.815	329	4.405	11.525
2002.622	0.003	1323	1073	1317	1289	49.991	61.996	0.008	11.942	5.269	56.727	1004	589	4.649	1.853	1339	0	0.000	4.821	437	4.405	11.527
2002.625	0.003	1328	1075	1323	1293	50.175	62.282	0.103	12.045	5.271	57.010	1004	599	4.650	1.854	1339	0	0.000	4.920	492	4.406	11.530
2002.627	0.003	1338	1077	1330	1301	50.465	62.553	-0.019	12.026	5.273	57.280	1004	615	4.650	1.854	1339	0	0.000	4.898	631	4.406	11.534
2002.630	0.003	1346	1078	1338	1308	50.742	62.867	0.037	12.063	5.276	57.591	1005	633	4.651	1.855	1339	0	0.000	4.932	781	4.407	11.538
2002.633	0.003	1356	1080	1347	1317	51.082	63.133	-0.073	11.990	5.278	57.855	1005	653	4.652	1.855	1339	0	0.000	4.856	958	4.408	11.542
2002.636	0.003	1366	1082	1356	1325	51.405	63.294	-0.163	11.827	5.279	58.014	1005	675	4.652	1.856	1339	0	0.000	4.691	1173	4.409	11.545
2002.638	0.003	1365	1084	1367	1330	51.614	63.294	-0.209	11.617	5.279	58.014	1005	684	4.653	1.857	1339	0	0.000	4.481	1264	4.411	11.547
2002.641	0.003	1363	1085	1363	1328	51.515	63.294	0.099	11.716	5.279	58.014	1005	680	4.654	1.858	1339	0	0.000	4.579	1357	4.412	11.549
2002.644	0.003	1362	1087	1361	1327	51.469	63.294	0.046	11.763	5.279	58.014	1005	676	4.654	1.858	1339	0	0.000	4.625	1452	4.413	11.551
2002.647	0.003	1360	1089	1360	1326	51.446	63.344	0.073	11.835	5.280	58.064	1005	673	4.655	1.859	1339	0	0.000	4.697	1430	4.415	11.554
2002.649	0.003	1361	1090	1360	1326	51.450	63.344	-0.004	11.832	5.280	58.064	1006	672	4.656	1.860	1339	0	0.000	4.692	1407	4.416	11.556
2002.652	0.003	1361	1093	1361	1327	51.492	63.344	-0.042	11.790	5.280	58.064	1006	673	4.657	1.860	1339	0	0.000	4.650	1400	4.418	11.558
2002.655	0.003	1360	1094	1360	1326	51.451	63.344	0.042	11.831	5.280	58.064	1006	672	4.657	1.861	1339	0	0.000	4.691	1366	4.419	11.560
2002.658	0.003	1359	1097	1360	1327	51.472	63.344	-0.021	11.810	5.280	58.064	1006	669	4.658	1.862	1339	0	0.000	4.669	1367	4.420	11.562
2002.660	0.003	1358	1098	1359	1325	51.423	63.344	0.049	11.859	5.280	58.064	1006	667	4.659	1.862	1339	0	0.000	4.717	1356	4.422	11.564
2002.663	0.003	1357	1100	1358	1325	51.415	63.344	0.008	11.867	5.280	58.064	1006	664	4.659	1.863	1339	0	0.000	4.724	1326	4.423	11.566
2002.666	0.003	1357	1102	1359	1326	51.442	63.344	-0.027	11.840	5.280	58.064	1006	663	4.660	1.864	1339	0	0.000	4.697	1327	4.424	11.568
2002.668	0.003	1356	1104	1358	1325	51.400	63.344	0.042	11.882	5.280	58.064	1007	662	4.661	1.864	1339	0	0.000	4.738	1287	4.426	11.570
2002.671	0.003	1355	1106	1358	1325	51.402	63.344	-0.002	11.880	5.280	58.064	1007	659	4.661	1.865	1339	0	0.000	4.735	1272	4.427	11.572
2002.674	0.003	1354	1108	1358	1325	51.403	63.344	0.000	11.879	5.280	58.064	1007	657	4.662	1.866	1339	0	0.000	4.734	1268	4.428	11.574
2002.677	0.003	1353	1110	1357	1324	51.383	63.344	0.019	11.898	5.280	58.064	1007	655	4.662	1.866	1339	0	0.000	4.752	1231	4.429	11.575
2002.679	0.003	1353	1112	1357	1325	51.387	63.344	-0.003	11.895	5.280	58.064	1007	653	4.663	1.867	1339	0	0.000	4.749	1224	4.431	11.577
2002.682	0.003	1353	1114	1357	1325	51.411	63.344	-0.025	11.871	5.280	58.064	1007	653	4.664	1.867	1339	0	0.000	4.723	1222	4.432	11.579
2002.685	0.003	1352	1116	1357	1325	51.396	63.344	0.015	11.886	5.280	58.064	1007	652	4.664	1.868	1339	0	0.000	4.738	1189	4.433	11.581
2002.688	0.003	1351	1117	1356	1324	51.375	63.344	0.021	11.907	5.280	58.064	1008	649	4.665	1.869	1339	0	0.000	4.758	1179	4.434	11.583
2002.693	0.005	1350	1121	1356	1324	51.372	63.344	0.003	11.910	5.280	58.064	1008	648	4.666	1.870	1339	0	0.000	4.760	1176	4.437	11.587
2002.696	0.003	1350	1123	1355	1324	51.369	63.344	0.003	11.913	5.280	58.064	1008	646	4.667	1.871	1339	0	0.000	4.762	1154	4.438	11.588
2002.699	0.003	1350	1126	1356	1325	51.395	63.344	-0.027	11.886	5.280	58.064	1008	645	4.668	1.871	1339	0	0.000	4.735	1148	4.439	11.590
2002.701	0.003	1350	1128	1355	1325	51.390	63.344	0.006	11.892	5.280	58.064	1008	645	4.668	1.872	1339	0	0.000	4.740	1135	4.440	11.592
2002.704	0.003	1348	1129	1355	1324	51.368	63.344	0.022	11.914	5.280	58.064	1008	643	4.669	1.873	1339	0	0.000	4.762	1114	4.441	11.594
2002.707	0.003	1348	1131	1355	1324	51.369	63.344	-0.001	11.913	5.280	58.064	1008	641	4.670	1.873	1339	0	0.000	4.760	1113	4.442	11.595
2002.710	0.003	1349	1134	1355	1325	51.390	63.344	-0.021	11.892	5.280	58.064	1009	641	4.670	1.874	1339	0	0.000	4.738	1113	4.443	11.597
2002.712	0.003	1348	1135	1355	1325	51.392	63.344	-0.002	11.889	5.280	58.064	1009	640	4.671	1.875	1339	0	0.000	4.735	1089	4.444	11.599
2002.715	0.003	1348	1137	1355	1325	51.403	63.344	-0.011	11.878	5.280	58.064	1009	639	4.672	1.875	1339	0	0.000	4.723	1086	4.445	11.601
2002.718	0.003	1347	1138	1354	1324	51.371	63.344	0.033	11.911	5.280	58.064	1009	637	4.672	1.876	1339	0	0.000	4.756	1076	4.447	11.602
2002.723	0.005	1346	1142	1354	1324	51.367	63.344	0.003	11.915	5.280	58.064	1009	635	4.673	1.877	1339	0	0.000	4.758	1056	4.449	11.606
2002.726	0.003	1346	1144	1354	1325	51.393	63.344	-0.026	11.889	5.280	58.064	1009	634	4.674	1.878	1339	0	0.000	4.731	1063	4.450	11.607
2002.729	0.003	1346	1146	1354	1325	51.395	63.344	-0.001	11.887	5.280	58.064	1010	634	4.675	1.878	1339	0	0.000	4.729	1044	4.451	11.609
2002.732	0.003	1346	1148	1354	1325	51.395	63.344	-0.001	11.887	5.280	58.064	1010	633	4.675	1.879	1339	0	0.000	4.728	1031	4.452	11.611
2002.734	0.003	1345	1149	1354	1325	51.392	63.344	0.004	11.890	5.280	58.064	1010	632	4.676	1.880	1339	0	0.000	4.731	1026	4.453	11.612
2002.737	0.003	1345	1151	1354	1325	51.398	63.344	-0.006	11.884	5.280	58.064	1010	630	4.677	1.880	1339	0	0.000	4.724	1022	4.454	11.614
2002.740	0.003	1344	1152	1353	1324	51.368	63.344	0.030	11.914	5.280	58.064	1010	629	4.677	1.881	1339	0	0.000	4.753	1007	4.455	11.616

Gas Balance MODEL R1-F
Kimball Colinville Storage Reservoir
Discrepancy History Match
E. Kimball Crossflow with Meter Error &Gas Spill

Spill threshhold
1300

		Reservoir P/Z(psia)									E.Kimball+Low Perm Gas Balance				Corunna Seckerton Crossflow					South Spill Model		
Date	dT (years)	SOUTH	A1	MID	AVG	Calc. GIP (bcf)	Inventory GIP (bcf)	Total Discrepancy (bcf)	Adjusted Cumulative Discrep. (bcf)	Cumulative Meter Error (bcf)	Adjusted Inventory GIP (bcf)	P/Z (psia)	Influx 0.0008 (mcfd)	5.0 GIP (bcf)	Cum. Influx (bcf)	Avg P/Z Cor/Sec (psi)	Influx 0.0000 (mcfd)	Cum. Influx (bcf)	Revised K/C Cumulative Discrepancy (bcf)	Gas Spill 0.00855 (mcfd)	Cum. Gas Spill (bcf)	Total Model Adjustments (bcf)
2002.742	0.003	1344	1154	1353	1325	51.401	63.344	-0.033	11.881	5.280	58.064	1010	628	4.678	1.882	1339	0	0.000	4.720	1001	4.456	11.617
2002.745	0.003	1344	1156	1353	1325	51.407	63.344	-0.006	11.875	5.280	58.064	1010	628	4.678	1.882	1339	0	0.000	4.713	999	4.457	11.619
2002.748	0.003	1342	1157	1352	1324	51.370	63.344	0.037	11.912	5.280	58.064	1011	626	4.679	1.883	1339	0	0.000	4.749	972	4.458	11.621
2002.751	0.003	1342	1158	1352	1324	51.374	63.371	0.023	11.935	5.280	58.091	1011	625	4.680	1.883	1339	0	0.000	4.771	975	4.459	11.622
2002.753	0.003	1345	1160	1352	1325	51.413	63.371	-0.038	11.897	5.280	58.091	1011	627	4.680	1.884	1339	0	0.000	4.732	1000	4.460	11.624
2002.756	0.003	1344	1162	1352	1325	51.413	63.371	0.000	11.896	5.280	58.091	1011	629	4.681	1.885	1339	0	0.000	4.731	979	4.461	11.626
2002.759	0.003	1344	1163	1352	1325	51.411	63.410	0.041	11.937	5.280	58.129	1011	627	4.682	1.885	1339	0	0.000	4.771	971	4.462	11.628
2002.762	0.003	1347	1165	1353	1327	51.475	63.410	-0.065	11.872	5.280	58.129	1011	630	4.682	1.886	1339	0	0.000	4.706	1035	4.463	11.629
2002.764	0.003	1347	1166	1352	1327	51.482	63.410	-0.007	11.865	5.280	58.129	1011	633	4.683	1.887	1339	0	0.000	4.698	1033	4.464	11.631
2002.767	0.003	1347	1168	1352	1327	51.482	63.410	0.000	11.866	5.280	58.129	1011	633	4.684	1.887	1339	0	0.000	4.698	1023	4.465	11.632
2002.770	0.003	1347	1170	1352	1327	51.495	63.450	0.027	11.893	5.281	58.169	1012	633	4.684	1.888	1339	0	0.000	4.724	1067	4.466	11.635
2002.773	0.003	1350	1170	1352	1328	51.524	63.450	-0.029	11.864	5.281	58.169	1012	636	4.685	1.888	1339	0	0.000	4.695	1098	4.467	11.636
2002.775	0.003	1349	1172	1352	1328	51.528	63.450	-0.004	11.860	5.281	58.169	1012	638	4.685	1.889	1339	0	0.000	4.690	1089	4.468	11.638
2002.778	0.003	1349	1174	1352	1328	51.528	63.484	0.034	11.894	5.281	58.203	1012	637	4.686	1.890	1339	0	0.000	4.723	1093	4.469	11.640
2002.781	0.003	1351	1175	1352	1329	51.561	63.586	0.069	11.963	5.282	58.304	1012	638	4.687	1.890	1339	0	0.000	4.791	1141	4.470	11.643
2002.784	0.003	1359	1176	1352	1332	51.668	63.689	-0.004	11.959	5.283	58.406	1012	648	4.687	1.891	1339	0	0.000	4.785	1224	4.472	11.645
2002.786	0.003	1360	1177	1357	1335	51.807	63.692	-0.136	11.822	5.283	58.409	1012	658	4.688	1.892	1339	0	0.000	4.648	1241	4.473	11.647
2002.789	0.003	1360	1178	1357	1335	51.798	63.692	0.009	11.832	5.283	58.409	1013	659	4.689	1.892	1339	0	0.000	4.657	1254	4.474	11.649
2002.792	0.003	1360	1180	1357	1336	51.815	63.692	-0.017	11.815	5.283	58.409	1013	659	4.689	1.893	1339	0	0.000	4.639	1344	4.475	11.651
2002.795	0.003	1358	1180	1356	1335	51.774	63.692	0.040	11.856	5.283	58.409	1013	657	4.690	1.894	1339	0	0.000	4.679	1350	4.477	11.653
2002.797	0.003	1358	1182	1357	1335	51.809	63.692	-0.034	11.821	5.283	58.409	1013	655	4.691	1.894	1339	0	0.000	4.644	1342	4.478	11.655
2002.800	0.003	1358	1184	1358	1336	51.829	63.692	-0.020	11.801	5.283	58.409	1013	655	4.691	1.895	1339	0	0.000	4.623	1340	4.479	11.657
2002.803	0.003	1357	1185	1356	1335	51.783	63.692	0.046	11.847	5.283	58.409	1013	654	4.692	1.896	1339	0	0.000	4.669	1316	4.481	11.659
2002.805	0.003	1357	1185	1356	1334	51.771	63.692	0.011	11.858	5.283	58.409	1013	652	4.693	1.896	1339	0	0.000	4.679	1308	4.482	11.661
2002.808	0.003	1357	1188	1357	1335	51.809	63.692	-0.038	11.820	5.283	58.409	1014	651	4.693	1.897	1339	0	0.000	4.641	1308	4.483	11.663
2002.811	0.003	1356	1189	1355	1334	51.773	63.692	0.036	11.857	5.283	58.409	1014	650	4.694	1.898	1339	0	0.000	4.676	1289	4.485	11.665
2002.814	0.003	1355	1190	1355	1334	51.757	63.618	-0.057	11.799	5.283	58.335	1014	648	4.695	1.898	1339	0	0.000	4.618	1272	4.486	11.667
2002.816	0.003	1352	1191	1355	1333	51.726	63.558	-0.030	11.770	5.283	58.275	1014	643	4.695	1.899	1339	0	0.000	4.588	1233	4.487	11.669
2002.819	0.003	1348	1193	1356	1333	51.698	63.558	0.028	11.798	5.283	58.275	1014	635	4.696	1.900	1339	0	0.000	4.616	1177	4.488	11.671
2002.822	0.003	1343	1195	1355	1331	51.625	63.558	0.073	11.871	5.283	58.275	1014	625	4.696	1.900	1339	0	0.000	4.688	1113	4.489	11.672
2002.825	0.003	1343	1195	1355	1331	51.626	63.075	-0.485	11.387	5.283	57.792	1014	620	4.697	1.901	1339	0	0.000	4.203	1071	4.491	11.674
2002.827	0.003	1324	1196	1343	1318	51.130	62.361	-0.217	11.170	5.283	57.079	1015	599	4.698	1.901	1339	0	0.000	3.986	808	4.491	11.675
2002.830	0.003	1296	1197	1323	1298	50.351	61.879	0.297	11.467	5.283	56.596	1015	549	4.698	1.902	1339	0	0.000	4.282	438	4.492	11.676
2002.833	0.003	1272	1198	1309	1282	49.735	61.538	0.275	11.741	5.283	56.255	1015	495	4.699	1.902	1339	0	0.000	4.556	165	4.492	11.677
2002.836	0.003	1261	1201	1296	1272	49.342	61.148	0.003	11.744	5.283	55.865	1015	460	4.699	1.903	1339	0	0.000	4.558	0	4.492	11.678
2002.838	0.003	1253	1201	1282	1262	48.960	60.910	0.144	11.888	5.283	55.627	1015	441	4.700	1.903	1339	0	0.000	4.701	0	4.492	11.678
2002.841	0.003	1244	1202	1273	1254	48.656	60.751	0.145	12.033	5.283	55.468	1015	423	4.700	1.904	1339	0	0.000	4.846	0	4.492	11.678
2002.844	0.003	1238	1204	1274	1253	48.610	60.513	-0.192	11.841	5.283	55.230	1015	408	4.700	1.904	1339	0	0.000	4.654	0	4.492	11.679
2002.847	0.003	1230	1204	1267	1246	48.349	60.243	-0.010	11.831	5.283	54.960	1015	394	4.701	1.905	1339	0	0.000	4.644	0	4.492	11.679
2002.849	0.003	1225	1206	1260	1241	48.148	60.107	0.065	11.896	5.283	54.824	1015	380	4.701	1.905	1339	0	0.000	4.709	0	4.492	11.680
2002.852	0.003	1223	1206	1251	1236	47.940	59.960	0.061	11.958	5.283	54.677	1015	373	4.702	1.905	1339	0	0.000	4.770	0	4.492	11.680
2002.855	0.003	1225	1208	1246	1234	47.867	60.255	0.368	12.326	5.285	54.970	1016	373	4.702	1.906	1339	0	0.000	5.135	0	4.492	11.683
2002.858	0.003	1239	1210	1251	1242	48.169	60.636	0.079	12.405	5.288	55.348	1016	388	4.702	1.906	1339	0	0.000	5.211	0	4.492	11.686
2002.860	0.003	1256	1210	1263	1254	48.649	61.002	-0.114	12.291	5.291	55.710	1016	420	4.703	1.906	1339	0	0.000	5.093	0	4.492	11.690
2002.863	0.003	1272	1211	1274	1265	49.089	61.002	-0.440	11.851	5.291	55.710	1016	453	4.703	1.907	1339	0	0.000	4.653	0	4.492	11.690

Gas Balance MODEL R1-F
Kimball Colinville Storage Reservoir
Discrepancy History Match
E. Kimball Crossflow with Meter Error &Gas Spill

Spill threshhold
1300

		Reservoir P/Z(psia)									E.Kimball+Low Perm Gas Balance				Corunna Seckerton Crossflow					South Spill Model		
Date	dT (years)	SOUTH	A1	MID	AVG	Calc. GIP (bcf)	Inventory GIP (bcf)	Total Discrepancy (bcf)	Adjusted Cumulative Discrep. (bcf)	Cumulative Meter Error (bcf)	Adjusted Inventory GIP (bcf)	P/Z (psia)	Influx 0.0008 (mcfd)	5.0 GIP (bcf)	Cum. Influx (bcf)	Avg P/Z Cor/Sec (psi)	Influx 0.0000 (mcfd)	Cum. Influx (bcf)	Revised K/C Cumulative Discrepancy (bcf)	Gas Spill 0.00855 (mcfd)	Cum. Gas Spill (bcf)	Total Model Adjustments (bcf)
2002.866	0.003	1274	1211	1275	1267	49.146	61.002	-0.057	11.794	5.291	55.710	1016	472	4.704	1.907	1339	0	0.000	4.595	0	4.492	11.691
2002.868	0.003	1274	1211	1274	1266	49.126	60.892	-0.090	11.704	5.291	55.601	1016	473	4.704	1.908	1339	0	0.000	4.505	0	4.492	11.691
2002.871	0.003	1266	1212	1275	1264	49.038	60.892	0.088	11.792	5.291	55.601	1016	465	4.705	1.908	1339	0	0.000	4.593	0	4.492	11.692
2002.874	0.003	1263	1211	1274	1262	48.969	60.533	-0.291	11.501	5.291	55.241	1016	453	4.705	1.909	1339	0	0.000	4.301	0	4.492	11.692
2002.877	0.003	1249	1212	1265	1253	48.613	60.162	-0.014	11.487	5.291	54.871	1016	436	4.706	1.909	1339	0	0.000	4.287	0	4.492	11.692
2002.885	0.008	1223	1214	1239	1231	47.744	59.772	0.479	11.966	5.291	54.480	1016	396	4.707	1.910	1339	0	0.000	4.764	0	4.492	11.694
2002.910	0.025	1216	1214	1235	1225	47.542	59.417	-0.153	11.813	5.291	54.126	1017	363	4.710	1.914	1339	0	0.000	4.608	0	4.492	11.697
2002.912	0.003	1212	1215	1232	1223	47.452	59.591	0.264	12.077	5.293	54.298	1017	352	4.710	1.914	1339	0	0.000	4.870	0	4.492	11.699
2002.915	0.003	1213	1216	1241	1228	47.645	59.773	-0.011	12.066	5.294	54.478	1017	349	4.711	1.914	1339	0	0.000	4.857	0	4.492	11.701
2002.918	0.003	1213	1215	1251	1233	47.847	59.870	-0.105	11.961	5.295	54.575	1018	349	4.711	1.915	1339	0	0.000	4.751	0	4.492	11.702
2002.921	0.003	1214	1215	1259	1238	48.020	59.735	-0.308	11.653	5.295	54.440	1018	349	4.711	1.915	1339	0	0.000	4.443	0	4.492	11.702
2002.923	0.003	1206	1215	1258	1235	47.904	59.178	-0.440	11.213	5.295	53.883	1018	343	4.712	1.915	1339	0	0.000	4.002	0	4.492	11.702
2002.926	0.003	1186	1216	1244	1220	47.334	58.862	0.253	11.466	5.295	53.567	1018	316	4.712	1.916	1339	0	0.000	4.255	0	4.492	11.703
2002.929	0.003	1166	1214	1233	1207	46.836	58.469	0.105	11.571	5.295	53.174	1018	277	4.712	1.916	1339	0	0.000	4.360	0	4.492	11.703
2002.932	0.003	1149	1216	1220	1195	46.361	58.115	0.122	11.693	5.295	52.820	1018	243	4.713	1.916	1339	0	0.000	4.481	0	4.492	11.703
2002.934	0.003	1140	1215	1210	1186	46.019	58.097	0.323	12.016	5.295	52.802	1018	219	4.713	1.916	1339	0	0.000	4.804	0	4.492	11.703
2002.937	0.003	1139	1215	1208	1185	45.980	57.643	-0.414	11.601	5.295	52.348	1018	209	4.713	1.917	1339	0	0.000	4.390	0	4.492	11.704
2002.940	0.003	1127	1214	1200	1176	45.638	57.301	0.000	11.602	5.295	52.006	1018	198	4.713	1.917	1339	0	0.000	4.390	0	4.492	11.704
2002.942	0.003	1095	1214	1198	1164	45.175	57.241	0.402	12.004	5.295	51.946	1018	158	4.713	1.917	1339	0	0.000	4.792	0	4.492	11.704
2002.945	0.003	1085	1214	1199	1161	45.053	57.200	0.081	12.085	5.295	51.905	1018	121	4.713	1.917	1339	0	0.000	4.873	0	4.492	11.704
2002.948	0.003	1084	1214	1200	1161	45.055	57.163	-0.039	12.046	5.295	51.868	1018	112	4.714	1.917	1339	0	0.000	4.834	0	4.492	11.704
2002.951	0.003	1083	1214	1200	1161	45.057	57.157	-0.008	12.038	5.295	51.862	1018	109	4.714	1.917	1339	0	0.000	4.826	0	4.492	11.704
2002.953	0.003	1084	1214	1201	1162	45.091	57.157	-0.034	12.004	5.295	51.862	1018	110	4.714	1.917	1339	0	0.000	4.792	0	4.492	11.704
2002.956	0.003	1085	1213	1201	1163	45.101	57.131	-0.036	11.968	5.295	51.836	1018	112	4.714	1.918	1339	0	0.000	4.755	0	4.492	11.705
2002.959	0.003	1084	1213	1201	1162	45.073	56.887	-0.216	11.752	5.295	51.592	1018	112	4.714	1.918	1339	0	0.000	4.539	0	4.492	11.705
2002.962	0.003	1069	1212	1201	1157	44.870	56.563	-0.121	11.631	5.295	51.268	1018	97	4.714	1.918	1339	0	0.000	4.418	0	4.492	11.705
2002.964	0.003	1040	1212	1201	1147	44.495	56.561	0.373	12.004	5.295	51.266	1018	60	4.714	1.918	1339	0	0.000	4.791	0	4.492	11.705
2002.967	0.003	1036	1213	1202	1146	44.465	56.561	0.030	12.034	5.295	51.266	1018	33	4.714	1.918	1339	0	0.000	4.821	0	4.492	11.705
2002.970	0.003	1039	1211	1201	1146	44.472	56.561	-0.007	12.027	5.295	51.266	1018	32	4.714	1.918	1339	0	0.000	4.815	0	4.492	11.705
2002.973	0.003	1040	1210	1201	1147	44.488	56.561	-0.016	12.012	5.295	51.266	1018	35	4.714	1.918	1339	0	0.000	4.799	0	4.492	11.705
2002.975	0.003	1042	1210	1202	1147	44.512	56.556	-0.029	11.982	5.295	51.261	1018	38	4.714	1.918	1339	0	0.000	4.769	0	4.492	11.705
2002.978	0.003	1044	1209	1202	1148	44.530	56.127	-0.448	11.535	5.295	50.832	1018	40	4.714	1.918	1339	0	0.000	4.322	0	4.492	11.705
2002.981	0.003	1011	1208	1201	1136	44.087	55.978	0.294	11.829	5.295	50.683	1018	15	4.714	1.918	1339	0	0.000	4.616	0	4.492	11.705
2002.984	0.003	993	1207	1201	1130	43.835	55.695	-0.031	11.798	5.295	50.400	1018	-26	4.714	1.918	1339	0	0.000	4.585	0	4.492	11.705
2002.986	0.003	974	1206	1201	1123	43.573	55.429	-0.004	11.794	5.295	50.134	1018	-56	4.714	1.918	1339	0	0.000	4.581	0	4.492	11.705
2002.989	0.003	950	1204	1201	1115	43.254	55.186	0.076	11.871	5.295	49.891	1018	-89	4.714	1.918	1339	0	0.000	4.658	0	4.492	11.705
2002.992	0.003	930	1204	1201	1108	42.979	55.008	0.096	11.967	5.295	49.713	1018	-122	4.714	1.918	1339	0	0.000	4.754	0	4.492	11.705
2002.995	0.003	914	1203	1201	1102	42.759	54.890	0.102	12.069	5.295	49.595	1018	-149	4.714	1.918	1339	0	0.000	4.857	0	4.492	11.705
2002.997	0.003	908	1202	1201	1100	42.673	54.797	-0.007	12.063	5.295	49.502	1018	-165	4.714	1.917	1339	0	0.000	4.850	0	4.492	11.704
2003.011	0.014	801	1195	1193	1058	41.033	53.129	-0.029	12.034	5.295	47.834	1018	-246	4.713	1.916	1339	0	0.000	4.823	0	4.492	11.703
2003.014	0.003	773	1194	1193	1048	40.652	52.791	0.043	12.077	5.295	47.496	1018	-334	4.712	1.916	1339	0	0.000	4.866	0	4.492	11.703
2003.016	0.003	747	1192	1194	1039	40.310	52.276	-0.172	11.905	5.295	46.981	1018	-367	4.712	1.916	1339	0	0.000	4.694	0	4.492	11.702
2003.019	0.003	723	1192	1185	1026	39.790	51.671	-0.085	11.819	5.295	46.376	1018	-397	4.711	1.915	1339	0	0.000	4.609	0	4.492	11.702
2003.022	0.003	699	1189	1164	1006	39.046	51.291	0.364	12.184	5.295	45.996	1018	-424	4.711	1.915	1339	0	0.000	4.974	0	4.492	11.702
2003.025	0.003	677	1188	1158	995	38.612	50.813	-0.045	12.139	5.295	45.518	1018	-450	4.711	1.914	1339	0	0.000	4.930	0	4.492	11.701

Gas Balance MODEL R1-F
Kimball Colinville Storage Reservoir
Discrepancy History Match
E. Kimball Crossflow with Meter Error &Gas Spill

Spill threshhold
1300

		Reservoir P/Z(psia)									E.Kimball+Low Perm Gas Balance				Corunna Seckerton Crossflow					South Spill Model		
Date	dT (years)	SOUTH	A1	MID	AVG	Calc. GIP (bcf)	Inventory GIP (bcf)	Total Discrepancy (bcf)	Adjusted Cumulative Discrep. (bcf)	Cumulative Meter Error (bcf)	Adjusted Inventory GIP (bcf)	P/Z (psia)	Influx 0.0008 (mcfd)	5.0 GIP (bcf)	Cum. Influx (bcf)	Avg P/Z Cor/Sec (psi)	Influx 0.0000 (mcfd)	Cum. Influx (bcf)	Revised K/C Cumulative Discrepancy (bcf)	Gas Spill 0.00855 (mcfd)	Cum. Gas Spill (bcf)	Total Model Adjustments (bcf)
2003.027	0.003	657	1185	1145	981	38.055	50.079	-0.176	11.963	5.295	44.784	1017	-473	4.710	1.914	1339	0	0.000	4.754	0	4.492	11.701
2003.030	0.003	639	1183	1121	962	37.313	49.592	0.254	12.217	5.295	44.297	1017	-492	4.710	1.913	1339	0	0.000	5.009	0	4.492	11.700
2003.033	0.003	620	1181	1107	947	36.759	49.112	0.075	12.291	5.295	43.817	1017	-511	4.709	1.913	1339	0	0.000	5.084	0	4.492	11.700
2003.036	0.003	602	1179	1094	935	36.265	48.367	-0.252	12.040	5.295	43.072	1017	-529	4.709	1.912	1339	0	0.000	4.832	0	4.492	11.699
2003.038	0.003	589	1177	1065	915	35.479	47.770	0.189	12.229	5.295	42.475	1017	-544	4.708	1.912	1339	0	0.000	5.022	0	4.492	11.699
2003.041	0.003	578	1176	1040	898	34.824	47.333	0.218	12.447	5.295	42.038	1017	-555	4.707	1.911	1339	0	0.000	5.241	0	4.492	11.698
2003.044	0.003	569	1173	1025	886	34.367	46.939	0.063	12.510	5.295	41.644	1017	-564	4.707	1.911	1339	0	0.000	5.304	0	4.492	11.698
2003.047	0.003	558	1170	1010	874	33.900	46.231	-0.241	12.269	5.295	40.936	1017	-573	4.706	1.910	1339	0	0.000	5.064	0	4.492	11.697
2003.049	0.003	549	1168	988	859	33.316	45.693	0.046	12.315	5.295	40.398	1017	-582	4.706	1.909	1339	0	0.000	5.110	0	4.492	11.696
2003.052	0.003	538	1166	960	840	32.581	45.052	0.094	12.409	5.295	39.757	1016	-590	4.705	1.909	1339	0	0.000	5.205	0	4.492	11.696
2003.055	0.003	528	1163	938	825	32.002	44.309	-0.164	12.244	5.295	39.014	1016	-599	4.705	1.908	1339	0	0.000	5.041	0	4.492	11.695
2003.058	0.003	516	1161	910	806	31.257	43.595	0.032	12.276	5.295	38.300	1016	-608	4.704	1.908	1339	0	0.000	5.074	0	4.492	11.695
2003.060	0.003	505	1158	880	786	30.475	42.718	-0.095	12.181	5.295	37.423	1016	-617	4.703	1.907	1339	0	0.000	4.979	0	4.492	11.694
2003.063	0.003	487	1154	848	762	29.551	41.981	0.188	12.369	5.295	36.686	1016	-629	4.703	1.906	1339	0	0.000	5.167	0	4.492	11.693
2003.066	0.003	467	1151	818	739	28.658	41.447	0.358	12.727	5.295	36.152	1016	-644	4.702	1.906	1339	0	0.000	5.526	0	4.492	11.693
2003.068	0.003	448	1148	797	721	27.967	40.838	0.083	12.810	5.295	35.543	1016	-658	4.701	1.905	1339	0	0.000	5.610	0	4.492	11.692
2003.071	0.003	432	1145	787	709	27.517	40.250	-0.139	12.671	5.295	34.955	1015	-670	4.701	1.904	1339	0	0.000	5.472	0	4.492	11.691
2003.074	0.003	414	1142	769	693	26.897	39.738	0.108	12.779	5.295	34.443	1015	-682	4.700	1.904	1339	0	0.000	5.580	0	4.492	11.691
2003.077	0.003	402	1139	752	679	26.359	39.301	0.101	12.880	5.295	34.006	1015	-692	4.699	1.903	1339	0	0.000	5.682	0	4.492	11.690
2003.079	0.003	391	1136	738	668	25.925	38.847	-0.021	12.860	5.295	33.552	1015	-699	4.699	1.902	1339	0	0.000	5.662	0	4.492	11.689
2003.082	0.003	389	1133	722	659	25.557	38.354	-0.125	12.735	5.295	33.059	1015	-703	4.698	1.902	1339	0	0.000	5.538	0	4.492	11.689
2003.085	0.003	380	1129	702	644	25.002	38.015	0.217	12.952	5.295	32.720	1015	-706	4.697	1.901	1339	0	0.000	5.756	0	4.492	11.688
2003.088	0.003	375	1126	687	635	24.627	37.692	0.051	13.003	5.295	32.397	1015	-710	4.697	1.900	1339	0	0.000	5.808	0	4.492	11.687
2003.090	0.003	370	1123	676	627	24.310	37.370	-0.005	12.998	5.295	32.075	1014	-712	4.696	1.900	1339	0	0.000	5.803	0	4.492	11.686
2003.093	0.003	365	1120	668	620	24.064	36.977	-0.147	12.851	5.295	31.682	1014	-715	4.695	1.899	1339	0	0.000	5.657	0	4.492	11.686
2003.096	0.003	358	1116	658	612	23.742	36.470	-0.185	12.666	5.295	31.175	1014	-718	4.694	1.898	1339	0	0.000	5.473	0	4.492	11.685
2003.099	0.003	348	1112	639	598	23.209	35.963	0.025	12.692	5.295	30.668	1014	-723	4.694	1.897	1339	0	0.000	5.499	0	4.492	11.684
2003.101	0.003	338	1109	620	584	22.654	35.601	0.193	12.885	5.295	30.306	1014	-728	4.693	1.897	1339	0	0.000	5.693	0	4.492	11.684
2003.104	0.003	338	1105	599	573	22.211	35.222	0.064	12.949	5.295	29.927	1014	-731	4.692	1.896	1339	0	0.000	5.758	0	4.492	11.683
2003.107	0.003	342	1103	582	565	21.908	34.803	-0.117	12.833	5.295	29.508	1014	-729	4.691	1.895	1339	0	0.000	5.642	0	4.492	11.682
2003.110	0.003	343	1099	562	554	21.490	34.378	-0.006	12.826	5.295	29.083	1013	-728	4.691	1.894	1339	0	0.000	5.637	0	4.492	11.681
2003.112	0.003	331	1095	546	541	20.995	34.095	0.212	13.038	5.295	28.800	1013	-731	4.690	1.894	1339	0	0.000	5.849	0	4.492	11.681
2003.115	0.003	322	1091	539	534	20.712	33.778	-0.034	13.004	5.295	28.483	1013	-736	4.689	1.893	1339	0	0.000	5.816	0	4.492	11.680
2003.118	0.003	314	1089	533	527	20.454	33.519	-0.002	13.002	5.295	28.224	1013	-740	4.689	1.892	1339	0	0.000	5.815	0	4.492	11.679
2003.121	0.003	317	1085	521	522	20.247	33.268	-0.043	12.959	5.295	27.973	1013	-741	4.688	1.891	1339	0	0.000	5.773	0	4.492	11.678
2003.123	0.003	319	1082	509	516	20.025	33.007	-0.040	12.919	5.295	27.712	1013	-739	4.687	1.891	1339	0	0.000	5.734	0	4.492	11.678
2003.126	0.003	322	1077	499	511	19.825	32.653	-0.154	12.766	5.295	27.358	1012	-738	4.686	1.890	1339	0	0.000	5.581	0	4.492	11.677
2003.129	0.003	325	1075	482	503	19.497	32.294	-0.031	12.735	5.295	26.999	1012	-736	4.686	1.889	1339	0	0.000	5.551	0	4.492	11.676
2003.132	0.003	327	1071	464	493	19.139	31.942	0.006	12.741	5.295	26.647	1012	-735	4.685	1.889	1339	0	0.000	5.558	0	4.492	11.675
2003.134	0.003	329	1068	446	484	18.775	31.743	0.164	12.906	5.295	26.448	1012	-733	4.684	1.888	1339	0	0.000	5.723	0	4.492	11.675
2003.137	0.003	331	1065	433	478	18.539	31.515	0.008	12.914	5.295	26.220	1012	-732	4.683	1.887	1339	0	0.000	5.732	0	4.492	11.674
2003.140	0.003	333	1061	423	472	18.329	31.372	0.068	12.982	5.295	26.077	1012	-731	4.683	1.886	1339	0	0.000	5.800	0	4.492	11.673
2003.142	0.003	335	1057	415	468	18.173	31.372	0.156	13.138	5.295	26.077	1011	-729	4.682	1.886	1339	0	0.000	5.957	0	4.492	11.673
2003.145	0.003	337	1054	415	469	18.200	31.337	-0.063	13.075	5.295	26.042	1011	-728	4.681	1.885	1339	0	0.000	5.895	0	4.492	11.672
2003.148	0.003	339	1050	416	470	18.223	31.147	-0.213	12.862	5.295	25.852	1011	-727	4.680	1.884	1339	0	0.000	5.683	0	4.492	11.671

Gas Balance MODEL R1-F
Kimball Colinville Storage Reservoir
Discrepancy History Match
E. Kimball Crossflow with Meter Error &Gas Spill

Spill threshhold
1300

		Reservoir P/Z(psia)									E.Kimball+Low Perm Gas Balance				Corunna Seckerton Crossflow					South Spill Model		
Date	dT (years)	SOUTH	A1	MID	AVG	Calc. GIP (bcf)	Inventory GIP (bcf)	Total Discrepancy (bcf)	Adjusted Cumulative Discrep. (bcf)	Cumulative Meter Error (bcf)	Adjusted Inventory GIP (bcf)	P/Z (psia)	Influx 0.0008 (mcfd)	5.0 GIP (bcf)	Cum. Influx (bcf)	Avg P/Z Cor/Sec (psi)	Influx 0.0000 (mcfd)	Cum. Influx (bcf)	Revised K/C Cumulative Discrepancy (bcf)	Gas Spill 0.00855 (mcfd)	Cum. Gas Spill (bcf)	Total Model Adjustments (bcf)
2003.151	0.003	341	1048	412	468	18.146	30.914	-0.156	12.706	5.295	25.619	1011	-725	4.680	1.883	1339	0	0.000	5.527	0	4.492	11.670
2003.153	0.003	343	1043	402	462	17.937	30.694	-0.010	12.696	5.295	25.399	1011	-724	4.679	1.883	1339	0	0.000	5.518	0	4.492	11.670
2003.156	0.003	344	1040	389	456	17.676	30.649	0.215	12.911	5.295	25.354	1011	-723	4.678	1.882	1339	0	0.000	5.734	0	4.492	11.669
2003.159	0.003	346	1036	377	450	17.442	30.846	0.432	13.343	5.297	25.549	1011	-722	4.678	1.881	1339	0	0.000	6.165	0	4.492	11.670
2003.162	0.003	348	1033	391	457	17.737	30.650	-0.491	12.851	5.297	25.353	1010	-721	4.677	1.881	1339	0	0.000	5.674	0	4.492	11.669
2003.164	0.003	349	1029	393	458	17.779	30.591	-0.101	12.751	5.297	25.295	1010	-720	4.676	1.880	1339	0	0.000	5.574	0	4.492	11.668
2003.167	0.003	350	1026	386	455	17.640	30.379	-0.073	12.677	5.297	25.083	1010	-719	4.675	1.879	1339	0	0.000	5.502	0	4.492	11.668
2003.170	0.003	352	1021	378	451	17.481	30.131	-0.090	12.588	5.297	24.835	1010	-717	4.675	1.878	1339	0	0.000	5.413	0	4.492	11.667
2003.173	0.003	353	1019	367	445	17.260	29.958	0.048	12.636	5.297	24.662	1010	-716	4.674	1.878	1339	0	0.000	5.462	0	4.492	11.666
2003.175	0.003	355	1015	355	438	17.005	29.769	0.067	12.703	5.297	24.473	1010	-715	4.673	1.877	1339	0	0.000	5.529	0	4.492	11.666
2003.178	0.003	356	1012	346	434	16.830	29.701	0.107	12.809	5.297	24.404	1009	-714	4.673	1.876	1339	0	0.000	5.637	0	4.492	11.665
2003.181	0.003	358	1010	339	431	16.705	29.607	0.030	12.840	5.297	24.310	1009	-713	4.672	1.876	1339	0	0.000	5.668	0	4.492	11.664
2003.184	0.003	359	1006	338	430	16.676	29.500	-0.077	12.762	5.297	24.204	1009	-712	4.671	1.875	1339	0	0.000	5.591	0	4.492	11.663
2003.186	0.003	360	1002	334	427	16.582	29.393	-0.013	12.750	5.297	24.096	1009	-711	4.670	1.874	1339	0	0.000	5.579	0	4.492	11.663
2003.189	0.003	361	999	329	425	16.483	29.285	-0.010	12.740	5.297	23.988	1009	-710	4.670	1.873	1339	0	0.000	5.570	0	4.492	11.662
2003.192	0.003	363	996	324	422	16.390	29.190	-0.002	12.738	5.297	23.894	1009	-709	4.669	1.873	1339	0	0.000	5.569	0	4.492	11.661
2003.195	0.003	364	992	321	420	16.310	29.089	-0.020	12.718	5.297	23.793	1009	-708	4.668	1.872	1339	0	0.000	5.549	0	4.492	11.661
2003.197	0.003	365	989	316	418	16.219	29.077	0.079	12.796	5.297	23.781	1008	-708	4.668	1.871	1339	0	0.000	5.629	0	4.492	11.660
2003.200	0.003	365	985	315	417	16.170	29.077	0.049	12.846	5.297	23.781	1008	-707	4.667	1.871	1339	0	0.000	5.678	0	4.492	11.659
2003.203	0.003	367	982	317	418	16.229	29.077	-0.060	12.786	5.297	23.780	1008	-706	4.666	1.870	1339	0	0.000	5.619	0	4.492	11.658
2003.205	0.003	367	979	318	418	16.228	29.077	0.001	12.787	5.297	23.780	1008	-705	4.665	1.869	1339	0	0.000	5.621	0	4.492	11.658
2003.208	0.003	368	976	319	419	16.251	29.077	-0.023	12.764	5.297	23.780	1008	-705	4.665	1.868	1339	0	0.000	5.599	0	4.492	11.657
2003.211	0.003	369	973	320	420	16.279	29.077	-0.028	12.736	5.297	23.780	1008	-704	4.664	1.868	1339	0	0.000	5.571	0	4.492	11.656
2003.214	0.003	370	969	321	420	16.295	29.076	-0.017	12.719	5.297	23.780	1007	-703	4.663	1.867	1339	0	0.000	5.555	0	4.492	11.656
2003.216	0.003	371	967	322	421	16.325	29.076	-0.029	12.690	5.297	23.780	1007	-702	4.663	1.866	1339	0	0.000	5.527	0	4.492	11.655
2003.219	0.003	372	963	323	421	16.335	29.076	-0.010	12.679	5.297	23.780	1007	-701	4.662	1.866	1339	0	0.000	5.517	0	4.492	11.654
2003.222	0.003	373	960	324	422	16.354	29.076	-0.019	12.660	5.297	23.780	1007	-700	4.661	1.865	1339	0	0.000	5.499	0	4.492	11.654
2003.225	0.003	374	957	325	422	16.360	29.076	-0.006	12.654	5.297	23.780	1007	-699	4.661	1.864	1339	0	0.000	5.493	0	4.492	11.653
2003.227	0.003	375	954	325	422	16.375	29.076	-0.014	12.640	5.297	23.780	1007	-699	4.660	1.864	1339	0	0.000	5.479	0	4.492	11.652
2003.230	0.003	376	951	327	423	16.398	29.076	-0.024	12.616	5.297	23.780	1007	-698	4.659	1.863	1339	0	0.000	5.456	0	4.492	11.651
2003.233	0.003	377	948	327	423	16.406	29.076	-0.007	12.609	5.297	23.780	1006	-697	4.658	1.862	1339	0	0.000	5.450	0	4.492	11.651
2003.236	0.003	378	945	328	423	16.412	29.076	-0.007	12.602	5.297	23.780	1006	-696	4.658	1.861	1339	0	0.000	5.444	0	4.492	11.650
2003.238	0.003	379	943	329	424	16.438	29.076	-0.025	12.577	5.297	23.780	1006	-695	4.657	1.861	1339	0	0.000	5.419	0	4.492	11.649
2003.241	0.003	380	940	329	424	16.458	29.076	-0.020	12.556	5.297	23.780	1006	-694	4.656	1.860	1339	0	0.000	5.400	0	4.492	11.649
2003.244	0.003	380	936	329	424	16.441	29.076	0.017	12.574	5.297	23.780	1006	-694	4.656	1.859	1339	0	0.000	5.418	0	4.492	11.648
2003.247	0.003	381	933	330	424	16.450	29.009	-0.076	12.498	5.297	23.713	1006	-693	4.655	1.859	1339	0	0.000	5.342	0	4.492	11.647
2003.249	0.003	379	931	331	423	16.425	28.914	-0.070	12.427	5.297	23.618	1005	-693	4.654	1.858	1339	0	0.000	5.273	0	4.492	11.647
2003.252	0.003	363	927	332	418	16.222	28.821	0.110	12.538	5.297	23.525	1005	-698	4.654	1.857	1339	0	0.000	5.384	0	4.492	11.646
2003.255	0.003	362	925	332	417	16.187	28.593	-0.194	12.343	5.297	23.296	1005	-703	4.653	1.857	1339	0	0.000	5.190	0	4.492	11.645
2003.258	0.003	349	922	329	411	15.939	28.411	0.067	12.410	5.297	23.114	1005	-707	4.652	1.856	1339	0	0.000	5.257	0	4.492	11.644
2003.260	0.003	340	919	325	406	15.733	28.196	-0.009	12.401	5.297	22.899	1005	-713	4.651	1.855	1339	0	0.000	5.249	0	4.492	11.644
2003.263	0.003	328	916	320	398	15.447	28.069	0.160	12.561	5.297	22.773	1005	-718	4.651	1.854	1339	0	0.000	5.409	0	4.492	11.643
2003.266	0.003	320	914	315	393	15.228	27.944	0.093	12.654	5.297	22.648	1005	-723	4.650	1.854	1339	0	0.000	5.504	0	4.492	11.642
2003.268	0.003	313	910	315	390	15.112	27.849	0.022	12.675	5.297	22.553	1004	-727	4.649	1.853	1339	0	0.000	5.526	0	4.492	11.642
2003.271	0.003	311	908	313	388	15.039	27.819	0.042	12.718	5.297	22.522	1004	-729	4.649	1.852	1339	0	0.000	5.569	0	4.492	11.641

Gas Balance MODEL R1-F
Kimball Colinville Storage Reservoir
Discrepancy History Match
E. Kimball Crossflow with Meter Error &Gas Spill

Spill threshhold
1300

		Reservoir P/Z(psia)									E.Kimball+Low Perm Gas Balance				Corunna Seckerton Crossflow					South Spill Model		
Date	dT (years)	SOUTH	A1	MID	AVG	Calc. GIP (bcf)	Inventory GIP (bcf)	Total Discrepancy (bcf)	Adjusted Cumulative Discrep. (bcf)	Cumulative Meter Error (bcf)	Adjusted Inventory GIP (bcf)	P/Z (psia)	Influx 0.0008 (mcfd)	5.0 GIP (bcf)	Cum. Influx (bcf)	Avg P/Z Cor/Sec (psi)	Influx 0.0000 (mcfd)	Cum. Influx (bcf)	Revised K/C Cumulative Discrepancy (bcf)	Gas Spill 0.00855 (mcfd)	Cum. Gas Spill (bcf)	Total Model Adjustments (bcf)
2003.274	0.003	313	905	309	386	14.972	27.819	0.067	12.785	5.297	22.522	1004	-729	4.648	1.852	1339	0	0.000	5.637	0	4.492	11.640
2003.277	0.003	314	903	310	386	14.992	27.819	-0.020	12.765	5.297	22.522	1004	-728	4.647	1.851	1339	0	0.000	5.618	0	4.492	11.639
2003.279	0.003	315	900	311	387	15.019	27.819	-0.028	12.738	5.297	22.522	1004	-727	4.646	1.850	1339	0	0.000	5.591	0	4.492	11.639
2003.282	0.003	317	897	312	387	15.030	27.819	-0.011	12.727	5.297	22.522	1004	-726	4.646	1.849	1339	0	0.000	5.581	0	4.492	11.638
2003.285	0.003	318	894	312	388	15.045	28.000	0.166	12.893	5.298	22.702	1003	-725	4.645	1.849	1339	0	0.000	5.746	0	4.492	11.639
2003.290	0.005	320	890	332	398	15.454	28.107	-0.301	12.591	5.299	22.808	1003	-724	4.643	1.847	1339	0	0.000	5.445	0	4.492	11.638
2003.293	0.003	321	887	333	399	15.477	28.066	-0.064	12.527	5.299	22.767	1003	-723	4.643	1.846	1339	0	0.000	5.381	0	4.492	11.637
2003.296	0.003	320	885	330	397	15.397	28.400	0.414	12.941	5.302	23.098	1003	-722	4.642	1.846	1339	0	0.000	5.793	0	4.492	11.639
2003.299	0.003	329	882	340	405	15.715	28.851	0.133	13.074	5.305	23.546	1003	-720	4.641	1.845	1339	0	0.000	5.923	0	4.492	11.642
2003.301	0.003	356	879	355	422	16.364	29.470	-0.030	13.044	5.311	24.159	1003	-710	4.641	1.844	1339	0	0.000	5.889	0	4.492	11.647
2003.304	0.003	381	877	371	439	17.017	29.869	-0.254	12.790	5.314	24.555	1002	-695	4.640	1.844	1339	0	0.000	5.632	0	4.492	11.649
2003.307	0.003	398	874	387	452	17.551	29.869	-0.534	12.256	5.314	24.555	1002	-682	4.639	1.843	1339	0	0.000	5.099	0	4.492	11.649
2003.310	0.003	399	872	391	454	17.622	29.834	-0.107	12.149	5.314	24.520	1002	-677	4.639	1.842	1339	0	0.000	4.993	0	4.492	11.648
2003.312	0.003	399	869	389	453	17.574	29.834	0.048	12.197	5.314	24.520	1002	-676	4.638	1.842	1339	0	0.000	5.042	0	4.492	11.647
2003.315	0.003	399	867	387	452	17.526	29.882	0.097	12.294	5.314	24.568	1002	-676	4.637	1.841	1339	0	0.000	5.139	0	4.492	11.647
2003.318	0.003	399	864	388	452	17.551	30.008	0.101	12.395	5.315	24.693	1002	-675	4.637	1.840	1339	0	0.000	5.240	0	4.492	11.647
2003.321	0.003	403	861	392	455	17.659	30.288	0.171	12.567	5.318	24.971	1001	-674	4.636	1.840	1339	0	0.000	5.410	0	4.492	11.649
2003.323	0.003	413	860	401	463	17.973	30.620	0.018	12.585	5.320	25.300	1001	-669	4.635	1.839	1339	0	0.000	5.426	0	4.492	11.651
2003.326	0.003	425	857	411	472	18.329	30.749	-0.227	12.358	5.321	25.428	1001	-662	4.635	1.838	1339	0	0.000	5.199	0	4.492	11.651
2003.329	0.003	428	855	421	479	18.564	30.962	-0.022	12.336	5.323	25.639	1001	-656	4.634	1.838	1339	0	0.000	5.176	0	4.492	11.653
2003.332	0.003	435	852	427	484	18.771	31.300	0.132	12.468	5.326	25.975	1001	-652	4.633	1.837	1339	0	0.000	5.305	0	4.492	11.655
2003.334	0.003	446	850	437	493	19.114	31.495	-0.149	12.319	5.327	26.168	1001	-646	4.633	1.836	1339	0	0.000	5.155	0	4.492	11.656
2003.337	0.003	455	848	447	500	19.417	31.804	0.006	12.325	5.330	26.474	1001	-639	4.632	1.836	1339	0	0.000	5.160	0	4.492	11.657
2003.340	0.003	465	845	455	508	19.701	32.124	0.036	12.361	5.333	26.792	1000	-632	4.631	1.835	1339	0	0.000	5.194	0	4.492	11.659
2003.342	0.003	476	843	467	518	20.089	32.304	-0.208	12.153	5.334	26.970	1000	-624	4.631	1.834	1339	0	0.000	4.985	0	4.492	11.660
2003.345	0.003	484	841	476	525	20.363	32.472	-0.107	12.046	5.335	27.136	1000	-616	4.630	1.834	1339	0	0.000	4.877	0	4.492	11.661
2003.348	0.003	489	838	481	529	20.516	32.603	-0.021	12.025	5.336	27.266	1000	-611	4.629	1.833	1339	0	0.000	4.855	0	4.492	11.662
2003.351	0.003	493	836	485	532	20.645	32.852	0.121	12.145	5.339	27.514	1000	-607	4.629	1.833	1339	0	0.000	4.974	0	4.492	11.663
2003.353	0.003	500	834	491	538	20.861	33.266	0.197	12.342	5.342	27.924	1000	-603	4.628	1.832	1339	0	0.000	5.168	0	4.492	11.666
2003.356	0.003	513	832	504	549	21.296	33.709	0.010	12.352	5.346	28.364	1000	-594	4.628	1.831	1339	0	0.000	5.175	0	4.492	11.669
2003.359	0.003	528	829	519	562	21.787	34.103	-0.098	12.254	5.349	28.754	1000	-583	4.627	1.831	1339	0	0.000	5.074	0	4.492	11.671
2003.362	0.003	543	828	535	574	22.286	34.371	-0.231	12.023	5.351	29.020	999	-570	4.626	1.830	1339	0	0.000	4.842	0	4.492	11.673
2003.364	0.003	552	826	544	582	22.591	34.620	-0.056	11.967	5.353	29.267	999	-560	4.626	1.830	1339	0	0.000	4.784	0	4.492	11.675
2003.367	0.003	560	823	551	589	22.837	35.074	0.208	12.175	5.357	29.717	999	-552	4.625	1.829	1339	0	0.000	4.989	0	4.492	11.678
2003.370	0.003	574	822	563	600	23.265	35.624	0.122	12.297	5.361	30.263	999	-541	4.625	1.829	1339	0	0.000	5.107	0	4.492	11.682
2003.373	0.003	593	820	582	616	23.887	35.923	-0.323	11.974	5.364	30.559	999	-526	4.624	1.828	1339	0	0.000	4.782	0	4.492	11.684
2003.375	0.003	605	817	595	627	24.313	36.348	-0.001	11.973	5.367	30.981	999	-511	4.624	1.827	1339	0	0.000	4.778	0	4.492	11.687
2003.378	0.003	616	815	606	636	24.674	36.878	0.168	12.141	5.372	31.506	999	-500	4.623	1.827	1339	0	0.000	4.943	0	4.492	11.690
2003.381	0.003	634	814	623	651	25.250	37.493	0.040	12.181	5.377	32.116	999	-485	4.623	1.827	1339	0	0.000	4.978	0	4.492	11.695
2003.384	0.003	653	811	642	667	25.891	37.772	-0.361	11.820	5.379	32.394	999	-466	4.622	1.826	1339	0	0.000	4.615	0	4.492	11.697
2003.386	0.003	665	810	655	678	26.311	37.886	-0.306	11.514	5.380	32.507	998	-450	4.622	1.826	1339	0	0.000	4.308	0	4.492	11.697
2003.389	0.003	664	807	660	680	26.383	38.157	0.198	11.712	5.382	32.775	998	-444	4.621	1.825	1339	0	0.000	4.504	0	4.492	11.699
2003.392	0.003	671	806	666	685	26.595	38.562	0.194	11.906	5.385	33.177	998	-441	4.621	1.825	1339	0	0.000	4.695	0	4.492	11.702
2003.395	0.003	682	804	677	695	26.965	39.055	0.123	12.029	5.389	33.666	998	-431	4.621	1.824	1339	0	0.000	4.815	0	4.492	11.706
2003.397	0.003	700	803	693	709	27.519	39.555	-0.054	11.974	5.393	34.162	998	-415	4.620	1.824	1339	0	0.000	4.757	0	4.492	11.709

Gas Balance MODEL R1-F
Kimball Colinville Storage Reservoir
Discrepancy History Match
E. Kimball Crossflow with Meter Error &Gas Spill

Spill threshhold
1300

		Reservoir P/Z(psia)										E.Kimball+Low Perm Gas Balance			Corunna Seckerton Crossflow					South Spill Model		
Date	dT (years)	SOUTH	A1	MID	AVG	Calc. GIP (bcf)	Inventory GIP (bcf)	Total Discrepancy (bcf)	Adjusted Cumulative Discrep. (bcf)	Cumulative Meter Error (bcf)	Adjusted Inventory GIP (bcf)	P/Z (psia)	Influx 0.0008 (mcfd)	5.0 GIP (bcf)	Cum. Influx (bcf)	Avg P/Z Cor/Sec (psi)	Influx 0.0000 (mcfd)	Cum. Influx (bcf)	Revised K/C Cumulative Discrepancy (bcf)	Gas Spill 0.00855 (mcfd)	Cum. Gas Spill (bcf)	Total Model Adjustments (bcf)
2003.400	0.003	716	801	708	722	28.028	40.054	-0.010	11.964	5.398	34.657	998	-396	4.620	1.823	1339	0	0.000	4.743	0	4.492	11.713
2003.403	0.003	733	800	725	737	28.591	40.521	-0.096	11.868	5.401	35.120	998	-377	4.619	1.823	1339	0	0.000	4.644	0	4.492	11.716
2003.405	0.003	748	798	739	750	29.086	41.026	0.010	11.878	5.406	35.620	998	-358	4.619	1.823	1339	0	0.000	4.649	0	4.492	11.720
2003.408	0.003	766	797	751	762	29.557	41.528	0.031	11.909	5.410	36.119	998	-338	4.619	1.822	1339	0	0.000	4.677	0	4.492	11.724
2003.411	0.003	782	795	767	776	30.104	42.061	-0.014	11.895	5.414	36.647	998	-317	4.618	1.822	1339	0	0.000	4.659	0	4.492	11.728
2003.414	0.003	798	794	785	790	30.665	42.521	-0.101	11.794	5.418	37.103	998	-297	4.618	1.822	1339	0	0.000	4.554	0	4.492	11.732
2003.416	0.003	811	792	800	803	31.137	43.010	0.016	11.811	5.422	37.588	998	-279	4.618	1.822	1339	0	0.000	4.567	0	4.492	11.735
2003.419	0.003	827	792	816	817	31.683	43.691	0.135	11.946	5.427	38.264	997	-260	4.618	1.821	1339	0	0.000	4.697	0	4.492	11.741
2003.422	0.003	844	790	834	832	32.274	44.261	-0.021	11.925	5.432	38.829	997	-238	4.617	1.821	1339	0	0.000	4.672	0	4.492	11.745
2003.425	0.003	862	789	860	852	33.050	44.830	-0.207	11.718	5.437	39.393	997	-214	4.617	1.821	1339	0	0.000	4.461	0	4.492	11.749
2003.427	0.003	877	787	873	863	33.498	45.316	0.039	11.757	5.441	39.876	997	-191	4.617	1.821	1339	0	0.000	4.495	0	4.492	11.753
2003.430	0.003	893	786	889	877	34.027	45.942	0.096	11.853	5.446	40.497	997	-169	4.617	1.820	1339	0	0.000	4.587	0	4.492	11.758
2003.433	0.003	909	785	904	891	34.561	46.611	0.136	11.989	5.451	41.160	997	-146	4.617	1.820	1339	0	0.000	4.717	0	4.492	11.764
2003.436	0.003	930	784	925	909	35.268	47.234	-0.085	11.904	5.456	41.778	997	-118	4.616	1.820	1339	0	0.000	4.627	0	4.492	11.769
2003.438	0.003	949	783	944	925	35.900	47.903	0.038	11.941	5.462	42.441	997	-89	4.616	1.820	1339	0	0.000	4.659	0	4.492	11.774
2003.441	0.003	969	783	964	943	36.579	48.635	0.053	11.994	5.468	43.167	997	-60	4.616	1.820	1339	0	0.000	4.706	0	4.492	11.780
2003.444	0.003	991	782	986	962	37.316	49.356	-0.016	11.978	5.474	43.882	997	-27	4.616	1.820	1339	0	0.000	4.684	0	4.492	11.786
2003.447	0.003	1013	781	1009	982	38.086	49.937	-0.189	11.789	5.479	44.459	997	8	4.616	1.820	1339	0	0.000	4.491	0	4.492	11.791
2003.449	0.003	1030	781	1026	996	38.646	50.642	0.145	11.934	5.484	45.158	997	40	4.616	1.820	1339	0	0.000	4.630	0	4.492	11.796
2003.452	0.003	1051	781	1045	1014	39.326	51.382	0.059	11.993	5.490	45.891	997	71	4.616	1.820	1339	0	0.000	4.683	0	4.492	11.803
2003.455	0.003	1073	780	1066	1032	40.047	52.137	0.035	12.028	5.497	46.641	997	107	4.617	1.820	1339	0	0.000	4.711	0	4.492	11.809
2003.458	0.003	1095	780	1088	1052	40.800	52.844	-0.046	11.982	5.502	47.342	997	145	4.617	1.820	1339	0	0.000	4.659	0	4.492	11.815
2003.460	0.003	1117	780	1111	1071	41.552	53.514	-0.082	11.900	5.508	48.006	997	183	4.617	1.821	1339	0	0.000	4.571	0	4.492	11.820
2003.463	0.003	1134	779	1128	1086	42.138	54.038	-0.061	11.838	5.512	48.526	997	217	4.617	1.821	1339	0	0.000	4.505	0	4.492	11.825
2003.466	0.003	1150	779	1145	1100	42.692	54.678	0.086	11.924	5.518	49.161	997	247	4.617	1.821	1339	0	0.000	4.586	0	4.492	11.830
2003.468	0.003	1168	780	1161	1115	43.260	55.231	-0.015	11.909	5.522	49.709	997	278	4.618	1.821	1339	0	0.000	4.566	0	4.492	11.835
2003.471	0.003	1184	780	1178	1129	43.819	55.874	0.084	11.993	5.527	50.347	997	310	4.618	1.822	1339	0	0.000	4.644	0	4.492	11.841
2003.474	0.003	1201	781	1195	1145	44.403	56.472	0.014	12.007	5.532	50.940	997	342	4.618	1.822	1339	0	0.000	4.652	0	4.492	11.846
2003.477	0.003	1218	781	1212	1159	44.984	57.066	0.014	12.020	5.537	51.529	998	375	4.619	1.822	1339	0	0.000	4.661	0	4.492	11.851
2003.479	0.003	1235	782	1227	1174	45.531	57.616	0.002	12.023	5.542	52.074	998	407	4.619	1.823	1339	0	0.000	4.658	0	4.492	11.856
2003.482	0.003	1250	782	1243	1187	46.070	58.004	-0.150	11.873	5.545	52.460	998	439	4.619	1.823	1339	0	0.000	4.505	0	4.492	11.860
2003.485	0.003	1259	783	1253	1196	46.381	58.356	0.041	11.913	5.548	52.809	998	463	4.620	1.824	1339	0	0.000	4.542	0	4.492	11.863
2003.488	0.003	1268	784	1263	1204	46.703	58.785	0.107	12.020	5.551	53.234	998	480	4.620	1.824	1339	0	0.000	4.645	0	4.492	11.867
2003.490	0.003	1277	785	1272	1212	47.020	59.236	0.133	12.153	5.555	53.681	998	498	4.621	1.825	1339	0	0.000	4.774	0	4.492	11.871
2003.493	0.003	1289	786	1285	1223	47.455	59.718	0.047	12.200	5.559	54.159	998	520	4.621	1.825	1339	0	0.000	4.816	0	4.492	11.876
2003.496	0.003	1302	788	1299	1235	47.932	60.162	-0.032	12.168	5.562	54.600	998	546	4.622	1.826	1339	0	0.000	4.780	0	4.492	11.880
2003.499	0.003	1313	789	1310	1245	48.310	60.602	0.062	12.230	5.566	55.036	998	571	4.623	1.826	1339	0	0.000	4.838	0	4.492	11.884
2003.501	0.003	1327	791	1324	1258	48.797	60.946	-0.143	12.088	5.569	55.378	998	596	4.623	1.827	1339	0	0.000	4.692	172	4.492	11.888
2003.504	0.003	1337	794	1332	1266	49.100	61.278	0.029	12.116	5.572	55.707	999	621	4.624	1.827	1339	0	0.000	4.717	438	4.493	11.892
2003.507	0.003	1344	795	1338	1272	49.332	61.655	0.145	12.261	5.575	56.080	999	640	4.624	1.828	1339	0	0.000	4.858	642	4.493	11.896
2003.510	0.003	1354	797	1349	1281	49.682	62.024	0.018	12.279	5.578	56.446	999	658	4.625	1.829	1339	0	0.000	4.873	905	4.494	11.901
2003.512	0.003	1362	799	1358	1289	50.004	62.432	0.086	12.365	5.581	56.851	999	677	4.626	1.829	1339	0	0.000	4.955	1120	4.495	11.906
2003.515	0.003	1372	801	1369	1298	50.374	62.874	0.074	12.439	5.585	57.290	999	697	4.626	1.830	1339	0	0.000	5.024	1326	4.497	11.911
2003.518	0.003	1384	804	1382	1310	50.808	63.287	-0.022	12.417	5.588	57.699	999	721	4.627	1.831	1339	0	0.000	4.998	1574	4.498	11.917
2003.521	0.003	1396	806	1394	1320	51.214	63.464	-0.229	12.187	5.590	57.874	999	747	4.628	1.832	1339	0	0.000	4.766	1807	4.500	11.921

Gas Balance MODEL R1-F
Kimball Colinville Storage Reservoir
Discrepancy History Match
E. Kimball Crossflow with Meter Error &Gas Spill

Spill threshhold
1300

		Reservoir P/Z(psia)										E.Kimball+Low Perm Gas Balance				Corunna Seckerton Crossflow				South Spill Model		
Date	dT (years)	SOUTH	A1	MID	AVG	Calc. GIP (bcf)	Inventory GIP (bcf)	Total Discrepancy (bcf)	Adjusted Cumulative Discrep. (bcf)	Cumulative Meter Error (bcf)	Adjusted Inventory GIP (bcf)	P/Z (psia)	Influx 0.0008 (mcfd)	5.0 GIP (bcf)	Cum. Influx (bcf)	Avg P/Z Cor/Sec (psi)	Influx 0.0000 (mcfd)	Cum. Influx (bcf)	Revised K/C Cumulative Discrepancy (bcf)	Gas Spill 0.00855 (mcfd)	Cum. Gas Spill (bcf)	Total Model Adjustments (bcf)
2003.523	0.003	1401	809	1398	1324	51.381	63.602	-0.028	12.159	5.591	58.012	1000	765	4.629	1.832	1339	0	0.000	4.736	1989	4.502	11.925
2003.526	0.003	1402	812	1399	1326	51.428	63.801	0.152	12.311	5.592	58.209	1000	772	4.629	1.833	1339	0	0.000	4.886	2146	4.504	11.930
2003.529	0.003	1406	815	1402	1329	51.573	63.936	-0.011	12.300	5.593	58.342	1000	778	4.630	1.834	1339	0	0.000	4.873	2336	4.506	11.934
2003.532	0.003	1409	818	1406	1333	51.706	64.063	-0.006	12.295	5.594	58.468	1000	786	4.631	1.835	1339	0	0.000	4.866	2430	4.509	11.938
2003.534	0.003	1412	821	1408	1335	51.791	64.063	-0.085	12.209	5.594	58.468	1000	791	4.632	1.835	1339	0	0.000	4.780	2472	4.511	11.941
2003.537	0.003	1408	825	1406	1333	51.722	64.063	0.069	12.278	5.594	58.468	1000	790	4.633	1.836	1339	0	0.000	4.848	2486	4.514	11.945
2003.540	0.003	1406	827	1404	1332	51.665	64.063	0.057	12.335	5.594	58.468	1001	783	4.633	1.837	1339	0	0.000	4.904	2489	4.516	11.948
2003.542	0.003	1403	832	1403	1331	51.621	64.063	0.045	12.380	5.594	58.468	1001	777	4.634	1.838	1339	0	0.000	4.948	2485	4.519	11.951
2003.545	0.003	1401	835	1402	1330	51.588	64.063	0.033	12.413	5.594	58.468	1001	771	4.635	1.839	1339	0	0.000	4.980	2419	4.521	11.954
2003.548	0.003	1400	839	1401	1330	51.586	64.063	0.002	12.415	5.594	58.468	1001	767	4.636	1.839	1339	0	0.000	4.981	2374	4.524	11.957
2003.551	0.003	1397	842	1399	1328	51.526	64.063	0.060	12.475	5.594	58.468	1001	762	4.636	1.840	1339	0	0.000	5.040	2311	4.526	11.960
2003.553	0.003	1395	846	1399	1328	51.511	64.063	0.015	12.489	5.594	58.468	1001	757	4.637	1.841	1339	0	0.000	5.054	2265	4.528	11.963
2003.556	0.003	1393	850	1398	1327	51.482	64.063	0.029	12.518	5.594	58.468	1002	753	4.638	1.842	1339	0	0.000	5.082	2228	4.530	11.966
2003.559	0.003	1393	854	1398	1327	51.492	64.063	-0.010	12.509	5.594	58.468	1002	750	4.639	1.842	1339	0	0.000	5.072	2185	4.533	11.969
2003.562	0.003	1390	858	1396	1326	51.444	64.063	0.048	12.556	5.594	58.468	1002	746	4.639	1.843	1339	0	0.000	5.119	2135	4.535	11.972
2003.564	0.003	1389	863	1396	1326	51.459	64.063	-0.015	12.541	5.594	58.468	1002	742	4.640	1.844	1339	0	0.000	5.103	2105	4.537	11.975
2003.567	0.003	1387	866	1395	1325	51.419	64.063	0.040	12.581	5.594	58.468	1002	739	4.641	1.845	1339	0	0.000	5.142	2071	4.539	11.978
2003.570	0.003	1386	871	1394	1325	51.415	64.063	0.004	12.585	5.594	58.468	1002	735	4.642	1.845	1339	0	0.000	5.146	2024	4.541	11.981
2003.573	0.003	1384	875	1393	1325	51.394	64.063	0.021	12.607	5.594	58.468	1003	731	4.642	1.846	1339	0	0.000	5.166	1998	4.543	11.983
2003.575	0.003	1384	879	1394	1325	51.416	64.063	-0.022	12.585	5.594	58.468	1003	729	4.643	1.847	1339	0	0.000	5.144	1970	4.545	11.986
2003.578	0.003	1383	884	1393	1325	51.412	64.063	0.004	12.589	5.594	58.468	1003	727	4.644	1.848	1339	0	0.000	5.147	1942	4.547	11.989
2003.581	0.003	1381	887	1392	1324	51.369	64.063	0.042	12.631	5.594	58.468	1003	723	4.645	1.848	1339	0	0.000	5.188	1898	4.549	11.991
2003.584	0.003	1380	892	1392	1324	51.378	64.063	-0.009	12.622	5.594	58.468	1003	720	4.645	1.849	1339	0	0.000	5.179	1882	4.551	11.994
2003.586	0.003	1379	896	1391	1324	51.373	64.063	0.005	12.628	5.594	58.468	1003	717	4.646	1.850	1339	0	0.000	5.184	1859	4.552	11.997
2003.589	0.003	1378	900	1391	1324	51.374	64.063	-0.001	12.627	5.594	58.468	1004	715	4.647	1.850	1339	0	0.000	5.182	1821	4.554	11.999
2003.592	0.003	1377	904	1389	1324	51.353	64.063	0.021	12.648	5.594	58.468	1004	712	4.647	1.851	1339	0	0.000	5.202	1794	4.556	12.002
2003.595	0.003	1376	908	1389	1324	51.355	64.063	-0.002	12.645	5.594	58.468	1004	709	4.648	1.852	1339	0	0.000	5.199	1771	4.558	12.004
2003.597	0.003	1375	912	1389	1324	51.351	64.063	0.004	12.649	5.594	58.468	1004	707	4.649	1.853	1339	0	0.000	5.202	1748	4.560	12.007
2003.600	0.003	1374	916	1388	1324	51.348	64.063	0.003	12.652	5.594	58.468	1004	705	4.650	1.853	1339	0	0.000	5.204	1721	4.561	12.009
2003.603	0.003	1373	920	1388	1324	51.355	64.063	-0.006	12.646	5.594	58.468	1004	702	4.650	1.854	1339	0	0.000	5.198	1701	4.563	12.011
2003.605	0.003	1372	924	1388	1324	51.349	64.063	0.006	12.652	5.594	58.468	1004	700	4.651	1.855	1339	0	0.000	5.203	1678	4.565	12.014
2003.608	0.003	1371	928	1387	1323	51.345	64.063	0.003	12.655	5.594	58.468	1005	697	4.652	1.855	1339	0	0.000	5.206	1653	4.566	12.016
2003.611	0.003	1370	932	1387	1324	51.354	64.063	-0.009	12.646	5.594	58.468	1005	696	4.652	1.856	1339	0	0.000	5.196	1639	4.568	12.018
2003.614	0.003	1370	936	1387	1324	51.357	64.063	-0.002	12.644	5.594	58.468	1005	694	4.653	1.857	1339	0	0.000	5.193	1617	4.570	12.021
2003.616	0.003	1369	940	1386	1324	51.357	64.063	0.000	12.643	5.594	58.468	1005	692	4.654	1.857	1339	0	0.000	5.192	1595	4.571	12.023
2003.619	0.003	1368	944	1385	1323	51.344	64.063	0.013	12.656	5.594	58.468	1005	689	4.654	1.858	1339	0	0.000	5.204	1575	4.573	12.025
2003.622	0.003	1367	948	1385	1324	51.357	64.137	0.062	12.718	5.595	58.542	1005	687	4.655	1.859	1339	0	0.000	5.264	1561	4.574	12.028
2003.625	0.003	1372	951	1385	1325	51.424	64.137	-0.067	12.651	5.595	58.542	1006	691	4.656	1.859	1339	0	0.000	5.197	1603	4.576	12.030
2003.627	0.003	1372	955	1385	1326	51.439	64.137	-0.015	12.636	5.595	58.542	1006	697	4.656	1.860	1339	0	0.000	5.181	1597	4.577	12.033
2003.630	0.003	1372	959	1385	1327	51.470	64.137	-0.031	12.605	5.595	58.542	1006	697	4.657	1.861	1339	0	0.000	5.149	1593	4.579	12.035
2003.633	0.003	1371	962	1385	1327	51.471	64.137	-0.001	12.604	5.595	58.542	1006	696	4.658	1.862	1339	0	0.000	5.148	1633	4.581	12.037
2003.636	0.003	1371	966	1384	1327	51.470	64.137	0.001	12.605	5.595	58.542	1006	694	4.659	1.862	1339	0	0.000	5.148	1634	4.582	12.040
2003.638	0.003	1369	969	1383	1326	51.445	64.137	0.026	12.631	5.595	58.542	1006	692	4.659	1.863	1339	0	0.000	5.172	1618	4.584	12.042
2003.641	0.003	1369	973	1383	1326	51.449	64.137	-0.004	12.626	5.595	58.542	1006	689	4.660	1.864	1339	0	0.000	5.167	1598	4.586	12.044
2003.644	0.003	1368	976	1383	1326	51.448	64.137	0.001	12.627	5.595	58.542	1007	687	4.661	1.864	1339	0	0.000	5.167	1581	4.587	12.047

Gas Balance MODEL R1-F
Kimball Colinville Storage Reservoir
Discrepancy History Match
E. Kimball Crossflow with Meter Error &Gas Spill

Spill threshhold
1300

		Reservoir P/Z(psia)										E.Kimball+Low Perm Gas Balance			Corunna Seckerton Crossflow					South Spill Model		
Date	dT (years)	SOUTH	A1	MID	AVG	Calc. GIP (bcf)	Inventory GIP (bcf)	Total Discrepancy (bcf)	Adjusted Cumulative Discrep. (bcf)	Cumulative Meter Error (bcf)	Adjusted Inventory GIP (bcf)	P/Z (psia)	Influx 0.0008 (mcfd)	5.0 GIP (bcf)	Cum. Influx (bcf)	Avg P/Z Cor/Sec (psi)	Influx 0.0000 (mcfd)	Cum. Influx (bcf)	Revised K/C Cumulative Discrepancy (bcf)	Gas Spill 0.00855 (mcfd)	Cum. Gas Spill (bcf)	Total Model Adjustments (bcf)
2003.647	0.003	1367	980	1383	1327	51.469	64.137	-0.020	12.606	5.595	58.542	1007	686	4.661	1.865	1339	0	0.000	5.146	1561	4.589	12.049
2003.649	0.003	1366	983	1382	1326	51.451	64.137	0.017	12.624	5.595	58.542	1007	684	4.662	1.866	1339	0	0.000	5.163	1536	4.590	12.051
2003.652	0.003	1366	986	1382	1326	51.451	64.137	0.000	12.624	5.595	58.542	1007	681	4.663	1.866	1339	0	0.000	5.163	1520	4.592	12.053
2003.655	0.003	1365	989	1382	1326	51.454	64.137	-0.003	12.621	5.595	58.542	1007	680	4.663	1.867	1339	0	0.000	5.159	1510	4.593	12.055
2003.658	0.003	1365	993	1382	1327	51.480	64.137	-0.026	12.595	5.595	58.542	1007	679	4.664	1.868	1339	0	0.000	5.133	1494	4.595	12.058
2003.660	0.003	1364	996	1381	1326	51.462	64.261	0.142	12.737	5.596	58.665	1007	677	4.665	1.868	1339	0	0.000	5.273	1474	4.596	12.061
2003.663	0.003	1373	999	1382	1330	51.609	64.384	-0.024	12.713	5.597	58.787	1008	686	4.665	1.869	1339	0	0.000	5.247	1571	4.598	12.064
2003.666	0.003	1383	1003	1381	1334	51.760	64.491	-0.043	12.670	5.598	58.894	1008	707	4.666	1.870	1339	0	0.000	5.202	1695	4.600	12.067
2003.668	0.003	1387	1005	1383	1337	51.852	64.612	0.028	12.698	5.599	59.013	1008	722	4.667	1.871	1339	0	0.000	5.228	1721	4.601	12.071
2003.671	0.003	1386	1010	1391	1341	52.019	64.738	-0.040	12.657	5.600	59.138	1008	725	4.668	1.871	1339	0	0.000	5.186	1819	4.603	12.074
2003.674	0.003	1390	1012	1394	1344	52.154	64.868	-0.006	12.652	5.601	59.267	1008	729	4.668	1.872	1339	0	0.000	5.179	1996	4.605	12.078
2003.677	0.003	1400	1015	1392	1347	52.251	64.998	0.033	12.685	5.602	59.396	1008	744	4.669	1.873	1339	0	0.000	5.210	2151	4.607	12.082
2003.679	0.003	1411	1018	1391	1351	52.396	65.113	-0.030	12.655	5.603	59.510	1009	767	4.670	1.874	1339	0	0.000	5.178	2271	4.609	12.086
2003.682	0.003	1410	1021	1397	1354	52.541	65.219	-0.039	12.615	5.604	59.615	1009	778	4.671	1.874	1339	0	0.000	5.137	2317	4.612	12.090
2003.685	0.003	1409	1024	1403	1357	52.660	65.330	-0.008	12.607	5.605	59.725	1009	776	4.671	1.875	1339	0	0.000	5.127	2418	4.614	12.094
2003.688	0.003	1408	1027	1408	1360	52.762	65.330	-0.102	12.505	5.605	59.725	1009	772	4.672	1.876	1339	0	0.000	5.025	2531	4.617	12.097
2003.690	0.003	1407	1030	1409	1360	52.775	65.330	-0.012	12.493	5.605	59.725	1009	770	4.673	1.877	1339	0	0.000	5.012	2515	4.619	12.101
2003.693	0.003	1406	1033	1408	1360	52.757	65.330	0.018	12.511	5.605	59.725	1009	767	4.674	1.877	1339	0	0.000	5.028	2486	4.622	12.104
2003.696	0.003	1405	1036	1407	1359	52.743	65.330	0.014	12.525	5.605	59.725	1010	765	4.674	1.878	1339	0	0.000	5.042	2462	4.624	12.107
2003.699	0.003	1403	1036	1406	1358	52.699	65.330	0.044	12.569	5.605	59.725	1010	762	4.675	1.879	1339	0	0.000	5.085	2427	4.627	12.110
2003.701	0.003	1402	1039	1406	1358	52.694	65.330	0.004	12.573	5.605	59.725	1010	758	4.676	1.880	1339	0	0.000	5.089	2404	4.629	12.114
2003.704	0.003	1402	1041	1406	1358	52.698	65.330	-0.003	12.570	5.605	59.725	1010	756	4.677	1.880	1339	0	0.000	5.085	2389	4.631	12.117
2003.707	0.003	1401	1045	1405	1358	52.691	65.330	0.006	12.576	5.605	59.725	1010	755	4.677	1.881	1339	0	0.000	5.090	2353	4.634	12.120
2003.710	0.003	1401	1048	1406	1359	52.718	65.330	-0.027	12.549	5.605	59.725	1010	753	4.678	1.882	1339	0	0.000	5.063	2344	4.636	12.123
2003.712	0.003	1400	1051	1406	1359	52.715	65.330	0.003	12.553	5.605	59.725	1010	752	4.679	1.883	1339	0	0.000	5.065	2329	4.638	12.126
2003.715	0.003	1400	1054	1406	1359	52.725	65.330	-0.010	12.543	5.605	59.725	1011	751	4.680	1.883	1339	0	0.000	5.055	2312	4.641	12.129
2003.718	0.003	1398	1056	1405	1358	52.692	65.330	0.033	12.575	5.605	59.725	1011	748	4.680	1.884	1339	0	0.000	5.086	2293	4.643	12.132
2003.721	0.003	1398	1059	1405	1359	52.716	65.330	-0.024	12.552	5.605	59.725	1011	746	4.681	1.885	1339	0	0.000	5.062	2287	4.645	12.135
2003.723	0.003	1397	1062	1404	1359	52.711	65.330	0.005	12.557	5.605	59.725	1011	745	4.682	1.886	1339	0	0.000	5.066	2272	4.648	12.138
2003.726	0.003	1396	1064	1404	1358	52.697	65.330	0.014	12.571	5.605	59.725	1011	743	4.683	1.886	1339	0	0.000	5.080	2237	4.650	12.141
2003.729	0.003	1396	1068	1404	1359	52.721	65.330	-0.024	12.547	5.605	59.725	1011	741	4.683	1.887	1339	0	0.000	5.055	2244	4.652	12.144
2003.732	0.003	1396	1070	1404	1359	52.717	65.330	0.004	12.550	5.605	59.725	1012	741	4.684	1.888	1339	0	0.000	5.058	2226	4.654	12.147
2003.734	0.003	1395	1073	1404	1359	52.715	65.330	0.002	12.553	5.605	59.725	1012	739	4.685	1.889	1339	0	0.000	5.059	2202	4.657	12.150
2003.737	0.003	1395	1076	1403	1359	52.717	65.330	-0.003	12.550	5.605	59.725	1012	737	4.686	1.889	1339	0	0.000	5.056	2200	4.659	12.153
2003.740	0.003	1393	1078	1403	1358	52.693	65.330	0.025	12.575	5.605	59.725	1012	735	4.686	1.890	1339	0	0.000	5.080	2175	4.661	12.156
2003.742	0.003	1393	1081	1403	1359	52.727	65.330	-0.034	12.541	5.605	59.725	1012	733	4.687	1.891	1339	0	0.000	5.045	2170	4.663	12.159
2003.745	0.003	1393	1084	1403	1359	52.730	65.330	-0.003	12.537	5.605	59.725	1012	733	4.688	1.892	1339	0	0.000	5.041	2159	4.665	12.162
2003.748	0.003	1392	1086	1403	1359	52.736	65.330	-0.006	12.531	5.605	59.725	1013	732	4.689	1.892	1339	0	0.000	5.034	2135	4.667	12.165
2003.751	0.003	1393	1091	1403	1360	52.758	65.330	-0.022	12.509	5.605	59.725	1013	731	4.689	1.893	1339	0	0.000	5.011	2143	4.670	12.167
2003.753	0.003	1391	1090	1400	1358	52.667	65.330	0.091	12.601	5.605	59.725	1013	729	4.690	1.894	1339	0	0.000	5.102	2115	4.672	12.170
2003.756	0.003	1391	1094	1403	1360	52.758	65.330	-0.091	12.510	5.605	59.725	1013	727	4.691	1.894	1339	0	0.000	5.010	2109	4.674	12.173
2003.759	0.003	1390	1096	1402	1359	52.735	65.330	0.023	12.532	5.605	59.725	1013	726	4.692	1.895	1339	0	0.000	5.032	2107	4.676	12.176
2003.762	0.003	1389	1098	1400	1358	52.697	65.330	0.038	12.571	5.605	59.725	1013	724	4.692	1.896	1339	0	0.000	5.070	2074	4.678	12.179
2003.764	0.003	1389	1100	1401	1359	52.713	65.330	-0.017	12.554	5.605	59.725	1014	722	4.693	1.897	1339	0	0.000	5.053	2067	4.680	12.181
2003.767	0.003	1389	1103	1401	1359	52.732	65.330	-0.019	12.536	5.605	59.725	1014	721	4.694	1.897	1339	0	0.000	5.033	2059	4.682	12.184

Gas Balance MODEL R1-F
Kimball Colinville Storage Reservoir
Discrepancy History Match
E. Kimball Crossflow with Meter Error &Gas Spill

Spill threshhold
1300

		Reservoir P/Z(psia)										E.Kimball+Low Perm Gas Balance			Corunna Seckerton Crossflow					South Spill Model		
Date	dT (years)	SOUTH	A1	MID	AVG	Calc. GIP (bcf)	Inventory GIP (bcf)	Total Discrepancy (bcf)	Adjusted Cumulative Discrep. (bcf)	Cumulative Meter Error (bcf)	Adjusted Inventory GIP (bcf)	P/Z (psia)	Influx 0.0008 (mcfd)	5.0 GIP (bcf)	Cum. Influx (bcf)	Avg P/Z Cor/Sec (psi)	Influx 0.0000 (mcfd)	Cum. Influx (bcf)	Revised K/C Cumulative Discrepancy (bcf)	Gas Spill 0.00855 (mcfd)	Cum. Gas Spill (bcf)	Total Model Adjustments (bcf)
2003.770	0.003	1389	1106	1402	1360	52.763	65.330	-0.031	12.504	5.605	59.725	1014	721	4.694	1.898	1339	0	0.000	5.001	2051	4.684	12.187
2003.773	0.003	1388	1108	1401	1360	52.754	65.330	0.009	12.513	5.605	59.725	1014	720	4.695	1.899	1339	0	0.000	5.009	2037	4.686	12.190
2003.775	0.003	1388	1111	1402	1360	52.771	65.408	0.062	12.575	5.605	59.803	1014	719	4.696	1.900	1339	0	0.000	5.070	2030	4.688	12.193
2003.778	0.003	1393	1113	1402	1362	52.848	65.527	0.043	12.618	5.606	59.921	1014	724	4.697	1.900	1339	0	0.000	5.111	2094	4.690	12.197
2003.781	0.003	1402	1115	1400	1365	52.951	65.647	0.016	12.633	5.607	60.039	1014	740	4.697	1.901	1339	0	0.000	5.125	2198	4.692	12.201
2003.784	0.003	1413	1118	1400	1369	53.111	65.768	-0.039	12.595	5.608	60.159	1015	762	4.698	1.902	1339	0	0.000	5.085	2322	4.695	12.205
2003.786	0.003	1423	1120	1401	1373	53.257	65.768	-0.146	12.449	5.608	60.159	1015	785	4.699	1.903	1339	0	0.000	4.938	2499	4.697	12.208
2003.789	0.003	1424	1122	1401	1373	53.280	65.768	-0.023	12.426	5.608	60.159	1015	796	4.700	1.903	1339	0	0.000	4.914	2622	4.700	12.212
2003.792	0.003	1422	1124	1400	1373	53.260	65.768	0.020	12.446	5.608	60.159	1015	796	4.700	1.904	1339	0	0.000	4.933	2735	4.703	12.215
2003.795	0.003	1421	1125	1400	1372	53.244	65.768	0.016	12.462	5.608	60.159	1015	792	4.701	1.905	1339	0	0.000	4.949	2833	4.705	12.219
2003.797	0.003	1420	1129	1400	1373	53.254	65.768	-0.010	12.452	5.608	60.159	1015	789	4.702	1.906	1339	0	0.000	4.938	2838	4.708	12.222
2003.800	0.003	1420	1131	1399	1372	53.233	65.768	0.020	12.472	5.608	60.159	1016	788	4.703	1.907	1339	0	0.000	4.957	2812	4.711	12.226
2003.803	0.003	1419	1133	1399	1372	53.226	65.768	0.008	12.480	5.608	60.159	1016	786	4.704	1.907	1339	0	0.000	4.964	2783	4.714	12.230
2003.805	0.003	1417	1135	1399	1372	53.222	65.768	0.004	12.484	5.608	60.159	1016	783	4.704	1.908	1339	0	0.000	4.968	2761	4.717	12.233
2003.808	0.003	1417	1138	1399	1373	53.249	65.768	-0.027	12.457	5.608	60.159	1016	781	4.705	1.909	1339	0	0.000	4.940	2753	4.719	12.237
2003.811	0.003	1416	1139	1399	1372	53.228	65.768	0.021	12.478	5.608	60.159	1016	780	4.706	1.910	1339	0	0.000	4.960	2727	4.722	12.240
2003.814	0.003	1416	1142	1399	1372	53.235	65.768	-0.007	12.471	5.608	60.159	1016	778	4.707	1.910	1339	0	0.000	4.952	2707	4.725	12.244
2003.816	0.003	1416	1144	1399	1373	53.258	65.768	-0.023	12.448	5.608	60.159	1017	777	4.707	1.911	1339	0	0.000	4.928	2706	4.728	12.247
2003.819	0.003	1415	1146	1399	1373	53.250	65.768	0.008	12.455	5.608	60.159	1017	775	4.708	1.912	1339	0	0.000	4.935	2682	4.730	12.251
2003.822	0.003	1414	1148	1399	1372	53.242	65.768	0.009	12.464	5.608	60.159	1017	773	4.709	1.913	1339	0	0.000	4.943	2670	4.733	12.254
2003.825	0.003	1414	1150	1399	1373	53.254	65.768	-0.013	12.452	5.608	60.159	1017	772	4.710	1.914	1339	0	0.000	4.930	2659	4.736	12.258
2003.827	0.003	1413	1152	1399	1373	53.259	65.768	-0.005	12.447	5.608	60.159	1017	770	4.711	1.914	1339	0	0.000	4.924	2647	4.738	12.261
2003.830	0.003	1413	1154	1399	1373	53.265	65.768	-0.006	12.441	5.608	60.159	1017	769	4.711	1.915	1339	0	0.000	4.917	2633	4.741	12.264
2003.833	0.003	1411	1156	1399	1373	53.259	65.768	0.007	12.447	5.608	60.159	1018	767	4.712	1.916	1339	0	0.000	4.923	2606	4.743	12.268
2003.836	0.003	1412	1159	1399	1373	53.279	65.921	0.132	12.579	5.610	60.311	1018	766	4.713	1.917	1339	0	0.000	5.053	2614	4.746	12.272
2003.838	0.003	1415	1161	1404	1377	53.420	66.075	0.013	12.593	5.611	60.464	1018	769	4.714	1.917	1339	0	0.000	5.064	2642	4.749	12.277
2003.841	0.003	1420	1165	1411	1383	53.658	66.198	-0.115	12.478	5.612	60.586	1018	778	4.714	1.918	1339	0	0.000	4.948	2681	4.751	12.281
2003.844	0.003	1419	1165	1416	1385	53.747	66.252	-0.034	12.444	5.612	60.640	1018	782	4.715	1.919	1339	0	0.000	4.912	2676	4.754	12.285
2003.847	0.003	1417	1166	1419	1386	53.787	66.319	0.026	12.469	5.613	60.706	1018	778	4.716	1.920	1339	0	0.000	4.937	2693	4.757	12.289
2003.849	0.003	1417	1169	1423	1389	53.871	66.481	0.078	12.548	5.614	60.866	1019	777	4.717	1.920	1339	0	0.000	5.013	2753	4.759	12.294
2003.863	0.014	1423	1179	1419	1390	53.912	66.362	-0.159	12.388	5.614	60.748	1019	783	4.721	1.924	1339	0	0.000	4.850	2805	4.774	12.312
2003.866	0.003	1421	1180	1418	1389	53.889	66.542	0.203	12.591	5.616	60.926	1020	787	4.721	1.925	1339	0	0.000	5.050	2772	4.776	12.317
2003.890	0.025	1424	1197	1418	1392	54.006	66.739	0.079	12.671	5.617	61.121	1020	787	4.729	1.932	1339	0	0.000	5.121	2804	4.802	12.351
2003.893	0.003	1433	1198	1425	1399	54.277	66.944	-0.066	12.605	5.619	61.325	1021	799	4.729	1.933	1339	0	0.000	5.053	2977	4.805	12.357
2003.896	0.003	1441	1201	1435	1408	54.617	67.226	-0.058	12.547	5.621	61.605	1022	817	4.730	1.934	1339	0	0.000	4.992	3067	4.808	12.363
2003.899	0.003	1450	1202	1442	1414	54.872	67.161	-0.319	12.228	5.621	61.540	1022	837	4.731	1.935	1339	0	0.000	4.672	3205	4.811	12.367
2003.901	0.003	1450	1203	1439	1413	54.811	66.917	-0.183	12.045	5.621	61.296	1022	846	4.732	1.936	1339	0	0.000	4.488	3307	4.814	12.371
2003.904	0.003	1449	1205	1427	1406	54.566	66.897	0.224	12.269	5.621	61.276	1022	845	4.733	1.936	1339	0	0.000	4.711	3408	4.817	12.375
2003.907	0.003	1447	1207	1424	1404	54.480	67.031	0.221	12.489	5.622	61.409	1022	841	4.734	1.937	1339	0	0.000	4.930	3483	4.821	12.381
2003.910	0.003	1446	1209	1430	1408	54.607	67.132	-0.027	12.462	5.623	61.508	1022	837	4.734	1.938	1339	0	0.000	4.901	3468	4.824	12.386
2003.915	0.005	1444	1212	1437	1411	54.740	67.121	-0.143	12.320	5.623	61.498	1023	834	4.736	1.940	1339	0	0.000	4.757	3446	4.831	12.394
2003.918	0.003	1443	1217	1437	1411	54.753	66.784	-0.351	11.969	5.623	61.161	1023	831	4.737	1.941	1339	0	0.000	4.405	3402	4.835	12.399
2003.921	0.003	1432	1215	1425	1401	54.350	66.104	-0.277	11.692	5.623	60.481	1023	816	4.738	1.941	1339	0	0.000	4.127	3253	4.838	12.403
2003.923	0.003	1413	1216	1399	1381	53.571	65.542	0.217	11.909	5.623	59.918	1023	781	4.738	1.942	1339	0	0.000	4.343	2998	4.841	12.406
2003.926	0.003	1387	1218	1383	1363	52.897	65.126	0.258	12.167	5.623	59.503	1024	729	4.739	1.943	1339	0	0.000	4.601	2670	4.844	12.410

Gas Balance MODEL R1-F
Kimball Colinville Storage Reservoir
Discrepancy History Match
E. Kimball Crossflow with Meter Error &Gas Spill

Spill threshhold
1300

		Reservoir P/Z(psia)										E.Kimball+Low Perm Gas Balance			Corunna Seckerton Crossflow					South Spill Model		
Date	dT (years)	SOUTH	A1	MID	AVG	Calc. GIP (bcf)	Inventory GIP (bcf)	Total Discrepancy (bcf)	Adjusted Cumulative Discrep. (bcf)	Cumulative Meter Error (bcf)	Adjusted Inventory GIP (bcf)	P/Z (psia)	Influx 0.0008 (mcfd)	5.0 GIP (bcf)	Cum. Influx (bcf)	Avg P/Z Cor/Sec (psi)	Influx 0.0000 (mcfd)	Cum. Influx (bcf)	Revised K/C Cumulative Discrepancy (bcf)	Gas Spill 0.00855 (mcfd)	Cum. Gas Spill (bcf)	Total Model Adjustments (bcf)
2003.929	0.003	1367	1221	1374	1352	52.451	64.410	-0.270	11.897	5.623	58.787	1024	678	4.740	1.944	1339	0	0.000	4.330	2299	4.846	12.413
2003.932	0.003	1343	1221	1358	1335	51.804	63.745	-0.018	11.879	5.623	58.121	1024	630	4.741	1.944	1339	0	0.000	4.312	1779	4.848	12.415
2003.937	0.005	1318	1226	1317	1306	50.668	63.416	0.807	12.686	5.623	57.792	1024	577	4.742	1.945	1339	0	0.000	5.117	1188	4.850	12.419
2003.940	0.003	1321	1228	1316	1306	50.678	63.352	-0.074	12.612	5.623	57.729	1024	554	4.742	1.946	1339	0	0.000	5.043	991	4.851	12.420
2003.953	0.014	1324	1235	1319	1310	50.823	63.352	-0.145	12.468	5.623	57.729	1024	560	4.745	1.949	1339	0	0.000	4.896	753	4.855	12.427
2003.973	0.019	1326	1241	1321	1313	50.924	63.352	-0.102	12.366	5.623	57.729	1025	565	4.749	1.953	1339	0	0.000	4.790	499	4.858	12.434
2003.975	0.003	1327	1243	1321	1313	50.957	63.352	-0.033	12.333	5.623	57.729	1026	567	4.750	1.953	1339	0	0.000	4.757	534	4.859	12.435
2003.989	0.014	1327	1245	1321	1313	50.959	63.352	-0.001	12.332	5.623	57.729	1026	567	4.752	1.956	1339	0	0.000	4.752	573	4.862	12.441
2003.992	0.003	1327	1246	1322	1314	50.985	63.352	-0.027	12.305	5.623	57.729	1027	566	4.753	1.957	1339	0	0.000	4.725	602	4.862	12.442
2003.995	0.003	1328	1248	1323	1315	51.018	63.352	-0.033	12.272	5.623	57.729	1027	567	4.754	1.957	1339	0	0.000	4.692	615	4.863	12.443
2004.003	0.008	1328	1251	1323	1316	51.043	63.352	-0.024	12.248	5.623	57.729	1027	567	4.755	1.959	1339	0	0.000	4.666	614	4.865	12.447
2004.005	0.003	1327	1249	1323	1315	51.023	63.352	0.019	12.267	5.623	57.729	1027	567	4.756	1.959	1339	0	0.000	4.684	614	4.865	12.448
2004.022	0.016	1207	1252	1251	1236	47.950	59.515	-0.764	11.503	5.623	53.892	1027	440	4.758	1.962	1339	0	0.000	3.918	0	4.865	12.451
2004.025	0.003	1167	1252	1222	1207	46.808	58.498	0.125	11.628	5.623	52.875	1028	282	4.759	1.962	1339	0	0.000	4.043	0	4.865	12.451
2004.027	0.003	1134	1251	1187	1177	45.660	57.550	0.200	11.828	5.623	51.926	1028	214	4.759	1.963	1339	0	0.000	4.242	0	4.865	12.451
2004.030	0.003	1103	1253	1155	1149	44.582	57.023	0.551	12.379	5.623	51.400	1028	155	4.759	1.963	1339	0	0.000	4.793	0	4.865	12.451
2004.033	0.003	1071	1254	1148	1134	44.012	56.475	0.022	12.401	5.623	50.851	1028	99	4.759	1.963	1339	0	0.000	4.814	0	4.865	12.452
2004.038	0.005	1017	1253	1120	1101	42.708	54.638	-0.533	11.868	5.623	49.014	1028	26	4.759	1.963	1339	0	0.000	4.281	0	4.865	12.452
2004.044	0.005	933	1254	1072	1047	40.615	52.972	0.427	12.295	5.623	47.348	1028	-85	4.759	1.963	1339	0	0.000	4.709	0	4.865	12.451
2004.046	0.003	896	1255	1055	1026	39.787	52.303	0.159	12.454	5.623	46.680	1028	-176	4.759	1.963	1339	0	0.000	4.868	0	4.865	12.451
2004.052	0.005	818	1253	1032	986	38.244	50.842	0.081	12.535	5.623	45.219	1028	-258	4.758	1.962	1339	0	0.000	4.950	0	4.865	12.451
2004.055	0.003	788	1253	1021	970	37.622	50.295	0.075	12.610	5.623	44.671	1028	-330	4.758	1.962	1339	0	0.000	5.025	0	4.865	12.450
2004.057	0.003	757	1250	1009	952	36.951	49.640	0.017	12.627	5.623	44.017	1028	-368	4.758	1.961	1339	0	0.000	5.042	0	4.865	12.450
2004.060	0.003	733	1250	993	936	36.295	48.787	-0.197	12.430	5.623	43.164	1028	-401	4.757	1.961	1339	0	0.000	4.846	0	4.865	12.450
2004.063	0.003	715	1250	967	915	35.517	47.956	-0.053	12.377	5.623	42.333	1028	-426	4.757	1.961	1339	0	0.000	4.793	0	4.865	12.449
2004.066	0.003	694	1250	935	891	34.585	47.197	0.173	12.549	5.623	41.573	1027	-448	4.756	1.960	1339	0	0.000	4.966	0	4.865	12.449
2004.068	0.003	676	1246	907	870	33.745	46.437	0.080	12.629	5.623	40.813	1027	-469	4.756	1.960	1339	0	0.000	5.046	0	4.865	12.448
2004.071	0.003	661	1246	880	851	32.999	45.712	0.022	12.651	5.623	40.089	1027	-487	4.755	1.959	1339	0	0.000	5.069	0	4.865	12.448
2004.079	0.008	611	1240	811	796	30.895	43.783	0.174	12.826	5.623	38.160	1027	-521	4.754	1.958	1339	0	0.000	5.245	0	4.865	12.446
2004.082	0.003	597	1238	791	780	30.270	43.158	0.000	12.826	5.623	37.535	1027	-552	4.753	1.957	1339	0	0.000	5.246	0	4.865	12.446
2004.085	0.003	579	1236	773	765	29.661	42.585	0.035	12.861	5.623	36.961	1027	-567	4.753	1.956	1339	0	0.000	5.281	0	4.865	12.445
2004.087	0.003	561	1233	756	749	29.056	42.061	0.083	12.944	5.623	36.438	1027	-583	4.752	1.956	1339	0	0.000	5.365	0	4.865	12.445
2004.090	0.003	541	1232	739	733	28.445	41.438	-0.013	12.931	5.623	35.815	1026	-600	4.752	1.955	1339	0	0.000	5.353	0	4.865	12.444
2004.093	0.003	528	1228	725	721	27.961	40.911	-0.044	12.887	5.623	35.287	1026	-614	4.751	1.955	1339	0	0.000	5.309	0	4.865	12.443
2004.096	0.003	510	1224	708	705	27.342	40.390	0.098	12.986	5.623	34.766	1026	-627	4.750	1.954	1339	0	0.000	5.408	0	4.865	12.443
2004.098	0.003	494	1222	696	693	26.884	39.915	-0.016	12.970	5.623	34.292	1026	-641	4.750	1.953	1339	0	0.000	5.393	0	4.865	12.442
2004.101	0.003	480	1219	683	681	26.415	39.579	0.133	13.103	5.623	33.956	1026	-652	4.749	1.953	1339	0	0.000	5.527	0	4.865	12.441
2004.104	0.003	468	1215	676	672	26.079	39.159	-0.084	13.019	5.623	33.536	1026	-662	4.748	1.952	1339	0	0.000	5.443	0	4.865	12.441
2004.107	0.003	455	1212	668	663	25.718	38.649	-0.150	12.869	5.623	33.025	1026	-671	4.748	1.951	1339	0	0.000	5.294	0	4.865	12.440
2004.109	0.003	439	1209	654	649	25.197	38.191	0.062	12.931	5.623	32.567	1026	-682	4.747	1.951	1339	0	0.000	5.357	0	4.865	12.439
2004.112	0.003	426	1205	638	636	24.689	37.724	0.041	12.972	5.623	32.100	1025	-691	4.746	1.950	1339	0	0.000	5.399	0	4.865	12.439
2004.115	0.003	418	1202	621	624	24.227	37.246	-0.015	12.957	5.623	31.623	1025	-698	4.746	1.949	1339	0	0.000	5.384	0	4.865	12.438
2004.117	0.003	410	1198	604	612	23.754	36.856	0.083	13.040	5.623	31.233	1025	-703	4.745	1.949	1339	0	0.000	5.468	0	4.865	12.437
2004.120	0.003	402	1194	588	601	23.298	36.538	0.138	13.178	5.623	30.914	1025	-709	4.744	1.948	1339	0	0.000	5.607	0	4.865	12.437
2004.123	0.003	394	1190	580	593	22.997	36.163	-0.075	13.104	5.623	30.539	1025	-713	4.744	1.947	1339	0	0.000	5.533	0	4.865	12.436

Gas Balance MODEL R1-F
Kimball Colinville Storage Reservoir
Discrepancy History Match
E. Kimball Crossflow with Meter Error &Gas Spill

Spill threshhold
1300

		Reservoir P/Z(psia)										E.Kimball+Low Perm Gas Balance				Corunna Seckerton Crossflow					South Spill Model		
Date	dT (years)	SOUTH	A1	MID	AVG	Calc. GIP (bcf)	Inventory GIP (bcf)	Total Discrepancy (bcf)	Adjusted Cumulative Discrep. (bcf)	Cumulative Meter Error (bcf)	Adjusted Inventory GIP (bcf)	P/Z (psia)	Influx 0.0008 (mcfd)	5.0 GIP (bcf)	Cum. Influx (bcf)	Avg P/Z Cor/Sec (psi)	Influx 0.0000 (mcfd)	Cum. Influx (bcf)	Revised K/C Cumulative Discrepancy (bcf)	Gas Spill 0.00855 (mcfd)	Cum. Gas Spill (bcf)	Total Model Adjustments (bcf)
2004.126	0.003	386	1187	571	585	22.689	35.731	-0.123	12.981	5.623	30.108	1025	-718	4.743	1.947	1339	0	0.000	5.411	0	4.865	12.435
2004.128	0.003	371	1182	559	573	22.228	35.304	0.032	13.013	5.623	29.680	1024	-725	4.742	1.946	1339	0	0.000	5.444	0	4.865	12.435
2004.131	0.003	354	1178	550	562	21.784	35.002	0.142	13.155	5.623	29.379	1024	-734	4.741	1.945	1339	0	0.000	5.587	0	4.865	12.434
2004.134	0.003	355	1176	536	554	21.499	34.802	0.085	13.240	5.623	29.178	1024	-739	4.741	1.944	1339	0	0.000	5.673	0	4.865	12.433
2004.137	0.003	358	1171	524	549	21.288	34.726	0.135	13.376	5.623	29.103	1024	-737	4.740	1.944	1339	0	0.000	5.809	0	4.865	12.432
2004.139	0.003	362	1167	520	547	21.219	34.704	0.048	13.424	5.623	29.081	1024	-735	4.739	1.943	1339	0	0.000	5.857	0	4.865	12.432
2004.142	0.003	365	1163	523	549	21.313	34.634	-0.165	13.259	5.623	29.011	1024	-733	4.738	1.942	1339	0	0.000	5.693	0	4.865	12.431
2004.145	0.003	368	1159	524	551	21.358	34.588	-0.091	13.168	5.623	28.965	1024	-731	4.738	1.941	1339	0	0.000	5.604	0	4.865	12.430
2004.148	0.003	371	1154	521	549	21.315	34.481	-0.064	13.104	5.623	28.858	1023	-729	4.737	1.941	1339	0	0.000	5.540	0	4.865	12.429
2004.150	0.003	374	1150	519	548	21.277	34.367	-0.076	13.028	5.623	28.744	1023	-727	4.736	1.940	1339	0	0.000	5.465	0	4.865	12.429
2004.153	0.003	376	1146	514	546	21.198	34.269	-0.019	13.008	5.623	28.645	1023	-725	4.736	1.939	1339	0	0.000	5.446	0	4.865	12.428
2004.156	0.003	379	1142	510	544	21.118	34.131	-0.058	12.950	5.623	28.507	1023	-723	4.735	1.939	1339	0	0.000	5.388	0	4.865	12.427
2004.158	0.003	381	1137	504	542	21.009	34.000	-0.022	12.929	5.623	28.377	1023	-721	4.734	1.938	1339	0	0.000	5.368	0	4.865	12.427
2004.161	0.003	383	1133	498	539	20.893	34.000	0.117	13.046	5.623	28.377	1023	-720	4.733	1.937	1339	0	0.000	5.485	0	4.865	12.426
2004.164	0.003	386	1129	497	538	20.888	34.000	0.005	13.050	5.623	28.377	1022	-718	4.733	1.936	1339	0	0.000	5.491	0	4.865	12.425
2004.167	0.003	387	1126	499	540	20.931	34.061	0.017	13.067	5.624	28.437	1022	-717	4.732	1.936	1339	0	0.000	5.508	0	4.865	12.425
2004.169	0.003	390	1121	504	542	21.045	34.317	0.142	13.210	5.626	28.691	1022	-715	4.731	1.935	1339	0	0.000	5.649	0	4.865	12.426
2004.172	0.003	392	1117	518	550	21.338	34.580	-0.030	13.180	5.628	28.952	1022	-713	4.731	1.934	1339	0	0.000	5.617	0	4.865	12.428
2004.175	0.003	394	1113	535	559	21.694	34.846	-0.090	13.089	5.630	29.215	1022	-712	4.730	1.934	1339	0	0.000	5.526	0	4.865	12.429
2004.178	0.003	396	1109	553	569	22.079	35.271	0.041	13.131	5.634	29.638	1022	-710	4.729	1.933	1339	0	0.000	5.564	0	4.865	12.432
2004.180	0.003	398	1105	576	581	22.538	35.272	-0.459	12.672	5.634	29.638	1021	-709	4.728	1.932	1339	0	0.000	5.106	0	4.865	12.431
2004.183	0.003	399	1101	582	585	22.678	35.272	-0.140	12.532	5.634	29.638	1021	-708	4.728	1.931	1339	0	0.000	4.967	0	4.865	12.431
2004.186	0.003	401	1096	579	583	22.618	35.272	0.060	12.592	5.634	29.638	1021	-706	4.727	1.931	1339	0	0.000	5.028	0	4.865	12.430
2004.189	0.003	403	1096	578	583	22.616	35.272	0.001	12.594	5.634	29.638	1021	-705	4.726	1.930	1339	0	0.000	5.030	0	4.865	12.429
2004.191	0.003	405	1092	577	583	22.606	35.272	0.010	12.603	5.634	29.638	1021	-704	4.726	1.929	1339	0	0.000	5.040	0	4.865	12.428
2004.194	0.003	406	1089	578	583	22.627	35.272	-0.021	12.583	5.634	29.638	1021	-702	4.725	1.929	1339	0	0.000	5.020	0	4.865	12.428
2004.197	0.003	408	1085	578	583	22.625	35.211	-0.059	12.523	5.634	29.577	1021	-701	4.724	1.928	1339	0	0.000	4.962	0	4.865	12.427
2004.199	0.003	409	1081	577	583	22.608	35.211	0.018	12.541	5.634	29.577	1020	-700	4.723	1.927	1339	0	0.000	4.980	0	4.865	12.426
2004.202	0.003	411	1078	575	582	22.583	35.211	0.024	12.566	5.634	29.577	1020	-698	4.723	1.926	1339	0	0.000	5.005	0	4.865	12.426
2004.205	0.003	412	1074	576	582	22.594	35.211	-0.010	12.555	5.634	29.577	1020	-697	4.722	1.926	1339	0	0.000	4.996	0	4.865	12.425
2004.208	0.003	414	1071	576	583	22.603	35.211	-0.009	12.546	5.634	29.577	1020	-696	4.721	1.925	1339	0	0.000	4.988	0	4.865	12.424
2004.210	0.003	415	1069	577	583	22.621	35.211	-0.018	12.528	5.634	29.577	1020	-695	4.721	1.924	1339	0	0.000	4.970	0	4.865	12.424
2004.213	0.003	417	1067	576	583	22.623	35.201	-0.012	12.516	5.634	29.568	1020	-693	4.720	1.924	1339	0	0.000	4.959	0	4.865	12.423
2004.216	0.003	418	1062	577	583	22.626	35.201	-0.003	12.514	5.634	29.568	1020	-692	4.719	1.923	1339	0	0.000	4.957	0	4.865	12.422
2004.219	0.003	420	1059	577	583	22.635	35.201	-0.009	12.504	5.634	29.568	1019	-691	4.719	1.922	1339	0	0.000	4.948	0	4.865	12.421
2004.221	0.003	421	1055	577	583	22.632	35.119	-0.079	12.425	5.634	29.485	1019	-690	4.718	1.922	1339	0	0.000	4.870	0	4.865	12.421
2004.224	0.003	422	1051	572	581	22.530	34.894	-0.123	12.302	5.634	29.260	1019	-689	4.717	1.921	1339	0	0.000	4.747	0	4.865	12.420
2004.227	0.003	423	1048	563	576	22.349	34.641	-0.072	12.230	5.634	29.008	1019	-688	4.717	1.920	1339	0	0.000	4.676	0	4.865	12.419
2004.230	0.003	425	1044	548	568	22.042	34.619	0.285	12.515	5.634	28.985	1019	-687	4.716	1.920	1339	0	0.000	4.962	0	4.865	12.419
2004.232	0.003	426	1042	543	566	21.950	35.061	0.534	13.049	5.637	29.423	1019	-685	4.715	1.919	1339	0	0.000	5.493	0	4.865	12.422
2004.235	0.003	458	1037	545	578	22.405	35.636	0.119	13.168	5.642	29.993	1018	-674	4.715	1.918	1339	0	0.000	5.608	0	4.865	12.426
2004.238	0.003	511	1035	546	596	23.122	36.053	-0.300	12.868	5.645	30.407	1018	-642	4.714	1.918	1339	0	0.000	5.305	0	4.865	12.429
2004.240	0.003	555	1031	547	611	23.715	36.423	-0.222	12.646	5.649	30.775	1018	-602	4.713	1.917	1339	0	0.000	5.081	0	4.865	12.431
2004.243	0.003	590	1028	548	623	24.179	36.869	-0.018	12.629	5.652	31.217	1018	-567	4.713	1.916	1339	0	0.000	5.060	0	4.865	12.434
2004.246	0.003	603	1024	564	635	24.651	37.154	-0.187	12.442	5.655	31.500	1018	-545	4.712	1.916	1339	0	0.000	4.871	0	4.865	12.436

Gas Balance MODEL R1-F
Kimball Colinville Storage Reservoir
Discrepancy History Match
E. Kimball Crossflow with Meter Error &Gas Spill

Spill threshhold
1300

		Reservoir P/Z(psia)										E.Kimball+Low Perm Gas Balance				Corunna Seckerton Crossflow				South Spill Model		
Date	dT (years)	SOUTH	A1	MID	AVG	Calc. GIP (bcf)	Inventory GIP (bcf)	Total Discrepancy (bcf)	Adjusted Cumulative Discrep. (bcf)	Cumulative Meter Error (bcf)	Adjusted Inventory GIP (bcf)	P/Z (psia)	Influx 0.0008 (mcfd)	5.0 GIP (bcf)	Cum. Influx (bcf)	Avg P/Z Cor/Sec (psi)	Influx 0.0000 (mcfd)	Cum. Influx (bcf)	Revised K/C Cumulative Discrepancy (bcf)	Gas Spill 0.00855 (mcfd)	Cum. Gas Spill (bcf)	Total Model Adjustments (bcf)
2004.251	0.005	604	1015	594	651	25.249	37.366	-0.387	12.054	5.656	31.709	1018	-538	4.711	1.915	1339	0	0.000	4.483	0	4.865	12.436
2004.260	0.008	603	1008	604	655	25.403	37.309	-0.210	11.844	5.656	31.653	1018	-537	4.710	1.913	1339	0	0.000	4.275	0	4.865	12.435
2004.262	0.003	603	1004	597	650	25.231	37.044	-0.093	11.751	5.656	31.388	1017	-537	4.709	1.913	1339	0	0.000	4.182	0	4.865	12.434
2004.265	0.003	592	1000	586	641	24.856	36.807	0.138	11.889	5.656	31.150	1017	-542	4.708	1.912	1339	0	0.000	4.321	0	4.865	12.434
2004.268	0.003	581	998	578	632	24.523	36.564	0.090	11.979	5.656	30.908	1017	-552	4.708	1.912	1339	0	0.000	4.411	0	4.865	12.433
2004.270	0.003	571	995	572	625	24.264	36.579	0.275	12.253	5.656	30.923	1017	-562	4.707	1.911	1339	0	0.000	4.686	0	4.865	12.433
2004.273	0.003	570	991	571	624	24.200	36.607	0.092	12.345	5.657	30.951	1017	-567	4.707	1.910	1339	0	0.000	4.778	0	4.865	12.432
2004.276	0.003	572	988	573	625	24.259	36.607	-0.059	12.286	5.657	30.951	1017	-566	4.706	1.910	1339	0	0.000	4.720	0	4.865	12.432
2004.279	0.003	574	985	574	626	24.282	36.607	-0.023	12.263	5.657	30.951	1017	-564	4.706	1.909	1339	0	0.000	4.697	0	4.865	12.431
2004.281	0.003	574	982	574	626	24.280	36.607	0.002	12.265	5.657	30.951	1016	-563	4.705	1.909	1339	0	0.000	4.700	0	4.865	12.431
2004.284	0.003	575	980	575	626	24.293	36.607	-0.012	12.253	5.657	30.951	1016	-563	4.704	1.908	1339	0	0.000	4.688	0	4.865	12.430
2004.287	0.003	575	977	575	626	24.287	36.607	0.006	12.258	5.657	30.951	1016	-562	4.704	1.908	1339	0	0.000	4.694	0	4.865	12.430
2004.290	0.003	575	974	575	626	24.277	36.607	0.010	12.268	5.657	30.951	1016	-561	4.703	1.907	1339	0	0.000	4.704	0	4.865	12.429
2004.292	0.003	576	972	575	626	24.270	36.607	0.007	12.275	5.657	30.951	1016	-561	4.703	1.907	1339	0	0.000	4.712	0	4.865	12.429
2004.295	0.003	577	970	575	626	24.274	36.607	-0.004	12.271	5.657	30.951	1016	-560	4.702	1.906	1339	0	0.000	4.708	0	4.865	12.428
2004.298	0.003	577	966	576	625	24.267	36.607	0.008	12.279	5.657	30.951	1016	-559	4.702	1.905	1339	0	0.000	4.717	0	4.865	12.427
2004.301	0.003	577	964	575	625	24.254	36.607	0.012	12.291	5.657	30.951	1016	-559	4.701	1.905	1339	0	0.000	4.729	0	4.865	12.427
2004.303	0.003	578	962	576	626	24.268	36.607	-0.013	12.278	5.657	30.951	1015	-558	4.701	1.904	1339	0	0.000	4.717	0	4.865	12.426
2004.306	0.003	578	960	576	626	24.270	36.607	-0.002	12.275	5.657	30.951	1015	-557	4.700	1.904	1339	0	0.000	4.715	0	4.865	12.426
2004.309	0.003	579	957	576	625	24.261	36.607	0.009	12.285	5.657	30.951	1015	-557	4.699	1.903	1339	0	0.000	4.725	0	4.865	12.425
2004.311	0.003	579	955	577	625	24.258	36.607	0.003	12.287	5.657	30.951	1015	-556	4.699	1.903	1339	0	0.000	4.728	0	4.865	12.425
2004.314	0.003	580	953	577	625	24.260	36.607	-0.002	12.286	5.657	30.951	1015	-556	4.698	1.902	1339	0	0.000	4.727	0	4.865	12.424
2004.317	0.003	580	951	577	625	24.264	36.607	-0.004	12.281	5.657	30.951	1015	-555	4.698	1.902	1339	0	0.000	4.723	0	4.865	12.424
2004.320	0.003	580	948	577	625	24.255	36.607	0.009	12.290	5.657	30.951	1015	-555	4.697	1.901	1339	0	0.000	4.732	0	4.865	12.423
2004.322	0.003	581	946	577	625	24.251	36.607	0.004	12.294	5.657	30.951	1015	-554	4.697	1.900	1339	0	0.000	4.737	0	4.865	12.422
2004.325	0.003	581	942	577	625	24.239	36.607	0.012	12.306	5.657	30.951	1014	-554	4.696	1.900	1339	0	0.000	4.750	0	4.865	12.422
2004.328	0.003	581	940	578	625	24.239	37.159	0.551	12.858	5.661	31.497	1014	-553	4.696	1.899	1339	0	0.000	5.297	0	4.865	12.426
2004.331	0.003	599	938	592	638	24.748	37.792	0.124	12.981	5.666	32.125	1014	-545	4.695	1.899	1339	0	0.000	5.416	0	4.865	12.431
2004.333	0.003	622	936	615	658	25.544	38.097	-0.491	12.490	5.669	32.428	1014	-525	4.695	1.898	1339	0	0.000	4.923	0	4.865	12.432
2004.336	0.003	636	934	630	670	26.012	38.172	-0.393	12.097	5.669	32.502	1014	-506	4.694	1.898	1339	0	0.000	4.530	0	4.865	12.433
2004.339	0.003	636	930	634	672	26.074	38.182	-0.052	12.046	5.670	32.512	1014	-499	4.694	1.897	1339	0	0.000	4.479	0	4.865	12.432
2004.342	0.003	637	930	633	672	26.062	38.214	0.044	12.089	5.670	32.544	1014	-498	4.693	1.897	1339	0	0.000	4.523	0	4.865	12.432
2004.344	0.003	637	928	635	672	26.089	38.601	0.360	12.449	5.673	32.928	1014	-498	4.693	1.896	1339	0	0.000	4.880	0	4.865	12.435
2004.347	0.003	639	926	650	681	26.423	39.152	0.217	12.667	5.677	33.474	1014	-496	4.692	1.896	1339	0	0.000	5.094	0	4.865	12.439
2004.350	0.003	639	924	681	697	27.057	39.541	-0.245	12.422	5.681	33.861	1013	-495	4.692	1.895	1339	0	0.000	4.846	0	4.865	12.441
2004.352	0.003	640	923	708	711	27.592	39.771	-0.305	12.117	5.683	34.089	1013	-494	4.691	1.895	1339	0	0.000	4.540	0	4.865	12.443
2004.355	0.003	640	919	721	718	27.858	40.264	0.227	12.344	5.687	34.577	1013	-494	4.691	1.894	1339	0	0.000	4.763	0	4.865	12.446
2004.358	0.003	640	917	740	728	28.239	40.811	0.166	12.509	5.691	35.120	1013	-494	4.690	1.894	1339	0	0.000	4.924	0	4.865	12.450
2004.361	0.003	641	916	774	746	28.930	41.293	-0.208	12.301	5.695	35.598	1013	-493	4.690	1.893	1339	0	0.000	4.713	0	4.865	12.454
2004.363	0.003	644	913	797	759	29.446	41.790	-0.019	12.282	5.699	36.091	1013	-491	4.689	1.893	1339	0	0.000	4.690	0	4.865	12.457
2004.366	0.003	651	912	819	773	29.975	42.344	0.025	12.307	5.704	36.641	1013	-485	4.689	1.892	1339	0	0.000	4.711	0	4.865	12.461
2004.369	0.003	656	910	846	788	30.588	42.344	-0.612	11.695	5.704	36.641	1013	-479	4.688	1.892	1339	0	0.000	4.099	0	4.865	12.461
2004.391	0.022	659	895	833	781	30.283	42.344	0.305	12.000	5.704	36.641	1013	-474	4.684	1.888	1339	0	0.000	4.408	0	4.865	12.457
2004.393	0.003	660	894	833	781	30.283	42.344	-0.001	11.999	5.704	36.641	1012	-472	4.684	1.888	1339	0	0.000	4.408	0	4.865	12.457
2004.396	0.003	660	892	831	779	30.241	42.344	0.042	12.041	5.704	36.641	1012	-471	4.683	1.887	1339	0	0.000	4.450	0	4.865	12.456

Gas Balance MODEL R1-F
Kimball Colinville Storage Reservoir
Discrepancy History Match
E. Kimball Crossflow with Meter Error &Gas Spill

Spill threshhold
1300

		Reservoir P/Z(psia)										E.Kimball+Low Perm Gas Balance				Corunna Seckerton Crossflow					South Spill Model		
Date	dT (years)	SOUTH	A1	MID	AVG	Calc. GIP (bcf)	Inventory GIP (bcf)	Total Discrepancy (bcf)	Adjusted Cumulative Discrep. (bcf)	Cumulative Meter Error (bcf)	Adjusted Inventory GIP (bcf)	P/Z (psia)	Influx 0.0008 (mcfd)	5.0 GIP (bcf)	Cum. Influx (bcf)	Avg P/Z Cor/Sec (psi)	Influx 0.0000 (mcfd)	Cum. Influx (bcf)	Revised K/C Cumulative Discrepancy (bcf)	Gas Spill 0.00855 (mcfd)	Cum. Gas Spill (bcf)	Total Model Adjustments (bcf)
2004.402	0.005	660	889	830	779	30.212	42.344	0.030	12.071	5.704	36.641	1012	-470	4.682	1.886	1339	0	0.000	4.481	0	4.865	12.455
2004.404	0.003	661	888	830	779	30.214	42.344	-0.002	12.069	5.704	36.641	1011	-469	4.682	1.886	1339	0	0.000	4.479	0	4.865	12.455
2004.407	0.003	661	886	829	778	30.198	42.344	0.016	12.085	5.704	36.641	1011	-469	4.682	1.885	1339	0	0.000	4.496	0	4.865	12.454
2004.410	0.003	662	886	829	778	30.195	42.344	0.002	12.087	5.704	36.641	1011	-468	4.681	1.885	1339	0	0.000	4.499	0	4.865	12.454
2004.413	0.003	662	884	829	778	30.180	42.344	0.016	12.103	5.704	36.641	1011	-468	4.681	1.884	1339	0	0.000	4.515	0	4.865	12.453
2004.415	0.003	662	882	828	777	30.161	42.344	0.019	12.122	5.704	36.641	1011	-467	4.680	1.884	1339	0	0.000	4.534	0	4.865	12.453
2004.418	0.003	662	881	827	777	30.140	42.344	0.020	12.142	5.704	36.641	1011	-467	4.680	1.883	1339	0	0.000	4.555	0	4.865	12.452
2004.421	0.003	663	880	827	777	30.147	42.344	-0.007	12.135	5.704	36.641	1011	-466	4.679	1.883	1339	0	0.000	4.549	0	4.865	12.452
2004.423	0.003	663	878	827	777	30.134	42.344	0.013	12.148	5.704	36.641	1011	-466	4.679	1.882	1339	0	0.000	4.562	0	4.865	12.452
2004.426	0.003	663	877	827	777	30.128	42.344	0.006	12.154	5.704	36.641	1011	-465	4.678	1.882	1339	0	0.000	4.569	0	4.865	12.451
2004.429	0.003	664	875	827	776	30.123	42.344	0.005	12.159	5.704	36.641	1011	-465	4.678	1.882	1339	0	0.000	4.574	0	4.865	12.451
2004.432	0.003	664	874	826	776	30.108	42.344	0.015	12.175	5.704	36.641	1010	-464	4.677	1.881	1339	0	0.000	4.590	0	4.865	12.450
2004.434	0.003	664	872	825	775	30.084	42.344	0.024	12.199	5.704	36.641	1010	-464	4.677	1.881	1339	0	0.000	4.614	0	4.865	12.450
2004.437	0.003	665	871	825	775	30.080	42.344	0.003	12.202	5.704	36.641	1010	-463	4.676	1.880	1339	0	0.000	4.618	0	4.865	12.449
2004.443	0.005	665	868	825	775	30.068	42.344	0.013	12.215	5.704	36.641	1010	-463	4.676	1.879	1339	0	0.000	4.632	0	4.865	12.448
2004.445	0.003	666	867	825	775	30.064	42.344	0.004	12.219	5.704	36.641	1010	-462	4.675	1.879	1339	0	0.000	4.636	0	4.865	12.448
2004.448	0.003	666	866	825	775	30.083	42.344	-0.019	12.199	5.704	36.641	1010	-461	4.675	1.878	1339	0	0.000	4.617	0	4.865	12.447
2004.451	0.003	666	865	824	775	30.057	42.344	0.026	12.225	5.704	36.641	1010	-460	4.674	1.878	1339	0	0.000	4.644	0	4.865	12.447
2004.454	0.003	667	863	824	774	30.044	42.344	0.013	12.238	5.704	36.641	1010	-460	4.674	1.877	1339	0	0.000	4.657	0	4.865	12.446
2004.456	0.003	667	862	823	774	30.036	42.344	0.008	12.247	5.704	36.641	1010	-460	4.673	1.877	1339	0	0.000	4.666	0	4.865	12.446
2004.459	0.003	667	861	823	774	30.038	42.344	-0.003	12.244	5.704	36.641	1009	-459	4.673	1.876	1339	0	0.000	4.664	0	4.865	12.446
2004.462	0.003	668	860	823	774	30.034	42.344	0.005	12.249	5.704	36.641	1009	-458	4.672	1.876	1339	0	0.000	4.669	0	4.865	12.445
2004.464	0.003	668	859	823	774	30.027	42.344	0.007	12.256	5.704	36.641	1009	-458	4.672	1.876	1339	0	0.000	4.677	0	4.865	12.445
2004.467	0.003	669	858	823	774	30.039	42.344	-0.012	12.243	5.704	36.641	1009	-457	4.671	1.875	1339	0	0.000	4.665	0	4.865	12.444
2004.470	0.003	669	857	823	774	30.035	42.344	0.004	12.248	5.704	36.641	1009	-457	4.671	1.875	1339	0	0.000	4.669	0	4.865	12.444
2004.473	0.003	670	856	823	774	30.029	42.344	0.005	12.253	5.704	36.641	1009	-456	4.670	1.874	1339	0	0.000	4.675	0	4.865	12.443
2004.500	0.027	673	845	820	772	29.967	42.422	0.140	12.393	5.704	36.718	1009	-454	4.666	1.870	1339	0	0.000	4.819	0	4.865	12.439
2004.503	0.003	680	844	820	774	30.045	42.517	0.017	12.410	5.705	36.812	1008	-447	4.665	1.869	1339	0	0.000	4.836	0	4.865	12.440
2004.505	0.003	688	844	819	777	30.143	42.717	0.102	12.512	5.707	37.011	1008	-438	4.665	1.869	1339	0	0.000	4.937	0	4.865	12.441
2004.508	0.003	705	842	818	782	30.341	42.853	-0.062	12.450	5.708	37.146	1008	-424	4.665	1.868	1339	0	0.000	4.874	0	4.865	12.442
2004.511	0.003	720	841	818	787	30.532	43.004	-0.041	12.409	5.709	37.295	1008	-406	4.664	1.868	1339	0	0.000	4.832	0	4.865	12.442
2004.514	0.003	730	840	817	790	30.655	43.308	0.182	12.591	5.712	37.596	1007	-392	4.664	1.868	1339	0	0.000	5.012	0	4.865	12.445
2004.522	0.008	781	838	825	811	31.480	43.883	-0.250	12.341	5.716	38.166	1007	-355	4.663	1.866	1339	0	0.000	4.758	0	4.865	12.448
2004.525	0.003	796	836	824	816	31.657	44.192	0.133	12.473	5.719	38.473	1007	-314	4.662	1.866	1339	0	0.000	4.888	0	4.865	12.450
2004.527	0.003	807	835	832	824	31.957	44.585	0.093	12.566	5.722	38.863	1007	-297	4.662	1.866	1339	0	0.000	4.978	0	4.865	12.453
2004.530	0.003	820	835	844	834	32.375	45.041	0.038	12.604	5.726	39.315	1007	-282	4.662	1.866	1339	0	0.000	5.013	0	4.865	12.457
2004.533	0.003	835	834	859	848	32.884	45.555	0.005	12.609	5.730	39.825	1007	-264	4.662	1.865	1339	0	0.000	5.014	0	4.865	12.461
2004.536	0.003	843	833	879	861	33.397	45.957	-0.111	12.498	5.733	40.224	1007	-248	4.661	1.865	1339	0	0.000	4.900	0	4.865	12.464
2004.538	0.003	842	832	904	873	33.876	46.340	-0.096	12.402	5.736	40.604	1007	-243	4.661	1.865	1339	0	0.000	4.801	0	4.865	12.467
2004.541	0.003	840	831	924	883	34.272	46.811	0.075	12.477	5.740	41.071	1007	-245	4.661	1.865	1339	0	0.000	4.872	0	4.865	12.470
2004.544	0.003	847	831	943	896	34.745	47.323	0.039	12.516	5.744	41.579	1007	-242	4.661	1.864	1339	0	0.000	4.907	0	4.865	12.474
2004.546	0.003	849	830	967	909	35.261	47.775	-0.065	12.452	5.748	42.027	1007	-236	4.660	1.864	1339	0	0.000	4.839	0	4.865	12.478
2004.549	0.003	856	829	987	922	35.753	48.234	-0.032	12.420	5.752	42.483	1007	-229	4.660	1.864	1339	0	0.000	4.804	0	4.865	12.481
2004.552	0.003	856	829	1008	933	36.196	48.697	0.019	12.439	5.756	42.941	1007	-224	4.660	1.864	1339	0	0.000	4.820	0	4.865	12.485
2004.555	0.003	856	828	1031	945	36.651	49.198	0.046	12.485	5.760	43.438	1007	-224	4.660	1.863	1339	0	0.000	4.862	0	4.865	12.489

Gas Balance MODEL R1-F
Kimball Colinville Storage Reservoir
Discrepancy History Match
E. Kimball Crossflow with Meter Error &Gas Spill

Spill threshhold
1300

		Reservoir P/Z(psia)										E.Kimball+Low Perm Gas Balance				Corunna Seckerton Crossflow				South Spill Model		
Date	dT (years)	SOUTH	A1	MID	AVG	Calc. GIP (bcf)	Inventory GIP (bcf)	Total Discrepancy (bcf)	Adjusted Cumulative Discrep. (bcf)	Cumulative Meter Error (bcf)	Adjusted Inventory GIP (bcf)	P/Z (psia)	Influx 0.0008 (mcfd)	5.0 GIP (bcf)	Cum. Influx (bcf)	Avg P/Z Cor/Sec (psi)	Influx 0.0000 (mcfd)	Cum. Influx (bcf)	Revised K/C Cumulative Discrepancy (bcf)	Gas Spill 0.00855 (mcfd)	Cum. Gas Spill (bcf)	Total Model Adjustments (bcf)
2004.557	0.003	855	828	1056	958	37.158	49.510	-0.195	12.290	5.762	43.747	1007	-225	4.660	1.863	1339	0	0.000	4.664	0	4.865	12.491
2004.560	0.003	855	827	1074	967	37.519	49.888	0.017	12.307	5.765	44.122	1006	-225	4.659	1.863	1339	0	0.000	4.678	0	4.865	12.494
2004.566	0.005	858	826	1108	986	38.262	50.855	0.224	12.531	5.773	45.081	1006	-223	4.659	1.863	1339	0	0.000	4.895	0	4.865	12.501
2004.568	0.003	863	826	1130	999	38.761	51.263	-0.091	12.440	5.777	45.486	1006	-217	4.659	1.862	1339	0	0.000	4.801	0	4.865	12.505
2004.571	0.003	865	825	1149	1010	39.178	51.657	-0.024	12.416	5.780	45.877	1006	-213	4.658	1.862	1339	0	0.000	4.774	0	4.865	12.508
2004.574	0.003	864	825	1167	1019	39.525	52.146	0.143	12.559	5.784	46.362	1006	-212	4.658	1.862	1339	0	0.000	4.913	0	4.865	12.511
2004.577	0.003	870	825	1186	1031	40.002	52.587	-0.037	12.522	5.788	46.799	1006	-209	4.658	1.862	1339	0	0.000	4.873	0	4.865	12.515
2004.579	0.003	876	825	1204	1043	40.450	52.883	-0.151	12.371	5.790	47.093	1006	-200	4.658	1.861	1339	0	0.000	4.720	0	4.865	12.517
2004.582	0.003	877	825	1219	1050	40.754	53.240	0.053	12.424	5.793	47.447	1006	-195	4.658	1.861	1339	0	0.000	4.770	0	4.865	12.520
2004.585	0.003	876	825	1233	1058	41.045	53.625	0.094	12.518	5.796	47.829	1006	-195	4.657	1.861	1339	0	0.000	4.861	0	4.865	12.523
2004.587	0.003	883	825	1248	1068	41.439	53.982	-0.036	12.482	5.799	48.183	1006	-190	4.657	1.861	1339	0	0.000	4.822	0	4.865	12.525
2004.590	0.003	892	825	1257	1076	41.758	54.107	-0.195	12.287	5.800	48.307	1006	-179	4.657	1.861	1339	0	0.000	4.626	0	4.865	12.526
2004.593	0.003	902	825	1258	1080	41.902	54.329	0.079	12.365	5.802	48.527	1006	-165	4.657	1.861	1339	0	0.000	4.703	0	4.865	12.528
2004.596	0.003	905	825	1263	1083	42.031	54.706	0.248	12.613	5.805	48.901	1006	-156	4.657	1.860	1339	0	0.000	4.948	0	4.865	12.531
2004.598	0.003	905	825	1280	1093	42.385	55.103	0.042	12.655	5.808	49.294	1006	-155	4.657	1.860	1339	0	0.000	4.987	0	4.865	12.534
2004.601	0.003	920	825	1295	1106	42.891	55.606	-0.002	12.653	5.812	49.793	1006	-143	4.656	1.860	1339	0	0.000	4.980	0	4.865	12.538
2004.604	0.003	933	826	1306	1116	43.299	56.052	0.039	12.691	5.816	50.236	1006	-123	4.656	1.860	1339	0	0.000	5.015	0	4.865	12.541
2004.607	0.003	953	826	1316	1129	43.782	56.481	-0.054	12.638	5.820	50.662	1006	-98	4.656	1.860	1339	0	0.000	4.958	0	4.865	12.545
2004.609	0.003	976	825	1320	1139	44.174	56.899	0.026	12.663	5.823	51.076	1006	-65	4.656	1.860	1339	0	0.000	4.981	0	4.865	12.548
2004.612	0.003	997	825	1328	1150	44.608	57.309	-0.025	12.639	5.826	51.482	1006	-31	4.656	1.860	1339	0	0.000	4.953	0	4.865	12.552
2004.615	0.003	1017	826	1335	1161	45.037	57.747	0.009	12.648	5.830	51.917	1006	2	4.656	1.860	1339	0	0.000	4.958	0	4.865	12.555
2004.617	0.003	1038	826	1342	1172	45.460	58.188	0.019	12.666	5.834	52.355	1006	36	4.656	1.860	1339	0	0.000	4.973	0	4.865	12.559
2004.620	0.003	1055	827	1353	1183	45.907	58.648	0.012	12.679	5.837	52.810	1006	67	4.656	1.860	1339	0	0.000	4.981	0	4.865	12.563
2004.623	0.003	1071	827	1365	1195	46.371	59.036	-0.076	12.603	5.841	53.195	1006	95	4.656	1.860	1339	0	0.000	4.902	0	4.865	12.566
2004.626	0.003	1091	827	1372	1206	46.775	59.396	-0.043	12.560	5.843	53.553	1006	125	4.656	1.860	1339	0	0.000	4.856	0	4.865	12.569
2004.628	0.003	1108	828	1377	1215	47.127	59.766	0.017	12.577	5.846	53.919	1006	158	4.657	1.860	1339	0	0.000	4.870	0	4.865	12.572
2004.631	0.003	1131	828	1379	1223	47.464	60.179	0.076	12.653	5.850	54.329	1006	193	4.657	1.860	1339	0	0.000	4.943	0	4.865	12.576
2004.634	0.003	1156	828	1382	1234	47.860	60.588	0.014	12.667	5.853	54.735	1006	236	4.657	1.861	1339	0	0.000	4.953	0	4.865	12.579
2004.637	0.003	1176	829	1389	1245	48.289	60.978	-0.039	12.628	5.856	55.122	1006	279	4.657	1.861	1339	0	0.000	4.910	0	4.865	12.583
2004.639	0.003	1194	830	1396	1255	48.681	61.342	-0.028	12.600	5.859	55.483	1006	314	4.658	1.861	1339	0	0.000	4.879	0	4.865	12.586
2004.642	0.003	1211	830	1403	1264	49.032	61.720	0.026	12.626	5.863	55.857	1006	347	4.658	1.862	1339	0	0.000	4.902	0	4.865	12.590
2004.645	0.003	1227	831	1408	1272	49.366	62.046	-0.008	12.618	5.865	56.181	1006	379	4.658	1.862	1339	0	0.000	4.891	0	4.865	12.593
2004.648	0.003	1240	832	1415	1281	49.688	62.365	-0.003	12.615	5.868	56.497	1006	406	4.659	1.862	1339	0	0.000	4.885	0	4.865	12.596
2004.650	0.003	1253	833	1422	1289	49.995	62.524	-0.148	12.467	5.869	56.654	1006	432	4.659	1.863	1339	0	0.000	4.735	0	4.865	12.597
2004.653	0.003	1251	834	1428	1292	50.106	62.752	0.117	12.584	5.871	56.881	1006	443	4.660	1.863	1339	0	0.000	4.849	0	4.865	12.600
2004.656	0.003	1247	835	1438	1296	50.269	63.003	0.088	12.671	5.873	57.129	1006	438	4.660	1.864	1339	0	0.000	4.935	0	4.865	12.602
2004.658	0.003	1247	836	1448	1301	50.485	63.236	0.018	12.689	5.875	57.361	1007	434	4.660	1.864	1339	0	0.000	4.950	0	4.865	12.605
2004.661	0.003	1245	838	1459	1306	50.677	63.478	0.049	12.738	5.877	57.601	1007	432	4.661	1.865	1339	0	0.000	4.997	0	4.865	12.607
2004.664	0.003	1244	839	1471	1312	50.915	63.601	-0.114	12.624	5.878	57.723	1007	428	4.661	1.865	1339	0	0.000	4.882	0	4.865	12.608
2004.667	0.003	1242	841	1477	1315	51.023	63.744	0.034	12.659	5.879	57.865	1007	425	4.662	1.865	1339	0	0.000	4.914	0	4.865	12.610
2004.669	0.003	1241	843	1482	1318	51.125	63.892	0.046	12.705	5.880	58.012	1007	422	4.662	1.866	1339	0	0.000	4.958	0	4.865	12.612
2004.672	0.003	1238	845	1488	1320	51.224	63.983	-0.008	12.697	5.881	58.102	1007	418	4.663	1.866	1339	0	0.000	4.950	0	4.865	12.613
2004.675	0.003	1237	846	1490	1321	51.259	64.075	0.057	12.754	5.882	58.193	1007	414	4.663	1.867	1339	0	0.000	5.005	0	4.865	12.614
2004.678	0.003	1236	848	1494	1323	51.319	64.075	-0.060	12.694	5.882	58.193	1007	412	4.663	1.867	1339	0	0.000	4.945	0	4.865	12.614
2004.680	0.003	1235	850	1492	1322	51.290	64.075	0.028	12.722	5.882	58.193	1007	409	4.664	1.868	1339	0	0.000	4.973	0	4.865	12.615

Gas Balance MODEL R1-F
Kimball Colinville Storage Reservoir
Discrepancy History Match
E. Kimball Crossflow with Meter Error &Gas Spill

Spill threshhold
1300

		Reservoir P/Z(psia)									E.Kimball+Low Perm Gas Balance			Corunna Seckerton Crossflow					South Spill Model		
Date	dT (years)	SOUTH	A1	MID	AVG	Calc. GIP (bcf)	Inventory GIP (bcf)	Total Discrepancy (bcf)	Adjusted Cumulative Discrep. (bcf)	Cumulative Meter Error (bcf)	Adjusted Inventory GIP (bcf)	P/Z (psia)	Influx 0.0008 (mcfd)	5.0 GIP (bcf)	Cum. Influx (bcf)	Avg P/Z Cor/Sec (psi)	Influx 0.0000 (mcfd)	Cum. Influx (bcf)	Revised K/C Cumulative Discrepancy (bcf)	Gas Spill 0.00855 (mcfd)	Cum. Gas Spill (bcf)	Total Model Adjustments (bcf)
2004.683	0.003	1234	853	1491	1321	51.254	64.075	0.036	12.758	5.882	58.193	1007	407	4.664	1.868	1339	0	0.000	5.008	0	4.865	12.615
2004.686	0.003	1233	855	1489	1320	51.225	64.075	0.029	12.788	5.882	58.193	1007	405	4.665	1.868	1339	0	0.000	5.037	0	4.865	12.616
2004.689	0.003	1232	857	1488	1320	51.195	64.075	0.030	12.818	5.882	58.193	1008	403	4.665	1.869	1339	0	0.000	5.067	0	4.865	12.616
2004.691	0.003	1232	859	1487	1319	51.174	64.075	0.021	12.839	5.882	58.193	1008	402	4.665	1.869	1339	0	0.000	5.088	0	4.865	12.616
2004.694	0.003	1231	862	1486	1319	51.179	64.075	-0.005	12.834	5.882	58.193	1008	401	4.666	1.870	1339	0	0.000	5.082	0	4.865	12.617
2004.697	0.003	1231	865	1485	1319	51.165	64.075	0.014	12.848	5.882	58.193	1008	400	4.666	1.870	1339	0	0.000	5.096	0	4.865	12.617
2004.699	0.003	1230	868	1485	1319	51.155	64.075	0.010	12.858	5.882	58.193	1008	399	4.667	1.870	1339	0	0.000	5.106	0	4.865	12.618
2004.702	0.003	1230	870	1483	1318	51.135	64.075	0.019	12.877	5.882	58.193	1008	398	4.667	1.871	1339	0	0.000	5.125	0	4.865	12.618
2004.705	0.003	1228	872	1482	1317	51.098	64.075	0.038	12.915	5.882	58.193	1008	396	4.667	1.871	1339	0	0.000	5.162	0	4.865	12.618
2004.708	0.003	1228	875	1481	1317	51.087	64.075	0.010	12.925	5.882	58.193	1008	394	4.668	1.872	1339	0	0.000	5.172	0	4.865	12.619
2004.710	0.003	1228	877	1480	1316	51.075	64.075	0.013	12.938	5.882	58.193	1008	393	4.668	1.872	1339	0	0.000	5.184	0	4.865	12.619
2004.713	0.003	1228	881	1480	1317	51.092	64.075	-0.017	12.921	5.882	58.193	1008	393	4.669	1.872	1339	0	0.000	5.166	0	4.865	12.620
2004.716	0.003	1227	883	1479	1317	51.085	64.075	0.007	12.927	5.882	58.193	1008	392	4.669	1.873	1339	0	0.000	5.173	0	4.865	12.620
2004.719	0.003	1227	886	1478	1316	51.069	64.075	0.016	12.943	5.882	58.193	1009	391	4.669	1.873	1339	0	0.000	5.188	0	4.865	12.620
2004.721	0.003	1227	889	1478	1316	51.067	64.075	0.003	12.946	5.882	58.193	1009	390	4.670	1.873	1339	0	0.000	5.190	0	4.865	12.621
2004.724	0.003	1226	891	1477	1316	51.053	64.075	0.013	12.959	5.882	58.193	1009	389	4.670	1.874	1339	0	0.000	5.203	0	4.865	12.621
2004.727	0.003	1226	894	1476	1316	51.052	64.075	0.001	12.960	5.882	58.193	1009	388	4.671	1.874	1339	0	0.000	5.204	0	4.865	12.622
2004.730	0.003	1226	896	1476	1316	51.051	64.082	0.009	12.969	5.882	58.200	1009	388	4.671	1.875	1339	0	0.000	5.212	0	4.865	12.622
2004.732	0.003	1225	899	1474	1315	51.024	64.114	0.059	13.027	5.882	58.231	1009	386	4.671	1.875	1339	0	0.000	5.270	0	4.865	12.623
2004.735	0.003	1224	901	1476	1316	51.058	64.191	0.043	13.070	5.883	58.308	1009	385	4.672	1.875	1339	0	0.000	5.312	0	4.865	12.624
2004.738	0.003	1225	904	1479	1318	51.151	64.222	-0.062	13.009	5.883	58.339	1009	385	4.672	1.876	1339	0	0.000	5.250	0	4.865	12.624
2004.740	0.003	1224	907	1481	1319	51.188	64.236	-0.023	12.985	5.883	58.352	1009	385	4.672	1.876	1339	0	0.000	5.226	0	4.865	12.625
2004.743	0.003	1225	910	1481	1320	51.218	64.236	-0.029	12.956	5.883	58.352	1009	385	4.673	1.877	1339	0	0.000	5.196	0	4.865	12.625
2004.746	0.003	1224	912	1480	1320	51.194	64.236	0.024	12.980	5.883	58.352	1009	384	4.673	1.877	1339	0	0.000	5.220	0	4.865	12.626
2004.749	0.003	1224	914	1479	1319	51.176	64.236	0.018	12.998	5.883	58.352	1009	383	4.674	1.877	1339	0	0.000	5.237	0	4.865	12.626
2004.751	0.003	1224	916	1480	1320	51.208	64.272	0.004	13.002	5.883	58.388	1010	383	4.674	1.878	1339	0	0.000	5.240	0	4.865	12.627
2004.754	0.003	1223	919	1479	1319	51.186	64.289	0.039	13.041	5.884	58.405	1010	382	4.674	1.878	1339	0	0.000	5.279	0	4.865	12.627
2004.757	0.003	1223	922	1479	1320	51.203	64.523	0.217	13.258	5.886	58.637	1010	381	4.675	1.878	1339	0	0.000	5.494	0	4.865	12.629
2004.760	0.003	1232	925	1485	1327	51.468	64.569	-0.219	13.039	5.886	58.683	1010	390	4.675	1.879	1339	0	0.000	5.275	0	4.865	12.630
2004.762	0.003	1233	927	1488	1329	51.543	64.614	-0.030	13.009	5.886	58.728	1010	399	4.676	1.879	1339	0	0.000	5.244	0	4.865	12.631
2004.765	0.003	1232	930	1489	1329	51.576	64.721	0.073	13.082	5.887	58.833	1010	399	4.676	1.880	1339	0	0.000	5.315	0	4.865	12.632
2004.768	0.003	1232	932	1494	1332	51.682	64.748	-0.078	13.005	5.887	58.861	1010	399	4.676	1.880	1339	0	0.000	5.237	0	4.865	12.633
2004.770	0.003	1232	935	1495	1333	51.720	64.808	0.022	13.027	5.888	58.921	1010	398	4.677	1.880	1339	0	0.000	5.258	0	4.865	12.634
2004.773	0.003	1231	937	1496	1333	51.733	64.907	0.086	13.112	5.889	59.019	1010	397	4.677	1.881	1339	0	0.000	5.343	0	4.865	12.635
2004.776	0.003	1232	939	1500	1336	51.842	65.103	0.086	13.199	5.890	59.213	1010	397	4.678	1.881	1339	0	0.000	5.427	0	4.865	12.637
2004.779	0.003	1248	942	1501	1342	52.084	65.258	-0.086	13.112	5.892	59.367	1010	413	4.678	1.882	1339	0	0.000	5.339	0	4.865	12.639
2004.781	0.003	1263	944	1499	1347	52.254	65.353	-0.074	13.038	5.892	59.461	1010	444	4.678	1.882	1339	0	0.000	5.263	0	4.865	12.640
2004.784	0.003	1272	947	1499	1350	52.385	65.469	-0.016	13.022	5.893	59.576	1011	468	4.679	1.883	1339	0	0.000	5.246	0	4.865	12.641
2004.787	0.003	1282	949	1498	1354	52.519	65.555	-0.047	12.974	5.894	59.662	1011	487	4.679	1.883	1339	0	0.000	5.197	0	4.865	12.642
2004.790	0.003	1289	951	1498	1356	52.622	65.717	0.059	13.033	5.895	59.822	1011	504	4.680	1.884	1339	0	0.000	5.255	0	4.865	12.644
2004.792	0.003	1301	954	1497	1360	52.774	65.843	-0.027	13.006	5.896	59.946	1011	524	4.680	1.884	1339	0	0.000	5.226	0	4.865	12.646
2004.795	0.003	1312	956	1496	1364	52.922	65.875	-0.114	12.892	5.897	59.979	1011	547	4.681	1.885	1339	0	0.000	5.111	0	4.865	12.647
2004.798	0.003	1314	958	1496	1365	52.949	65.906	0.003	12.895	5.897	60.010	1011	562	4.681	1.885	1339	0	0.000	5.113	35	4.865	12.647
2004.801	0.003	1315	960	1495	1365	52.964	65.917	-0.004	12.891	5.897	60.020	1011	565	4.682	1.886	1339	0	0.000	5.108	177	4.866	12.648
2004.803	0.003	1315	962	1495	1365	52.960	65.920	0.007	12.898	5.897	60.023	1011	566	4.683	1.886	1339	0	0.000	5.115	300	4.866	12.649

Gas Balance MODEL R1-F
Kimball Colinville Storage Reservoir
Discrepancy History Match
E. Kimball Crossflow with Meter Error &Gas Spill

Spill threshhold
1300

		Reservoir P/Z(psia)										E.Kimball+Low Perm Gas Balance			Corunna Seckerton Crossflow					South Spill Model		
Date	dT (years)	SOUTH	A1	MID	AVG	Calc. GIP (bcf)	Inventory GIP (bcf)	Total Discrepancy (bcf)	Adjusted Cumulative Discrep. (bcf)	Cumulative Meter Error (bcf)	Adjusted Inventory GIP (bcf)	P/Z (psia)	Influx 0.0008 (mcfd)	5.0 GIP (bcf)	Cum. Influx (bcf)	Avg P/Z Cor/Sec (psi)	Influx 0.0000 (mcfd)	Cum. Influx (bcf)	Revised K/C Cumulative Discrepancy (bcf)	Gas Spill 0.00855 (mcfd)	Cum. Gas Spill (bcf)	Total Model Adjustments (bcf)
2004.806	0.003	1315	964	1494	1365	52.960	65.920	0.000	12.898	5.897	60.023	1011	565	4.683	1.887	1339	0	0.000	5.114	329	4.866	12.650
2004.809	0.003	1314	967	1494	1365	52.958	65.920	0.002	12.900	5.897	60.023	1012	564	4.684	1.887	1339	0	0.000	5.116	328	4.867	12.651
2004.811	0.003	1313	970	1494	1365	52.956	65.961	0.042	12.942	5.897	60.063	1012	562	4.684	1.888	1339	0	0.000	5.157	317	4.867	12.652
2004.814	0.003	1315	971	1492	1365	52.953	65.961	0.003	12.946	5.897	60.063	1012	563	4.685	1.889	1339	0	0.000	5.160	341	4.867	12.653
2004.817	0.003	1315	974	1493	1366	52.987	65.968	-0.027	12.919	5.897	60.070	1012	565	4.685	1.889	1339	0	0.000	5.132	329	4.868	12.654
2004.820	0.003	1315	977	1492	1365	52.974	66.060	0.105	13.024	5.898	60.162	1012	564	4.686	1.890	1339	0	0.000	5.236	311	4.868	12.656
2004.822	0.003	1322	979	1492	1368	53.078	66.060	-0.104	12.920	5.898	60.162	1012	571	4.687	1.890	1339	0	0.000	5.132	418	4.868	12.657
2004.825	0.003	1322	981	1491	1368	53.077	66.060	0.000	12.921	5.898	60.162	1012	579	4.687	1.891	1339	0	0.000	5.132	422	4.869	12.658
2004.828	0.003	1321	984	1491	1368	53.074	66.060	0.003	12.924	5.898	60.162	1012	578	4.688	1.891	1339	0	0.000	5.134	403	4.869	12.659
2004.831	0.003	1320	986	1489	1367	53.036	66.201	0.179	13.103	5.899	60.302	1013	575	4.688	1.892	1339	0	0.000	5.311	471	4.870	12.661
2004.833	0.003	1331	989	1490	1372	53.213	66.231	-0.147	12.956	5.900	60.331	1013	585	4.689	1.893	1339	0	0.000	5.164	597	4.870	12.662
2004.836	0.003	1336	991	1490	1373	53.286	66.231	-0.073	12.883	5.900	60.331	1013	602	4.689	1.893	1339	0	0.000	5.090	641	4.871	12.664
2004.839	0.003	1334	994	1489	1373	53.257	66.231	0.029	12.912	5.900	60.331	1013	605	4.690	1.894	1339	0	0.000	5.119	608	4.871	12.665
2004.842	0.003	1333	996	1489	1373	53.253	66.231	0.004	12.916	5.900	60.331	1013	602	4.691	1.894	1339	0	0.000	5.123	723	4.872	12.666
2004.844	0.003	1332	998	1488	1372	53.241	66.231	0.012	12.928	5.900	60.331	1013	600	4.691	1.895	1339	0	0.000	5.134	766	4.873	12.667
2004.847	0.003	1332	1001	1488	1372	53.235	66.264	0.039	12.967	5.900	60.364	1013	598	4.692	1.896	1339	0	0.000	5.172	742	4.874	12.669
2004.850	0.003	1334	1003	1487	1373	53.275	66.333	0.029	12.995	5.900	60.432	1013	600	4.692	1.896	1339	0	0.000	5.199	762	4.874	12.671
2004.852	0.003	1341	1007	1488	1376	53.381	66.329	-0.110	12.886	5.900	60.428	1014	610	4.693	1.897	1339	0	0.000	5.089	825	4.875	12.672
2004.855	0.003	1339	1008	1486	1375	53.336	65.886	-0.398	12.488	5.900	59.986	1014	614	4.694	1.897	1339	0	0.000	4.690	794	4.876	12.674
2004.858	0.003	1304	1010	1486	1363	52.885	65.554	0.119	12.607	5.900	59.654	1014	575	4.694	1.898	1339	0	0.000	4.809	435	4.876	12.675
2004.861	0.003	1271	1013	1486	1352	52.446	65.634	0.519	13.127	5.901	59.733	1014	504	4.695	1.898	1339	0	0.000	5.327	130	4.877	12.676
2004.863	0.003	1274	1016	1486	1353	52.487	65.418	-0.258	12.869	5.901	59.517	1014	472	4.695	1.899	1339	0	0.000	5.069	139	4.877	12.677
2004.866	0.003	1259	1017	1485	1347	52.275	65.191	-0.015	12.854	5.901	59.290	1014	460	4.696	1.899	1339	0	0.000	5.054	0	4.877	12.677
2004.869	0.003	1238	1020	1485	1340	52.004	65.144	0.224	13.078	5.901	59.243	1014	424	4.696	1.900	1339	0	0.000	5.278	0	4.877	12.678
2004.872	0.003	1233	1022	1484	1339	51.933	65.144	0.071	13.149	5.901	59.243	1014	398	4.697	1.900	1339	0	0.000	5.348	0	4.877	12.678
2004.874	0.003	1234	1025	1484	1339	51.965	65.224	0.049	13.198	5.902	59.323	1014	394	4.697	1.901	1339	0	0.000	5.395	0	4.877	12.679
2004.877	0.003	1242	1028	1484	1342	52.081	65.308	-0.033	13.164	5.902	59.405	1015	402	4.697	1.901	1339	0	0.000	5.361	0	4.877	12.680
2004.880	0.003	1250	1031	1484	1346	52.218	65.452	0.007	13.171	5.904	59.548	1015	419	4.698	1.901	1339	0	0.000	5.366	0	4.877	12.682
2004.883	0.003	1263	1033	1484	1350	52.383	65.604	-0.012	13.159	5.905	59.699	1015	440	4.698	1.902	1339	0	0.000	5.352	0	4.877	12.683
2004.885	0.003	1277	1035	1483	1355	52.569	65.780	-0.009	13.150	5.906	59.874	1015	466	4.699	1.902	1339	0	0.000	5.341	0	4.877	12.685
2004.888	0.003	1291	1038	1483	1360	52.773	65.915	-0.070	13.080	5.907	60.008	1015	495	4.699	1.903	1339	0	0.000	5.270	0	4.877	12.687
2004.891	0.003	1304	1039	1483	1365	52.945	66.036	-0.051	13.029	5.908	60.128	1015	523	4.700	1.903	1339	0	0.000	5.218	0	4.877	12.688
2004.893	0.003	1314	1041	1482	1368	53.067	66.104	-0.054	12.976	5.909	60.196	1015	547	4.700	1.904	1339	0	0.000	5.163	0	4.877	12.690
2004.896	0.003	1321	1043	1482	1371	53.177	66.176	-0.039	12.936	5.909	60.266	1015	564	4.701	1.904	1339	0	0.000	5.122	137	4.877	12.691
2004.899	0.003	1326	1045	1481	1372	53.248	65.976	-0.270	12.667	5.909	60.067	1015	577	4.701	1.905	1339	0	0.000	4.852	339	4.877	12.692
2004.902	0.003	1311	1046	1481	1367	53.037	65.494	-0.271	12.396	5.909	59.585	1015	566	4.702	1.906	1339	0	0.000	4.580	280	4.878	12.693
2004.904	0.003	1273	1048	1480	1354	52.524	65.339	0.358	12.753	5.909	59.429	1016	510	4.702	1.906	1339	0	0.000	4.938	0	4.878	12.693
2004.907	0.003	1251	1051	1480	1347	52.245	65.470	0.410	13.163	5.911	59.560	1016	449	4.703	1.907	1339	0	0.000	5.346	0	4.878	12.695
2004.910	0.003	1259	1053	1480	1350	52.358	65.341	-0.243	12.921	5.911	59.430	1016	435	4.703	1.907	1339	0	0.000	5.103	0	4.878	12.695
2004.913	0.003	1254	1054	1479	1348	52.285	65.172	-0.096	12.825	5.911	59.261	1016	438	4.704	1.907	1339	0	0.000	5.007	0	4.878	12.695
2004.915	0.003	1238	1056	1479	1342	52.072	65.018	0.059	12.884	5.911	59.108	1016	417	4.704	1.908	1339	0	0.000	5.066	0	4.878	12.696
2004.918	0.003	1224	1058	1479	1338	51.896	65.018	0.177	13.061	5.911	59.108	1016	387	4.705	1.908	1339	0	0.000	5.242	0	4.878	12.696
2004.921	0.003	1225	1060	1479	1338	51.912	65.018	-0.017	13.044	5.911	59.108	1016	373	4.705	1.909	1339	0	0.000	5.225	0	4.878	12.697
2004.923	0.003	1225	1061	1478	1338	51.900	65.018	0.012	13.056	5.911	59.108	1016	374	4.705	1.909	1339	0	0.000	5.236	0	4.878	12.697
2004.926	0.003	1226	1064	1478	1338	51.913	65.018	-0.013	13.043	5.911	59.108	1016	375	4.706	1.909	1339	0	0.000	5.223	0	4.878	12.697

Gas Balance MODEL R1-F
Kimball Colinville Storage Reservoir
Discrepancy History Match
E. Kimball Crossflow with Meter Error &Gas Spill

Spill threshhold
1300

		Reservoir P/Z(psia)										E.Kimball+Low Perm Gas Balance				Corunna Seckerton Crossflow				South Spill Model		
Date	dT (years)	SOUTH	A1	MID	AVG	Calc. GIP (bcf)	Inventory GIP (bcf)	Total Discrepancy (bcf)	Adjusted Cumulative Discrep. (bcf)	Cumulative Meter Error (bcf)	Adjusted Inventory GIP (bcf)	P/Z (psia)	Influx 0.0008 (mcfd)	5.0 GIP (bcf)	Cum. Influx (bcf)	Avg P/Z Cor/Sec (psi)	Influx 0.0000 (mcfd)	Cum. Influx (bcf)	Revised K/C Cumulative Discrepancy (bcf)	Gas Spill 0.00855 (mcfd)	Cum. Gas Spill (bcf)	Total Model Adjustments (bcf)
2004.929	0.003	1227	1066	1478	1339	51.936	65.018	-0.022	13.021	5.911	59.108	1016	377	4.706	1.910	1339	0	0.000	5.200	0	4.878	12.698
2004.932	0.003	1227	1067	1477	1339	51.936	64.772	-0.247	12.773	5.911	58.861	1016	378	4.706	1.910	1339	0	0.000	4.953	0	4.878	12.698
2004.934	0.003	1213	1069	1477	1334	51.760	64.771	0.176	12.950	5.911	58.861	1017	365	4.707	1.910	1339	0	0.000	5.129	0	4.878	12.698
2004.937	0.003	1206	1071	1477	1332	51.669	64.764	0.084	13.033	5.911	58.854	1017	344	4.707	1.911	1339	0	0.000	5.212	0	4.878	12.699
2004.940	0.003	1207	1072	1476	1332	51.681	64.764	-0.012	13.021	5.911	58.854	1017	338	4.707	1.911	1339	0	0.000	5.200	0	4.878	12.699
2004.943	0.003	1208	1074	1476	1332	51.685	64.764	-0.004	13.017	5.911	58.854	1017	339	4.708	1.911	1339	0	0.000	5.195	0	4.878	12.700
2004.945	0.003	1208	1075	1475	1332	51.685	64.764	0.000	13.017	5.911	58.854	1017	340	4.708	1.912	1339	0	0.000	5.194	0	4.878	12.700
2004.948	0.003	1209	1077	1475	1333	51.699	64.764	-0.014	13.003	5.911	58.854	1017	341	4.708	1.912	1339	0	0.000	5.180	0	4.878	12.700
2004.951	0.003	1209	1078	1474	1333	51.698	64.759	-0.004	12.999	5.911	58.849	1017	342	4.709	1.912	1339	0	0.000	5.176	0	4.878	12.701
2004.954	0.003	1210	1079	1474	1333	51.696	64.535	-0.222	12.777	5.911	58.625	1017	343	4.709	1.913	1339	0	0.000	4.953	0	4.878	12.701
2004.956	0.003	1194	1080	1473	1327	51.472	64.535	0.224	13.001	5.911	58.625	1017	327	4.709	1.913	1339	0	0.000	5.177	0	4.878	12.701
2004.959	0.003	1190	1082	1473	1326	51.437	64.511	0.010	13.011	5.911	58.600	1017	309	4.710	1.913	1339	0	0.000	5.187	0	4.878	12.702
2004.964	0.005	1182	1082	1473	1323	51.315	64.355	-0.033	12.978	5.911	58.445	1017	297	4.710	1.914	1339	0	0.000	5.154	0	4.878	12.702
2004.967	0.003	1180	1082	1472	1321	51.268	63.759	-0.549	12.429	5.911	57.849	1017	287	4.711	1.914	1339	0	0.000	4.604	0	4.878	12.702
2004.970	0.003	1146	1089	1467	1308	50.753	63.246	0.001	12.430	5.911	57.335	1017	254	4.711	1.915	1339	0	0.000	4.605	0	4.878	12.703
2004.973	0.003	1108	1089	1459	1291	50.071	62.958	0.395	12.825	5.911	57.047	1018	188	4.711	1.915	1339	0	0.000	5.000	0	4.878	12.703
2004.975	0.003	1088	1090	1458	1283	49.789	62.661	-0.014	12.811	5.911	56.751	1018	136	4.711	1.915	1339	0	0.000	4.985	0	4.878	12.703
2004.978	0.003	1062	1091	1456	1274	49.411	62.152	-0.132	12.679	5.911	56.241	1018	96	4.711	1.915	1339	0	0.000	4.854	0	4.878	12.703
2004.981	0.003	1034	1093	1451	1261	48.930	61.669	-0.001	12.678	5.911	55.759	1018	50	4.711	1.915	1339	0	0.000	4.852	0	4.878	12.703
2004.984	0.003	1008	1092	1437	1245	48.287	61.246	0.219	12.897	5.911	55.336	1018	5	4.711	1.915	1339	0	0.000	5.071	0	4.878	12.703
2004.986	0.003	988	1093	1424	1232	47.779	60.527	-0.211	12.686	5.911	54.617	1018	-32	4.711	1.915	1339	0	0.000	4.860	0	4.878	12.703
2004.989	0.003	974	1095	1404	1216	47.186	59.818	-0.115	12.571	5.911	53.908	1018	-58	4.711	1.915	1339	0	0.000	4.745	0	4.878	12.703
2004.992	0.003	961	1095	1367	1192	46.257	59.543	0.654	13.225	5.911	53.633	1018	-79	4.711	1.915	1339	0	0.000	5.399	0	4.878	12.703
2004.995	0.003	944	1097	1365	1185	45.987	59.322	0.048	13.273	5.911	53.412	1018	-103	4.711	1.915	1339	0	0.000	5.448	0	4.878	12.703
2004.997	0.003	931	1097	1368	1182	45.875	59.283	0.072	13.346	5.911	53.372	1018	-126	4.711	1.915	1339	0	0.000	5.520	0	4.878	12.703
2005.000	0.003	931	1099	1368	1182	45.875	59.252	-0.030	13.315	5.911	53.341	1018	-136	4.711	1.915	1339	0	0.000	5.490	0	4.878	12.703
2005.003	0.003	931	1097	1368	1183	45.882	59.196	-0.063	13.252	5.911	53.285	1018	-135	4.711	1.914	1339	0	0.000	5.427	0	4.878	12.702
2005.005	0.003	928	1098	1369	1182	45.859	59.155	-0.018	13.235	5.911	53.245	1018	-137	4.711	1.914	1339	0	0.000	5.410	0	4.878	12.702
2005.008	0.003	928	1097	1369	1182	45.859	59.099	-0.056	13.178	5.911	53.189	1017	-139	4.710	1.914	1339	0	0.000	5.354	0	4.878	12.702
2005.011	0.003	925	1098	1369	1181	45.816	59.078	0.022	13.200	5.911	53.167	1017	-142	4.710	1.914	1339	0	0.000	5.376	0	4.878	12.702
2005.014	0.003	925	1097	1369	1181	45.807	58.655	-0.414	12.786	5.911	52.745	1017	-144	4.710	1.914	1339	0	0.000	4.962	0	4.878	12.702
2005.016	0.003	903	1097	1364	1171	45.425	58.238	-0.035	12.751	5.911	52.328	1017	-160	4.710	1.914	1339	0	0.000	4.927	0	4.878	12.702
2005.019	0.003	875	1097	1360	1159	44.954	58.147	0.379	13.131	5.911	52.236	1017	-196	4.710	1.913	1339	0	0.000	5.307	0	4.878	12.702
2005.022	0.003	868	1097	1357	1155	44.817	57.994	-0.016	13.115	5.911	52.084	1017	-220	4.710	1.913	1339	0	0.000	5.291	0	4.878	12.701
2005.025	0.003	861	1096	1355	1151	44.663	57.790	-0.050	13.065	5.911	51.879	1017	-229	4.709	1.913	1339	0	0.000	5.241	0	4.878	12.701
2005.027	0.003	844	1096	1356	1146	44.453	57.477	-0.102	12.963	5.911	51.567	1017	-246	4.709	1.913	1339	0	0.000	5.139	0	4.878	12.701
2005.030	0.003	821	1095	1354	1137	44.117	57.013	-0.128	12.835	5.911	51.103	1017	-273	4.709	1.913	1339	0	0.000	5.012	0	4.878	12.701
2005.033	0.003	802	1094	1344	1125	43.644	56.812	0.271	13.105	5.911	50.901	1017	-300	4.709	1.912	1339	0	0.000	5.283	0	4.878	12.700
2005.036	0.003	787	1096	1343	1119	43.420	56.746	0.159	13.264	5.911	50.836	1017	-322	4.708	1.912	1339	0	0.000	5.442	0	4.878	12.700
2005.038	0.003	784	1092	1340	1117	43.317	56.082	-0.561	12.703	5.911	50.171	1017	-334	4.708	1.912	1339	0	0.000	4.881	0	4.878	12.700
2005.041	0.003	765	1092	1324	1101	42.713	55.437	-0.041	12.662	5.911	49.527	1017	-347	4.708	1.911	1339	0	0.000	4.841	0	4.878	12.699
2005.044	0.003	739	1091	1302	1080	41.918	54.675	0.032	12.694	5.911	48.764	1017	-375	4.707	1.911	1339	0	0.000	4.873	0	4.878	12.699
2005.047	0.003	712	1090	1285	1062	41.194	53.816	-0.135	12.559	5.911	47.905	1017	-406	4.707	1.910	1339	0	0.000	4.738	0	4.878	12.698
2005.049	0.003	691	1088	1249	1035	40.173	52.928	0.134	12.694	5.911	47.018	1017	-433	4.706	1.910	1339	0	0.000	4.873	0	4.878	12.698
2005.052	0.003	668	1087	1213	1008	39.121	52.356	0.479	13.173	5.911	46.445	1017	-458	4.706	1.910	1339	0	0.000	5.353	0	4.878	12.698

Gas Balance MODEL R1-F
Kimball Colinville Storage Reservoir
Discrepancy History Match
E. Kimball Crossflow with Meter Error &Gas Spill

Spill threshhold
1300

		Reservoir P/Z(psia)									E.Kimball+Low Perm Gas Balance				Corunna Seckerton Crossflow					South Spill Model		
Date	dT (years)	SOUTH	A1	MID	AVG	Calc. GIP (bcf)	Inventory GIP (bcf)	Total Discrepancy (bcf)	Adjusted Cumulative Discrep. (bcf)	Cumulative Meter Error (bcf)	Adjusted Inventory GIP (bcf)	P/Z (psia)	Influx 0.0008 (mcfd)	5.0 GIP (bcf)	Cum. Influx (bcf)	Avg P/Z Cor/Sec (psi)	Influx 0.0000 (mcfd)	Cum. Influx (bcf)	Revised K/C Cumulative Discrepancy (bcf)	Gas Spill 0.00855 (mcfd)	Cum. Gas Spill (bcf)	Total Model Adjustments (bcf)
2005.055	0.003	649	1085	1192	991	38.433	51.515	-0.152	13.021	5.911	45.605	1016	-480	4.705	1.909	1339	0	0.000	5.201	0	4.878	12.697
2005.058	0.003	633	1084	1166	971	37.668	50.888	0.137	13.158	5.911	44.977	1016	-498	4.705	1.909	1339	0	0.000	5.339	0	4.878	12.697
2005.060	0.003	614	1084	1143	952	36.942	50.071	-0.091	13.067	5.911	44.161	1016	-516	4.704	1.908	1339	0	0.000	5.249	0	4.878	12.696
2005.063	0.003	595	1081	1115	930	36.099	49.351	0.123	13.191	5.911	43.441	1016	-534	4.704	1.908	1339	0	0.000	5.373	0	4.878	12.696
2005.068	0.005	560	1079	1068	893	34.660	48.206	0.293	13.484	5.911	42.295	1016	-559	4.703	1.906	1339	0	0.000	5.667	0	4.878	12.694
2005.071	0.003	546	1078	1051	880	34.122	47.543	-0.125	13.359	5.911	41.632	1016	-581	4.702	1.906	1339	0	0.000	5.542	0	4.878	12.694
2005.074	0.003	534	1074	1036	867	33.640	46.797	-0.264	13.095	5.911	40.886	1016	-592	4.702	1.905	1339	0	0.000	5.279	0	4.878	12.693
2005.077	0.003	522	1071	988	837	32.480	46.040	0.404	13.498	5.911	40.130	1016	-602	4.701	1.905	1339	0	0.000	5.683	0	4.878	12.693
2005.079	0.003	512	1072	971	825	32.002	45.436	-0.126	13.372	5.911	39.526	1015	-611	4.700	1.904	1339	0	0.000	5.558	0	4.878	12.692
2005.082	0.003	502	1070	942	806	31.280	44.839	0.125	13.497	5.911	38.928	1015	-619	4.700	1.903	1339	0	0.000	5.683	0	4.878	12.691
2005.085	0.003	492	1067	922	791	30.701	44.031	-0.230	13.267	5.911	38.120	1015	-627	4.699	1.903	1339	0	0.000	5.454	0	4.878	12.691
2005.088	0.003	482	1066	890	771	29.912	43.269	0.027	13.294	5.911	37.358	1015	-634	4.698	1.902	1339	0	0.000	5.482	0	4.878	12.690
2005.090	0.003	472	1063	853	748	29.011	42.666	0.299	13.593	5.911	36.756	1015	-642	4.698	1.901	1339	0	0.000	5.781	0	4.878	12.690
2005.093	0.003	461	1061	826	730	28.308	42.026	0.063	13.657	5.911	36.116	1015	-650	4.697	1.901	1339	0	0.000	5.845	0	4.878	12.689
2005.096	0.003	453	1059	806	716	27.770	41.642	0.153	13.810	5.911	35.731	1015	-656	4.696	1.900	1339	0	0.000	5.999	0	4.878	12.688
2005.099	0.003	450	1056	789	705	27.366	41.322	0.085	13.895	5.911	35.412	1014	-660	4.696	1.900	1339	0	0.000	6.085	0	4.878	12.688
2005.101	0.003	448	1054	779	699	27.130	41.013	-0.074	13.821	5.911	35.102	1014	-662	4.695	1.899	1339	0	0.000	6.011	0	4.878	12.687
2005.104	0.003	444	1052	772	694	26.918	40.721	-0.080	13.741	5.911	34.810	1014	-664	4.694	1.898	1339	0	0.000	5.933	0	4.878	12.686
2005.107	0.003	440	1049	764	688	26.680	40.438	-0.045	13.696	5.911	34.528	1014	-666	4.694	1.898	1339	0	0.000	5.888	0	4.878	12.686
2005.110	0.003	437	1046	756	682	26.454	40.170	-0.042	13.654	5.911	34.260	1014	-669	4.693	1.897	1339	0	0.000	5.847	0	4.878	12.685
2005.112	0.003	433	1043	747	676	26.217	39.909	-0.024	13.630	5.911	33.998	1014	-671	4.692	1.896	1339	0	0.000	5.823	0	4.878	12.684
2005.115	0.003	430	1042	740	670	26.012	39.648	-0.055	13.575	5.911	33.738	1014	-673	4.692	1.896	1339	0	0.000	5.769	0	4.878	12.684
2005.118	0.003	425	1038	731	664	25.770	39.372	-0.035	13.540	5.911	33.461	1013	-676	4.691	1.895	1339	0	0.000	5.734	0	4.878	12.683
2005.121	0.003	422	1036	723	658	25.526	39.111	-0.017	13.523	5.911	33.200	1013	-678	4.690	1.894	1339	0	0.000	5.718	0	4.878	12.682
2005.123	0.003	418	1034	714	652	25.286	38.855	-0.016	13.506	5.911	32.944	1013	-680	4.690	1.893	1339	0	0.000	5.702	0	4.878	12.682
2005.126	0.003	414	1031	705	646	25.048	38.723	0.108	13.614	5.911	32.813	1013	-683	4.689	1.893	1339	0	0.000	5.811	0	4.878	12.681
2005.129	0.003	412	1027	699	641	24.876	38.237	-0.315	13.299	5.911	32.326	1013	-684	4.688	1.892	1339	0	0.000	5.496	0	4.878	12.680
2005.132	0.003	404	1024	689	633	24.544	37.830	-0.075	13.224	5.911	31.919	1013	-687	4.688	1.891	1339	0	0.000	5.422	0	4.878	12.679
2005.134	0.003	400	1020	669	620	24.066	37.454	0.103	13.327	5.911	31.544	1013	-691	4.687	1.891	1339	0	0.000	5.525	0	4.878	12.679
2005.137	0.003	403	1018	649	610	23.680	37.080	0.012	13.338	5.911	31.169	1012	-691	4.686	1.890	1339	0	0.000	5.538	0	4.878	12.678
2005.140	0.003	406	1015	629	601	23.302	36.721	0.019	13.357	5.911	30.811	1012	-689	4.686	1.889	1339	0	0.000	5.557	0	4.878	12.677
2005.142	0.003	408	1014	611	592	22.953	36.407	0.035	13.392	5.911	30.496	1012	-687	4.685	1.889	1339	0	0.000	5.593	0	4.878	12.677
2005.145	0.003	410	1010	594	583	22.616	36.149	0.079	13.471	5.911	30.239	1012	-685	4.684	1.888	1339	0	0.000	5.672	0	4.878	12.676
2005.148	0.003	413	1006	581	576	22.358	35.896	0.005	13.476	5.911	29.985	1012	-684	4.684	1.887	1339	0	0.000	5.678	0	4.878	12.675
2005.151	0.003	415	1004	570	571	22.156	35.656	-0.038	13.438	5.911	29.746	1012	-682	4.683	1.887	1339	0	0.000	5.641	0	4.878	12.675
2005.153	0.003	417	1000	558	565	21.924	35.424	0.000	13.438	5.911	29.514	1012	-680	4.682	1.886	1339	0	0.000	5.641	0	4.878	12.674
2005.156	0.003	418	998	548	560	21.723	35.191	-0.032	13.406	5.911	29.280	1011	-679	4.682	1.885	1339	0	0.000	5.610	0	4.878	12.673
2005.159	0.003	420	994	537	555	21.516	34.960	-0.024	13.382	5.911	29.049	1011	-677	4.681	1.885	1339	0	0.000	5.587	0	4.878	12.673
2005.162	0.003	422	992	526	549	21.294	34.731	-0.007	13.375	5.911	28.821	1011	-676	4.680	1.884	1339	0	0.000	5.581	0	4.878	12.672
2005.164	0.003	423	989	518	545	21.132	34.513	-0.056	13.319	5.911	28.603	1011	-675	4.680	1.883	1339	0	0.000	5.525	0	4.878	12.671
2005.173	0.008	429	979	483	527	20.437	33.904	0.086	13.404	5.911	27.993	1011	-672	4.678	1.881	1339	0	0.000	5.613	0	4.878	12.669
2005.175	0.003	430	977	477	524	20.327	33.793	0.000	13.405	5.911	27.883	1010	-670	4.677	1.881	1339	0	0.000	5.614	0	4.878	12.669
2005.178	0.003	431	974	471	521	20.204	33.688	0.017	13.422	5.911	27.777	1010	-668	4.676	1.880	1339	0	0.000	5.631	0	4.878	12.668
2005.181	0.003	433	972	467	519	20.146	33.527	-0.103	13.319	5.911	27.616	1010	-667	4.676	1.879	1339	0	0.000	5.529	0	4.878	12.667
2005.184	0.003	433	968	462	516	20.025	33.278	-0.128	13.191	5.911	27.368	1010	-666	4.675	1.879	1339	0	0.000	5.402	0	4.878	12.667

Gas Balance MODEL R1-F
Kimball Colinville Storage Reservoir
Discrepancy History Match
E. Kimball Crossflow with Meter Error &Gas Spill

Spill threshhold
1300

		Reservoir P/Z(psia)									E.Kimball+Low Perm Gas Balance				Corunna Seckerton Crossflow					South Spill Model		
Date	dT (years)	SOUTH	A1	MID	AVG	Calc. GIP (bcf)	Inventory GIP (bcf)	Total Discrepancy (bcf)	Adjusted Cumulative Discrep. (bcf)	Cumulative Meter Error (bcf)	Adjusted Inventory GIP (bcf)	P/Z (psia)	Influx 0.0008 (mcfd)	5.0 GIP (bcf)	Cum. Influx (bcf)	Avg P/Z Cor/Sec (psi)	Influx 0.0000 (mcfd)	Cum. Influx (bcf)	Revised K/C Cumulative Discrepancy (bcf)	Gas Spill 0.00855 (mcfd)	Cum. Gas Spill (bcf)	Total Model Adjustments (bcf)
2005.186	0.003	435	966	451	510	19.805	33.074	0.015	13.206	5.911	27.163	1010	-665	4.674	1.878	1339	0	0.000	5.418	0	4.878	12.666
2005.189	0.003	436	963	438	504	19.543	32.974	0.162	13.369	5.911	27.063	1010	-664	4.674	1.877	1339	0	0.000	5.581	0	4.878	12.665
2005.192	0.003	437	959	432	501	19.423	32.974	0.120	13.489	5.911	27.063	1009	-663	4.673	1.877	1339	0	0.000	5.702	0	4.878	12.665
2005.195	0.003	439	957	434	502	19.471	32.938	-0.083	13.406	5.911	27.028	1009	-662	4.672	1.876	1339	0	0.000	5.619	0	4.878	12.664
2005.214	0.019	446	937	433	501	19.445	32.722	-0.190	13.215	5.911	26.812	1009	-659	4.668	1.871	1339	0	0.000	5.433	0	4.878	12.659
2005.216	0.003	447	935	434	502	19.469	32.722	-0.024	13.192	5.911	26.812	1008	-655	4.667	1.871	1339	0	0.000	5.410	0	4.878	12.659
2005.219	0.003	447	932	436	503	19.497	32.722	-0.028	13.164	5.911	26.812	1008	-653	4.666	1.870	1339	0	0.000	5.383	0	4.878	12.658
2005.222	0.003	448	929	437	503	19.513	32.722	-0.016	13.147	5.911	26.812	1008	-652	4.666	1.869	1339	0	0.000	5.368	0	4.878	12.657
2005.225	0.003	449	927	438	504	19.542	32.630	-0.122	13.026	5.911	26.719	1008	-652	4.665	1.869	1339	0	0.000	5.246	0	4.878	12.657
2005.227	0.003	450	924	436	502	19.488	32.630	0.054	13.080	5.911	26.719	1008	-651	4.664	1.868	1339	0	0.000	5.301	0	4.878	12.656
2005.230	0.003	451	921	433	501	19.445	32.630	0.043	13.123	5.911	26.719	1007	-650	4.664	1.867	1339	0	0.000	5.345	0	4.878	12.655
2005.233	0.003	452	918	435	502	19.466	32.676	0.025	13.148	5.911	26.765	1007	-649	4.663	1.867	1339	0	0.000	5.370	0	4.878	12.655
2005.236	0.003	456	916	436	504	19.536	32.722	-0.023	13.125	5.911	26.811	1007	-647	4.662	1.866	1339	0	0.000	5.347	0	4.878	12.655
2005.238	0.003	461	913	437	506	19.612	32.768	-0.031	13.094	5.912	26.857	1007	-643	4.662	1.865	1339	0	0.000	5.317	0	4.878	12.655
2005.241	0.003	466	910	437	507	19.679	33.006	0.171	13.265	5.914	27.092	1007	-639	4.661	1.865	1339	0	0.000	5.487	0	4.878	12.656
2005.244	0.003	483	909	438	513	19.911	33.035	-0.203	13.062	5.914	27.121	1007	-631	4.660	1.864	1339	0	0.000	5.284	0	4.878	12.656
2005.247	0.003	493	906	439	517	20.049	33.201	0.028	13.090	5.915	27.286	1007	-620	4.660	1.864	1339	0	0.000	5.311	0	4.878	12.656
2005.249	0.003	507	903	439	521	20.231	33.108	-0.276	12.814	5.915	27.193	1007	-611	4.659	1.863	1339	0	0.000	5.036	0	4.878	12.656
2005.252	0.003	501	900	440	520	20.163	33.020	-0.020	12.795	5.915	27.104	1006	-607	4.659	1.862	1339	0	0.000	5.017	0	4.878	12.655
2005.255	0.003	494	898	441	517	20.063	32.886	-0.034	12.761	5.915	26.970	1006	-612	4.658	1.862	1339	0	0.000	4.984	0	4.878	12.654
2005.258	0.003	482	895	442	513	19.908	32.801	0.071	12.831	5.915	26.886	1006	-619	4.657	1.861	1339	0	0.000	5.055	0	4.878	12.654
2005.260	0.003	473	893	442	510	19.781	32.720	0.045	12.877	5.915	26.805	1006	-627	4.657	1.860	1339	0	0.000	5.101	0	4.878	12.653
2005.263	0.003	466	891	443	507	19.682	32.755	0.134	13.011	5.916	26.840	1006	-633	4.656	1.860	1339	0	0.000	5.236	0	4.878	12.653
2005.266	0.003	469	889	443	509	19.735	32.716	-0.092	12.919	5.916	26.800	1006	-634	4.655	1.859	1339	0	0.000	5.144	0	4.878	12.652
2005.268	0.003	468	886	444	508	19.708	32.750	0.061	12.980	5.916	26.835	1006	-633	4.655	1.859	1339	0	0.000	5.206	0	4.878	12.652
2005.271	0.003	470	884	444	509	19.741	32.784	0.001	12.981	5.916	26.868	1005	-633	4.654	1.858	1339	0	0.000	5.207	0	4.878	12.651
2005.274	0.003	474	881	445	510	19.798	32.817	-0.025	12.956	5.916	26.900	1005	-630	4.654	1.857	1339	0	0.000	5.183	0	4.878	12.651
2005.277	0.003	479	880	445	512	19.849	32.759	-0.108	12.848	5.916	26.843	1005	-627	4.653	1.857	1339	0	0.000	5.075	0	4.878	12.651
2005.279	0.003	476	877	446	511	19.811	32.759	0.038	12.886	5.916	26.843	1005	-626	4.652	1.856	1339	0	0.000	5.114	0	4.878	12.650
2005.282	0.003	475	874	446	510	19.795	32.800	0.057	12.943	5.917	26.884	1005	-627	4.652	1.855	1339	0	0.000	5.171	0	4.878	12.650
2005.285	0.003	479	873	447	512	19.850	32.856	0.001	12.944	5.917	26.939	1005	-626	4.651	1.855	1339	0	0.000	5.172	0	4.878	12.649
2005.288	0.003	485	870	447	514	19.931	32.856	-0.081	12.863	5.917	26.939	1005	-622	4.650	1.854	1339	0	0.000	5.092	0	4.878	12.649
2005.290	0.003	486	868	447	514	19.940	32.947	0.082	12.945	5.918	27.029	1004	-619	4.650	1.854	1339	0	0.000	5.174	0	4.878	12.649
2005.293	0.003	494	866	448	517	20.045	33.035	-0.018	12.927	5.919	27.116	1004	-615	4.649	1.853	1339	0	0.000	5.156	0	4.878	12.649
2005.296	0.003	502	864	449	520	20.160	33.035	-0.114	12.813	5.919	27.116	1004	-609	4.649	1.852	1339	0	0.000	5.043	0	4.878	12.648
2005.299	0.003	504	862	449	520	20.182	33.035	-0.022	12.791	5.919	27.116	1004	-604	4.648	1.852	1339	0	0.000	5.021	0	4.878	12.648
2005.301	0.003	504	859	449	520	20.168	33.035	0.014	12.805	5.919	27.116	1004	-603	4.647	1.851	1339	0	0.000	5.035	0	4.878	12.647
2005.304	0.003	505	858	450	520	20.183	33.035	-0.015	12.790	5.919	27.116	1004	-603	4.647	1.851	1339	0	0.000	5.021	0	4.878	12.647
2005.307	0.003	505	855	449	520	20.161	33.035	0.022	12.812	5.919	27.116	1004	-602	4.646	1.850	1339	0	0.000	5.044	0	4.878	12.646
2005.310	0.003	505	854	450	520	20.176	33.035	-0.015	12.797	5.919	27.116	1004	-602	4.646	1.849	1339	0	0.000	5.029	0	4.878	12.645
2005.312	0.003	505	851	450	520	20.176	33.035	0.000	12.797	5.919	27.116	1003	-601	4.645	1.849	1339	0	0.000	5.030	0	4.878	12.645
2005.315	0.003	506	850	451	520	20.182	33.035	-0.007	12.791	5.919	27.116	1003	-601	4.644	1.848	1339	0	0.000	5.024	0	4.878	12.644
2005.318	0.003	506	848	451	520	20.187	33.035	-0.005	12.786	5.919	27.116	1003	-600	4.644	1.848	1339	0	0.000	5.020	0	4.878	12.644
2005.321	0.003	506	846	451	520	20.183	33.035	0.004	12.790	5.919	27.116	1003	-600	4.643	1.847	1339	0	0.000	5.025	0	4.878	12.643
2005.323	0.003	507	844	452	520	20.185	33.035	-0.002	12.788	5.919	27.116	1003	-599	4.643	1.846	1339	0	0.000	5.023	0	4.878	12.642

Gas Balance MODEL R1-F
Kimball Colinville Storage Reservoir
Discrepancy History Match
E. Kimball Crossflow with Meter Error &Gas Spill

Spill threshhold
1300

		Reservoir P/Z(psia)									E.Kimball+Low Perm Gas Balance				Corunna Seckerton Crossflow					South Spill Model		
Date	dT (years)	SOUTH	A1	MID	AVG	Calc. GIP (bcf)	Inventory GIP (bcf)	Total Discrepancy (bcf)	Adjusted Cumulative Discrep. (bcf)	Cumulative Meter Error (bcf)	Adjusted Inventory GIP (bcf)	P/Z (psia)	Influx 0.0008 (mcfd)	5.0 GIP (bcf)	Cum. Influx (bcf)	Avg P/Z Cor/Sec (psi)	Influx 0.0000 (mcfd)	Cum. Influx (bcf)	Revised K/C Cumulative Discrepancy (bcf)	Gas Spill 0.00855 (mcfd)	Cum. Gas Spill (bcf)	Total Model Adjustments (bcf)
2005.326	0.003	507	841	452	520	20.185	33.035	0.000	12.788	5.919	27.116	1003	-599	4.642	1.846	1339	0	0.000	5.023	0	4.878	12.642
2005.329	0.003	508	840	452	520	20.190	33.035	-0.005	12.783	5.919	27.116	1003	-598	4.641	1.845	1339	0	0.000	5.019	0	4.878	12.641
2005.332	0.003	508	838	453	521	20.195	33.035	-0.005	12.778	5.919	27.116	1003	-598	4.641	1.845	1339	0	0.000	5.015	0	4.878	12.641
2005.334	0.003	508	836	453	521	20.197	33.035	-0.003	12.776	5.919	27.116	1002	-597	4.640	1.844	1339	0	0.000	5.013	0	4.878	12.640
2005.337	0.003	509	834	453	521	20.195	33.035	0.003	12.778	5.919	27.116	1002	-597	4.640	1.843	1339	0	0.000	5.017	0	4.878	12.639
2005.340	0.003	509	832	454	521	20.195	33.035	-0.001	12.778	5.919	27.116	1002	-597	4.639	1.843	1339	0	0.000	5.017	0	4.878	12.639
2005.342	0.003	509	831	454	521	20.200	33.035	-0.005	12.773	5.919	27.116	1002	-596	4.638	1.842	1339	0	0.000	5.013	0	4.878	12.638
2005.345	0.003	509	829	454	521	20.202	33.094	0.057	12.830	5.919	27.175	1002	-596	4.638	1.842	1339	0	0.000	5.070	0	4.878	12.638
2005.348	0.003	515	827	454	523	20.276	33.335	0.166	12.997	5.921	27.414	1002	-593	4.637	1.841	1339	0	0.000	5.235	0	4.878	12.639
2005.351	0.003	519	825	462	528	20.471	33.603	0.073	13.070	5.923	27.679	1002	-589	4.637	1.840	1339	0	0.000	5.306	0	4.878	12.641
2005.353	0.003	521	824	476	536	20.780	33.858	-0.054	13.016	5.925	27.933	1002	-586	4.636	1.840	1339	0	0.000	5.251	0	4.878	12.643
2005.356	0.003	520	822	494	544	21.123	34.189	-0.012	13.004	5.928	28.261	1001	-586	4.635	1.839	1339	0	0.000	5.237	0	4.878	12.645
2005.359	0.003	521	821	512	554	21.501	34.421	-0.146	12.858	5.930	28.491	1001	-585	4.635	1.839	1339	0	0.000	5.089	0	4.878	12.646
2005.362	0.003	523	819	527	562	21.819	34.462	-0.277	12.581	5.930	28.532	1001	-584	4.634	1.838	1339	0	0.000	4.813	0	4.878	12.646
2005.364	0.003	527	817	530	565	21.921	34.483	-0.081	12.500	5.930	28.552	1001	-581	4.634	1.837	1339	0	0.000	4.732	0	4.878	12.645
2005.367	0.003	528	815	528	564	21.897	34.701	0.241	12.742	5.932	28.769	1001	-579	4.633	1.837	1339	0	0.000	4.972	0	4.878	12.647
2005.370	0.003	530	814	536	569	22.077	34.826	-0.055	12.687	5.933	28.892	1001	-577	4.633	1.836	1339	0	0.000	4.918	0	4.878	12.647
2005.373	0.003	531	812	543	573	22.225	34.864	-0.111	12.576	5.934	28.930	1001	-576	4.632	1.836	1339	0	0.000	4.807	0	4.878	12.647
2005.375	0.003	535	811	545	575	22.320	35.017	0.058	12.634	5.935	29.082	1001	-574	4.631	1.835	1339	0	0.000	4.864	0	4.878	12.647
2005.378	0.003	542	809	547	578	22.429	35.341	0.216	12.850	5.938	29.404	1000	-569	4.631	1.835	1339	0	0.000	5.078	0	4.878	12.650
2005.381	0.003	555	808	554	587	22.758	35.638	-0.032	12.818	5.940	29.698	1000	-560	4.630	1.834	1339	0	0.000	5.044	0	4.878	12.651
2005.384	0.003	568	806	565	596	23.136	36.003	-0.012	12.805	5.943	30.060	1000	-548	4.630	1.833	1339	0	0.000	5.029	0	4.878	12.654
2005.386	0.003	581	805	576	607	23.532	36.274	-0.125	12.680	5.945	30.329	1000	-536	4.629	1.833	1339	0	0.000	4.902	0	4.878	12.656
2005.389	0.003	592	803	586	615	23.870	36.497	-0.115	12.565	5.947	30.550	1000	-525	4.629	1.832	1339	0	0.000	4.785	0	4.878	12.657
2005.392	0.003	601	802	593	622	24.133	36.646	-0.113	12.452	5.948	30.698	1000	-515	4.628	1.832	1339	0	0.000	4.672	0	4.878	12.658
2005.395	0.003	607	800	597	626	24.300	36.800	-0.014	12.438	5.949	30.850	1000	-508	4.628	1.831	1339	0	0.000	4.657	0	4.878	12.658
2005.397	0.003	611	799	603	630	24.457	37.134	0.176	12.615	5.952	31.181	1000	-502	4.627	1.831	1339	0	0.000	4.831	0	4.878	12.661
2005.400	0.003	621	797	611	638	24.760	37.420	-0.017	12.597	5.955	31.465	999	-495	4.627	1.830	1339	0	0.000	4.813	0	4.878	12.662
2005.403	0.003	632	796	622	647	25.107	37.641	-0.126	12.471	5.956	31.684	999	-485	4.626	1.830	1339	0	0.000	4.685	0	4.878	12.664
2005.405	0.003	639	794	630	654	25.360	37.865	-0.028	12.443	5.958	31.907	999	-476	4.626	1.829	1339	0	0.000	4.656	0	4.878	12.665
2005.408	0.003	646	792	637	660	25.603	38.057	-0.051	12.392	5.960	32.097	999	-468	4.625	1.829	1339	0	0.000	4.603	0	4.878	12.666
2005.411	0.003	652	791	644	665	25.803	38.241	-0.015	12.377	5.961	32.280	999	-462	4.625	1.828	1339	0	0.000	4.587	0	4.878	12.667
2005.414	0.003	657	790	649	670	25.986	38.521	0.096	12.473	5.964	32.558	999	-456	4.624	1.828	1339	0	0.000	4.681	0	4.878	12.669
								0.0000%		100.00%			0.0008							0.008550		
2005.416	0.002	664	788	656	676	26.217	38.972	0.220	12.693	5.964	33.008	999	-449	4.624	1.828	1339	0	0.000	4.901	0	4.878	12.669
2005.419	0.003	676	787	672	688	26.683	39.243	-0.195	12.498	5.964	33.279	999	-439	4.623	1.827	1339	0	0.000	4.707	0	4.878	12.668
2005.422	0.003	686	786	682	696	27.013	39.283	-0.290	12.208	5.964	33.320	999	-427	4.623	1.827	1339	0	0.000	4.418	0	4.878	12.668
2005.424	0.003	688	785	684	698	27.087	39.477	0.121	12.329	5.964	33.514	999	-420	4.623	1.826	1339	0	0.000	4.539	0	4.878	12.667
2005.427	0.003	697	783	685	702	27.225	39.613	-0.002	12.326	5.964	33.650	998	-414	4.622	1.826	1339	0	0.000	4.537	0	4.878	12.667
2005.430	0.003	709	782	684	705	27.346	39.640	-0.094	12.233	5.964	33.677	998	-402	4.622	1.826	1339	0	0.000	4.443	0	4.878	12.667
2005.433	0.003	713	781	683	706	27.380	39.642	-0.033	12.200	5.964	33.678	998	-393	4.621	1.825	1339	0	0.000	4.411	0	4.878	12.666
2005.435	0.003	712	780	683	705	27.352	39.736	0.123	12.323	5.964	33.773	998	-391	4.621	1.825	1339	0	0.000	4.534	0	4.878	12.666
2005.438	0.003	720	779	682	708	27.451	39.782	-0.053	12.269	5.964	33.819	998	-387	4.621	1.824	1339	0	0.000	4.481	0	4.878	12.665
2005.441	0.003	723	778	682	708	27.470	39.790	-0.011	12.258	5.964	33.827	998	-381	4.620	1.824	1339	0	0.000	4.471	0	4.878	12.665

Gas Balance MODEL R1-F
Kimball Colinville Storage Reservoir
Discrepancy History Match
E. Kimball Crossflow with Meter Error &Gas Spill

Spill threshhold
1300

		Reservoir P/Z(psia)									E.Kimball+Low Perm Gas Balance				Corunna Seckerton Crossflow					South Spill Model		
Date	dT (years)	SOUTH	A1	MID	AVG	Calc. GIP (bcf)	Inventory GIP (bcf)	Total Discrepancy (bcf)	Adjusted Cumulative Discrep. (bcf)	Cumulative Meter Error (bcf)	Adjusted Inventory GIP (bcf)	P/Z (psia)	Influx 0.0008 (mcfd)	5.0 GIP (bcf)	Cum. Influx (bcf)	Avg P/Z Cor/Sec (psi)	Influx 0.0000 (mcfd)	Cum. Influx (bcf)	Revised K/C Cumulative Discrepancy (bcf)	Gas Spill 0.00855 (mcfd)	Cum. Gas Spill (bcf)	Total Model Adjustments (bcf)
2005.444	0.003	723	777	682	708	27.465	39.810	0.024	12.282	5.964	33.846	998	-379	4.620	1.824	1339	0	0.000	4.495	0	4.878	12.665
2005.446	0.003	723	776	682	708	27.457	39.854	0.053	12.335	5.964	33.891	998	-379	4.619	1.823	1339	0	0.000	4.548	0	4.878	12.664
2005.449	0.003	726	775	681	709	27.494	39.889	-0.002	12.334	5.964	33.926	998	-377	4.619	1.823	1339	0	0.000	4.547	0	4.878	12.664
2005.452	0.003	730	774	681	710	27.535	39.958	0.027	12.361	5.964	33.994	998	-373	4.619	1.822	1339	0	0.000	4.575	0	4.878	12.664
2005.454	0.003	735	773	681	711	27.589	40.027	0.015	12.376	5.964	34.063	998	-367	4.618	1.822	1339	0	0.000	4.590	0	4.878	12.663
2005.457	0.003	741	772	681	713	27.675	40.058	-0.055	12.321	5.964	34.094	998	-361	4.618	1.822	1339	0	0.000	4.535	0	4.878	12.663
2005.460	0.003	741	772	681	713	27.675	40.140	0.082	12.403	5.964	34.176	997	-357	4.618	1.821	1339	0	0.000	4.618	0	4.878	12.662
2005.463	0.003	746	771	681	715	27.731	40.171	-0.025	12.378	5.964	34.207	997	-354	4.617	1.821	1339	0	0.000	4.594	0	4.878	12.662
2005.465	0.003	752	770	681	717	27.822	40.171	-0.092	12.287	5.964	34.207	997	-347	4.617	1.821	1339	0	0.000	4.502	0	4.878	12.662
2005.468	0.003	752	770	681	717	27.822	40.171	0.000	12.287	5.964	34.207	997	-343	4.617	1.820	1339	0	0.000	4.503	0	4.878	12.661
2005.471	0.003	750	769	681	716	27.786	40.185	0.050	12.337	5.964	34.222	997	-344	4.616	1.820	1339	0	0.000	4.553	0	4.878	12.661
2005.474	0.003	751	768	681	716	27.781	40.214	0.033	12.370	5.964	34.250	997	-345	4.616	1.820	1339	0	0.000	4.587	0	4.878	12.661
2005.476	0.003	751	768	681	716	27.787	40.302	0.083	12.453	5.964	34.338	997	-345	4.616	1.819	1339	0	0.000	4.670	0	4.878	12.660
2005.479	0.003	760	766	681	719	27.892	40.397	-0.009	12.444	5.964	34.433	997	-339	4.615	1.819	1339	0	0.000	4.661	0	4.878	12.660
2005.482	0.003	768	766	681	722	27.995	40.464	-0.037	12.407	5.964	34.500	997	-329	4.615	1.819	1339	0	0.000	4.625	0	4.878	12.660
2005.485	0.003	774	765	681	724	28.072	40.551	0.010	12.416	5.964	34.587	997	-320	4.615	1.818	1339	0	0.000	4.635	0	4.878	12.659
2005.487	0.003	778	765	682	726	28.160	40.551	-0.087	12.329	5.964	34.587	997	-313	4.614	1.818	1339	0	0.000	4.548	0	4.878	12.659
2005.490	0.003	778	765	682	726	28.160	40.558	0.007	12.337	5.964	34.595	997	-311	4.614	1.818	1339	0	0.000	4.555	0	4.878	12.659
2005.493	0.003	777	764	682	725	28.146	40.558	0.014	12.351	5.964	34.595	997	-311	4.614	1.817	1339	0	0.000	4.570	0	4.878	12.658
2005.496	0.003	776	764	683	725	28.145	40.572	0.014	12.365	5.964	34.608	997	-312	4.613	1.817	1339	0	0.000	4.584	0	4.878	12.658
2005.498	0.003	776	764	683	725	28.145	40.611	0.039	12.404	5.964	34.647	996	-312	4.613	1.817	1339	0	0.000	4.623	0	4.878	12.658
2005.501	0.003	780	763	683	727	28.200	40.654	-0.011	12.392	5.964	34.690	996	-310	4.613	1.816	1339	0	0.000	4.612	0	4.878	12.658
2005.504	0.003	783	764	683	728	28.249	40.766	0.064	12.456	5.964	34.803	996	-306	4.612	1.816	1339	0	0.000	4.676	0	4.878	12.657
2005.507	0.003	791	763	683	730	28.339	40.839	-0.018	12.437	5.964	34.875	996	-299	4.612	1.816	1339	0	0.000	4.658	0	4.878	12.657
2005.509	0.003	798	764	684	733	28.448	40.937	-0.010	12.427	5.964	34.973	996	-289	4.612	1.816	1339	0	0.000	4.648	0	4.878	12.657
2005.512	0.003	804	762	683	735	28.519	41.027	0.018	12.445	5.964	35.063	996	-281	4.612	1.815	1339	0	0.000	4.666	0	4.878	12.656
2005.515	0.003	813	763	684	739	28.652	41.168	0.009	12.454	5.964	35.204	996	-271	4.611	1.815	1339	0	0.000	4.675	0	4.878	12.656
2005.517	0.003	813	763	684	739	28.652	41.483	0.316	12.769	5.964	35.519	996	-265	4.611	1.815	1339	0	0.000	4.991	0	4.878	12.656
2005.520	0.003	846	762	686	751	29.145	41.858	-0.119	12.651	5.964	35.894	996	-243	4.611	1.814	1339	0	0.000	4.873	0	4.878	12.656
2005.523	0.003	873	762	689	762	29.562	42.247	-0.028	12.622	5.964	36.283	996	-202	4.611	1.814	1339	0	0.000	4.844	0	4.878	12.655
2005.526	0.003	900	762	692	773	29.993	42.622	-0.055	12.567	5.964	36.658	996	-164	4.610	1.814	1339	0	0.000	4.789	0	4.878	12.655
2005.528	0.003	900	762	692	773	29.993	43.009	0.387	12.954	5.964	37.045	996	-145	4.610	1.814	1339	0	0.000	5.176	0	4.878	12.655
2005.531	0.003	900	762	692	773	29.993	43.361	0.352	13.306	5.964	37.397	996	-145	4.610	1.814	1339	0	0.000	5.528	0	4.878	12.655
2005.534	0.003	995	762	692	806	31.252	43.766	-0.854	12.452	5.964	37.802	996	-75	4.610	1.814	1339	0	0.000	4.675	0	4.878	12.655
2005.537	0.003	1024	762	693	816	31.670	44.196	0.011	12.463	5.964	38.232	996	22	4.610	1.814	1339	0	0.000	4.686	0	4.878	12.655
2005.539	0.003	1051	762	699	829	32.157	44.550	-0.132	12.331	5.964	38.586	996	67	4.610	1.814	1339	0	0.000	4.554	0	4.878	12.655
2005.542	0.003	1075	762	702	839	32.540	44.867	-0.066	12.265	5.964	38.903	996	110	4.610	1.814	1339	0	0.000	4.487	0	4.878	12.655
2005.545	0.003	1098	762	703	847	32.871	45.198	0.000	12.265	5.964	39.234	996	150	4.610	1.814	1339	0	0.000	4.487	0	4.878	12.655
2005.548	0.003	1120	762	706	856	33.222	45.601	0.052	12.317	5.964	39.637	996	190	4.611	1.814	1339	0	0.000	4.539	0	4.878	12.655
2005.550	0.003	1145	762	709	867	33.631	45.942	-0.068	12.249	5.964	39.978	996	233	4.611	1.815	1339	0	0.000	4.471	0	4.878	12.656
2005.553	0.003	1169	763	711	876	33.993	46.288	-0.015	12.234	5.964	40.325	996	278	4.611	1.815	1339	0	0.000	4.455	0	4.878	12.656
2005.556	0.003	1194	763	712	885	34.350	46.689	0.043	12.277	5.964	40.725	996	324	4.611	1.815	1339	0	0.000	4.498	0	4.878	12.656
2005.559	0.003	1217	764	717	896	34.767	47.108	0.003	12.280	5.964	41.145	996	369	4.612	1.815	1339	0	0.000	4.501	0	4.878	12.657
2005.561	0.003	1243	764	721	907	35.187	47.509	-0.019	12.260	5.964	41.545	996	417	4.612	1.816	1339	0	0.000	4.481	0	4.878	12.657
2005.564	0.003	1267	765	725	918	35.606	47.927	-0.001	12.259	5.964	41.964	996	466	4.613	1.816	1339	0	0.000	4.479	0	4.878	12.657

Gas Balance MODEL R1-F
Kimball Colinville Storage Reservoir
Discrepancy History Match
E. Kimball Crossflow with Meter Error &Gas Spill

Spill threshhold
1300

		Reservoir P/Z(psia)									E.Kimball+Low Perm Gas Balance				Corunna Seckerton Crossflow					South Spill Model		
Date	dT (years)	SOUTH	A1	MID	AVG	Calc. GIP (bcf)	Inventory GIP (bcf)	Total Discrepancy (bcf)	Adjusted Cumulative Discrep. (bcf)	Cumulative Meter Error (bcf)	Adjusted Inventory GIP (bcf)	P/Z (psia)	Influx 0.0008 (mcfd)	5.0 GIP (bcf)	Cum. Influx (bcf)	Avg P/Z Cor/Sec (psi)	Influx 0.0000 (mcfd)	Cum. Influx (bcf)	Revised K/C Cumulative Discrepancy (bcf)	Gas Spill 0.00855 (mcfd)	Cum. Gas Spill (bcf)	Total Model Adjustments (bcf)
2005.567	0.003	1263	766	744	926	35.936	48.296	0.039	12.298	5.964	42.332	996	486	4.613	1.817	1339	0	0.000	4.517	0	4.878	12.658
2005.569	0.003	1258	767	744	924	35.863	48.580	0.357	12.655	5.964	42.616	996	477	4.614	1.817	1339	0	0.000	4.874	0	4.878	12.658
2005.572	0.003	1254	768	785	945	36.659	48.993	-0.382	12.272	5.964	43.029	997	467	4.614	1.818	1339	0	0.000	4.491	0	4.878	12.659
2005.575	0.003	1250	769	804	954	37.022	49.451	0.095	12.367	5.964	43.487	997	460	4.615	1.818	1339	0	0.000	4.585	0	4.878	12.659
2005.578	0.003	1247	770	829	966	37.477	49.993	0.087	12.454	5.964	44.030	997	452	4.615	1.819	1339	0	0.000	4.672	0	4.878	12.660
2005.580	0.003	1243	772	856	979	37.998	50.601	0.087	12.541	5.964	44.638	997	445	4.615	1.819	1339	0	0.000	4.759	0	4.878	12.660
2005.583	0.003	1247	773	884	996	38.627	51.032	-0.198	12.343	5.964	45.068	997	445	4.616	1.820	1339	0	0.000	4.560	0	4.878	12.661
2005.586	0.003	1247	775	908	1009	39.127	51.381	-0.151	12.193	5.964	45.418	997	449	4.616	1.820	1339	0	0.000	4.409	0	4.878	12.661
2005.589	0.003	1246	776	932	1021	39.611	51.763	-0.103	12.089	5.964	45.799	997	448	4.617	1.821	1339	0	0.000	4.305	0	4.878	12.662
2005.591	0.003	1242	778	944	1026	39.811	52.089	0.126	12.216	5.964	46.125	997	442	4.617	1.821	1339	0	0.000	4.431	0	4.878	12.662
2005.594	0.003	1239	781	959	1033	40.094	52.468	0.097	12.313	5.964	46.505	997	435	4.618	1.821	1339	0	0.000	4.528	0	4.878	12.662
2005.597	0.003	1238	783	977	1043	40.457	52.925	0.093	12.406	5.964	46.961	997	431	4.618	1.822	1339	0	0.000	4.621	0	4.878	12.663
2005.600	0.003	1235	785	998	1053	40.860	53.349	0.021	12.427	5.964	47.385	998	427	4.619	1.822	1339	0	0.000	4.641	0	4.878	12.663
2005.602	0.003	1233	787	1021	1065	41.303	53.751	-0.041	12.386	5.964	47.788	998	422	4.619	1.823	1339	0	0.000	4.600	0	4.878	12.664
2005.605	0.003	1233	787	1021	1065	41.303	54.179	0.427	12.813	5.964	48.215	998	419	4.619	1.823	1339	0	0.000	5.027	0	4.878	12.664
2005.608	0.003	1229	794	1070	1090	42.280	54.538	-0.617	12.196	5.964	48.575	998	415	4.620	1.823	1339	0	0.000	4.409	0	4.878	12.665
2005.611	0.003	1227	796	1080	1095	42.473	54.891	0.160	12.356	5.964	48.927	998	409	4.620	1.824	1339	0	0.000	4.569	0	4.878	12.665
2005.613	0.003	1241	798	1087	1104	42.823	55.243	0.002	12.358	5.964	49.280	998	422	4.621	1.824	1339	0	0.000	4.570	0	4.878	12.665
2005.616	0.003	1255	801	1093	1112	43.142	55.749	0.187	12.545	5.964	49.785	998	449	4.621	1.825	1339	0	0.000	4.757	0	4.878	12.666
2005.619	0.003	1266	804	1108	1124	43.601	56.200	-0.008	12.537	5.964	50.237	998	473	4.622	1.825	1339	0	0.000	4.748	0	4.878	12.666
2005.621	0.003	1266	807	1131	1137	44.105	56.616	-0.089	12.448	5.964	50.652	998	485	4.622	1.826	1339	0	0.000	4.659	0	4.878	12.667
2005.624	0.003	1264	810	1131	1136	44.090	56.977	0.377	12.825	5.964	51.013	998	483	4.623	1.826	1339	0	0.000	5.035	0	4.878	12.667
2005.627	0.003	1261	813	1170	1156	44.856	57.318	-0.425	12.400	5.964	51.355	998	478	4.623	1.827	1339	0	0.000	4.610	0	4.878	12.668
2005.630	0.003	1259	815	1186	1164	45.168	57.723	0.093	12.493	5.964	51.759	999	473	4.623	1.827	1339	0	0.000	4.702	0	4.878	12.668
2005.632	0.003	1258	819	1204	1174	45.549	58.170	0.066	12.559	5.964	52.207	999	469	4.624	1.828	1339	0	0.000	4.768	0	4.878	12.669
2005.635	0.003	1256	821	1225	1185	45.963	58.627	0.043	12.602	5.964	52.663	999	466	4.624	1.828	1339	0	0.000	4.810	0	4.878	12.669
2005.638	0.003	1255	825	1247	1196	46.400	59.065	0.001	12.603	5.964	53.102	999	463	4.625	1.829	1339	0	0.000	4.811	0	4.878	12.670
2005.641	0.003	1254	828	1269	1208	46.876	59.458	-0.083	12.520	5.964	53.494	999	460	4.625	1.829	1339	0	0.000	4.727	0	4.878	12.670
2005.643	0.003	1252	828	1288	1217	47.230	59.803	-0.008	12.511	5.964	53.840	999	458	4.626	1.829	1339	0	0.000	4.718	0	4.878	12.671
2005.646	0.003	1252	828	1288	1217	47.230	60.179	0.375	12.887	5.964	54.215	999	456	4.626	1.830	1339	0	0.000	5.093	0	4.878	12.671
2005.649	0.003	1251	837	1320	1235	47.919	60.529	-0.339	12.548	5.964	54.565	999	454	4.627	1.830	1339	0	0.000	4.754	0	4.878	12.671
2005.652	0.003	1249	837	1335	1242	48.204	60.869	0.055	12.603	5.964	54.905	999	451	4.627	1.831	1339	0	0.000	4.808	0	4.878	12.672
2005.654	0.003	1249	837	1350	1250	48.499	61.114	-0.050	12.553	5.964	55.150	999	448	4.628	1.831	1339	0	0.000	4.758	0	4.878	12.672
2005.657	0.003	1248	837	1364	1257	48.770	61.371	-0.014	12.539	5.964	55.407	1000	447	4.628	1.832	1339	0	0.000	4.743	0	4.878	12.673
2005.660	0.003	1246	850	1372	1263	48.982	61.579	-0.003	12.535	5.964	55.615	1000	445	4.628	1.832	1339	0	0.000	4.739	0	4.878	12.673
2005.663	0.003	1246	852	1379	1266	49.133	62.022	0.292	12.827	5.964	56.058	1000	443	4.629	1.833	1339	0	0.000	5.031	0	4.878	12.674
2005.665	0.003	1245	852	1394	1274	49.426	62.383	0.067	12.894	5.964	56.419	1000	441	4.629	1.833	1339	0	0.000	5.098	0	4.878	12.674
2005.668	0.003	1245	852	1394	1274	49.429	62.589	0.204	13.098	5.964	56.626	1000	440	4.630	1.834	1339	0	0.000	5.301	0	4.878	12.675
2005.671	0.003	1244	862	1426	1292	50.112	62.736	-0.536	12.562	5.964	56.773	1000	439	4.630	1.834	1339	0	0.000	4.765	0	4.878	12.675
2005.674	0.003	1243	866	1430	1294	50.211	63.044	0.210	12.772	5.964	57.081	1000	437	4.631	1.834	1339	0	0.000	4.974	0	4.878	12.675
2005.676	0.003	1243	869	1441	1300	50.448	63.340	0.058	12.830	5.964	57.376	1000	436	4.631	1.835	1339	0	0.000	5.031	0	4.878	12.676
2005.679	0.003	1243	869	1441	1300	50.448	63.623	0.283	13.112	5.964	57.659	1000	436	4.632	1.835	1339	0	0.000	5.314	0	4.878	12.676
2005.682	0.003	1242	875	1469	1315	51.032	63.780	-0.426	12.686	5.964	57.816	1000	435	4.632	1.836	1339	0	0.000	4.887	0	4.878	12.677
2005.684	0.003	1242	878	1476	1319	51.186	63.951	0.017	12.703	5.964	57.987	1001	434	4.632	1.836	1339	0	0.000	4.904	0	4.878	12.677
2005.687	0.003	1241	881	1482	1322	51.297	64.055	-0.007	12.696	5.964	58.091	1001	432	4.633	1.837	1339	0	0.000	4.896	0	4.878	12.678

Gas Balance MODEL R1-F
Kimball Colinville Storage Reservoir
Discrepancy History Match
E. Kimball Crossflow with Meter Error &Gas Spill

Spill threshhold
1300

		Reservoir P/Z(psia)									E.Kimball+Low Perm Gas Balance				Corunna Seckerton Crossflow					South Spill Model		
Date	dT (years)	SOUTH	A1	MID	AVG	Calc. GIP (bcf)	Inventory GIP (bcf)	Total Discrepancy (bcf)	Adjusted Cumulative Discrep. (bcf)	Cumulative Meter Error (bcf)	Adjusted Inventory GIP (bcf)	P/Z (psia)	Influx 0.0008 (mcfd)	5.0 GIP (bcf)	Cum. Influx (bcf)	Avg P/Z Cor/Sec (psi)	Influx 0.0000 (mcfd)	Cum. Influx (bcf)	Revised K/C Cumulative Discrepancy (bcf)	Gas Spill 0.00855 (mcfd)	Cum. Gas Spill (bcf)	Total Model Adjustments (bcf)
2005.690	0.003	1240	881	1485	1324	51.370	64.141	0.013	12.709	5.964	58.177	1001	430	4.633	1.837	1339	0	0.000	4.909	0	4.878	12.678
2005.693	0.003	1241	887	1488	1326	51.462	64.236	0.003	12.712	5.964	58.272	1001	430	4.634	1.837	1339	0	0.000	4.911	0	4.878	12.678
2005.695	0.003	1240	890	1491	1328	51.524	64.348	0.050	12.762	5.964	58.384	1001	430	4.634	1.838	1339	0	0.000	4.960	0	4.878	12.679
2005.698	0.003	1240	893	1494	1330	51.611	64.427	-0.007	12.755	5.964	58.464	1001	429	4.635	1.838	1339	0	0.000	4.953	0	4.878	12.679
2005.701	0.003	1239	895	1497	1331	51.654	64.515	0.045	12.800	5.964	58.552	1001	427	4.635	1.839	1339	0	0.000	4.997	0	4.878	12.680
2005.704	0.003	1239	898	1499	1333	51.709	64.616	0.045	12.845	5.964	58.652	1001	426	4.635	1.839	1339	0	0.000	5.042	0	4.878	12.680
2005.706	0.003	1238	901	1502	1335	51.792	64.732	0.033	12.878	5.964	58.768	1001	426	4.636	1.840	1339	0	0.000	5.075	0	4.878	12.681
2005.709	0.003	1238	903	1508	1338	51.907	64.773	-0.074	12.804	5.964	58.809	1001	425	4.636	1.840	1339	0	0.000	5.000	0	4.878	12.681
2005.712	0.003	1238	907	1509	1339	51.957	64.773	-0.050	12.753	5.964	58.809	1001	424	4.637	1.840	1339	0	0.000	4.950	0	4.878	12.681
2005.715	0.003	1239	910	1508	1339	51.947	64.773	0.010	12.764	5.964	58.809	1002	425	4.637	1.841	1339	0	0.000	4.959	0	4.878	12.682
2005.717	0.003	1238	912	1506	1338	51.899	64.773	0.048	12.811	5.964	58.809	1002	424	4.638	1.841	1339	0	0.000	5.007	0	4.878	12.682
2005.720	0.003	1237	914	1504	1337	51.875	64.773	0.024	12.836	5.964	58.809	1002	423	4.638	1.842	1339	0	0.000	5.030	0	4.878	12.683
2005.723	0.003	1238	918	1504	1338	51.899	64.773	-0.023	12.812	5.964	58.809	1002	423	4.638	1.842	1339	0	0.000	5.006	0	4.878	12.683
2005.726	0.003	1237	920	1501	1336	51.846	64.773	0.052	12.864	5.964	58.809	1002	422	4.639	1.843	1339	0	0.000	5.058	0	4.878	12.684
2005.728	0.003	1237	923	1500	1336	51.834	64.773	0.012	12.877	5.964	58.809	1002	421	4.639	1.843	1339	0	0.000	5.070	0	4.878	12.684
2005.731	0.003	1238	926	1500	1337	51.855	64.773	-0.021	12.855	5.964	58.809	1002	421	4.640	1.843	1339	0	0.000	5.048	0	4.878	12.684
2005.734	0.003	1237	928	1498	1336	51.817	64.773	0.039	12.894	5.964	58.809	1002	421	4.640	1.844	1339	0	0.000	5.087	0	4.878	12.685
2005.736	0.003	1237	930	1498	1336	51.816	64.773	0.000	12.894	5.964	58.809	1002	420	4.640	1.844	1339	0	0.000	5.087	0	4.878	12.685
2005.739	0.003	1237	933	1497	1336	51.830	64.773	-0.014	12.880	5.964	58.809	1002	421	4.641	1.845	1339	0	0.000	5.072	0	4.878	12.686
2005.742	0.003	1237	936	1496	1336	51.817	64.773	0.013	12.894	5.964	58.809	1002	421	4.641	1.845	1339	0	0.000	5.085	0	4.878	12.686
2005.745	0.003	1237	938	1495	1335	51.809	64.773	0.008	12.902	5.964	58.809	1003	420	4.642	1.845	1339	0	0.000	5.093	0	4.878	12.687
2005.747	0.003	1236	941	1494	1335	51.788	64.824	0.071	12.973	5.964	58.860	1003	419	4.642	1.846	1339	0	0.000	5.164	0	4.878	12.687
2005.750	0.003	1242	943	1494	1337	51.868	64.948	0.045	13.018	5.964	58.985	1003	424	4.643	1.846	1339	0	0.000	5.208	0	4.878	12.687
2005.753	0.003	1253	946	1493	1341	52.016	65.052	-0.044	12.974	5.964	59.089	1003	441	4.643	1.847	1339	0	0.000	5.164	0	4.878	12.688
2005.756	0.003	1262	948	1491	1343	52.109	65.052	-0.093	12.881	5.964	59.089	1003	460	4.643	1.847	1339	0	0.000	5.070	0	4.878	12.688
2005.758	0.003	1260	950	1490	1342	52.077	65.255	0.235	13.116	5.964	59.291	1003	467	4.644	1.848	1339	0	0.000	5.305	0	4.878	12.689
2005.761	0.003	1275	953	1491	1348	52.301	65.434	-0.046	13.070	5.964	59.470	1003	481	4.644	1.848	1339	0	0.000	5.259	0	4.878	12.689
2005.764	0.003	1291	954	1489	1353	52.493	65.607	-0.019	13.052	5.964	59.644	1003	513	4.645	1.849	1339	0	0.000	5.240	0	4.878	12.690
2005.767	0.003	1307	957	1489	1359	52.723	65.738	-0.098	12.954	5.964	59.775	1003	545	4.645	1.849	1339	0	0.000	5.141	0	4.878	12.690
2005.769	0.003	1318	959	1489	1363	52.869	65.778	-0.106	12.847	5.964	59.815	1003	573	4.646	1.850	1339	0	0.000	5.034	0	4.878	12.691
2005.772	0.003	1321	961	1488	1364	52.905	65.929	0.114	12.961	5.964	59.965	1004	588	4.647	1.850	1339	0	0.000	5.147	143	4.878	12.692
2005.775	0.003	1332	964	1488	1368	53.062	66.066	-0.019	12.942	5.964	60.102	1004	602	4.647	1.851	1339	0	0.000	5.127	437	4.878	12.693
2005.778	0.003	1345	966	1487	1372	53.220	66.149	-0.075	12.867	5.964	60.186	1004	627	4.648	1.852	1339	0	0.000	5.051	710	4.879	12.694
2005.780	0.003	1349	969	1487	1374	53.289	66.235	0.017	12.884	5.964	60.271	1004	645	4.649	1.852	1339	0	0.000	5.068	795	4.880	12.695
2005.783	0.003	1356	970	1486	1376	53.381	66.402	0.075	12.959	5.964	60.439	1004	657	4.649	1.853	1339	0	0.000	5.142	999	4.881	12.697
2005.786	0.003	1368	973	1486	1380	53.546	66.588	0.022	12.981	5.964	60.625	1004	678	4.650	1.854	1339	0	0.000	5.164	1284	4.882	12.699
2005.789	0.003	1383	975	1487	1386	53.772	66.733	-0.082	12.899	5.964	60.769	1004	707	4.651	1.854	1339	0	0.000	5.081	1501	4.883	12.701
2005.791	0.003	1394	977	1485	1390	53.909	66.733	-0.137	12.762	5.964	60.769	1005	735	4.651	1.855	1339	0	0.000	4.943	1723	4.885	12.704
2005.794	0.003	1394	979	1485	1389	53.901	66.733	0.008	12.770	5.964	60.769	1005	747	4.652	1.856	1339	0	0.000	4.951	1857	4.887	12.706
2005.797	0.003	1392	982	1485	1389	53.895	66.869	0.142	12.912	5.964	60.906	1005	744	4.653	1.856	1339	0	0.000	5.092	2006	4.889	12.709
2005.799	0.003	1390	985	1490	1392	53.989	66.989	0.026	12.938	5.964	61.025	1005	740	4.654	1.857	1339	0	0.000	5.117	2123	4.891	12.712
2005.802	0.003	1388	987	1497	1395	54.110	66.989	-0.121	12.816	5.964	61.025	1005	736	4.654	1.858	1339	0	0.000	4.995	2093	4.893	12.715
2005.805	0.003	1387	990	1498	1395	54.132	66.989	-0.022	12.794	5.964	61.025	1005	732	4.655	1.859	1339	0	0.000	4.972	2056	4.895	12.718
2005.808	0.003	1386	992	1497	1395	54.114	66.989	0.018	12.813	5.964	61.025	1005	729	4.656	1.859	1339	0	0.000	4.990	2026	4.897	12.720
2005.810	0.003	1385	995	1496	1394	54.098	66.728	-0.245	12.568	5.964	60.765	1006	727	4.656	1.860	1339	0	0.000	4.744	1993	4.899	12.723

Gas Balance MODEL R1-F
Kimball Colinville Storage Reservoir
Discrepancy History Match
E. Kimball Crossflow with Meter Error &Gas Spill

Spill threshhold
1300

		Reservoir P/Z(psia)									E.Kimball+Low Perm Gas Balance				Corunna Seckerton Crossflow				South Spill Model		
Date	dT (years)	SOUTH	A1	MID	AVG	Calc. GIP (bcf)	Inventory GIP (bcf)	Total Discrepancy (bcf)	Adjusted Cumulative Discrep. (bcf)	Cumulative Meter Error (bcf)	Adjusted Inventory GIP (bcf)	P/Z (psia)	Influx 0.0008 (mcfd)	5.0 GIP (bcf)	Cum. Influx (bcf)	Avg P/Z Cor/Sec (psi)	Influx 0.0000 (mcfd)	Cum. Influx (bcf)	Revised K/C Cumulative Discrepancy (bcf)	Gas Spill 0.00855 (mcfd)	Cum. Gas Spill (bcf)	Total Model Adjustments (bcf)
2005.813	0.003	1364	997	1495	1387	53.805	66.380	-0.055	12.513	5.964	60.416	1006	702	4.657	1.861	1339	0	0.000	4.689	1726	4.901	12.725
2005.816	0.003	1336	1000	1496	1377	53.441	66.029	0.013	12.526	5.964	60.065	1006	648	4.658	1.862	1339	0	0.000	4.701	1383	4.902	12.727
2005.819	0.003	1302	1002	1495	1366	52.981	65.724	0.156	12.682	5.964	59.761	1006	581	4.658	1.862	1339	0	0.000	4.856	980	4.903	12.729
2005.821	0.003	1274	1005	1494	1356	52.605	65.367	0.019	12.700	5.964	59.403	1006	517	4.659	1.863	1339	0	0.000	4.874	422	4.904	12.730
2005.824	0.003	1244	1008	1494	1346	52.214	65.053	0.077	12.777	5.964	59.090	1006	458	4.659	1.863	1339	0	0.000	4.950	0	4.904	12.730
2005.827	0.003	1218	1010	1493	1337	51.859	65.114	0.417	13.194	5.964	59.151	1006	402	4.660	1.863	1339	0	0.000	5.367	0	4.904	12.731
2005.830	0.003	1218	1014	1499	1340	51.996	65.224	-0.028	13.166	5.964	59.261	1007	377	4.660	1.864	1339	0	0.000	5.338	0	4.904	12.731
2005.832	0.003	1231	1018	1492	1342	52.065	65.224	-0.068	13.098	5.964	59.261	1007	389	4.661	1.864	1339	0	0.000	5.270	0	4.904	12.732
2005.835	0.003	1232	1019	1492	1342	52.079	65.224	-0.014	13.084	5.964	59.261	1007	403	4.661	1.865	1339	0	0.000	5.255	0	4.904	12.732
2005.838	0.003	1233	1021	1491	1342	52.077	65.306	0.084	13.167	5.964	59.343	1007	405	4.661	1.865	1339	0	0.000	5.339	0	4.904	12.732
2005.841	0.003	1241	1025	1491	1346	52.202	65.519	0.087	13.254	5.964	59.555	1007	413	4.662	1.865	1339	0	0.000	5.425	0	4.904	12.733
2005.843	0.003	1259	1027	1491	1352	52.449	65.664	-0.102	13.153	5.964	59.700	1007	439	4.662	1.866	1339	0	0.000	5.323	0	4.904	12.733
2005.846	0.003	1274	1030	1490	1357	52.647	65.844	-0.017	13.135	5.964	59.881	1007	472	4.663	1.866	1339	0	0.000	5.305	0	4.904	12.734
2005.849	0.003	1289	1031	1489	1362	52.835	65.848	-0.185	12.950	5.964	59.884	1007	502	4.663	1.867	1339	0	0.000	5.120	0	4.904	12.734
2005.851	0.003	1291	1033	1489	1363	52.879	65.764	-0.127	12.824	5.964	59.801	1007	520	4.664	1.867	1339	0	0.000	4.993	0	4.904	12.735
2005.854	0.003	1285	1036	1489	1361	52.791	65.692	0.015	12.839	5.964	59.728	1007	516	4.664	1.868	1339	0	0.000	5.007	0	4.904	12.735
2005.857	0.003	1279	1038	1489	1359	52.733	65.563	-0.071	12.768	5.964	59.600	1007	503	4.665	1.868	1339	0	0.000	4.936	0	4.904	12.736
2005.860	0.003	1268	1040	1488	1355	52.571	65.292	-0.109	12.659	5.964	59.328	1008	486	4.665	1.869	1339	0	0.000	4.826	0	4.904	12.736
2005.862	0.003	1245	1041	1487	1347	52.255	65.292	0.316	12.975	5.964	59.328	1008	451	4.666	1.869	1339	0	0.000	5.142	0	4.904	12.737
2005.865	0.003	1241	1044	1486	1345	52.196	65.408	0.175	13.149	5.964	59.444	1008	424	4.666	1.870	1339	0	0.000	5.316	0	4.904	12.737
2005.868	0.003	1250	1046	1486	1349	52.336	65.554	0.006	13.155	5.964	59.590	1008	428	4.666	1.870	1339	0	0.000	5.321	0	4.904	12.738
2005.871	0.003	1265	1048	1486	1354	52.533	65.554	-0.197	12.959	5.964	59.590	1008	453	4.667	1.871	1339	0	0.000	5.124	0	4.904	12.738
2005.873	0.003	1267	1050	1485	1355	52.551	65.554	-0.018	12.941	5.964	59.590	1008	469	4.667	1.871	1339	0	0.000	5.106	0	4.904	12.738
2005.876	0.003	1266	1052	1485	1354	52.546	65.554	0.004	12.945	5.964	59.590	1008	470	4.668	1.872	1339	0	0.000	5.110	0	4.904	12.739
2005.879	0.003	1266	1053	1484	1354	52.532	65.554	0.015	12.960	5.964	59.590	1008	469	4.668	1.872	1339	0	0.000	5.124	0	4.904	12.739
2005.882	0.003	1266	1054	1484	1354	52.522	65.278	-0.266	12.694	5.964	59.314	1008	468	4.669	1.873	1339	0	0.000	4.858	0	4.904	12.740
2005.884	0.003	1246	1057	1483	1347	52.267	65.209	0.186	12.880	5.964	59.245	1008	448	4.669	1.873	1339	0	0.000	5.044	0	4.904	12.740
2005.887	0.003	1237	1058	1483	1344	52.142	65.205	0.121	13.001	5.964	59.241	1009	419	4.670	1.873	1339	0	0.000	5.164	0	4.904	12.741
2005.890	0.003	1236	1060	1483	1344	52.136	65.128	-0.071	12.930	5.964	59.164	1009	409	4.670	1.874	1339	0	0.000	5.093	0	4.904	12.741
2005.893	0.003	1231	1062	1482	1342	52.073	64.906	-0.159	12.771	5.964	58.942	1009	404	4.670	1.874	1339	0	0.000	4.933	0	4.904	12.742
2005.895	0.003	1219	1063	1481	1337	51.885	64.740	0.022	12.793	5.964	58.776	1009	387	4.671	1.875	1339	0	0.000	4.955	0	4.904	12.742
2005.898	0.003	1200	1064	1481	1331	51.636	64.549	0.058	12.851	5.964	58.585	1009	356	4.671	1.875	1339	0	0.000	5.012	0	4.904	12.742
2005.901	0.003	1183	1065	1480	1325	51.387	64.514	0.215	13.065	5.964	58.550	1009	321	4.672	1.875	1339	0	0.000	5.226	0	4.904	12.743
2005.903	0.003	1178	1067	1479	1323	51.322	64.514	0.065	13.130	5.964	58.550	1009	300	4.672	1.876	1339	0	0.000	5.291	0	4.904	12.743
2005.906	0.003	1179	1070	1480	1324	51.358	64.485	-0.064	13.066	5.964	58.522	1009	296	4.672	1.876	1339	0	0.000	5.226	0	4.904	12.743
2005.909	0.003	1180	1071	1479	1324	51.379	64.586	0.079	13.145	5.964	58.622	1009	299	4.672	1.876	1339	0	0.000	5.305	0	4.904	12.743
2005.912	0.003	1189	1073	1479	1327	51.498	64.586	-0.120	13.025	5.964	58.622	1009	308	4.673	1.876	1339	0	0.000	5.185	0	4.904	12.744
2005.914	0.003	1187	1074	1478	1326	51.462	64.549	0.000	13.025	5.964	58.586	1009	314	4.673	1.877	1339	0	0.000	5.185	0	4.904	12.744
2005.917	0.003	1186	1075	1478	1326	51.448	64.548	0.013	13.038	5.964	58.585	1009	312	4.673	1.877	1339	0	0.000	5.198	0	4.904	12.744
2005.920	0.003	1187	1076	1478	1326	51.455	64.548	-0.007	13.032	5.964	58.585	1009	311	4.674	1.877	1339	0	0.000	5.191	0	4.904	12.745
2005.923	0.003	1188	1077	1477	1326	51.453	64.548	0.002	13.033	5.964	58.585	1010	312	4.674	1.878	1339	0	0.000	5.192	0	4.904	12.745
2005.925	0.003	1188	1078	1476	1326	51.445	64.548	0.008	13.041	5.964	58.585	1010	314	4.674	1.878	1339	0	0.000	5.199	0	4.904	12.745
2005.928	0.003	1189	1079	1475	1326	51.453	64.517	-0.039	13.002	5.964	58.553	1010	315	4.675	1.878	1339	0	0.000	5.160	0	4.904	12.746
2005.931	0.003	1187	1080	1475	1325	51.416	64.219	-0.261	12.742	5.964	58.256	1010	314	4.675	1.879	1339	0	0.000	4.899	0	4.904	12.746
2005.934	0.003	1169	1082	1475	1319	51.184	63.733	-0.255	12.487	5.964	57.770	1010	294	4.675	1.879	1339	0	0.000	4.644	0	4.904	12.746

Gas Balance MODEL R1-F
Kimball Colinville Storage Reservoir
Discrepancy History Match
E. Kimball Crossflow with Meter Error &Gas Spill

Spill threshhold
1300

		Reservoir P/Z(psia)									E.Kimball+Low Perm Gas Balance				Corunna Seckerton Crossflow					South Spill Model		
Date	dT (years)	SOUTH	A1	MID	AVG	Calc. GIP (bcf)	Inventory GIP (bcf)	Total Discrepancy (bcf)	Adjusted Cumulative Discrep. (bcf)	Cumulative Meter Error (bcf)	Adjusted Inventory GIP (bcf)	P/Z (psia)	Influx 0.0008 (mcfd)	5.0 GIP (bcf)	Cum. Influx (bcf)	Avg P/Z Cor/Sec (psi)	Influx 0.0000 (mcfd)	Cum. Influx (bcf)	Revised K/C Cumulative Discrepancy (bcf)	Gas Spill 0.00855 (mcfd)	Cum. Gas Spill (bcf)	Total Model Adjustments (bcf)
2005.936	0.003	1133	1082	1472	1306	50.652	63.457	0.256	12.743	5.964	57.493	1010	244	4.675	1.879	1339	0	0.000	4.900	0	4.904	12.747
2005.939	0.003	1108	1084	1467	1294	50.213	63.309	0.290	13.033	5.964	57.345	1010	189	4.676	1.879	1339	0	0.000	5.190	0	4.904	12.747
2005.942	0.003	1093	1084	1467	1289	50.028	63.266	0.143	13.176	5.964	57.303	1010	153	4.676	1.880	1339	0	0.000	5.333	0	4.904	12.747
2005.945	0.003	1092	1086	1467	1289	50.020	63.231	-0.027	13.149	5.964	57.268	1010	139	4.676	1.880	1339	0	0.000	5.306	0	4.904	12.747
2005.947	0.003	1090	1087	1468	1289	50.009	62.667	-0.553	12.596	5.964	56.704	1010	137	4.676	1.880	1339	0	0.000	4.752	0	4.904	12.747
2005.950	0.003	1067	1087	1462	1278	49.579	62.343	0.107	12.702	5.964	56.379	1010	115	4.676	1.880	1339	0	0.000	4.859	0	4.904	12.747
2005.953	0.003	1043	1087	1449	1262	48.976	62.045	0.304	13.007	5.964	56.081	1010	74	4.676	1.880	1339	0	0.000	5.163	0	4.904	12.747
2005.956	0.003	1023	1089	1448	1256	48.718	62.004	0.217	13.224	5.964	56.040	1010	37	4.676	1.880	1339	0	0.000	5.381	0	4.904	12.747
2005.958	0.003	1017	1089	1449	1254	48.645	62.004	0.072	13.296	5.964	56.040	1010	17	4.676	1.880	1339	0	0.000	5.453	0	4.904	12.747
2005.961	0.003	1020	1090	1448	1254	48.667	62.004	-0.022	13.274	5.964	56.040	1010	14	4.676	1.880	1339	0	0.000	5.431	0	4.904	12.747
2005.964	0.003	1022	1090	1447	1255	48.684	61.826	-0.194	13.080	5.964	55.863	1010	17	4.676	1.880	1339	0	0.000	5.236	0	4.904	12.747
2005.966	0.003	1013	1091	1448	1252	48.574	61.465	-0.252	12.828	5.964	55.501	1010	12	4.676	1.880	1339	0	0.000	4.985	0	4.904	12.747
2005.969	0.003	988	1092	1444	1242	48.171	61.184	0.123	12.951	5.964	55.221	1010	-16	4.676	1.880	1339	0	0.000	5.108	0	4.904	12.747
2005.972	0.003	967	1091	1439	1232	47.788	61.107	0.306	13.257	5.964	55.144	1010	-52	4.676	1.880	1339	0	0.000	5.414	0	4.904	12.747
2005.975	0.003	962	1092	1438	1229	47.693	61.107	0.095	13.352	5.964	55.144	1010	-72	4.676	1.880	1339	0	0.000	5.509	0	4.904	12.747
2005.977	0.003	965	1092	1438	1231	47.743	61.107	-0.051	13.302	5.964	55.144	1010	-74	4.676	1.880	1339	0	0.000	5.458	0	4.904	12.747
2005.980	0.003	967	1092	1438	1231	47.767	61.107	-0.024	13.278	5.964	55.144	1010	-70	4.676	1.880	1339	0	0.000	5.435	0	4.904	12.747
2005.983	0.003	970	1092	1438	1232	47.797	61.107	-0.030	13.248	5.964	55.144	1010	-66	4.676	1.880	1339	0	0.000	5.405	0	4.904	12.747
2005.986	0.003	971	1092	1437	1232	47.813	61.098	-0.025	13.223	5.964	55.134	1010	-63	4.676	1.880	1339	0	0.000	5.379	0	4.904	12.747
2005.988	0.003	972	1092	1437	1232	47.807	61.098	0.006	13.229	5.964	55.134	1010	-61	4.676	1.880	1339	0	0.000	5.386	0	4.904	12.747
2005.991	0.003	974	1092	1437	1233	47.830	61.098	-0.022	13.206	5.964	55.134	1010	-59	4.676	1.880	1339	0	0.000	5.363	0	4.904	12.747
2005.994	0.003	976	1091	1436	1233	47.844	61.088	-0.025	13.182	5.964	55.124	1010	-56	4.676	1.880	1339	0	0.000	5.339	0	4.904	12.747
2005.997	0.003	976	1091	1435	1233	47.831	60.936	-0.139	13.043	5.964	54.973	1010	-54	4.676	1.879	1339	0	0.000	5.200	0	4.904	12.747
2005.999	0.003	966	1091	1435	1229	47.690	60.752	-0.044	13.000	5.964	54.788	1010	-61	4.676	1.879	1339	0	0.000	5.157	0	4.904	12.747
2006.003	0.003	951	1090	1435	1224	47.484	60.547	0.002	13.001	5.964	54.583	1010	-80	4.676	1.879	1339	0	0.000	5.158	0	4.904	12.747
2006.005	0.003	935	1090	1434	1218	47.236	60.207	-0.092	12.909	5.964	54.243	1010	-104	4.675	1.879	1339	0	0.000	5.066	0	4.904	12.747
2006.008	0.003	915	1089	1430	1209	46.896	60.037	0.169	13.078	5.964	54.073	1010	-131	4.675	1.879	1339	0	0.000	5.236	0	4.904	12.746
2006.011	0.003	897	1089	1429	1202	46.627	59.918	0.151	13.229	5.964	53.954	1010	-159	4.675	1.879	1339	0	0.000	5.387	0	4.904	12.746
2006.014	0.003	889	1088	1429	1199	46.506	59.621	-0.176	13.054	5.964	53.658	1010	-178	4.675	1.879	1339	0	0.000	5.211	0	4.904	12.746
2006.016	0.003	866	1086	1428	1190	46.176	59.192	-0.100	12.954	5.964	53.228	1010	-200	4.675	1.879	1339	0	0.000	5.112	0	4.904	12.746
2006.019	0.003	832	1086	1428	1179	45.721	58.849	0.112	13.066	5.964	52.886	1010	-239	4.675	1.878	1339	0	0.000	5.224	0	4.904	12.746
2006.022	0.003	800	1086	1428	1167	45.282	58.566	0.155	13.221	5.964	52.602	1010	-283	4.674	1.878	1339	0	0.000	5.380	0	4.904	12.745
2006.025	0.003	777	1085	1428	1159	44.972	58.287	0.032	13.253	5.964	52.323	1010	-318	4.674	1.878	1339	0	0.000	5.412	0	4.904	12.745
2006.027	0.003	754	1083	1427	1150	44.634	58.265	0.317	13.570	5.964	52.302	1010	-347	4.674	1.877	1339	0	0.000	5.729	0	4.904	12.745
2006.030	0.003	753	1083	1427	1150	44.625	58.237	-0.019	13.550	5.964	52.274	1010	-361	4.673	1.877	1339	0	0.000	5.710	0	4.904	12.744
2006.033	0.003	754	1082	1428	1151	44.647	58.237	-0.022	13.528	5.964	52.274	1009	-361	4.673	1.877	1339	0	0.000	5.688	0	4.904	12.744
2006.036	0.003	759	1082	1427	1152	44.699	58.237	-0.052	13.476	5.964	52.274	1009	-357	4.673	1.876	1339	0	0.000	5.636	0	4.904	12.744
2006.038	0.003	761	1080	1426	1152	44.702	57.917	-0.324	13.152	5.964	51.953	1009	-353	4.672	1.876	1339	0	0.000	5.313	0	4.904	12.743
2006.041	0.003	739	1078	1425	1144	44.387	57.377	-0.224	12.928	5.964	51.414	1009	-364	4.672	1.876	1339	0	0.000	5.089	0	4.904	12.743
2006.044	0.003	711	1077	1420	1131	43.885	56.879	0.004	12.932	5.964	50.916	1009	-394	4.671	1.875	1339	0	0.000	5.093	0	4.904	12.742
2006.047	0.003	683	1076	1408	1115	43.253	56.663	0.416	13.348	5.964	50.699	1009	-426	4.671	1.875	1339	0	0.000	5.510	0	4.904	12.742
2006.049	0.003	665	1075	1403	1106	42.921	56.448	0.117	13.465	5.964	50.484	1009	-451	4.671	1.874	1339	0	0.000	5.627	0	4.904	12.742
2006.052	0.003	665	1075	1403	1106	42.921	56.366	-0.082	13.383	5.964	50.402	1009	-460	4.670	1.874	1339	0	0.000	5.545	0	4.904	12.741
2006.055	0.003	645	1073	1404	1099	42.640	56.366	0.281	13.664	5.964	50.402	1009	-471	4.670	1.873	1339	0	0.000	5.827	0	4.904	12.741
2006.058	0.003	649	1070	1403	1100	42.662	56.179	-0.209	13.455	5.964	50.216	1009	-479	4.669	1.873	1339	0	0.000	5.619	0	4.904	12.740

Gas Balance MODEL R1-F
Kimball Colinville Storage Reservoir
Discrepancy History Match
E. Kimball Crossflow with Meter Error &Gas Spill

Spill threshhold
1300

		Reservoir P/Z(psia)									E.Kimball+Low Perm Gas Balance			Corunna Seckerton Crossflow					South Spill Model		
Date	dT (years)	SOUTH	A1	MID	AVG	Calc. GIP (bcf)	Inventory GIP (bcf)	Total Discrepancy (bcf)	Adjusted Cumulative Discrep. (bcf)	Cumulative Meter Error (bcf)	Adjusted Inventory GIP (bcf)	P/Z (psia)	Influx 0.0008 (mcfd)	5.0 GIP (bcf)	Cum. Influx (bcf)	Avg P/Z Cor/Sec (psi)	Influx 0.0000 (mcfd)	Cum. Influx (bcf)	Revised K/C Cumulative Discrepancy (bcf)	Gas Spill 0.00855 (mcfd)	Cum. Gas Spill (bcf)	Total Model Adjustments (bcf)
2006.060	0.003	640	1069	1402	1096	42.531	55.989	-0.059	13.396	5.964	50.026	1009	-482	4.669	1.872	1339	0	0.000	5.560	0	4.904	12.740
2006.063	0.003	628	1067	1402	1092	42.358	55.803	-0.012	13.384	5.964	49.840	1008	-492	4.668	1.872	1339	0	0.000	5.548	0	4.904	12.739
2006.066	0.003	616	1066	1402	1087	42.180	55.564	-0.062	13.322	5.964	49.600	1008	-504	4.668	1.871	1339	0	0.000	5.487	0	4.904	12.739
2006.068	0.003	602	1064	1401	1082	41.964	55.251	-0.097	13.224	5.964	49.287	1008	-517	4.667	1.871	1339	0	0.000	5.390	0	4.904	12.738
2006.071	0.003	587	1062	1398	1075	41.703	54.633	-0.357	12.867	5.964	48.669	1008	-531	4.667	1.870	1339	0	0.000	5.033	0	4.904	12.738
2006.074	0.003	578	1060	1383	1063	41.256	54.630	0.445	13.312	5.964	48.667	1008	-542	4.666	1.870	1339	0	0.000	5.479	0	4.904	12.737
2006.077	0.003	580	1059	1370	1057	41.017	54.630	0.239	13.551	5.964	48.667	1008	-545	4.666	1.869	1339	0	0.000	5.718	0	4.904	12.737
2006.079	0.003	584	1057	1371	1059	41.084	54.630	-0.067	13.484	5.964	48.667	1008	-542	4.665	1.869	1339	0	0.000	5.652	0	4.904	12.736
2006.082	0.003	587	1055	1372	1060	41.126	54.630	-0.042	13.442	5.964	48.667	1008	-538	4.664	1.868	1339	0	0.000	5.610	0	4.904	12.735
2006.085	0.003	591	1052	1371	1061	41.149	54.300	-0.354	13.088	5.964	48.336	1008	-535	4.664	1.868	1339	0	0.000	5.257	0	4.904	12.735
2006.088	0.003	581	1050	1365	1054	40.889	54.239	0.200	13.289	5.964	48.276	1007	-537	4.663	1.867	1339	0	0.000	5.458	0	4.904	12.734
2006.090	0.003	581	1048	1359	1051	40.759	54.239	0.130	13.418	5.964	48.276	1007	-541	4.663	1.867	1339	0	0.000	5.588	0	4.904	12.734
2006.093	0.003	584	1046	1359	1051	40.788	54.239	-0.029	13.389	5.964	48.276	1007	-540	4.662	1.866	1339	0	0.000	5.560	0	4.904	12.733
2006.096	0.003	587	1044	1359	1052	40.815	54.239	-0.027	13.362	5.964	48.276	1007	-537	4.662	1.865	1339	0	0.000	5.533	0	4.904	12.733
2006.099	0.003	590	1041	1359	1053	40.835	53.932	-0.328	13.035	5.964	47.968	1007	-534	4.661	1.865	1339	0	0.000	5.206	0	4.904	12.732
2006.101	0.003	592	1039	1347	1047	40.605	53.590	-0.112	12.923	5.964	47.626	1007	-532	4.661	1.864	1339	0	0.000	5.095	0	4.904	12.732
2006.104	0.003	592	1037	1336	1040	40.363	53.539	0.191	13.114	5.964	47.575	1007	-531	4.660	1.864	1339	0	0.000	5.287	0	4.904	12.731
2006.107	0.003	589	1034	1331	1036	40.212	53.482	0.093	13.208	5.964	47.518	1007	-532	4.660	1.863	1339	0	0.000	5.381	0	4.904	12.731
2006.110	0.003	586	1033	1333	1037	40.213	53.410	-0.072	13.135	5.964	47.447	1006	-534	4.659	1.863	1339	0	0.000	5.309	0	4.904	12.730
2006.112	0.003	583	1029	1332	1034	40.134	53.228	-0.104	13.031	5.964	47.264	1006	-537	4.659	1.862	1339	0	0.000	5.205	0	4.904	12.730
2006.115	0.003	580	1027	1327	1031	39.981	53.134	0.061	13.092	5.964	47.171	1006	-539	4.658	1.862	1339	0	0.000	5.267	0	4.904	12.729
2006.118	0.003	578	1025	1326	1029	39.925	53.040	-0.039	13.053	5.964	47.076	1006	-541	4.657	1.861	1339	0	0.000	5.229	0	4.904	12.729
2006.121	0.003	575	1022	1325	1027	39.846	52.930	-0.031	13.023	5.964	46.967	1006	-544	4.657	1.861	1339	0	0.000	5.198	0	4.904	12.728
2006.123	0.003	573	1020	1325	1026	39.812	52.823	-0.073	12.950	5.964	46.860	1006	-546	4.656	1.860	1339	0	0.000	5.126	0	4.904	12.727
2006.126	0.003	570	1018	1323	1023	39.707	52.796	0.077	13.027	5.964	46.832	1006	-548	4.656	1.860	1339	0	0.000	5.204	0	4.904	12.727
2006.129	0.003	568	1015	1322	1022	39.657	52.770	0.024	13.051	5.964	46.806	1006	-550	4.655	1.859	1339	0	0.000	5.228	0	4.904	12.726
2006.132	0.003	571	1012	1321	1022	39.660	52.661	-0.111	12.940	5.964	46.698	1006	-549	4.655	1.858	1339	0	0.000	5.118	0	4.904	12.726
2006.134	0.003	574	1010	1317	1021	39.603	52.472	-0.134	12.806	5.964	46.508	1005	-547	4.654	1.858	1339	0	0.000	4.985	0	4.904	12.725
2006.137	0.003	576	1008	1310	1018	39.486	52.328	-0.026	12.781	5.964	46.365	1005	-544	4.654	1.857	1339	0	0.000	4.960	0	4.904	12.725
2006.140	0.003	578	1004	1301	1013	39.307	52.282	0.133	12.914	5.964	46.319	1005	-542	4.653	1.857	1339	0	0.000	5.093	0	4.904	12.724
2006.142	0.003	580	1003	1294	1010	39.188	52.263	0.099	13.013	5.964	46.300	1005	-540	4.653	1.856	1339	0	0.000	5.193	0	4.904	12.724
2006.145	0.003	580	1000	1293	1009	39.151	52.259	0.033	13.046	5.964	46.295	1005	-539	4.652	1.856	1339	0	0.000	5.227	0	4.904	12.723
2006.148	0.003	581	997	1293	1009	39.159	52.247	-0.020	13.026	5.964	46.283	1005	-538	4.652	1.855	1339	0	0.000	5.207	0	4.904	12.723
2006.151	0.003	583	995	1293	1010	39.166	52.182	-0.072	12.954	5.964	46.218	1005	-536	4.651	1.855	1339	0	0.000	5.135	0	4.904	12.722
2006.153	0.003	585	993	1289	1008	39.111	51.975	-0.151	12.802	5.964	46.011	1005	-534	4.650	1.854	1339	0	0.000	4.985	0	4.904	12.721
2006.156	0.003	587	990	1282	1005	38.980	51.551	-0.293	12.510	5.964	45.588	1004	-532	4.650	1.854	1339	0	0.000	4.692	0	4.904	12.721
2006.159	0.003	589	988	1271	999	38.756	51.251	-0.077	12.433	5.964	45.287	1004	-530	4.649	1.853	1339	0	0.000	4.616	0	4.904	12.720
2006.162	0.003	591	986	1255	991	38.454	50.973	0.024	12.457	5.964	45.009	1004	-529	4.649	1.853	1339	0	0.000	4.641	0	4.904	12.720
2006.164	0.003	585	982	1243	982	38.104	50.838	0.215	12.672	5.964	44.874	1004	-530	4.648	1.852	1339	0	0.000	4.856	0	4.904	12.719
2006.167	0.003	580	981	1239	978	37.937	50.713	0.042	12.714	5.964	44.749	1004	-535	4.648	1.851	1339	0	0.000	4.899	0	4.904	12.719
2006.170	0.003	574	978	1239	976	37.861	50.641	0.004	12.718	5.964	44.678	1004	-540	4.647	1.851	1339	0	0.000	4.903	0	4.904	12.718
2006.172	0.003	573	975	1239	975	37.829	50.599	-0.010	12.708	5.964	44.635	1004	-543	4.647	1.850	1339	0	0.000	4.894	0	4.904	12.718
2006.175	0.003	576	973	1235	974	37.772	50.599	0.058	12.766	5.964	44.635	1004	-542	4.646	1.850	1339	0	0.000	4.952	0	4.904	12.717
2006.178	0.003	578	971	1235	974	37.790	50.539	-0.079	12.687	5.964	44.576	1004	-540	4.646	1.849	1339	0	0.000	4.874	0	4.904	12.717
2006.181	0.003	579	968	1234	974	37.775	50.387	-0.137	12.550	5.964	44.423	1003	-538	4.645	1.849	1339	0	0.000	4.738	0	4.904	12.716

Gas Balance MODEL R1-F
Kimball Colinville Storage Reservoir
Discrepancy History Match
E. Kimball Crossflow with Meter Error &Gas Spill

Spill threshhold
1300

		Reservoir P/Z(psia)										E.Kimball+Low Perm Gas Balance				Corunna Seckerton Crossflow				South Spill Model		
Date	dT (years)	SOUTH	A1	MID	AVG	Calc. GIP (bcf)	Inventory GIP (bcf)	Total Discrepancy (bcf)	Adjusted Cumulative Discrep. (bcf)	Cumulative Meter Error (bcf)	Adjusted Inventory GIP (bcf)	P/Z (psia)	Influx 0.0008 (mcfd)	5.0 GIP (bcf)	Cum. Influx (bcf)	Avg P/Z Cor/Sec (psi)	Influx 0.0000 (mcfd)	Cum. Influx (bcf)	Revised K/C Cumulative Discrepancy (bcf)	Gas Spill 0.00855 (mcfd)	Cum. Gas Spill (bcf)	Total Model Adjustments (bcf)
2006.183	0.003	581	967	1226	970	37.627	50.387	0.147	12.698	5.964	44.423	1003	-536	4.645	1.848	1339	0	0.000	4.886	0	4.904	12.716
2006.186	0.003	583	965	1224	969	37.601	50.387	0.026	12.724	5.964	44.423	1003	-534	4.644	1.848	1339	0	0.000	4.913	0	4.904	12.715
2006.189	0.003	585	963	1225	970	37.638	50.178	-0.246	12.478	5.964	44.215	1003	-532	4.643	1.847	1339	0	0.000	4.667	0	4.904	12.715
2006.192	0.003	586	960	1217	966	37.472	50.095	0.083	12.561	5.964	44.131	1003	-531	4.643	1.847	1339	0	0.000	4.751	0	4.904	12.714
2006.194	0.003	590	958	1209	963	37.369	50.001	0.009	12.570	5.964	44.038	1003	-528	4.642	1.846	1339	0	0.000	4.760	0	4.904	12.713
2006.197	0.003	592	956	1204	961	37.281	49.744	-0.169	12.401	5.964	43.780	1003	-525	4.642	1.846	1339	0	0.000	4.592	0	4.904	12.713
2006.200	0.003	593	953	1191	954	37.013	48.986	-0.490	11.911	5.964	43.023	1003	-524	4.641	1.845	1339	0	0.000	4.102	0	4.904	12.712
2006.203	0.003	594	951	1165	940	36.476	48.394	-0.055	11.856	5.964	42.430	1003	-522	4.641	1.845	1339	0	0.000	4.048	0	4.904	12.712
2006.205	0.003	596	948	1128	921	35.739	47.708	0.052	11.908	5.964	41.745	1002	-521	4.640	1.844	1339	0	0.000	4.100	0	4.904	12.711
2006.208	0.003	597	946	1095	904	35.058	47.100	0.073	11.981	5.964	41.137	1002	-519	4.640	1.844	1339	0	0.000	4.174	0	4.904	12.711
2006.211	0.003	598	944	1060	886	34.362	46.592	0.187	12.168	5.964	40.628	1002	-518	4.639	1.843	1339	0	0.000	4.361	0	4.904	12.710
2006.214	0.003	600	942	1028	869	33.712	46.200	0.258	12.426	5.964	40.236	1002	-516	4.639	1.842	1339	0	0.000	4.620	0	4.904	12.710
2006.216	0.003	601	940	1004	856	33.224	45.753	0.042	12.468	5.964	39.790	1002	-515	4.638	1.842	1339	0	0.000	4.662	0	4.904	12.709
2006.219	0.003	602	938	983	846	32.803	45.308	-0.024	12.443	5.964	39.345	1002	-514	4.638	1.841	1339	0	0.000	4.638	0	4.904	12.709
2006.222	0.003	603	936	961	834	32.357	45.008	0.145	12.589	5.964	39.044	1002	-512	4.637	1.841	1339	0	0.000	4.784	0	4.904	12.708
2006.225	0.003	604	934	944	825	32.022	44.786	0.113	12.702	5.964	38.822	1002	-511	4.637	1.840	1339	0	0.000	4.898	0	4.904	12.708
2006.227	0.003	605	932	932	819	31.770	44.592	0.058	12.760	5.964	38.628	1002	-510	4.636	1.840	1339	0	0.000	4.956	0	4.904	12.707
2006.230	0.003	607	930	923	814	31.599	44.400	-0.021	12.739	5.964	38.436	1001	-509	4.636	1.839	1339	0	0.000	4.936	0	4.904	12.707
2006.233	0.003	608	928	916	811	31.445	44.246	0.000	12.739	5.964	38.282	1001	-507	4.635	1.839	1339	0	0.000	4.937	0	4.904	12.706
2006.235	0.003	609	926	909	807	31.313	44.113	-0.001	12.739	5.964	38.150	1001	-506	4.635	1.838	1339	0	0.000	4.937	0	4.904	12.706
2006.238	0.003	610	924	902	804	31.177	44.113	0.136	12.874	5.964	38.150	1001	-505	4.634	1.838	1339	0	0.000	5.073	0	4.904	12.705
2006.241	0.003	611	922	903	804	31.208	44.113	-0.031	12.843	5.964	38.150	1001	-504	4.634	1.837	1339	0	0.000	5.042	0	4.904	12.705
2006.244	0.003	612	920	906	806	31.257	44.136	-0.027	12.816	5.964	38.172	1001	-503	4.633	1.837	1339	0	0.000	5.016	0	4.904	12.704
2006.246	0.003	613	917	908	807	31.314	44.136	-0.057	12.759	5.964	38.172	1001	-501	4.633	1.836	1339	0	0.000	4.959	0	4.904	12.704
2006.249	0.003	617	917	910	809	31.391	44.136	-0.077	12.682	5.964	38.172	1001	-498	4.632	1.836	1339	0	0.000	4.883	0	4.904	12.703
2006.252	0.003	618	914	910	809	31.406	44.136	-0.014	12.668	5.964	38.172	1001	-496	4.632	1.835	1339	0	0.000	4.869	0	4.904	12.703
2006.255	0.003	620	913	912	811	31.461	44.008	-0.183	12.485	5.964	38.045	1000	-494	4.631	1.835	1339	0	0.000	4.686	0	4.904	12.702
2006.257	0.003	621	910	907	808	31.361	43.698	-0.209	12.276	5.964	37.734	1000	-493	4.631	1.834	1339	0	0.000	4.478	0	4.904	12.702
2006.260	0.003	622	908	895	802	31.127	43.379	-0.085	12.190	5.964	37.415	1000	-491	4.630	1.834	1339	0	0.000	4.393	0	4.904	12.701
2006.263	0.003	623	907	877	793	30.764	43.305	0.289	12.479	5.964	37.341	1000	-490	4.630	1.833	1339	0	0.000	4.682	0	4.904	12.701
2006.266	0.003	624	905	866	788	30.555	43.040	-0.055	12.423	5.964	37.077	1000	-489	4.629	1.833	1339	0	0.000	4.627	0	4.904	12.700
2006.268	0.003	625	903	859	783	30.395	42.629	-0.251	12.172	5.964	36.665	1000	-488	4.629	1.832	1339	0	0.000	4.376	0	4.904	12.700
2006.271	0.003	625	901	842	774	30.045	42.294	0.015	12.187	5.964	36.330	1000	-487	4.628	1.832	1339	0	0.000	4.392	0	4.904	12.699
2006.274	0.003	626	900	820	763	29.609	42.245	0.387	12.575	5.964	36.282	1000	-486	4.628	1.831	1339	0	0.000	4.779	0	4.904	12.699
2006.277	0.003	627	898	811	759	29.433	42.245	0.176	12.751	5.964	36.282	1000	-485	4.627	1.831	1339	0	0.000	4.956	0	4.904	12.698
2006.279	0.003	628	897	815	760	29.502	42.245	-0.070	12.681	5.964	36.282	999	-484	4.627	1.831	1339	0	0.000	4.887	0	4.904	12.698
2006.282	0.003	629	895	817	762	29.545	42.436	0.148	12.829	5.964	36.472	999	-483	4.626	1.830	1339	0	0.000	5.036	0	4.904	12.697
2006.285	0.003	643	893	818	767	29.760	42.653	0.001	12.831	5.964	36.689	999	-476	4.626	1.830	1339	0	0.000	5.037	0	4.904	12.697
2006.287	0.003	664	892	820	775	30.066	42.860	-0.099	12.732	5.964	36.896	999	-457	4.625	1.829	1339	0	0.000	4.939	0	4.904	12.696
2006.290	0.003	683	890	820	782	30.325	42.869	-0.249	12.482	5.964	36.905	999	-435	4.625	1.829	1339	0	0.000	4.690	0	4.904	12.696
2006.293	0.003	688	888	821	783	30.396	42.996	0.055	12.538	5.964	37.032	999	-422	4.625	1.828	1339	0	0.000	4.746	0	4.904	12.696
2006.296	0.003	696	887	822	786	30.509	43.321	0.212	12.750	5.964	37.357	999	-415	4.624	1.828	1339	0	0.000	4.958	0	4.904	12.695
2006.298	0.003	714	885	827	795	30.859	43.672	0.001	12.751	5.964	37.708	999	-400	4.624	1.827	1339	0	0.000	4.960	0	4.904	12.695
2006.301	0.003	735	883	835	807	31.295	44.047	-0.061	12.690	5.964	38.083	999	-378	4.623	1.827	1339	0	0.000	4.899	0	4.904	12.694
2006.304	0.003	758	882	842	818	31.746	44.319	-0.179	12.511	5.964	38.355	999	-352	4.623	1.827	1339	0	0.000	4.720	0	4.904	12.694

Gas Balance MODEL R1-F
Kimball Colinville Storage Reservoir
Discrepancy History Match
E. Kimball Crossflow with Meter Error &Gas Spill

Spill threshhold
1300

		Reservoir P/Z(psia)									E.Kimball+Low Perm Gas Balance				Corunna Seckerton Crossflow				South Spill Model		
Date	dT (years)	SOUTH	A1	MID	AVG	Calc. GIP (bcf)	Inventory GIP (bcf)	Total Discrepancy (bcf)	Adjusted Cumulative Discrep. (bcf)	Cumulative Meter Error (bcf)	Adjusted Inventory GIP (bcf)	P/Z (psia)	Influx 0.0008 (mcfd)	5.0 GIP (bcf)	Cum. Influx (bcf)	Avg P/Z Cor/Sec (psi)	Influx 0.0000 (mcfd)	Cum. Influx (bcf)	Revised K/C Cumulative Discrepancy (bcf)	Gas Spill 0.00855 (mcfd)	Cum. Gas Spill (bcf)	Total Model Adjustments (bcf)
2006.307	0.003	776	881	848	827	32.101	44.476	-0.197	12.313	5.964	38.512	999	-327	4.623	1.826	1339	0	0.000	4.523	0	4.904	12.694
2006.309	0.003	788	879	850	833	32.304	44.476	-0.203	12.110	5.964	38.512	998	-308	4.622	1.826	1339	0	0.000	4.320	0	4.904	12.693
2006.312	0.003	790	878	851	833	32.322	44.476	-0.018	12.092	5.964	38.512	998	-299	4.622	1.826	1339	0	0.000	4.303	0	4.904	12.693
2006.315	0.003	788	876	850	832	32.288	44.476	0.034	12.126	5.964	38.512	998	-299	4.622	1.825	1339	0	0.000	4.337	0	4.904	12.693
2006.318	0.003	787	874	850	831	32.255	44.476	0.033	12.159	5.964	38.512	998	-301	4.621	1.825	1339	0	0.000	4.370	0	4.904	12.693
2006.320	0.003	786	873	851	832	32.261	44.476	-0.005	12.153	5.964	38.512	998	-302	4.621	1.825	1339	0	0.000	4.365	0	4.904	12.692
2006.323	0.003	786	872	851	831	32.252	44.633	0.165	12.319	5.964	38.669	998	-302	4.621	1.825	1339	0	0.000	4.531	0	4.904	12.692
2006.326	0.003	786	870	857	834	32.358	44.964	0.225	12.544	5.964	39.000	998	-302	4.621	1.824	1339	0	0.000	4.756	0	4.904	12.692
2006.329	0.003	786	870	876	844	32.750	45.343	-0.012	12.531	5.964	39.379	998	-302	4.620	1.824	1339	0	0.000	4.744	0	4.904	12.691
2006.331	0.003	786	869	898	856	33.196	45.644	-0.146	12.386	5.964	39.680	998	-302	4.620	1.824	1339	0	0.000	4.599	0	4.904	12.691
2006.334	0.003	786	867	917	866	33.589	45.644	-0.394	11.992	5.964	39.680	998	-302	4.620	1.823	1339	0	0.000	4.205	0	4.904	12.691
2006.337	0.003	786	866	881	847	32.845	45.644	0.745	12.737	5.964	39.680	998	-302	4.619	1.823	1339	0	0.000	4.950	0	4.904	12.690
2006.339	0.003	786	864	898	855	33.177	45.644	-0.332	12.405	5.964	39.680	998	-302	4.619	1.823	1339	0	0.000	4.618	0	4.904	12.690
2006.342	0.003	786	864	898	855	33.174	45.644	0.003	12.407	5.964	39.680	998	-302	4.619	1.822	1339	0	0.000	4.621	0	4.904	12.690
2006.345	0.003	786	863	898	855	33.169	45.644	0.005	12.413	5.964	39.680	998	-301	4.618	1.822	1339	0	0.000	4.627	0	4.904	12.689
2006.348	0.003	786	862	898	855	33.163	45.644	0.006	12.419	5.964	39.680	998	-301	4.618	1.822	1339	0	0.000	4.633	0	4.904	12.689
2006.350	0.003	786	861	898	855	33.160	45.644	0.003	12.421	5.964	39.680	998	-301	4.618	1.822	1339	0	0.000	4.636	0	4.904	12.689
2006.353	0.003	786	860	898	855	33.157	45.644	0.003	12.424	5.964	39.680	997	-301	4.618	1.821	1339	0	0.000	4.639	0	4.904	12.689
2006.356	0.003	786	860	898	855	33.153	45.644	0.004	12.429	5.964	39.680	997	-301	4.617	1.821	1339	0	0.000	4.644	0	4.904	12.688
2006.359	0.003	786	858	898	854	33.147	45.644	0.006	12.434	5.964	39.680	997	-301	4.617	1.821	1339	0	0.000	4.650	0	4.904	12.688
2006.361	0.003	786	858	898	854	33.146	45.644	0.001	12.435	5.964	39.680	997	-301	4.617	1.820	1339	0	0.000	4.651	0	4.904	12.688
2006.364	0.003	786	858	898	854	33.144	45.644	0.003	12.438	5.964	39.680	997	-301	4.616	1.820	1339	0	0.000	4.655	0	4.904	12.687
2006.367	0.003	786	857	898	854	33.139	45.644	0.004	12.443	5.964	39.680	997	-301	4.616	1.820	1339	0	0.000	4.659	0	4.904	12.687
2006.370	0.003	786	856	898	854	33.136	45.644	0.003	12.446	5.964	39.680	997	-301	4.616	1.819	1339	0	0.000	4.662	0	4.904	12.687
2006.372	0.003	786	855	898	854	33.133	45.644	0.004	12.449	5.964	39.680	997	-300	4.615	1.819	1339	0	0.000	4.666	0	4.904	12.686
2006.375	0.003	786	855	898	854	33.129	45.644	0.004	12.453	5.964	39.680	997	-300	4.615	1.819	1339	0	0.000	4.670	0	4.904	12.686
2006.378	0.003	786	854	898	854	33.127	45.644	0.002	12.455	5.964	39.680	997	-300	4.615	1.819	1339	0	0.000	4.672	0	4.904	12.686
2006.381	0.003	786	854	898	854	33.125	45.644	0.002	12.457	5.964	39.680	997	-300	4.615	1.818	1339	0	0.000	4.675	0	4.904	12.686
2006.383	0.003	786	853	898	854	33.121	45.644	0.004	12.460	5.964	39.680	997	-300	4.614	1.818	1339	0	0.000	4.679	0	4.904	12.685
2006.386	0.003	786	852	898	854	33.118	45.644	0.004	12.464	5.964	39.680	997	-300	4.614	1.818	1339	0	0.000	4.683	0	4.904	12.685
2006.389	0.003	786	852	898	854	33.115	45.644	0.003	12.467	5.964	39.680	997	-300	4.614	1.817	1339	0	0.000	4.686	0	4.904	12.685
2006.392	0.003	786	851	898	853	33.111	45.644	0.004	12.470	5.964	39.680	997	-300	4.613	1.817	1339	0	0.000	4.690	0	4.904	12.684
2006.394	0.003	786	851	898	853	33.111	45.644	0.000	12.470	5.964	39.680	996	-300	4.613	1.817	1339	0	0.000	4.690	0	4.904	12.684
2006.397	0.003	786	850	898	853	33.106	45.644	0.006	12.476	5.964	39.680	996	-300	4.613	1.816	1339	0	0.000	4.696	0	4.904	12.684
2006.400	0.003	786	850	898	853	33.104	45.644	0.002	12.478	5.964	39.680	996	-299	4.612	1.816	1339	0	0.000	4.698	0	4.904	12.683
2006.402	0.003	786	850	898	853	33.104	45.644	0.000	12.478	5.964	39.680	996	-299	4.612	1.816	1339	0	0.000	4.698	0	4.904	12.683
2006.405	0.003	786	849	898	853	33.099	45.644	0.005	12.483	5.964	39.680	996	-299	4.612	1.816	1339	0	0.000	4.704	0	4.904	12.683
2006.408	0.003	786	848	898	853	33.097	45.644	0.002	12.484	5.964	39.680	996	-299	4.612	1.815	1339	0	0.000	4.706	0	4.904	12.683
2006.411	0.003	786	848	898	853	33.097	45.644	0.001	12.485	5.964	39.680	996	-299	4.611	1.815	1339	0	0.000	4.707	0	4.904	12.682
2006.413	0.003	786	847	898	853	33.093	45.644	0.004	12.489	5.964	39.680	996	-299	4.611	1.815	1339	0	0.000	4.711	0	4.904	12.682
2006.416	0.003	786	847	898	853	33.091	45.644	0.002	12.491	5.964	39.680	996	-299	4.611	1.814	1339	0	0.000	4.713	0	4.904	12.682
2006.419	0.003	787	847	913	861	33.395	45.865	-0.084	12.407	5.964	39.901	996	-298	4.610	1.814	1339	0	0.000	4.630	0	4.904	12.681
2006.422	0.003	787	846	922	866	33.586	45.968	-0.088	12.319	5.964	40.004	996	-298	4.610	1.814	1339	0	0.000	4.542	0	4.904	12.681
2006.424	0.003	789	846	930	871	33.777	46.053	-0.105	12.215	5.964	40.089	996	-296	4.610	1.813	1339	0	0.000	4.437	0	4.904	12.681
2006.427	0.003	789	844	933	872	33.815	46.157	0.066	12.281	5.964	40.194	996	-295	4.609	1.813	1339	0	0.000	4.504	0	4.904	12.681

Gas Balance MODEL R1-F
Kimball Colinville Storage Reservoir
Discrepancy History Match
E. Kimball Crossflow with Meter Error &Gas Spill

Spill threshhold
1300

		Reservoir P/Z(psia)									E.Kimball+Low Perm Gas Balance				Corunna Seckerton Crossflow					South Spill Model		
Date	dT (years)	SOUTH	A1	MID	AVG	Calc. GIP (bcf)	Inventory GIP (bcf)	Total Discrepancy (bcf)	Adjusted Cumulative Discrep. (bcf)	Cumulative Meter Error (bcf)	Adjusted Inventory GIP (bcf)	P/Z (psia)	Influx 0.0008 (mcfd)	5.0 GIP (bcf)	Cum. Influx (bcf)	Avg P/Z Cor/Sec (psi)	Influx 0.0000 (mcfd)	Cum. Influx (bcf)	Revised K/C Cumulative Discrepancy (bcf)	Gas Spill 0.00855 (mcfd)	Cum. Gas Spill (bcf)	Total Model Adjustments (bcf)
2006.430	0.003	791	845	940	876	33.998	46.351	0.010	12.291	5.964	40.388	996	-294	4.609	1.813	1339	0	0.000	4.515	0	4.904	12.680
2006.433	0.003	790	845	947	880	34.146	46.677	0.178	12.469	5.964	40.713	996	-293	4.609	1.813	1339	0	0.000	4.692	0	4.904	12.680
2006.435	0.003	793	844	962	889	34.476	46.975	-0.032	12.436	5.964	41.011	996	-291	4.609	1.812	1339	0	0.000	4.660	0	4.904	12.680
2006.438	0.003	796	844	977	898	34.833	47.314	-0.017	12.419	5.964	41.351	995	-288	4.608	1.812	1339	0	0.000	4.643	0	4.904	12.679
2006.441	0.003	800	844	994	908	35.225	47.485	-0.222	12.197	5.964	41.521	995	-283	4.608	1.812	1339	0	0.000	4.422	0	4.904	12.679
2006.444	0.003	803	843	1002	913	35.423	47.720	0.038	12.235	5.964	41.757	995	-279	4.608	1.811	1339	0	0.000	4.460	0	4.904	12.679
2006.446	0.003	806	843	1012	919	35.669	47.934	-0.032	12.203	5.964	41.970	995	-275	4.607	1.811	1339	0	0.000	4.428	0	4.904	12.679
2006.449	0.003	809	843	1020	925	35.880	48.165	0.020	12.223	5.964	42.201	995	-271	4.607	1.811	1339	0	0.000	4.448	0	4.904	12.678
2006.452	0.003	810	842	1031	930	36.099	48.467	0.083	12.305	5.964	42.503	995	-268	4.607	1.811	1339	0	0.000	4.531	0	4.904	12.678
2006.454	0.003	812	842	1044	938	36.404	48.690	-0.081	12.224	5.964	42.727	995	-266	4.607	1.810	1339	0	0.000	4.450	0	4.904	12.678
2006.457	0.003	814	842	1056	945	36.670	48.953	-0.003	12.221	5.964	42.990	995	-263	4.606	1.810	1339	0	0.000	4.448	0	4.904	12.677
2006.460	0.003	816	841	1066	951	36.899	49.281	0.100	12.321	5.964	43.318	995	-260	4.606	1.810	1339	0	0.000	4.547	0	4.904	12.677
2006.463	0.003	817	841	1082	960	37.239	49.571	-0.052	12.269	5.964	43.607	995	-259	4.606	1.810	1339	0	0.000	4.496	0	4.904	12.677
2006.465	0.003	817	840	1097	968	37.542	49.810	-0.063	12.206	5.964	43.847	995	-258	4.606	1.809	1339	0	0.000	4.433	0	4.904	12.677
2006.468	0.003	817	840	1110	975	37.814	50.022	-0.060	12.146	5.964	44.059	995	-258	4.605	1.809	1339	0	0.000	4.374	0	4.904	12.676
2006.471	0.003	817	840	1119	979	37.997	50.201	-0.004	12.142	5.964	44.237	995	-258	4.605	1.809	1339	0	0.000	4.369	0	4.904	12.676
2006.474	0.003	818	840	1128	984	38.184	50.456	0.068	12.210	5.964	44.492	995	-257	4.605	1.809	1339	0	0.000	4.437	0	4.904	12.676
2006.476	0.003	818	839	1138	990	38.400	50.578	-0.093	12.116	5.964	44.615	995	-256	4.605	1.808	1339	0	0.000	4.344	0	4.904	12.676
2006.479	0.003	826	840	1142	994	38.573	50.950	0.199	12.315	5.964	44.986	995	-251	4.604	1.808	1339	0	0.000	4.543	0	4.904	12.675
2006.482	0.003	838	840	1149	1002	38.890	51.294	0.027	12.342	5.964	45.330	995	-237	4.604	1.808	1339	0	0.000	4.571	0	4.904	12.675
2006.485	0.003	845	839	1162	1011	39.235	51.492	-0.147	12.195	5.964	45.528	994	-224	4.604	1.808	1339	0	0.000	4.424	0	4.904	12.675
2006.487	0.003	849	838	1172	1018	39.487	51.896	0.152	12.347	5.964	45.932	994	-217	4.604	1.807	1339	0	0.000	4.576	0	4.904	12.675
2006.490	0.003	860	838	1182	1027	39.841	52.151	-0.100	12.248	5.964	46.188	994	-207	4.603	1.807	1339	0	0.000	4.477	0	4.904	12.674
2006.493	0.003	863	838	1194	1034	40.134	52.461	0.018	12.266	5.964	46.498	994	-197	4.603	1.807	1339	0	0.000	4.495	0	4.904	12.674
2006.496	0.003	868	838	1206	1042	40.435	52.724	-0.038	12.227	5.964	46.761	994	-192	4.603	1.807	1339	0	0.000	4.457	0	4.904	12.674
2006.498	0.003	870	838	1218	1049	40.716	53.042	0.036	12.263	5.964	47.078	994	-187	4.603	1.807	1339	0	0.000	4.493	0	4.904	12.674
2006.501	0.003	873	838	1237	1060	41.141	53.391	-0.075	12.189	5.964	47.428	994	-183	4.603	1.806	1339	0	0.000	4.419	0	4.904	12.674
2006.504	0.003	881	838	1243	1067	41.383	53.652	0.018	12.207	5.964	47.688	994	-175	4.603	1.806	1339	0	0.000	4.437	0	4.904	12.674
2006.507	0.003	888	838	1253	1074	41.664	53.829	-0.103	12.103	5.964	47.866	994	-165	4.602	1.806	1339	0	0.000	4.334	0	4.904	12.673
2006.509	0.003	888	838	1262	1079	41.854	53.996	-0.023	12.080	5.964	48.032	994	-160	4.602	1.806	1339	0	0.000	4.311	0	4.904	12.673
2006.512	0.003	887	838	1269	1082	41.982	54.193	0.068	12.149	5.964	48.229	994	-161	4.602	1.806	1339	0	0.000	4.379	0	4.904	12.673
2006.515	0.003	887	838	1277	1087	42.153	54.609	0.245	12.394	5.964	48.645	994	-161	4.602	1.806	1339	0	0.000	4.625	0	4.904	12.673
2006.517	0.003	909	838	1283	1097	42.563	54.922	-0.096	12.297	5.964	48.958	994	-145	4.602	1.805	1339	0	0.000	4.528	0	4.904	12.673
2006.520	0.003	938	837	1280	1106	42.905	55.224	-0.041	12.257	5.964	49.260	994	-108	4.602	1.805	1339	0	0.000	4.488	0	4.904	12.673
2006.523	0.003	965	837	1278	1114	43.208	55.470	-0.057	12.199	5.964	49.506	994	-66	4.602	1.805	1339	0	0.000	4.431	0	4.904	12.673
2006.526	0.003	987	837	1277	1121	43.483	55.790	0.045	12.245	5.964	49.826	994	-29	4.602	1.805	1339	0	0.000	4.476	0	4.904	12.673
2006.528	0.003	1009	837	1278	1129	43.812	56.022	-0.097	12.148	5.964	50.059	994	6	4.602	1.805	1339	0	0.000	4.379	0	4.904	12.673
2006.531	0.003	1029	837	1278	1136	44.074	56.245	-0.039	12.109	5.964	50.282	994	41	4.602	1.805	1339	0	0.000	4.341	0	4.904	12.673
2006.534	0.003	1048	837	1276	1142	44.293	56.538	0.073	12.183	5.964	50.574	994	72	4.602	1.805	1339	0	0.000	4.414	0	4.904	12.673
2006.537	0.003	1067	838	1278	1149	44.591	56.853	0.018	12.201	5.964	50.890	994	104	4.602	1.805	1339	0	0.000	4.432	0	4.904	12.673
2006.539	0.003	1092	838	1278	1158	44.918	57.138	-0.043	12.158	5.964	51.174	994	142	4.602	1.806	1339	0	0.000	4.389	0	4.904	12.673
2006.542	0.003	1117	838	1276	1166	45.221	57.374	-0.067	12.091	5.964	51.411	994	186	4.602	1.806	1339	0	0.000	4.322	0	4.904	12.673
2006.545	0.003	1137	838	1276	1172	45.482	57.586	-0.050	12.042	5.964	51.622	994	225	4.602	1.806	1339	0	0.000	4.272	0	4.904	12.673
2006.548	0.003	1153	838	1275	1177	45.679	57.706	-0.077	11.965	5.964	51.742	994	258	4.603	1.806	1339	0	0.000	4.195	0	4.904	12.674
2006.550	0.003	1161	839	1275	1180	45.787	57.856	0.042	12.007	5.964	51.893	994	280	4.603	1.807	1339	0	0.000	4.237	0	4.904	12.674

Gas Balance MODEL R1-F
Kimball Colinville Storage Reservoir
Discrepancy History Match
E. Kimball Crossflow with Meter Error &Gas Spill

Spill threshhold
1300

		Reservoir P/Z(psia)										E.Kimball+Low Perm Gas Balance				Corunna Seckerton Crossflow				South Spill Model		
Date	dT (years)	SOUTH	A1	MID	AVG	Calc. GIP (bcf)	Inventory GIP (bcf)	Total Discrepancy (bcf)	Adjusted Cumulative Discrep. (bcf)	Cumulative Meter Error (bcf)	Adjusted Inventory GIP (bcf)	P/Z (psia)	Influx 0.0008 (mcfd)	5.0 GIP (bcf)	Cum. Influx (bcf)	Avg P/Z Cor/Sec (psi)	Influx 0.0000 (mcfd)	Cum. Influx (bcf)	Revised K/C Cumulative Discrepancy (bcf)	Gas Spill 0.00855 (mcfd)	Cum. Gas Spill (bcf)	Total Model Adjustments (bcf)
2006.553	0.003	1172	840	1274	1184	45.928	58.070	0.073	12.080	5.964	52.106	994	298	4.603	1.807	1339	0	0.000	4.309	0	4.904	12.674
2006.556	0.003	1187	840	1273	1189	46.120	58.343	0.081	12.160	5.964	52.379	994	323	4.603	1.807	1339	0	0.000	4.390	0	4.904	12.675
2006.559	0.003	1207	841	1273	1196	46.399	58.597	-0.025	12.136	5.964	52.633	994	356	4.604	1.808	1339	0	0.000	4.364	0	4.904	12.675
2006.561	0.003	1229	842	1273	1203	46.687	58.820	-0.064	12.071	5.964	52.856	994	396	4.604	1.808	1339	0	0.000	4.300	0	4.904	12.675
2006.564	0.003	1247	842	1272	1209	46.899	58.966	-0.066	12.006	5.964	53.003	995	435	4.605	1.808	1339	0	0.000	4.234	0	4.904	12.676
2006.567	0.003	1258	843	1272	1213	47.052	59.159	0.039	12.045	5.964	53.195	995	464	4.605	1.809	1339	0	0.000	4.272	0	4.904	12.676
2006.569	0.003	1271	844	1271	1217	47.219	59.312	-0.013	12.031	5.964	53.349	995	488	4.606	1.809	1339	0	0.000	4.258	0	4.904	12.677
2006.572	0.003	1282	845	1271	1221	47.363	59.513	0.056	12.088	5.964	53.549	995	512	4.606	1.810	1339	0	0.000	4.314	0	4.904	12.677
2006.575	0.003	1280	846	1279	1224	47.504	59.714	0.059	12.147	5.964	53.750	995	521	4.607	1.810	1339	0	0.000	4.373	0	4.904	12.678
2006.578	0.003	1277	848	1290	1230	47.701	59.972	0.063	12.210	5.964	54.009	995	516	4.607	1.811	1339	0	0.000	4.435	0	4.904	12.678
2006.580	0.003	1275	850	1302	1235	47.923	60.178	-0.017	12.192	5.964	54.214	995	510	4.608	1.811	1339	0	0.000	4.417	0	4.904	12.679
2006.583	0.003	1272	851	1317	1243	48.205	60.248	-0.211	11.981	5.964	54.284	995	505	4.608	1.812	1339	0	0.000	4.206	0	4.904	12.679
2006.586	0.003	1270	853	1318	1242	48.200	60.365	0.122	12.103	5.964	54.402	995	500	4.609	1.812	1339	0	0.000	4.327	0	4.904	12.680
2006.589	0.003	1268	855	1323	1245	48.286	60.512	0.061	12.164	5.964	54.548	995	496	4.609	1.813	1339	0	0.000	4.387	0	4.904	12.680
2006.591	0.003	1266	857	1329	1248	48.406	60.669	0.037	12.201	5.964	54.705	996	492	4.610	1.813	1339	0	0.000	4.424	0	4.904	12.681
2006.594	0.003	1264	858	1337	1251	48.538	60.950	0.150	12.350	5.964	54.986	996	488	4.610	1.814	1339	0	0.000	4.573	0	4.904	12.681
2006.597	0.003	1263	860	1350	1258	48.800	61.232	0.020	12.370	5.964	55.269	996	484	4.611	1.814	1339	0	0.000	4.593	0	4.904	12.682
2006.600	0.003	1262	863	1365	1266	49.115	61.469	-0.079	12.292	5.964	55.505	996	482	4.611	1.815	1339	0	0.000	4.513	0	4.904	12.682
2006.602	0.003	1260	865	1376	1271	49.319	61.538	-0.135	12.157	5.964	55.574	996	479	4.612	1.815	1339	0	0.000	4.378	0	4.904	12.683
2006.605	0.003	1260	868	1381	1274	49.436	61.722	0.067	12.224	5.964	55.758	996	477	4.612	1.816	1339	0	0.000	4.445	0	4.904	12.683
2006.608	0.003	1258	870	1387	1277	49.541	61.746	-0.081	12.143	5.964	55.783	996	474	4.613	1.816	1339	0	0.000	4.363	0	4.904	12.684
2006.611	0.003	1258	873	1389	1278	49.598	61.875	0.072	12.215	5.964	55.912	996	472	4.613	1.817	1339	0	0.000	4.434	0	4.904	12.684
2006.613	0.003	1257	876	1393	1280	49.668	62.093	0.148	12.363	5.964	56.129	996	471	4.613	1.817	1339	0	0.000	4.582	0	4.904	12.685
2006.616	0.003	1256	879	1401	1285	49.837	62.242	-0.020	12.343	5.964	56.278	997	469	4.614	1.818	1339	0	0.000	4.562	0	4.904	12.685
2006.619	0.003	1254	881	1408	1288	49.968	62.336	-0.036	12.307	5.964	56.373	997	466	4.614	1.818	1339	0	0.000	4.525	0	4.904	12.685
2006.621	0.003	1254	881	1414	1291	50.082	62.336	-0.115	12.192	5.964	56.373	997	463	4.615	1.819	1339	0	0.000	4.410	0	4.904	12.686
2006.624	0.003	1254	881	1412	1290	50.040	62.498	0.204	12.396	5.964	56.534	997	462	4.615	1.819	1339	0	0.000	4.614	0	4.904	12.686
2006.627	0.003	1253	881	1417	1292	50.141	62.671	0.072	12.468	5.964	56.708	997	462	4.616	1.820	1339	0	0.000	4.685	0	4.904	12.687
2006.630	0.003	1252	881	1425	1296	50.291	62.843	0.022	12.490	5.964	56.879	997	460	4.616	1.820	1339	0	0.000	4.706	0	4.904	12.687
2006.632	0.003	1251	881	1433	1300	50.445	63.107	0.110	12.600	5.964	57.144	997	457	4.617	1.820	1339	0	0.000	4.816	0	4.904	12.688
2006.635	0.003	1250	881	1446	1307	50.696	63.376	0.018	12.618	5.964	57.413	997	456	4.617	1.821	1339	0	0.000	4.834	0	4.904	12.688
2006.638	0.003	1251	881	1460	1314	50.994	63.569	-0.105	12.513	5.964	57.605	997	455	4.618	1.821	1339	0	0.000	4.728	0	4.904	12.689
2006.641	0.003	1249	881	1470	1319	51.171	63.729	-0.017	12.496	5.964	57.765	997	454	4.618	1.822	1339	0	0.000	4.711	0	4.904	12.689
2006.643	0.003	1250	881	1477	1323	51.325	63.880	-0.003	12.493	5.964	57.917	998	453	4.619	1.822	1339	0	0.000	4.707	0	4.904	12.690
2006.646	0.003	1249	881	1482	1325	51.416	64.025	0.054	12.547	5.964	58.061	998	452	4.619	1.823	1339	0	0.000	4.760	0	4.904	12.690
2006.649	0.003	1248	881	1488	1328	51.532	64.128	-0.012	12.534	5.964	58.164	998	450	4.619	1.823	1339	0	0.000	4.748	0	4.904	12.690
2006.652	0.003	1248	881	1493	1330	51.615	64.234	0.022	12.557	5.964	58.270	998	449	4.620	1.824	1339	0	0.000	4.769	0	4.904	12.691
2006.654	0.003	1248	881	1497	1333	51.701	64.329	0.009	12.566	5.964	58.366	998	449	4.620	1.824	1339	0	0.000	4.778	0	4.904	12.691
2006.657	0.003	1247	881	1500	1334	51.762	64.441	0.050	12.617	5.964	58.477	998	448	4.621	1.824	1339	0	0.000	4.828	0	4.904	12.692
2006.660	0.003	1250	881	1503	1337	51.859	64.499	-0.038	12.578	5.964	58.536	998	450	4.621	1.825	1339	0	0.000	4.790	0	4.904	12.692
2006.663	0.003	1249	881	1505	1337	51.886	64.499	-0.027	12.551	5.964	58.536	998	452	4.622	1.825	1339	0	0.000	4.763	0	4.904	12.693
2006.665	0.003	1250	926	1506	1344	52.134	64.499	-0.248	12.303	5.964	58.536	998	452	4.622	1.826	1339	0	0.000	4.514	0	4.904	12.693
2006.668	0.003	1249	926	1503	1342	52.072	64.499	0.062	12.365	5.964	58.536	998	451	4.623	1.826	1339	0	0.000	4.575	0	4.904	12.694
2006.671	0.003	1248	926	1502	1341	52.032	64.499	0.040	12.405	5.964	58.536	998	449	4.623	1.827	1339	0	0.000	4.615	0	4.904	12.694
2006.674	0.003	1248	926	1500	1340	51.997	64.499	0.035	12.440	5.964	58.536	999	449	4.623	1.827	1339	0	0.000	4.650	0	4.904	12.695

Gas Balance MODEL R1-F
Kimball Colinville Storage Reservoir
Discrepancy History Match
E. Kimball Crossflow with Meter Error &Gas Spill

Spill threshhold
1300

		Reservoir P/Z(psia)									E.Kimball+Low Perm Gas Balance				Corunna Seckerton Crossflow					South Spill Model		
Date	dT (years)	SOUTH	A1	MID	AVG	Calc. GIP (bcf)	Inventory GIP (bcf)	Total Discrepancy (bcf)	Adjusted Cumulative Discrep. (bcf)	Cumulative Meter Error (bcf)	Adjusted Inventory GIP (bcf)	P/Z (psia)	Influx 0.0008 (mcfd)	5.0 GIP (bcf)	Cum. Influx (bcf)	Avg P/Z Cor/Sec (psi)	Influx 0.0000 (mcfd)	Cum. Influx (bcf)	Revised K/C Cumulative Discrepancy (bcf)	Gas Spill 0.00855 (mcfd)	Cum. Gas Spill (bcf)	Total Model Adjustments (bcf)
2006.676	0.003	1249	926	1500	1341	52.012	64.499	-0.015	12.426	5.964	58.536	999	449	4.624	1.828	1339	0	0.000	4.634	0	4.904	12.695
2006.679	0.003	1248	926	1499	1340	51.981	64.499	0.030	12.456	5.964	58.536	999	449	4.624	1.828	1339	0	0.000	4.664	0	4.904	12.695
2006.682	0.003	1247	926	1497	1339	51.936	64.499	0.046	12.501	5.964	58.536	999	448	4.625	1.829	1339	0	0.000	4.709	0	4.904	12.696
2006.684	0.003	1248	926	1498	1339	51.946	64.499	-0.010	12.491	5.964	58.536	999	447	4.625	1.829	1339	0	0.000	4.698	0	4.904	12.696
2006.687	0.003	1247	926	1496	1338	51.903	64.499	0.043	12.534	5.964	58.536	999	447	4.626	1.829	1339	0	0.000	4.741	0	4.904	12.697
2006.690	0.003	1247	926	1495	1337	51.885	64.499	0.019	12.552	5.964	58.536	999	445	4.626	1.830	1339	0	0.000	4.759	0	4.904	12.697
2006.693	0.003	1247	926	1495	1338	51.893	64.499	-0.008	12.544	5.964	58.536	999	446	4.627	1.830	1339	0	0.000	4.750	0	4.904	12.698
2006.695	0.003	1248	926	1495	1338	51.890	64.499	0.003	12.547	5.964	58.536	999	446	4.627	1.831	1339	0	0.000	4.753	0	4.904	12.698
2006.698	0.003	1247	926	1493	1336	51.839	64.499	0.051	12.598	5.964	58.536	999	445	4.627	1.831	1339	0	0.000	4.803	0	4.904	12.699
2006.701	0.003	1247	926	1493	1336	51.825	64.499	0.014	12.612	5.964	58.536	1000	444	4.628	1.832	1339	0	0.000	4.817	0	4.904	12.699
2006.704	0.003	1246	926	1492	1335	51.810	64.499	0.015	12.627	5.964	58.536	1000	444	4.628	1.832	1339	0	0.000	4.832	0	4.904	12.699
2006.706	0.003	1246	926	1491	1335	51.795	64.610	0.125	12.752	5.964	58.646	1000	443	4.629	1.833	1339	0	0.000	4.956	0	4.904	12.700
2006.709	0.003	1247	926	1496	1338	51.905	64.701	-0.018	12.734	5.964	58.738	1000	443	4.629	1.833	1339	0	0.000	4.938	0	4.904	12.700
2006.712	0.003	1246	926	1502	1340	52.000	64.792	-0.004	12.730	5.964	58.829	1000	443	4.630	1.833	1339	0	0.000	4.933	0	4.904	12.701
2006.715	0.003	1246	926	1505	1342	52.072	64.792	-0.071	12.659	5.964	58.829	1000	442	4.630	1.834	1339	0	0.000	4.861	0	4.904	12.701
2006.717	0.003	1247	926	1506	1343	52.095	64.793	-0.023	12.636	5.964	58.829	1000	443	4.631	1.834	1339	0	0.000	4.838	0	4.904	12.702
2006.720	0.003	1247	926	1505	1342	52.074	64.793	0.021	12.656	5.964	58.829	1000	443	4.631	1.835	1339	0	0.000	4.858	0	4.904	12.702
2006.723	0.003	1246	926	1504	1342	52.050	64.793	0.024	12.681	5.964	58.829	1000	443	4.631	1.835	1339	0	0.000	4.882	0	4.904	12.703
2006.726	0.003	1247	926	1503	1342	52.047	64.793	0.003	12.684	5.964	58.829	1000	442	4.632	1.836	1339	0	0.000	4.884	0	4.904	12.703
2006.728	0.003	1246	926	1501	1340	51.994	64.793	0.053	12.737	5.964	58.829	1000	442	4.632	1.836	1339	0	0.000	4.937	0	4.904	12.703
2006.731	0.003	1246	926	1501	1340	51.989	64.793	0.005	12.741	5.964	58.829	1001	441	4.633	1.837	1339	0	0.000	4.941	0	4.904	12.704
2006.734	0.003	1246	926	1501	1340	51.995	64.793	-0.005	12.736	5.964	58.829	1001	441	4.633	1.837	1339	0	0.000	4.935	0	4.904	12.704
2006.736	0.003	1246	926	1500	1340	51.979	64.793	0.016	12.751	5.964	58.829	1001	442	4.634	1.837	1339	0	0.000	4.950	0	4.904	12.705
2006.739	0.003	1247	926	1500	1340	51.983	64.793	-0.004	12.747	5.964	58.829	1001	442	4.634	1.838	1339	0	0.000	4.946	0	4.904	12.705
2006.742	0.003	1246	926	1500	1339	51.964	64.793	0.020	12.767	5.964	58.829	1001	442	4.635	1.838	1339	0	0.000	4.965	0	4.904	12.706
2006.745	0.003	1246	926	1499	1339	51.944	64.793	0.019	12.786	5.964	58.829	1001	441	4.635	1.839	1339	0	0.000	4.984	0	4.904	12.706
2006.747	0.003	1247	926	1499	1339	51.945	64.793	0.000	12.786	5.964	58.829	1001	441	4.635	1.839	1339	0	0.000	4.983	0	4.904	12.706
2006.750	0.003	1246	926	1498	1339	51.937	64.793	0.008	12.794	5.964	58.829	1001	441	4.636	1.840	1339	0	0.000	4.990	0	4.904	12.707
2006.753	0.003	1246	926	1498	1338	51.926	64.793	0.011	12.804	5.964	58.829	1001	441	4.636	1.840	1339	0	0.000	5.001	0	4.904	12.707
2006.756	0.003	1246	926	1497	1338	51.897	64.793	0.029	12.834	5.964	58.829	1001	440	4.637	1.840	1339	0	0.000	5.030	0	4.904	12.708
2006.758	0.003	1246	926	1496	1337	51.878	64.805	0.031	12.865	5.964	58.841	1002	439	4.637	1.841	1339	0	0.000	5.060	0	4.904	12.708
2006.761	0.003	1246	926	1496	1338	51.891	64.921	0.104	12.968	5.964	58.958	1002	440	4.638	1.841	1339	0	0.000	5.163	0	4.904	12.709
2006.764	0.003	1246	926	1501	1340	51.992	64.971	-0.051	12.917	5.964	59.007	1002	440	4.638	1.842	1339	0	0.000	5.112	0	4.904	12.709
2006.767	0.003	1246	926	1505	1342	52.068	64.975	-0.072	12.845	5.964	59.011	1002	440	4.639	1.842	1339	0	0.000	5.039	0	4.904	12.710
2006.769	0.003	1246	926	1504	1342	52.047	65.072	0.118	12.963	5.964	59.108	1002	440	4.639	1.843	1339	0	0.000	5.157	0	4.904	12.710
2006.772	0.003	1255	926	1503	1344	52.154	65.072	-0.107	12.856	5.964	59.108	1002	448	4.639	1.843	1339	0	0.000	5.049	0	4.904	12.710
2006.775	0.003	1256	926	1503	1344	52.152	65.276	0.206	13.062	5.964	59.312	1002	457	4.640	1.844	1339	0	0.000	5.255	0	4.904	12.711
2006.778	0.003	1270	926	1502	1349	52.342	65.276	-0.191	12.871	5.964	59.312	1002	473	4.640	1.844	1339	0	0.000	5.064	0	4.904	12.711
2006.780	0.003	1274	926	1502	1350	52.379	65.276	-0.036	12.835	5.964	59.312	1002	491	4.641	1.845	1339	0	0.000	5.027	0	4.904	12.712
2006.783	0.003	1273	926	1501	1349	52.350	65.276	0.029	12.864	5.964	59.312	1002	494	4.641	1.845	1339	0	0.000	5.055	0	4.904	12.712
2006.786	0.003	1273	926	1501	1349	52.343	65.276	0.007	12.871	5.964	59.312	1003	492	4.642	1.846	1339	0	0.000	5.061	0	4.904	12.713
2006.789	0.003	1272	926	1500	1349	52.319	65.276	0.025	12.895	5.964	59.312	1003	491	4.642	1.846	1339	0	0.000	5.086	0	4.904	12.713
2006.791	0.003	1272	926	1500	1348	52.314	65.276	0.005	12.900	5.964	59.312	1003	490	4.643	1.847	1339	0	0.000	5.090	0	4.904	12.714
2006.794	0.003	1272	926	1500	1348	52.314	65.276	0.000	12.900	5.964	59.312	1003	490	4.643	1.847	1339	0	0.000	5.089	0	4.904	12.714
2006.797	0.003	1272	926	1499	1348	52.302	65.276	0.012	12.912	5.964	59.312	1003	490	4.644	1.847	1339	0	0.000	5.101	0	4.904	12.715

Gas Balance MODEL R1-F
Kimball Colinville Storage Reservoir
Discrepancy History Match
E. Kimball Crossflow with Meter Error &Gas Spill

Spill threshhold
1300

		Reservoir P/Z(psia)										E.Kimball+Low Perm Gas Balance				Corunna Seckerton Crossflow				South Spill Model		
Date	dT (years)	SOUTH	A1	MID	AVG	Calc. GIP (bcf)	Inventory GIP (bcf)	Total Discrepancy (bcf)	Adjusted Cumulative Discrep. (bcf)	Cumulative Meter Error (bcf)	Adjusted Inventory GIP (bcf)	P/Z (psia)	Influx 0.0008 (mcfd)	5.0 GIP (bcf)	Cum. Influx (bcf)	Avg P/Z Cor/Sec (psi)	Influx 0.0000 (mcfd)	Cum. Influx (bcf)	Revised K/C Cumulative Discrepancy (bcf)	Gas Spill 0.00855 (mcfd)	Cum. Gas Spill (bcf)	Total Model Adjustments (bcf)
2006.799	0.003	1272	926	1499	1348	52.290	65.276	0.012	12.924	5.964	59.312	1003	490	4.644	1.848	1339	0	0.000	5.113	0	4.904	12.715
2006.802	0.003	1272	926	1498	1347	52.270	65.276	0.019	12.944	5.964	59.312	1003	489	4.645	1.848	1339	0	0.000	5.131	0	4.904	12.716
2006.805	0.003	1271	926	1498	1347	52.265	65.276	0.005	12.949	5.964	59.312	1003	489	4.645	1.849	1339	0	0.000	5.136	0	4.904	12.716
2006.808	0.003	1271	926	1498	1347	52.265	65.276	0.000	12.949	5.964	59.312	1003	488	4.646	1.849	1339	0	0.000	5.136	0	4.904	12.717
2006.810	0.003	1271	926	1497	1347	52.240	65.276	0.025	12.973	5.964	59.312	1003	487	4.646	1.850	1339	0	0.000	5.160	0	4.904	12.717
2006.813	0.003	1271	926	1497	1346	52.235	65.276	0.005	12.978	5.964	59.312	1004	487	4.647	1.850	1339	0	0.000	5.164	0	4.904	12.718
2006.816	0.003	1271	926	1496	1346	52.219	65.276	0.016	12.995	5.964	59.312	1004	487	4.647	1.851	1339	0	0.000	5.180	0	4.904	12.718
2006.819	0.003	1271	926	1496	1346	52.213	65.276	0.006	13.001	5.964	59.312	1004	487	4.648	1.851	1339	0	0.000	5.186	0	4.904	12.719
2006.821	0.003	1272	926	1496	1346	52.221	65.160	-0.124	12.877	5.964	59.196	1004	487	4.648	1.852	1339	0	0.000	5.061	0	4.904	12.719
2006.824	0.003	1263	926	1495	1343	52.090	65.095	0.067	12.943	5.964	59.132	1004	479	4.649	1.852	1339	0	0.000	5.127	0	4.904	12.720
2006.827	0.003	1257	926	1494	1340	52.005	64.894	-0.116	12.827	5.964	58.931	1004	464	4.649	1.853	1339	0	0.000	5.011	0	4.904	12.720
2006.830	0.003	1242	926	1494	1335	51.792	64.888	0.207	13.034	5.964	58.925	1004	442	4.650	1.853	1339	0	0.000	5.217	0	4.904	12.721
2006.832	0.003	1237	926	1494	1333	51.709	64.884	0.079	13.113	5.964	58.920	1004	421	4.650	1.854	1339	0	0.000	5.296	0	4.904	12.721
2006.835	0.003	1238	1057	1493	1350	52.362	64.794	-0.743	12.370	5.964	58.830	1004	418	4.650	1.854	1339	0	0.000	4.552	0	4.904	12.721
2006.838	0.003	1233	1057	1492	1348	52.281	64.555	-0.158	12.212	5.964	58.591	1004	414	4.651	1.855	1339	0	0.000	4.394	0	4.904	12.722
2006.841	0.003	1213	1057	1492	1340	52.005	64.347	0.068	12.280	5.964	58.383	1005	389	4.651	1.855	1339	0	0.000	4.461	0	4.904	12.722
2006.843	0.003	1195	1057	1492	1334	51.767	64.347	0.238	12.518	5.964	58.383	1005	352	4.652	1.855	1339	0	0.000	4.699	0	4.904	12.723
2006.846	0.003	1191	1057	1492	1333	51.717	64.500	0.204	12.721	5.964	58.536	1005	331	4.652	1.856	1339	0	0.000	4.902	0	4.904	12.723
2006.849	0.003	1204	1057	1492	1337	51.889	64.729	0.057	12.778	5.964	58.766	1005	339	4.652	1.856	1339	0	0.000	4.959	0	4.904	12.723
2006.851	0.003	1225	1057	1492	1345	52.166	64.958	-0.048	12.730	5.964	58.995	1005	372	4.653	1.856	1339	0	0.000	4.910	0	4.904	12.724
2006.854	0.003	1246	1057	1492	1352	52.456	65.114	-0.133	12.596	5.964	59.151	1005	413	4.653	1.857	1339	0	0.000	4.776	0	4.904	12.724
2006.857	0.003	1262	1057	1492	1358	52.670	65.301	-0.027	12.569	5.964	59.338	1005	450	4.653	1.857	1339	0	0.000	4.748	0	4.904	12.724
2006.860	0.003	1277	1057	1492	1363	52.871	65.438	-0.063	12.506	5.964	59.475	1005	481	4.654	1.858	1339	0	0.000	4.684	0	4.904	12.725
2006.862	0.003	1295	1057	1492	1369	53.113	65.457	-0.224	12.282	5.964	59.493	1005	515	4.654	1.858	1339	0	0.000	4.460	0	4.904	12.725
2006.865	0.003	1302	1057	1492	1371	53.201	65.458	-0.086	12.195	5.964	59.494	1005	540	4.655	1.859	1339	0	0.000	4.373	0	4.904	12.726
2006.868	0.003	1306	1057	1492	1373	53.264	65.545	0.023	12.219	5.964	59.581	1005	551	4.656	1.859	1339	0	0.000	4.396	0	4.904	12.727
2006.871	0.003	1314	1057	1492	1375	53.362	65.545	-0.098	12.121	5.964	59.581	1006	564	4.656	1.860	1339	0	0.000	4.297	96	4.904	12.727
2006.873	0.003	1312	1057	1492	1375	53.345	65.545	0.017	12.138	5.964	59.581	1006	570	4.657	1.860	1339	0	0.000	4.314	154	4.904	12.728
2006.876	0.003	1312	1057	1492	1375	53.342	65.545	0.003	12.141	5.964	59.581	1006	568	4.657	1.861	1339	0	0.000	4.316	205	4.904	12.729
2006.879	0.003	1311	1057	1492	1374	53.325	65.545	0.017	12.158	5.964	59.581	1006	566	4.658	1.862	1339	0	0.000	4.333	272	4.904	12.730
2006.882	0.003	1310	1057	1492	1374	53.316	65.545	0.008	12.166	5.964	59.581	1006	564	4.658	1.862	1339	0	0.000	4.341	251	4.905	12.730
2006.884	0.003	1310	1057	1492	1374	53.312	65.545	0.004	12.171	5.964	59.581	1006	563	4.659	1.863	1339	0	0.000	4.344	245	4.905	12.731
2006.887	0.003	1309	1057	1492	1374	53.305	65.545	0.008	12.178	5.964	59.581	1006	562	4.659	1.863	1339	0	0.000	4.351	224	4.905	12.732
2006.890	0.003	1309	1057	1492	1374	53.296	65.545	0.008	12.187	5.964	59.581	1006	560	4.660	1.864	1339	0	0.000	4.359	210	4.905	12.733
2006.893	0.003	1308	1057	1492	1374	53.290	65.545	0.006	12.193	5.964	59.581	1007	559	4.661	1.864	1339	0	0.000	4.365	201	4.906	12.734
2006.895	0.003	1308	1057	1492	1374	53.287	65.545	0.003	12.196	5.964	59.581	1007	558	4.661	1.865	1339	0	0.000	4.368	192	4.906	12.734
2006.898	0.003	1308	1057	1492	1373	53.283	65.545	0.003	12.199	5.964	59.581	1007	558	4.662	1.865	1339	0	0.000	4.370	183	4.906	12.735
2006.901	0.003	1308	1057	1492	1373	53.283	65.666	0.121	12.320	5.964	59.702	1007	557	4.662	1.866	1339	0	0.000	4.491	178	4.906	12.736
2006.903	0.003	1318	1057	1492	1377	53.415	65.845	0.047	12.368	5.964	59.881	1007	567	4.663	1.867	1339	0	0.000	4.537	285	4.906	12.737
2006.906	0.003	1318	1057	1492	1377	53.415	65.972	0.127	12.494	5.964	60.008	1007	577	4.663	1.867	1339	0	0.000	4.664	283	4.907	12.737
2006.909	0.003	1344	1057	1492	1386	53.773	66.089	-0.240	12.255	5.964	60.126	1007	605	4.664	1.868	1339	0	0.000	4.423	584	4.907	12.739
2006.912	0.003	1354	1057	1492	1389	53.907	66.239	0.015	12.270	5.964	60.275	1007	644	4.665	1.868	1339	0	0.000	4.438	809	4.908	12.740
2006.914	0.003	1370	1057	1492	1395	54.122	66.301	-0.153	12.117	5.964	60.338	1008	673	4.665	1.869	1339	0	0.000	4.284	993	4.909	12.742
2006.917	0.003	1371	1057	1492	1395	54.135	66.301	-0.013	12.104	5.964	60.338	1008	691	4.666	1.870	1339	0	0.000	4.271	1311	4.910	12.744
2006.920	0.003	1370	1057	1492	1395	54.117	66.301	0.018	12.122	5.964	60.338	1008	690	4.667	1.870	1339	0	0.000	4.288	1412	4.912	12.746

Gas Balance MODEL R1-F
Kimball Colinville Storage Reservoir
Discrepancy History Match
E. Kimball Crossflow with Meter Error &Gas Spill

Spill threshhold
1300

		Reservoir P/Z(psia)										E.Kimball+Low Perm Gas Balance				Corunna Seckerton Crossflow				South Spill Model		
Date	dT (years)	SOUTH	A1	MID	AVG	Calc. GIP (bcf)	Inventory GIP (bcf)	Total Discrepancy (bcf)	Adjusted Cumulative Discrep. (bcf)	Cumulative Meter Error (bcf)	Adjusted Inventory GIP (bcf)	P/Z (psia)	Influx 0.0008 (mcfd)	5.0 GIP (bcf)	Cum. Influx (bcf)	Avg P/Z Cor/Sec (psi)	Influx 0.0000 (mcfd)	Cum. Influx (bcf)	Revised K/C Cumulative Discrepancy (bcf)	Gas Spill 0.00855 (mcfd)	Cum. Gas Spill (bcf)	Total Model Adjustments (bcf)
2006.923	0.003	1369	1057	1492	1394	54.101	66.284	-0.001	12.121	5.964	60.320	1008	687	4.667	1.871	1339	0	0.000	4.286	1585	4.913	12.748
2006.925	0.003	1367	1057	1492	1394	54.080	66.104	-0.159	11.962	5.964	60.140	1008	684	4.668	1.872	1339	0	0.000	4.126	1578	4.915	12.750
2006.928	0.003	1351	1057	1492	1388	53.858	65.796	-0.085	11.876	5.964	59.833	1008	664	4.669	1.872	1339	0	0.000	4.040	1370	4.916	12.752
2006.931	0.003	1327	1057	1492	1380	53.536	65.743	0.269	12.145	5.964	59.780	1008	620	4.669	1.873	1339	0	0.000	4.309	1078	4.917	12.754
2006.934	0.003	1315	1057	1492	1376	53.387	64.864	-0.730	11.416	5.964	58.901	1009	582	4.670	1.874	1339	0	0.000	3.578	933	4.918	12.756
2006.936	0.003	1278	1057	1468	1350	52.387	64.433	0.569	11.984	5.964	58.470	1009	531	4.670	1.874	1339	0	0.000	4.147	318	4.919	12.756
2006.939	0.003	1248	1057	1460	1336	51.830	64.402	0.526	12.510	5.964	58.438	1009	462	4.671	1.875	1339	0	0.000	4.672	0	4.919	12.757
2006.942	0.003	1238	1057	1458	1331	51.650	64.402	0.180	12.690	5.964	58.438	1009	422	4.671	1.875	1339	0	0.000	4.851	0	4.919	12.757
2006.945	0.003	1238	1057	1458	1331	51.650	64.364	-0.038	12.651	5.964	58.400	1009	412	4.672	1.875	1339	0	0.000	4.812	0	4.919	12.758
2006.947	0.003	1239	1057	1459	1332	51.672	64.364	-0.022	12.629	5.964	58.400	1009	413	4.672	1.876	1339	0	0.000	4.790	0	4.919	12.758
2006.950	0.003	1241	1057	1459	1333	51.707	64.364	-0.034	12.595	5.964	58.400	1009	415	4.673	1.876	1339	0	0.000	4.755	0	4.919	12.759
2006.953	0.003	1242	1057	1459	1333	51.712	64.364	-0.006	12.589	5.964	58.400	1009	418	4.673	1.877	1339	0	0.000	4.749	0	4.919	12.759
2006.956	0.003	1243	1057	1459	1333	51.721	64.364	-0.008	12.581	5.964	58.400	1009	420	4.673	1.877	1339	0	0.000	4.740	0	4.919	12.759
2006.958	0.003	1244	1057	1458	1333	51.712	64.364	0.009	12.590	5.964	58.400	1009	422	4.674	1.878	1339	0	0.000	4.748	0	4.919	12.760
2006.961	0.003	1245	1057	1458	1334	51.746	64.364	-0.034	12.555	5.964	58.400	1010	424	4.674	1.878	1339	0	0.000	4.714	0	4.919	12.760
2006.964	0.003	1246	1057	1458	1334	51.747	64.364	0.000	12.555	5.964	58.400	1010	426	4.675	1.878	1339	0	0.000	4.713	0	4.919	12.761
2006.966	0.003	1246	1057	1457	1333	51.734	64.364	0.012	12.568	5.964	58.400	1010	426	4.675	1.879	1339	0	0.000	4.725	0	4.919	12.761
2006.969	0.003	1247	1057	1457	1334	51.736	64.364	-0.001	12.566	5.964	58.400	1010	427	4.676	1.879	1339	0	0.000	4.723	0	4.919	12.762
2006.972	0.003	1247	1057	1457	1334	51.747	64.364	-0.012	12.554	5.964	58.400	1010	428	4.676	1.880	1339	0	0.000	4.711	0	4.919	12.762
2006.975	0.003	1248	1057	1457	1334	51.756	64.364	-0.008	12.546	5.964	58.400	1010	430	4.676	1.880	1339	0	0.000	4.702	0	4.919	12.762
2006.977	0.003	1249	1057	1457	1334	51.760	64.503	0.135	12.681	5.964	58.540	1010	431	4.677	1.881	1339	0	0.000	4.837	0	4.919	12.763
2006.980	0.003	1258	1057	1456	1337	51.861	64.638	0.033	12.715	5.964	58.674	1010	440	4.677	1.881	1339	0	0.000	4.870	0	4.919	12.763
2006.983	0.003	1271	1057	1455	1341	52.031	64.768	-0.039	12.675	5.964	58.805	1010	462	4.678	1.881	1339	0	0.000	4.830	0	4.919	12.764
2006.986	0.003	1283	1057	1455	1345	52.195	64.775	-0.157	12.518	5.964	58.811	1010	488	4.678	1.882	1339	0	0.000	4.673	0	4.919	12.764
2006.988	0.003	1287	1057	1455	1346	52.237	64.775	-0.043	12.476	5.964	58.811	1011	504	4.679	1.882	1339	0	0.000	4.629	0	4.919	12.765
2006.991	0.003	1286	1140	1455	1357	52.632	64.775	-0.395	12.081	5.964	58.811	1011	507	4.679	1.883	1339	0	0.000	4.234	0	4.919	12.765
2006.994	0.003	1286	1141	1454	1356	52.626	64.775	0.006	12.087	5.964	58.811	1011	507	4.680	1.883	1339	0	0.000	4.240	0	4.919	12.766
2006.997	0.003	1286	1142	1454	1357	52.629	64.930	0.153	12.239	5.964	58.966	1011	506	4.680	1.884	1339	0	0.000	4.392	0	4.919	12.766
2006.999	0.003	1297	1143	1454	1360	52.775	65.000	-0.077	12.163	5.964	59.036	1011	517	4.681	1.885	1339	0	0.000	4.315	0	4.919	12.767
2007.003	0.003	1300	1144	1454	1361	52.814	65.000	-0.039	12.124	5.964	59.036	1011	531	4.681	1.885	1339	0	0.000	4.275	0	4.919	12.767
2007.005	0.003	1300	1144	1453	1361	52.801	65.000	0.013	12.137	5.964	59.036	1011	534	4.682	1.886	1339	0	0.000	4.287	0	4.919	12.768
2007.008	0.003	1300	1145	1453	1361	52.797	65.000	0.004	12.141	5.964	59.036	1011	533	4.683	1.886	1339	0	0.000	4.291	0	4.919	12.769
2007.011	0.003	1300	1147	1453	1361	52.809	65.130	0.119	12.260	5.964	59.167	1011	533	4.683	1.887	1339	0	0.000	4.409	0	4.919	12.769
2007.014	0.003	1314	1148	1453	1366	53.013	65.298	-0.036	12.223	5.964	59.335	1012	548	4.684	1.887	1339	0	0.000	4.372	156	4.919	12.770
2007.016	0.003	1326	1149	1453	1370	53.166	65.298	-0.153	12.070	5.964	59.335	1012	576	4.684	1.888	1339	0	0.000	4.219	285	4.919	12.771
2007.019	0.003	1327	1149	1452	1370	53.168	65.298	-0.001	12.069	5.964	59.335	1012	589	4.685	1.888	1339	0	0.000	4.217	298	4.919	12.771
2007.022	0.003	1327	1150	1452	1370	53.170	65.298	-0.002	12.066	5.964	59.335	1012	589	4.685	1.889	1339	0	0.000	4.214	459	4.920	12.773
2007.025	0.003	1326	1151	1452	1370	53.153	65.298	0.017	12.083	5.964	59.335	1012	588	4.686	1.890	1339	0	0.000	4.230	578	4.920	12.774
2007.027	0.003	1325	1151	1451	1370	53.134	65.064	-0.214	11.869	5.964	59.101	1012	585	4.687	1.890	1339	0	0.000	4.015	583	4.921	12.775
2007.030	0.003	1311	1153	1451	1365	52.956	65.016	0.130	11.999	5.964	59.053	1012	570	4.687	1.891	1339	0	0.000	4.144	419	4.921	12.776
2007.033	0.003	1299	1154	1452	1361	52.805	65.016	0.150	12.149	5.964	59.053	1012	542	4.688	1.891	1339	0	0.000	4.294	271	4.922	12.777
2007.036	0.003	1298	1155	1451	1361	52.793	64.934	-0.071	12.079	5.964	58.970	1013	529	4.688	1.892	1339	0	0.000	4.223	260	4.922	12.777
2007.038	0.003	1291	1156	1451	1358	52.703	64.757	-0.087	11.991	5.964	58.793	1013	521	4.689	1.892	1339	0	0.000	4.135	24	4.922	12.778
2007.041	0.003	1278	1157	1451	1354	52.533	64.310	-0.276	11.715	5.964	58.346	1013	500	4.689	1.893	1339	0	0.000	3.859	0	4.922	12.779
2007.044	0.003	1242	1158	1450	1341	52.040	63.647	-0.170	11.546	5.964	57.684	1013	450	4.690	1.893	1339	0	0.000	3.689	0	4.922	12.779

Gas Balance MODEL R1-F
Kimball Colinville Storage Reservoir
Discrepancy History Match
E. Kimball Crossflow with Meter Error &Gas Spill

Spill threshhold
1300

		Reservoir P/Z(psia)									E.Kimball+Low Perm Gas Balance			Corunna Seckerton Crossflow					South Spill Model		
Date	dT (years)	SOUTH	A1	MID	AVG	Calc. GIP (bcf)	Inventory GIP (bcf)	Total Discrepancy (bcf)	Adjusted Cumulative Discrep. (bcf)	Cumulative Meter Error (bcf)	Adjusted Inventory GIP (bcf)	P/Z (psia)	Influx 0.0008 (mcfd)	5.0 GIP (bcf)	Cum. Influx (bcf)	Avg P/Z Cor/Sec (psi)	Influx 0.0000 (mcfd)	Cum. Influx (bcf)	Revised K/C Cumulative Discrepancy (bcf)	Gas Spill 0.00855 (mcfd)	Cum. Gas Spill (bcf)	Total Model Adjustments (bcf)
2007.047	0.003	1205	1160	1442	1324	51.380	63.143	0.156	11.701	5.964	57.179	1013	377	4.690	1.894	1339	0	0.000	3.844	0	4.922	12.779
2007.049	0.003	1183	1160	1425	1308	50.728	63.008	0.517	12.218	5.964	57.044	1013	319	4.690	1.894	1339	0	0.000	4.360	0	4.922	12.780
2007.052	0.003	1175	1161	1417	1301	50.460	62.812	0.072	12.290	5.964	56.848	1013	290	4.691	1.894	1339	0	0.000	4.432	0	4.922	12.780
2007.055	0.003	1164	1162	1418	1298	50.339	62.145	-0.546	11.744	5.964	56.181	1013	273	4.691	1.895	1339	0	0.000	3.886	0	4.922	12.780
2007.058	0.003	1141	1164	1407	1285	49.834	61.557	-0.083	11.661	5.964	55.593	1013	241	4.691	1.895	1339	0	0.000	3.803	0	4.922	12.780
2007.060	0.003	1113	1164	1388	1264	49.056	60.977	0.197	11.859	5.964	55.013	1013	195	4.691	1.895	1339	0	0.000	4.000	0	4.922	12.781
2007.063	0.003	1082	1165	1375	1247	48.372	60.388	0.095	11.953	5.964	54.424	1013	142	4.691	1.895	1339	0	0.000	4.095	0	4.922	12.781
2007.066	0.003	1053	1166	1358	1228	47.656	59.491	-0.180	11.773	5.964	53.527	1013	91	4.692	1.895	1339	0	0.000	3.914	0	4.922	12.781
2007.068	0.003	1033	1167	1332	1208	46.858	58.389	-0.304	11.468	5.964	52.425	1013	49	4.692	1.895	1339	0	0.000	3.610	0	4.922	12.781
2007.071	0.003	1009	1168	1293	1179	45.741	57.770	0.499	11.967	5.964	51.807	1013	12	4.692	1.895	1339	0	0.000	4.109	0	4.922	12.781
2007.074	0.003	979	1169	1268	1156	44.840	57.227	0.358	12.325	5.964	51.263	1013	-31	4.692	1.895	1339	0	0.000	4.466	0	4.922	12.781
2007.077	0.003	951	1170	1257	1140	44.223	56.368	-0.243	12.083	5.964	50.404	1013	-76	4.692	1.895	1339	0	0.000	4.224	0	4.922	12.781
2007.079	0.003	928	1170	1236	1121	43.480	55.424	-0.201	11.881	5.964	49.460	1013	-115	4.691	1.895	1339	0	0.000	4.022	0	4.922	12.781
2007.082	0.003	898	1170	1236	1110	43.082	54.507	-0.518	11.363	5.964	48.544	1013	-155	4.691	1.895	1339	0	0.000	3.505	0	4.922	12.781
2007.085	0.003	869	1170	1178	1070	41.500	53.580	0.654	12.018	5.964	47.616	1013	-197	4.691	1.895	1339	0	0.000	4.159	0	4.922	12.780
2007.088	0.003	834	1169	1141	1038	40.281	52.708	0.348	12.365	5.964	46.745	1013	-242	4.691	1.895	1339	0	0.000	4.507	0	4.922	12.780
2007.090	0.003	813	1169	1120	1020	39.578	51.886	-0.119	12.246	5.964	45.923	1013	-279	4.691	1.894	1339	0	0.000	4.389	0	4.922	12.780
2007.093	0.003	788	1169	1093	997	38.688	51.050	0.053	12.299	5.964	45.086	1013	-309	4.690	1.894	1339	0	0.000	4.442	0	4.922	12.780
2007.096	0.003	763	1169	1068	975	37.828	50.126	-0.064	12.236	5.964	44.162	1013	-340	4.690	1.894	1339	0	0.000	4.379	0	4.922	12.779
2007.099	0.003	740	1169	1035	950	36.864	49.114	-0.048	12.188	5.964	43.151	1013	-369	4.690	1.893	1339	0	0.000	4.331	0	4.922	12.779
2007.101	0.003	719	1169	1000	924	35.854	48.254	0.150	12.338	5.964	42.290	1013	-395	4.689	1.893	1339	0	0.000	4.481	0	4.922	12.778
2007.104	0.003	701	1169	966	900	34.911	47.378	0.068	12.405	5.964	41.415	1013	-418	4.689	1.892	1339	0	0.000	4.549	0	4.922	12.778
2007.107	0.003	682	1169	935	877	34.020	46.558	0.070	12.475	5.964	40.594	1013	-438	4.688	1.892	1339	0	0.000	4.620	0	4.922	12.778
2007.110	0.003	664	1169	905	855	33.165	45.780	0.078	12.553	5.964	39.816	1013	-458	4.688	1.892	1339	0	0.000	4.698	0	4.922	12.777
2007.112	0.003	646	1169	876	833	32.336	45.023	0.072	12.625	5.964	39.059	1013	-477	4.687	1.891	1339	0	0.000	4.771	0	4.922	12.777
2007.115	0.003	629	1169	850	814	31.576	44.327	0.063	12.689	5.964	38.363	1012	-495	4.687	1.891	1339	0	0.000	4.834	0	4.922	12.776
2007.118	0.003	614	1169	824	795	30.842	43.704	0.112	12.801	5.964	37.741	1012	-511	4.686	1.890	1339	0	0.000	4.947	0	4.922	12.776
2007.121	0.003	614	1169	824	795	30.842	43.124	-0.580	12.221	5.964	37.161	1012	-519	4.686	1.890	1339	0	0.000	4.368	0	4.922	12.775
2007.123	0.003	588	1169	783	764	29.655	42.514	0.576	12.797	5.964	36.550	1012	-531	4.685	1.889	1339	0	0.000	4.944	0	4.922	12.775
2007.126	0.003	573	1169	764	749	29.054	41.934	0.021	12.818	5.964	35.970	1012	-550	4.685	1.888	1339	0	0.000	4.966	0	4.922	12.774
2007.129	0.003	558	1169	746	734	28.494	41.270	-0.104	12.714	5.964	35.306	1012	-563	4.684	1.888	1339	0	0.000	4.862	0	4.922	12.773
2007.132	0.003	541	1169	727	718	27.872	40.554	-0.093	12.620	5.964	34.591	1012	-577	4.684	1.887	1339	0	0.000	4.769	0	4.922	12.773
2007.134	0.003	520	1169	704	699	27.127	39.915	0.106	12.727	5.964	33.952	1012	-593	4.683	1.887	1339	0	0.000	4.876	0	4.922	12.772
2007.137	0.003	500	1169	684	681	26.435	39.292	0.069	12.796	5.964	33.329	1012	-611	4.682	1.886	1339	0	0.000	4.946	0	4.922	12.772
2007.140	0.003	479	1169	666	665	25.790	38.798	0.150	12.946	5.964	32.834	1011	-627	4.682	1.885	1339	0	0.000	5.097	0	4.922	12.771
2007.142	0.003	479	1138	650	653	25.315	38.324	0.002	12.948	5.964	32.361	1011	-635	4.681	1.885	1339	0	0.000	5.099	0	4.922	12.770
2007.145	0.003	479	1137	636	645	25.015	37.943	-0.082	12.866	5.964	31.979	1011	-635	4.680	1.884	1339	0	0.000	5.018	0	4.922	12.770
2007.148	0.003	479	1134	622	637	24.717	37.548	-0.097	12.769	5.964	31.584	1011	-634	4.680	1.884	1339	0	0.000	4.922	0	4.922	12.769
2007.151	0.003	479	1133	609	630	24.443	37.169	-0.104	12.665	5.964	31.206	1011	-634	4.679	1.883	1339	0	0.000	4.818	0	4.922	12.769
2007.153	0.003	479	1129	594	622	24.133	36.810	-0.050	12.615	5.964	30.846	1011	-634	4.679	1.882	1339	0	0.000	4.769	0	4.922	12.768
2007.156	0.003	479	1126	582	615	23.857	36.515	-0.018	12.597	5.964	30.552	1011	-634	4.678	1.882	1339	0	0.000	4.752	0	4.922	12.767
2007.159	0.003	425	1123	572	591	22.920	36.167	0.588	13.185	5.964	30.204	1010	-654	4.677	1.881	1339	0	0.000	5.341	0	4.922	12.767
2007.162	0.003	415	1120	565	583	22.628	35.810	-0.065	13.120	5.964	29.846	1010	-676	4.677	1.880	1339	0	0.000	5.276	0	4.922	12.766
2007.164	0.003	405	1117	555	574	22.282	35.432	-0.032	13.088	5.964	29.468	1010	-682	4.676	1.880	1339	0	0.000	5.245	0	4.922	12.765
2007.167	0.003	396	1114	544	565	21.909	35.210	0.150	13.239	5.964	29.246	1010	-688	4.675	1.879	1339	0	0.000	5.396	0	4.922	12.765

Gas Balance MODEL R1-F
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1300

		Reservoir P/Z(psia)									E.Kimball+Low Perm Gas Balance				Corunna Seckerton Crossflow					South Spill Model		
Date	dT (years)	SOUTH	A1	MID	AVG	Calc. GIP (bcf)	Inventory GIP (bcf)	Total Discrepancy (bcf)	Adjusted Cumulative Discrep. (bcf)	Cumulative Meter Error (bcf)	Adjusted Inventory GIP (bcf)	P/Z (psia)	Influx 0.0008 (mcfd)	5.0 GIP (bcf)	Cum. Influx (bcf)	Avg P/Z Cor/Sec (psi)	Influx 0.0000 (mcfd)	Cum. Influx (bcf)	Revised K/C Cumulative Discrepancy (bcf)	Gas Spill 0.00855 (mcfd)	Cum. Gas Spill (bcf)	Total Model Adjustments (bcf)
2007.170	0.003	398	1111	532	559	21.673	34.989	0.015	13.254	5.964	29.026	1010	-690	4.675	1.878	1339	0	0.000	5.412	0	4.922	12.764
2007.172	0.003	401	1108	523	554	21.511	34.783	-0.044	13.210	5.964	28.819	1010	-688	4.674	1.878	1339	0	0.000	5.369	0	4.922	12.763
2007.175	0.003	404	1105	512	550	21.325	34.412	-0.185	13.025	5.964	28.449	1010	-686	4.673	1.877	1339	0	0.000	5.184	0	4.922	12.763
2007.178	0.003	402	1102	500	542	21.043	34.045	-0.085	12.940	5.964	28.081	1009	-685	4.673	1.876	1339	0	0.000	5.100	0	4.922	12.762
2007.181	0.003	397	1098	485	532	20.642	33.796	0.153	13.093	5.964	27.833	1009	-687	4.672	1.876	1339	0	0.000	5.253	0	4.922	12.761
2007.183	0.003	395	1095	471	524	20.320	33.612	0.138	13.230	5.964	27.648	1009	-689	4.671	1.875	1339	0	0.000	5.392	0	4.922	12.760
2007.186	0.003	398	1091	462	519	20.154	33.610	0.164	13.394	5.964	27.647	1009	-689	4.670	1.874	1339	0	0.000	5.557	0	4.922	12.760
2007.189	0.003	401	1089	462	520	20.181	33.503	-0.135	13.260	5.964	27.539	1009	-687	4.670	1.873	1339	0	0.000	5.423	0	4.922	12.759
2007.192	0.003	403	1085	461	520	20.179	33.484	-0.016	13.244	5.964	27.521	1009	-685	4.669	1.873	1339	0	0.000	5.407	0	4.922	12.758
2007.194	0.003	406	1081	461	520	20.177	33.484	0.001	13.245	5.964	27.521	1009	-683	4.668	1.872	1339	0	0.000	5.409	0	4.922	12.758
2007.197	0.003	408	1078	463	522	20.248	33.575	0.020	13.265	5.964	27.612	1008	-681	4.668	1.871	1339	0	0.000	5.430	0	4.922	12.757
2007.200	0.003	410	1075	469	526	20.393	33.664	-0.056	13.209	5.964	27.700	1008	-679	4.667	1.871	1339	0	0.000	5.374	0	4.922	12.756
2007.203	0.003	412	1071	477	530	20.563	33.664	-0.170	13.039	5.964	27.700	1008	-678	4.666	1.870	1339	0	0.000	5.205	0	4.922	12.756
2007.205	0.003	414	1068	481	532	20.637	33.586	-0.152	12.887	5.964	27.623	1008	-676	4.666	1.869	1339	0	0.000	5.054	0	4.922	12.755
2007.208	0.003	416	1064	478	531	20.592	33.586	0.045	12.933	5.964	27.623	1008	-675	4.665	1.869	1339	0	0.000	5.100	0	4.922	12.754
2007.211	0.003	418	1061	478	531	20.595	33.586	-0.004	12.929	5.964	27.623	1008	-673	4.664	1.868	1339	0	0.000	5.097	0	4.922	12.754
2007.214	0.003	420	1058	480	532	20.642	33.586	-0.046	12.883	5.964	27.623	1008	-672	4.664	1.867	1339	0	0.000	5.052	0	4.922	12.753
2007.216	0.003	421	1054	481	533	20.667	33.586	-0.025	12.857	5.964	27.623	1007	-671	4.663	1.867	1339	0	0.000	5.027	0	4.922	12.752
2007.219	0.003	423	1050	482	533	20.693	33.586	-0.025	12.832	5.964	27.623	1007	-669	4.662	1.866	1339	0	0.000	5.002	0	4.922	12.752
2007.222	0.003	425	1048	483	534	20.727	33.603	-0.017	12.815	5.964	27.640	1007	-668	4.662	1.865	1339	0	0.000	4.986	0	4.922	12.751
2007.225	0.003	426	1044	484	535	20.753	33.866	0.236	13.051	5.964	27.902	1007	-667	4.661	1.865	1339	0	0.000	5.222	0	4.922	12.750
2007.227	0.003	428	1040	495	540	20.966	34.041	-0.038	13.013	5.964	28.077	1007	-665	4.660	1.864	1339	0	0.000	5.185	0	4.922	12.750
2007.230	0.003	429	1036	510	549	21.280	34.205	-0.149	12.863	5.964	28.242	1007	-664	4.660	1.863	1339	0	0.000	5.036	0	4.922	12.749
2007.233	0.003	431	1034	520	554	21.504	34.503	0.074	12.937	5.964	28.539	1006	-663	4.659	1.863	1339	0	0.000	5.111	0	4.922	12.748
2007.235	0.003	432	1030	535	562	21.802	34.594	-0.207	12.730	5.964	28.630	1006	-661	4.658	1.862	1339	0	0.000	4.904	0	4.922	12.748
2007.238	0.003	433	1027	545	567	22.005	34.676	-0.120	12.609	5.964	28.713	1006	-660	4.658	1.861	1339	0	0.000	4.784	0	4.922	12.747
2007.241	0.003	435	1022	549	569	22.081	34.781	0.029	12.638	5.964	28.818	1006	-659	4.657	1.861	1339	0	0.000	4.814	0	4.922	12.746
2007.244	0.003	436	1019	554	572	22.190	35.069	0.179	12.817	5.964	29.105	1006	-658	4.656	1.860	1339	0	0.000	4.993	0	4.922	12.746
2007.246	0.003	437	1016	567	579	22.458	35.260	-0.077	12.740	5.964	29.296	1006	-657	4.656	1.859	1339	0	0.000	4.917	0	4.922	12.745
2007.249	0.003	439	1013	582	587	22.771	35.260	-0.313	12.427	5.964	29.296	1006	-656	4.655	1.859	1339	0	0.000	4.605	0	4.922	12.744
2007.252	0.003	440	1010	584	588	22.824	35.273	-0.040	12.387	5.964	29.310	1005	-655	4.654	1.858	1339	0	0.000	4.565	0	4.922	12.744
2007.255	0.003	441	1006	585	588	22.820	35.273	0.004	12.391	5.964	29.310	1005	-653	4.654	1.857	1339	0	0.000	4.570	0	4.922	12.743
2007.257	0.003	442	1003	584	588	22.819	35.273	0.001	12.392	5.964	29.310	1005	-652	4.653	1.857	1339	0	0.000	4.572	0	4.922	12.742
2007.260	0.003	443	998	584	588	22.799	35.273	0.020	12.412	5.964	29.310	1005	-651	4.652	1.856	1339	0	0.000	4.592	0	4.922	12.742
2007.263	0.003	444	995	584	588	22.800	35.273	0.000	12.412	5.964	29.310	1005	-650	4.652	1.856	1339	0	0.000	4.592	0	4.922	12.741
2007.266	0.003	446	992	584	588	22.797	35.273	0.003	12.414	5.964	29.310	1005	-649	4.651	1.855	1339	0	0.000	4.596	0	4.922	12.740
2007.268	0.003	447	989	584	588	22.798	35.273	-0.001	12.413	5.964	29.310	1005	-648	4.651	1.854	1339	0	0.000	4.596	0	4.922	12.740
2007.271	0.003	448	986	584	588	22.802	35.273	-0.004	12.410	5.964	29.310	1005	-647	4.650	1.854	1339	0	0.000	4.592	0	4.922	12.739
2007.274	0.003	449	983	585	588	22.810	35.273	-0.008	12.402	5.964	29.310	1004	-646	4.649	1.853	1339	0	0.000	4.585	0	4.922	12.739
2007.277	0.003	450	980	585	588	22.813	35.273	-0.003	12.398	5.964	29.310	1004	-645	4.649	1.852	1339	0	0.000	4.582	0	4.922	12.738
2007.279	0.003	451	977	585	588	22.825	35.273	-0.013	12.386	5.964	29.310	1004	-644	4.648	1.852	1339	0	0.000	4.570	0	4.922	12.737
2007.282	0.003	452	974	585	588	22.814	35.273	0.011	12.397	5.964	29.310	1004	-643	4.647	1.851	1339	0	0.000	4.582	0	4.922	12.737
2007.285	0.003	463	970	585	592	22.955	35.273	-0.140	12.257	5.964	29.310	1004	-639	4.647	1.850	1339	0	0.000	4.443	0	4.922	12.736
2007.287	0.003	454	968	586	588	22.827	35.273	0.127	12.384	5.964	29.310	1004	-638	4.646	1.850	1339	0	0.000	4.570	0	4.922	12.735
2007.290	0.003	455	965	586	588	22.830	35.195	-0.081	12.302	5.964	29.231	1004	-641	4.645	1.849	1339	0	0.000	4.490	0	4.922	12.735

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1300

		Reservoir P/Z(psia)									E.Kimball+Low Perm Gas Balance				Corunna Seckerton Crossflow					South Spill Model		
Date	dT (years)	SOUTH	A1	MID	AVG	Calc. GIP (bcf)	Inventory GIP (bcf)	Total Discrepancy (bcf)	Adjusted Cumulative Discrep. (bcf)	Cumulative Meter Error (bcf)	Adjusted Inventory GIP (bcf)	P/Z (psia)	Influx 0.0008 (mcfd)	5.0 GIP (bcf)	Cum. Influx (bcf)	Avg P/Z Cor/Sec (psi)	Influx 0.0000 (mcfd)	Cum. Influx (bcf)	Revised K/C Cumulative Discrepancy (bcf)	Gas Spill 0.00855 (mcfd)	Cum. Gas Spill (bcf)	Total Model Adjustments (bcf)
2007.293	0.003	456	963	584	587	22.789	35.008	-0.145	12.158	5.964	29.045	1003	-640	4.645	1.848	1339	0	0.000	4.345	0	4.922	12.734
2007.296	0.003	457	960	576	583	22.632	34.804	-0.048	12.109	5.964	28.840	1003	-639	4.644	1.848	1339	0	0.000	4.298	0	4.922	12.733
2007.298	0.003	458	957	566	578	22.414	34.804	0.218	12.327	5.964	28.840	1003	-638	4.643	1.847	1339	0	0.000	4.516	0	4.922	12.733
2007.301	0.003	459	954	559	574	22.273	34.804	0.141	12.468	5.964	28.840	1003	-637	4.643	1.847	1339	0	0.000	4.658	0	4.922	12.732
2007.304	0.003	459	950	560	575	22.290	35.096	0.276	12.744	5.964	29.133	1003	-636	4.642	1.846	1339	0	0.000	4.935	0	4.922	12.731
2007.307	0.003	461	948	569	579	22.478	35.409	0.125	12.869	5.964	29.446	1003	-635	4.642	1.845	1339	0	0.000	5.061	0	4.922	12.731
2007.309	0.003	461	944	587	589	22.844	35.559	-0.217	12.653	5.964	29.595	1003	-634	4.641	1.845	1339	0	0.000	4.845	0	4.922	12.730
2007.312	0.003	462	942	602	597	23.148	35.579	-0.284	12.369	5.964	29.615	1002	-634	4.640	1.844	1339	0	0.000	4.561	0	4.922	12.730
2007.315	0.003	463	939	606	599	23.230	35.788	0.127	12.496	5.964	29.824	1002	-633	4.640	1.843	1339	0	0.000	4.689	0	4.922	12.729
2007.318	0.003	464	937	612	602	23.346	35.824	-0.079	12.417	5.964	29.861	1002	-632	4.639	1.843	1339	0	0.000	4.610	0	4.922	12.728
2007.320	0.003	465	934	621	606	23.519	35.991	-0.007	12.410	5.964	30.027	1002	-631	4.638	1.842	1339	0	0.000	4.604	0	4.922	12.728
2007.323	0.003	466	931	625	609	23.617	36.044	-0.045	12.365	5.964	30.080	1002	-630	4.638	1.841	1339	0	0.000	4.560	0	4.922	12.727
2007.326	0.003	466	928	631	612	23.732	36.212	0.053	12.418	5.964	30.249	1002	-629	4.637	1.841	1339	0	0.000	4.613	0	4.922	12.726
2007.329	0.003	467	925	636	614	23.814	36.269	-0.025	12.392	5.964	30.305	1002	-628	4.637	1.840	1339	0	0.000	4.588	0	4.922	12.726
2007.331	0.003	468	923	639	616	23.890	36.269	-0.076	12.316	5.964	30.305	1001	-628	4.636	1.840	1339	0	0.000	4.513	0	4.922	12.725
2007.334	0.003	469	920	644	618	23.984	36.288	-0.074	12.242	5.964	30.324	1001	-627	4.635	1.839	1339	0	0.000	4.440	0	4.922	12.725
2007.337	0.003	470	917	644	618	23.979	36.350	0.067	12.309	5.964	30.387	1001	-626	4.635	1.838	1339	0	0.000	4.507	0	4.922	12.724
2007.339	0.003	471	917	646	620	24.038	36.478	0.069	12.378	5.964	30.514	1001	-625	4.634	1.838	1339	0	0.000	4.577	0	4.922	12.723
2007.342	0.003	472	912	652	622	24.148	36.677	0.088	12.466	5.964	30.713	1001	-624	4.633	1.837	1339	0	0.000	4.666	0	4.922	12.723
2007.345	0.003	472	909	662	628	24.357	36.726	-0.160	12.307	5.964	30.762	1001	-623	4.633	1.836	1339	0	0.000	4.507	0	4.922	12.722
2007.348	0.003	473	907	668	631	24.469	36.816	-0.022	12.285	5.964	30.852	1001	-622	4.632	1.836	1339	0	0.000	4.485	0	4.922	12.721
2007.350	0.003	480	905	667	632	24.538	37.042	0.157	12.442	5.964	31.079	1001	-619	4.632	1.835	1339	0	0.000	4.643	0	4.922	12.721
2007.353	0.003	500	902	666	638	24.762	37.422	0.156	12.598	5.964	31.458	1000	-609	4.631	1.835	1339	0	0.000	4.800	0	4.922	12.720
2007.356	0.003	533	899	666	649	25.190	37.837	-0.013	12.585	5.964	31.874	1000	-587	4.630	1.834	1339	0	0.000	4.787	0	4.922	12.720
2007.359	0.003	571	897	666	662	25.698	38.213	-0.131	12.454	5.964	32.250	1000	-556	4.630	1.833	1339	0	0.000	4.657	0	4.922	12.719
2007.361	0.003	606	895	666	674	26.154	38.524	-0.146	12.308	5.964	32.561	1000	-523	4.629	1.833	1339	0	0.000	4.511	0	4.922	12.719
2007.364	0.003	636	892	665	684	26.533	38.866	-0.037	12.271	5.964	32.902	1000	-491	4.629	1.832	1339	0	0.000	4.475	0	4.922	12.718
2007.367	0.003	665	890	665	694	26.920	39.159	-0.093	12.178	5.964	33.196	1000	-461	4.628	1.832	1339	0	0.000	4.382	0	4.922	12.718
2007.370	0.003	693	887	665	703	27.260	39.394	-0.106	12.072	5.964	33.430	1000	-431	4.628	1.832	1339	0	0.000	4.277	0	4.922	12.717
2007.372	0.003	702	886	672	710	27.530	39.394	-0.270	11.803	5.964	33.430	1000	-410	4.627	1.831	1339	0	0.000	4.008	0	4.922	12.717
2007.375	0.003	701	883	676	711	27.577	39.394	-0.048	11.755	5.964	33.430	1000	-406	4.627	1.831	1339	0	0.000	3.960	0	4.922	12.716
2007.378	0.003	700	881	676	710	27.543	39.394	0.035	11.789	5.964	33.430	999	-407	4.627	1.830	1339	0	0.000	3.995	0	4.922	12.716
2007.381	0.003	699	879	676	709	27.521	39.482	0.110	11.899	5.964	33.519	999	-408	4.626	1.830	1339	0	0.000	4.106	0	4.922	12.716
2007.383	0.003	698	877	678	710	27.554	39.780	0.264	12.164	5.964	33.816	999	-409	4.626	1.830	1339	0	0.000	4.371	0	4.922	12.715
2007.386	0.003	697	874	692	717	27.809	40.084	0.049	12.213	5.964	34.120	999	-410	4.625	1.829	1339	0	0.000	4.420	0	4.922	12.715
2007.389	0.003	696	872	709	725	28.131	40.364	-0.041	12.171	5.964	34.401	999	-410	4.625	1.829	1339	0	0.000	4.379	0	4.922	12.714
2007.392	0.003	696	870	726	734	28.467	40.676	-0.024	12.148	5.964	34.712	999	-411	4.625	1.828	1339	0	0.000	4.356	0	4.922	12.714
2007.394	0.003	708	868	735	742	28.799	40.973	-0.036	12.111	5.964	35.009	999	-404	4.624	1.828	1339	0	0.000	4.320	0	4.922	12.714
2007.397	0.003	723	866	741	751	29.118	41.199	-0.093	12.019	5.964	35.235	999	-389	4.624	1.828	1339	0	0.000	4.228	0	4.922	12.713
2007.400	0.003	737	864	746	758	29.391	41.276	-0.196	11.823	5.964	35.312	999	-372	4.623	1.827	1339	0	0.000	4.033	0	4.922	12.713
2007.402	0.003	745	862	743	759	29.440	41.380	0.055	11.878	5.964	35.417	999	-359	4.623	1.827	1339	0	0.000	4.088	0	4.922	12.712
2007.405	0.003	753	861	743	761	29.542	41.602	0.119	11.998	5.964	35.639	999	-349	4.623	1.826	1339	0	0.000	4.208	0	4.922	12.712
2007.408	0.003	767	860	742	766	29.710	41.839	0.069	12.066	5.964	35.875	999	-335	4.622	1.826	1339	0	0.000	4.277	0	4.922	12.712
2007.411	0.003	788	858	741	772	29.962	41.974	-0.116	11.950	5.964	36.010	998	-314	4.622	1.826	1339	0	0.000	4.161	0	4.922	12.711
2007.413	0.003	805	856	742	778	30.201	42.030	-0.182	11.768	5.964	36.067	998	-290	4.622	1.825	1339	0	0.000	3.979	0	4.922	12.711

Gas Balance MODEL R1-F
Kimball Colinville Storage Reservoir
Discrepancy History Match
E. Kimball Crossflow with Meter Error &Gas Spill

Spill threshhold
1300

		Reservoir P/Z(psia)									E.Kimball+Low Perm Gas Balance			Corunna Seckerton Crossflow					South Spill Model		
Date	dT (years)	SOUTH	A1	MID	AVG	Calc. GIP (bcf)	Inventory GIP (bcf)	Total Discrepancy (bcf)	Adjusted Cumulative Discrep. (bcf)	Cumulative Meter Error (bcf)	Adjusted Inventory GIP (bcf)	P/Z (psia)	Influx 0.0008 (mcfd)	5.0 GIP (bcf)	Cum. Influx (bcf)	Avg P/Z Cor/Sec (psi)	Influx 0.0000 (mcfd)	Cum. Influx (bcf)	Revised K/C Cumulative Discrepancy (bcf)	Gas Spill 0.00855 (mcfd)	Cum. Gas Spill (bcf)	Total Model Adjustments (bcf)
2007.416	0.003	809	855	742	780	30.242	42.073	0.002	11.770	5.964	36.110	998	-276	4.622	1.825	1339	0	0.000	3.981	0	4.922	12.711
2007.419	0.003	811	853	741	780	30.251	42.173	0.091	11.861	5.964	36.210	998	-272	4.621	1.825	1339	0	0.000	4.072	0	4.922	12.711
2007.422	0.003	815	852	741	781	30.293	42.231	0.016	11.876	5.964	36.267	998	-268	4.621	1.825	1339	0	0.000	4.088	0	4.922	12.710
2007.424	0.003	822	850	741	783	30.379	42.335	0.017	11.893	5.964	36.371	998	-261	4.621	1.824	1339	0	0.000	4.105	0	4.922	12.710
2007.427	0.003	826	849	741	784	30.421	42.389	0.014	11.907	5.964	36.426	998	-254	4.620	1.824	1339	0	0.000	4.119	0	4.922	12.710
2007.430	0.003	834	849	742	787	30.535	42.555	0.051	11.958	5.964	36.591	998	-246	4.620	1.824	1339	0	0.000	4.171	0	4.922	12.710
2007.433	0.003	843	847	741	790	30.647	42.793	0.126	12.084	5.964	36.830	998	-235	4.620	1.824	1339	0	0.000	4.297	0	4.922	12.709
2007.435	0.003	853	846	745	795	30.852	43.049	0.051	12.135	5.964	37.086	998	-221	4.620	1.823	1339	0	0.000	4.348	0	4.922	12.709
2007.438	0.003	871	846	751	804	31.210	43.333	-0.075	12.061	5.964	37.369	998	-202	4.620	1.823	1339	0	0.000	4.274	0	4.922	12.709
2007.441	0.003	892	845	751	812	31.487	43.582	-0.028	12.033	5.964	37.618	998	-175	4.619	1.823	1339	0	0.000	4.246	0	4.922	12.709
2007.444	0.003	914	843	750	818	31.750	43.798	-0.047	11.986	5.964	37.835	998	-144	4.619	1.823	1339	0	0.000	4.199	0	4.922	12.709
2007.446	0.003	933	842	750	825	32.005	44.135	0.082	12.068	5.964	38.171	998	-114	4.619	1.823	1339	0	0.000	4.281	0	4.922	12.708
2007.449	0.003	948	841	756	833	32.321	44.345	-0.106	11.962	5.964	38.381	998	-89	4.619	1.823	1339	0	0.000	4.175	0	4.922	12.708
2007.452	0.003	961	841	760	840	32.583	44.544	-0.062	11.899	5.964	38.581	998	-68	4.619	1.823	1339	0	0.000	4.113	0	4.922	12.708
2007.454	0.003	977	840	760	845	32.798	44.728	-0.032	11.867	5.964	38.764	998	-45	4.619	1.823	1339	0	0.000	4.081	0	4.922	12.708
2007.457	0.003	992	840	760	850	32.991	44.931	0.011	11.878	5.964	38.968	998	-20	4.619	1.823	1339	0	0.000	4.092	0	4.922	12.708
2007.460	0.003	1007	839	760	855	33.176	45.172	0.056	11.935	5.964	39.209	998	3	4.619	1.823	1339	0	0.000	4.149	0	4.922	12.708
2007.463	0.003	1024	839	760	861	33.404	45.466	0.065	11.999	5.964	39.502	998	28	4.619	1.823	1339	0	0.000	4.213	0	4.922	12.708
2007.465	0.003	1047	839	760	869	33.718	45.732	-0.047	11.952	5.964	39.769	998	61	4.619	1.823	1339	0	0.000	4.166	0	4.922	12.708
2007.468	0.003	1070	838	760	877	34.018	45.968	-0.064	11.888	5.964	40.004	998	100	4.619	1.823	1339	0	0.000	4.102	0	4.922	12.708
2007.471	0.003	1088	838	760	883	34.264	46.240	0.026	11.914	5.964	40.276	998	134	4.619	1.823	1339	0	0.000	4.128	0	4.922	12.709
2007.474	0.003	1106	838	761	890	34.530	46.553	0.047	11.961	5.964	40.590	998	166	4.619	1.823	1339	0	0.000	4.175	0	4.922	12.709
2007.476	0.003	1126	838	764	899	34.861	46.862	-0.022	11.939	5.964	40.899	998	200	4.620	1.823	1339	0	0.000	4.152	0	4.922	12.709
2007.479	0.003	1143	839	769	907	35.195	47.139	-0.058	11.881	5.964	41.175	998	234	4.620	1.824	1339	0	0.000	4.094	0	4.922	12.709
2007.482	0.003	1161	838	771	915	35.484	47.393	-0.034	11.847	5.964	41.429	998	266	4.620	1.824	1339	0	0.000	4.059	0	4.922	12.709
2007.485	0.003	1178	838	772	921	35.728	47.644	0.007	11.854	5.964	41.681	998	298	4.620	1.824	1339	0	0.000	4.067	0	4.922	12.710
2007.487	0.003	1192	839	776	928	36.003	47.898	-0.021	11.833	5.964	41.935	998	326	4.621	1.824	1339	0	0.000	4.045	0	4.922	12.710
2007.490	0.003	1205	839	780	935	36.257	48.149	-0.003	11.830	5.964	42.185	998	352	4.621	1.825	1339	0	0.000	4.041	0	4.922	12.710
2007.493	0.003	1221	840	782	942	36.527	48.413	-0.005	11.824	5.964	42.450	998	380	4.621	1.825	1339	0	0.000	4.036	0	4.922	12.711
2007.496	0.003	1236	840	784	947	36.758	48.662	0.018	11.842	5.964	42.699	998	410	4.622	1.826	1339	0	0.000	4.053	0	4.922	12.711
2007.498	0.003	1251	841	788	955	37.051	48.950	-0.005	11.837	5.964	42.987	998	440	4.622	1.826	1339	0	0.000	4.048	0	4.922	12.712
2007.501	0.003	1268	842	790	962	37.324	49.381	0.158	11.995	5.964	43.418	998	471	4.623	1.826	1339	0	0.000	4.205	0	4.922	12.712
2007.504	0.003	1269	843	803	969	37.605	49.463	-0.199	11.796	5.964	43.500	999	490	4.623	1.827	1339	0	0.000	4.005	0	4.922	12.713
2007.507	0.003	1265	844	819	977	37.887	49.571	-0.174	11.622	5.964	43.607	999	487	4.624	1.827	1339	0	0.000	3.831	0	4.922	12.713
2007.509	0.003	1261	843	827	979	37.988	49.677	0.005	11.627	5.964	43.714	999	479	4.624	1.828	1339	0	0.000	3.836	0	4.922	12.714
2007.512	0.003	1258	846	829	979	37.997	49.809	0.123	11.750	5.964	43.845	999	471	4.625	1.828	1339	0	0.000	3.958	0	4.922	12.714
2007.515	0.003	1255	847	835	982	38.085	49.954	0.056	11.806	5.964	43.990	999	464	4.625	1.829	1339	0	0.000	4.014	0	4.922	12.714
2007.517	0.003	1252	849	843	985	38.223	50.028	-0.064	11.743	5.964	44.064	999	458	4.626	1.829	1339	0	0.000	3.950	0	4.922	12.715
2007.520	0.003	1249	851	848	987	38.305	50.059	-0.050	11.692	5.964	44.095	999	453	4.626	1.830	1339	0	0.000	3.899	0	4.922	12.715
2007.523	0.003	1246	853	849	987	38.297	50.289	0.238	11.931	5.964	44.326	999	447	4.627	1.830	1339	0	0.000	4.137	0	4.922	12.716
2007.526	0.003	1244	855	855	990	38.404	50.381	-0.016	11.915	5.964	44.417	999	442	4.627	1.831	1339	0	0.000	4.121	0	4.922	12.716
2007.528	0.003	1243	857	868	996	38.648	50.400	-0.225	11.690	5.964	44.437	999	438	4.627	1.831	1339	0	0.000	3.896	0	4.922	12.717
2007.531	0.003	1240	859	868	996	38.628	50.448	0.068	11.759	5.964	44.485	1000	433	4.628	1.832	1339	0	0.000	3.964	0	4.922	12.717
2007.534	0.003	1239	862	869	996	38.636	50.572	0.116	11.874	5.964	44.608	1000	429	4.628	1.832	1339	0	0.000	4.079	0	4.922	12.718
2007.537	0.003	1236	863	874	998	38.710	50.695	0.048	11.923	5.964	44.731	1000	426	4.629	1.832	1339	0	0.000	4.127	0	4.922	12.718

Gas Balance MODEL R1-F
Kimball Colinville Storage Reservoir
Discrepancy History Match
E. Kimball Crossflow with Meter Error &Gas Spill

Spill threshhold
1300

		Reservoir P/Z(psia)									E.Kimball+Low Perm Gas Balance			Corunna Seckerton Crossflow					South Spill Model		
Date	dT (years)	SOUTH	A1	MID	AVG	Calc. GIP (bcf)	Inventory GIP (bcf)	Total Discrepancy (bcf)	Adjusted Cumulative Discrep. (bcf)	Cumulative Meter Error (bcf)	Adjusted Inventory GIP (bcf)	P/Z (psia)	Influx 0.0008 (mcfd)	5.0 GIP (bcf)	Cum. Influx (bcf)	Avg P/Z Cor/Sec (psi)	Influx 0.0000 (mcfd)	Cum. Influx (bcf)	Revised K/C Cumulative Discrepancy (bcf)	Gas Spill 0.00855 (mcfd)	Cum. Gas Spill (bcf)	Total Model Adjustments (bcf)
2007.539	0.003	1234	866	880	1001	38.833	50.741	-0.077	11.845	5.964	44.777	1000	421	4.629	1.833	1339	0	0.000	4.049	0	4.922	12.718
2007.542	0.003	1233	868	886	1004	38.935	50.785	-0.057	11.788	5.964	44.822	1000	418	4.630	1.833	1339	0	0.000	3.991	0	4.922	12.719
2007.545	0.003	1231	871	886	1004	38.941	50.849	0.058	11.846	5.964	44.886	1000	414	4.630	1.834	1339	0	0.000	4.049	0	4.922	12.719
2007.548	0.003	1230	873	889	1005	38.989	50.937	0.041	11.887	5.964	44.974	1000	411	4.630	1.834	1339	0	0.000	4.089	0	4.922	12.720
2007.550	0.003	1228	875	892	1006	39.038	51.128	0.141	12.028	5.964	45.165	1000	408	4.631	1.834	1339	0	0.000	4.230	0	4.922	12.720
2007.553	0.003	1228	879	901	1011	39.238	51.440	0.112	12.140	5.964	45.476	1000	406	4.631	1.835	1339	0	0.000	4.342	0	4.922	12.720
2007.556	0.003	1226	881	915	1018	39.513	51.758	0.043	12.183	5.964	45.794	1000	404	4.632	1.835	1339	0	0.000	4.384	0	4.922	12.721
2007.559	0.003	1224	883	932	1027	39.834	51.972	-0.107	12.076	5.964	46.008	1000	400	4.632	1.836	1339	0	0.000	4.277	0	4.922	12.721
2007.561	0.003	1223	886	947	1035	40.135	52.236	-0.036	12.039	5.964	46.273	1001	396	4.632	1.836	1339	0	0.000	4.240	0	4.922	12.722
2007.564	0.003	1221	889	958	1040	40.360	52.570	0.108	12.147	5.964	46.606	1001	394	4.633	1.836	1339	0	0.000	4.347	0	4.922	12.722
2007.567	0.003	1220	891	974	1048	40.675	52.926	0.042	12.189	5.964	46.963	1001	391	4.633	1.837	1339	0	0.000	4.389	0	4.922	12.722
2007.569	0.003	1219	894	993	1058	41.063	53.396	0.083	12.271	5.964	47.432	1001	389	4.634	1.837	1339	0	0.000	4.471	0	4.922	12.723
2007.572	0.003	1217	897	1013	1069	41.476	53.929	0.119	12.390	5.964	47.965	1001	386	4.634	1.838	1339	0	0.000	4.589	0	4.922	12.723
2007.575	0.003	1216	900	1044	1085	42.108	54.445	-0.115	12.275	5.964	48.481	1001	383	4.634	1.838	1339	0	0.000	4.473	0	4.922	12.724
2007.578	0.003	1215	902	1072	1100	42.677	54.936	-0.078	12.197	5.964	48.972	1001	381	4.635	1.838	1339	0	0.000	4.395	0	4.922	12.724
2007.580	0.003	1214	904	1099	1114	43.219	55.350	-0.128	12.069	5.964	49.386	1001	379	4.635	1.839	1339	0	0.000	4.266	0	4.922	12.724
2007.583	0.003	1213	907	1117	1124	43.596	55.677	-0.050	12.019	5.964	49.714	1001	377	4.635	1.839	1339	0	0.000	4.216	0	4.922	12.725
2007.586	0.003	1213	911	1133	1132	43.936	56.007	-0.010	12.009	5.964	50.043	1001	375	4.636	1.840	1339	0	0.000	4.206	0	4.922	12.725
2007.589	0.003	1213	911	1133	1132	43.936	56.333	0.326	12.335	5.964	50.370	1001	375	4.636	1.840	1339	0	0.000	4.531	0	4.922	12.725
2007.591	0.003	1211	915	1167	1150	44.631	56.732	-0.296	12.039	5.964	50.768	1001	372	4.637	1.840	1339	0	0.000	4.235	0	4.922	12.726
2007.594	0.003	1210	918	1186	1160	45.018	57.141	0.023	12.062	5.964	51.178	1001	370	4.637	1.841	1339	0	0.000	4.257	0	4.922	12.726
2007.597	0.003	1210	918	1186	1160	45.018	57.476	0.335	12.397	5.964	51.513	1002	369	4.637	1.841	1339	0	0.000	4.592	0	4.922	12.727
2007.600	0.003	1209	922	1220	1178	45.719	57.770	-0.407	11.989	5.964	51.807	1002	367	4.638	1.841	1339	0	0.000	4.184	0	4.922	12.727
2007.602	0.003	1208	924	1234	1186	46.013	57.999	-0.065	11.925	5.964	52.036	1002	366	4.638	1.842	1339	0	0.000	4.119	0	4.922	12.727
2007.605	0.003	1208	927	1245	1192	46.244	58.195	-0.035	11.889	5.964	52.231	1002	364	4.638	1.842	1339	0	0.000	4.084	0	4.922	12.728
2007.608	0.003	1207	929	1254	1197	46.430	58.436	0.056	11.945	5.964	52.473	1002	363	4.639	1.842	1339	0	0.000	4.139	0	4.922	12.728
2007.611	0.003	1206	931	1263	1201	46.598	58.837	0.232	12.177	5.964	52.873	1002	361	4.639	1.843	1339	0	0.000	4.371	0	4.922	12.728
2007.613	0.003	1206	934	1277	1209	46.896	59.261	0.125	12.302	5.964	53.297	1002	360	4.639	1.843	1339	0	0.000	4.496	0	4.922	12.729
2007.616	0.003	1220	936	1290	1221	47.376	59.685	-0.056	12.247	5.964	53.721	1002	373	4.640	1.844	1339	0	0.000	4.440	0	4.922	12.729
2007.619	0.003	1236	938	1303	1234	47.858	59.941	-0.226	12.021	5.964	53.977	1002	403	4.640	1.844	1339	0	0.000	4.213	0	4.922	12.730
2007.621	0.003	1236	938	1303	1234	47.858	60.215	0.274	12.295	5.964	54.251	1002	419	4.641	1.844	1339	0	0.000	4.487	0	4.922	12.730
2007.624	0.003	1236	938	1303	1234	47.858	60.470	0.255	12.550	5.964	54.506	1002	419	4.641	1.845	1339	0	0.000	4.742	0	4.922	12.730
2007.627	0.003	1254	945	1327	1253	48.622	60.722	-0.512	12.039	5.964	54.759	1002	436	4.642	1.845	1339	0	0.000	4.230	0	4.922	12.731
2007.630	0.003	1257	947	1336	1259	48.863	61.072	0.109	12.147	5.964	55.109	1003	456	4.642	1.846	1339	0	0.000	4.338	0	4.922	12.731
2007.632	0.003	1255	949	1350	1266	49.128	61.429	0.091	12.238	5.964	55.465	1003	458	4.642	1.846	1339	0	0.000	4.429	0	4.922	12.732
2007.635	0.003	1254	951	1367	1275	49.480	61.644	-0.136	12.102	5.964	55.680	1003	455	4.643	1.847	1339	0	0.000	4.292	0	4.922	12.732
2007.638	0.003	1253	953	1380	1282	49.750	61.865	-0.048	12.054	5.964	55.902	1003	453	4.643	1.847	1339	0	0.000	4.243	0	4.922	12.733
2007.641	0.003	1252	956	1389	1287	49.931	62.068	0.021	12.075	5.964	56.104	1003	451	4.644	1.847	1339	0	0.000	4.264	0	4.922	12.733
2007.643	0.003	1252	958	1398	1292	50.122	62.268	0.010	12.084	5.964	56.305	1003	449	4.644	1.848	1339	0	0.000	4.273	0	4.922	12.734
2007.646	0.003	1251	960	1407	1296	50.297	62.570	0.126	12.210	5.964	56.606	1003	448	4.645	1.848	1339	0	0.000	4.398	0	4.922	12.734
2007.649	0.003	1250	962	1417	1302	50.503	62.885	0.110	12.320	5.964	56.921	1003	447	4.645	1.849	1339	0	0.000	4.507	0	4.922	12.734
2007.652	0.003	1250	964	1433	1310	50.821	63.203	0.000	12.319	5.964	57.239	1003	445	4.646	1.849	1339	0	0.000	4.507	0	4.922	12.735
2007.654	0.003	1250	967	1449	1319	51.173	63.483	-0.071	12.248	5.964	57.520	1003	444	4.646	1.850	1339	0	0.000	4.435	0	4.922	12.735
2007.657	0.003	1250	969	1463	1327	51.469	63.717	-0.063	12.186	5.964	57.753	1004	444	4.646	1.850	1339	0	0.000	4.372	0	4.922	12.736
2007.660	0.003	1249	970	1473	1332	51.672	63.835	-0.086	12.100	5.964	57.871	1004	443	4.647	1.851	1339	0	0.000	4.286	0	4.922	12.736

Gas Balance MODEL R1-F
Kimball Colinville Storage Reservoir
Discrepancy History Match
E. Kimball Crossflow with Meter Error &Gas Spill

Spill threshhold
1300

		Reservoir P/Z(psia)										E.Kimball+Low Perm Gas Balance			Corunna Seckerton Crossflow					South Spill Model		
Date	dT (years)	SOUTH	A1	MID	AVG	Calc. GIP (bcf)	Inventory GIP (bcf)	Total Discrepancy (bcf)	Adjusted Cumulative Discrep. (bcf)	Cumulative Meter Error (bcf)	Adjusted Inventory GIP (bcf)	P/Z (psia)	Influx 0.0008 (mcfd)	5.0 GIP (bcf)	Cum. Influx (bcf)	Avg P/Z Cor/Sec (psi)	Influx 0.0000 (mcfd)	Cum. Influx (bcf)	Revised K/C Cumulative Discrepancy (bcf)	Gas Spill 0.00855 (mcfd)	Cum. Gas Spill (bcf)	Total Model Adjustments (bcf)
2007.663	0.003	1248	973	1479	1335	51.794	64.021	0.065	12.165	5.964	58.058	1004	441	4.647	1.851	1339	0	0.000	4.350	0	4.922	12.737
2007.665	0.003	1249	975	1486	1339	51.950	64.179	0.002	12.167	5.964	58.215	1004	441	4.648	1.851	1339	0	0.000	4.352	0	4.922	12.737
2007.668	0.003	1249	978	1492	1342	52.083	64.338	0.026	12.193	5.964	58.374	1004	441	4.648	1.852	1339	0	0.000	4.378	0	4.922	12.738
2007.671	0.003	1248	980	1499	1346	52.238	64.442	-0.051	12.142	5.964	58.478	1004	440	4.649	1.852	1339	0	0.000	4.326	0	4.922	12.738
2007.674	0.003	1247	982	1503	1349	52.318	64.548	0.025	12.167	5.964	58.584	1004	439	4.649	1.853	1339	0	0.000	4.351	0	4.922	12.738
2007.676	0.003	1250	983	1506	1351	52.420	64.564	-0.086	12.081	5.964	58.600	1004	441	4.650	1.853	1339	0	0.000	4.265	0	4.922	12.739
2007.679	0.003	1247	986	1507	1351	52.410	64.564	0.011	12.092	5.964	58.600	1004	440	4.650	1.854	1339	0	0.000	4.275	0	4.922	12.739
2007.682	0.003	1247	988	1505	1350	52.373	64.564	0.036	12.129	5.964	58.600	1004	437	4.650	1.854	1339	0	0.000	4.311	0	4.922	12.740
2007.684	0.003	1247	990	1503	1349	52.347	64.643	0.106	12.234	5.964	58.680	1004	436	4.651	1.855	1339	0	0.000	4.416	0	4.922	12.740
2007.687	0.003	1246	992	1503	1350	52.358	64.763	0.109	12.343	5.964	58.799	1005	436	4.651	1.855	1339	0	0.000	4.524	0	4.922	12.741
2007.690	0.003	1246	994	1508	1352	52.464	64.871	0.002	12.345	5.964	58.908	1005	435	4.652	1.855	1339	0	0.000	4.526	0	4.922	12.741
2007.693	0.003	1246	996	1513	1355	52.580	64.871	-0.116	12.229	5.964	58.908	1005	435	4.652	1.856	1339	0	0.000	4.409	0	4.922	12.741
2007.695	0.003	1246	998	1514	1356	52.599	64.871	-0.019	12.210	5.964	58.908	1005	435	4.653	1.856	1339	0	0.000	4.390	0	4.922	12.742
2007.698	0.003	1247	1001	1513	1356	52.603	64.871	-0.005	12.206	5.964	58.908	1005	435	4.653	1.857	1339	0	0.000	4.385	0	4.922	12.742
2007.701	0.003	1246	1003	1512	1356	52.590	64.871	0.014	12.220	5.964	58.908	1005	435	4.653	1.857	1339	0	0.000	4.399	0	4.922	12.743
2007.704	0.003	1247	1005	1510	1355	52.576	64.871	0.013	12.233	5.964	58.908	1005	435	4.654	1.858	1339	0	0.000	4.412	0	4.922	12.743
2007.706	0.003	1247	1006	1509	1355	52.562	64.871	0.014	12.247	5.964	58.908	1005	435	4.654	1.858	1339	0	0.000	4.425	0	4.922	12.744
2007.709	0.003	1246	1008	1508	1354	52.538	64.871	0.024	12.271	5.964	58.908	1005	434	4.655	1.858	1339	0	0.000	4.449	0	4.922	12.744
2007.712	0.003	1246	1010	1507	1354	52.534	64.871	0.004	12.275	5.964	58.908	1005	434	4.655	1.859	1339	0	0.000	4.453	0	4.922	12.745
2007.715	0.003	1247	1012	1506	1354	52.529	64.871	0.005	12.280	5.964	58.908	1006	434	4.656	1.859	1339	0	0.000	4.457	0	4.922	12.745
2007.717	0.003	1246	1014	1505	1353	52.497	64.871	0.032	12.312	5.964	58.908	1006	434	4.656	1.860	1339	0	0.000	4.489	0	4.922	12.745
2007.720	0.003	1246	1016	1504	1353	52.478	64.871	0.019	12.331	5.964	58.908	1006	433	4.657	1.860	1339	0	0.000	4.507	0	4.922	12.746
2007.723	0.003	1247	1018	1504	1353	52.507	64.871	-0.028	12.302	5.964	58.908	1006	433	4.657	1.861	1339	0	0.000	4.478	0	4.922	12.746
2007.726	0.003	1246	1019	1502	1353	52.475	64.871	0.032	12.334	5.964	58.908	1006	433	4.657	1.861	1339	0	0.000	4.510	0	4.922	12.747
2007.728	0.003	1246	1022	1502	1353	52.489	64.871	-0.014	12.320	5.964	58.908	1006	433	4.658	1.862	1339	0	0.000	4.495	0	4.922	12.747
2007.731	0.003	1246	1023	1502	1353	52.484	64.871	0.006	12.325	5.964	58.908	1006	433	4.658	1.862	1339	0	0.000	4.500	0	4.922	12.748
2007.734	0.003	1246	1025	1500	1352	52.451	64.871	0.033	12.358	5.964	58.908	1006	433	4.659	1.862	1339	0	0.000	4.532	0	4.922	12.748
2007.736	0.003	1246	1026	1499	1352	52.440	64.871	0.011	12.369	5.964	58.908	1006	432	4.659	1.863	1339	0	0.000	4.542	0	4.922	12.748
2007.739	0.003	1246	1028	1499	1352	52.438	64.871	0.003	12.371	5.964	58.908	1006	432	4.660	1.863	1339	0	0.000	4.545	0	4.922	12.749
2007.742	0.003	1247	1031	1499	1352	52.467	64.871	-0.030	12.342	5.964	58.908	1006	433	4.660	1.864	1339	0	0.000	4.514	0	4.922	12.749
2007.745	0.003	1246	1032	1498	1352	52.455	64.871	0.012	12.354	5.964	58.908	1007	433	4.660	1.864	1339	0	0.000	4.526	0	4.922	12.750
2007.747	0.003	1247	1034	1498	1352	52.462	64.871	-0.007	12.347	5.964	58.908	1007	433	4.661	1.865	1339	0	0.000	4.519	0	4.922	12.750
2007.750	0.003	1246	1035	1497	1352	52.443	64.871	0.019	12.366	5.964	58.908	1007	432	4.661	1.865	1339	0	0.000	4.538	0	4.922	12.751
2007.753	0.003	1246	1037	1495	1351	52.421	64.871	0.022	12.388	5.964	58.908	1007	432	4.662	1.865	1339	0	0.000	4.559	0	4.922	12.751
2007.756	0.003	1247	1039	1495	1351	52.427	64.871	-0.005	12.383	5.964	58.908	1007	432	4.662	1.866	1339	0	0.000	4.553	0	4.922	12.751
2007.758	0.003	1247	1041	1495	1352	52.440	64.871	-0.013	12.370	5.964	58.908	1007	433	4.663	1.866	1339	0	0.000	4.540	0	4.922	12.752
2007.761	0.003	1247	1042	1493	1351	52.410	64.871	0.030	12.400	5.964	58.908	1007	433	4.663	1.867	1339	0	0.000	4.569	0	4.922	12.752
2007.764	0.003	1247	1044	1493	1351	52.415	64.871	-0.005	12.394	5.964	58.908	1007	432	4.663	1.867	1339	0	0.000	4.564	0	4.922	12.753
2007.767	0.003	1247	1045	1493	1351	52.418	64.871	-0.003	12.391	5.964	58.908	1007	432	4.664	1.868	1339	0	0.000	4.560	0	4.922	12.753
2007.769	0.003	1247	1047	1492	1351	52.405	64.871	0.013	12.404	5.964	58.908	1007	432	4.664	1.868	1339	0	0.000	4.572	0	4.922	12.754
2007.772	0.003	1247	1049	1491	1351	52.408	64.871	-0.003	12.401	5.964	58.908	1007	432	4.665	1.868	1339	0	0.000	4.569	0	4.922	12.754
2007.775	0.003	1247	1050	1491	1351	52.397	64.871	0.011	12.412	5.964	58.908	1008	432	4.665	1.869	1339	0	0.000	4.580	0	4.922	12.754
2007.778	0.003	1247	1052	1491	1351	52.419	64.871	-0.022	12.390	5.964	58.908	1008	432	4.666	1.869	1339	0	0.000	4.557	0	4.922	12.755
2007.780	0.003	1248	1053	1490	1351	52.415	64.871	0.004	12.394	5.964	58.908	1008	433	4.666	1.870	1339	0	0.000	4.560	0	4.922	12.755
2007.783	0.003	1248	1055	1490	1351	52.414	64.871	0.002	12.396	5.964	58.908	1008	433	4.666	1.870	1339	0	0.000	4.562	0	4.922	12.756

Gas Balance MODEL R1-F
Kimball Colinville Storage Reservoir
Discrepancy History Match
E. Kimball Crossflow with Meter Error &Gas Spill

Spill threshhold
1300

		Reservoir P/Z(psia)									E.Kimball+Low Perm Gas Balance			Corunna Seckerton Crossflow					South Spill Model		
Date	dT (years)	SOUTH	A1	MID	AVG	Calc. GIP (bcf)	Inventory GIP (bcf)	Total Discrepancy (bcf)	Adjusted Cumulative Discrep. (bcf)	Cumulative Meter Error (bcf)	Adjusted Inventory GIP (bcf)	P/Z (psia)	Influx 0.0008 (mcfd)	5.0 GIP (bcf)	Cum. Influx (bcf)	Avg P/Z Cor/Sec (psi)	Influx 0.0000 (mcfd)	Cum. Influx (bcf)	Revised K/C Cumulative Discrepancy (bcf)	Gas Spill 0.00855 (mcfd)	Cum. Gas Spill (bcf)	Total Model Adjustments (bcf)
2007.786	0.003	1248	1057	1489	1351	52.415	64.871	-0.001	12.394	5.964	58.908	1008	433	4.667	1.871	1339	0	0.000	4.560	0	4.922	12.756
2007.789	0.003	1248	1059	1489	1351	52.427	64.871	-0.012	12.382	5.964	58.908	1008	433	4.667	1.871	1339	0	0.000	4.547	0	4.922	12.757
2007.791	0.003	1248	1060	1489	1351	52.425	64.871	0.002	12.384	5.964	58.908	1008	434	4.668	1.871	1339	0	0.000	4.549	0	4.922	12.757
2007.794	0.003	1248	1061	1487	1350	52.391	64.871	0.034	12.418	5.964	58.908	1008	433	4.668	1.872	1339	0	0.000	4.583	0	4.922	12.757
2007.797	0.003	1248	1063	1488	1351	52.411	64.976	0.084	12.502	5.964	59.012	1008	432	4.669	1.872	1339	0	0.000	4.667	0	4.922	12.758
2007.799	0.003	1248	1064	1490	1352	52.464	65.099	0.071	12.574	5.964	59.136	1008	432	4.669	1.873	1339	0	0.000	4.737	0	4.922	12.758
2007.802	0.003	1249	1066	1497	1357	52.635	65.204	-0.067	12.507	5.964	59.240	1009	433	4.669	1.873	1339	0	0.000	4.670	0	4.922	12.759
2007.805	0.003	1248	1067	1502	1359	52.726	65.324	0.030	12.537	5.964	59.361	1009	433	4.670	1.874	1339	0	0.000	4.699	0	4.922	12.759
2007.808	0.003	1253	1068	1506	1363	52.874	65.584	0.112	12.648	5.964	59.621	1009	437	4.670	1.874	1339	0	0.000	4.811	0	4.922	12.760
2007.810	0.003	1274	1070	1504	1370	53.144	65.707	-0.147	12.502	5.964	59.744	1009	463	4.671	1.875	1339	0	0.000	4.663	0	4.922	12.760
2007.813	0.003	1291	1072	1504	1376	53.368	65.624	-0.308	12.194	5.964	59.660	1009	502	4.671	1.875	1339	0	0.000	4.355	0	4.922	12.761
2007.816	0.003	1290	1073	1503	1375	53.348	65.666	0.061	12.255	5.964	59.702	1009	518	4.672	1.876	1339	0	0.000	4.416	0	4.922	12.761
2007.819	0.003	1287	1074	1502	1374	53.296	65.814	0.201	12.456	5.964	59.851	1009	514	4.672	1.876	1339	0	0.000	4.616	0	4.922	12.762
2007.821	0.003	1299	1075	1501	1377	53.428	65.978	0.032	12.488	5.964	60.015	1009	522	4.673	1.877	1339	0	0.000	4.648	0	4.922	12.762
2007.824	0.003	1312	1076	1501	1382	53.610	65.700	-0.461	12.027	5.964	59.736	1009	548	4.673	1.877	1339	0	0.000	4.186	25	4.922	12.763
2007.827	0.003	1304	1077	1500	1379	53.490	65.626	0.047	12.074	5.964	59.662	1009	554	4.674	1.878	1339	0	0.000	4.232	0	4.922	12.763
2007.830	0.003	1283	1079	1500	1372	53.218	65.626	0.272	12.346	5.964	59.662	1010	523	4.674	1.878	1339	0	0.000	4.504	0	4.922	12.764
2007.832	0.003	1284	1081	1500	1372	53.236	65.676	0.032	12.378	5.964	59.712	1010	502	4.675	1.879	1339	0	0.000	4.536	0	4.922	12.764
2007.835	0.003	1288	1082	1498	1373	53.260	65.637	-0.063	12.315	5.964	59.673	1010	507	4.675	1.879	1339	0	0.000	4.472	0	4.922	12.765
2007.838	0.003	1284	1083	1498	1372	53.219	65.637	0.041	12.356	5.964	59.673	1010	507	4.676	1.880	1339	0	0.000	4.513	0	4.922	12.765
2007.841	0.003	1285	1084	1498	1372	53.219	65.885	0.249	12.605	5.964	59.922	1010	504	4.677	1.880	1339	0	0.000	4.761	0	4.922	12.766
2007.843	0.003	1299	1086	1498	1377	53.427	65.774	-0.319	12.285	5.964	59.811	1010	519	4.677	1.881	1339	0	0.000	4.441	0	4.922	12.766
2007.846	0.003	1299	1088	1497	1377	53.418	65.634	-0.130	12.155	5.964	59.671	1010	534	4.678	1.881	1339	0	0.000	4.310	0	4.922	12.767
2007.849	0.003	1285	1089	1497	1372	53.234	65.299	-0.152	12.003	5.964	59.335	1010	519	4.678	1.882	1339	0	0.000	4.157	0	4.922	12.767
2007.851	0.003	1285	1089	1497	1372	53.234	65.248	-0.051	11.952	5.964	59.285	1010	505	4.679	1.882	1339	0	0.000	4.106	0	4.922	12.768
2007.854	0.003	1248	1092	1496	1359	52.729	65.248	0.506	12.457	5.964	59.285	1011	466	4.679	1.883	1339	0	0.000	4.611	0	4.922	12.768
2007.857	0.003	1249	1094	1496	1360	52.748	65.248	-0.019	12.438	5.964	59.285	1011	430	4.679	1.883	1339	0	0.000	4.592	0	4.922	12.769
2007.860	0.003	1250	1095	1495	1360	52.758	65.248	-0.010	12.429	5.964	59.285	1011	432	4.680	1.884	1339	0	0.000	4.581	0	4.922	12.769
2007.862	0.003	1251	1097	1495	1360	52.770	65.248	-0.013	12.416	5.964	59.285	1011	434	4.680	1.884	1339	0	0.000	4.568	0	4.922	12.770
2007.865	0.003	1252	1098	1495	1361	52.784	65.376	0.114	12.530	5.964	59.412	1011	435	4.681	1.884	1339	0	0.000	4.682	0	4.922	12.770
2007.868	0.003	1260	1100	1495	1363	52.897	65.568	0.079	12.609	5.964	59.605	1011	444	4.681	1.885	1339	0	0.000	4.761	0	4.922	12.771
2007.871	0.003	1276	1101	1494	1369	53.108	65.793	0.014	12.624	5.964	59.830	1011	468	4.682	1.885	1339	0	0.000	4.775	0	4.922	12.771
2007.873	0.003	1295	1103	1494	1376	53.368	65.793	-0.260	12.363	5.964	59.830	1011	504	4.682	1.886	1339	0	0.000	4.514	0	4.922	12.772
2007.876	0.003	1303	1103	1493	1378	53.456	65.793	-0.088	12.275	5.964	59.830	1011	532	4.683	1.886	1339	0	0.000	4.425	0	4.922	12.772
2007.879	0.003	1302	1104	1493	1377	53.438	65.793	0.018	12.293	5.964	59.830	1011	538	4.683	1.887	1339	0	0.000	4.443	0	4.922	12.773
2007.882	0.003	1301	1106	1492	1377	53.428	65.793	0.010	12.303	5.964	59.830	1012	536	4.684	1.887	1339	0	0.000	4.452	0	4.922	12.773
2007.884	0.003	1301	1106	1492	1377	53.428	65.793	0.000	12.303	5.964	59.830	1012	535	4.684	1.888	1339	0	0.000	4.452	39	4.922	12.774
2007.887	0.003	1301	1110	1492	1378	53.449	65.793	-0.021	12.282	5.964	59.830	1012	535	4.685	1.889	1339	0	0.000	4.430	28	4.922	12.774
2007.890	0.003	1301	1111	1492	1377	53.439	65.793	0.010	12.292	5.964	59.830	1012	534	4.685	1.889	1339	0	0.000	4.440	17	4.922	12.775
2007.893	0.003	1300	1111	1491	1377	53.415	65.793	0.024	12.316	5.964	59.830	1012	533	4.686	1.890	1339	0	0.000	4.463	6	4.922	12.775
2007.895	0.003	1299	1112	1490	1376	53.397	65.793	0.019	12.335	5.964	59.830	1012	531	4.686	1.890	1339	0	0.000	4.481	0	4.922	12.776
2007.898	0.003	1299	1114	1490	1376	53.400	65.793	-0.003	12.331	5.964	59.830	1012	530	4.687	1.891	1339	0	0.000	4.477	0	4.922	12.776
2007.901	0.003	1299	1115	1490	1376	53.401	65.793	-0.001	12.331	5.964	59.830	1012	530	4.688	1.891	1339	0	0.000	4.476	0	4.922	12.777
2007.903	0.003	1299	1116	1490	1377	53.407	65.793	-0.006	12.324	5.964	59.830	1013	530	4.688	1.892	1339	0	0.000	4.469	0	4.922	12.777
2007.906	0.003	1299	1118	1489	1377	53.405	65.362	-0.430	11.895	5.964	59.398	1013	530	4.689	1.892	1339	0	0.000	4.039	0	4.922	12.778

Gas Balance MODEL R1-F
Kimball Colinville Storage Reservoir
Discrepancy History Match
E. Kimball Crossflow with Meter Error &Gas Spill

Spill threshhold
1300

		Reservoir P/Z(psia)										E.Kimball+Low Perm Gas Balance				Corunna Seckerton Crossflow				South Spill Model		
Date	dT (years)	SOUTH	A1	MID	AVG	Calc. GIP (bcf)	Inventory GIP (bcf)	Total Discrepancy (bcf)	Adjusted Cumulative Discrep. (bcf)	Cumulative Meter Error (bcf)	Adjusted Inventory GIP (bcf)	P/Z (psia)	Influx 0.0008 (mcfd)	5.0 GIP (bcf)	Cum. Influx (bcf)	Avg P/Z Cor/Sec (psi)	Influx 0.0000 (mcfd)	Cum. Influx (bcf)	Revised K/C Cumulative Discrepancy (bcf)	Gas Spill 0.00855 (mcfd)	Cum. Gas Spill (bcf)	Total Model Adjustments (bcf)
2007.909	0.003	1274	1118	1489	1368	53.055	64.855	-0.157	11.738	5.964	58.891	1013	504	4.689	1.893	1339	0	0.000	3.881	0	4.922	12.779
2007.912	0.003	1228	1121	1489	1352	52.461	64.674	0.413	12.151	5.964	58.710	1013	431	4.690	1.893	1339	0	0.000	4.294	0	4.922	12.779
2007.914	0.003	1211	1121	1486	1345	52.173	64.532	0.146	12.296	5.964	58.568	1013	369	4.690	1.894	1339	0	0.000	4.439	0	4.922	12.779
2007.917	0.003	1213	1122	1476	1340	51.999	64.166	-0.191	12.105	5.964	58.203	1013	354	4.690	1.894	1339	0	0.000	4.248	0	4.922	12.780
2007.920	0.003	1215	1124	1461	1333	51.726	64.166	0.273	12.378	5.964	58.203	1013	359	4.691	1.894	1339	0	0.000	4.520	0	4.922	12.780
2007.923	0.003	1218	1126	1451	1329	51.564	63.832	-0.173	12.205	5.964	57.868	1013	363	4.691	1.895	1339	0	0.000	4.347	0	4.922	12.780
2007.925	0.003	1218	1126	1439	1323	51.317	63.538	-0.046	12.159	5.964	57.574	1013	365	4.691	1.895	1339	0	0.000	4.301	0	4.922	12.781
2007.928	0.003	1219	1128	1420	1313	50.950	63.162	-0.008	12.151	5.964	57.199	1013	366	4.692	1.895	1339	0	0.000	4.292	0	4.922	12.781
2007.931	0.003	1219	1130	1403	1305	50.629	62.942	0.100	12.251	5.964	56.978	1013	367	4.692	1.896	1339	0	0.000	4.391	0	4.922	12.781
2007.934	0.003	1220	1130	1390	1298	50.376	62.893	0.204	12.455	5.964	56.930	1013	369	4.692	1.896	1339	0	0.000	4.595	0	4.922	12.782
2007.936	0.003	1219	1132	1387	1297	50.308	62.893	0.068	12.524	5.964	56.930	1014	368	4.693	1.896	1339	0	0.000	4.663	0	4.922	12.782
2007.939	0.003	1217	1133	1389	1297	50.324	62.829	-0.080	12.443	5.964	56.866	1014	365	4.693	1.897	1339	0	0.000	4.583	0	4.922	12.783
2007.942	0.003	1216	1134	1390	1297	50.335	62.829	-0.011	12.432	5.964	56.865	1014	363	4.694	1.897	1339	0	0.000	4.571	0	4.922	12.783
2007.945	0.003	1212	1134	1390	1296	50.290	62.761	-0.023	12.409	5.964	56.797	1014	358	4.694	1.898	1339	0	0.000	4.547	0	4.922	12.783
2007.947	0.003	1208	1135	1391	1295	50.257	62.601	-0.126	12.282	5.964	56.638	1014	350	4.694	1.898	1339	0	0.000	4.421	0	4.922	12.784
2007.950	0.003	1195	1136	1391	1291	50.083	62.226	-0.201	12.081	5.964	56.263	1014	333	4.695	1.898	1339	0	0.000	4.219	0	4.922	12.784
2007.953	0.003	1174	1138	1391	1284	49.806	61.973	0.023	12.104	5.964	56.009	1014	300	4.695	1.899	1339	0	0.000	4.242	0	4.922	12.784
2007.956	0.003	1145	1138	1391	1274	49.426	61.317	-0.276	11.828	5.964	55.353	1014	253	4.695	1.899	1339	0	0.000	3.966	0	4.922	12.785
2007.958	0.003	1117	1139	1380	1259	48.825	61.022	0.306	12.135	5.964	55.058	1014	201	4.695	1.899	1339	0	0.000	4.272	0	4.922	12.785
2007.961	0.003	1096	1140	1365	1243	48.236	60.673	0.240	12.375	5.964	54.709	1014	156	4.695	1.899	1339	0	0.000	4.512	0	4.922	12.785
2007.964	0.003	1078	1141	1365	1237	48.008	60.420	-0.025	12.350	5.964	54.456	1014	122	4.696	1.899	1339	0	0.000	4.487	0	4.922	12.785
2007.966	0.003	1056	1142	1367	1231	47.743	60.329	0.175	12.524	5.964	54.366	1014	88	4.696	1.899	1339	0	0.000	4.662	0	4.922	12.785
2007.969	0.003	1042	1142	1367	1226	47.567	60.158	0.005	12.530	5.964	54.195	1014	57	4.696	1.899	1339	0	0.000	4.667	0	4.922	12.785
2007.972	0.003	1033	1143	1367	1223	47.436	60.013	-0.014	12.515	5.964	54.050	1014	38	4.696	1.899	1339	0	0.000	4.652	0	4.922	12.785
2007.975	0.003	1025	1144	1367	1220	47.346	59.955	0.033	12.548	5.964	53.992	1014	24	4.696	1.900	1339	0	0.000	4.685	0	4.922	12.785
2007.977	0.003	1018	1145	1367	1218	47.257	59.922	0.056	12.604	5.964	53.959	1014	11	4.696	1.900	1339	0	0.000	4.741	0	4.922	12.785
2007.980	0.003	1016	1144	1366	1217	47.219	59.684	-0.201	12.403	5.964	53.720	1014	4	4.696	1.900	1339	0	0.000	4.540	0	4.922	12.785
2007.983	0.003	1005	1144	1366	1213	47.060	59.662	0.137	12.540	5.964	53.698	1014	-6	4.696	1.900	1339	0	0.000	4.677	0	4.922	12.785
2007.986	0.003	997	1144	1366	1210	46.953	59.641	0.087	12.627	5.964	53.678	1014	-22	4.696	1.899	1339	0	0.000	4.764	0	4.922	12.785
2007.988	0.003	999	1144	1366	1211	46.976	59.555	-0.110	12.517	5.964	53.592	1014	-26	4.696	1.899	1339	0	0.000	4.654	0	4.922	12.785
2007.991	0.003	996	1144	1365	1210	46.934	59.430	-0.083	12.434	5.964	53.466	1014	-27	4.696	1.899	1339	0	0.000	4.571	0	4.922	12.785
2007.994	0.003	988	1145	1366	1207	46.824	59.323	0.003	12.437	5.964	53.360	1014	-36	4.696	1.899	1339	0	0.000	4.574	0	4.922	12.785
2007.997	0.003	978	1144	1365	1203	46.688	59.204	0.017	12.454	5.964	53.241	1014	-50	4.696	1.899	1339	0	0.000	4.591	0	4.922	12.785
2007.999	0.003	968	1144	1365	1200	46.539	59.055	-0.001	12.454	5.964	53.091	1014	-65	4.696	1.899	1339	0	0.000	4.591	0	4.922	12.785

APPENDIX IV

PAPER BALANCE ADJUSTMENTS

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TABLE A4-1 PAPER BALANCE ADJUSTMENTS - KIMBALL COLINVILLE	227
TABLE A4-2 PAPER BALANCE ADJUSTMENTS - REMAINING POOLS	228

Appendix 4
Balance Adjustments - Kimball Colinville

Date		South Kimball Balance Adjustments		Mid Kimball Balance Adjustments		
Year	Month	Paper (e3m3)	Physical (e3m3)	Paper (e3m3)	Physical (e3m3)	Description
1982	10	215,292.8		-215,292.8		Paper transfer from Mid Kimball to South Kimball
1988	7				34,583.8	Physical adjustment, Injected gas to increase Cusion
1988	8				17,561.5	Physical adjustment, Injected gas to increase Cusion
1988	10			-8,498.4		Mid Kimball LUF
1990	8	-10,814.3				South Kimball LUF
1991	8	-5,025.6				South Kimball LUF
1991	8			-6,910.2		Mid Kimball LUF
1991	9	-54,918.6				South Kimball Cushion Gas Adjustment
1991	9			-75,815.1		Mid Kimball Cushion Gas Adjustment
1992	8	-1,659.1				South Kimball LUF
1992	8			-174.4		Mid Kimball LUF
1992	9	-10,323.5				South Kimball LUF
1993	4			-10,121.5		Mid Kimball LUF
1993	8	-20,463.5				South Kimball LUF
1993	10	0.0				South Kimball Paper increase, E. Kimball Migration of 3201.1 E3m3 was actually injection according to Enbridge; no adjustment
1993	10	0.0				South Kimball Paper increase, E. Kimball Migration of 6390.7 E3m3 was actually injection according to Enbridge; no adjustment
1994	8			-19,326.0		Mid Kimball LUF
1995	1	-6,390.7				South Kimball Writedown
1995	7			8,498.4		Mid Kimball 1988 LUF correction from 1988-10
1995	7	10,814.3				South Kimball 1990 LUF correction from 1990-08
1995	8			-19,133.0		Mid Kimball LUF
1996	9			-1,796.7		Mid Kimball LUF
1996	9	158,126.9		-158,126.9		Paper transfer from Mid Kimball to South Kimball
1997	9	-8,796.1				South Kimball LUF
1997	9	-4,560.0		4,560.0		Paper transfer from South Kimball to Mid Kimball
1998	4		-199.0		-397.5	TCPL meter correction reduces Physical Balance monthly and Paper Balance in September
1998	5		-412.9		-874.5	TCPL meter correction reduces Physical Balance monthly and Paper Balance in September
1998	6		-419.9		-2,335.5	TCPL meter correction reduces Physical Balance monthly and Paper Balance in September
1998	7		-1,767.5		-1,469.0	TCPL meter correction reduces Physical Balance monthly and Paper Balance in September
1998	7	-15,422.1				EBRO 497 Base Pressure Writedown
1998	8	-19,616.2				South Kimball LUF Adjustment
1998	8	-13,994.0		13,994.0		Paper transfer from South Kimball to Mid Kimball
1998	8		-216.1		-177.5	TCPL meter correction reduces Physical Balance monthly and Paper Balance in September
1999	6			-23,110.0		South/Mid Kimball LUF
1999	6	-37,563.0		37,563.0		Paper transfer from South Kimball to Mid Kimball
2000	8	-7,770.6		-11,216.9		South/Mid Kimball LUF
2001	8	-7,052.5		-11,735.5		South/Mid Kimball LUF
2002	8	-7,052.5		-11,735.5		South/Mid Kimball LUF
2003	8	-7,052.5		-11,735.5		South/Mid Kimball LUF
2004	8	-6,534.3		-10,496.9		South/Mid Kimball LUF
2005	8	-6,094.6		-10,759.8		South/Mid Kimball LUF - Meter & Migration
2006	8	-3,847.3		-6,792.3		South/Mid Kimball LUF - Meter & Migration
2007	8	-3,847.3		-6,792.3		South/Mid Kimball LUF - Meter & Migration

Appendix 4
Balance Adjustments - Remaining Pools

Date		Corunna Paper	Corunna Physical	Wilkesport Paper	Wilkesport Physical	Seckerton Paper	Seckerton Physical	Dow Moore Paper	Dow Moore Physical	Black Creek Paper	Black Creek Physical	Coveny Paper	Coveny Physical	Ladysmith Paper	Ladysmith Physical	
Year	Month	(e3m3)	(e3m3)	(e3m3)	(e3m3)	(e3m3)	(e3m3)	(e3m3)	(e3m3)	(e3m3)	(e3m3)	(e3m3)	(e3m3)	(e3m3)	(e3m3)	Description
1979	1	##########				25673.700								-92887.512		Manual Adjustment to Match Old Spreadsheet
1983	2					-1,543.9										Feb 83 Adjustment
1988	7		13.3													July 88 Adjustment to match Enbridge books precisely
1988	9	25,673.7														Sep 88 Accounting error correction
1988	9					-25,673.7										Sep 88 Accounting error correction
1988	10								10,481.3							Oct 88 increase in cushion volume
1989	5				22.49243											May 89 Adjustment to match Enbridge books exactly, before any LUF's or OEBs
1989	6		50,674.8													Jun 89 Accounting Adjustment of 50,674.8 E3m3 was determined to be actually injected by reviewing the pressure behavior of the pool
1989	6					-8,498.4										July 89 LUF
1989	6							0.0								Jun 89 transfer from Dow to Corunna of -50674.8 E3m3 was determined to be an withdrawl of gas by reviewing the pool pressure behavior
1989	8							0.0								August 89 adjustment of 189.6 E3m3 (or 6694 mcf) to match Enbridge book balance was treated as an injection volume instead as per instructions from Enbridge
1990	1							0.0								Jan 90 decrease in cushion volume of 937.2 E3m3 (or 33,084 mcf) was an actual withdrawl that went through Dow Chemical meters instead of Tecumseh meters. It was not an accounting adjustment, and should impact both paper and physical balances.
1990	8							0.0								Aug 90 increase in cushion volume of 937.2 E3m3 (or 33,084 mcf) was an actual injection that went through Dow Chemical meters instead of Tecumseh meters. It was not an accounting adjustment, and should impact both paper and physical balances.
1990	11							0.0								Nov 90 decrease in cushion volume of 47.4 E3m3 (or 1673 mcf) was an actual withdrawl that went through Dow Chemical meters instead of Tecumseh meters. It was not an accounting adjustment, and should impact both paper and physical balances.
1990	12						6.0									Dec 90 Adjustment to match Enbridge books precisely
1990	12							0.0								Dec 90 decrease in cushion volume of 15.8 E3m3 (or 558 mcf) was an actual withdrawl that went through Dow Chemical meters instead of Tecumseh meters. It was not an accounting adjustment, and should impact both paper and physical balances.
1991	8															Aug 91 Adjustment no longer needed to match Enbridge books; correction made to Sept 89 inection/withdrawls
1991	8					-7,438.2										Aug 91 LUF
1991	9	-36,741.4														Sept 91 booked cushion reduction
1991	9			-9603.2												Sept 91 booked cushion reduction
1991	9					3,626.0										Sept 91 Increased cushion booking
1992	1							0.0								Jan 92 decrease in cushion volume of 546.7 E3m3 (or 19,299 mcf) was an actual withdrawl that went through Dow Chemical meters instead of Tecumseh meters. It was not an accounting adjustment, and should impact both paper and physical balances.
1992	3							0.0								Mar 92 decrease in cushion volume of 4133.2 E3m3 (or 145,905 mcf) was an actual withdrawl that went through Dow Chemical meters instead of Tecumseh meters. It was not an accounting adjustment, and should impact both paper and physical balances.
1992	5							0.0								May 92 Do Not include as per instructions from Enbridge
1992	8							-6,721.9								Aug 92 LUF
1992	8							0.0								Aug 92 Do Not include as per instructions from Enbridge
1992	9							-917.1								Sept 92 LUF
1993	3						-0.8									Mar 93 Adjustment to match Enbridge books precisely
1994	7						0.2									Jul 94 Adjustment to match Enbridge books precisely
1994	8							-4,850.0								Aug 94 LUF
1994	12						-11.6									Dec 94 Adjustment to match Enbridge books precisely
1995	7					8,498.4										July 95 Correction of July 89 LUF
1995	8							-5,503.0								Aug 95 LUF
1996	9					-16,743.4										Sept 96 LUF
1996	9							-5,862.1								Sept 96 LUF
1997	1													-92887.512		Adjustment to set Paper Balance to Enbridge official records
1997	1													92887.512		Manual Adjustment to Match Old Spreadsheet
1997	8		0.8													Aug 97 Adjustment to match Enbridge books
1997	8						-0.3									Aug 97 Adjustment to match Enbridge books precisely
1997	9	-4,050.0														Sept. 97 LUF
1997	9							-12,410.9								Sept 97 LUF
1998	4	0.000		35.705	-35.705	0.000		349.977	-349.977							Apr 98 TCPL CORR
1998	5	0.000		1306.667	-1306.667	24.586	-24.586	2370.325	-2370.325							May 98 TCPL CORR
1998	6	0.000		473.083	-473.083	-0.001		611.433	-611.433							June 98 TCPL CORR
1998	7			7365.3												July 98,EBRO 497 Base Pressure Writedown
1998	7							-1,175.1								July 98,EBRO 497 Base Pressure Writedown
1998	7							-2,535.3								July 98 LUF
1998	7	0.000		0.000		159.605	-159.605	543.165	-543.165							Jul 98 TCPL CORR
1998	8							-5,626.4								Aug 98 LUF
1998	8	441.300	-441.300	105.045	-105.045	1587.507	-1587.507	0.000								Aug. 98 TCPL CORR
1998	9	-441.300		-1920.500		-1771.700		-3874.900	-3874.900							Sept 98 TCPL Paper Adj.
1999	2													791.002744	-791.003	Feb 99 production
1999	3													2923.59124		Mar 99 production
1999	4													3099.593104		Apr 99 production
1999	5													2984.808048		May 99 production
1999	6	-1,700.0		-2300												June 99 LUF
1999	6							-3,207.0								June 99 LUF
1999	6													2939.908168		Jun 99 production
1999	7													2350.005896		Jul 99 production
1999	8							-324.0								Aug 99 Union LUF
1999	9													387.272088		Enbridge booked production differs from the actual production by this much due to incorrect conversion factor

Appendix 4
Balance Adjustments - Remaining Pools

Date		Corunna Paper	Corunna Physical	Wilkesport Paper	Wilkesport Physical	Seckerton Paper	Seckerton Physical	Dow Moore Paper	Dow Moore Physical	Black Creek Paper	Black Creek Physical	Coveny Paper	Coveny Physical	Ladysmith Paper	Ladysmith Physical	
Year	Month	(e3m3)	(e3m3)	(e3m3)	(e3m3)	(e3m3)	(e3m3)	(e3m3)	(e3m3)	(e3m3)	(e3m3)	(e3m3)	(e3m3)	(e3m3)	(e3m3)	Description
1999	11														1.218104	Enbridge booked injection & production volumes differ slightly from actuals; disregard for consistency
1999	12														-1.9263	Enbridge booked injection & production volumes differ slightly from actuals; disregard for consistency
2000	1													33908.616		Enbridge working gas adjustment booked Jan 1, 2000
2000	1													28328		Enbridge accounting adjustment Jan 1,2000
2000	8	-1010.48		-1620.30		-2261.01		-5743.54		-187.93		-764.45		-439.04		LUF Adjustment
2001	8	-996.00		-1820.21		-2297.46		-5810.52		-197.13		-777.62		-987.94		LUF Adjustment
2002	8	-996.00		-1820.21		-2297.46		-5810.52		-197.13		-777.62		-987.94		LUF Adjustment
2003	8	-996.00		-1820.21		-2297.46		-5810.52		-197.13		-777.62		-987.94		LUF Adjustment
2004	8	-999.62		-1745.52		-2504.74		-5910.59		-208.80		-804.81		-1308.57		LUF Adjustment
2005	8	-951.43		-1757.31		-2209.42		-5739.61		-788.68		-196.91		-1565.74		LUF Adjustment
2006	8	-945.29		-1745.97		-2195.17		-5702.58		-783.59		-195.64		-1555.64		LUF Adjustment
2007	8	-945.29		-1745.97		-2195.17		-5702.58		-783.59		-195.64		-1555.64		LUF Adjustment

APPENDIX V

EXTRAPOLATION TYPE CURVES

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Appendix 5
Extrapolation Type Curves
For Tables 5-11

Utilized Pressure Adjustment

Shut in Time (Weeks)	Seckerton Injection (psi)	Seckerton Production (psi)	Corunna Injection (psi)	Corunna Production (psi)	Wilkesport Injection (psi)	Wilkesport Production (psi)	Dow Moore Injection (psi)	Dow Moore Production (psi)	Black Creek Injection (psi)	Black Creek Production (psi)	Coveny Injection (psi)	Coveny Production (psi)	Ladysmith Injection (psi)	Ladysmith Production (psi)
0.5	-24	24	-23	23	-23	23	-9	17	-13.5	13.5	-13.5	13.5	-8	8
1	-22	22	-21	21	-21	21	-8	16	-12	12	-12	12	-7	7
1.5	-20	20	-18	18	-18	18	-7.5	15.5	-10.5	10.5	-10.5	10.5	-6	6
2	-18	18	-16	16	-16	16	-7	15	-9	9	-9	9	-5	5
2.5	-16	16	-14.5	14.5	-14.5	14.5	-6.5	14	-7.5	7.5	-7.5	7.5	-4	4
3	-14	14	-13	13	-13	13	-6	13.5	-6	6	-6	6	-3	3
3.5	-12.5	12.5	-12	12	-12	12	-5.5	13	-5.5	5.5	-5.5	5.5	-2.5	2.5
4	-12	12	-11	11	-11	11	-5	12.5	-5	5	-5	5	-2	2
4.5	-11.5	11.5	-10	10	-10	10	-4.5	12	-4.5	4.5	-4.5	4.5	-1.75	1.75
5	-11	11	-9	9	-9	9	-4	11.5	-4	4	-4	4	-1.5	1.5
5.5	-10.5	10.5	-8	8	-8	8	-3.5	11	-3.65	3.65	-3.65	3.65	-1.35	1.35
6	-10	10	-7	7	-7	7	-3	10.5	-3.3	3.3	-3.3	3.3	-1.25	1.25
6.5	-9.5	9.5	-6.5	6.5	-6.5	6.5	-2.75	10	-3.05	3.05	-3.05	3.05	-1.1	1.1
7	-9	9	-6	6	-6	6	-2.5	9.5	-2.8	2.8	-2.8	2.8	-1	1
7.5	-8.5	8.5	-5.5	5.5	-5.5	5.5	-2.25	9	-2.65	2.65	-2.65	2.65	-0.95	0.95
8	-8	8	-5	5	-5	5	-2	8.5	-2.5	2.5	-2.5	2.5	-0.9	0.9
8.5	-7.5	7.5	-4.5	4.5	-4.5	4.5	-1.75	8	-2.25	2.25	-2.25	2.25	-0.8	0.8
9	-7	7	-4	4	-4	4	-1.6	7.5	-2	2	-2	2	-0.7	0.7
9.5	-6.5	6.5	-3.5	3.5	-3.5	3.5	-1.5	7	-1.9	1.9	-1.9	1.9	-0.65	0.65
10	-6	6	-3	3	-3	3	-1.3	6.5	-1.8	1.8	-1.8	1.8	-0.6	0.6
10.5	-5.5	5.5	-2.5	2.5	-2.5	2.5	-1.15	6	-1.65	1.65	-1.65	1.65	-0.55	0.55
11	-5	5	-2	2	-2	2	-1	5.5	-1.5	1.5	-1.5	1.5	-0.5	0.5
11.5	-4.5	4.5	-1.5	1.5	-1.5	1.5	-0.95	5	-1.35	1.35	-1.35	1.35	-0.45	0.45
12	-4	4	-1.25	1.25	-1.25	1.25	-0.9	4.5	-1.2	1.2	-1.2	1.2	-0.4	0.4
12.5	-3.5	3.5	-1	1	-1	1	-0.8	4	-1.1	1.1	-1.1	1.1	-0.37	0.37
13	-3	3	-1	1	-1	1	-0.75	3.5	-0.9	0.9	-0.9	0.9	-0.35	0.35
13.5	-2.5	2.5	-0.5	0.5	-0.5	0.5	-0.6	3	-0.75	0.75	-0.75	0.75	-0.32	0.32
14	-2	2	-0.5	0.5	-0.5	0.5	-0.5	2.5	-0.6	0.6	-0.6	0.6	-0.3	0.3
14.5	-1.5	1.5	-0.5	0.5	-0.5	0.5	-0.3	2	-0.55	0.55	-0.55	0.55	-0.27	0.27
15	-1	1	-0.25	0.25	-0.25	0.25	-0.2	1.5	-0.5	0.5	-0.5	0.5	-0.25	0.25
15.5	-0.5	0.5	0	0	0	0	-0.15	1	-0.45	0.45	-0.45	0.45	-0.22	0.22
16	0	0	0	0	0	0	-0.1	0.5	-0.4	0.4	-0.4	0.4	-0.2	0.2
16.5	0	0	0	0	0	0	-0.05	0.25	-0.3	0.3	-0.3	0.3	-0.175	0.175
17	0	0	0	0	0	0	0	0	-0.25	0.25	-0.25	0.25	-0.15	0.15
17.5	0	0	0	0	0	0	0	0	0	0	0	0	-0.125	0.125
18	0	0	0	0	0	0	0	0	0	0	0	0	-0.075	0.075
18.5	0	0	0	0	0	0	0	0	0	0	0	0	0	0

APPENDIX VI

STORAGE SLOPES

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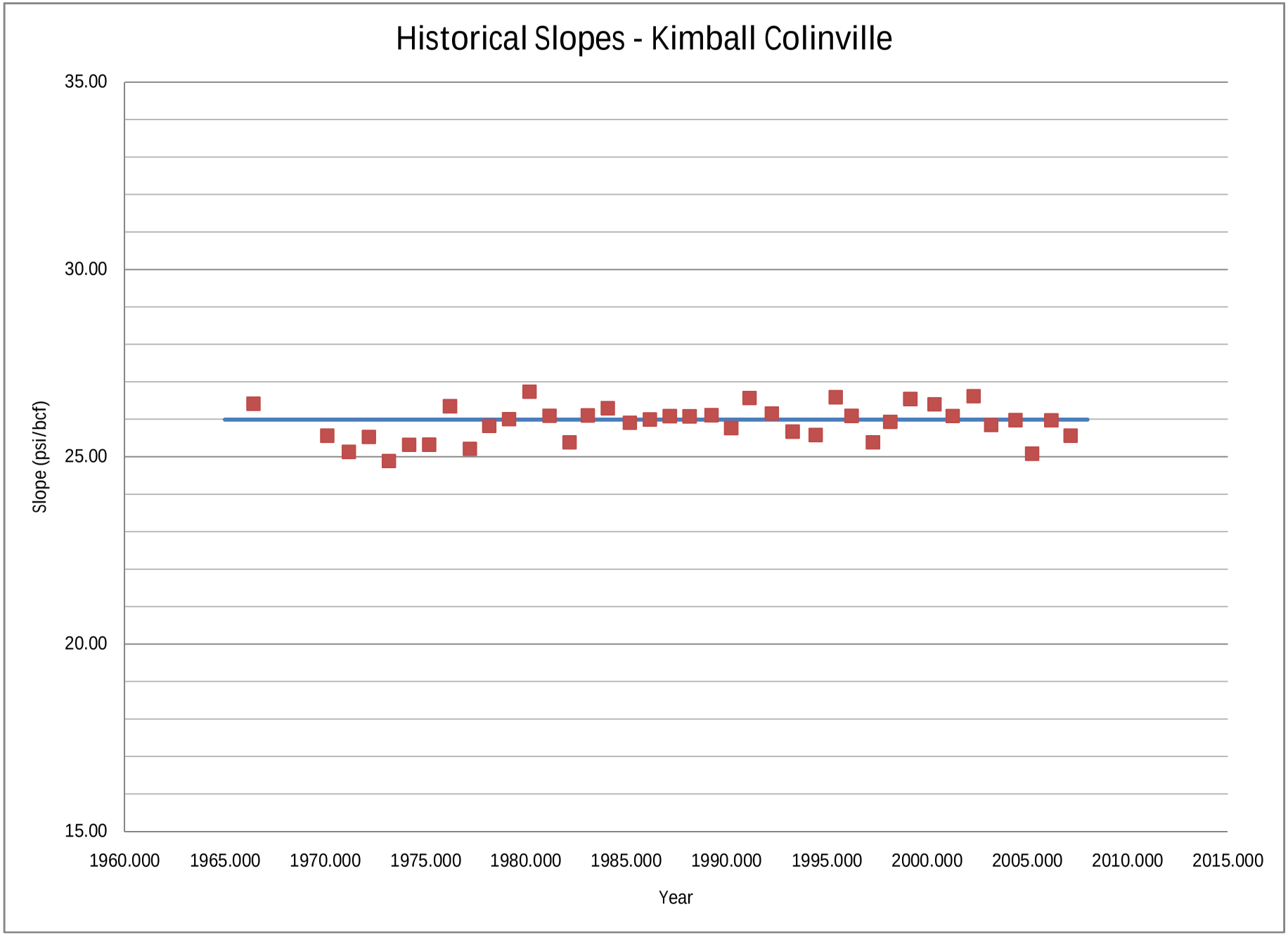
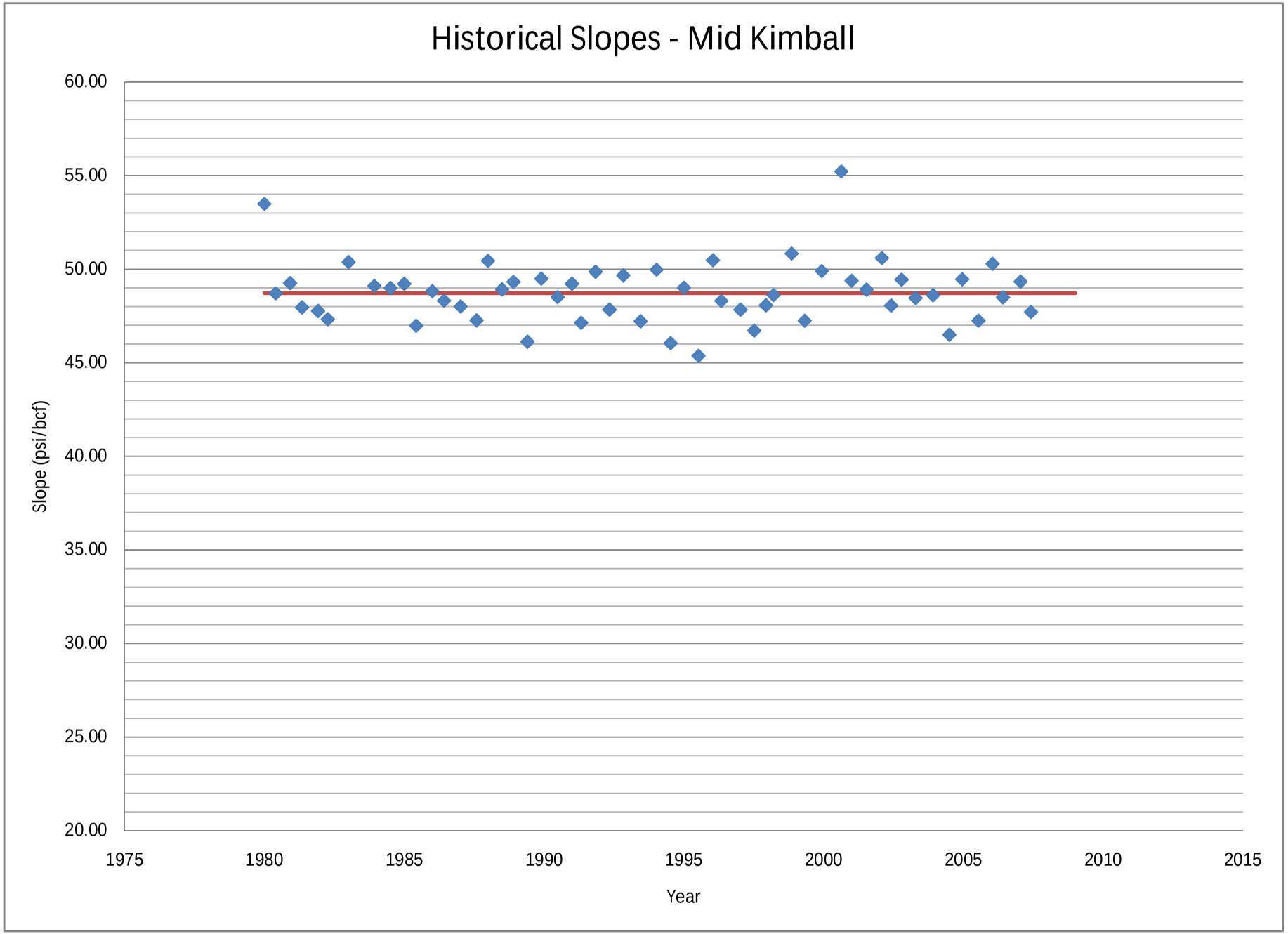
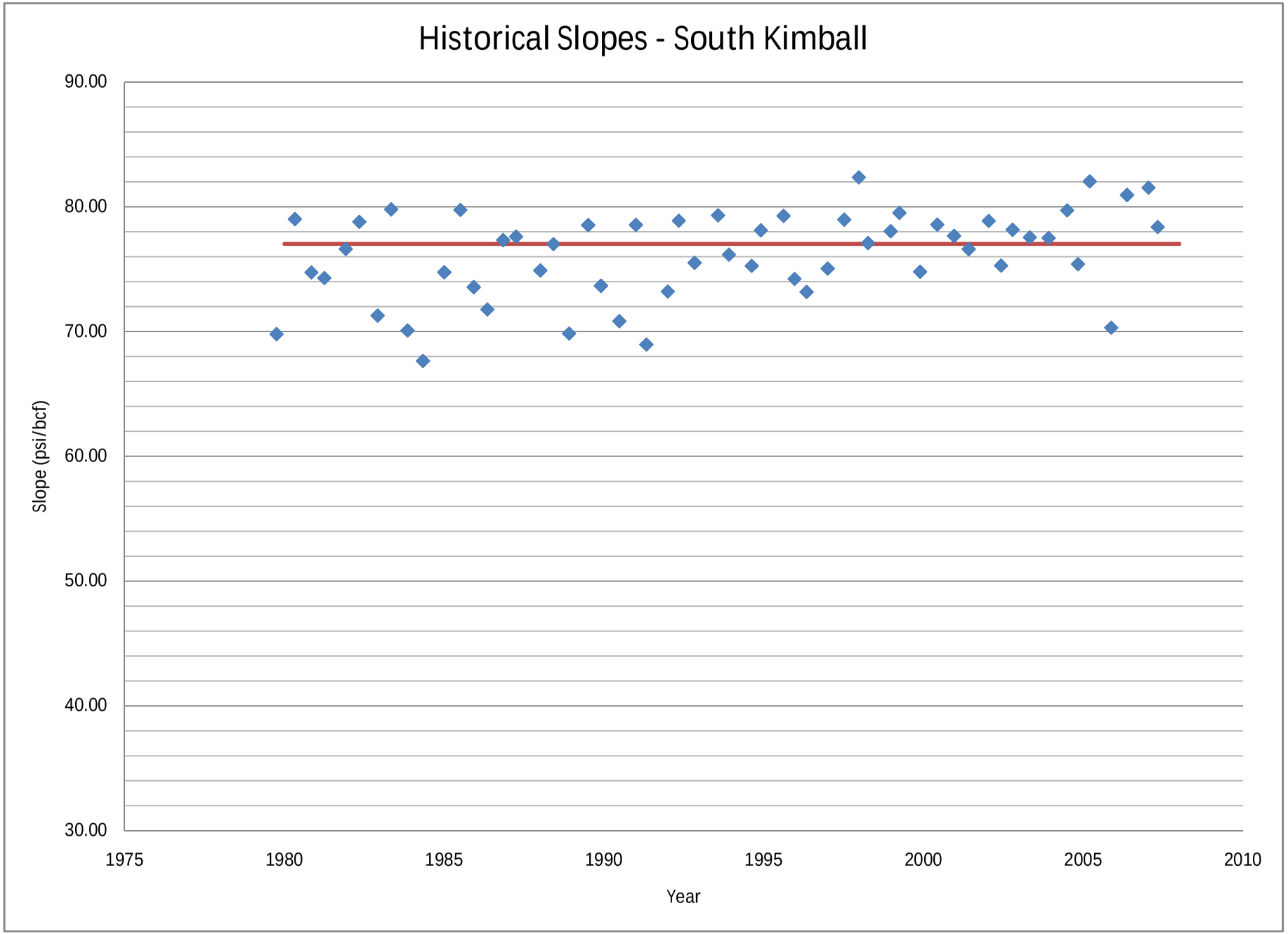
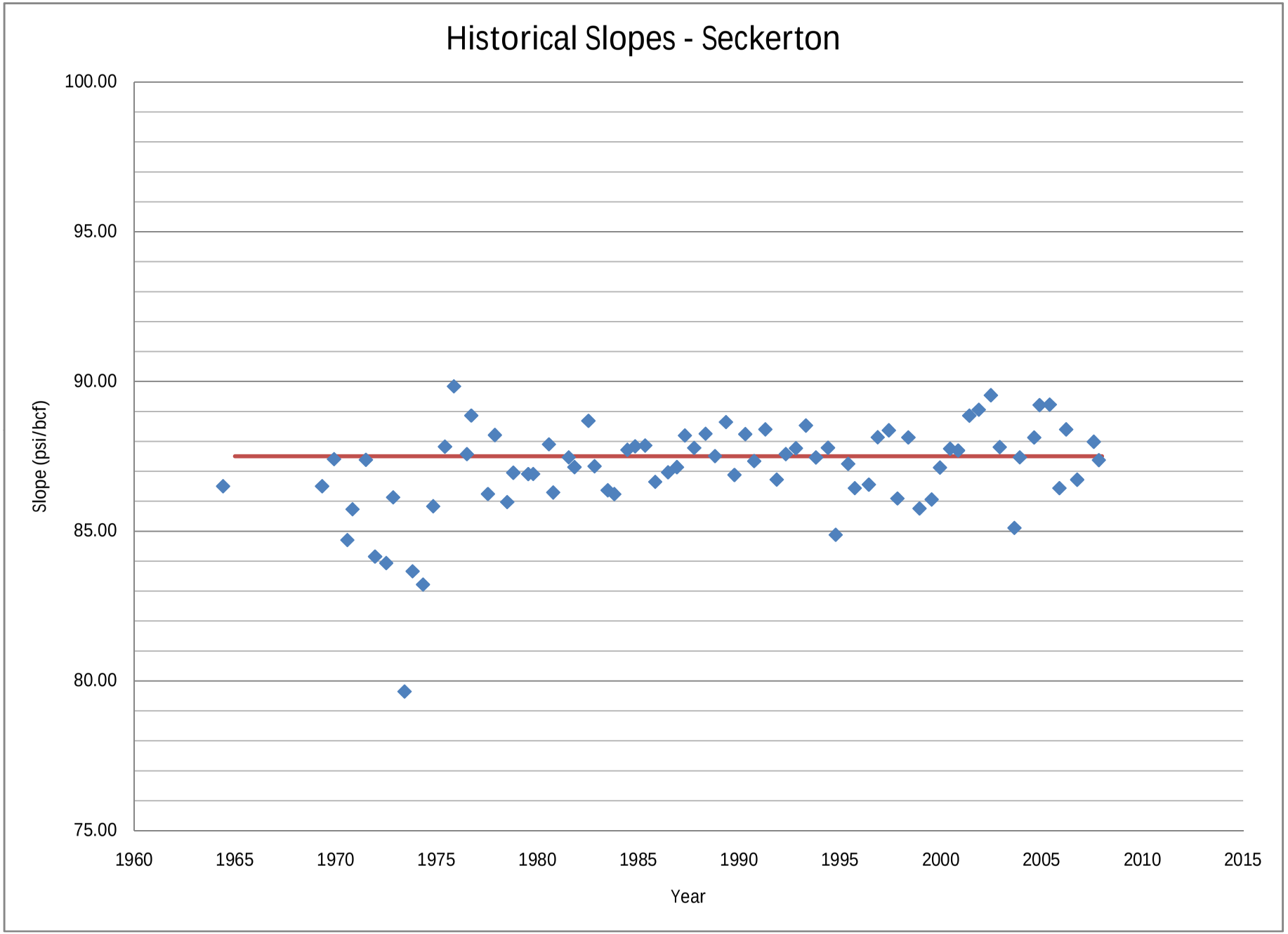
Appendix 6
Storage Slope Summary

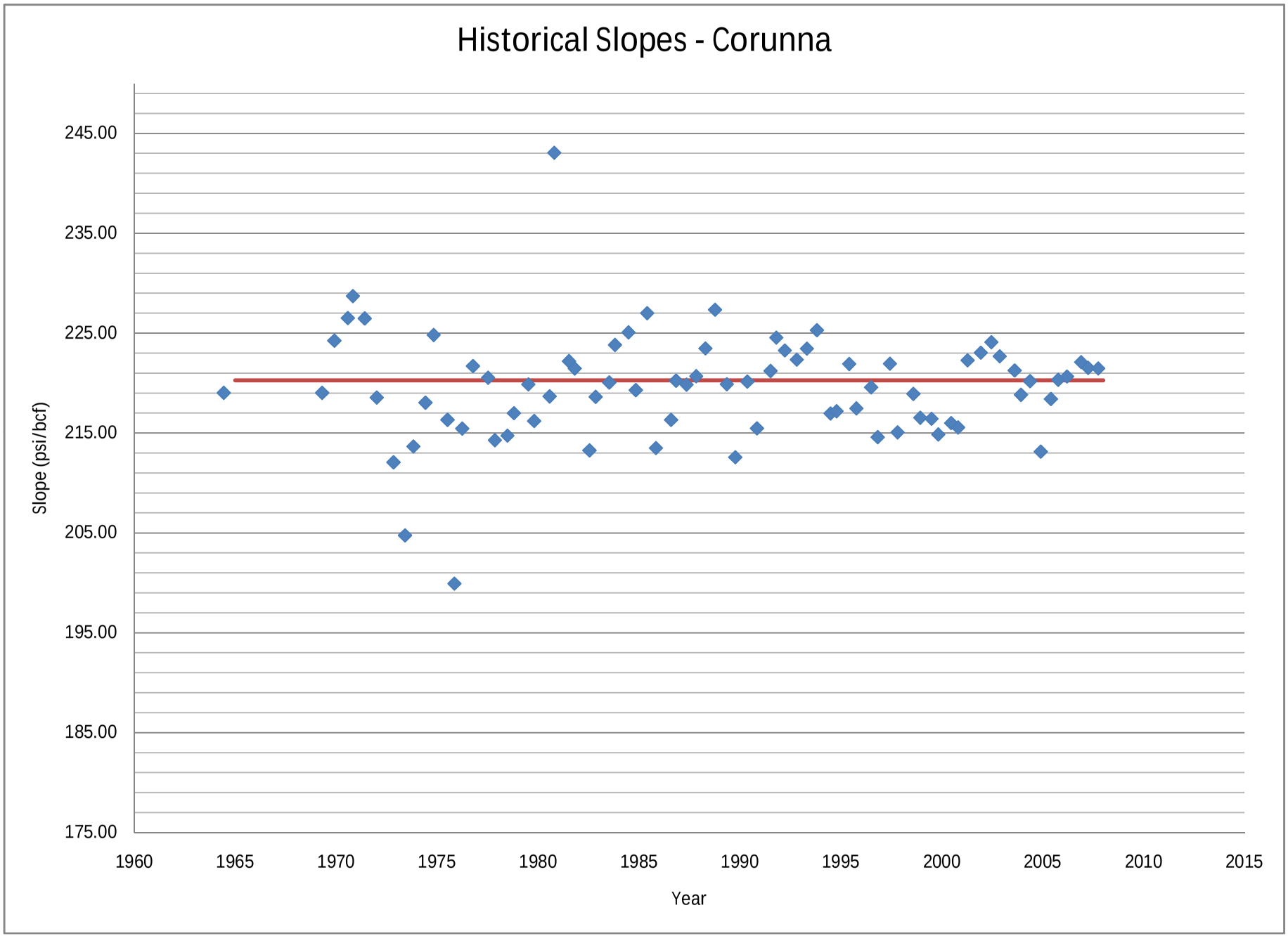
Pool	Recommended Slope	Source
Mid Kimball	48.72	1990-2008 Average
South Kimball	77.02	1990-2008 Average
Kimball Colinville	25.99	1990-2008 Average
Seckerton	87.50	1980-2008 Average
Corunna	220.27	1980-2008 Average
Wilkesport	139.54	1980-2006 Average
Dowmoore	57.66	1990-2008 Average
Black Creek	1420.08	Pre - 2008 Average
Coveny	315.46	Pre - 2008 Average
Ladysmith	206.77	Pre - 2008 Average

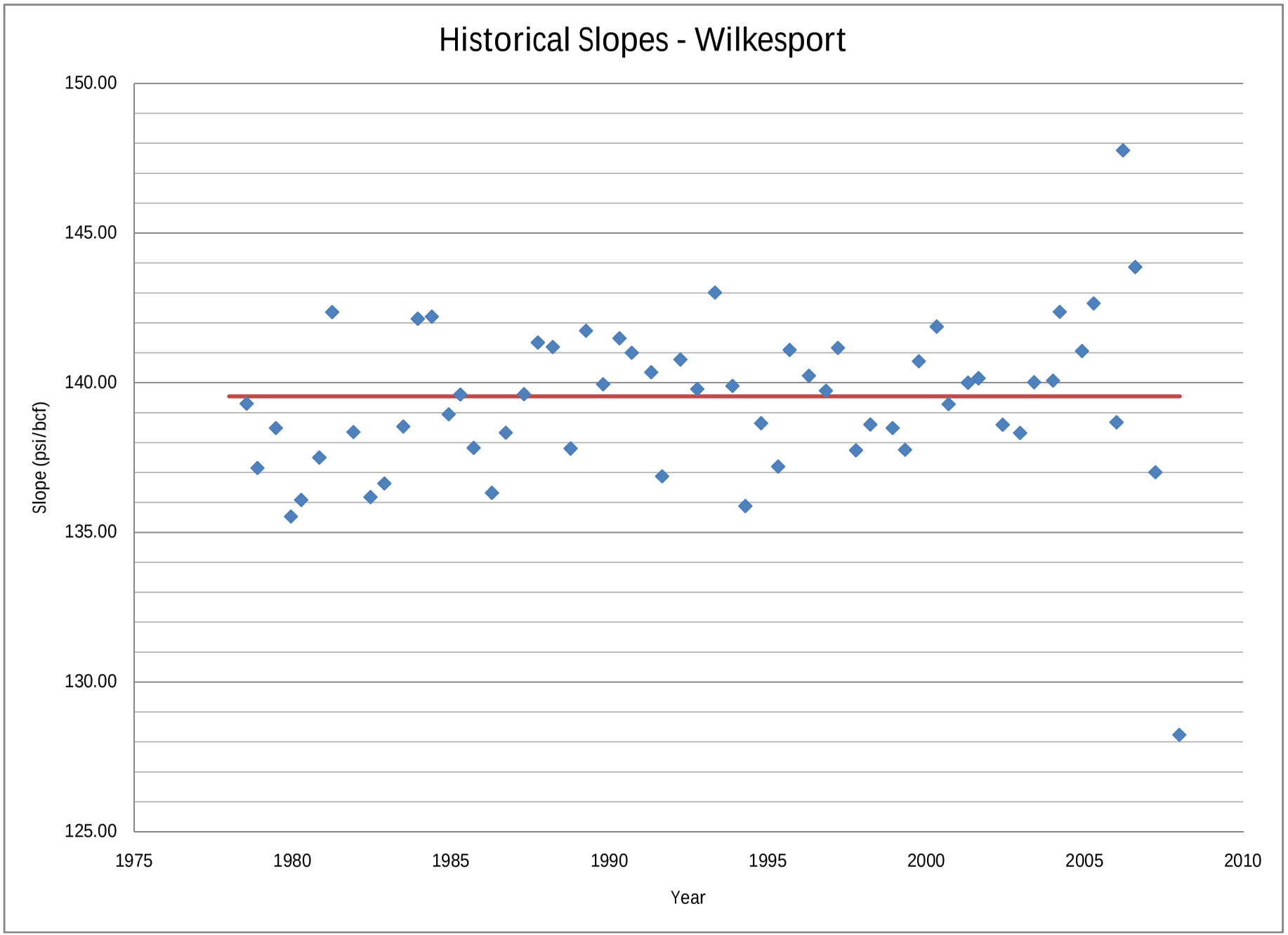

Historical Slopes - Kimball Colinville
35.00
30.00
25.00
20.00
15.00
Slope (psi/bcf)
1960.000
1965.000
1970.000
1975.000
1980.000
1985.000
1990.000
1995.000
2000.000
2005.000
2010.000
2015.000
Year

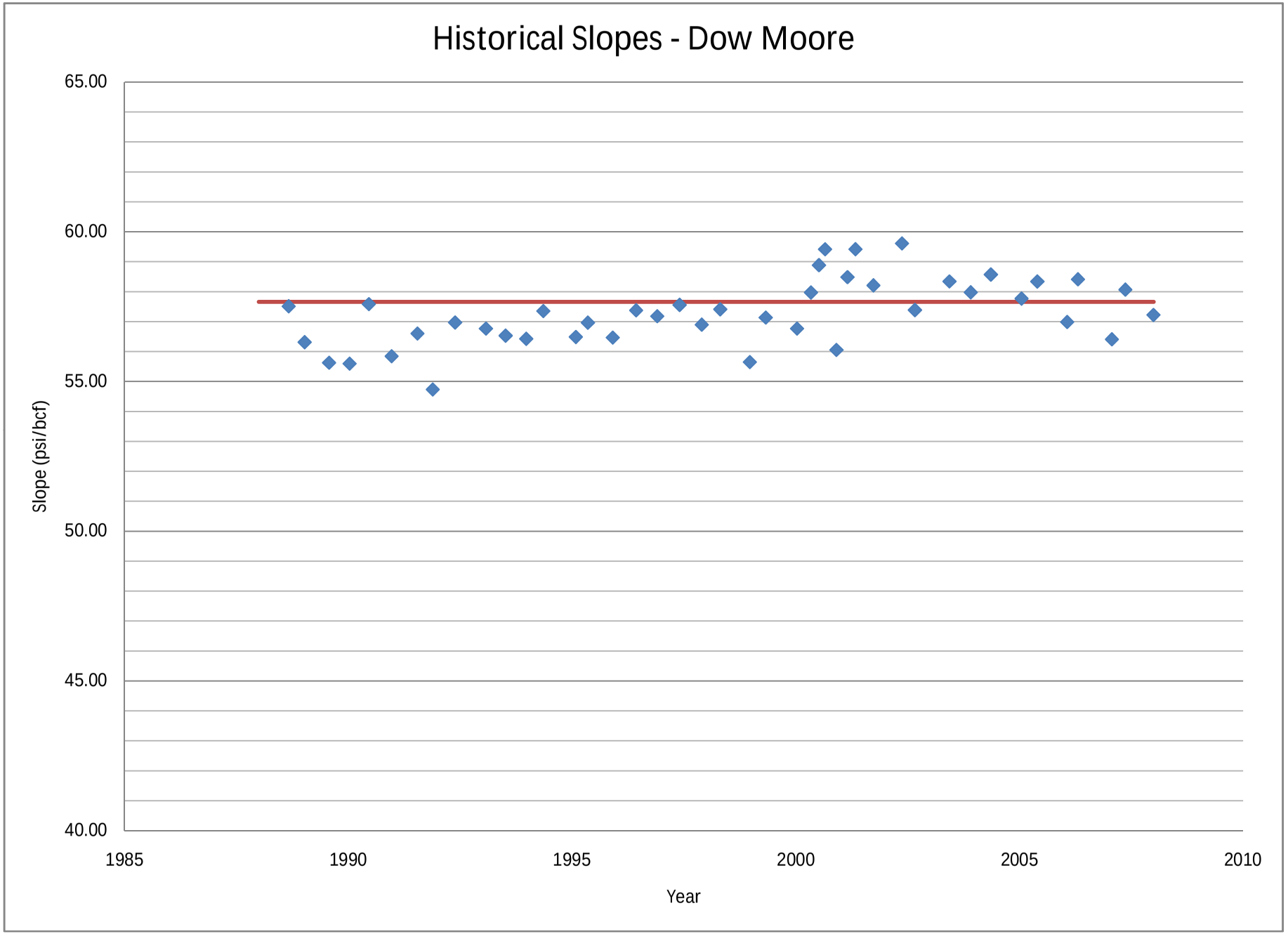

Historical Slopes - Mid Kimball
60.00
55.00
50.00
45.00
40.00
35.00
30.00
25.00
20.00
Slope (psi/bcf)
1975
1980
1985
1990
1995
2000
2005
2010
2015
Year

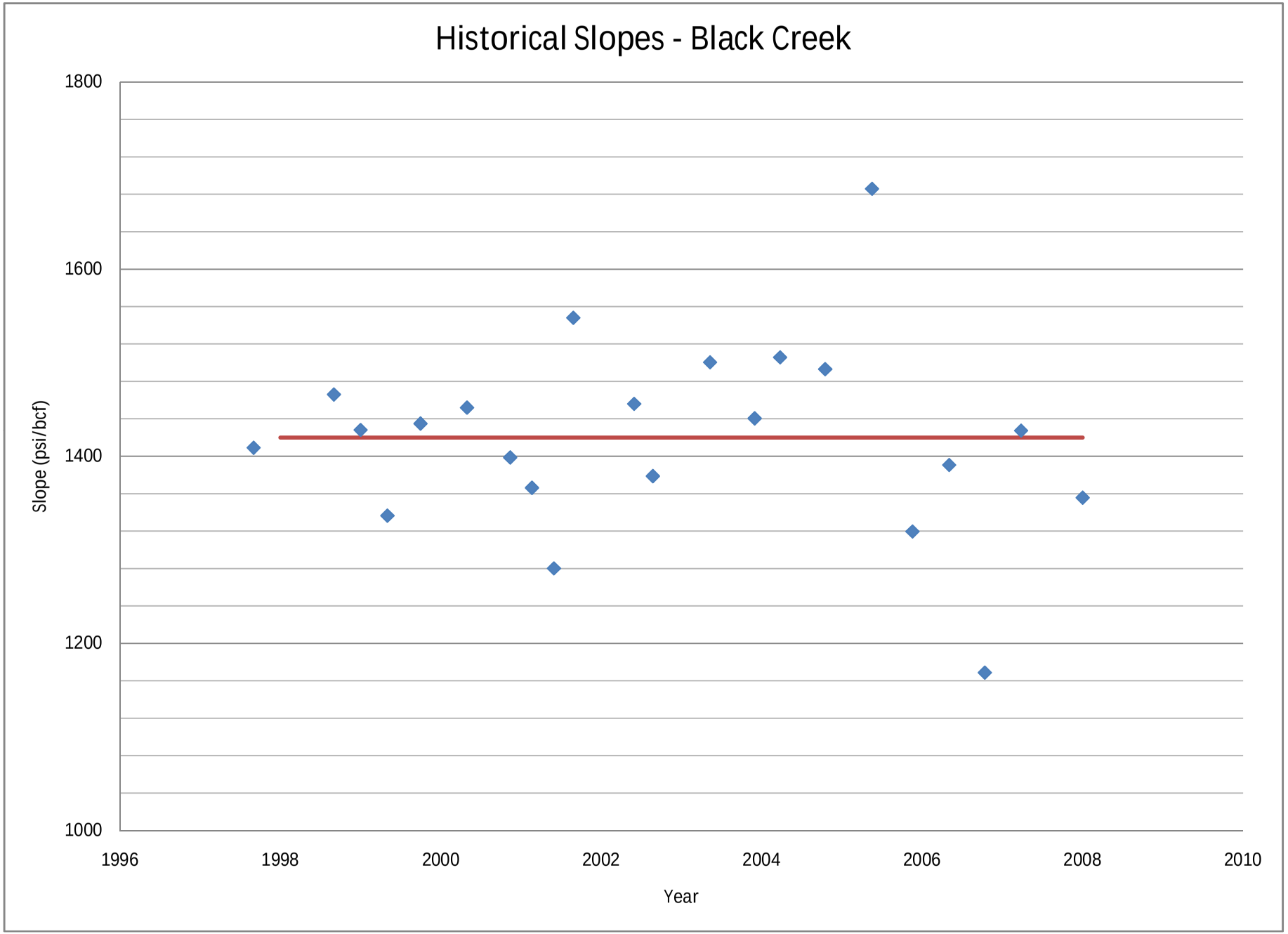

Historical Slopes - South Kimball
90.00
80.00
70.00
60.00
50.00
40.00
30.00
Slope (psi/bcf)
1975
1980
1985
1990
1995
2000
2005
2010
Year

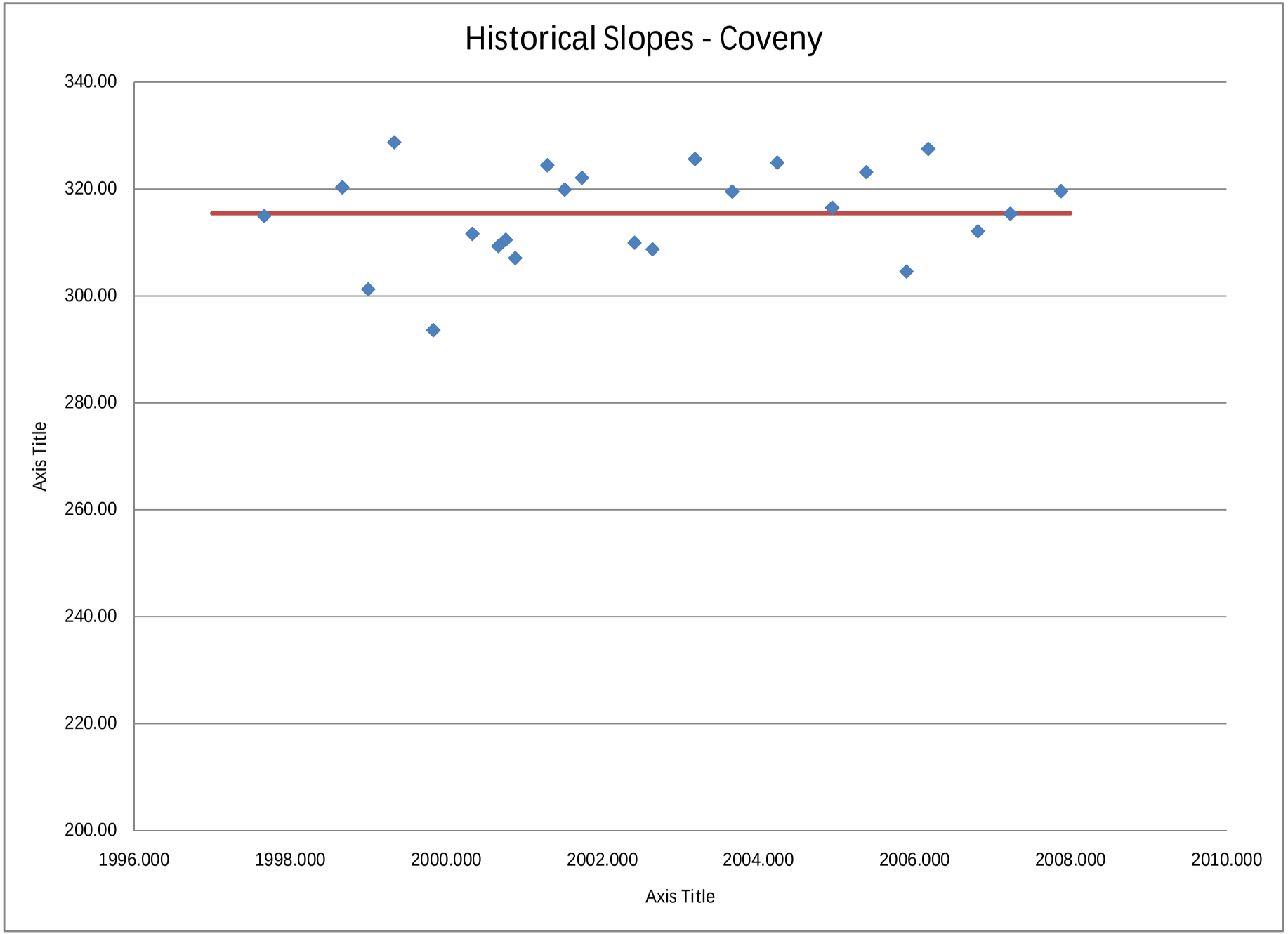

Historical Slopes - Seckerton
100.00
95.00
90.00
85.00
80.00
75.00
Slope (psi/bcf)
1960
1965
1970
1975
1980
1985
1990
1995
2000
2005
2010
2015
Year

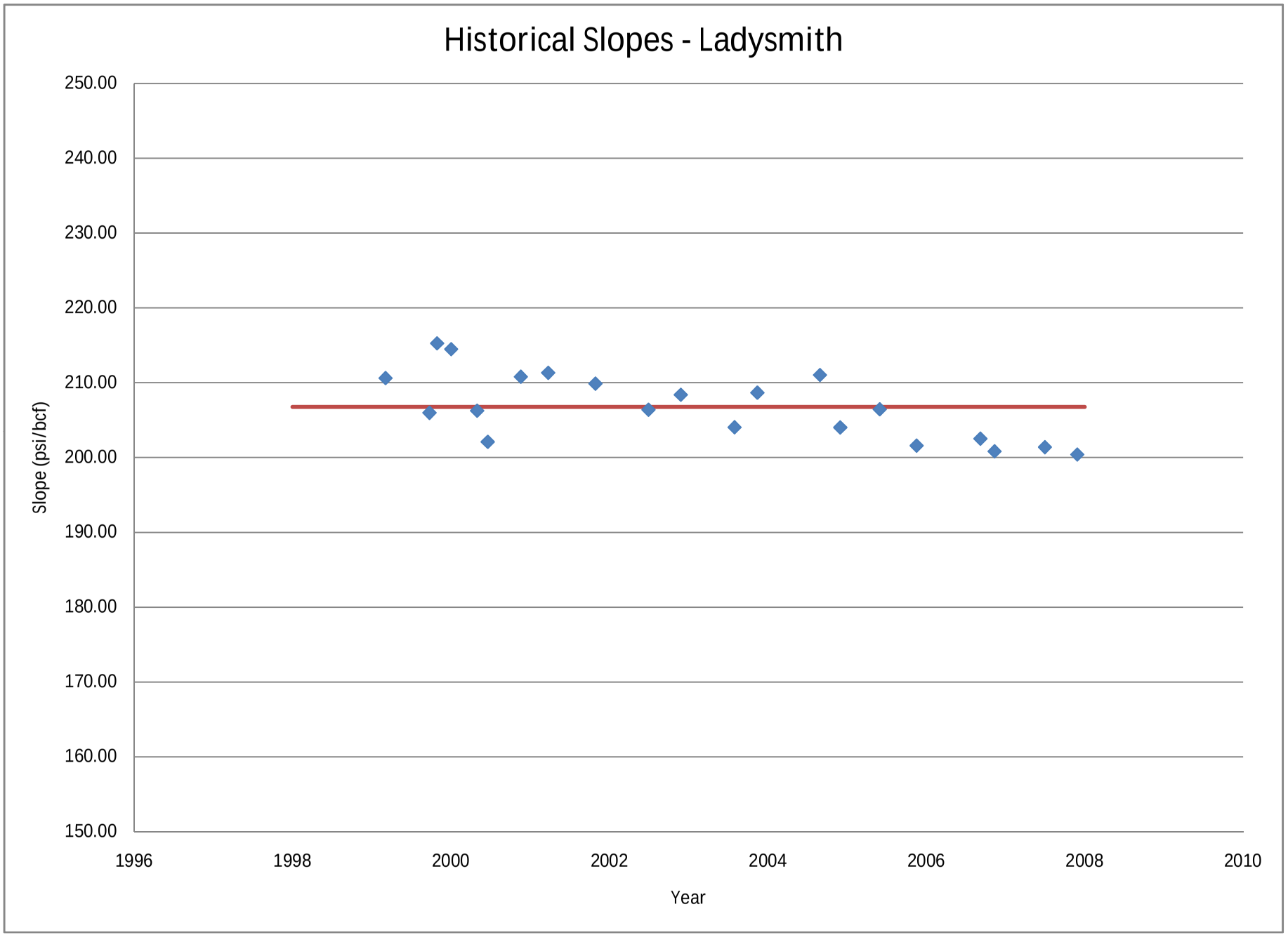

Historical Slopes - Corunna
245.00
235.00
225.00
215.00
205.00
195.00
185.00
175.00
Slope (psi/bcf)
1960
1965
1970
1975
1980
1985
1990
1995
2000
2005
2010
2015
Year


Historical Slopes - Wilkesport
150.00
145.00
140.00
135.00
130.00
125.00
Slope (psi/bcf)
1975
1980
1985
1990
1995
2000
2005
2010
Year


Historical Slopes - Dow Moore
65.00
60.00
55.00
50.00
45.00
40.00
Slope (psi/bcf)
1985
1990
1995
2000
2005
2010
Year


Historical Slopes - Black Creek
1800
1600
1400
1200
1000
Slope (psi/bcf)
1996
1998
2000
2002
2004
2006
2008
2010
Year


Historical Slopes - Coveny
340.00
320.00
300.00
280.00
260.00
240.00
220.00
200.00
Axis Title
1996.000
1998.000
2000.000
2002.000
2004.000
2006.000
2008.000
2010.000
Axis Title


Historical Slopes - Ladysmith
250.00
240.00
230.00
220.00
210.00
200.00
190.00
180.00
170.00
160.00
150.00
Slope (psi/bcf)
1996
1998
2000
2002
2004
2006
2008
2010
Year

THIRD PARTY REVIEW
PRACTICES AND PROCEDURES
GAS STORAGE INVENTORY VERIFICATION

EGD GAS STORAGE POOLS
LAMBTON AND KENT COUNTIES, ONTARIO

April 2009

Prepared for

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Petroleum Engineering Consultants

April 15, 2009

Mr. Ian MacRobbie, P.Eng.
Manager, Gas Storage Services and Business Development
ENBRIDGE GAS DISTRIBUTION – GAS STORAGE OPERATIONS
3595 Tecumseh Road
Mooretown, Ontario
N0N 1M0 Canada

Re: ***THIRD PARTY REVIEW***
PRACTICES AND PROCEDURES
GAS STORAGE INVENTORY VERIFICATION

Dear Mr. MacRobbie:

At your request, and as authorized under Consulting Agreement effective November 25, 2008, we have performed a due diligence third party review of practices and procedures followed by Enbridge Gas Distribution - Gas Storage Operations (EGD) to verify book inventory in its underground gas storage fields located in Ontario, Canada. The scope of work for this study is outlined in a proposal dated July 18, 2008, and more specifically in Schedule "A" to the referenced Consulting Agreement.

BACKGROUND

The Storage Pools

EGD operates ten gas storage pools in Lambton and Kent Counties, Ontario, all pinnacle dolomitic reefs averaging approximately 200 ft in gross thickness, 200 acres in areal extent and 2,000 ft in depth below the surface (Table 1). The reefs were formed during the Silurian Period in the Michigan Basin and are overlain by anhydrite cap rock that provides a seal for structural entrapment of hydrocarbons within porous and permeable portions of the Guelph formation.[1,2]

Each pool was a depleted gas reservoir prior to conversion to storage, except Corunna, Ladysmith and Seckerton, which originally contained both oil and gas and still have active oil production. From 1947 to 1990, approximately 90 billion standard cubic feet (Bcf) of gas and 13 million barrels (MMB) of oil were discovered in these pools. Most wells were drilled using cable tool technology, including some recently.[3]

Corunna and Seckerton were activated for storage in 1964, followed by Mid Kimball-Colinville and South Kimball-Colinville in 1965. The last fields placed in storage service were Black Creek and Coveny in 1997 and Chatham 'D' and Ladysmith in 1998 and 1999, respectively. The field complex has a total working gas capacity of 97,551 million standard cubic feet (MMcf) with 34,508 MMcf of base gas.[4]

Surface Facilities, Data and Tests

The ten pools have a common gathering system with two compressor stations: Sombra, which has three reciprocating units, each with 1,200 hp, and Corunna (Tecumseh), which has 11 reciprocating compressors totaling 41,000 hp (Figure 1). Gas is dehydrated, if necessary, at the Dawn hub, or at the Sombra compressor station, for deliveries to the Vector Pipeline. Pipeline sizes range from 6-in for some gathering lines to 30-in transmission lines between the Corunna station and Dawn.[5]

An extensive amount of injection-withdrawal data has been compiled over 45 years of storage operations. However, individual well flows have not been measured, only pool flows. Well tests, including 4-point modified isochronal tests with shut-ins, are conducted on a frequent basis. Observation-well pressure data are extensive, and more recently such data have been obtained daily.[6]

Wireline log and core data are limited. Prior to 1988, neutron and density logs were run; afterwards, wells were logged with compensated neutron-density tools. In all the pools, only a few resistivity logs and one core through the storage interval were taken. Seismic was shot, but just the Ladysmith pool has 3D data.[7]

Pressure-Inventory Matters

Pool discovery pressures were typically near 900 psig, with the exception of Chatham 'D', a shallower 1,400-ft reservoir, which had an initial pressure of 783 psig. Currently, pools in the complex are operated at delta-pressure levels varying up to 1,440 psig wellhead. The reservoirs are reported to behave volumetrically with no apparent associated active water-drive, although several pools have water or oil legs underlying the gas zone (Figures 2-9).[8]

Inventory discrepancies at EGD's pools have been evaluated extensively by GLJ Petroleum Consultants Ltd. (GLJ) since 1988. In its most recent update,[9] GLJ reported a shortfall of gas inventory that its engineering analysis indicated was not present in the storage reservoirs on December 31, 2007. The incremental change in gas inventory discrepancy from May 2005 to December 2007 was calculated to be 2.68 Bcf. GLJ has attributed gas losses to meter error, migration and other unknown causes.[10]

EGD conducts annual pressure-inventory studies[11] and reports inventory counts to its outside auditors,[12] based in part on GLJ's analyses. Using reservoir engineering methods, gas physically in-place (GIP) typically is calculated on a specific day at each pool from shut-in wellhead pressure (SIWHP) measurements and gas-per-pound relationships (GLJ reciprocal slopes). Book volumes then are adjusted to these GIP calculations to provide inventory counts for the auditors. Several factors have been cited to explain variances between inventory determined from the wellhead-pressure measurements and inventory presented in the operations report, including pressure-stabilization effects, metering error, compressibility-factor computations, gas-per-pound slopes and gas migration.[13]

Scope of This Review

In November 2008, EGD engaged Dowdle & Associates, Inc. to perform a third party review of its inventory verification analysis, including pressure acquisition practices, compressibility or *Z* factor sensitivity, bottomhole pressure calculations, measurement procedures and related GLJ studies and methodologies.[14] The items we reviewed, along with comments, observations and recommendations for improved processes and methodologies, consistent with industry best practices, or common procedures with which we are familiar, are set forth below.

REVIEW OF EGD'S INVENTORY VERIFICATION METHODOLOGY

Pressure Measurement and Acquisition

Pressure-inventory verification is based on volumetric material balance relationships that depend upon estimation of average reservoir pressures. Numerous techniques are used throughout the gas storage industry to determine average pressures, but most "best practices" involve some variation of the following steps at the end of the fall and spring cycles:

1) Shut-in the field at the station or header, then all wells at the wellhead
2) Leave wells shut-in for a predetermined period sufficient for adequate field pressure stabilization or as long as practicable
3) Measure pressures at the wellhead during each day of the shut-in test
4) Obtain bottomhole pressures on selected wells during the shut-in period
5) Calculate bottomhole pressures from wellhead pressures using the Cullender and Smith[15] or similar method, or an average gradient from the bottomhole pressure measurements
6) Compute reservoir pressure for each day of shut-in using some type of well pressure-weighting scheme (*e.g.*, acre-footage assignments)

EGD's procedure is to conduct shut-in tests at its pools semi-annually, striving for 30-day shut-in periods at each. Obtaining shut-in data semi-annually is good practice, because *p/Z* (or BHP/Z, average reservoir pressure divided by compressibility factor, *Z*) versus total book gas in-place (GIP) plots and several other pressure-inventory analysis techniques are best analyzed using spring and fall shut-in data.

Typically, in EGD's shut-in tests, pressure is measured on only one observation well in each reef. We have found that, in some instances, pressures at a "key" observation well can yield sufficient data for determination of average pressure. However, in our experience, the more common use of a "key" observation well is to develop rate-terminal-pressure relationships for deliverability predictions. Thus, we recommend EGD consider and evaluate the benefit of conducting future semi-annual tests at its pools according to the general procedure enumerated in the steps above in which all wells in the pool are shut-in.

In conjunction, EGD should evaluate drilling additional observation wells, both within the main reefs and in lower-permeability regions, at each of its pools to support

enhancement and optimization of field operations and to improve the reliability of inventory verification studies. Data from additional observation wells would allow better estimates of average reservoir pressure, thereby improving the accuracy and consistency of pressure-inventory analysis. Also, such wells would serve as sentinels against potential gas impoundment and migration. This would especially be true for any fields with relatively sizeable Guelph fringe areas outside the main reef, which, at present, contain no observation wells. Moreover, if EGD does not currently have observation wells in collector zones above the main storage horizon, it would be prudent to do so. Such observation wells could be completed to monitor multiple zones.

Bottomhole Pressure Calculations

Several methods are available for calculating static bottomhole pressure from shut-in wellhead pressure. The most widely used method is that of Cullender and Smith.[16,17,18] Each of the rigorous methods requires average temperature in the wellbore and Z factor evaluated at the average wellbore temperature and pressure, which makes the computation iterative. Regardless of which method is used, it is advisable to confirm results with actual measured data on a spot-check basis. This is one reason for obtaining bottomhole pressures on selected wells during shut-in tests. In fact, in some instances, if bottomhole pressure surveys have been run on several representative wells, it may be better to convert SIWHPs to BHPs using an average wellbore gradient rather than using a theoretical computational method.

We have reviewed EGD's internal memos that give the Excel formula used to convert SIWHP to BHP for its inventory studies.[19] This calculation, as input, is strictly valid for vertical wells, wellhead pressure in psia, gas specific gravity of 0.58 and average wellbore temperature of 60° F, and if Z is determined iteratively. Using the same data specified in EGD's audit calculations as of December 31, 2007,[20] BHPs were calculated from SIWHPs using a popular personal-computer program (RLM),[21] which determines Z iteratively, and were compared with those given in the audit. EGD's results, although slightly higher on average, agree quite closely with those of the RLM program (Figure 10).

To obtain Z factors for the BHP calculations, it is important to know the composition of the gas in the wellbore at time of the shut-in test, since compressibility-factor correlations depend on gas composition. Consequently, gas samples should be taken from representative wells immediately prior to fall and spring shut-in tests and analyzed to determine wellbore gas composition for use in deriving BHPs. In addition, historical injection-withdrawal (IW) and observation well gas sample analyses are valuable in helping to identify injected gas fronts, possible migration patterns, potential gas pore volume expansion and other trends. At a minimum, gas samples should be taken before each shut-in at some common point where composition of the injected and withdrawal gas is representative for the pools.

Compressibility Factors

- Correlations

Numerous correlations are used throughout the industry to obtain *Z* factors. According to a survey conducted by the AGA Underground Storage Committee,[22] in 1991 twice as many respondents used the Dranchuk, Purvis and Robinson (DPR) correlation as any other. McCain recommends the Dranchuk Abou-Kassem (DAK) correlation.[23] Dranchuk and Abou-Kassem themselves concluded that the fitted equations of Hall and Yarborough (HY) and both the DPR and DAK methods all yield results which are within engineering accuracy over a wide range of conditions.[24]

We have performed independent comparisons of all the correlations mentioned above, and others, and have found DAK to be valid over a broader range and more accurate than the rest. However, the HY correlation seems to be in more common use among the storage companies with which we are familiar.[25] In agreement with Dranchuk and Abou-Kassem, especially since gas compositions, temperatures and pressures do not range nearly as widely as in those encountered in reservoirs worldwide, either HY, DPR or DAK should be satisfactory for determining *Z* factors in EGD's storage pools.[26]

Comparisons of *Z* factors and *p/Z* derived from the DAK and HY correlations and those used by EGD in its December 2007 audit calculations[27] are presented in Figure 11. The DAK and HY methods give nearly identical *Z* factors over the pressure range evaluated. EGD's values, however, are consistently higher and, as a result, yield a lower *p/Z* curve. While this difference may not affect inventory reconciliation significantly, provided the same relationship has been used consistently, it is recommended that EGD reevaluate its *Z*-factor computation method and consider the advisability of using the HY or DAK correlation.

- Gas Composition

As mentioned, it is necessary to use the composition of gas contained in the wellbore at the time of shut-in to derive *Z* factors for correctly computing BHP from SIWHP. This also is true of the composition of gas in the reservoir with respect to *Z* for pressure-inventory analysis. Two extremes are considered here, both at 63° F, using the DAK correlation. The first uses native gas properties as estimated from gas analyses data provided by EGD.[28] The second is based on injected gas properties in EGD's audit referred to earlier (see also legend on Figure 11).[29] Results at 500 psia and 1,000 psia are compared below:

Comparison of Native and Injected Gas *Z* Factors
DAK Correlation at 63° F and Two Pressures

500 psia			1000 psia		
Native	Injected	Δ%	Native	Injected	Δ%
0.9177	0.9290	1.22	0.8403	0.8637	2.71

The differences shown above are relatively small, less than three percent at 1,000 psia. However, at the end of a withdrawal season, when pressure is low, gas composition would tend to be more native in quality, while at the end of a fall period, when pressure is high, gas would have a more dominate injected-gas composition. In this case, the *Z*-factor difference could be as much as six percent. Thus, EGD should consider these effects in its operations and inventory analysis.

GLJ STUDIES AND METHODOLOGY

GLJ has performed thorough and extensive inventory discrepancy analyses on behalf of EGD for many years. Comprehensive and detailed studies of inventory losses are quantified in GLJ's evaluations, including gas migration, meter error and other causes. The fundamental basis of GLJ's determinations, like essentially any pressure-inventory analysis, is the *p/Z* versus GIP relationship.

Slopes or Gas-Per-Pound

In its inventory analysis update effective December 31, 2007,[30] GLJ determined the following *p/Z*-GIP relationships, or slopes of the *p/Z* versus GIP plot[31] (Figure 12):

Pool	Slope [psi/Bcf]	Source
Mid Kimball	48.72	1990 – 2008 Average
South Kimball	77.02	1990 – 2008 Average
Seckerton	87.50	1980 – 2008 Average
Corunna	220.27	1980 – 2008 Average
Wilkesport	139.54	1980 – 2008 Average
Dow Moore	57.66	1990 – 2008 Average
Black Creek	1420.08	Pre – 2008 Average
Coveny	315.46	Pre – 2008 Average
Ladysmith	206.77	Pre – 2008 Average
Chatham 'D'	490.47	GLJ 2005 Analysis

The reciprocal of the GLJ slope is known as gas-per-pound (GPP or M/#) and is indicative of reservoir size. For ideal, volumetric conditions, or constant gas-pore-volume, discovery GPP (GIP divided by *p/Z* at the time the pool is discovered) is constant. Hence, under storage operations, as gas in-place, or inventory, changes, reservoir pressure will increase or decrease accordingly, such that, theoretically, *p/Z* points will plot directly on the "discovery line" (the discovery line on a *p/Z* vs GIP plot for any given pool runs from the origin at zero gas in-place and zero pressure to gas in-place at discovery and initial *p/Z*, see Figure 12). Therefore, the basis of nearly all pressure-inventory evaluation methods is the discovery line.

- Reliability

Seldom do spring and fall semi-annual test *p/Z* points, much less "spot" readings taken after relatively short shut-ins (or no shut-in period) following various levels of field activity, lie exactly and consistently on the discovery line. There are several reasons for this. Storage reservoir geometry, permeability and IW well placement usually do not allow for complete reservoir pressure stabilization within practical shut-in times. Consequently, as a rule, pressures are not fully built up in the spring and have not completely leveled of in the fall. Field activity during the cycle and immediately prior to shut-in can also affect pressure stability.

Reservoir gas pore volume can expand and contract due to water influx and efflux and other phenomena. Expansion results in larger GPP values, while contraction causes GPP to decrease. Such effects can be subtle and ongoing for several cycles, sometimes requiring several years to identify and adequately characterize. In a similar way, gas loss or migration creates larger GPP values, whereas reverse migration lowers GPP.[32] "Shifting" of spring-fall cycle lines also can be difficult to immediately recognize.

- Examples Referencing the Discovery Line

Consider Figure 13, a *p/Z* plot for an example field progressively undergoing expansion due to delta-pressuring and water movement out of the reservoir. The growth in gas pore volume is apparent by the increase in GPP, or reciprocal slope of the *p/Z* cycle lines (lines connecting fall and spring points). At the most recent period, GPP had reached its highest value, having more or less steadily increased to that point from discovery GPP. It would not be proper in this case to use an average of the historical GPPs for inventory verification at the present time. Rather, the most recent slope or GPP should be used.

Figure 14 illustrates a field undergoing loss.[33] Note that cycle lines are nearly parallel to the discovery line and cyclic GPP (slope of the individual cycle lines) is close to discovery GPP. For this reservoir, it would not be unreasonable to use historical average GPP to quantify inventory discrepancies. Based on our experience, however, pressure-inventory performance of most storage reservoirs is affected by a combination of factors, including pressure-stabilization, diffuse gas losses, expansion or contraction, metering error and gas impoundment. Considering the complications these factors can produce, we are of the opinion that pressure-inventory interpretation and inventory verification studies and audits should be based on the discovery line as the fundamental basis of reference from which pore volume ratio, gas-per-pound, inventory variance and gas impoundment are determined. In our opinion, this approach represents industry "best practices". Consequently, we recommend EGD asses the impact of using, or of not using, this approach in quantifying inventory discrepancies.

- Comparisons, Trends and Ramifications

Estimated GPP at discovery for each of EGD's pools is given in Table 2 along with GLJ current slope determinations.[34,35] When compared to discovery GPP, GLJ's slopes are in

fairly close agreement at seven fields, where slight to moderate gas pore volume decreases are indicated at each (Figure 15). Ladysmith, Corunna and Seckerton show apparent expansion effects, which might be expected, since each of these three fields originally contained oil, so that its production would create additional gas pore volume. Yet, the implied expansion at Seckerton is extraordinarily high, with GLJ's GPP being nearly twice that at discovery (Figure 15). This difference is disturbing and should be investigated.

Finally, Figures 16 and 17 illustrate an overriding concern with using average slopes and lack of reference to the discovery line in evaluation of inventory discrepancies. Historical slopes indicate Ladysmith has progressively undergone expansion (see the black trend line on Figure 16) and that the most representative slope for current inventory verification purposes is the latest one. Using the GLJ average slope, rather than the current slope, would result in computation of an implied loss from a "spot" pressure measurement, even if the pressure were stabilized.

Like Ladysmith, GPP slopes at the Dow Moore pool also have been increasing (GLJ slopes decreasing, see black trend line on Figure 17), again, indicative of reservoir expansion. However, the present trend at Dow Moore developed around 2000, when some anomalous step-function change apparently occurred, and GPP seemingly decreased instantaneously (GLJ slope increased, see Figure 17). Prior to the step-function shift, which usually reflects some type of operational or interpretational change, computed slopes at this field were relatively constant, but somewhat greater than discovery (lower GPP and apparent gas pore volume). Although the current GLJ average slope is near the post-2000 trend line, use of that slope in late 2000 or early 2001 could have resulted in an estimated loss of up to 0.4 Bcf, when actually, some other influence, such as expansion, would have been the real cause.

Pressure Stabilization

The "Extrapolation Type Curves" presented in GLJ's January 2009 report[36] provide a resourceful technique for estimating average reservoir pressure for various shut-in lengths at EGD's pools. As GLJ correctly states, "...the level and duration of [injection/withdrawal] prior to shut-in will affect the reliability of...extrapolations" to obtain stabilized pressures.[37] Clearly then, GLJ recognizes that these type curves, as presently formulated, do not explicitly account for injection or withdrawal rates prior to shut-in. Thus, in order to obtain better estimates of stabilized pressures when field activity prior to shut-in is outside the range of the data upon which the type curves are based, some type of adjustment for non-typical spring and fall withdrawals needs to be made. For that reason, we agree with GLJ that more consistent extrapolations should be sought from this technique by incorporating all extended shut-in periods. However, in our opinion, the Horner-correction method offers an alternative approach that is more in line with "best practices" for obtaining stabilized pressures, although our experience suggests its use may not be widespread throughout the storage industry.

The application of the Horner method to storage reservoir shut-in data is directly analogous to the Horner plot used to analyze individual-well pressure transient tests (buildups and falloffs). In the usual manner, weighted average shut-in pressure is plotted versus the logarithm of Horner time, $(t + \Delta t)/\Delta t$, and extrapolated to p^*. The t in Horner time can be approximated in the accepted fashion by dividing the cycle turnover volume by q, taken as the last rate before the shut-in. The shut-in pressures are obtained from wellhead pressure measurements taken at selected times during the shut-in, preferably each day, and averaged to obtain BHPs.

As for wells in finite reservoirs, average pressure in storage reservoirs can be obtained from Horner-extrapolated p^* using the Matthews-Brons-Hazebroek (MBH) method presented in SPE Monograph Volume 1.[38] This is done using published MBH pressure functions for wells at specified locations in drainage areas of various shapes (*e.g.*, see Figure 18).[39]

In practice, storage operators typically use the Horner-corrected average pressures primarily to assess the volume of "non-effective gas" (NEG).[40] Generally, pressure-inventory plots in their reports use the "raw" or conventional data, but Horner corrections are made in an effort to explain or justify the NEG, thereby reconciling book inventory.

METERING, LUF AND DIFFUSE LOSSES

Measurement

Gas injected into EGD's pools is measured at the TransCanada Pipeline (TCPL) custody transfer meters at the Dawn Station and at individual pool meters located at the Enbridge Station. Withdrawal gas is measured at individual pool meters located at the Enbridge Station and then at the Union Gas custody transfer meters located at Dawn. EGD's pool book volumes are adjusted each month, up or down accordingly, to agree with the custody meters. Longer-term average net adjustments have been in the range of 0.8 to 0.9 percent of injected volumes.[41]

Of the 2.68 Bcf incremental inventory discrepancy from May 2005 to December 2007 determined by GLJ, 2.452 Bcf is attributed to meter error and unknown losses. In view of losses of this kind and magnitude, EGD should consider installing its own separate custody-type meters upstream and downstream of the Union Gas and TCPL meters, respectively. Before doing so, however, we recommend that EGD evaluate how it treats lost and unaccounted for (LUF) and blowdown losses as discussed in the following section.

"Best Practices" provide for both injection and withdrawal measurement at each individual field with the most accurate metering that can be justified economically. In specifically designed tests, or when the opportunity arises, if practicable, EGD should separately check individual pool meters against the custody transfer meters by injecting and withdrawing only from one field at a time. Testing priority should be ordered according the highest estimated error by field. In this way, the greatest source of

measurement discrepancy can be pinpointed and identified. It may be that custody to custody checks would prove unnecessary. Still, because inventory discrepancies can result from many things, even the most accurate metering at EGD's pools and complex would not inevitably guarantee agreement with custody injection and withdrawal meters.

Diffuse Losses

Many gas storage companies document individual well and field blowdown losses and prepare "lost and unaccounted for" plans for diffuse losses. Some of these plans provide for monthly "field use" deductions from inventory. Usually, such deductions are based on monthly average reservoir or keywell (or observation well) pressures.[42]

Katz *et al*[43] propose that a value of 0.0002 Mcf/yr-psi per square foot of pipe surface should be the right order of magnitude for LUF from storage field systems. In practice, the procedure for a given field is to compute the surface square footage of well casing and pipelines and gathering lines. This total times 0.0002 gives an estimate of LUF in Mcf/yr-psi or Mcf/mo-psi. Then, multiplying this figure by the keywell or observation well monthly average pressure, gives the LUF each month. Adjustments to the 0.0002 factor usually are required at each field based on specific operating experience.

Katz and Lee report an annual loss of nearly one Bcf per year for 20 reservoirs containing 500 Bcf when full. Further, these investigators imply that leakage in low-pressure systems (500-1000 psia) generally is greater than that in high-pressure systems (> 1500-2000 psia).[44] Thus, blowdown and diffuse losses, if not specifically accounted for, could explain a significant portion of the LUF attributed to meter error and unknown losses at EGD's storage complex.

EXTERNAL AUDITS

Pressure-inventory verification, performed under "best practices" methodology, is a systematic process based on engineering analysis of spring and fall semi-annual shut-in tests, field injection-withdrawal activity, observation well and keywell data, historical gas sample analyses, geological and geophysical interpretations, primary production history and "discovery lines", prior cyclic history and more. Diagnostic techniques, such as GPP, pore volume ratio, variance and others, generally are more amenable to trend analysis, rather than instantaneous interpretation. This should not be construed to mean that "spot" pressure readings and inventory checks are not helpful and valuable. But, in our experience, the common practice with respect to inventory counts, book adjustments and write-offs is to follow an established policy that describes how recommendations regarding such adjustments are to be reached and broadly defines the technical procedures that should be followed in doing so. Annual inventory reports and reviews are a part of this practice, and several injection-withdrawal cycles and special studies may be required before reaching reliable decisions of this nature.

EGD conducts inventory counts for its external auditors on a regular basis. The general procedure is to obtain shut-in pressures on pool observation wells on a given day

witnessed by representatives from the auditing firm. After converting SIWHPs to BHPs, pool slopes recommended by GLJ are used to calculate physical gas in place in each pool. The difference between these results and the operations report balance gives the variance between "book" volumes and GIP. For reasons given previously, we are of the opinion that such inventory counts should be used merely for current field performance and inventory crosscheck indicators. The rationale for this is well explained in EGD inventory audit reconciliation memos.[45]

In consideration of audit requirements, we recommend that EGD establish and follow a company policy dealing with the manner in which inventory adjustments are approved and share that policy with its external auditors. Further, annual inventory reports should be prepared and reviewed by an independent third party, which may be requested to submit a separate opinion report, depending on the requirements of EGD and its auditors. The inventory verification, which justifies it all, should be according to "best practices" as presented in this review.

GENERAL "BEST PRACTICES" METHODOLOGY

Pressure-inventory interpretation that is reliable follows a methodology that identifies, quantifies and accounts for various factors that may influence reservoir performance, like those previously discussed and others. For example, a trend of reservoir and cyclic GPP (1/GLJ slope) increasing together generally indicates gas pore volume expansion. This would not be unusual in delta-pressured fields where pound-days are such that the original GWC could be moved downdip (storage pools in Michigan Basin Stray sands are good examples of this).[46] The reverse is true of fields where water influx can occur as a result of operating at average reservoir pressures below discovery (negative pound-days). Other factors, such as gas impoundment and unstabilized pressures can cause slope changes and seeming trend reversals. On the other hand, book discrepancies can result from measurement, diffuse losses and leakage, as pointed out above.

For a methodology to have ultimate value, data of the right type, nature and quality must be available and continually acquired. Therefore, spring and fall semi-annual shut-in tests should be conducted at the right time and for adequate lengths of time, and pressure data should be obtained on a sufficient number of wells at the proper frequency. Likewise, there should be an ample number of observation wells and keywells in each field to allow best estimates of average reservoir pressure to be made and for assessment of pressure hysteresis behavior and potential expansion or contraction effects. Field injection-withdrawal activity prior to shut-ins should be considered in extrapolating pressure to stabilized conditions. Historical gas sample analyses should be available for tracking injected gas position and displacement fronts. Primary production history should be evaluated to establish "discovery lines" and well-weighing factors. Geological and geophysical interpretations should be available and updated to assist with spill-point monitoring, possible GWC movement, well weighting-factor assignments and infill drilling.

More specifically, seismic data have proved particularly helpful in building geological frameworks for evaluating field infill drilling opportunities. Three-dimensional (3D) seismic is valuable for obtaining better reservoir definition and delineation, especially when planning step-out drilling near mapped reef edges. When proper inventory verification methodology has been followed, seismic and geological information, used in conjunction with reservoir simulation, can provide the ultimate means for evaluating field deliverability enhancement and facility optimization. Further, seismic modeling and reservoir simulation together can serve as a valuable tool to crosscheck, verify and more thoroughly investigate reservoir engineering analytical methods. All of these practices and procedures, and more, are encompassed within industry "best practices" inventory verification methodology and are recommended for EGD's due consideration.

Dowdle & Associates, Inc. is pleased to assist EGD with the important responsibility of evaluating inventory verification practices and procedures at its Ontario storage complex. We trust this review will be helpful in your current and future operations and we look forward to continued service to EGD.

Very truly yours,
DOWDLE & ASSOCIATES, INC.

By: _____
Walter L. Dowdle, P.E.
President

WLD:

Attachments: Tables, Figures and Appendix.

TABLE 1
Pool Details

Enbridge Gas Distribution, Inc.

Storage Facility Name	Year of Discovery	Year Activated for Storage	Injection/ Withdrawal Wells - Total	Injection/ Withdrawal Wells - Horizontal	Pressure Control / Observation Wells	Base Gas, MMcf	Working Gas Capacity, MMcf	Max Storage Pressure, psig WHP	Oil Wells
Black Creek	1978	1997	4	1	1	329	911	1,305	
Corunna	1950	1964	7		1	1,824	4,469	1,100	10
Coveny	1971	1997	6		1	1,342	3,480	1,170	
Dow Moore	1977	1988	22		1	7,127	26,424	1,440	
Ladysmith	1969	1999	3	2	1	1,196	6,496	1,320	2
Mid Kimball- Colinville	1947	1965	33		1	8,503	20,820	1,100	
Seckerton	1952	1964	15		1	4,571	11,198	1,100	10
South Kimball-Colinville	1947	1965	14		5	5,891	14,424	1,100	
Wilkesport	1965	1978	9		1	2,875	7,804	1,175	
Chatham 'D'	1990	1998	4			850	1,525	905	
		Averages	**12**	**2**	**1**	**3,451**	**9,755**	**1,172**	**7**
		Totals	**117**	**3**	**13**	**34,508**	**97,551**		**22**

Filed: 2012-07-24, EB-2012-0055, Exhibit I, Tab 2, Schedule 7, Attachment, Page 295 of 320
Filed: 2012-
EB-2011-0354
Exhibit I
Issue B4
Schedule 8.1
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TABLE 2
Estimated Discovery Slopes and Comparison with GLJ Slopes

Enbridge Gas Distribution, Inc.

No.	Pool	Discovery Pressure (psig)	Discovery Pressure (psia)	Reservoir Temp (deg F)	Native Gas Props pTc (deg R)	Native Gas Props pPc (psia)	Comp Factor Z	p/Z (psia)	Discovery OGIP (MMcf)	Discovery GPP (MMcf/psi)	Discovery 1/GPP (psi/Bcf)	1/GPP GLJ (psi/Bcf)	GPP GLJ (MMcf/psi)
1	Mid Kimball	893	908	63	359.45	658.85	0.8538	1063	22,200	20.883	47.89	48.72	20.525
2	South Kimball	893	908	63	359.45	658.85	0.8538	1063	14,500	13.640	73.31	77.02	12.984
3	Seckerton	953	968	63	359.45	658.85	0.8450	1145	7,500	6.549	152.69	87.50	11.429
4	Corunna	953	968	63	359.45	658.85	0.8450	1145	3,811	3.328	300.48	220.27	4.540
5	Wilkesport	925	940	63	359.45	658.85	0.8491	1107	8,600	7.771	128.68	139.54	7.166
6	Dow Moore	930	945	63	359.45	658.85	0.8484	1113	20,300	18.231	54.85	57.66	17.343
7	Black Creek	948	963	63	359.45	658.85	0.8457	1138	876	0.770	1299.36	1420.08	0.704
8	Coveny	934	949	63	359.45	658.85	0.8478	1119	3,809	3.404	293.77	315.46	3.170
9	Ladysmith	920	935	63	359.45	658.85	0.8498	1100	4,633	4.213	237.38	206.77	4.836
10	Chatham 'D'	783	798	63	359.45	658.85	0.8705	916	2,340	2.554	391.60	490.47	2.039

Originally contained oil.
Field which GLJ attributes gas losses to meter error only.
Field which GLJ attributes gas losses to meter error and A1 or tight gas migration.

Ref: aga2004StorageDataUSandCanada.xls

Filed: 2012-07-24, EB-2012-0055, Exhibit I, Tab 2, Schedule 7, Attachment, Page 296 of 320
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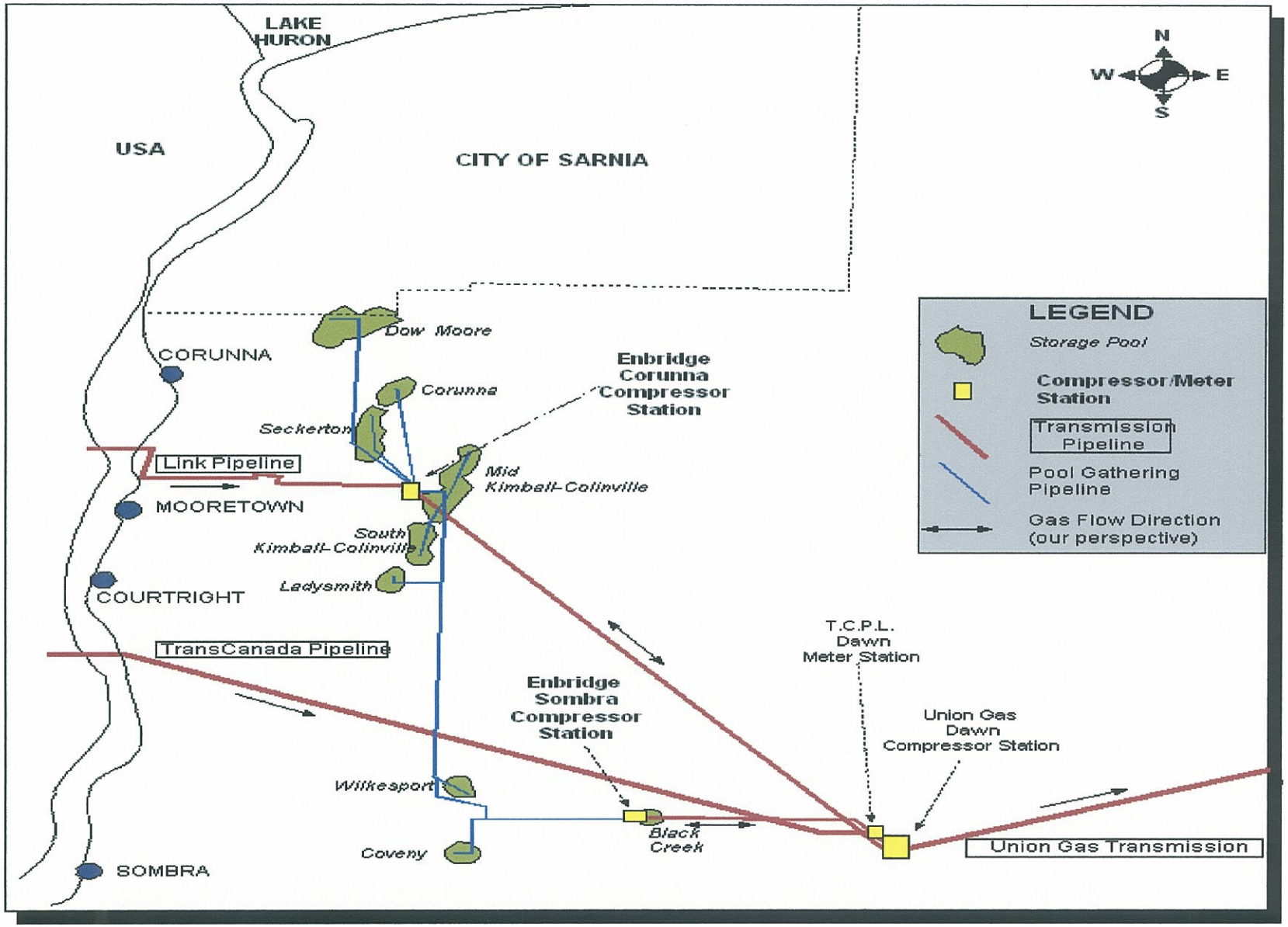
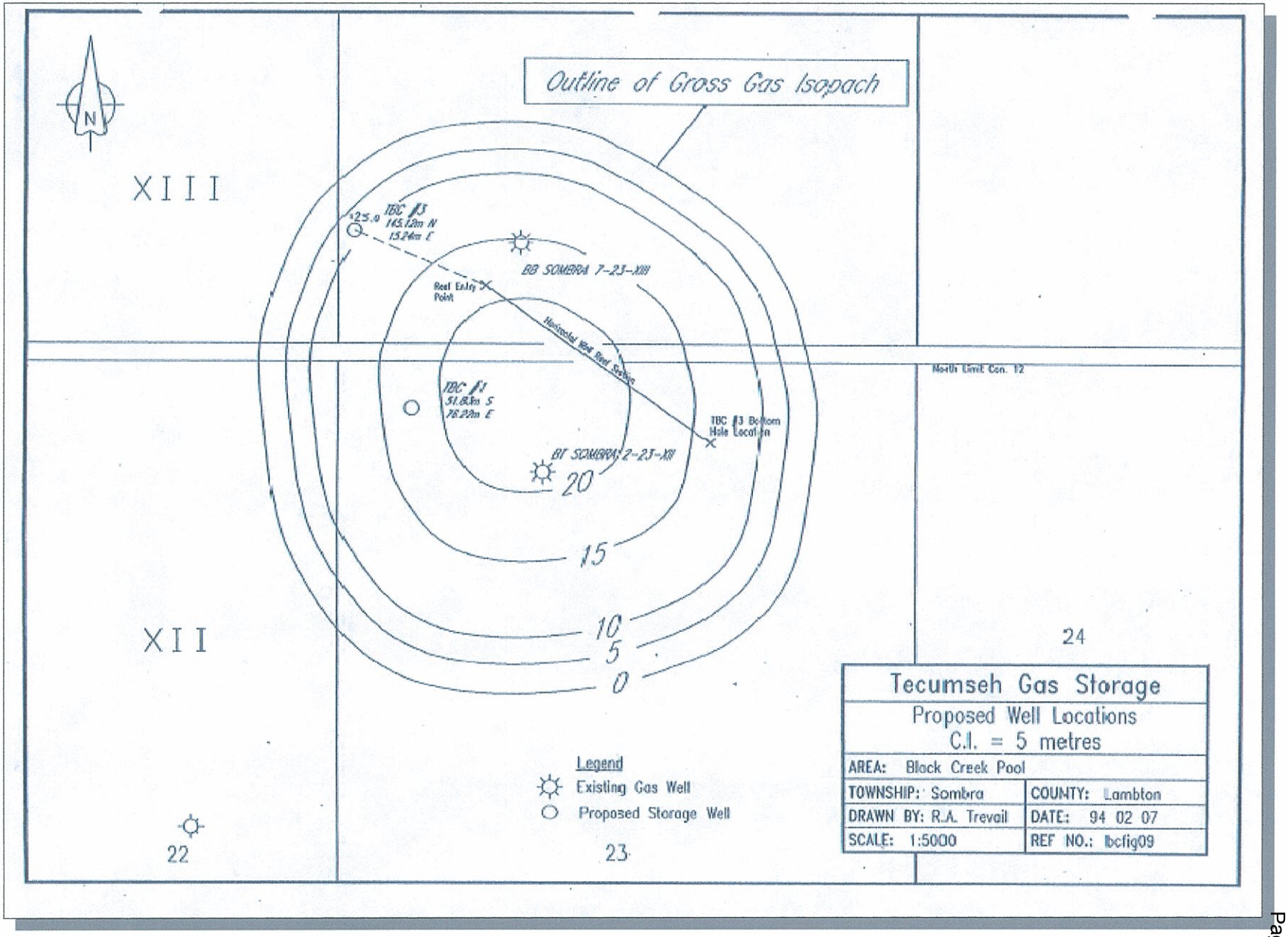
SYSTEM COMPLEX
EGD Gas Storage Pools



ISOPACH MAP
Black Creek Pool



Filed: 2012-07-24, EB-2012-0055, Exhibit I, Tab 2, Schedule 7, Attachment, Page 298 of 320
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STRUCTURE MAP
Corunna Pool

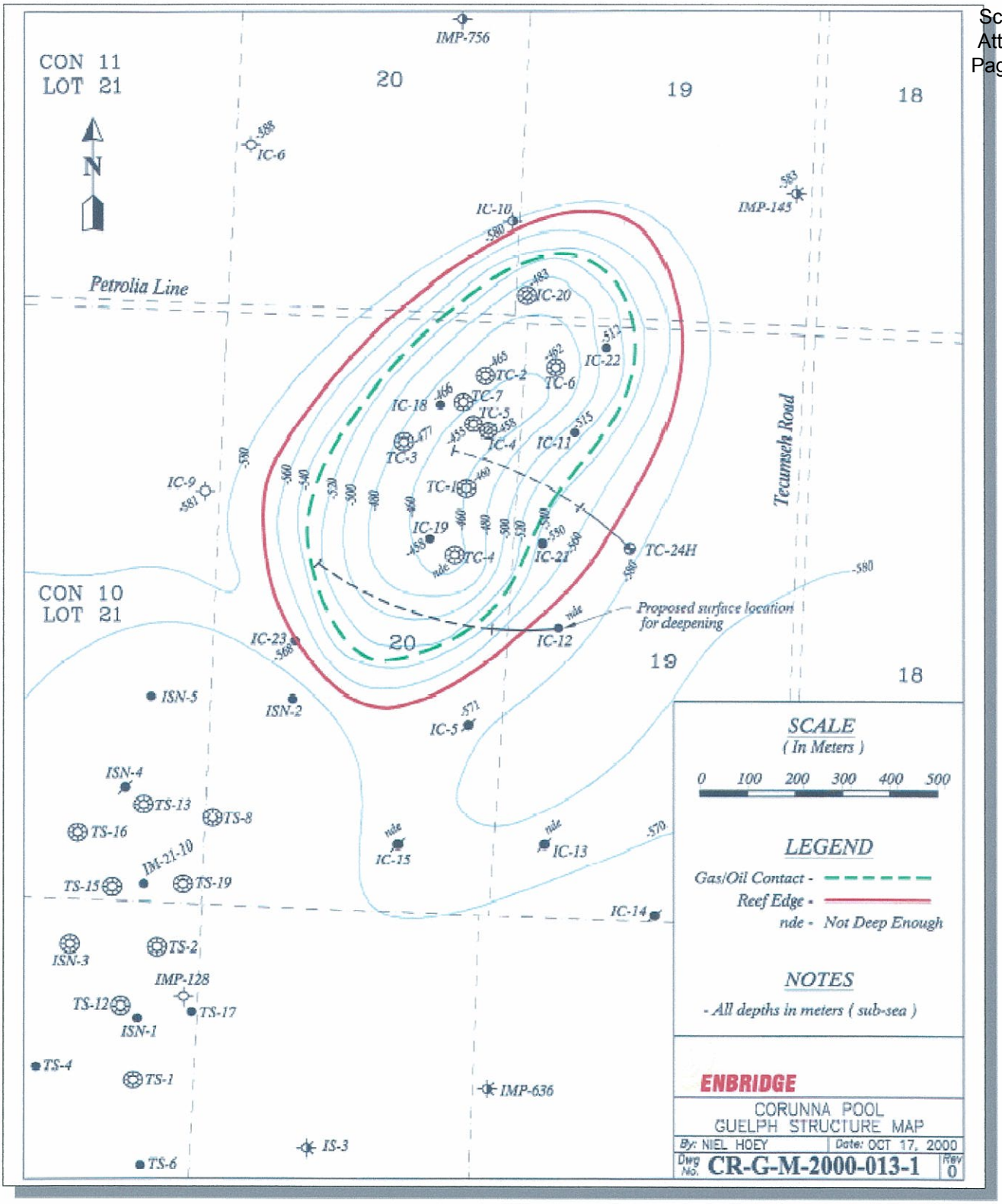
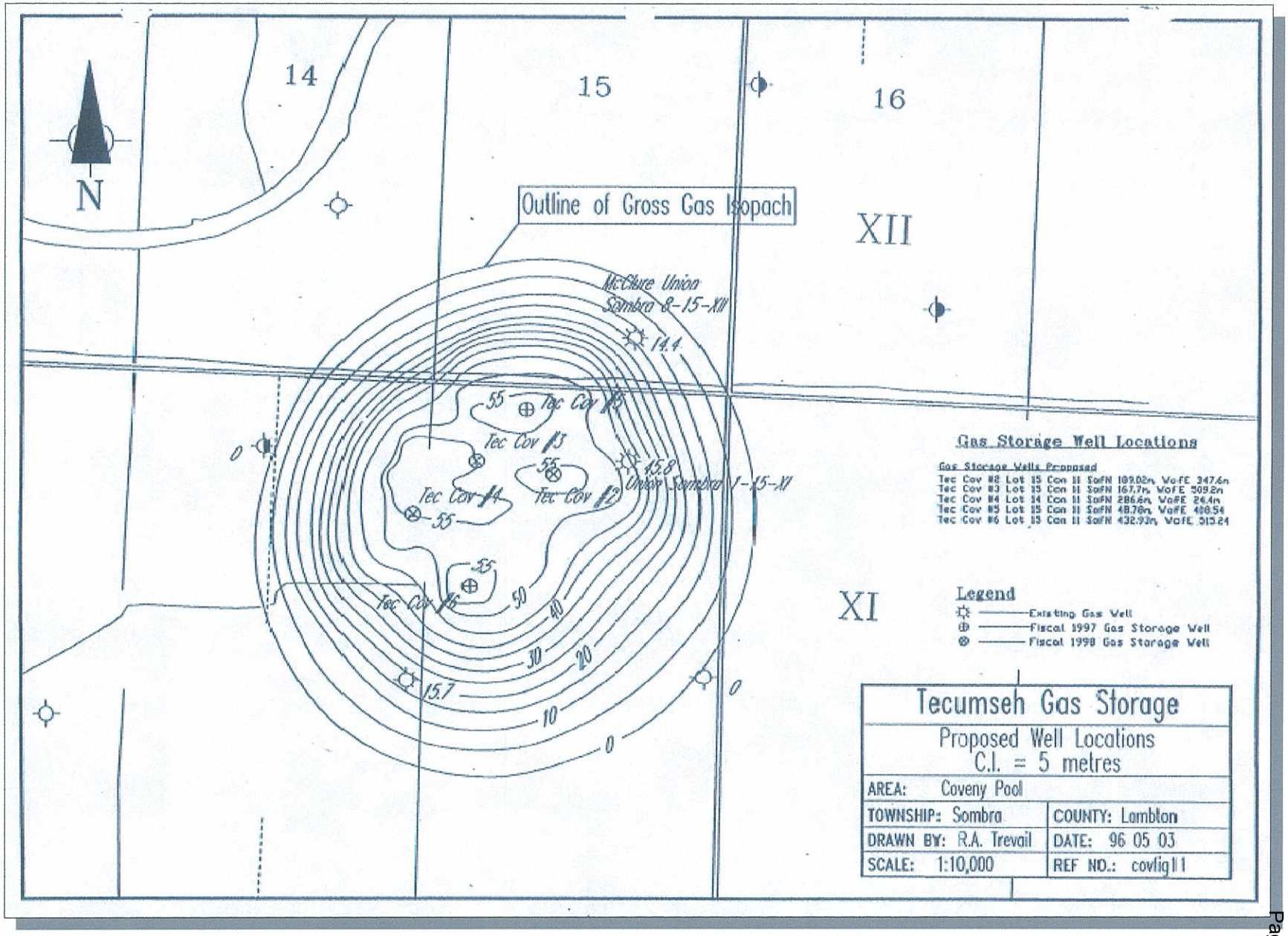


Figure 3

ISOPACH MAP
Coveny Pool



Filed: 2012-07-24, EB-2012-0055, Exhibit I, Tab 2, Schedule 7, Attachment, Page 300 of 320
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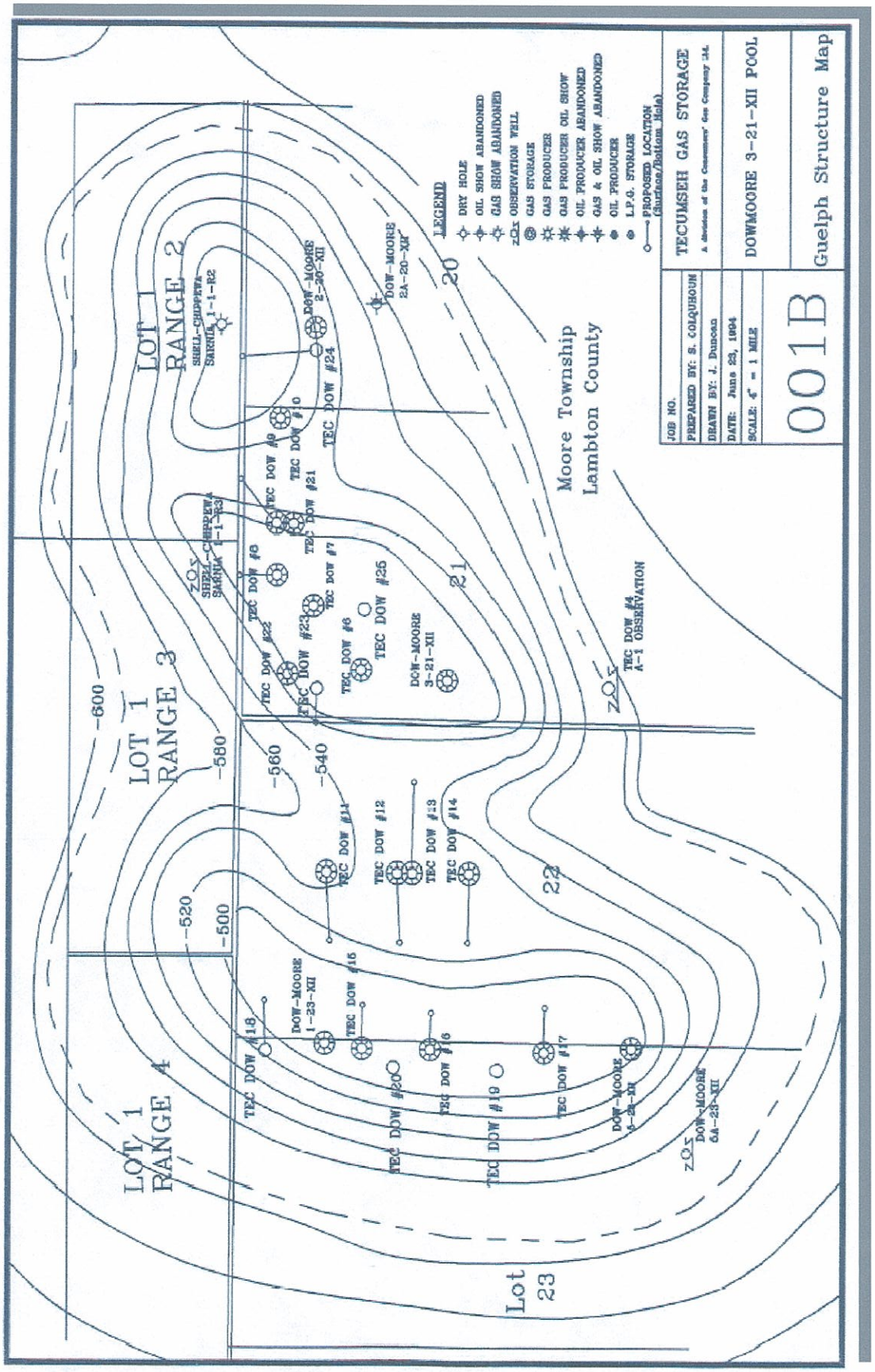
STRUCTURE MAP
Dow Moore Pool



STRUCTURE MAP
Ladysmith Pool

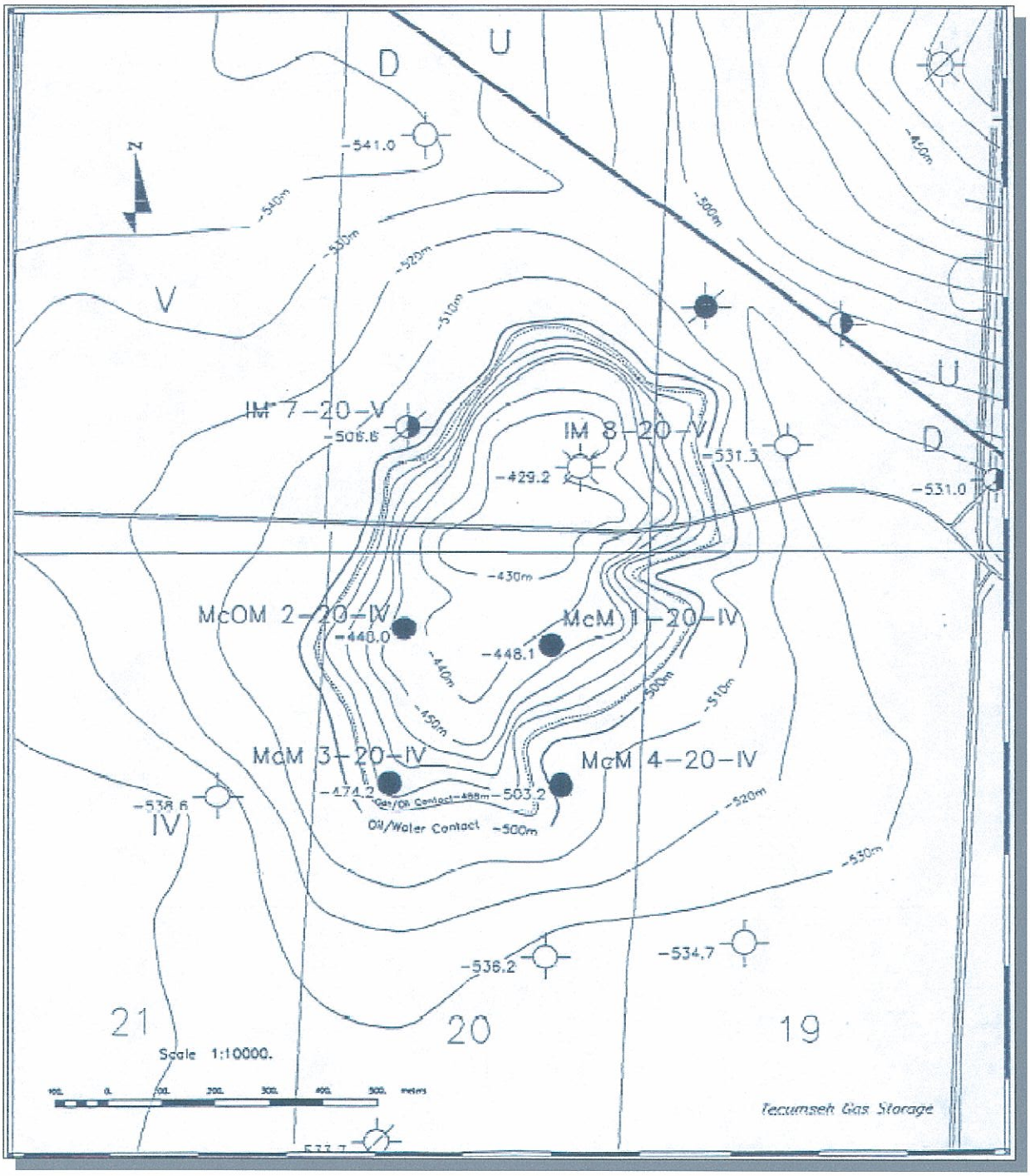


Figure 6

AREA DESIGNATIONS

Mid and South Kimball-Colinville Pools

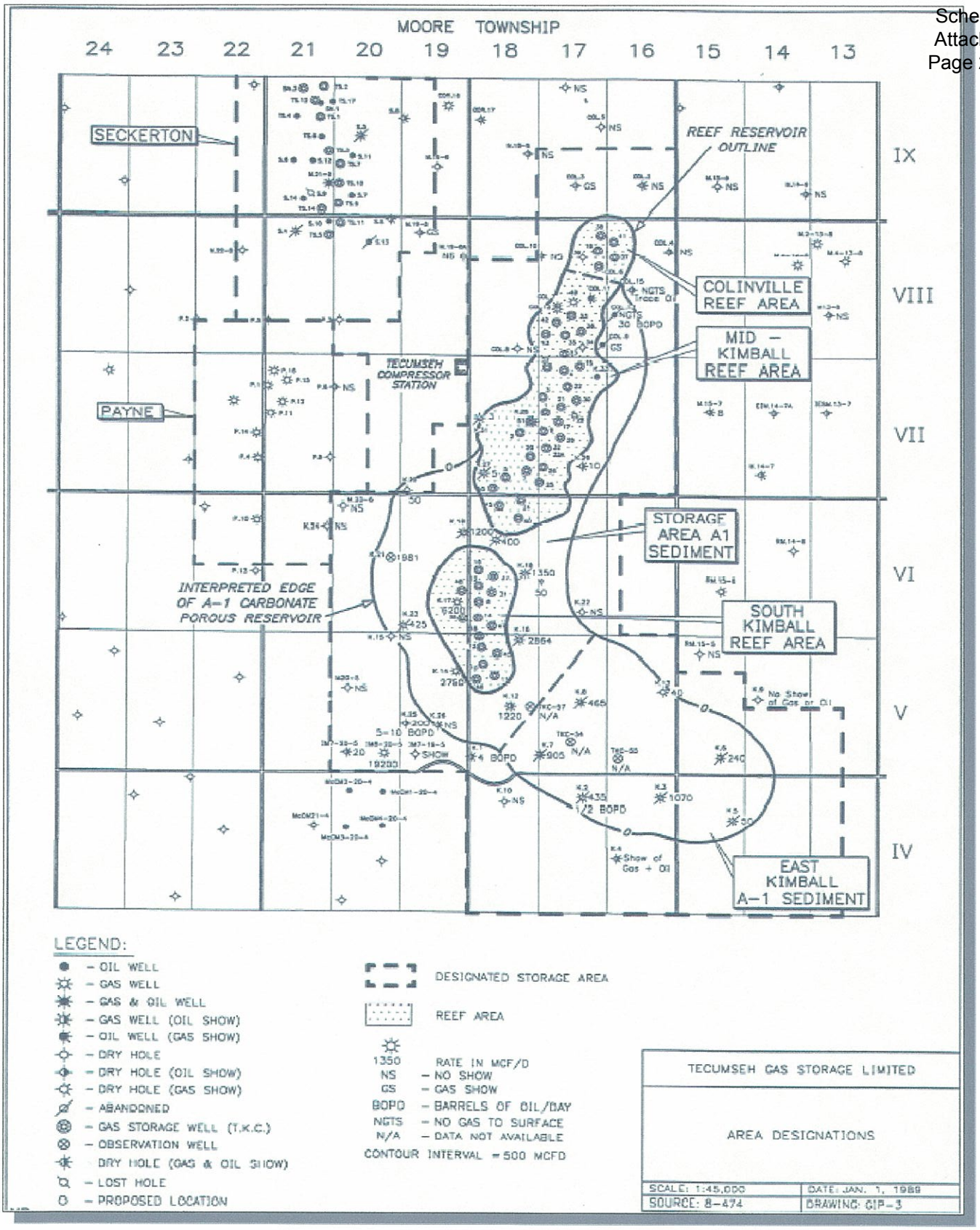


Figure 7

STRUCTURE MAP
Sekerton Pool

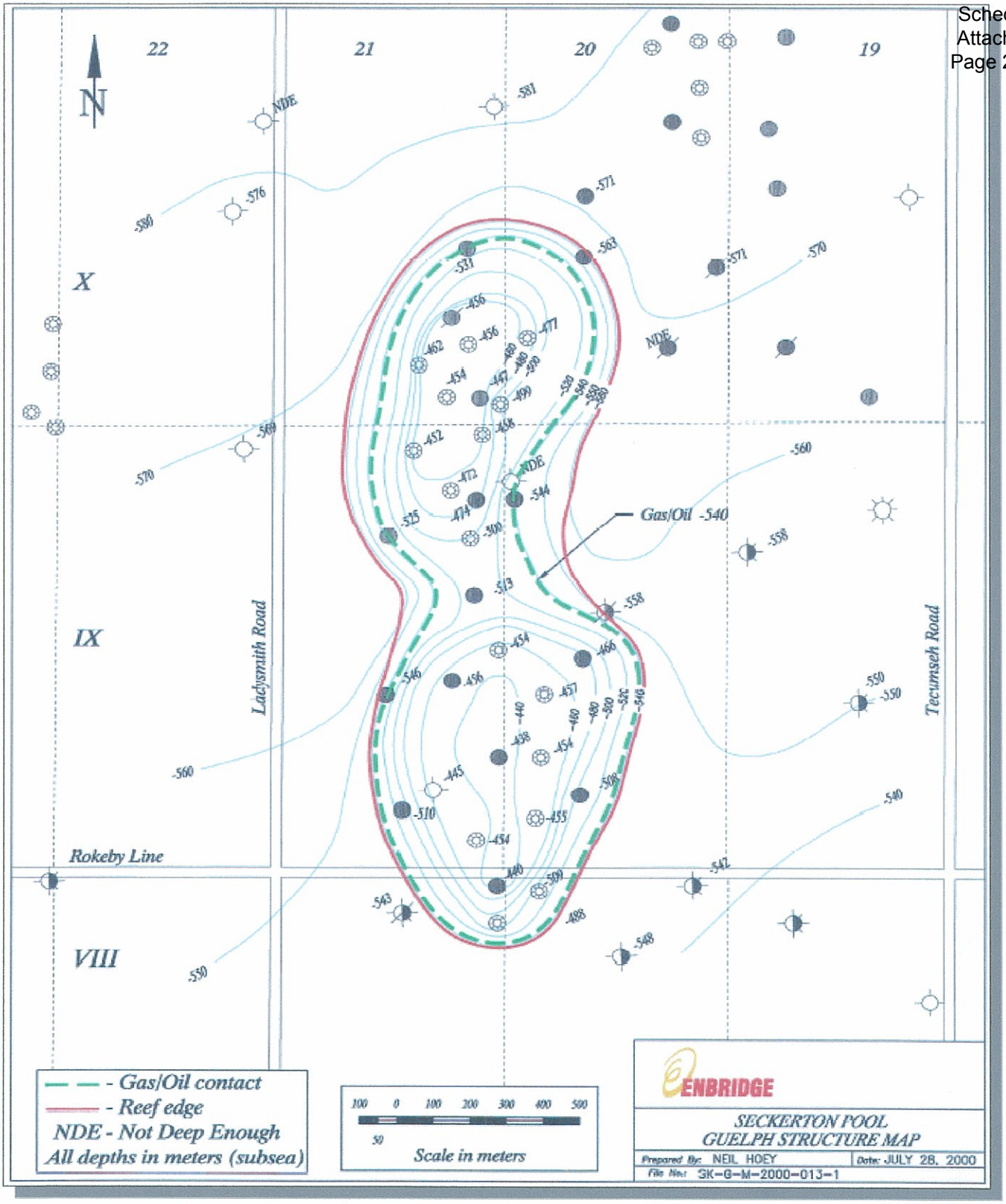


Figure 8

STRUCTURE MAP
Wilkesport Pool

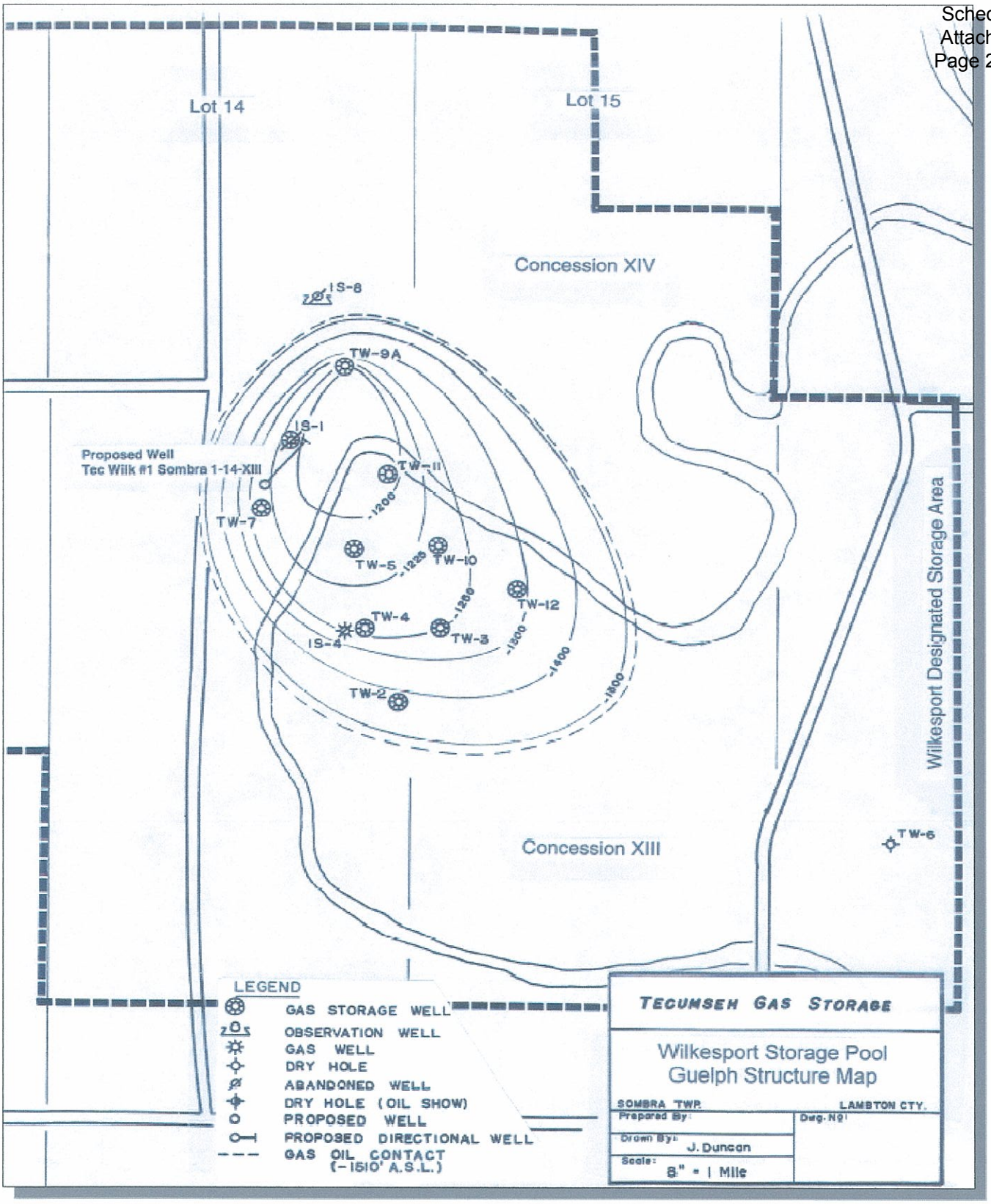


Figure 9

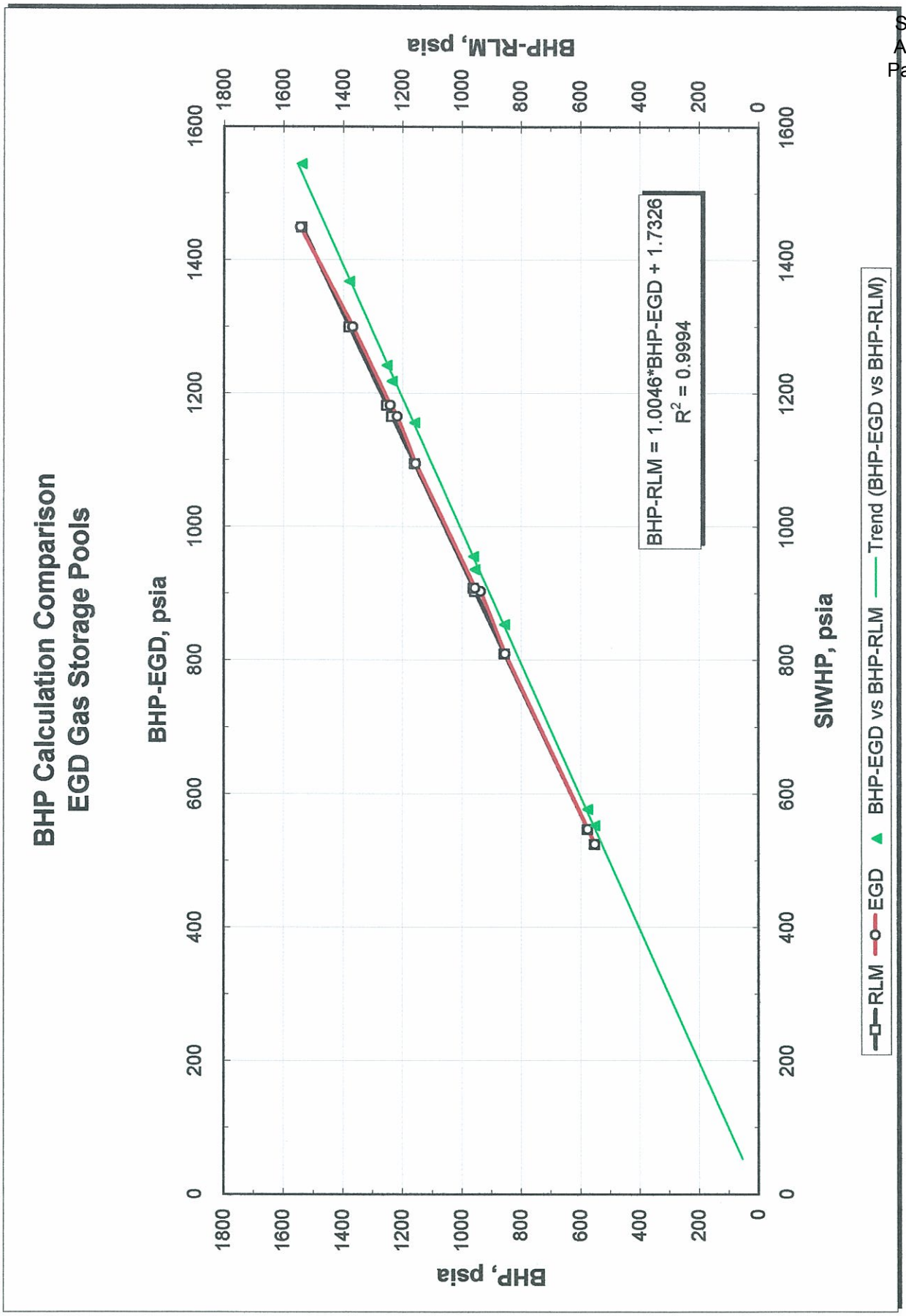

BHP Calculation Comparison
EGD Gas Storage Pools
BHP-EGD, psia
BHP-RLM, psia
SIWHP, psia
BHP, psia
BHP-RLM = 1.0046*BHP-EGD + 1.7326
R2 = 0.9994
RLM
EGD
BHP-EGD vs BHP-RLM
Trend (BHP-EGD vs BHP-RLM)

Figure 1

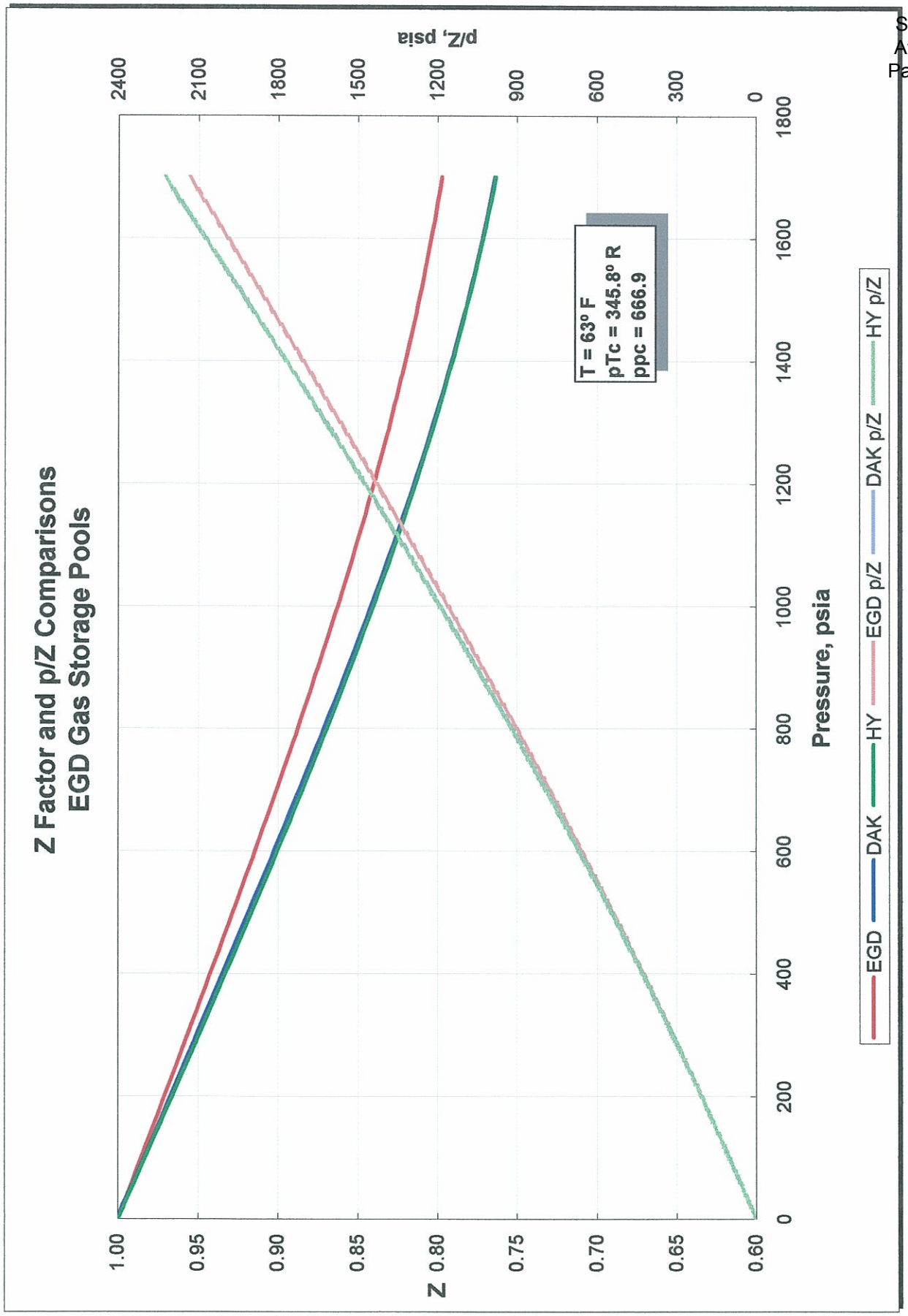

Z Factor and p/Z Comparisons
EGD Gas Storage Pools
T = 63° F
pTc = 345.8° R
ppc = 666.9
Z
Pressure, psia
p/Z, psia
EGD
DAK
HY
EGD p/Z
DAK p/Z
HY p/Z
1.00
0.95
0.90
0.85
0.80
0.75
0.70
0.65
0.60
0
200
400
600
800
1000
1200
1400
1600
1800
2400
2100
1800
1500
1200
900
600
300
0

Figure 1

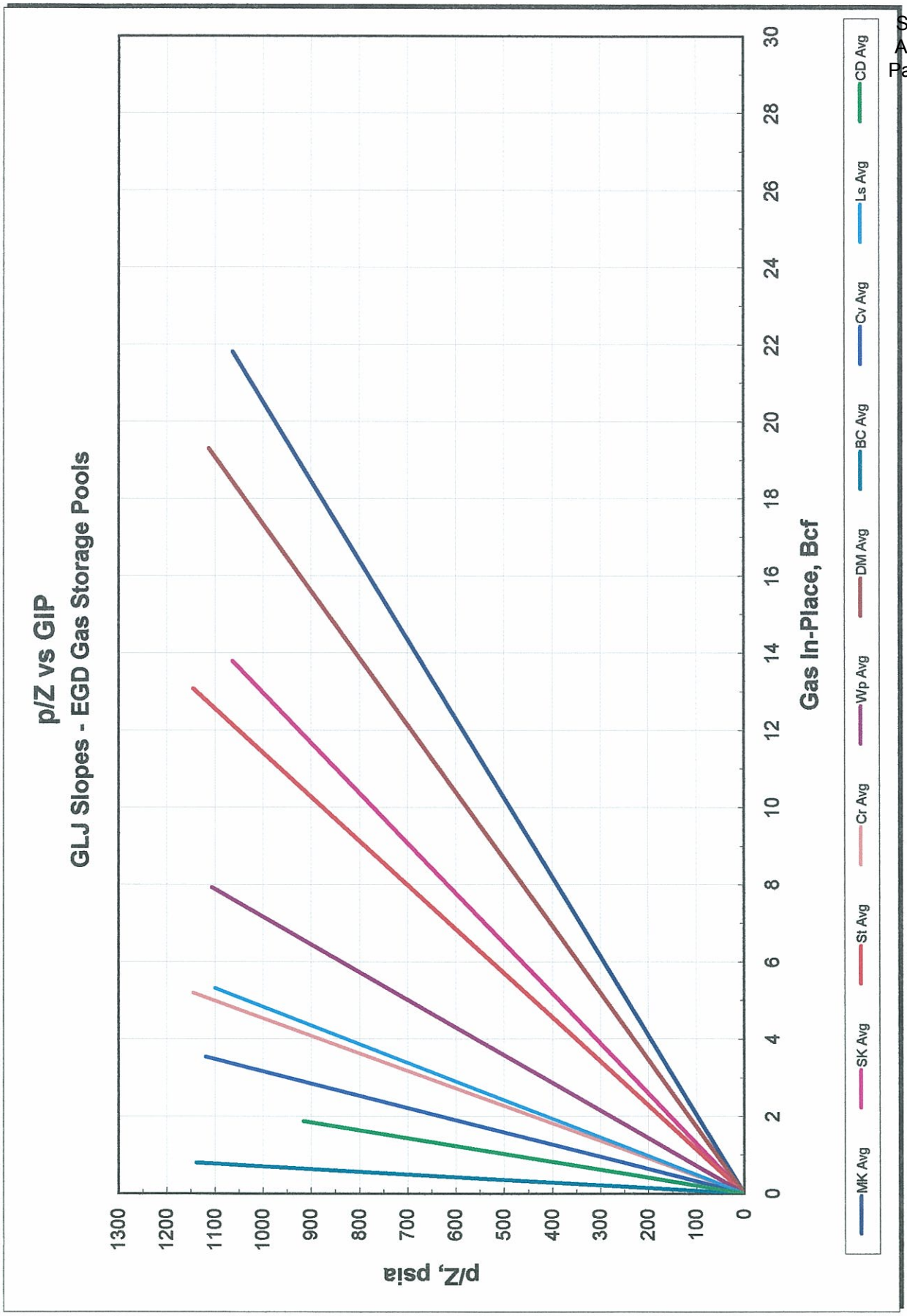
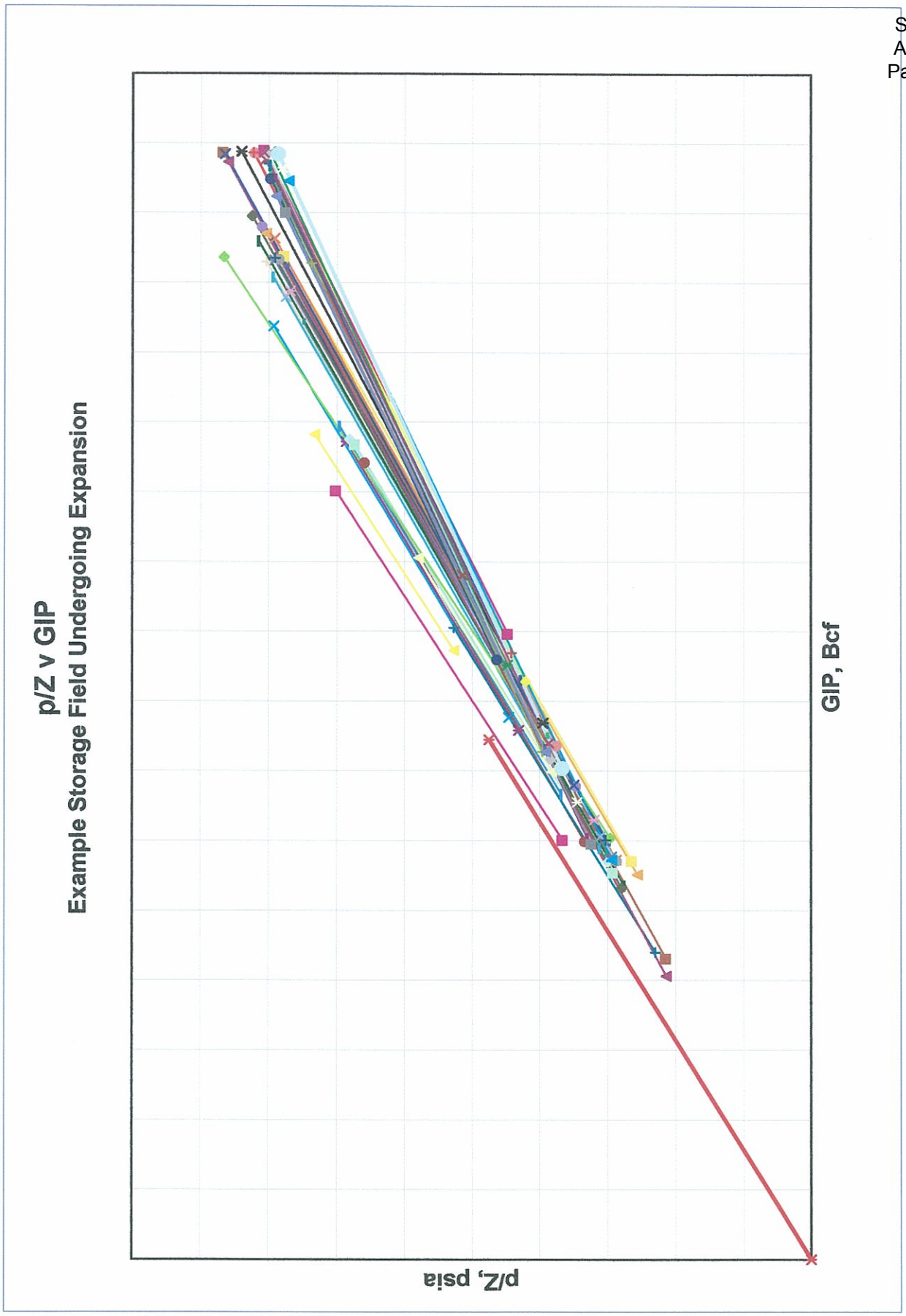
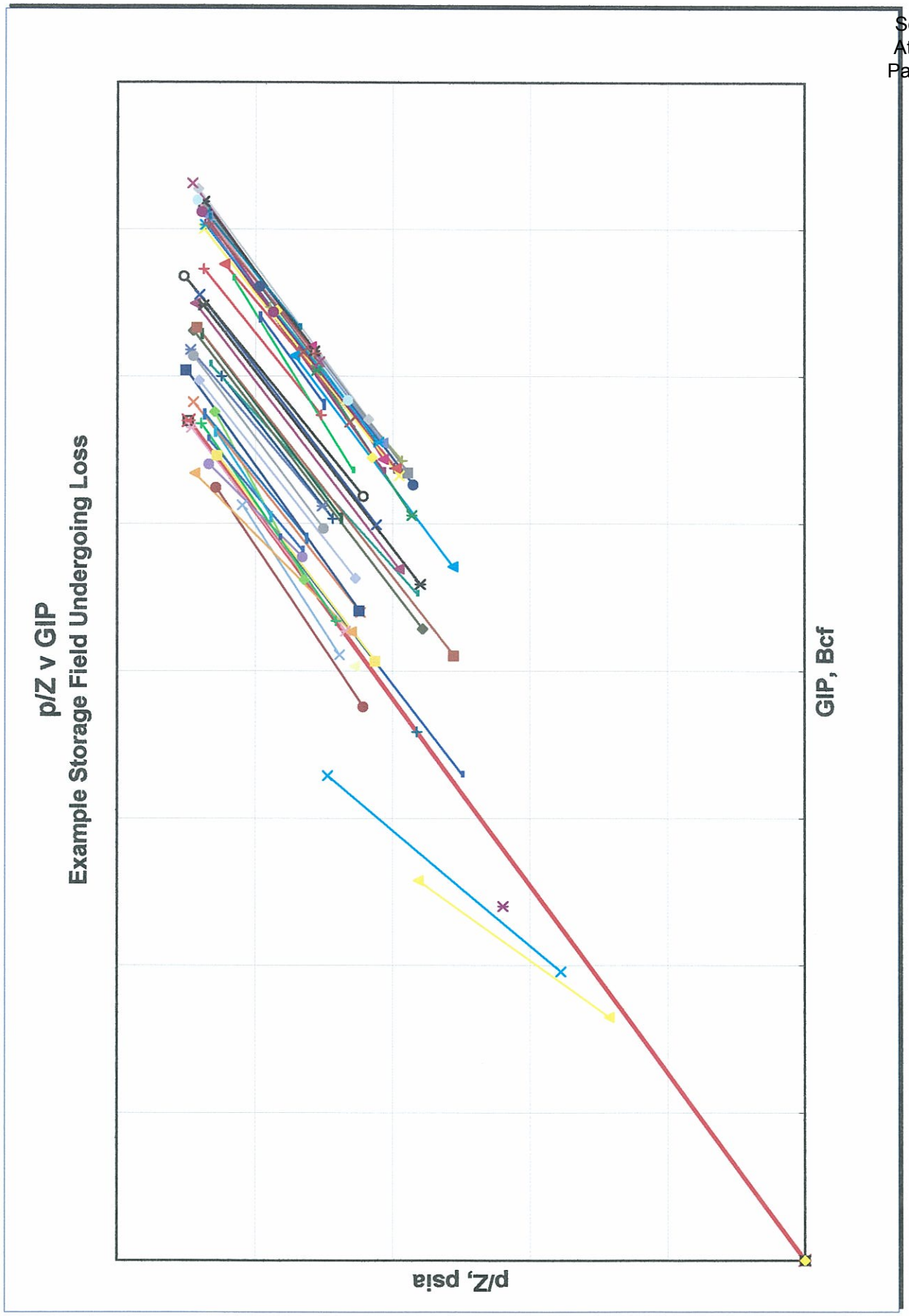


Figure 11

Third Party Review - Inventory Practices and Procedures

Figure 15


p/Z v GIP
Example Storage Field Undergoing Expansion
p/Z, psia
GIP, Bcf


p/Z v GIP
Example Storage Field Undergoing Loss
p/Z, psia
GIP, Bcf

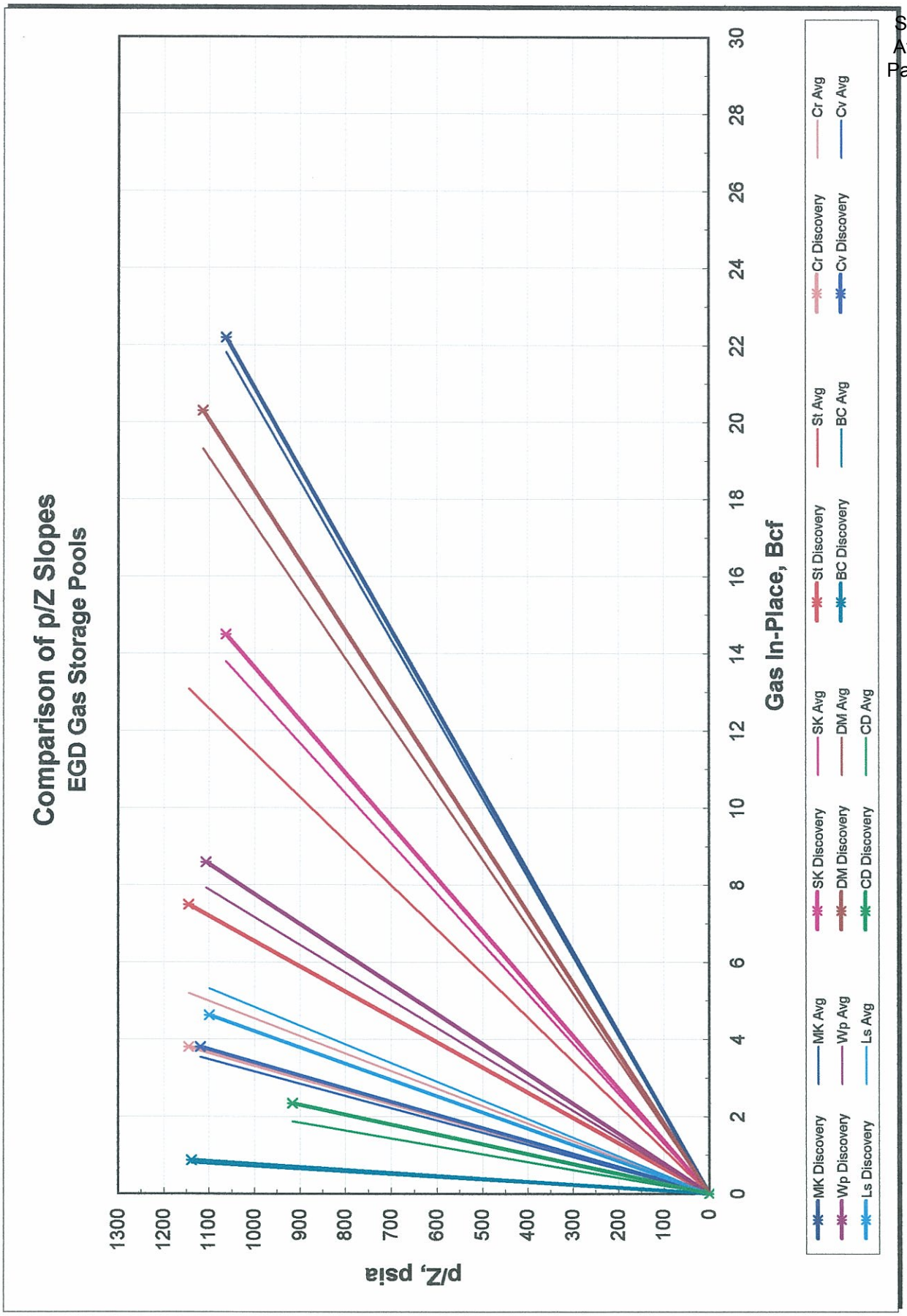
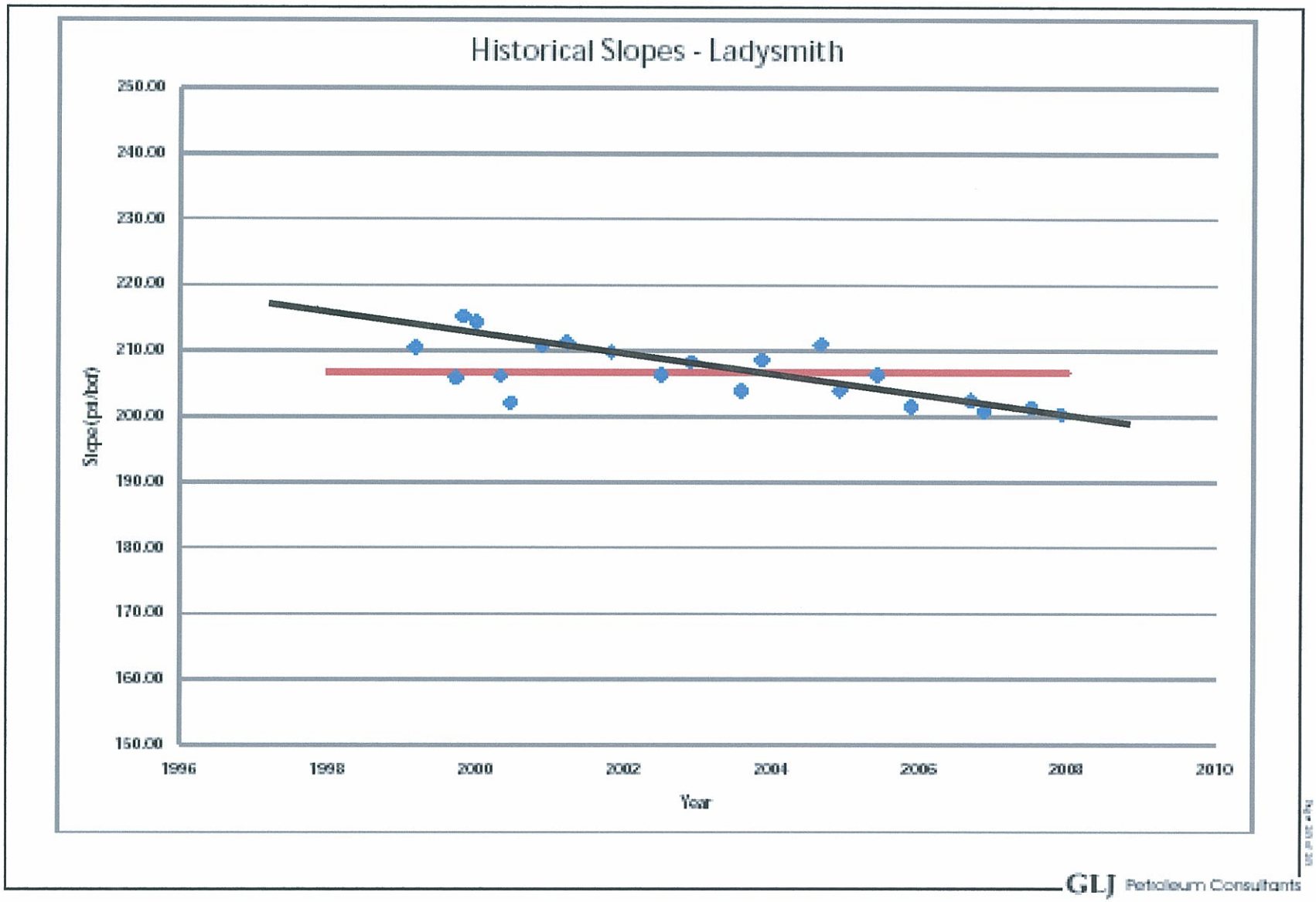


Figure 1

Third Party Review - Inventory Verification Procedures and Practices

HISTORICAL SLOPES - GLJ

Ladysmith Pool



Filed: 2012-07-24, EB-2012-0055, Exhibit I, Tab 2, Schedule 7, Attachment, Page 312 of 320
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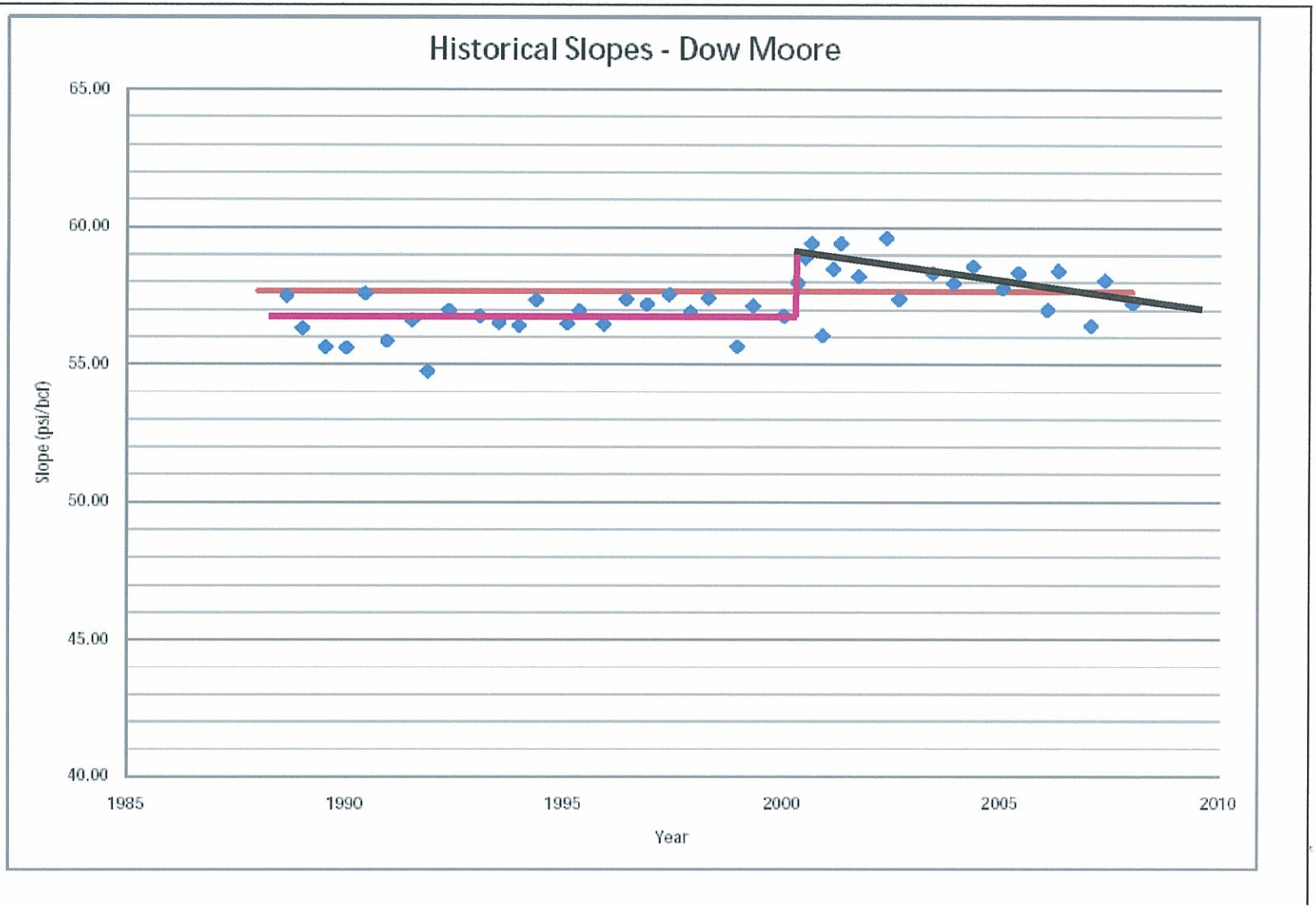
HISTORICAL SLOPES - GLJ

Dow Moore Pool



Filed: 2012-07-24, EB-2012-0055, Exhibit I, Tab 2, Schedule 7, Attachment, Page 313 of 320
Filed: 2012-EB-2011-0354
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Figure 1

MBH FUNCTIONS FOR OBTAINING AVERAGE RESERVOIR PRESSURE
Equilateral Drainage Areas

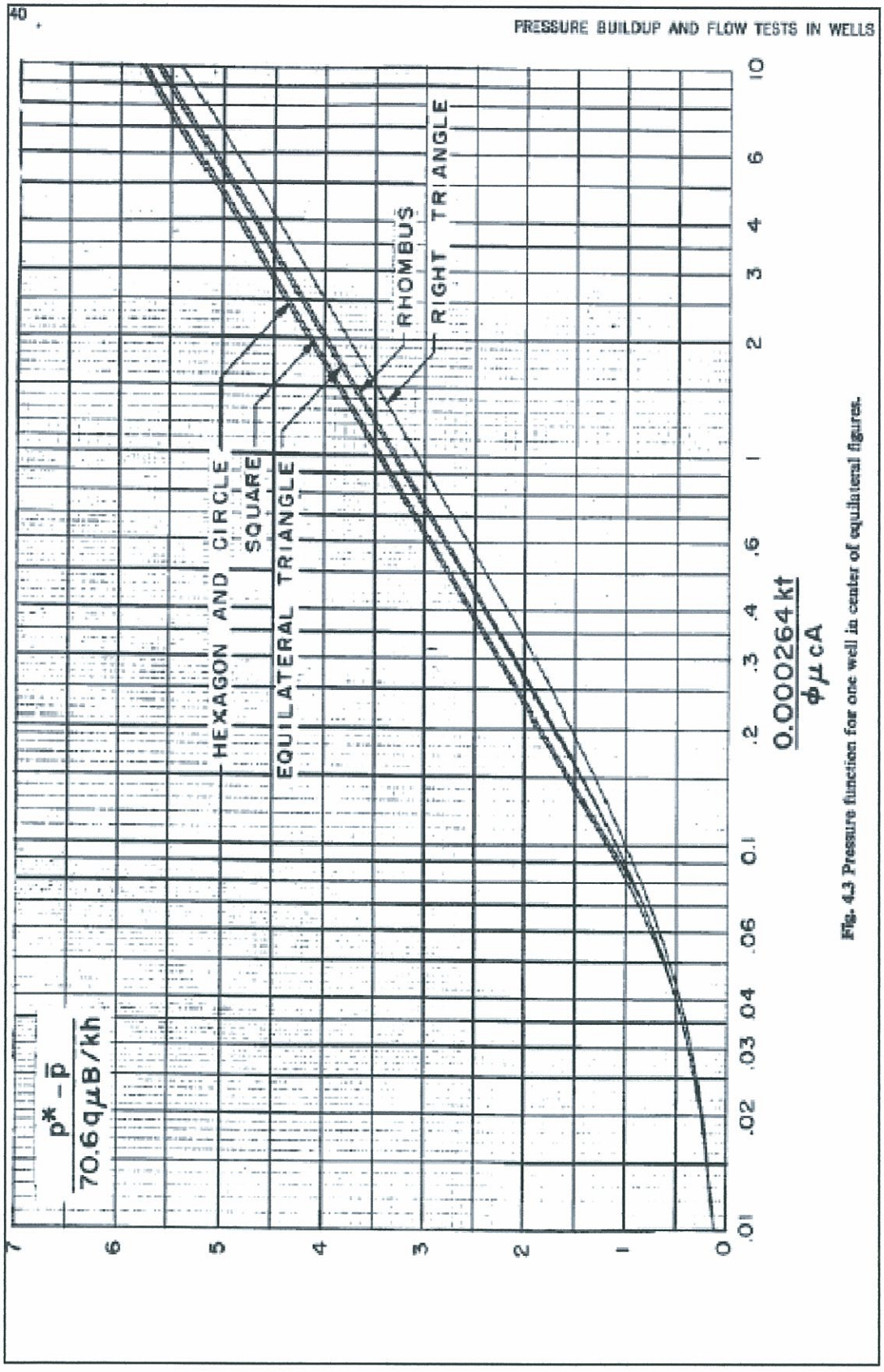

Fig. 4.3 Pressure function for one well in center of equilateral figures.

APPENDIX
Details Lisiting of Electronic Files Provided on Flash Drives by EGD

DataTraveler

2005 Update of Inventory Discrepancy Analysis (CD).pdf	02/09/2006	06:24 AM	3,431,353
Audit December 31 2007.pdf	01/09/2008	04:36 AM	11,672
Audit December 31 2007.xls	01/09/2008	12:12 PM	292,864
Audit November 1 2007 Figure 1.pdf	11/30/2007	04:13 AM	10,893
Audit November 1 2007 Figure 2.pdf	11/30/2007	04:45 AM	11,029
Audit November 1 2007 GLJ Regression Int Slope Dec 10 2007.pdf	12/10/2007	06:28 AM	11,556
Audit November 1 2007 GLJ Reported Slopes Dec 10 2007.pdf	12/10/2007	06:27 AM	11,290
Audit November 1 2007 IM updated SODA.pdf	11/30/2007	03:39 AM	11,269
AuditNovember2007relianceLetter.pdf	12/05/2007	10:55 AM	18,329
Audits Spring 2008 - Audit Sheets.pdf	06/17/2008	07:47 AM	14,859
Base Pressure Account volumes.pdf	01/09/2008	05:08 AM	10,621
Base Pressure Account.pdf	11/22/2007	09:56 AM	10,621
BHP Calc Explain.pdf	11/30/2007	07:32 AM	27,445
BHP Calc memo.pdf	01/09/2008	05:10 AM	27,437
Black Creek Cross Section.pdf	11/20/2008	09:51 AM	918,170
Black Creek Structure.pdf	11/20/2008	09:51 AM	379,168
Corunna Guelph Map.pdf	11/20/2008	09:51 AM	443,470
Coveny Structure.pdf	11/20/2008	09:51 AM	491,906
Dec 31 07 adj ops report.pdf	01/07/2008	08:10 AM	21,893
Dow Moore Guelph.pdf	11/20/2008	09:51 AM	536,043
Ladysmith Guelph map.pdf	11/20/2008	09:51 AM	544,584
Mid South Kimball Guelph Map.pdf	11/20/2008	09:51 AM	622,821
November 1 study Reconciliation memoJan 7 2008.pdf	01/07/2008	03:18 AM	89,597
October 31 2007 updated ops report Dec 10 2007.pdf	12/10/2007	06:40 AM	21,763
Ops report Oct 31.pdf	11/22/2007	05:36 AM	21,787
Pool Info.doc	11/20/2008	09:57 AM	59,392
Reconciliation memo Dec 18 2007.pdf	12/18/2007	08:34 AM	69,843
Reconciliation memo January 9 2007.pdf	01/10/2008	03:32 AM	72,724
Seckerton Guelph Map.pdf	11/20/2008	09:51 AM	446,696
Signed Audit Letter.pdf	12/19/2007	06:01 AM	128,612
SODA GLJ TABLES Dec 31 2007 December 17.xls	01/07/2008	10:31 AM	1,125,504
Spring 2008 Inventory Memo and audit sheets.pdf	06/17/2008	07:57 AM	159,190
Walter Dowdle File Key.doc	11/23/2008	02:55 PM	33,280
Wilkesport Guelph Map.pdf	11/20/2008	09:51 AM	507,741

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APPENDIX
Details Lisiting of Electronic Files Provided on Flash Drives by EGD

Verbatim

2008 GLJ EGD Gas Storage Pools Report.pdf	01/14/2009	09:19 AM	2,375,831
Report Phase II-Final.pdf	11/25/2007	10:49 AM	511,375
Sproule Enbridge.Kimball.17232.Report.pdf	01/13/2009	10:49 AM	3,365,205
Audit December 30 2008 rev1.pdf	01/27/2009	07:36 AM	13,846
Audit December 30 2008 Slope Curves.pdf	01/08/2009	08:49 AM	12,545
Audit December 30 2008.pdf	01/09/2009	03:32 AM	12,110
Audit Results November 11 2008.pdf	01/08/2009	08:13 AM	11,668
Base Pressure Account.pdf	01/08/2009	08:28 AM	10,910
ChathamD Gas Flow to Dec 31 2008 ops report.pdf	01/07/2009	06:40 AM	15,645
GD Dec 29 Ops Report.pdf	01/05/2009	06:14 AM	20,622
GD Dec 30 Ops Report.pdf	01/05/2009	06:14 AM	20,684
GD Dec 31 Ops Report.pdf	01/05/2009	06:15 AM	20,922
November 10 Gas Day Daily Ops Report.pdf	12/12/2008	04:33 AM	20,899
Reconciliation memo January 27 2008 rev1.pdf	01/27/2009	08:57 AM	170,784
Reconciliation memo January 7 2008.pdf	01/09/2009	03:27 AM	167,844
Signed PWC Letter.pdf	01/09/2009	03:46 AM	161,064

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Note: For a details listing of electronic files (eFiles) provided by EGD for this Review, see the Appendix.

[1] eFile: Pool Info.doc.
[2] *AGA 2004 Storage Data, US and Canada.*
[3] *Ibid., Op. cit.* (Pool Info).
[4] *Op. cit.* (AGA 2004, Pool Info).
[5] *Op. cit.* (Pool Info).
[6] *Op. cit.* (Pool Info).
[7] *Op. cit.* (Pool Info).
[8] *Op. cit.* (Pool Info).
[9] GLJ Petroleum Consultants Ltd.: *Enbridge Gas Distribution Inc., Inventory Discrepancy Analysis, Gas Storage Pools, Effective December 31, 2007*, Jan. 31, 2009 (eFile: 2008 GLJ EGD Gas Storage Pools Report.pdf).
[10] *Ibid.*
[11] For example, see eFiles: Reconciliation memo January 27 2008 rev1.pdf and Spring 2008 Inventory Memo and audit sheets.pdf.
[12] For example, see eFile: Signed PWC Letter.pdf.
[13] *Op. cit.* (Reconciliation memo).
[14] For more detail, see Schedule "A", Consulting Agreement Between Enbridge Gas Distribution Inc. and Dowdle & Associates, Inc. dated November 25, 2008.
[15] Cullender, M.H. and Smith, R.V.: "Practical Solution of Gas Flow Equations for Wells and Pipelines with Large Temperature Gradients," *Trans.* AIME 207, (1956).
[16] *Ibid.*
[17] Beggs, H. Dale: *Gas Production Operations*, OGCI Publications, Oil & Gas Consultants Inc., Tulsa (1984).
[18] McCoy, R.L.: *Microcomputer Programs for Petroleum Engineers, Volume:1 Reservoir Engineering and Formation Evaluation*, Gulf Publishing Company, Houston (1983).
[19] eFiles: BHP Calc Explain.pdf and BHP Calc memo.pdf.
[20] eFile: Audit December 31 2007.xls
[21] *Op. cit.* (McCoy).
[22] AGA Underground Storage Committee: *Z-Factor Survey Results, March 1991.*
[23] McCain, W.D., Jr.: *The Properties of Petroleum Fluids*, Second Edition, PennWell Publishing Company, Tulsa, Oklahoma, 1990.
[24] Dranchuk, P.M. and Abou-Kassem, J.H.: "Calculation of Z Factors For Natural Gases Using Equations of State", *The Journal of Canadian Petroleum Technology*, Montreal, July-September, 1975.
[25] Perhaps this is at least partly because the once widely-used HP-41C Petroleum Fluids PAK contained this correlation along with the equations for its application.
[26] *Op. cit.* (Dranchuk and Abou-Kassem).
[27] *Op. cit.* (Audit Dec 2007, see Z Factor Look Up Table).
[28] MacRobbie, Ian: email correspondence, eFile: Native Gas Analyses.pdf.
[29] *Op. cit.* (Audit Dec 2007, see Z Factor Look Up Table).
[30] *Op. cit.* (Inventory Discrepancy Analysis, Jan 2009).
[31] *Op. cit.* (Reconciliation memo).
[32] There is a distinction between cyclic GPP and reservoir GPP. The comments here regarding slope changes associated with migration and reverse migration are related to reservoir GPP.
[33] A "loss" of any kind is implied here, including gas migration, diffuse gas loss, measurement error, book error, etc. All would appear the same on the p/Z plot.
[34] *Op. cit.* (Pool Info and AGA 2004).
[35] *Op. cit.* (Inventory Discrepancy Analysis, Jan 2009).
[36] *Op. cit.* (Inventory Discrepancy Analysis, Jan 2009, Appendix V).
[37] *Op. cit.* (Inventory Discrepancy Analysis, Jan 2009, p 15).
[38] Matthews, C.S. and Russell, D.G.: *Pressure Buildup and Flow Tests in Wells, SPE Monograph Volume 1* (1967).
[39] *Ibid.*, Fig. 4.3.

[40] NEG is defined as that volume of gas which does not exhibit a pressure response in the reservoir when a pressure decline analysis is performed based on the Fall and Spring shut-in pressure data, which data, in general, are not necessarily indicative of fully stabilized reservoir conditions.
[41] *Op. cit.* (Inventory Discrepancy Analysis, Jan 2009, p 17).
[42] Katz, Donald L. and Lee, Robert L.: *Natural Gas Engineering Production and Storage*, McGraw-Hill Publishing Company (1990).
[43] Katz, Donald L. *et al*: *Handbook of Natural Gas Engineering*, McGraw-Hill Publishing Company (1959).
[44] *Op. cit.* (Katz and Lee).
[45] *Op. cit.* (January 27 2008 rev1 and Spring 2008 Memos).
[46] Katz, Donald L. and Coats, Keith H.: *Underground Storage of Fluids*, Ulrich's Books, Inc., Ann Arbor, Michigan (1968) p 223 ff.

FRPO INTERROGATORY #1

INTERROGATORY

C - Operating Revenue
Issue 6: Is the proposal for the treatment and sharing of Transactional Services revenues, and the forecast of those revenues, appropriate?

Ref: Exhibit D1, Tab 13, Schedule 1, Page 2

EGD states that the Gas Supply group has responsibility for Transactional Services.

a. Are any of the individuals involved in the sale of Transactional Services also involved in the sale of storage services from EGD's non-utility ("unregulated") storage operation? If so, please explain.

b. How are ex-franchise storage service transactions that are underpinned by utility storage assets (i.e. Transactional Services) kept separate from ex-franchise storage service transactions that are underpinned by non-utility storage assets?

c. Beyond the delivery and/or receipt point of Tecumseh, what are the points at which EGD offers exchange points for non-utility storage transactions (for example Parkway)?

    i. How does EGD non-utility effect transportation to and from Tecumseh to those locations?
    ii. What assets or transportation rights does EGD use to effect these transactions?
    iii. How is the utility compensated for any assets owned by or rights contracted by the utility?

RESPONSE

a. No

Witnesses: K. Culbert
V. Krauchek
B. Pilon
J. Sarnovsky
R. Small

b. Transactional Services storage deals are related to available utility assets only. TS personnel do not have access to information regarding the availability of non-utility storage assets and as such, at no time is the execution of a TS storage deal a function of non-utility storage balances. This separation of business units includes the gas management system (OpenLink) which records all TS storage transactions and which restricts access to its databases to authorized employees only (there are no individuals involved in the sale of unregulated storage with access to this system).

c. EGD does not offer unregulated storage receipt/delivery beyond the Tecumseh custody inter-connect points.
   i. N/A
   ii. N/A
   iii. N/A

Witnesses: K. Culbert
V. Krauchek
B. Pilon
J. Sarnovsky
R. Small

ENERGY PROBE INTERROGATORY #1

INTERROGATORY

Ref: Exhibit B, Tab 1, Schedule 1

a) Please confirm that the escalation factor approved in EB-2010-0146 for 2011 was 0.36% based on a GDP IPI FDD of 0.72% and an inflation coefficient of 50%.

b) What level would the escalation factor have had to been in 2011 to reduce the normalized return on equity from 10.376% to the benchmark ROE of 7.94%?

RESPONSE

a) The Company confirms that the escalation factor approved in EB-2010-0146 for 2011 was 0.36% based on a GDP IPI FDD of 0.72% and an inflation coefficient of 50%.

b) When the Company uses an ROE of 7.94% in its Revenue Sufficiency Calculation (Exhibit B, Tab 5, Schedule 1), as opposed to 8.94%, the gross revenue sufficiency becomes $48.42 million. To reduce the Approved 2011 Total Revenue of $2,404.89 million (EB-2010-0146, Final Rate Order, Appendix A) by $48.42 million, an escalation factor of (5.49%) would have had to have been used in the 2011 IR formula.

Witnesses: K. Culbert
R. Small

ENERGY PROBE INTERROGATORY #2

INTERROGATORY

Ref: Exhibit B, Tab 1, Schedule 1

Has EGD made any changes to the way that the earnings sharing amount has been calculated for 2011 from the methodology used for 2010 in EB-2011-0008? If yes, please describe the change(s) and why the change(s) was (were) made.

RESPONSE

The Company has adopted the recommendations proposed in the Black & Veatch report related to the allocations of costs to the unregulated storage activity. There are no other changes to the way that the earnings sharing amount was calculated for 2011.

Witnesses: K. Culbert
R. Small

ENERGY PROBE INTERROGATORY #3

INTERROGATORY

Ref: Exhibit B, Tab 1, Schedule 3

Please show the calculation of the 7.94% based on the Board approved formula using the October 2010 consensus forecast.

RESPONSE

See the response to Board Staff Interrogatory #2 found at Exhibit I, Tab 1, Schedule 2.

Witnesses: K. Culbert
M. Lister
R. Small

ENERGY PROBE INTERROGATORY #4

INTERROGATORY

Ref: Exhibit B, Tab 4, Schedule 1, page 7

Please confirm that the opening CCA balances shown in column 2 are the actual final ending 2010 utility UCC balances from the 2010 tax return. If this cannot be confirmed, please explain the difference between the opening CCA balances shown here and the UCC Carry Forward figures for 2010 shown in Exhibit B, Tab 4, Schedule 1, page 8 of EB-2011-0008.

RESPONSE

The opening utility UCC balances shown in Column 2, are derived from the actual final 2010 UCC balances resident within the 2010 tax return and adjusted to take account of non-utility related adjustments.

Witnesses: K. Culbert
R. Small

ENERGY PROBE INTERROGATORY #5

INTERROGATORY

Ref: Exhibit C, Tab 1, Schedule 2, page 6 &
Exhibit C, Tab 1, Schedule 3, page 6

a) Please explain why EGD has used a combined tax rate of 36.12% for all the years shown in Schedule 2, while the combined tax rate changes each year in Schedule 3.

b) The combined tax rate shown in schedule 3 is 26.25%. Please confirm that this includes a provincial tax rate of 11.25% for 2012, that in turn reflects a provincial tax rate of 11.5% for the first half of 2012 and a rate of 11.0% for the last half of 2012.

c) Please confirm that the Ontario government has cancelled the reduction in the corporate tax rate from 11.5% to 11.0% that was scheduled for July 1, 2012.

RESPONSE

a) The GDAR deferral account was approved prior to the IR mechanism and related agreed to parameters. Most of the capital related costs in the GDAR deferral account were incurred prior to the IR term. Other parameters applied to that account are those that existed at the start of the IR term. For other revenue requirement premised deferral accounts, like the MPFDA shown in schedule 3 where the account was approved during the IR term and costs are incurred on an ongoing basis, the parameters used are those applicable during the IR term.

b) Confirmed. The combined 2012 income tax rate of 26.25%, shown in schedule 3, assumed a federal income tax rate of 15% along with a provincial income tax rate of 11.25%. The provincial rate of 11.25% was utilized on the belief that the provincial income tax rate would drop, from 11.5% to 11.0%, on July 1, 2012.

c) Confirmed. Since filing the EB-2012-0055 application, Ontario budget bill, Bill 114, received royal assent on June 20, 2012. Among other things, the bill freezes Ontario's general corporate income tax rate at 11.5%. The Company now anticipates a combined income tax rate of 26.5% for 2012.

Witnesses: K. Culbert
R. Small

ENERGY PROBE INTERROGATORY #6

INTERROGATORY

Ref: Exhibit C, Tab 2, Schedule 1

a) Did EGD consider any other allocation methodology for the MDVMDA balance? If so, please explain why it was rejected in favour of the number of customers by rate class.

b) Please explain why EGD believes that system gas and direct purchase customers within the same rate class should be applied the same unit rate.

RESPONSE

a) In addition to the proposed allocation methodology, EGD considered allocating the MDVMDA balance based on delivery volumes by rate class and based on the combination of delivery volumes and number of customers by rate class.

The Company did not adopt either of these two approaches given that the key features of the mechanism - weather normalized MDV and its re-establishment during the contract term - are calculated for each customer account separately and are driven by the needs of general service customers (for example- pool composition change greater than the threshold can be triggered by drops, mid-term enrolments, vendor- to vendor switches, migration from/to system gas, termination or reconnection of service, and change in customer location). Therefore, the cost triggers for the code / underlying logic and calculations of the mechanism, as well as the key ongoing features of the mechanism, are driven by the needs at the account level (i.e., the number of customers) rather than volume. In other words, all calculations are carried out at the account level and customer movement (to / from system gas, vendor to vendor switches, etc.) is the key driver for MDV to be re-established. Further, weather normalization does not apply to customers taking service under a large volume contract rate. Hence, the Company's proposal that the MDVMDA balance be allocated based on the number of customers by rate class.

b) The Company proposed to clear the MDVMDA balance to system gas and direct purchase customers given that the mechanism is market enabling and given that customers have a choice with respect to the type of service they take.

Witnesses: J. Collier
A. Kacicnik
M. Kirk

ENERGY PROBE INTERROGATORY #7

INTERROGATORY

Ref: Exhibit C, Tab 2, Schedule 2

Has EGD made any changes to the allocation of the various deferral and variance accounts to the rate classes from what has been approved by the Board in the past? If yes, please explain the difference and the reason for the change.

RESPONSE

No, Enbridge Gas Distribution has not made any changes to the allocations of the various deferral and variance accounts that have been approved by the Board in the past.

Please note that the 2011 clearance is the first time the Mean Daily Volume Mechanism Deferral Account ("MDVMDA") balance will be disposed to customers. The proposed allocation treatment for MDVMDA is presented at Exhibit C, Tab 2, Schedule 1, page 2.

Witnesses: J. Collier
A. Kacicnik
M. Kirk

FRPO INTERROGATORY #1

INTERROGATORY

Reference: Ex. B, Tab 4, Schedule 2, page 1

Please provide the main drivers behind the substantial 2011 increase in Human Resources cost.

a. For each driver, please provide if this factor is a one year phenomenon or the trend is expected into 2012 and beyond.
b. To the extent possible, please explain what EGD is doing to mitigate these increases in 2012 and beyond.
c. Please break out from each of the respective years from 2007 Board-approved to 2011, the actual amount of performance based incentives.
    i. Please provide the details on any significant change to EGD performance based incentive programs during the Incentive Regulation term.

RESPONSE

a) The main drivers of the $4.9M increase are:

$1.6M Severances
$0.4M Salaries & Wages
$1.8M Relocation
$0.3M Employee Recognition Awards (service awards)
$0.2M Training
$0.6M CPP, EI, Employer's Health Tax
$4.9M

Severances – The Company is placing a greater emphasis on performance management ensuring employees are achieving the required results. Employees are expected to achieve their performance objectives, which assists the Company in achieving operational and financial results. As the performance management process continues to be refined and implemented, the Company expects severances to increase over the next 2 or 3 years, and then stabilize afterwards.

Witnesses: R. Lei
S. Trozzi

Salaries & Wages – result of a merit salary increase of 3.5% plus five FTE's. Merit increases are not a one-time phenomenon. Enbridge expects salaries will continue to be adjusted as required to maintain competitiveness in the market.

Relocation – Enbridge is committed to employee development, which in some circumstances requires employees to move to new locations. These moves ensure that Enbridge is developing the required skills for the future, and also promotes employee engagement and retention. There has been a greater emphasis placed upon leadership development, this will increase the need for additional relocation funds to move employees to locations that will allow their continued development. Enbridge does not expect relocation costs to increase each year, however the Company believes they will remain stable.

Employee Recognition Awards – Employee recognition awards will continue as a greater number of employees who will be celebrating milestones as their years of service grow, and more employees are expected to retire. Enbridge anticipates employee recognition awards will remain constant.

Training & Development – Enbridge is increasing its focus on leadership development which will require a continued financial contribution to ensure we are delivering the required learning and development programs. As Enbridge enhances its leadership development programs, this focus will require additional funds for 2013.

CPP, EI, Employer's Health Tax – this is an uncontrollable expense driven by increases in salaries and wages for the Company. These expenses will continue to grow as salaries are adjusted.

c) Below is the breakdown of all performance based incentive programs at Enbridge. There have been no significant changes in the program during the IR term.

Performance Based Incentive Program	**2007 Board Approved**	**2007**	**2008**	**2009**	**2010**	**2011**
Short Term Incentive Program	$15M	$20M	$19M	$25M	$19M	$26M
Restricted Stock Units	N/A	85,300 grants	109,200 grants	134,200 grants	121,800 grants	112,900 grants
Performance Stock Units	N/A	9,600 grants	10,000 grants	13,600 grants	17,200 grants	18,000 grants
Incentive Stock Units	N/A	242,000 grants	415,600 grants	501,200 grants	359,000 grants	556,400 grants

FRPO INTERROGATORY #2

INTERROGATORY

Reference: Ex. C., Tab 2, Schedule 2, page 3, Line 1, Column 3
and
EB-2007-0615 Decision and Order, May 15, 2008, Appendix E, page 6, paragraph 3

Preamble: Net revenue is defined as gross revenues for providing these services less any direct incremental costs incurred, plus, any avoided costs. Direct incremental costs represent those direct costs incurred as a result of a transactional service activity and avoided costs are those costs that have been avoided as a result of a transactional service activity. Typical direct incremental costs and avoided costs would include transportation costs, fuel costs, charges for name changes, re-direct charges, etc.

We require additional information regarding the inputs into the figure provided.

a. Please provide a definition for the acronym "WBT" and how it is included or excluded in the derivation of your figures.
b. Please confirm that this figure is a net revenue figure as described in the preamble above.
c. Please disaggregate the Sales and WBT figure into amounts for different categories of transactional services:
    i. Base exchanges
    ii. FT-RAM company utilization
    iii. FT-RAM assignment
    iv. Other categories.
d. Please provide a definition for each of the categories.
e. For each of the categories in c., please provide the quantity of:
    i. gross revenue
    ii. direct incremental costs
    iii. avoided costs
f. For each of the above categories, and sub-categories as appropriate, please provide an example(s) of a specific transactions showing how the net revenue is determined by the process of adjustments for direct incremental costs and avoided costs. To be clear, please provide actual examples of the different types of transactions that contribute to each of the categories to demonstrate where the costs come from and where they are borne.

Witnesses: A. Kacicnik
M. Kirk
D. Small

RESPONSE

a) The acronym "WBT" stands for Western Bundled Transportation service. Customers receiving this type of service receive transportation service and delivery service from the Company but provide their own gas supply.

   Since Western Bundled Transportation customers, together with sales (i.e. – system gas) customers, pay for transportation service through the Company's rates, they are assigned the portion of TS deferral account balance associated with the optimization of upstream transportation contracts.

b) Confirmed.

c) and d)
   The amount shown at Exhibit C, Tab 2, Schedule 2, page 3 represents the amount in the Transactional Services Deferral Account ("TSDA") that needs to be cleared to customers. This amount is generated by determining the rate payer portion of Transactional Services revenue (90/10 for Storage Revenue, 75/25 for Transportation Revenue) less the $8.0 million guarantee already in rates. Because the $8.0 million guarantee is not broken down by specific transaction type, other than by storage and transportation, it is impossible to break down the dollar amount in the TSDA by transaction type.

   However, the Company can provide a little more detail with respect to how Transactional Services are generated and a high level breakdown of the revenue generated in 2011.

   While TS deals utilize the utility storage and transportation contracts no deal will be entered into at the expense or risk of the customers of the utility. For example, during periods of reduced demand and restrictions, typically during the summer months, Enbridge may optimize underutilized transportation capacity by executing basic exchanges between two points for a fee charged to a third party (i.e., Enbridge could move gas received at Dawn and redeliver to the CDA). During these same periods of reduced demand EGD may, temporarily, release parts of its long haul TCPL capacity to third parties. Tied to each release is an exchange through which EGD generally delivers gas at Empress and receives an equivalent volume of gas at Dawn. The credit received from TCPL through the temporary assignment offset by the cost payable to the third-party for the transportation capacity represents Transportation Optimization for Transactional Service purposes.

Witnesses: A. Kacicnik
M. Kirk
D. Small

Storage Revenue is generated when a third-party approaches EGD with the possibility to store gas with the utility for a short period of time. The revenue the Company receives from allowing the counter-party to park their gas is dependent upon the price spreads for the months that the gas sits in storage.

As for FT RAM these credits are only accumulated if a shipper does not utilize 100% of its RAM eligible capacity (i.e., FT or STS). In the case of EGD this is generated only when the Company does not fully utilize its STS capacity. For example, if in the month of December EGD did not fully utilize its STS capacity then we would have available credits that can be applied against the costs associated with any IT transportation costs that might be incurred by EGD in the month of December. However, if EGD does not contract for any IT transportation service in that month then the Company would not be eligible to receive any FT-RAM credits. To the extent that the Company required IT transportation for the purposes of meeting the needs of the Utility customer then any FT-RAM credits received by the Company would go toward lowering that transportation costs to the benefit of the rate payer and be captured as part of the PGVA. If however, the Utility did not require any IT transportation and there was an opportunity for Transactional Services to enter into a deal with a third party through the use of IT transportation then any FT-RAM credits received would offset that IT transportation cost and provide a benefit as part of the Transactional Services Transportation Optimization. In 2011 the Company collected a total of $2.3 million in RAM Credits from TCPL of which $0.2 million went to offset IT transportation costs incurred on behalf of the Utility and its' customers and the remaining $2.1 million went to offset the IT transportation costs associated with Transactional Services exchange deals that helped to generate $0.8 million in Transactional Services revenue of which the customer received $0.6 million through the TS sharing mechanism.

If by entering into transportation exchange deals the Company incurs or avoids a transportation fuel requirement then the associated cost of the fuel is either added to or subtracted from Transaction Services revenue.

d) The attached table provides a breakdown of the 2011 Transactional Services Revenue by service type and the calculation of the amount in the TSDA to be cleared to customers.

e) The Company believes that by providing the specifics to any particular deal will not provide any additional value to the table provided above and also could jeopardize the market integrity of the TS deals.

Witnesses: A. Kacicnik
M. Kirk
D. Small

	$ 000's
Storage Optimization	2,755.2
Transportation Optimization	
- Exchange Revenue	12,552.3
- Capacity Release Net Revenue	3,105.3
- Incurred/avoided fuel costs	661.0
	16,318.5
Ratepayer Portion of Storage Optimization - 90 %	2,479.7
Ratepayer Portion of Transportation Optimization - 75 %	12,238.9
Ratepayer Portion of TS	14,718.6
Less 2011 Guarantee in Rates	8,000.0
	6,718.6
ETT Revenue - Rider H	638.4
	7,357.0
Interest	103.2
TSDA Total	7,460.2
TSDA Clearance - Storage	1,795.1
TSDA Clearance - Transportation	5,665.1

Witnesses: A. Kacicnik
M. Kirk
D. Small

FRPO INTERROGATORY #3

INTERROGATORY

Reference: Ex. C., Tab 2, Schedule 2, page 3, Line 1, Column 3
and
EB-2007-0615 Decision and Order, May 15, 2008, Appendix E, page 6, paragraph 3

Preamble: Net revenue is defined as gross revenues for providing these services less any direct incremental costs incurred, plus, any avoided costs. Direct incremental costs represent those direct costs incurred as a result of a transactional service activity and avoided costs are those costs that have been avoided as a result of a transactional service activity. Typical direct incremental costs and avoided costs would include transportation costs, fuel costs, charges for name changes, re-direct charges, etc.

Please provide the answers to interrogatories provided in EB-2011-0354 under Issue D.2 (pages 12-19) that have import into the current proceeding. In those questions, where a period was defined as April to March for purposes of understanding a gas year, please use January to December to understand fiscal year implication. In our view, that includes to all interrogatories in the section with the exception of Questions 1, 5 a) and b), 9 and 10.

RESPONSE

The FRPO Interrogatories from the 2013 rebasing application for which responses are requested in this proceeding require a lot of information to be complied. This task will not be completed in time to meet the filing deadline for interrogatories in the 2011 ESM proceeding however, every effort will be made to have the responses available prior to the start of ADR for this 2011 ESM proceeding.

Witnesses: J. Collier
A. Kacicnik
M. Kirk

FRPO INTERROGATORY #4

INTERROGATORY

Reference: Exhibit C, Tab 2, Schedule 2, Page 1

For each of the years starting with Board Approved 2007, please provide the actual and forecasted broken down by:

a. number of units of UFG
b. price of each unit
c. total resulting cost

RESPONSE

Please see the tables below.

Forecast:

	UFG - Forecast (10^3m^3)	Unit Cost ($/$10^3m^3$)	Cost ($ M)
2007	39,444	380.28	15.0
2008	39,444	324.51	12.8
2009	31,841	386.29	12.3
2010	37,795	238.13	9.0
2011	64,211	205.57	13.2

Actual:

	UFG - Actual (10^3m^3)	Unit Cost ($/$10^3m^3$)	Cost ($ M)
2007	83,823	251.72	21.1
2008	44,424	301.64	13.4
2009	110,917	197.44	21.9
2010	72,104	245.48	17.7
2011	73,355	295.82	21.7

Witnesses: J. Collier
A. Kacicnik
M. Kirk

SEC INTERROGATORY #1

INTERROGATORY

Ref: B/1/3, p. 1

Please confirm that the depreciation rates used to calculate line 9 are unchanged between 2007 Board approved and 2011 actual. If there are any changes, please provide details.

RESPONSE

Confirmed, the depreciation rates are unchanged.

Witnesses: K. Culbert
R. Lei
R. Small

SEC INTERROGATORY #2

INTERROGATORY

Ref: B/1/4, p. 3

Please provide details of the revenues and costs associated with the ABC program. Please confirm (and disaggregate) the gross revenues of $5.9 million and the total costs of $1.8 million and the resulting profit before tax of $4.1 million.

RESPONSE

The Company's ABC-T program is operated as a non-utility business within Enbridge Gas Distribution. ABC-T program costs include direct expenses associated with supporting services provided by Accenture, an allocation of bad debt expense and an allocation of internal costs. The treatment of ABC-T program has been consistent throughout the period of the Company's current incentive rate making regime.

This treatment is consistent with the Board's Decision in the E.B.O. 179-14, E.B.O. 179-15 Decision at paragraph 3.5.1 ("Retention of ABC-T Service Program"), where the Board made the following determination:

> The Board confirmed the status of the ABC-T service as an ancillary program in E.B.R.O. 495, and accepts that it is a "business activity" within the meaning of the 1998 Undertakings. Under fully allocated costing, costs of the program will not be borne by ratepayers. The Board is prepared to accept the retention of the ABC-T Service Program, noting that the Company may decide in the future that the program is no longer economic, and would then be at liberty to cease to operate it. However, for consistency with the Board's findings in relation to the rental program and for regulatory efficiency, the ABC-T Service Program is accepted as non-utility rather than ancillary. Therefore, the Board's review in future will be limited to the costs removed and would not include matters of pricing or profitability.

Witnesses: K. Culbert
R. Lei
S. McGill
R. Small

Below please find Enbridge ABC-T program revenues for 2011 as well as the details of the costs eliminated from the Company's 2011 costs associated with the ABC-T program (in millions).

Revenues	**$11,074.2**

Expenses	
ABC Service Expenses	$1,325.1
ABC Bad Debt	$3,750.7
Interest Expense/Carrying cost ABC Allocation	$ 83.2
ABC Internal Costs (fully allocated)	$1,757.9
Total	$6,916.9

Witnesses: K. Culbert
R. Lei
S. McGill
R. Small

SEC INTERROGATORY #3

INTERROGATORY

Ref: B/1/5, App. 1, p. 11

Please confirm that costs for replacement assets with enhancements are allocated to unregulated on an incremental cost basis. Please provide the total dollar amounts (gross and unregulated allocation) allocated in this way in each of the last four years, and the cumulative total assets allocated this way as of 2011. Please provide a reference for the Board decision or other basis on which incremental costing is used for this allocation

RESPONSE

Since the time of the NGEIR Decision, EGD has undertaken only four projects that would be categorized as "replacement of assets with capacity enhancements". The table below shows each of these projects, their total cost including IDC and overheads, and the portion of the cost that has been determined to be incremental to the needs of the utility.

Replacement Projects	Total Project Cost	Incremental Portion Charged To Unregulated	Project Duration
Mid/South Kimball Colinville Well Intergrity	$ 3,071,173	$ 3,071,173	Apr 2009 to May 2010
Corunna/Seckerton Well Integrity	$ 1,657,604	$ 1,657,604	Feb 2010 to Dec 2011
Meter Upgrade Project	$ 42,451,644	$ 18,870,208	Feb 2010 to Present
Corunna/Seckerton Gathering Pipeline Replacement	$ 10,925,118	$ 10,925,118	Feb 2010 to Dec 2011

Of the 4 projects only the Meter Upgrade project has been allocated to both the utility and unregulated storage businesses. The split recognizes that not all of the cost would have been required simply to upgrade the metering to meet the utility's needs.

Witnesses: K. Culbert
B. Pilon
J. Sanders
R. Small

The other three projects were for the replacement of the gas gathering pipeline network in two of the storage pools (Corunna and Seckerton) and the wellhead equipment replacement programs on four of the storage pools that were to be delta pressured to provide some of the storage capacities required by Unregulated Storage. However, because these facility replacement projects were required to allow for the higher pressure requirements of the unregulated storage business, and not because the facilities required replacement because they were at the end of their useful life for utility service, all of the costs were allocated to Unregulated Storage.

The explanation as to why incremental costing has been used is set out in the Company's evidence (including the Black & Veatch report) at Exhibit B, Tab 1, Schedule 5.

Witnesses: K. Culbert
B. Pilon
J. Sanders
R. Small

SEC INTERROGATORY #4

INTERROGATORY

Ref: B/1/5, App. 1, p. 12

Please confirm that the overhead percentage and calculation method used to allocate to the unregulated business is identical in all respects to a) the allocation of overheads within the Applicant's regulated business, and b) the allocation of overheads between Enbridge Inc. and its affiliates. If there are differences in the methods or percentages please provide details.

RESPONSE

a) Enbridge Gas Distribution follows a consistent methodology in allocating overheads to all non-utility activities and third parties, where the fully allocated cost methodology is used.

b) The methodology used by EI to allocate overheads to its affiliates uses the same principles that Enbridge Gas Distribution uses in allocating overheads to non-utility activities and third parties. The allocation factors used by EI will differ from those used by Enbridge Gas Distribution, as the nature of services being provided may not necessarily be the same.

Witnesses: K. Culbert
R. Lei
B. Pilon
R. Small

SEC INTERROGATORY #5

INTERROGATORY

Ref: B/1/5, App. 1, p. 14

Please provide side by side profit and loss statements for the regulated and unregulated storage businesses for 2011.

RESPONSE

EGD does not have income statements specific to the regulated storage function.

The unregulated storage line of business operates within a competitive market and, in Enbridge's view, the financial statements for the unregulated business are not required in order to opine on the appropriateness of costs allocated between regulated and un-regulated operations.

The allocated amount of unregulated revenues and costs and the processes employed in arriving at those amounts have been provided for review in this application, along with a third party consultant review and report. The determination of reasonableness of the methods or processes of allocating costs can be achieved without a review of the un-regulated financial results.

Witnesses: K. Culbert
R. Lei
B. Pilon
J. Sanders
R. Small

VECC INTERROGATORY #1

INTERROGATORY

Ref: Exhibit B, Tab1, Schedule 3, line 15 and footnote 1

a) Please provide the calculation of the ROE established for the 2011 ESM.
b) Please provide the reference(s) for the approved ROE for use in 2011 ESM.

RESPONSE

See response to Board Staff Interrogatory 2, at Exhibit I, Tab1, Schedule 2, page1.

Witnesses: K. Culbert
R. Small

VECC INTERROGATORY #2

INTERROGATORY

Ref: Exhibit D, Tab 1 and 2 - Reference Material

a) Please also file the Annual Information Form for Enbridge Gas Distribution Inc. for the year ended December 31, 2011.

RESPONSE

a) Please see Attachment 1.

Witness: B. Yuzwa

ENBRIDGE GAS DISTRIBUTION INC.

ANNUAL INFORMATION FORM

FOR THE YEAR ENDED DECEMBER 31, 2011

February 14, 2012

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PRESENTATION OF INFORMATION

Unless otherwise noted, the information contained in this Annual Information Form (AIF) for Enbridge Gas Distribution Inc. (Enbridge Gas Distribution or the Company) is given at or for the year ended December 31, 2011. Amounts are expressed in Canadian dollars unless otherwise indicated. Financial information is presented in accordance with Part V – Pre-changeover Accounting Standards of the Canadian Institute of Chartered Accountants (CICA) Handbook (Canadian Generally Accepted Accounting Principles (GAAP)).

The Company's Management's Discussion and Analysis (MD&A), dated February 14, 2012, and the Company's Audited Consolidated Financial Statements, dated February 14, 2012, as at and for the year ended December 31, 2011 are incorporated by reference into this AIF and can be found on SEDAR at www.sedar.com.

FORWARD-LOOKING INFORMATION

Forward-looking information, or forward-looking statements, have been included in this AIF to provide the Company's shareholders and potential investors with information about the Company and its subsidiaries, including management's assessment of the Company's and its subsidiaries' future plans and operations. This information may not be appropriate for other purposes. Forward-looking statements are typically identified by words such as ''anticipate'', ''expect'', ''project'', ''estimate'', ''forecast'', ''plan'', ''intend'', ''target'', ''believe'' and similar words suggesting future outcomes or statements regarding an outlook. Forward-looking information or statements included or incorporated by reference in this document include, but are not limited to, statements with respect to expected capital expenditures.

Although the Company believes that these forward-looking statements are reasonable based on the information available on the date such statements are made and processes used to prepare the information, such statements are not guarantees of future performance and readers are cautioned against placing undue reliance on forward-looking statements. By their nature, these statements involve a variety of assumptions, known and unknown risks and uncertainties and other factors, which may cause actual results, levels of activity and achievements to differ materially from those expressed or implied by such statements. Material assumptions include assumptions about: the expected supply and demand for natural gas; prices of natural gas; expected exchange rates; inflation; interest rates; the availability and price of labour and pipeline construction materials; operational reliability; customer project approvals; maintenance of support and regulatory approvals for the Company's projects; anticipated in-service dates and weather. Assumptions regarding the expected supply and demand of natural gas and the prices of natural gas are material to and underlie all forward-looking statements. These factors are relevant to all forward-looking statements as they may impact current and future levels of demand for the Company's services. Similarly, exchange rates, inflation and interest rates impact the economies and business environments in which the Company operates, may impact levels of demand for the Company's services and cost of inputs, and are therefore inherent in all forward-looking statements. Due to the interdependencies and correlation of these macroeconomic factors, the impact of any one assumption on a forward-looking statement cannot be determined with certainty. The most relevant assumptions associated with forward-looking statements on expected capital expenditures include: the availability and price of labour and pipeline construction materials; the effects of inflation and foreign exchange rates on labour and material costs; the effects of interest rates on borrowing costs; and the impact of weather and customer and regulatory approvals on construction schedules.

The Company's forward-looking statements are subject to risks and uncertainties pertaining to operating performance, regulatory parameters, project approval and support, weather, economic and competitive conditions, exchange rates, interest rates, natural gas prices and supply and demand for natural gas, including but not limited to those risks and uncertainties discussed in this AIF and in the Company's other filings with Canadian securities regulators. The impact of any one risk, uncertainty or factor on a particular forward-looking statement is not determinable with certainty as these are interdependent and the Company's future course of action depends on management's assessment of all information available at the relevant time. Except to the extent required by law, the Company assumes no obligation to publicly update or revise any forward-looking statements made in this AIF or otherwise, whether as a result of new information, future events or otherwise. All subsequent forward looking statements, whether written or oral, attributable to the Company or persons acting on the Company's behalf, are expressly qualified in their entirety by these cautionary statements.

CORPORATE STRUCTURE

Enbridge Gas Distribution was incorporated in 1848 by Special Act, II Victoria Cap. XIV, of the Province of Canada. By letters patent dated September 30, 1954, Enbridge Gas Distribution was continued under the Corporations Act, 1953 (Ontario) and is now subject to the Business Corporations Act (Ontario). The Company changed its name from The Consumers' Gas Company Ltd. to Enbridge Gas Distribution Inc. on July 25, 2002.

Enbridge Gas Distribution's head office and registered office are located at 500 Consumers Road, Toronto, Ontario, M2J 1P8.

Enbridge Gas Distribution is an indirect wholly owned subsidiary of Enbridge Inc. (Enbridge). Enbridge Energy Distribution Inc., itself an indirect wholly owned subsidiary of Enbridge, owns all of the issued and outstanding common shares of Enbridge Gas Distribution.

GENERAL DEVELOPMENT OF THE BUSINESS

The Company was incorporated in 1848 to provide manufactured coal gas for lighting to customers in the City of Toronto. By 1948, Enbridge Gas Distribution was serving 180,000 customers.

Natural gas was introduced to Ontario in the 1950s, replacing manufactured coal gas. Natural gas was first imported from the United States and later shipped from Alberta via the facilities of TransCanada PipeLines Limited (TransCanada). During the same period, the Company also expanded service to the Niagara Peninsula, Ottawa and Peterborough areas through acquisitions. In the 1960s, St. Lawrence Gas Company, Inc. (St. Lawrence), a wholly owned subsidiary of Enbridge Gas Distribution, began delivering Canadian natural gas to customers in northern New York State.

The 1970s and 1980s were periods of significant growth for Enbridge Gas Distribution. By 1989, the Company was serving one million customers. Growth during this period resulted from the widening of the price advantage of natural gas over oil and electricity, the expansion of population and industry in the Company's franchise area, various government programs promoting natural gas usage, natural gas' environmental and supply advantages and the Company's marketing efforts. This growth continued in the 1990s, with the addition of more than 480,000 customers during the decade. Customer additions between fiscal 2009 and fiscal 2011 averaged approximately 35,000 customers per year.

Enbridge Gas Distribution is a rate-regulated natural gas distribution utility serving approximately 2 million residential, commercial and industrial customers in its franchise areas of central and eastern Ontario, including the City of Toronto and the surrounding areas of Peel, York and Durham regions, as well as the Niagara Peninsula, Ottawa, Brockville, Peterborough, Barrie and many other Ontario communities. In addition, the Company serves Massena, Ogdensburg, Potsdam and surrounding areas in northern New York State through St. Lawrence.

The Company also owns and operates unregulated facilities in Ontario, including two solar projects located in Amherstburg, Ontario, through its 99.9% limited partnership interest in Project AMBG2 LP (Project Amherstburg) and unregulated natural gas storage facilities.

The utility business is conducted under statutes and municipal by-laws which grant the right to operate in the areas served. The utility operations of the Company and St. Lawrence are regulated by the Ontario Energy Board (OEB) and by the New York State Public Service Commission, respectively.

As at December 31, 2011, the Company owned and operated a network of approximately 35,000 kilometres of mains (2010 - approximately 35,000; 2009 - approximately 35,000 kilometres) for the transportation and distribution of natural gas, as well as the service pipes to transfer natural gas from mains to meters on customers' premises.

THREE-YEAR HISTORY

WEATHER

The Company operates in a seasonal industry and earnings vary significantly according to weather patterns. Periods of colder than normal weather would typically result in higher earnings compared to periods of warmer than normal weather.

(Warmer)/colder than normal weather affected earnings in the past three years as follows:

Year Ended December 31,	**2011**	2010	2009
(millions of Canadian dollars) After-Tax Earnings Increase/(Decrease)	**1**	(12)	17

NATURAL GAS PRICES

Higher natural gas market prices result in a higher OEB approved charge to customers for the natural gas commodity. While higher natural gas commodity charges to customers result in higher revenues, there is no corresponding impact on the Company's earnings, since the cost of natural gas is flowed through to customers at cost. The Company does not earn a margin on the sale of natural gas.

REGULATORY ENVIRONMENT

Incentive Regulation (IR)

In 2008, the OEB approved the Company's application to move to a five year IR methodology for the years 2008 through 2012. Under IR, the Company's distribution revenue requirement and associated rates are based on a formulaic approach, using prior year cumulative data with 2007 as the starting point.

The objectives of the IR Settlement Agreement are as follows:

- reduce regulatory costs;
- provide incentives for improved efficiency;
- provide more flexibility for utility management; and
- provide more stable rates to customers.

In preparation for the conclusion of the current IR term at the end of 2012, the Company has recently filed a 2013 Cost of Service (COS) application. The Company expects the OEB to address the application in 2012.

2012 RATE ADJUSTMENT APPLICATION

In September 2011, the Company filed an application with the OEB to adjust rates for 2012 pursuant to the approved IR formula. The Company applied for distribution revenue of $1,024 million, and $1,004 million or 98%, was approved for recovery by the OEB, pursuant to a settlement agreement with the intervenors representing customers. The rate adjustment was effective January 1, 2012. A hearing with respect to the remaining $20 million applied for distribution revenue and related issues was held by the OEB in January 2012 with a decision expected by April 2012.

Cost of Capital

In December 2009, the OEB issued a report making several changes to the cost of capital for Ontario's regulated utilities. The new policy guidelines forecasted a new base level return on equity (ROE) of 9.75% for the Company's 2010 rate year, which was higher than the 8.37% generated by the 1997 ROE formula. In its 2010 rate application, the Company applied to the OEB for approval to use the new ROE formula to determine the annual earnings sharing with customers for 2010 and the remainder of the IR term. The OEB issued a decision in May 2010 that the new ROE is not to be used for such earnings sharing determinations. The Company appealed the OEB's decision to the Ontario Divisional Court and the appeal was dismissed by the Divisional Court in March 2011. As a result, earnings sharing will continue to be calculated on the basis of the 1997 ROE formula for the balance of the IR term. The Company has applied for the new ROE to determine rates after the conclusion of the IR term, commencing with the

2013 rate year.

2011 Rate Adjustment Application
In September 2010, the Company filed an application with the OEB to adjust rates for 2011 pursuant to the approved IR formula. The total distribution revenue applied for was approved by the OEB, with the rate adjustment being effective January 1, 2011.

2010 Rate Adjustment Application
In September 2009, the Company filed an application with the OEB to adjust rates for 2010 pursuant to the approved IR formula and to seek approval for specific changes to the Rate Handbook. Pursuant to the subsequent filing with the OEB of a settlement agreement with ratepayer groups, the Company received approval of a fiscal 2010 final rate order from the OEB in March 2010 approving the implementation of a rate change effective April 1, 2010, which enabled the Company to recover the approved revenues as if rates were effective January 1, 2010.

2009 Rate Adjustment Application
In September 2008, the Company filed an application with the OEB to adjust rates for 2009 pursuant to the approved IR formula and to seek approval for specific changes to the Rate Handbook. A settlement agreement containing all applied for aspects of the formulaic component of the IR rate setting process was approved by the OEB in December 2008.

The Company received a fiscal 2009 final rate order from the OEB in February 2009 approving the implementation of a rate change effective April 1, 2009, which enabled the Company to recover the approved revenues as if rates were effective January 1, 2009.

The key terms of the settlement agreement are summarized as follows:

Revenue Per Customer Cap – The Settlement provides an incentive for the Company to continue growing its customer base and provides the opportunity annually to adjust distribution volumes for rate-setting to protect the Company from exposure to declining average use of natural gas by residential and small commercial customers.

Revenue Escalation – Distribution revenues were adjusted by 60% of the rate of inflation♦ in 2008, by 55% in 2009, by 55% in 2010, and will be adjusted by 50% in 2011 and 45% in 2012. In addition to the annual inflation adjustment, revenues will also grow by the annual increase in the number of customers. Based on an assumed inflation rate of 2%, the combined inflation and growth factors are forecast to result in an overall revenue escalation averaging approximately 3% per year through the term of the plan.

Earnings Sharing – To the extent the actual utility return on the approved equity level represented by normalized earnings (i.e., excluding the effects of weather) (ROE) exceeds the notional allowed utility return on equity (NROE) by certain prescribed thresholds, earnings are shared with customers. The shareholder retains the first 100 basis points of ROE above the NROE (up to 9.66% in 2008), while earnings represented by the ROE in excess of 100 basis points above the NROE are shared equally with customers.

Adjustments – There are several cost and deferral accounts that fall outside of the revenue escalation formula, including the amount of capital invested in new power generation laterals. The Company is also allowed to apply for recovery of expenses above a defined threshold to the extent any such expenses meet certain criteria set out in the IR plan.

Off Ramps – An OEB review will be triggered if the Company's ROE on a normalized basis varies more

♦ The inflation index is defined as the year-over-year change in the annualized average of four quarters of Statistics Canada's Gross Domestic Product Implicit Price Index Final Domestic Demand.

than 300 basis points (either negatively or positively) relative to the NROE. The review, if triggered, would determine the reasons for the variance in earnings and in such circumstances could result in adjustments to the Settlement or a return to Cost of Service (COS) regulation. The review would not have an impact on earnings for prior years. The Settlement does not preclude the Company from applying to the OEB for an increase in the embedded ROE.

CUSTOMER GROWTH
Business development is positively impacted by customer growth. Customer additions for the last three fiscal years were as follows:

Year Ended December 31,	**2011**	2010	2009
New Customer Additions[1]	**35,862**	37,023	32,275

1 New customer additions are the number of new service lines installed during the year.

Uncertain conditions in the financial markets and weaker-than-expected economic growth slowed down the pace of housing activity in the Company's distribution franchise area. Although housing starts showed a year-over-year increase in 2011, a decline in new home purchases resulted in lower customer additions.

NEW CUSTOMER INFORMATION SYSTEM (CIS) IMPLEMENTED
In September 2009, the Company successfully implemented its new CIS, which replaced the Company's legacy system. The Company is recovering in rates the total cost of the project in accordance with an agreement with customer groups that was approved by the OEB in 2007.

DESCRIPTION OF THE BUSINESS

CORE BUSINESS – GAS DISTRIBUTION
There are four principal interrelated aspects of the natural gas distribution business in which the Company is directly involved: Distribution Service, Gas Supply, Transportation and Storage.

Distribution Service
The Company's principal source of revenue arises from distribution of natural gas to customers. The services provided to residential, small commercial and industrial heating customers are primarily on a general service basis (without a specific fixed term or fixed price contract). The services provided to larger commercial and industrial customers are usually on an annual contract basis under firm or interruptible service contracts. Under a firm contract, the Company is obligated to deliver natural gas to the customer up to a maximum daily volume. The service provided under an interruptible contract is similar to that of a firm contract, except that it allows for service interruption at the Company's option to meet seasonal or peak demands. The OEB approves rates for both contract and general services.

Customers have a choice with respect to natural gas supply. One option is a sales service option, whereby the customer purchases natural gas from the Company's supply portfolio (system supply). The Company does not earn a margin on the natural gas commodity it provides to customers. Alternatively, a natural gas user may select a direct purchase option, which is a transportation service arrangement. Under the transportation service arrangement, a customer supplies natural gas at a TransCanada receipt point in western Canada or at a TransCanada delivery point in Ontario, and the Company redelivers an equivalent amount of natural gas to the customer's end-use location. As a third option, a customer may select an unbundled service arrangement. Similar to the transportation service arrangement, customers deliver their own natural gas into the Company's distribution system, but they are responsible for balancing consumption with deliveries on a daily basis. These arrangements are billed under the OEB approved rate schedules.

Gas Supply
To acquire the necessary volume of natural gas to serve its customers, the Company maintains a diversified natural gas supply portfolio. During the year ended December 31, 2011, the Company

acquired approximately 6.3 billion cubic metres of natural gas (2010 - 5.9 billion cubic metres), of which 44.1% (2010 - 36.6%) was acquired from western Canadian producers, 28.4% (2010 - 41.6%) was acquired from suppliers in Chicago and 27.5% (2010 - 21.8%) was acquired on a delivered basis in Ontario. The Company also transported 5.8 billion cubic metres (2010 - 6.1 billion cubic metres) of natural gas on behalf of direct purchase customers operating under a transportation service arrangement.

The Company's system supply natural gas contracts have pricing structures responsive to supply and demand conditions in the North American natural gas market. The prices in these contracts may be indexed to Alberta, Chicago or New York based prices.

Transportation

TransCanada transports approximately 63.1% or 7.6 billion cubic metres (2010 - 64.3% or 7.5 billion cubic metres) of the annual natural gas supply requirements of the Company's customers. The Company has firm transportation service contracts with TransCanada for a portion of this requirement, while direct purchase customers contract directly with TransCanada or with natural gas marketers for the remainder.

The transportation service contracts are not directly linked with any particular source of natural gas supply. Separating transportation contracts from natural gas supply allows the Company flexibility in obtaining its own natural gas supply and accommodating the requests of its direct purchase customers for assignment of TransCanada capacity. The Company forecasts the natural gas supply needs of its customers, including the associated transportation and storage requirements.

TransCanada's transportation tolls, which are approved by the National Energy Board, consist of a demand component to recover fixed costs and a commodity component to recover variable costs for Firm Transportation (FT) service. An FT shipper, such as the Company, must pay the demand component regardless of the volume of natural gas that TransCanada actually transports for the FT shipper. Under the terms of TransCanada's tariff, if an FT shipper does not utilize all of its FT capacity rights, the FT shipper would nonetheless incur demand charges in respect of the unutilized portion.

In addition, the Company contracts for FT service on the pipelines of Alliance Pipeline Canada, Alliance Pipeline U.S. (collectively referred to as the Alliance network) and Vector Pipeline (Vector). The Alliance network of pipelines extends over 3,000 kilometres and runs from northeast British Columbia and northwest Alberta to the Chicago area hub, where it interconnects with the North American pipeline grid. Vector is a 560 kilometre pipeline that connects the hub facilities in the Chicago area to Dawn, Ontario. Enbridge has interests in these three pipeline facilities.

The Company relies on its long-term contracts with Union Gas Limited (Union) for transportation of natural gas from Dawn, located in south-western Ontario, to the Company's major market in the Greater Toronto Area (GTA). These contracts effectively provide the Company with access to United States sourced natural gas at Dawn. These contracts also provide transportation for natural gas received at Dawn via the Vector Pipeline as well as natural gas stored at the Company's and Union's storage pools in the Sarnia, Ontario area to the market area.

Storage

The Company's business is highly seasonal as daily market demand for natural gas fluctuates with changes in weather, with peak consumption occurring in the winter months. Utilization of storage facilities permits the Company to take delivery of natural gas on favourable terms during off-peak summer periods for subsequent use during the winter heating season. This practice permits the Company to minimize the annual cost of transportation of natural gas from its supply basins, assists in reducing its overall cost of natural gas supply and adds a measure of security in the event of any short-term interruption of transportation of natural gas to the Company's franchise area.

The Company's principal storage facilities are located in south-western Ontario, near Dawn, and have a total working capacity of approximately 110 billion cubic feet (bcf). Approximately 91 bcf of the total working capacity are available to the Company. The Company also has storage contracts with third parties for 19 bcf of storage capacity.

The Company-operated storage facilities are connected to the Dawn storage and transmission hub. In the summer, natural gas is delivered to Dawn for injection into storage through the transmission facilities of Niagara Gas Transmission, Union, TransCanada and Vector. In the winter, natural gas is withdrawn from storage and delivered to Dawn and transported from there to the Company's major market in the GTA through the transmission facilities of Union and TransCanada. The Company has transportation contracts with TransCanada, Vector and Union for the delivery of natural gas to and from storage.

ENERGY EFFICIENCY AND DEMAND SIDE MANAGEMENT (DSM)

The Company promotes the use of natural gas as an environmentally preferred fuel and develops and delivers energy efficiency and conservation programs which enable customers to optimize their energy usage.

The Company invests in collaborative research, development, demonstration and implementation of more efficient natural gas technologies. Through Enbridge’s demand side management programs, incentives are provided to customers to encourage the adoption of more energy efficient space conditioning, water heating, commercial cooking and industrial process equipment, as well as undertaking building envelope improvements.

The Company continues to work with municipalities to assist with their development of community energy plans, which are typically implemented under the Partners for Climate Protection Program, a Federation of Canadian Municipalities program.

HISTORICAL OPERATING STATISTICS

The following table presents statistics relating to the past three years of the Company's operations.

Year Ended December 31,	**2011**	2010	2009
Gas Supply and Sendout (10^6m^3)[1]			
Natural gas purchased	6,328	5,850	5,530
Gas into storage	(2,405)	(2,869)	(2,124)
Gas out of storage	2,369	2,564	2,252
Total gas sendout	6,292	5,545	5,658
Transportation of gas	5,752	6,083	6,329
	12,044	11,628	11,987
Gas sales to customers (10^6m^3)[1]	6,257	5,550	5,513
Transportation of gas (10^6m^3)[1]	5,370	5,584	6,035
Total sales (10^6m^3)[1]	11,627	11,134	11,548
Used by the Company (10^6m^3)[1]	4	6	6
Other volumetric variations (10^6m^3)[1,2]	413	488	433
	12,044	11,628	11,987
Maximum daily sendout (10^6m^3)[1]	88	84	86
Minimum daily sendout (10^6m^3)[1]	10	11	10
Average daily sendout (10^6m^3)[1]	33	32	33
Heating Degree Days[3]			
Actual	3,597	3,466	3,767
Forecast based on normal weather	3,602	3,546	3,514
Number of Active Customers[4] – end of year			
Residential	1,508,381	1,329,439	1,215,998
Commercial	120,397	110,846	106,298
Industrial	4,676	4,292	4,072
Wholesale	1	1	1
Transportation	364,027	518,689	598,704
	1,997,482	1,963,267	1,925,073
Average Revenue (per 10^3m^3) [1]			
Residential	$348	$357	$433
Commercial	$294	$289	$374
Industrial	$250	$244	$316
Wholesale	$168	$177	$246
Average Use per Residential Customer (m^3)[1]	2,572	2,507	2,726
Number of Employees – end of year	1,971	1,873	1,859

1 m^3 = cubic metre; 10^3m^3 = thousand cubic metres; 10^6m^3 = million cubic metres;
28.369 10^6m^3 = 1 billion cubic feet (bcf)

2 Includes volumes for unbundled customers who deliver their own natural gas into the Company's distribution system and manage their load balancing independent of the Company.

3 Heating degree days is a measure of coldness that is indicative of volumetric requirements for natural gas utilized for heating purposes in the Company's distribution franchise area. It is calculated by accumulating, for the fiscal year, the total number of degrees each day by which the daily mean temperature falls below 18 degrees Celsius. A daily mean temperature of zero degrees Celsius on any day equals 18 heating degree days for that day. The figures given are those accumulated in the GTA.

4 Number of active customers is the number of natural gas consuming customers at the end of the year and includes natural gas sales and transportation service customers. As the commodity cost of natural gas is flowed through to natural gas sales customers with no mark up, the composition of customers between natural gas sales and transportation service has no material impact on the Company's earnings.

BUSINESS OUTLOOK

Amherstburg Solar Projects

In August 2011, the Company's parent transferred a 99.9% limited partnership interest in Project Amherstburg to the Company. Project Amherstburg holds two solar projects, consisting of separate 10 megawatt (MW) and 5-MW facilities, both located in Amherstburg, Ontario. The total consideration transferred for the two projects was approximately $66 million, and was primarily funded by the issuance of common shares. The remaining 0.1% limited partnership interest is owned by the general partner, Project AMBG2 Inc., a wholly-owned subsidiary of Enbridge Inc. First Solar Inc. constructed both facilities under fixed price engineering, procurement and construction agreements, and is providing operating and maintenance services for a period of 10 years to both projects, with an optional 10-year renewal. Construction was completed and commercial operations commenced in August 2011. The combined facilities' power output is being sold to the Ontario Power Authority pursuant to 20-year fixed price power purchase agreements. The investment complies with the Affiliate Relationships Code for Gas Utilities issued by the OEB and the Company's Undertakings to the Lieutenant Governor in Council for the Province of Ontario.

Customer Care Agreement Extension

In February 2011, the Company's Board of Directors approved a five-year nine month extension to the Company's customer care services contract with a third party service provider for call centre, collections and billing services. This contract extension is effective April 1, 2012 and has been structured to provide enhanced levels of customer service and cost certainty. The total cost of the customer care services during the term of the extension is approximately $360 million. The Company filed an application with the OEB in June 2011 requesting that the OEB establish a procedure to facilitate the completion of a regulatory settlement agreement and subsequent approval of the rate recovery of the costs associated with the extended customer care services contract and other related costs. The OEB approved the Company's recovery of costs associated with the agreement in September 2011. Other elements of the customer care services also form part of the settlement agreement.

Unregulated Storage Services and Nexus Project

The deregulation of new natural gas storage in Ontario, coupled with the growing need for high-deliverability storage services by gas-fired power generators and other users, has created unregulated storage growth opportunities for the Company. As of December 31, 2011, the Company had expanded its storage capacity by 12% (to total capacity of approximately 0.3 billion cubic metres or 12 bcf), compared to pre-deregulation capacity, and sold unregulated storage services into the storage market.

The Nexus Project is a 4.5 bcf expansion of the Company's unregulated natural gas storage facility near Sarnia, Ontario. The project, which has received regulatory approval for construction, is secured by a long-term commercial contract. Construction began in the second quarter of 2011 and was completed in 2011 at an approximate capital cost of $34 million. Additional remediation and close-out activities are expected to be performed in 2012 to bring the total capital cost to approximately $38 million.

Renewable Natural Gas

The Company filed an application with the OEB in September of 2011 to permit the Company to purchase Renewable Natural Gas (RNG) for system gas customers in its system gas supply portfolio. RNG is a locally produced form of gas that is fully compatible with Natural Gas, and is typically derived from waste sources such as animal manure, municipal source separated organics (green bin waste), wastewater treatment plant by-products, and from the natural decay of organics in landfills.

Price Advantage of Natural Gas

Natural gas is the predominant fuel of choice in the residential heating market throughout the Company's franchise area. The primary competition for natural gas remains domestic fuel oil and electricity. Natural gas has continued to provide both environmental and price advantages, and this is expected to continue. During 2011, natural gas in the residential market experienced, on average, a price advantage on an equivalent annual volume basis of 66% (2010 - 60%) against electricity and 69% (2010 - 58%) against domestic fuel oil.

Customer Growth
The Ontario franchise area remains one of the most rapidly growing regions in North America. As such, the Company will continue to grow its natural gas distribution business by adding customers to existing infrastructure and through geographic extension of the distribution system.

While customer growth results in increased distribution volumes, this increase is partially offset by the impact of lower average annual consumption – all else being equal. Lower average annual consumption typically results from customers' increased adoption of energy efficient technologies along with more energy efficient building construction.

Electricity conservation efforts have included programs to encourage fuel switching from electricity to natural gas. The Company leverages its expertise in DSM to offer fee-for-service conservation services that can include fuel switching.

Energy Efficiency
Enbridge's 2.2 megawatt hybrid fuel cell power plant completed its third year of operations in 2011. The plant produces clean, low-carbon electricity from waste energy that is recovered from the pressure reduction process necessary to distribute natural gas. The Company is reviewing its pipeline network in Ontario to understand where additional applications would be appropriate.

GENERAL

EMPLOYEES
At December 31, 2011 the Company had 1,971 employees, 33% of whom are unionized. The Company's unionized employees are represented either by the Communications, Energy and Paperworkers Union, Local 975 (CEPU) or the International Brotherhood of Electrical Workers (IBEW), Local 97. A collective agreement with CEPU expiring in 2013 was ratified by union members in April 2011. A four-year collective agreement with the IBEW is in effect, expiring in February 2015.

ENVIRONMENTAL MATTERS

Federal and Provincial carbon regulations remain in development. With the withdrawal of Canada from the Kyoto protocol, sector specific carbon related regulations may develop. It is currently unclear how natural gas distributors will be specifically treated.

Ontario and Quebec, as members of the Western Climate Initiative, are implementing reporting and cap and trade programs respectively to meet their stated greenhouse gas (GHG) reduction targets. GHG reporting in Ontario was implemented in 2011, with subsequent years requiring verification of the data submitted. Quebec has announced a pilot cap and trade program prior to proposed regulatory compliance requirements. The Company will continue to monitor provincial developments and respond accordingly.

The Company is on track to deploy a carbon data management system to ensure compliance with 2012 reporting requirements. The Company continues to publicly report its GHG emissions and will continue to develop internal procedures to identify operationally related GHG reductions.

Former Manufactured Coal Gas Plant Sites
Information related to Former Manufactured Coal Gas Plant Sites can be found in Note 21 "Commitments and Contingencies" to the 2011 Audited Annual Consolidated Financial Statements.

RISK FACTORS

A discussion of the Company's risk factors can be found in the Company's MD&A for the year ended December 31, 2011 under the subheading "Risk Management and Financial Instruments".

SELECTED CONSOLIDATED FINANCIAL INFORMATION

(millions of Canadian dollars except per share amounts) Year Ended December 31,	**2011**	**2010**	**2009**
Total Revenue[1]	2,466	2,475	2,903
Earnings Applicable to the Common Shareholder[1]	209	191	218
Dividends Declared Per Share			
Common Shares	1.56	1.53	1.34
Preferred Shares – Group 3, Series D	0.60	0.52	0.84

1 Revenues include amounts billed to customers for natural gas, which varies with fluctuations in natural gas prices. Higher natural gas prices would increase revenues, but would not similarly impact earnings, given that the cost of natural gas flows through to customers. Earnings in two successive years may vary significantly primarily due to potentially varying weather patterns. Specifically, periods of colder than normal weather would typically result in higher earnings compared to periods of warmer than normal weather. As a result, a meaningful comparison can only be achieved after adjusting earnings for the impact of weather.

Since the issuer is an indirect wholly owned subsidiary of Enbridge, earnings per share is not provided.

DIVIDENDS

The declaration of dividends on the common shares is at the discretion of the Board of Directors. The Company targets to pay out approximately 90% to 100% of adjusted operating earnings as dividends. However, this policy range is subject to the Company's obligation to maintain average common equity in line with the deemed regulatory level, which may lead to a payout ratio outside of this range.

Floating adjustable cumulative cash dividends on the Group 3, Series D preferred shares are payable at 80% of the prime rate. The Company has the option to redeem the shares for $25.50 per share if the preferred shares are publicly traded, and for $25.00 per share in all other circumstances, together with accrued and unpaid dividends in each case.

On July 1, 2014, and every five years thereafter, the Group 3, Series D preferred shares can be converted, at the holder's option, into Group 2, Series D preferred shares, on a one-for-one basis, and will pay fixed cumulative cash dividends that are not less than 80% of the Government of Canada yield applicable to the fixed dividend period.

The Group 2, Series D preferred shares can be redeemed, at the Company's option, for $25.00 per share. The Group 2, Series D preferred shares can also be converted into Group 3, Series D preferred shares on a one-for-one basis at the holder's option on July 1, 2014 and every five years thereafter.

There are no restrictions that currently prevent the Company from paying dividends. However, in the event of liquidation, dissolution or winding-up of the Company, the preferred shareholders have priority in the payment of dividends over the common shareholder. As well, restrictions in the credit or financing agreements entered into by the Company or the provisions of applicable law may preclude the payment of dividends in certain circumstances.

DESCRIPTION OF CAPITAL STRUCTURE

Information related to the Company's capital structure can be found in Note 10 "Debt" and Note 12 "Share Capital" to the 2011 Audited Annual Consolidated Financial Statements.

RATINGS

The following table sets forth the ratings assigned to the Company's Group 3, Series D preferred shares, medium-term notes (MTNs) and unsecured debt, and commercial paper by DBRS Limited (DBRS) and Standard & Poor's Ratings Services (S&P).

	DBRS	S&P
Preferred Shares, Group 3, Series D	Pfd-2 (low)	BBB
MTNs and Unsecured Debt	A	A-
Commercial Paper	R-1 (low)	A-1 (low)
Rating Outlook	Stable	Stable

The credit ratings accorded by these rating agencies are not recommendations to purchase, hold or sell the shares or securities and such ratings do not comment as to market price or suitability for a particular investor. There is no assurance that any rating will remain in effect for any given period of time or that any rating will not be revised or withdrawn entirely by a rating agency in the future if, in its judgment, circumstances so warrant. A description from the rating agency for each credit rating listed in the table above is set out below.

DBRS has different rating scales for short and long-term debt and preferred shares. ''High'' or ''low'' grades are used to indicate the relative standing within a rating category. The absence of either a ''high'' or ''low'' designation indicates the rating is in the ''middle'' of this category. The Pfd-2 (low) rating assigned to the Company's preferred shares is the second highest of six rating categories for preferred shares. Preferred shares rated Pfd-2 are of satisfactory credit quality. Protection of dividends and principal is still substantial, but earnings, the balance sheet and coverage ratios are not as strong as Pfd-1 rated companies.

The A rating assigned to the Company's MTNs and unsecured debentures is the third highest of eight categories for long-term debt. Long-term debt rated A indicates good credit quality. The capacity for the payment of financial obligations is substantial, but of lesser credit quality than AA. Entities in this category may be vulnerable to future events, but qualifying negative factors are considered manageable.

While A is a respectable rating, entities in this category are considered to be more susceptible to adverse economic conditions and have greater cyclical tendencies than higher-rated securities. The R-1 (low) rating assigned to the Company's commercial paper is the third highest of ten rating categories and indicates good credit quality. The capacity for the payment of short-term financial obligations as they fall due is substantial. The overall strength is not as favourable as with higher rating categories. Entities in this category may be vulnerable to future events, but qualifying negative factors that exist are considered manageable.

S&P has different rating scales for short and long-term obligations. Ratings may be modified by the addition of a plus (+) or a minus (-) sign to show the relative standing within a particular rating category. The BBB rating assigned to the Company's preferred shares is the fourth highest of ten rating categories for long-term obligations. An obligor rated BBB has adequate capacity to meet its financial commitments; however, adverse economic conditions or changing circumstances are more likely to lead to a weakened capacity of the obligor to meet its financial commitments. The A- rating assigned to the Company's MTNs and unsecured debentures is the third highest of ten rating categories. An A rating indicates the obligor has strong capacity to meet its financial commitments, but is somewhat more susceptible to the adverse effects of changes in circumstances and economic conditions than obligors in higher-rated categories. The rating of A-1 (low) assigned to the Company's commercial paper is the highest of nine rating categories for short-term obligations. An obligor rated A-1 has strong capacity to meet its financial commitments.

CREDIT FACILITIES

Credit facilities carried a weighted average standby fee of 0.38% per annum from January to July 2011 and 0.22% per annum from August to December 2011 on the unused portion and draws bear interest at market rates.

The Company currently has a $700 million commercial paper program limit that is backstopped by committed lines of credit of $700 million. The term of any commercial paper issued under this program

may not exceed one year. The Company has the option, at its discretion, to extend the maturity date of the committed lines of credit for an additional year.

December 31, 2011	Total Facilities	Credit Facility Draws[1]	Available
(millions of Canadian dollars)			
Enbridge Gas Distribution Inc.	**700**	**545**	**155**
St. Lawrence Gas Company, Inc.	**12**	**10**	**2**
Total Credit Facilities	**712**	**555**	**157**

1 Includes facility draws and commercial paper issuances, net of discount, that are back-stopped by the credit facility.

DIRECTORS AND OFFICERS

DIRECTORS

The following table sets forth the names of the Directors of the Company as at February 14, 2012, their municipalities of residence, their respective principal occupations within the five preceding years and the year from which they first became a Director of the Company. Each Director who is elected holds office until the next annual proceedings of shareholders or until a successor is duly elected or appointed. The Company has an Audit, Finance & Risk Committee. The Directors and Officers do not beneficially own, directly or indirectly, any voting securities of the Company or its subsidiaries.

Name and Place of Residence	**Principal Occupation During the Five Preceding Years**	**Year First Became a Director**
J. Richard Bird[(1)] Calgary, Alberta Canada	Executive Vice President, Chief Financial Officer & Corporate Development, Enbridge Inc. since January 2008. Executive Vice President, Liquids Pipelines, Enbridge Inc. from May 2006 to January 2008.	2008
J. Lorne Braithwaite [(1)] Thornhill, Ontario Canada	Corporate Director. President and Chief Executive Officer of Build Toronto Inc. since April 2009.	2002
Patrick D. Daniel Calgary, Alberta Canada	President & Chief Executive Officer, Enbridge Inc. since January 2001.	1998
D. Guy Jarvis Aurora, Ontario Canada	President, Gas Distribution of Enbridge Inc. since September 2011 and President of the Company since September 2011. Senior Vice President, Investor Relations & Enterprise Risk of Enbridge Inc. from October 2010 to September 2011. Senior Vice President, Business Development of Enbridge Pipelines Inc. from March 2008 to October 2010. Vice President, Upstream Development, Enbridge Pipelines Inc. from December 2004 to March 2008.	2011
David A. Leslie [(1) (2)] Toronto, Ontario Canada	Corporate Director.	2007

Name and Place of Residence	Principal Occupation During the Five Preceding Years	Year First Became a Director
David T. Robottom, Q.C. Calgary, Alberta Canada	Executive Vice President & Chief Legal Officer of Enbridge Inc. since October 2010. Executive Vice President, Law of Enbridge Inc. from January 2010 to October 2010. Group Vice President, Corporate Law of Enbridge Inc. from June 2006 to January 2010.	2010

1 Member of the Audit, Finance & Risk Committee of the Board of Directors.
2 Mr. Leslie served as a member of the Board of Directors of Canwest Global Communications Corp. from March 26, 2007 to January 14, 2009. On October 6, 2009, Canwest Global Communications Corp. voluntarily entered into, and successfully obtained, an Order from the Ontario Superior Court of Justice (Commercial Division) relating to proceedings under the Companies' Creditors Arrangement Act.

OFFICERS

The following table sets forth the names of the Executive Officers, their current office with the Company on February 14, 2012, their municipalities of residence and their principal occupations for the five preceding years.

Name, Position and Place of Residence	Principal Occupation During the Five Preceding Years
D. Guy Jarvis President Aurora, Ontario Canada	President, Gas Distribution of Enbridge Inc. since September 2011 and President of the Company since September 2011. Senior Vice President, Investor Relations & Enterprise Risk of Enbridge Inc. from October 2010 to September 2011. Senior Vice President, Business Development of Enbridge Pipelines Inc. from March 2008 to October 2010. Vice President, Upstream Development, Enbridge Pipelines Inc. from December 2004 to March 2008.
Glenn W. Beaumont Senior Vice President, Operations Richmond Hill, Ontario Canada	Senior Vice President, Operations since October 2010. Vice President, Operations from May 2008 to October 2010. Vice President, Planning & Opportunity Development from February 2007 to May 2008. Vice President, Engineering & Technology from August 2006 to February 2007. President of Enbridge Gas New Brunswick Inc. since May 2009.
Mark R. Boyce Vice President, Law & Information Technology and Corporate Secretary Barrie, Ontario Canada	Vice President, Law & Information Technology and Corporate Secretary since October 2010. Vice President, Gas Distribution Law & Deputy General Counsel and Corporate Secretary from May 2007 to October 2010. Associate General Counsel & Corporate Secretary from June 2001 to May 2007.
James C. Grant Vice President, Energy Supply, Storage Development & Regulatory Aurora, Ontario Canada	Vice President, Energy Supply, Storage Development & Regulatory since July 2008. Senior Director, Energy Supply, Storage Development & Regulatory from May 2008 to July 2008. Director, Storage Operations & Development from April 2006 to May 2008.

Name, Position and Place of Residence	Principal Occupation During the Five Preceding Years
Narinder K. Kishinchandani Vice President, Finance Markham, Ontario Canada	Vice President, Finance since November 2010. Director, Finance & Control from December 2006 to November 2010.
James W. Milner Vice President, Pipeline Integrity & Safety Thornhill, Ontario Canada	Vice President, Pipeline Integrity & Safety since October 2010. Vice President, Engineering from February 2007 to October 2010.
Arunas J. Pleckaitis Vice President, Business Development & Customer Strategy Scarborough, Ontario Canada	Vice President, Business Development & Customer Strategy since May 2008. Vice President, Operations from December 2004 to May 2008. President of Enbridge Gas New Brunswick Inc. from October 1999 to May 2009.
Marc N. Weil Director, Human Resources & Facilities Thornhill, Ontario Canada	Director, Human Resources & Facilities since January 2010. Director, Information Technology from January 2006 to January 2010.

LEGAL PROCEEDINGS

Information related to the Company's legal proceedings can be found in Note 21 "Commitments and Contingencies" to the 2011 Audited Annual Consolidated Financial Statements.

INTEREST OF MANAGEMENT AND OTHERS IN MATERIAL TRANSACTIONS

No director, executive officer or principal shareholder of the Company, or associate or affiliate of these persons, has any material interest, direct or indirect, in any transaction within the last three years that has materially affected or will materially affect the Company.

TRANSFER AGENTS AND REGISTRARS

TRUSTEE AND REGISTRARS

Debenture
9.85% debenture

CIBC Mellon Trust Company of Canada
c/o BNY Mellon Trust Company of Canada
Corporate Trust Services
320 Bay Street, 11th Floor
Toronto, Ontario, M5H 4A6
and in Montreal, Calgary and Vancouver

For the above debenture, CIBC Mellon Trust Company of Canada is the Interest Dispersing Agent.

REGISTRAR AND PAYING AGENT

Medium Term Notes
Canadian Imperial Bank of Commerce
Debt Management Service
22 Front Street West, 5th Floor
Toronto, Ontario, M5J 2W5

TRUSTEE

Medium Term Notes
CIBC Mellon Trust Company of Canada
c/o BNY Mellon Trust Company of Canada
Corporate Trust Services
320 Bay Street, 11th Floor
Toronto, Ontario, M5H 4A6

REGISTRAR AND TRANSFER AGENT

Group 3 Preferred Shares
Computershare Investor Services Inc.
100 University Avenue
Toronto, Ontario, M5J 2Y1

MATERIAL CONTRACTS

The Company has not entered into any material contracts outside the ordinary course of business.

INTERESTS OF EXPERTS

The Company's auditors are PricewaterhouseCoopers LLP, Chartered Accountants, who have prepared an independent auditor's report dated February 14, 2012 in respect of the Company's consolidated financial statements as at December 31, 2011 and 2010 and for each of the years then ended. PricewaterhouseCoopers LLP has advised that they are independent with respect to the Company within the meaning of the Rules of Professional Conduct of the Institute of Chartered Accountants of Ontario.

ADDITIONAL INFORMATION

Additional information is provided in the Company's 2011 Audited Annual Consolidated Financial Statements and MD&A for the most recently completed financial year.

ADDITIONAL DISCLOSURE

VOTING SECURITIES AND PRINCIPAL HOLDERS OF VOTING SECURITIES

As of the date hereof, the only outstanding voting securities of the Company, which are 142,345,114 common shares, are held directly by Enbridge Energy Distribution Inc., an indirect wholly owned subsidiary of Enbridge. Each common share is entitled to one vote.

EXECUTIVE COMPENSATION

The Company's Statement of Executive Compensation is attached as Schedule A.

DIRECTORS AND OFFICERS OF ENBRIDGE INC.

The name, and province or state of residence of each Director or Executive Officer of Enbridge as at February 14, 2012 are as follows:

David A. Arledge, Florida	James J. Blanchard, Michigan	J. Lorne Braithwaite, Ontario
Patrick D. Daniel, Alberta	J. Herb England, Florida	Charles W. Fischer, Alberta
V. Maureen Kempston Darkes, Florida	David A. Leslie, Ontario	George K. Petty, California
Charles E. Shultz, Alberta	Dan C. Tutcher, Texas	Catherine L. Williams, Alberta
D. Guy Jarvis, Ontario	Al Monaco, Alberta	Stephen J. Wuori, Alberta
J. Richard Bird, Alberta	Janet A. Holder, British Columbia	Karen L. Radford, Alberta
David T. Robottom, Alberta	Byron C. Neiles, Alberta	John K. Whelen. Alberta

SCHEDULE A
ENBRIDGE GAS DISTRIBUTION INC.
STATEMENT OF EXECUTIVE COMPENSATION

COMPENSATION DISCUSSION AND ANALYSIS

This Compensation Discussion and Analysis describes Enbridge Inc.'s (Enbridge) executive compensation program for 2011 and applies to senior executives of Enbridge Gas Distribution Inc. (EGD). EGD does not have a Compensation Committee. This program is administered by the Human Resources & Compensation Committee (the Committee) of the Enbridge Board of Directors (the Enbridge Board) as described further below.

The following pages describe the compensation philosophy and programs for the named executives of EGD:

- President (Guy Jarvis) *current;*
- President (Janet Holder) *prior*;
- Vice President, Finance (Narinder (Narin) Kishinchandani)*;* and
- the next three most highly compensated executives (Glenn Beaumont, Arunas Pleckaitis and James Grant)

Ms. Holder was President until August 31, 2011 when she was appointed Executive Vice President, Western Access of Enbridge. Mr. Jarvis was the Senior Vice President, Investor Relations and Enterprise Risk of Enbridge until August 31, 2011 and was appointed President of EGD on September 1, 2011.

In addition to the role as principal officer of EGD, the President also has a strategic leadership role with Enbridge and reports to the President and Chief Executive Officer of Enbridge.

The 2011 compensation reported for Ms. Holder includes amounts from EGD in connection with her role as President until August 31, 2011 and from Enbridge in connection with her role as Executive Vice President, Western Access commencing September 1, 2011.

The 2011 compensation reported for Mr. Jarvis includes amounts from Enbridge in connection with his role as Senior Vice President, Investor Relations and Enterprise Risk until August 31, 2011 and from EGD in connection with his role as President commencing September 1, 2011.

Executive Summary

Enbridge's vision is to be the leading energy delivery company in North America. While Enbridge may be viewed as having achieved elements of this vision, enhancing and sustaining this position remains a continuing long-term pursuit. Enbridge's objective is to generate superior economic value for shareholders through investing capital in a low-risk and disciplined manner. Consistently applied, such stewardship should continue to generate attractive risk adjusted returns and, in turn, provide for consistent and growing dividend distributions and related capital appreciation. The business is capital intensive and long-term in nature, therefore the impact of decisions made today may not be realized until several years in the future. However, Enbridge has made the commitment to its shareholders to deliver steady, visible and predictable results in the short-term and to operate its assets in a responsible manner.

The compensation programs at Enbridge reflect a blend of short, medium and long-term incentive awards to support its pay for performance philosophy. Relevant Enbridge corporate and business unit (EGD and certain affiliates) performance measures are established for the short-term compensation plan that focus on the critical financial, operational, safety and environmental aspects of the business. The performance measures for the medium and long-term plans focus on overall Enbridge performance aligned with its shareholder expectations for earnings growth and share price appreciation.

When assessing performance, the Committee takes into consideration both the objective pre-defined performance metrics as well as qualitative factors not captured in the formal metrics. For example, a decision to complete a certain acquisition may have long-term strategic benefits to Enbridge that may not be reflected in the short-term performance metrics. Also playing a role are a number of market-based and earnings-based key performance indicators that compare Enbridge's results to a peer group and to the broader market over a one to ten year time horizon. Therefore, the Committee's assessment of overall performance is based on a combination of the pre-defined performance metrics, the key performance indicators, as well as the qualitative aspects of management's responsibilities.

Risk Management and Executive Compensation Governance

Enbridge is committed to ensuring that the compensation programs and policies put in place are aligned with the long-term objectives of its shareholders. To accomplish this, Enbridge incorporates general risk management principles into all decision making processes across the organization and regularly reviews its executive compensation programs through third party compensation consultants. This integration and review procedure helps ensure that Enbridge's programs continue to support shareholder interests and regulatory compliance, and are aligned with sound principles of risk management and governance.

The Committee oversees Enbridge's compensation programs from the perspective of whether they encourage individuals to take inappropriate or excessive risks that are reasonably likely to have a materially adverse effect on Enbridge.

Enbridge has a pay for performance philosophy that is embedded into its compensation design. Enbridge believes its mix of pay programs, its approach to goal setting, establishing targets with multiple levels of performance and evaluation of performance results assist Enbridge in mitigating excessive risk-taking that could harm its value or reward poor judgment of its executives.

The compensation programs include a combination of short, medium and long-term elements that ensure its executives are incented to consider both the immediate and long-term implications of their decisions.

Executives are compensated for their short-term performance using a combination of financial, operational, safety, environmental, customer and employee metrics that ensure a balanced perspective and are a mix of both leading and lagging indicators. Performance thresholds are established that include both minimum and maximum payouts.

Stock award programs vest over multiple years and are aligned to overall corporate performance that drives superior value to shareholders.

Enbridge's insider trading and reporting guidelines prohibit directors, officers and employees from purchasing financial instruments that are designed to hedge or offset a decrease in market value of equity securities granted as compensation or held, directly or indirectly, by the director, officer or employee, including those of its business units.

The Committee has considered the concept of risk as it relates to Enbridge's compensation programs and does not believe these programs encourage excessive or inappropriate risk taking.

2011 Performance – Enbridge

2011 was a year in which Enbridge made tremendous progress on many fronts, including further securing its future growth. Enbridge achieved strong growth in earnings and cash flow in 2011, exceeding its guidance range. Adjusted earnings of $1,110 million (or $1.48 per share) represent an 11% increase over 2010.

Over the course of the year Enbridge reached agreement with its Liquids Pipelines shippers on a 10-year Competitive Toll Settlement (CTS), and secured an additional $6 billion of attractive growth opportunities across its existing businesses of liquids pipelines, gas pipelines and distribution, and green

energy as well as into new platforms including power transmission and the Canadian midstream gas sector.

Notable growth projects include the proposed $1.2 billion Athabasca Twinning Project to connect growing oil sands production and Enbridge's Gulf Coast Access project to broaden market access to the U.S. Gulf Coast for Canadian and U.S. crude oil production. The latter includes expansion of Enbridge's existing infrastructure between Flanagan, Illinois and Cushing, Oklahoma, and the reversal and expansion of the Seaway Pipeline System from Cushing to the U.S. Gulf Coast. Enbridge acquired 50% of the Seaway Pipeline System in 2011.

The rapidly growing Bakken region continued to be an area of focus. Enbridge received approval of its Canadian Bakken Expansion Program in late 2011 and has planned expansions for its regional infrastructure in both Canada and the U.S. in both its crude oil systems, and natural gas infrastructure through Enbridge's investments in Alliance and Aux Sable.

Enbridge entered the Canadian midstream sector through the $1.15 billion investment in the Cabin Gas Plant Development and advanced its strategic objectives to enter the power transmission sector through the acquisition of the 300-megawatt (MW) Montana-Alberta Tie-line project. Enbridge's green energy business continues to grow. In 2011, Enbridge placed approximately 370 MWs of wind and solar generating capacity into service and entered the renewable sector in Quebec through investment in the 300-megawatt Lac Alfred wind project.

At the end of 2011, Enbridge's total commercially secured projects stood at over $11 billion, reinforcing management's confidence that Enbridge can achieve an average annual growth rate in adjusted earnings per share of 10% through 2015, based on conservative assumptions for mainline throughput and future growth investment. In December 2011, Enbridge announced its 2012 guidance for adjusted earnings of $1.58 to $1.74 per share, the midpoint of which represents an approximately 12% increase over 2011.

2011 was also a year of progress in further reinforcing safety and operational integrity across all of Enbridge's business units. A comprehensive Operational Risk Management assessment and planning initiative was undertaken across the enterprise to identify and implement further risk mitigation strategies to provide assurance that Enbridge will achieve its safety, integrity and environmental protection objectives. Enhancing the safety focus of the organization was further strengthened this year with the enterprise-wide creation and adoption of Enbridge's Life Saving Rules and through the rollout of a number of additional safety-enhancing initiatives. This will remain the Company's top priority in 2012.

All of these developments had an impact on Enbridge share performance in 2011. Enbridge split its common shares on a two-for-one basis in May 2011. Enbridge's common shares reached a 52-week trading high of $38.17 on the TSX on December 30, before closing that day, and the year at $38.09 per common share. Since Enbridge's inception as a publicly traded entity over 58 years ago, it has delivered an average annual total shareholder return of 14%, outperforming the TSX Composite Index by almost 5% over a similar timeframe.

In December 2011, the Enbridge Board declared a quarterly dividend of $0.2825 per common share to begin in the first quarter of 2012, a 15% increase over the quarterly dividend paid in 2011. Enbridge has increased its dividend by an average of 13% per year over the last five years and has paid dividends for 58 years.

In 2011, Enbridge was the largest single point contributor to the TSX Index Composite. This means that Enbridge had the highest performance of the large cap companies and drove the positive return more than any other stock.

2011 Performance – EGD

EGD measures performance in the areas of financial, safety, governance, customer satisfaction and a composite of employee related indicators. 2011 net earnings were strong at $175 million. EGD continued to make progress towards achieving a longer-term goal of having top decile safety

performance through public and employee safety programs. While EGD continues to look for opportunities to improve customer service, it scored the highest compared to benchmark utilities in terms of overall value, customer communication quality, and overall billing. The composite of employee related indicators of leadership effectiveness, succession readiness and workforce planning effectiveness were slightly above target. The overall performance of EGD in 2011 was above target. The following table summarizes EGD's 2011 performance results:

Business Unit Performance[1]

Performance Area	Weight	Measures	Results (% of target)
Financial	40%	Net Income that is weather normalized to provide a fair assessment of performance. The 2011 results were $175 million compared to a target of $172 million. [2]	128%
Safety	40%	Measured by three indices: - Public Safety and Reliability Index which gauges program effectiveness for condition monitoring, emergency response, quality acceptance faults, customer equipment compliance, corrosion protection, third party damages and unplanned outages; - Employee Safety Index which measures safety inspections & training, quality assurance results, as well as injuries and accidents; and - Technical Training Composite index which measures the success of the training project management and the development and delivery of training materials.	85%
Governance	5%	Governance Index that measures SOx compliance, IT security policy compliance, implementation of internal audit findings, successful completion of governance related training, as well as compliance with the OEB's service quality requirements.	163%
Customer	10%	Index that measures customer satisfaction and corporate brand.	100%
Employee	5%	Composite that measures leadership effectiveness, succession readiness and workforce planning effectiveness	114%

[1] Affiliate operations include Enbridge Gas New Brunswick Inc., Gazifère Inc. and St. Lawrence Gas Company, Inc.
[2] The 2011 target earnings for EGD represent approximately 80% of the total earnings target for which the executives are accountable.

2011 Pay Decisions

Early in 2011, the Committee determined base salary increases, medium and long-term incentive awards. Base salary increases of 2.5% to 7.5%, depending on the executive, were implemented on April 1, 2011 to maintain a competitive position. In September 2011, EGD had a leadership change. Mr. Jarvis was appointed President, replacing Ms. Holder who assumed another leadership position within Enbridge. At that time Mr. Jarvis received a salary increase of 15.4% to recognize his assumption of EGD leadership responsibilities. In October 2011, Mr. Kishinchandani received a salary increase of 4.7% to improve his overall competitive positioning. Mr. Grant received a salary increase of 9.9% in October 2011 to recognize an increase in role, scope and accountability.

In February 2011, Enbridge granted 161,100 stock options to the EGD named executives. This grant reflected target delivery for this compensation program and the Black-Scholes value of the stock options at the time of grant. Effective January 1, 2011, Enbridge granted 16,200 performance stock units to the named executives, which resulted in total direct compensation (base salary + short-term incentive + medium-term incentive + long-term incentives) being well positioned relative to the competitive market. Both of the grants noted above have been restated in the following pages to 322,200 incentive stock options and 32,400 performance stock units to reflect Enbridge's two-for-one stock split in May 2011.

In early 2012, the Committee determined short-term incentive awards of $1,229,730 for the named executives which includes an award of $236,910 to the President of EGD. These awards were determined based on above target performance for Enbridge, above target performance of the business unit, and the individual performance of each named executive relative to objectives established at the start of 2011. Given Enbridge's exceptional performance during 2011 the Committee approved a 10% increase to the short-term incentive awards to reflect their significant accomplishments achieved.

Changes in 2012
The Committee reviews Enbridge's compensation philosophy and practices every year with assistance from Mercer (Canada) Limited (Mercer), an independent compensation consultant, to ensure they are appropriate, competitive and continue to meet intended goals. There are no compensation changes approved by the Committee for implementation in 2012.

As part of its ongoing assessment Enbridge will continue to review its pay programs during the course of 2012. Any changes will be brought forward to the Committee and the Enbridge Board for decision. Approved changes would come into effect in 2013.

Philosophy and Approach

Enbridge's approach to executive compensation is set by the Committee and approved by the Enbridge Board. The programs are designed to accomplish three things:

- Attract and retain a highly effective executive team;
- Align executives' actions with Enbridge's business strategy and the interests of Enbridge shareholders; and
- Reward executives for short, medium and long-term performance.

Benchmarking to Peers
Total compensation for the President of EGD is benchmarked against a North American group of companies based on his/her strategic role with Enbridge.

The Canadian companies are large pipeline, energy, utility and industrial companies that are similar to Enbridge in size. Together they reflect the Canadian business environment within which Enbridge operates.

The US companies are mainly oil and gas pipelines and utilities, because the US energy sector is much larger and has more depth than Canada's.

Peer Group

Canada	United States
Agrium Inc.	Ameren Corp.
Atco Ltd.	Centerpoint Energy Inc.
Canadian National Railway Company	DTE Energy Co.
Canadian Pacific Railway Ltd.	El Paso Corp.
Husky Energy	Nisource Inc.
Nexen Inc.	OGE Energy Corp.
SNC-Lavalin Group Inc.	Oneok Inc.
	PG&E Corp.
Suncor Energy Inc.	PPL Corp.
Talisman Energy Inc.	Questar Corp.
Teck Cominco Ltd.	Sempra Energy
TELUS Corp.	Spectra Energy Corp.
TransAlta Corp.	Williams. Co. Inc.
TransCanada Corp.	Xcel Energy Inc.

How Enbridge Compares

	Canada	United States
Revenue	Above 75th percentile	Above 75th percentile
Total assets	Above 75th percentile	Above 75th percentile
Number of employees	Between 25th and 50th percentile	Between 25th and 50th percentile
Market capitalization[1]	Above 75th percentile	Above 75th percentile

[1] As of September 30, 2011. All other information is based on most recently reported data.

Setting Compensation Targets

Base pay is targeted at the median, considering the skill, competency and experience of each individual. Targets for short, medium and long-term incentives are linked to base salary levels.

Total direct compensation is targeted at the median of comparator companies in North America. The market data for the President (in respect of 2011 compensation) is weighted 80% on the Canadian comparator group and 20% on the United States comparator group.

The compensation for the other named executives is managed within a framework applicable to all Senior Vice President and Vice President level positions across Enbridge. The competitiveness of this framework is based on market data extracted from third party compensation surveys. Two general surveys are used as well as energy industry specific surveys. The market data is considered from several perspectives including organization size (revenue greater than $5 billion) and industry sector (pipeline, energy and utility criteria). There is no one set of comparator companies from which the competitiveness of Enbridge's senior management programs is compared.

Share Ownership

It is important for all Enbridge executives to have a meaningful equity stake in Enbridge because owning shares is a tangible way to align their interest with those of Enbridge shareholders.

Target ownership is a multiple of base salary, depending on position level, and executives are required to meet the target within four years of being appointed to the position. Shares can be acquired by making contributions to the employee savings plan, exercising stock options or by making personal investments in Enbridge common shares. Shares that an executive holds personally, or in the name of a spouse, dependent child or trust, all count toward meeting the guidelines. Stock options do not.

Target and actual share ownership as of December 31, 2011:

Executive	Target ownership	Actual ownership	Meets requirements
Guy Jarvis	2x base salary	2x base salary	✓
Janet Holder	2x base salary	4x base salary	✓
Narin Kishinchandani	1x base salary	2x base salary	✓
Glenn Beaumont	1x base salary	2x base salary	✓
Arunas Pleckaitis	1x base salary	5x base salary	✓
James Grant	1x base salary	2x base salary	✓

Paying for Performance

Performance is the cornerstone of Enbridge's executive compensation programs. The programs are designed to motivate management to achieve the high return, low risk business model Enbridge shareholders expect, with a focus on the long-term. The Board reviews Enbridge's business plans over the short, medium and long-term and the HRC Committee links the compensation programs to these timeframes. The performance of Enbridge's peer group is also considered. Together, this ensures that management is focused on delivering value to Enbridge shareholders not only in the short-term, but also continued performance in the long-term.

Annual Compensation Decision-Making Process

Each year, the President and EGD executive team establish objectives for the upcoming year, which include financial objectives as well as other key priorities. Performance relative to the objectives is reviewed at the end of the year. The President completes a self assessment and his or her performance is reviewed by Enbridge's President & Chief Executive Officer. In February of each year, the President & Chief Executive Officer of Enbridge recommends to the Committee the compensation of the President including base salary and short-term, medium-term and long-term incentive awards. In making these decisions, the Committee is provided the award calculations based on the approved programs and competitive information compiled by the Committee's external compensation consultant.

The President follows this same process for the other EGD executives. Each executive completes a self assessment. Their performance during the year is documented, detailing accomplishments, areas of strength, and areas for development. In making the compensation recommendations, the performance evaluation, calculations based on approved programs, market information and internal equity with other senior executive roles across Enbridge is taken into consideration. Compensation recommendations are approved by the Committee.

The External Compensation Consultant
Enbridge has retained Mercer to advise it on the competitiveness and appropriateness of the compensation programs of Enbridge and its subsidiaries, as well as actuarial and benefit matters, and has done so since 2002. The Committee has assumed responsibility for the compensation of the directors and executive officers of EGD. The costs incurred by Enbridge for Mercer's services are allocated to EGD and other Enbridge subsidiaries as part of the corporate cost allocation process.

Elements of Total Compensation

Total compensation is made up of six components.

Base salary	Short-term incentive	Medium-term incentive	Long-term incentives
	• annual cash bonus	• performance stock units • restricted stock units	• stock options
Retirement benefits	**Other benefits**		
• pension plans • other retirement benefits	• savings plan • perquisites • medical, dental and insurance		

Base Salary
Enbridge base salaries offer fixed compensation for performing day-to-day responsibilities, while balancing the individual's role and competency, market conditions and issues of attraction and retention.

Short-Term Incentive

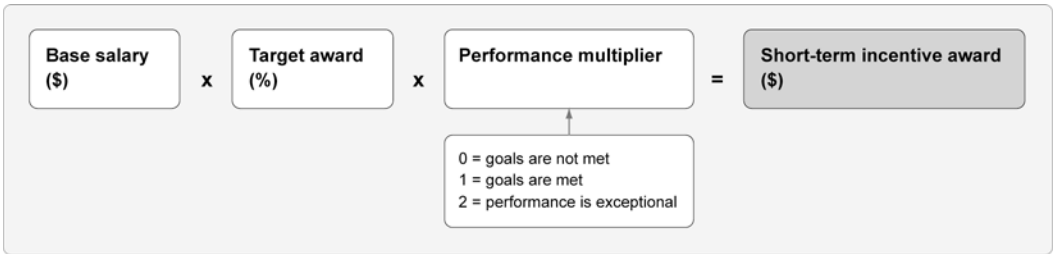
The short-term incentive plan is an annual bonus plan, paid out in cash. It's designed to motivate management to achieve corporate, business unit and individual objectives tied to executing the business strategy and to reward them according to their achievement for the year.

Each executive's target award and payout range reflect the level of responsibility associated with the role, as well as competitive practice, and are calculated as a percentage of base salary.

The award is paid out based on performance against a combination of Enbridge corporate, business unit and individual goals. To ensure alignment between each executive and the execution of the overall business strategy, all executives have a significant component of their incentive tied to operational business unit results as well as Enbridge corporate measures. For those executives who have primary responsibility for overall Enbridge corporate performance, the Enbridge corporate performance metrics are given the most weight. Business unit performance metrics are given the most weight for executives with primary responsibility within a business unit.

	Target award (as a % of base salary)	Payout range	Performance measures		
			Corporate	Business unit	Individual
Guy Jarvis	40%	0 – 80%	25%	50%	25%
Janet Holder	50%	0 – 100%	25%	50%	25%
Narin Kishinchandani	35%	0 – 70%	25%	50%	25%
Glenn Beaumont	40%	0 – 80%	25%	50%	25%
Arunas Pleckaitis	35%	0 – 70%	25%	50%	25%
James Grant	35%	0 – 70%	25%	50%	25%

Actual awards are calculated using a performance multiplier that ranges anywhere from 0 to 2.0, depending on whether the combination of goals has been met.



Using Discretion

The President & Chief Executive Officer of Enbridge can recommend to the Committee to adjust the calculated short-term incentive award for his direct reports, upwards or downwards, at his discretion. The Committee must approve the Chief Executive Officer's recommendations. The President may adjust the calculated awards for his or her direct reports at his or her discretion. Discretion may be exercised when the formulaic result does not fairly or accurately represent the outcomes and/or extraordinary events that occurred during the year that were not contemplated in the original measures or targets.

The Committee can change or waive the eligibility criteria, performance measures and the levels of target and maximum awards when it believes it is reasonable to do so. In doing so, the Committee may take into consideration broader levels of performance evidenced by the key performance indicators and the environment in which the performance was achieved.

Medium and Long-Term Incentives

Enbridge's medium and long-term incentives include three plans: the performance stock unit plan, performance stock option plan and incentive stock option plan. These plans motivate executives to deliver strong performance and reward them for achieving earnings targets, maintaining top quartile price-to-earnings performance compared to Enbridge peers, and appreciation in the Enbridge share price over the longer-term. Prior grants are not considered in determining future grants.

The number of incentive stock options awarded to each plan participant is determined by first applying the respective target award, established for each position as a percentage of salary and balances external market forces with relative internal value contribution. This target may be adjusted to reflect individual performance and succession candidacy and may be further adjusted to counter prevailing market pressures for particular skill sets.

The performance stock option plan has share price targets that must be attained for the options to become exercisable. Performance stock options have not been granted to the named executives of EGD in 2011. Enbridge also has a restricted stock unit plan. The restricted stock unit plan has no performance conditions and is designed only for retention of middle management. Restricted stock units were granted to Mr. Kishinchandani before he was promoted to his current role.

The performance stock unit plan and stock option plan each have different terms, vesting conditions and performance criteria. This mitigates the risks associated with incentive compensation programs by ensuring that executive decisions and actions are not incented to produce only short-term results for individual profit. This approach benefits Enbridge shareholders and maximizes the value of the longer-term incentives granted to executives.

	Performance stock unit plan	**Stock option plan**
Term	3 years	10 years
Description	Phantom shares with performance conditions that affect payout.	Options to acquire Enbridge shares.
Frequency	Granted every year	Granted every year
Performance Conditions	Two performance conditions, weighted 50% each: • Enbridge EPS relative to a target set at the start of the term • Enbridge price to earnings performance relative to Enbridge peers	
Vesting	Units mature in full after three years	Options vest at 25% per year over four years, starting on the first anniversary of the grant date
Payout	Paid out in cash at the end of three years based on: • the market value of an Enbridge common share at the end of three years • Enbridge performance	Participant acquires Enbridge shares at the exercise price defined at the time of grant (fair market value).

The table below shows the target amount that is granted to an executive in medium and long-term incentives each year (as a percentage of base salary) and the amount that each plan can contribute to that total.

	Target longer-term incentive grant (as % of base salary)	**Amount each plan contributes to total grant** (as % of base salary)		
		Performance stock unit plan	Stock option plan	Performance stock option plan [1]
Guy Jarvis	85%	59.5%	25.5%	-
Janet Holder	200%	70%	70%	60%
Narin Kishinchandani	70%	21%	49%	-
Glenn Beaumont	85%	59.5%	25.5%	-
Arunas Pleckaitis	70%	21%	49%	-
James Grant	70%	21%	49%	-

[1] Due to the timing of her appointment, Ms. Holder did not receive performance stock options in the 2007 grant. Performance stock options are granted every 5 years.

Target awards for all executives except the President are adjusted by a multiplier. The multiplier is based on individual performance history, succession potential, retention considerations and market competitiveness. Actual awards are calculated as follows:

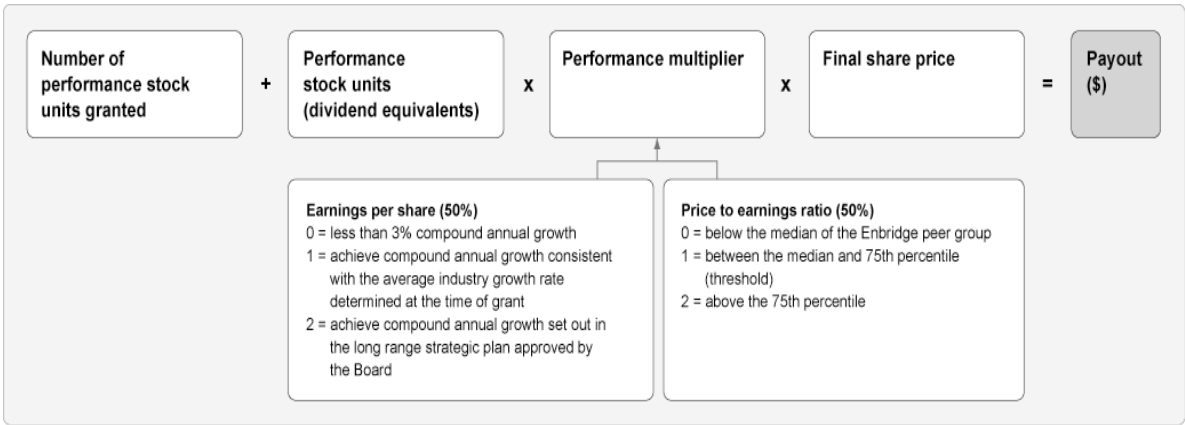
Performance Stock Units

Performance stock units give executives the opportunity to earn up to two times the value of their units when they mature after three years by achieving performance conditions. Enbridge typically grants performance stock units annually at the beginning of each year.

There are two performance measures, each weighted 50%:

- **Earnings per share (EPS) of Enbridge.** Enbridge uses this measure because it represents a commitment to Enbridge shareholders to achieve earnings that meet or exceed the industry growth rates projected at the time of grant. Executives are incented to meet or exceed the average growth rate forecasted for peer companies over a comparable time period.
- **Price-to-earnings ratio (P/E) of Enbridge.** Enbridge uses this measure because it is a strong reflection of how shareholders view Enbridge stock and its growth potential relative to peer companies. Enbridge compares itself against the group of companies in the table below, chosen because they are all capital market competitors, have a similar risk profile and operate in an industry sector comparable to Enbridge.

Price-to-earnings ratio comparator group	
Ameren Corp.	OGE Energy Corp.
Canadian Utilities	Oneok Inc.
Centerpoint Energy Inc.	PG&E Corp.
Emera Inc.	Sempra Energy
Fortis Inc.	Spectra Energy Corp.
National Fuel Gas Corp.	TransAlta Corp.
Nisource Inc.	TransCanada Corporation



The payout is calculated using the actual performance multiplier that ranges between 0 and 2.0, depending on whether the performance measures are met. The final share price at the end of the term is the weighted average trading price of an Enbridge share on the TSX for twenty days prior to the end of the term.

Stock Options

A stock option gives an employee the option to buy one Enbridge share at some point in the future, at the exercise price defined at the time of grant.

Enbridge typically grants stock options in February of each year. Options vest in equal installments over a four-year period. The maximum term of an option is 10 years, but the term can be reduced if the executive leaves Enbridge. See page A27 for details.

The exercise price of an option is the weighted average trading price of an Enbridge share on the TSX for the last five trading days before the grant date. If the grant date is during a trading blackout period, Enbridge will adjust the grant date to no earlier than the sixth trading day after the trading blackout period ends. Enbridge does not backdate stock options.

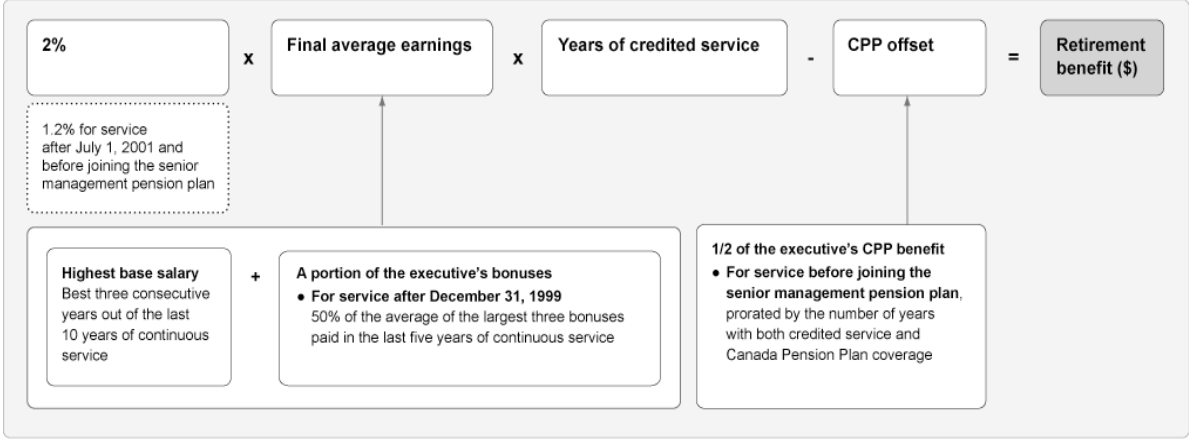
Stock options may be granted to executives joining EGD. In this case, Enbridge normally grants the options on the executive's date of hire. If the hire date falls within a blackout period, the grant is delayed until after the end of the blackout period.

Retirement Benefits

As of January 1, 2000 (or at the date they became a member of management if later), the executives joined the senior management pension plan which is a non-contributory defined benefit plan that pays out an enhanced retirement income to all senior management employees. Prior to becoming members of the senior management pension plan, the executives participated in a defined benefit pension plan.

Defined Benefit Plan

The table below shows how the retirement benefit payable is calculated under the defined benefit pension plans applicable to the named executives:



Some key terms of the plan:

- Retirement age: Executives can retire with an unreduced pension at age 60 or as early as age 55 with 30 years of service. Otherwise, they can retire as early as age 55 in which case their retirement benefit is reduced by 3% per year before age 60. For executives who joined the senior management pension plan after January 1, 2000, the reduction is 5% per year before age 60 for service prior to joining the senior management pension plan.
- Adjustment for inflation: Retirement benefits are indexed at 50% (55% for retirement benefits in respect of service prior to January 1, 2000) of the annual increase in the consumer price index.
- Survivor benefits: the pension is payable for the life of the member. If the member is single at retirement, 15 years of pension payments are guaranteed. If the member is married at retirement and dies before their spouse, 60% of the pension will continue to the spouse for his/her lifetime.
- Flexibility: To attract and retain executives, Enbridge can negotiate additional years of credited service or higher pension accruals, subject to approval by the Committee.

Other Retirement Terms

- The short-term incentive is pro-rated for service in the last year of employment.
- Unvested performance stock units are pro-rated for the period of active employment during the term of the grant. The units will continue to vest according to the terms of the plan.
- Unvested stock options will continue to vest. Executives can exercise stock options up to three years after retirement, or up to the date the option expires (whichever is earlier).

Other Benefits

The savings plan, perquisites and benefits plans are key elements of Enbridge's total compensation package for executives.

Savings Plan

The savings plan encourages share ownership by matching employee contributions of up to 2.5% of base salary toward the purchase of Enbridge shares. The executives participate in this plan along with all other employees.

Perquisites

Executives receive an annual perquisite allowance to offset expenses related to their position. This includes the cost of owning and operating a vehicle, parking and recreational clubs. These allowance levels are reviewed regularly for competitiveness. Mr. Jarvis and Ms. Holder are also reimbursed for a portion of costs for personal financial planning.

	Perquisite allowance (2011)	Financial planning reimbursement
Guy Jarvis	$20,000	50%, up to $5,000
Janet Holder	$35,000	50%, up to $5,000
Narin Kishinchandani	$20,000	-
Glenn Beaumont	$20,000	-
Arunas Pleckaitis	$25,000	-
James Grant	$20,000	-

Medical, Dental and Insurance Benefits

Medical, dental and insurance benefits are available to meet the specific needs of individuals and their families. The executives participate in the same plan as all other employees. The plans are structured to provide minimum basic coverage with the option of enhanced coverage at a level that is competitive and affordable.

The Committee reviews the retirement and other benefits regularly. These benefits are a key element of a total compensation package, and are designed to be competitive and reasonably meet the needs of executives in their current roles and when they retire from Enbridge.

2011 Performance and Compensation

Base Salary

The following table outlines the base salary of the executives as of December 31 of the year indicated:

	2011 base pay ($)	Increase from 2010 (%)	2010 base pay ($)	Increase from 2009 (%)
Guy Jarvis	350,000	21%	288,900	7.0%
Janet Holder	420,000	5%	400,000	27.0%
Narin Kishinchandani	225,000	13%	200,000	24.9%
Glenn Beaumont	310,500	4%	300,000	22.6%
Arunas Pleckaitis	288,390	2%	281,360	2.5%
James Grant	253,900	15%	221,000	8.9%

See the discussion for each executive starting on page A17 for information about base salary increases.

Short-Term Incentive

The short-term incentive is awarded based on performance against a combination of Enbridge corporate, business unit and individual objectives. Business unit performance is given the most weight.

Corporate Performance

Enbridge 2011 corporate performance was measured by Adjusted EPS. This is a metric that focuses on return to shareholders and is aligned with how investors and security analysts assess Enbridge's performance on an annual basis. Adjusted EPS is closely aligned with Enbridge's targets and objectives and is consistent with information reported regularly to the investor community. It is a metric that is

understandable from an employee perspective. The annual Enbridge Board approved budget establishes the target (1.0 multiplier) for this metric. The minimum (0) and maximum (2.0) multipliers are set using the low end and top end of the external guidance range that is publicly disclosed at the start of the year. The Adjusted EPS metric represents 25% of the named executives' short-term incentive award.

Enbridge's 2011 EPS guidance range was $1.38 – $1.48 as approved by the Enbridge Board at the start of the year. Actual performance was $1.48.

The Committee also considered Enbridge's performance compared to other companies in its performance stock unit peer group and companies in the TSX and TSX Composite indices, as measured by dividend per share growth, total shareholder return and reward to risk over the past one, three, five and 10 year periods. Enbridge's 2011 performance on all of the key performance indicators was very strong, featuring:

- 12.3% EPS growth;
- 15% dividend per share growth (one of the highest in its peer group);
- A reward to risk ratio at the 97th percentile of the industry; and
- Competitive total shareholder return in all periods (one year: 89th percentile; three year: 91st percentile; five year: 100th percentile; and 10 year: 100th percentile).

Business Unit Performance

Business unit performance for EGD is measured by a variety of metrics tailored to reflect the success in executing EGD's operations, strategies and initiatives for which the executives are accountable, including certain affiliate operations. Refer to page A3 for an outline of EGD's 2011 performance measures and results.

The results, as a percentage of target, translate into an overall multiplier of 1.09 out of 2.0 for the executives of EGD.

Individual Performance

Individual performance is measured by objectives established at the start of the year by each executive. The President's objectives are established taking into account EGD's financial, operational and strategic priorities.

The President establishes individual objectives for the other executives, also at the beginning of the year, basing them on areas of strategic and operational emphasis related to their portfolio, the development of succession candidates, employee engagement, community involvement and leadership.

See the discussion for each executive starting on page A17, for information about business unit and individual performance.

Overall Performance

The table below shows how each executive's overall performance multiplier was calculated in 2011.

	A – Enbridge Corporate performance				B - Business unit performance				C - Individual performance				Overall performance multiplier [1]
	Weight	×	Corporate multiplier	= Total A	Weight	×	Business unit multiplier	= Total B	Weight	×	Individual multiplier	= Total C	Total A+B+C
Guy Jarvis [2]	25%		2.00	0.50	50%		1.46	0.73	25%		1.60	0.40	1.63
Janet Holder [2]	25%		2.00	0.50	50%		1.23	0.62	25%		1.60	0.40	1.52
Narin Kishinchandani	25%		2.00	0.50	50%		1.09	0.55	25%		1.55	0.39	1.43
Glenn Beaumont	25%		2.00	0.50	50%		1.09	0.55	25%		1.40	0.35	1.40
Arunas Pleckaitis	25%		2.00	0.50	50%		1.09	0.55	25%		1.55	0.39	1.43
James Grant	25%		2.00	0.50	50%		1.09	0.55	25%		1.65	0.41	1.46

[1] Differences in the overall performance multipliers are due to rounding.

[2] Mr. Jarvis and Ms. Holder have pro-rated overall performance multipliers as a result of holding positions in different business units over the course of 2011. Ms. Holder's 2011 STIP is prorated based on Enbridge corporate and business unit performance associated with 8 months at EGD and 4 months at Enbridge. Mr. Jarvis' 2011 STIP is prorated based on Enbridge corporate and business unit performance associated with 4 months at EGD and 8 months at Enbridge.

The overall performance multiplier is used to calculate each executive's short-term incentive as follows:

	Base salary ($)	×	Target	×	Overall performance multiplier	=	Calculated short-term incentive award ($) [2]	Actual short-term incentive award ($) [3]
Guy Jarvis [1]	350,000		40%		1.63		239,913	263,910
Janet Holder [1]	420,000		50%		1.52		317,800	349,580
Narin Kishinchandani	225,000		35%		1.43		112,809	124,100
Glenn Beaumont	310,500		40%		1.40		173,259	190,590
Arunas Pleckaitis	288,390		35%		1.43		144,592	159,060
James Grant	253,900		35%		1.46		129,521	142,490

[1] Mr. Jarvis and Ms. Holder have pro-rated overall performance multipliers as a result of holding positions in different business units over the course of 2011. Ms. Holder's 2011 STIP is prorated based on Enbridge corporate and business unit performance associated with 8 months at EGD and 4 months at Enbridge. Mr. Jarvis' 2011 STIP is prorated based on Enbridge corporate and business unit performance associated with 4 months at EGD and 8 months at Enbridge.

[2] The calculated short-term incentive awards vary from the amount obtained by applying the formula because of rounding.

[3] Discretionary adjustments were made and the actual short-term incentive award was increased by an additional 10% of the calculated award due to strong organizational performance, and vary from the amount obtained by applying the formula because of rounding.

Longer-Term Incentives

Awards in 2011

Performance Stock Units

The table below shows the performance stock units granted to the named executives in early 2011.

	A Performance stock units granted (#)	B Value ($) (A x $27.92) [1]	C Value (%) (B / salary on Dec. 31, 2010)
Guy Jarvis[2]	12,000	335,040	116%
Janet Holder	12,000	335,040	84%
Narin Kishinchandani	1,600	44,672	22%
Glenn Beaumont	3,000	83,760	28%
Arunas Pleckaitis	2,000	55,840	20%
James Grant	1,800	50,256	23%

[1] For more information on the value of the 2011 Performance Stock Unit grant see Note 1 under the heading "Summary Compensation Table" on page A23 of this Schedule. The number of units and the unit prices have been restated consistent with the Enbridge (TSX) stock split of May 2011.

[2] Mr. Jarvis' 2011 Performance Stock Units were granted in respect of his employment with Enbridge.

Stock Options

The table below shows the stock options granted to the named executives in early 2011.

	A Stock options granted (#)	B Value ($) (A x $4.00) [1]	C Value (%) (B / salary on Dec. 31, 2010)
Guy Jarvis[2]	101,200	404,800	140%
Janet Holder	80,000	320,000	80%
Narin Kishinchandani	27,000	108,000	54%
Glenn Beaumont	49,400	197,600	66%
Arunas Pleckaitis	34,600	138,400	49%
James Grant	30,000	120,000	54%

[1] For more information on the value of the 2011 Stock Option grant see Note 2 under the heading "Summary Compensation Table" on page A23 of this Schedule. The number of units and the unit prices have been restated consistent with the Enbridge (TSX) stock split of May 2011.

[2] Options granted to Mr. Jarvis in 2011 were in respect of his employment with Enbridge.

Forecast Payouts

The performance stock units granted in 2009 vested on December 31, 2011. The forecast performance multiplier is 2.0 based on the following:

	Target	Result	Forecast Performance multiplier
EPS	$1.11	$1.48 (Actual)	2 X (50% weighting)
P/E ratio	75th percentile	98th percentile (Forecast)	2 X (50% weighting)

The table below shows the forecast performance stock unit payouts to the named executives in March 2012[1]:

	Performance stock units granted in 2009 [2]	+	Equivalent to reinvested dividends	=	Total performance stock units	x	Forecast performance multiplier [3]	x	Final share price ($)	=	Payout ($) [4]
Guy Jarvis	6,200		657.67		6,857.67		2.00		36.38		498,964
Janet Holder	4,600		487.95		5,087.95		2.00		36.38		370,199
Glenn Beaumont	2,000		212.15		2,212.15		2.00		36.38		160,956
Arunas Pleckaitis	2,200		233.37		2,433.37		2.00		36.38		177,052
James Grant	1,600		169.72		1,769.72		2.00		36.38		128,765

[1] Mr. Kishinchandani was not a member of the EGD executive team at the time of grant in 2009 and did not receive performance stock units. He was granted restricted stock units that matured in 2011. See the table below for amounts paid out. The number of units and the unit prices have been restated consistent with the Enbridge (TSX) stock split of May 2011.

[2] The number of units and the unit prices have been restated consistent with the Enbridge (TSX) stock split of May 2011.

[3] The final performance multiplier will be determined in March 2012.

[4] Differences in the calculated amounts and the forecast payout values are due to rounding.

The table below shows the restricted stock unit payouts to the named executives on December 31, 2011.

	Restricted stock units granted in 2009 [1]	+	Equivalent to reinvested dividends	=	Total restricted stock units	x	Final share price ($)	=	Payout ($)
Narin Kishinchandani	1,200		127.29		1,327.29		35.41		46,999

[1] The number of units and the unit prices have been restated consistent with the Enbridge (TSX) stock split of May 2011.

Named Executive Profiles

The profiles for each of the named executives provide the following information:

- A summary of the total direct compensation over the past 3 year period;
- A summary of the individual accomplishments in 2011; and
- The award decisions by the Committee and the President.

Guy Jarvis

President (current)

Total Direct Compensation

	2011		2010	2009
	$	%	$	$
Cash				
Base salary	315,287	10.9	284,172	270,000
Short-term incentive	263,910	14.5	230,520	192,820
	$579,197	**12.5**	**$514,692**	**$462,820**
Equity				
Performance stock units	335,040	(9.1)	368,394	119,970
Stock options	404,800	(24.8)	538,118	296,120
	$739,840	**(18.4)**	**$906,512**	**$416,090**

Information on the values presented in this table is provided in the notes to the Summary Compensation Table found on page A23 of this Schedule.

Base Salary

Mr. Jarvis held the role of Senior Vice President, Investor Relations and Enterprise Risk with Enbridge Inc. until August 31, 2011. He received a 5.0% salary increase on April 1, 2011 to $315,287 to maintain market competitiveness. On September 1, 2011 Mr. Jarvis transferred into the EGD business unit as President and he received an increase to base pay of 15.4% to reflect expanded leadership responsibilities.

Short-Term Incentive

In both roles held by Mr. Jarvis, a portion of his short-term incentive award is based on Enbridge corporate performance measured in 2011 by adjusted EPS. Corporate performance on this measure was determined to be 2.0 out of 2.0. See page A12 for information about the corporate performance multiplier.

2011 business unit performance was determined on a pro-rata basis for his time employed with EGD, and Enbridge Inc. Overall the performance of these two business units was above target and accounted for 50% of Mr. Jarvis' short-term incentive award calculation using a combined multiplier 1.46 out of 2.0. See page A13 for more information.

Approximately 25% of Mr. Jarvis' short-term incentive award is based on an individual performance multiplier of 1.6 out of 2.0.

In 2011 Mr. Jarvis, while in his role as President:

- delivered strong earnings performance of EGD;
- oversaw the development of a comprehensive operational risk management plan to ensure the safety and reliability of the distribution system;
- oversaw the planning of a large distribution infrastructure project in the Greater Toronto Area (GTA) that will address growth and operational requirements as well as gas supply and transportation considerations;
- instituted the development of a long-term gas supply and pipeline strategy; and
- reviewed and approved the approach taken to develop a 2013 regulatory re-basing and subsequent incentive regulation plan.

Overall, Mr. Jarvis' combined short-term incentive award based on his performance was determined to be $263,910. This award reflects the 10% increase approved by the Committee to recognize Enbridge's exceptional performance in 2011.

Medium and Long-Term Incentives
Mr. Jarvis was awarded 50,600 stock options and 6,000 performance stock units in early 2011. These numbers have been restated to 101,200 stock options and 12,000 performance stock units to reflect the May 2011 Enbridge stock split.

Janet Holder
President (former)

Total Direct Compensation

	2011		2010	2009
	$	%	$	$
Cash				
Base salary	415,000	21.7	340,975	315,000
Short-term incentive	349,580	43.3	244,000	254,050
	$764,580	**30.7**	**$584,975**	**$569,050**
Equity				
Performance stock units	335,040	108.6	160,582	89,033
Stock options	320,000	(49.7)	636,172	223,436
	$655,040	**(17.8)**	**$796,754**	**$312,469**

Information on the values presented in this table is provided in the notes to the Summary Compensation Table found on page A23 of this Schedule.

Base Salary
Ms. Holder was the President of EGD until August 31, 2011. On April 1, 2011 Ms. Holder received a salary increase of 5% to maintain market competitiveness. On September 1, 2011 Ms. Holder transferred to another business unit in Enbridge.

Short-Term Incentive
In both roles held by Ms. Holder, a portion of her short-term incentive award is based on Enbridge corporate performance measured in 2011 by Adjusted EPS. Corporate performance on this measure was determined to be 2.0 out of 2.0. See page A12 for information about the corporate performance multiplier.

2011 business unit performance was determined on a pro-rata basis for her time employed with EGD, and the Western Access business unit. Overall, the performance of these two business units was above target and accounted for 50% of Ms. Holder's short-term incentive award calculation using a combined multiplier of 1.5 out of 2.0. See page A13 for more information.

Approximately 25% of Ms. Holder's short-term incentive award is based on an individual performance multiplier of 1.6 out of 2.0.

In 2011 Ms. Holder, while in her role as President:
- drove strong earnings performance of EGD;
- increased the focus on safety and reliability of the distribution system and enhanced the safety culture of the organization;
- drove the development of a regulatory strategy to ensure EGD is well-positioned to meet regulatory filing requirements to ensure a successful 2013 rebasing and subsequent IR plan;
- continued to work with industry stakeholders in the energy sector to ensure a common approach to energy policy was developed in the province, where it was appropriate; and
- drove continued improvement in the areas of public safety and customer satisfaction.

Overall, Ms. Holder's combined short-term incentive award based on her performance in the combined roles was determined to be $349,580. This award reflects the 10% increase approved by the Committee to recognize Enbridge's exceptional performance in 2011.

Medium and Long-Term Incentives
Ms. Holder was awarded 40,000 stock options and 6,000 performance stock units in early 2011. These numbers have been restated to 80,000 stock options and 12,000 performance stock units to reflect the May 2011 Enbridge stock split.

Narin Kishinchandani
Vice President, Finance

Total Direct Compensation

	2011		2010	2009
	$	%	$	$
Cash				
Base salary	213,750	23.3	173,289	153,286
Short-term incentive	124,100	23.1	100,800	69,270
	$337,850	**23.3**	**$274,089**	**$222,556**
Equity				
Performance stock units	44,672	100.0	-	-
Restricted stock units	46,999	99.0	23,615	23,226
Stock options	108,000	96.6	54,929	56,532
	$199,671	**154.2**	**$78,544**	**$79,758**

Information on the values presented in this table is provided in the notes to the Summary Compensation Table found on page A23 of this Schedule.

Base Salary
On April 1, 2011 Mr. Kishinchandani received a salary increase of 7.5%. In October 2011 Mr. Kishinchandani received a salary increase of 4.7% to further improve his overall competitive positioning.

Short-Term Incentive
Enbridge corporate performance, measured in 2011 by Adjusted EPS, accounted for 25% of Mr. Kishinchandani's short-term incentive award. The performance multiplier on this measure was determined to be 2.0 out of 2.0. See page A12 for information about the corporate performance multiplier.

As a business unit of Enbridge, the performance of EGD accounted for 50% of Mr. Kishinchandani's short-term incentive award calculation. EGD's performance was determined by measures and targets established at the beginning of the year in the areas of financial, safety, governance, customer satisfaction and employee related indicators. The performance multiplier for the executives of EGD was determined to be 1.09 out of 2.0. See page A13 for more information.

Individual performance, with a multiplier of 1.55 out of 2.0, accounted for 25% of Mr. Kishinchandani's short-term incentive award.

In 2011 Mr. Kishinchandani:
- ensured the effective implementation of a transition plan to position EGD for a successful conversion to US GAAP in 2012;
- established a strong foundation to lead the transformation of the Finance department into an effective business support organization;
- developed and implemented improved processes to monitor and report on risks to enable a stronger risk-informed operational environment; and
- evaluated the effectiveness of the current business performance management framework to assist in structuring improved alignment with strategy.

Overall, Mr. Kishinchandani's short-term incentive award was $124,100. This award reflects the 10% increase approved by the Committee to recognize Enbridge's exceptional performance in 2011.

Medium and Long-Term Incentives

Mr. Kishinchandani was awarded 13,500 stock options and 800 performance stock units in early 2011. These numbers have been restated to 27,000 stock options and 1,600 performance stock units to reflect the May 2011 Enbridge stock split.

Glenn Beaumont

Senior Vice President, Operations

Total Direct Compensation

	2011		2010	2009
	$	%	$	$
Cash				
Base salary	307,875	17.1	262,826	244,725
Short-term incentive	190,590	8.6	175,500	148,950
	$498,465	**13.7**	**$438,326**	**$393,675**
Equity				
Performance stock units	83,760	36.4	61,399	38,710
Stock options	197,600	123.4	88,445	93,547
	$281,360	**87.8**	**$149,844**	**$132,257**

Information on the values presented in this table is provided in the notes to the Summary Compensation Table found on page A23 of this Schedule.

Base Salary

On April 1, 2011 Mr. Beaumont received a salary increase of 3.5% to maintain market competitiveness.

Short-Term Incentive

Enbridge corporate performance, measured in 2011 by Adjusted EPS, accounted for 25% of Mr. Beaumont's short-term incentive award. The performance multiplier on this measure was determined to be 2.0 out of 2.0. See page A12 for information about the corporate performance multiplier.

As a business unit of Enbridge, the performance of EGD accounted for 50% of Mr. Beaumont's short-term incentive award. Performance was determined by measures and targets established at the beginning of the year in the areas of financial, safety, governance, customer satisfaction and employee related indicators. The performance multiplier for the executives of EGD was determined to be 1.09 out of 2.0. See page A13 for more information.

Individual performance accounted for 25% of Mr. Beaumont's short-term incentive award with a performance multiplier of 1.4 out of 2.0.

In 2011 Mr. Beaumont:

- delivered strong earnings performance in EGD and its affiliates;
- developed Enbridge Distribution Safety Leadership Vision and initiated implementation of Safety Enhancement Plan;
- concluded successful negotiations of a 3-year Collective Bargaining agreement with the Communications, Energy and Paperworkers Union;
- concluded negotiations on two-year extensions to Extended Alliance Contracts; and
- developed and initiated the long-term Work and Asset Management strategy.

Mr. Beaumont's combined 2011 short-term incentive award, based on the performance described above, was $190,590. This award reflects the 10% increase approved by the Committee to recognize Enbridge's exceptional performance in 2011.

Medium and Long-Term Incentives
Mr. Beaumont was awarded 24,700 stock options and 1,500 performance stock units in early 2011. These numbers have been restated to 49,400 stock options and 3,000 performance stock units to reflect the May 2011 Enbridge stock split.

Arunas Pleckaitis

Vice President, Business Development & Customer Strategy

Total Direct Compensation

	2011		2010	2009
	$	%	$	$
Cash				
Base salary	286,632	2.5	279,645	274,500
Short-term incentive	159,060	1.8	156,240	172,840
	$445,692	**2.2**	**$435,885**	**$447,340**
Equity				
Performance stock units	55,840	(21.2)	70,845	42,581
Stock options	138,400	38.9	99,617	100,277
	$194,240	**13.9**	**$170,462**	**$142,858**

Information on the values presented in this table is provided in the notes to the Summary Compensation Table found on page A23 of this Schedule.

Base Salary
Mr. Pleckaitis received a salary increase of 2.5% on April 1, 2011 to maintain market competitiveness.

Short-Term Incentive
Enbridge corporate performance, measured in 2011 by Adjusted EPS, accounts for 25% of Mr. Pleckaitis' short-term incentive award. Corporate performance on this measure was determined to be 2.0 out of 2.0. See page A12 for information about the corporate performance multiplier.

As a business unit of Enbridge, the performance of EGD accounted for 50% of Mr. Pleckaitis' short-term incentive award calculation. Performance was determined by measures and targets established at the beginning of the year in the areas of financial, safety, governance, customer satisfaction and employee related indicators. The performance multiplier for the executives ofEGD was determined to be 1.09 out of 2.0. See page A13 for more information.

Individual performance accounts for 25% of Mr. Pleckaitis' short-term incentive award where the performance multiplier was 1.55 out of 2.0.

In 2011 Mr. Pleckaitis:
- was a significant contributor to EGD's strong earnings performance through effective revenue generation and cost management initiatives;
- successfully negotiated and received a favorable decision from the Ontario Energy Board on a major extension to 2018 of EGD's customer care outsourcing arrangement with a third party service provider. The new arrangement provides both higher levels of customer service as well as low and stable rates to customers; and
- advanced EGD's "green strategy" by designing and filing a Renewable Natural Gas application with the Ontario Energy Board.

Mr. Pleckaitis' combined 2011 short-term incentive award, based on the performance described above, was $159,060. This award reflects the 10% increase approved by the Committee to recognize Enbridge's exceptional performance in 2011.

Medium and Long-Term Incentives
Mr. Pleckaitis was awarded 17,300 stock options and 1,000 performance stock units in early 2011. These numbers have been restated to 34,600 stock options and 2,000 performance stock units to reflect the May 2011 Enbridge stock split.

James Grant

Vice President, Energy Supply, Storage Development & Regulatory

Total Direct Compensation

	2011		2010	2009
	$	%	$	$
Cash				
Base salary	233,095	10.5	210,983	198,477
Short-term incentive	142,490	15.2	123,700	123,500
	$375,585	**12.2**	**$334,683**	**$321,977**
Equity				
Performance stock units	50,256	6.4	47,230	30,968
Stock options	120,000	65.2	72,618	78,741
	$170,256	**42.1**	**$119,848**	**$109,709**

Information on the values presented in this table is provided in the notes to the Summary Compensation Table found on page A23 of this Schedule.

Base Salary

Mr. Grant received a salary increase of 3.5% on April 1, 2011 to maintain market competitiveness. He received an additional salary increase of 9.9% in October 2011 to recognize an increase in role, scope and accountability.

Short-Term Incentive

Enbridge corporate performance, measured in 2011 by Adjusted EPS, accounts for 25% of Mr. Grant's short-term incentive award. Corporate performance on this measure was determined to be 2.0 out of 2.0. See page A12 for information about the corporate performance multiplier.

As a business unit of Enbridge, the performance of EGD accounted for 50% of Mr. Grant's short-term incentive award calculation. Performance was determined by measures and targets established at the beginning of the year in the areas of financial, safety, governance, customer satisfaction and employee related indicators. The performance multiplier for the executives of EGD was determined to be 1.09 out of 2.0. See page A13 for more information.

Individual performance accounts for 25% of Mr. Grant's short-term incentive award where the performance multiplier was 1.65 out of 2.0.

In 2011 Mr. Grant:

- was responsible for unregulated storage operations. This business continued to grow in 2011 with the completion of a project that expanded capacity by 4.5 billion cubic feet. The project was approved, constructed and placed into service on time and within budget in 2011;
- ensured appropriate gas acquisition, transportation, and storage contracting to meet the needs of EGD and regulatory bodies;
- was responsible for the planning of a large distribution infrastructure project in the GTA. The project, which is subject to various regulatory and internal approvals, will be built in 2014/15 and will address growth and operational requirements for the GTA distribution system, as well as gas supply and transportation considerations. By year-end 2011 the project scope and preferred routing, as well as initial cost and regulatory timeline estimates were established; and
- set and implemented a regulatory affairs strategy to ensure that EGD's interests were fully represented with ratepayers and the Ontario Energy Board, and that appropriate rate making alternatives for the years 2013 and beyond were being assessed.

Mr. Grant's combined 2011 short-term incentive award, based on the performance described above, was $142,490. This award reflects the 10% increase approved by the Committee to recognize Enbridge's exceptional performance in 2011.

Medium and Long-Term Incentives
Mr. Grant was awarded 15,000 stock options and 900 performance stock units in early 2011. These numbers have been restated to 30,000 stock options and 1,800 performance stock units to reflect the May 2011 Enbridge stock split.

2011 RESULTS

Summary Compensation Table

The table below shows the total Enbridge and its subsidiaries paid and granted to the named executives for the years ended December 31, 2011, 2010 and 2009.

Executive and principal position	Year	Salary ($)	Share-based awards ($) [1]	Option-based awards ($) [2]	Non-equity (annual incentive plan) ($) [3]	Pension value ($) [4]	All other compensation ($) [5,6,7,8]	Total compensation ($)
Guy Jarvis President (Current) [9]	2011	315,287	335,040	404,800	263,910	287,000	63,083	1,669,120
	2010	284,172	368,394	538,118	230,520	4,000	35,120	1,460,324
	2009	270,000	119,970	296,120	192,820	-28,000	23,516	874,426
Janet Holder President (Prior) [10]	2011	415,000	335,040	320,000	349,580	660,000	91,054	2,170,674
	2010	340,975	160,582	636,172	244,000	69,000	41,541	1,492,270
	2009	315,000	89,033	223,436	254,050	37,000	44,924	963,443
Narin Kishinchandani Vice President, Finance	2011	213,750	91,671	108,000	124,100	83,000	46,384	666,905
	2010	173,289	23,615	54,929	100,800	89,000	12,911	454,544
	2009	153,286	23,226	56,532	69,270	36,000	11,318	349,632
Glenn Beaumont Senior Vice President, Operations	2011	307,875	83,760	197,600	190,590	99,000	55,759	934,584
	2010	262,826	61,399	88,445	175,500	150,000	23,468	761,638
	2009	244,725	38,710	93,547	148,950	20,000	25,559	571,491
Arunas Pleckaitis Vice President, Business Development & Customer Strategy	2011	286,632	55,840	138,400	159,060	71,000	58,643	769,575
	2010	279,645	70,845	99,617	156,240	52,000	25,000	683,347
	2009	274,500	42,581	100,277	172,840	-	25,000	615,198
James Grant Vice President, Energy Supply, Storage Development & Regulatory	2011	233,095	50,256	120,000	142,490	187,000	48,311	781,152
	2010	210,983	47,230	72,618	123,700	77,000	23,966	555,497
	2009	198,477	30,968	78,741	123,500	46,000	22,319	500,005

[1] Amounts in this column reflect the number of performance stock units awarded multiplied by the unit value which is determined by the volume weighted average of an Enbridge share on the TSX for 20 trading days prior to the grant date. The unit value for the performance units awarded was $27.92 (2011), $23.62 (2010), $19.36 (2009) on a split-adjusted basis. The unit value considers the notional dividends that are reinvested during the performance period. The unit value of the performance units varies from the accounting value which is based on a mark-to-market valuation of an Enbridge share at the end of each financial quarter, including notional dividends accrued. Particulars on performance stock units are set forth on page A9 of this Schedule.

[2] Amounts in this column reflect the number of options awarded multiplied by the option value. The option value for all regular stock option grants is determined using the Black-Scholes method. For compensation reporting, we use only the accounting option value:

Assumptions	February 2011	November 2010		February 2010		2009
	Grant date accounting value	Grant date fair value	Accounting value	Grant date fair value	Accounting value	Grant date fair value and accounting value
Expected option term in years	6	6	6	6	6	6
Expected volatility	17.80%	19.50%	19.10%	26.60%	19.10%	26.80%
Expected dividend yield	3.41%	3.11%	3.11%	3.64%	3.64%	3.88%
Risk free interest rate	2.88%	2.40%	2.40%	2.65%	2.65%	2.22%
Exercise price	$28.78	$27.84	$27.84	$23.30	$23.30	$19.81
Regular option value	$4.00	$3.96	$3.87	$4.66	$3.28	$3.37

[3] Amounts in this column reflect the short-term incentive plan awards earned in 2011 and payable on February 29, 2012. Awards are based on Enbridge, business unit and individual performance. Particulars on the short-term incentive awards calculations for each named executive are set forth on page A14 of this Schedule. There are no long-term non-equity incentive plans within the Enbridge compensation programs.

[4] The pension value is equal to the compensatory change shown in the defined benefit plans table. The pension values reported in 2009 for Ms. Holder include credited service with EGD only.

[5] Amounts in this column include the flexible perquisite allowance, excess flexible benefit credits paid to the executive, the taxable benefit from loans by EGD (which were made prior to the enactment of the Sarbanes-Oxley Act), parking, relocation subsidies, financial counseling benefits and other incidental compensation.

[6] In 2011, the executives were given a flexible perquisites allowance in the amount of $20,000 for Mr. Jarvis, $35,000 for Ms. Holder, $25,000 for Mr. Pleckaitis and $20,000 for each of Messrs. Beaumont, Grant, and Kishinchandani.

[7] EGD has a flexible benefit program where employees receive flex credits with which they can purchase various health and insurance benefits; apply as contributions to the savings plan; or be paid as additional compensation. Flexible benefit credits directed to the savings plan or paid as additional compensation to the executives are reported in All Other Compensation.

[8] For Ms. Holder, amount includes a taxable benefit from reimbursed mortgage interest of $7,414.

[9] Mr. Jarvis' compensation for 2011 includes amounts from Enbridge until August 31, 2011, and from EGD, from September 1, 2011.

[10] Ms. Holder's compensation for 2011 includes amounts from EGD until August 31, 2011, and from Enbridge from September 1, 2011.

Incentive Plan Awards

Outstanding option-based and share-based awards as of December 31, 2011.

	Option Based Awards					Share-Based Awards			
Executive	Number of securities underlying unexercised options (#)	Option exercise price ($)	Option expiration date	Value of unexercised in-the-money options ($) [1, 2] Vested	Unvested	Number of units that have not vested (#)	Unit maturity date	Market or payout value of units not vested [3, 4] ($)	Market or payout value of vested Share-based Awards not paid out or distributed [5] ($)
Guy Jarvis	101,200	$28.78	14-Feb-21	-	942,678	6,805	31-Dec-13	162,010	498,964
	43,350	$23.30	16-Feb-20	-	641,363	8,318	31-Dec-12	198,017	
	44,000	$19.81	25-Feb-19	-	804,540				
	17,650	$20.21	19-Feb-18	-	315,582				
Janet Holder	80,000	$28.78	14-Feb-21	-	745,200	12,373	31-Dec-13	294,563	370,199
	92,000	$27.84	12-Nov-20	235,750	707,250	7,251	31-Dec-12	172,630	
	58,400	$23.30	16-Feb-20	216,007	648,021				
	66,400	$19.81	25-Feb-19	607,062	607,062				
	52,600	$20.21	19-Feb-18	705,366	235,122				
	19,200	$19.13	9-Feb-17	364,032	-				
	22,800	$18.24	13-Feb-16	452,694	-				
	24,800	$15.84	3-Feb-15	551,800	-				
	47,200	$12.86	4-Feb-14	1,190,856	-				
	52,000	$10.41	6-Feb-13	1,439,256	-				
Narin Kishinchandani [4]	27,000	$28.78	14-Feb-21	-	251,505	1,650	1-Dec-13	39,275	-
	11,800	$23.30	16-Feb-20	43,645	130,936	1,066	1-Dec-12	40,619	
	16,800	$19.81	25-Feb-19	153,594	153,594				
	12,800	$20.21	19-Feb-18	171,648	57,216				
	10,200	$19.13	9-Feb-17	193,392	-				
	3,200	$18.24	13-Feb-16	63,536	-				
	3,200	$15.84	3-Feb-15	71,200	-				
Glenn Beaumont	49,400	$28.78	14-Feb-21	-	460,161	3,093	31-Dec-13	73,641	160,956
	19,000	$23.30	16-Feb-20	70,276	210,829	2,773	31-Dec-12	66,006	
	27,800	$19.81	25-Feb-19	254,162	254,162				
	27,800	$20.21	19-Feb-18	372,798	124,266				
	15,600	$19.13	9-Feb-17	295,776	-				
	18,600	$18.24	13-Feb-16	369,303	-				
	18,400	$15.84	3-Feb-15	409,400	-				
	6,000	$12.86	4-Feb-14	151,380	-				
Arunas Pleckaitis	34,600	$28.78	14-Feb-21	-	322,299	2,062	31-Dec-13	49,094	177,052
	21,400	$23.30	16-Feb-20	-	316,613	3,199	31-Dec-12	76,160	
	29,800	$19.81	25-Feb-19	136,223	408,670				
	29,800	$20.21	19-Feb-18	266,412	266,412				
	17,400	$19.13	9-Feb-17	247,428	82,476				
	19,600	$18.24	13-Feb-16	389,158	-				
	22,400	$15.84	3-Feb-15	498,400	-				
	45,200	$12.86	4-Feb-14	1,140,396	-				
	50,000	$10.41	6-Feb-13	1,383,900	-				
James Grant	30,000	$28.78	14-Feb-21	-	279,450	1,856	31-Dec-13	44,184	128,765
	15,600	$23.30	16-Feb-20	-	230,802	2,133	31-Dec-12	50,774	
	23,400	$19.81	25-Feb-19	106,967	320,902				
	12,400	$20.21	19-Feb-18	110,856	110,856				
	11,600	$19.13	9-Feb-17	164,952	54,984				
	8,800	$18.24	13-Feb-16	174,724	-				
	4,400	$15.84	3-Feb-15	97,900	-				
	4,800	$12.86	4-Feb-14	121,104	-				

[1] The value of the unexercised in-the-money stock options is based on the Enbridge closing share price on December 30, 2011 of $38.09. The number of units and the unit prices have been restated consistent with the Enbridge (TSX) stock split of May 2011.

[2] The market value of the performance stock units that have not vested is calculated by the number of units granted plus the number of units credited in lieu of reinvested dividends multiplied by the threshold performance multiplier and the Enbridge closing share price on December 30, 2011 of $38.09.

[3] We have assumed a threshold performance multiplier of 0.625, based on meeting minimum EPS threshold (50%) and a relative price to earnings ratio ranking of at least 50th percentile (50%). See page A16 for details.

[4] Mr. Kishinchandani was granted restricted stock units in 2010 and the market value of the units that have not vested is estimated by calculating by the number of units granted plus the number of units credited in lieu of reinvested dividends multiplied by the Enbridge share price on December 30, 2011 of $38.09.

[5] This is a reflection of the estimated payout value of the 2009 Performance Stock Unit grant, which vested on December 31, 2011 but will not be paid out until approximately March 2012. We have assumed a performance multiplier of 2.0.

Value Vested or Earned in 2011

Executive	Option-based awards – value vested during the year ($)	Share-based awards – value vested during the year ($) [1]	Non-equity incentive plan compensation – value earned during the year ($) [2]
Guy Jarvis	469,185	498,964	263,910
Janet Holder	554,951	370,199	349,580
Narin Kishinchandani	105,965	-	124,100
Glenn Beaumont	185,653	160,956	190,590
Arunas Pleckaitis	202,042	177,052	159,060
James Grant	128,595	128,765	142,490

[1] The performance stock units granted in 2009 matured on December 31, 2011. Awards are forecast. See page A16 for details.

[2] Based on Enbridge and business unit performance at an "exceeds" rating, and varying individual performance. See executive profiles for more information.

The value of the option-based awards is based on the following:

Grant date	Grant price ($)	2011 vesting date	Market price on 2011 vesting date ($)
12-Nov-10	27.84	12-Nov-11	35.10
16-Feb-10	23.30	16-Feb-11	28.70
25-Feb-09	19.81	25-Feb-11	28.88
19-Feb-08	20.21	19-Feb-11	28.74
09-Feb-07	19.13	09-Feb-11	28.80

The grant prices have been restated consistent with the Enbridge (TSX) stock split of May 2011.

Enbridge Shares Used for Purposes of Equity Compensation

Enbridge grants options under its current stock options plan, which was approved by Enbridge shareholders in 2007. Before these plans were approved, Enbridge issued stock options and performance stocks options under its legacy incentive stock option plan (2002). While Enbridge no longer grant options under this plan, there are still 7,657,034 options outstanding.

Enbridge shares reserved for equity compensation as of December 31, 2011

Plan	Number of securities to be issued upon exercise of outstanding options, warrants and rights (#) (a)	Weighted-average exercise price of outstanding options, warrants and rights ($) (b)	Number of securities remaining available for future issue under equity compensation plans (excluding securities reflected in column (a)) (#) (c)
Current stock option plans	23,935,031	23.31	26,923,604
Legacy stock option plan	7,657,034	15.90	-

Plan Restrictions

Shares Enbridge can reserve for issue under all stock option plans	36,662,414 in total, or 4.7% of our total issued and outstanding Enbridge shares as of December 31, 2011 • for an employee – no more than 5% of the total shares issued and outstanding • for an executive or other insider – no more than 10% of the total shares issued and outstanding
Shares that can be issued in a one-year period	• for an insider or his or her associate – no more than 5% of the total shares issued and outstanding • for insiders as a group – no more than 10% of the total shares issued and outstanding
The number of shares that can be issued as incentive stock options (within the meaning of the US Internal Revenue Code) to designated employees of Enbridge's US subsidiaries	Up to 2,000,000 shares can be issued to these employees under each option plan unless, at the time of the grant: • the employee owns shares that give him or her more than 10% of the total combined voting power of all classes of shares in his or her employer, or of its parent or subsidiary, unless the grant price is at least 110% of the fair market value of the shares, and the options are to be exercised within five years of the grant date, *or* • the employee has options that can be exercised in a single calendar year for shares that have a total fair market value of more than US$100,000 (or the amount set out in the US Internal Revenue Code)
Options the President & CEO of Enbridge can grant to new executives when they join EGD	Up to 2% of the total shares outstanding at the time of the grant (undiluted) or the amount stated in the policies of the Committee (whichever is less)

Termination Provisions of Stock Option Plans

The termination provisions for the Enbridge stock option plans are summarized below. Performance stock options have the same termination provisions as the regular stock options except for the following differences:

- for retirement, the entire grant of options is pro-rated;
- for death, unvested options are pro-rated and the plan assumes performance requirements have been met;
- for involuntary not for cause termination, unvested options are pro-rated; and,
- for change of control, the plan assumes the performance requirements have been met.

Pro-ration is based on active employment during the time vesting period (and any notice period on an involuntary not for cause termination will count as active employment), and pro-rated options are deemed to be time vested.

Reason for termination	Provision
Resignation	Can exercise vested options up to 30 days from the date of termination or until the option term expires (whichever is sooner).
Retirement	Options continue to vest and options that are vested or become vested can be exercised up to three years from retirement or until the option term expires (whichever is sooner).
Death	All options vest and can be exercised up to 12 months from the date of death or until the option term expires (whichever is sooner).
Disability	*Current stock option plans*: Options continue to vest based on the regular provisions of the plan. *Legacy stock option plan*: Options continue to vest. Vested options can be exercised up to three years from the date of disability or until the option term expires (whichever is sooner).
Termination - involuntary, not for cause	*Current stock option plans*: Unvested options continue to vest, and options that are vested or become vested can be exercised up to 30 days after the notice period expires or until the option term expires (whichever is sooner). *Legacy stock option plan*: Can exercise vested options up to 30 days from the date of termination or until the option term expires (whichever is sooner).
- involuntary, for cause	*Current stock option plans*: All options are cancelled on the date of termination. *Legacy stock option plan*: Can exercise vested options up to 30 days from the date of termination or until the option term expires (whichever is sooner).
- change of control or reorganization	*Current stock option plans*: For a change of control, options vest on a date determined by the Committee before the change of control. For any other kind of reorganization, options are to be assumed by the successor company. If they are not assumed, they will vest and the value will be paid in cash. *Legacy stock option plan*: Options will be assumed by the successor company. If they are not assumed, they will vest and the value will be paid in cash.

Retirement Benefits

The following table outlines estimated annual retirement benefits, accrued pension obligations and compensatory and non-compensatory changes for the executives under the defined benefit pension plans. All information is based on the assumptions and methods used for purposes of reporting financial statements.

Defined Benefit Plans

Executive	No. of years of credited service	Annual benefits payable ($) At year-end	Annual benefits payable ($) At age 65	Accrued obligation at start of the year ($)	Compensatory change ($)[1]	Non-compensatory change ($)[2]	Accrued obligation at year-end ($)
Guy Jarvis[3]	11.5	90,000	247,000	797,000	287,000	419,000	1,503,000
Janet Holder[4]	17.33	161,000	291,000	1,581,000	660,000	626,000	2,867,000
Narin Kishinchandani[5]	8.58	31,000	132,000	295,000	83,000	163,000	541,000
Glenn Beaumont	25.5	120,000	225,000	1,518,000	99,000	513,000	2,130,000
Arunas Pleckaitis[6]	24.75	175,000	201,000	2,035,000	71,000	577,000	2,683,000
James Grant	28.58	108,000	178,000	1,432,000	187,000	427,000	2,046,000

[1] The compensatory change includes current service cost, special arrangements and the difference between actual and estimated earnings.
[2] The non-compensatory change includes interest on the accrued obligation at the start of the year, changes in actuarial assumptions and other experience gains and losses.
[3] Mr. Jarvis has 0.33 years of credited service with EGD. A portion of Mr. Jarvis' retirement benefit will be paid from other Enbridge entities based on his service with those entities.
[4] Ms. Holder has 13.89 years of credited service with EGD. A portion of Ms. Holder's retirement benefit will be paid from other Enbridge entities based on her service with those entities. The final average earnings calculation for Ms. Holder will include bonuses for all service.
[5] Mr. Kishinchandani joined the senior management pension plan on December 1, 2006.
[6] The final average earnings calculation for Mr. Pleckaitis will include bonuses for all service.

Other Retirement Benefits

In addition to pension plan and post retirement benefits, retirees are entitled to the following compensation:

- annual incentive prorated for service in the last year of employment;
- unvested options continue to vest. Options may be exercised up to, but no later than, the earlier of three years following retirement and the expiry of the option;
- unvested performance stock unit grants are prorated for the period of active employment during the term of the grant and continue to vest in accordance with the terms of the plan.

Termination of Employment and Change of Control Arrangements

EGD does not have written employment agreements with its executives, other than with Mr. Pleckaitis. Upon resignation, retirement or termination without cause or constructive dismissal, each of the executives would be entitled to receive pension benefits under the senior management pension plan. The severance amounts payable to the executives upon termination without cause or constructive dismissal, except for Mr. Pleckaitis, would be individually determined based upon service, age, salary level and title. In the case of Mr.Pleckaitis, he would be entitled to the amounts described under "Executive Employment Agreement" below for termination without cause or constructive dismissal.

The following table discloses the lump sum value of pension benefits accrued under the senior management pension plan for the executives had they resigned, retired, been terminated involuntarily without cause or constructively dismissed as of December 31, 2011:

Executive	Pension ($)
Guy Jarvis	1,211,000
Janet Holder	2,666,000
Narin Kishinchandani	390,000
Glenn Beaumont	1,890,000
Arunas Pleckaitis	3,753,000
James Grant	1,910,000

Further information about the pension plan is set forth under the heading "Retirement Plan Benefits" of this Schedule.

Executive Employment Agreement

EGD has entered into an executive employment agreement with Mr. Pleckaitis which provides that should he experience involuntary termination (other than for cause) or constructive dismissal (as defined in the agreement) he will be paid the amounts described in the agreement.

In the event of an involuntary termination, other than for cause, or a voluntary termination by Mr. Pleckaitis within 60 days following constructive dismissal, as at December 31, 2011, Mr. Pleckaitis would be entitled to the following estimated incremental benefits:

	Base salary ($)[1]	Short-term incentive ($) [2]	Longer-term incentive ($) [3]	Benefits ($) [4]	Pension ($) [5]	Total payout ($)
Arunas Pleckaitis	576,780	329,080	1,697,080	33,643	432,000	3,068,583

[1] Amount in this column equals two times the annual salary.

[2] Amount in this column equals two times an annual short-term incentive award. The amount was calculated based on the short-term incentive awards paid in 2009 and 2010.

[3] Amount equals the in-the-money value of un-exercisable stock options as at December 31, 2011 that equals $1,396,470 for Mr. Pleckaitis. It also includes the amount $300,610 for the performance stock units outstanding at December 31, 2011 assuming they mature and the Enbridge earnings per share multiplier was 1.5 and the price to earnings ratio multiplier was 1.5. For the purposes of these calculations, the closing price of an Enbridge share on December 31, 2011 was $38.09.

[4] Amount in this column equals two times Flex Credits.

[5] This includes the value of two additional years of credited service and age at the assumed date of termination of December 31, 2011.

Change of Control

On a change of control of Enbridge, entitlement to short-term incentive, vesting of stock options, and maturing of performance units is accelerated as set forth below:

Plan	Result
Short-Term Incentive	Pro-rated short-term incentive payment based on service prior to the change of control assuming Corporate Performance at target, business unit performance as determined by Enbridge's President & Chief Executive Officer and individual performance meets requirements.
Stock Options	Unvested stock options conditionally vest not more than 30 days and not less than five days prior to the change of control.
Performance Units	All outstanding units mature 30 days prior to the change of control based on applicable performance measures achieved.

The following outlines the estimated incremental payment of longer-term incentive value in the event of a change of control on December 31, 2011:

Executive	Incremental Longer-Term Incentive Value ($) [1]
Guy Jarvis	3,568,225
Janet Holder	4,063,919
Narin Kishinchandani	406,693
Glenn Beaumont	795,312
Arunas Pleckaitis	1,697,079
James Grant	507,349

[1] Amount equals the in-the-money value of un-exercisable stock options as at December 31, 2011 and the value of the performance stock units outstanding at December 31, 2011. For the purpose of this calculation, a multiplier of 1.5 was applied. The closing price of an Enbridge share on December 31, 2011 was $38.09.

Directors' Compensation

Directors' Compensation Table

The following table sets forth the compensation elements and total compensation earned by each of EGD's directors in consideration for their service on EGD's Board of Directors during the financial year ended December 31, 2011.

Director[1]	Fees Earned[2] ($)	All Other Compensation[3] ($)	Total ($)
J. R. Bird	24,000	-	24,000
J. L. Braithwaite	24,000	2,500	26,500
P. D. Daniel	16,000	-	16,000
D. A. Leslie	27,000	2,000	29,000
D.T. Robottom	16,000	-	16,000

[1] Ms. Holder and Mr. Jarvis did not receive any compensation for acting as a director of EGD. They are compensated solely for holding the office of President.

[2] Fees earned include annual retainers and meeting fees and is discussed in greater detail below. Directors' fees payable to employees of Enbridge who are directors of EGD are paid directly to Enbridge.

[3] All other compensation includes an amount for meetings attended outside the director's Province or State of residence and is discussed below.

Directors' Compensation Plan

Directors of EGD other than the President are compensated in accordance with a Directors' Compensation policy which became effective in 1997 and was revised in 1998. EGD's Board of Directors is responsible for the development and implementation of the Directors' Compensation policy.

With the exception of the director who serves as EGD's President (currently Mr. Jarvis and previously Ms. Holder) each director receives $15,000 per annum for his or her services as a director as well as $3,000 per annum for serving as a member of any committee of the Board of Directors and an attendance fee of $1,000 for each board and committee meeting. Directors are also entitled to receive reimbursement for their out-of-pocket travel expenses incurred in connection with board and committee

meetings. Directors are also entitled to $500 for meetings attended where the meeting is held outside of the Province or State of residence of such director. In addition, the chair of the Audit, Finance & Risk Committee receives $3,000 per annum for serving as Chair of such committee. The President of EGD does not receive any additional compensation for acting as a director of EGD.

Unlike compensation for the executives, the Directors' Compensation policy is not designed to pay for performance. Rather, directors receive retainers for their services in order to help ensure unbiased decision-making.

VECC INTERROGATORY #3

INTERROGATORY

Ref: Exhibit B, Tab 4, line 16

a) Provide the CAM amounts for 2007-2011 and forecast 2012-2013,
b) Confirm the agreed 2011 amount between EGDI and Enbridge Inc was $43.44 million,
c) Provide a variance explanation for the increase in CAM amounts 2010-2011,
d) Provide the actual and estimates for SBC costs for 2011, 2012 and 2013.

RESPONSE

a) Please see Attachment 1.

b) Confirmed. The 2011 CAM charges were $43.44 million.

c) The 2010-2011 increase in CAM charges resulted mostly from the increase in insurance premium and stock-based compensation costs.

d) Please see Attachment 2.

Witnesses: K. Culbert
R. Small

	Forecast 2013	Forecast 2012	Actuals 2011	Actuals 2010	Actuals 2009	Actuals 2008	Actuals 2007
CAM	47.2	46.8	43.4	36.7	34.3	32.2	27.7

	Budget 2013	Estimate 2012	Actuals 2011
SBC	13.0	12.7	13.2

VECC INTERROGATORY #4

INTERROGATORY

Ref: Exhibit B, Tab 1, Schedule 3, Page 2, Paragraph b)
Exhibit B, Tab 3, Schedule 5, line 1.3
Exhibit B, Tab 2, Schedule 2, Page 1, Line 8

a) Provide actual LPP revenue for 2007-2011,
b) Provide an explanation for the 2011 LPP variance, including any changes in policy,
c) Provide an explanation of the change in customer security deposits 2010-2011,
d) Discuss changes to customer service rules and the potential impact on LPP revenue and Security Deposits 2012-2013.

RESPONSE

a)

Table 1
Late Payment Penalty Revenues
2007-2011

Line No.	Particulars ($millions)	Actual 2007 (a)	Actual 2008 (b)	Actual 2009 (c)	Actual 2010 (d)	Actual 2011 (e)
1	Late Payment Penalty Revenues	$ 11.1	$ 12.0	$ 14.0	$ 13.1	$ 13.2

b) No policy changes were implemented between 2007 and 2011.

The increase between 2007 Board Approved and 2011 Actual LPP is $5.2 million. This is due to an interplay of various factors such as economic conditions impacting customers' ability to pay; the addition of open bill charges to the Enbridge bill; degree days; customer growth; and gas costs.

c) In the first half of 2009 Enbridge implemented a more rigorous assessment and collection of security deposits ("SDs") due to factors such as the sudden economic

Witnesses: K. Culbert
R. Lei
R. Small

downturn. This applied to both Mass Market ("MM") and Large Business Account ("LBA") Customers.

During 2009-2011, Enbridge's policy was to review Mass Market SDs after two years, and refund with a good payment history. Therefore until Q2 2011, most MM accounts were not eligible for refund and the SD balance increased. This resulted in a buildup in SDs into 2011, especially using the averages of averages method. Additionally, Enbridge began to collect security from gas retailers as per GDAR in 2011.

d) Impacts of the Customer Service Rules implementation for 2012 and 2013 are set out in EB-2011-0354.

Witnesses: K. Culbert
R. Lei
R. Small

VECC INTERROGATORY #5

INTERROGATORY

Ref: Exhibit B, Tab 1, Schedule 5,Page 4 Para 12: Exhibit B, Tab 1,Schedules 1&2

Preamble:

Enbridge has looked at the 2011 O&M cost sharing that would have resulted had it been using this revised methodology. The resulting allocated amount would have been about $1.6 million or about 15 percent higher than the $1.4 million that had been allocated using the current methodology.

a) Does EGDI agree that by accepting the 2011 ESM adjustment to Storage O&M of $1.6 million, intervenors do not necessarily accept the changes to storage cost allocation recommended by B&V on a going forward basis for 2012/13 and beyond?
b) Does EGDI agree that a full examination of the matter should occur in the 2013 Rebasing and Rate Application?
c) Point to the adjustments made to Exhibit B, Tab 1,Schedules 1&2.

RESPONSE

a) Enbridge believes that it is necessary for the Board to approve a storage cost allocation methodology at some point in the near future to be used on a continuous basis for future fiscal years. Enbridge agrees that the 2011 ESM adjustment to Storage O&M could be accepted for the purpose of this proceeding only, with the storage cost allocation methodology to be substantively determined in the 2013 rate proceeding.

b) Enbridge believes a full examination and approval of a storage cost allocation methodology should occur in either this proceeding or alternately the 2013 rate application.

c) As indicated in paragraph 1 of Exhibit B, Tab 1, Schedule 1, the impact of adopting the B&V study allocation of costs of $1.6 million in comparison to the $1.4 million allocated prior to its adoption, increased the earnings sharing accrual by $0.2 million to $14.3 million, as shown at lines 31 and 47 in Exhibit B, Tab 1, Schedule 2, from the $14.1 million earnings sharing accrual within the

Witnesses: K. Culbert
B. Pilon
R. Small

2011 year-end financial statements. The $0.2 million further O&M allocation to unregulated storage reduced the Utility O&M to $360.5 million as shown on line 10 of Exhibit B, Tab 1, Schedule 2. Exhibit B, Tab 4, Schedule 1, pages 4 and 5 provide confirmation of the $0.2 million allocation to unregulated storage and reduction to Utility O&M.

Witnesses: K. Culbert
B. Pilon
R. Small

VECC INTERROGATORY #6

INTERROGATORY

Ref: Exhibit B, Tab 1, Schedule 5, Plus Appendices -Storage Activities:
Exhibit B, Tab 1, Schedule 5, Appendix II -Allocation of Storage O&M Costs
Exhibit D2, Tab 5, Schedule 1

a) In the second reference, provide an explanation of the 2011 increase in regulated storage from 98.0 to 98.4 Bcf.
b) Provide an explanation for the reduction in Direct unregulated storage allocated costs given the 4.7 Bcf increase in Capacity.

RESPONSE

a) The increase in regulated storage shown in this table is simply because of the inclusion of the Crowland storage capacity in these volumes in 2011, whereas it had not been included in the earlier years shown. It was determined that the Crowland capacity (which is in the Niagara Region), should be included in 2011 and beyond, as the 'O&M Regulated' and 'Total O&M for Storage' cost numbers shown below had included the Crowland storage costs for all of the years. It presents the capacities and the operating costs on an 'apples and apples' basis.

b) The 'Direct Unregulated Storage O&M' costs are those that have been borne by the Unregulated Storage business directly, and have not been allocated to Unregulated Storage by Gas Storage Operations. Because these direct costs are independent of Storage Operations, they do not necessarily move in concert with the changes in storage capacities or activity. The allocated costs have increased, as seen at Table 4 of Exhibit D2, Tab 5, Schedule 1.

Witnesses: K. Culbert
B. Pilon
R. Small

VECC INTERROGATORY #7

INTERROGATORY

Ref: Exhibit B, Tab 4, Schedule 2, Page 1

a) Provide (more) explanations for the following material changes
   i. Provision for Uncollectables (line 5)
   ii. Human Resources (line 11)
   iii. Public and Government Affairs (line 14)
   iv. Corporate Allocations (line 16)

   For each variance indicate the 2012 estimate and indicate whether the 2012 level of expense is continued in 2013.

b) Show the following for 2007-2011:
   i. CAM amounts
   ii. RCAM amounts
   iii. RCAM Amount Recovered from Ratepayers(Residual after Eliminations)

RESPONSE

a)

i. Please refer to the response to CME Interrogatory 4, at Exhibit I, Tab 2, Schedule 4.

ii. Please refer to the response to FRPO Interrogatory 1, at Exhibit I, Tab 4, Schedule 1.

iii. Please refer to the response to Board Staff Interrogatory 5, at Exhibit I, Tab 1, Schedule 5.

iv. The increase is primarily due to higher stock based compensation, insurance premium, general expenses, and IT shared services.

With respect to 2012 and 2013 level of expense, please refer to EB-2011-0354.

Witnesses: R. Lei
B. Yuzwa

b)

$ Millions	Actuals 2011	Actuals 2010	Actuals 2009	Actuals 2008	Actuals 2007
(i) CAM	43.4	36.7	34.3	32.2	27.7
(ii) RCAM	26.7	24.3	21.1	19.1	18.1

iii) There was no discrete/separate amount recovered in rates from 2008 to 2011 for RCAM (or any other particular item that is part of the Company's overall revenue requirement).

Witnesses: R. Lei
B. Yuzwa

VECC INTERROGATORY #8

INTERROGATORY

Ref: Exhibit A, Tab 2, Schedule 1, Appendix

a) Please provide a schedule that lists the accounts and associated balances that have already been approved for clearance. Include reference to Board Order(s).
b) For those DVAs approved ,but not cleared, please provide a schedule that shows the carrying costs from the date of approval to the date of (actual or proposed) clearance.
c) Provide explanatory Notes.

RESPONSE

a) See response to Board Staff Interrogatory 1, at Exhibit I, Tab1, Schedule 1, page 1.

b) For the accounts indicated in the part a) response, the interest calculated up to the October 1, 2012 proposed clearance date of the accounts, is shown in Column 4 of Exhibit A, Tab 2, Schedule 1, Appendix.

c) Please refer to the footnoted items in Column 4 of Exhibit A, Tab 2, Schedule 1, Appendix.

Witnesses: K. Culbert
R. Small

VECC INTERROGATORY #9

INTERROGATORY

Ref: Exhibit A,Tab2,Schedule 1, Appendix Line 6: Exhibit C, Tab1, Schedule 2

a) Please provide a schedule that shows all of the activities and costs recorded in the 2011 GDARCDA
b) Explain the calculation of the amount of $2,758.1 million scheduled for clearance in the first reference to the 2011 closing balance of ($2,904.4million) shown in the second reference
c) Update the status of the amendments to the Customer Service Rules for residential and residential low income customers.
d) What were the costs incurred for these latter amendments and indicate if these are included in the schedule in the response to part a).

RESPONSE

a) The total costs recorded in the 2011 GDARCDA were $226.6 thousand, and can be segregated into two categories. The first category, incremental operating labour totaling $136.7, relates to staffing resources, not included in 2007 base rates, required to support the OEB approved 2007 rollout of the GDAR system improvements to enable standardized electronic data exchanges between gas vendors and Ontario gas distributors. The second category, incremental capital expenditures totaling $89.9 thousand, was incurred as the Company began making system changes required as a result of amendments to the Customer Service Rules. In this application, the Company is not seeking approval for the recovery of the incremental costs, or the corresponding 2012 revenue requirement associated with the Customer Service Rule amendments. As indicated in evidence at Exhibit C, Tab 1, Schedule 2, the full cost and 2012 revenue requirement impact, of the Customer Service Rule amendments, will not be known until the end of 2012. Therefore, in 2013 once the total costs are known, the Company will request recovery of an incremental 2012 revenue requirement.

b) The $2,758.1 thousand requested for clearance in this proceeding, as identified in Exhibit A, Tab 2, Schedule 1, Appendix, Line 6, is the 2012 revenue requirement resulting from costs captured in the 2007 through 2011 GDARCDA accounts (excluding costs related to Customer Service Rule Amendments). The amount agrees to the 2012 revenue requirement, or deficiency, identified in Exhibit C, Tab 1,

Witnesses: K. Culbert
T. Ferguson
K. Lakatos-Hayward
R. Small

Schedule 2, pages 3 and 7. The recovery of a revenue requirement is required due to the fact that capital costs, in addition to operating costs, have been recorded in the GDARCDA accounts. Under a cost of service methodology, capital as well as a return on capital, is recovered over the life of the life of the asset. The revenue requirement calculation includes the typical items recovered in a cost of service calculation including depreciation, total return on rate base including interest, equity and taxes, and operating costs. The amount of $2,904.4 thousand, identified in Exhibit C, Tab 1, Schedule 2, pages 3 and 7, is not a closing balance, but was rather the 2011 revenue requirement, or deficiency, resulting from costs captured in the 2007 through 2010 GDARCDA accounts. The amount was approved for clearance in association with the 2010 GDARCDA in EB-2011-0008. Therefore, the requested clearance of the 2012 prospective year revenue requirement is consistent with amounts approved for recovery in connection with the 2007 through 2010 GDARCDA accounts.

c) In September 2010, the Ontario Energy Board ("Board") initiated a Consultation on Customer Service Standards for Natural Gas Distributors, including customer service standards for low-income customers. On January 20, 2011, the Board requested that Natural Gas Distributors provide input to the process by reviewing the customer service rules applicable to all residential customers for electricity distributors and documenting their current policies and practices in the areas addressed by those rules, and suggesting new or modified policies that are appropriate for gas distributors.

The Board issued amendments to the Gas Distribution Access Rule ("GDAR") on October 14, 2011 related to customer service standards for all residential customers. The Board accepted Enbridge's proposed modified and new policies. As per the Notice of Proposal, the in force date for the amendments proposed by the Company was April 30, 2012. The Company has delivered all of its suggested changes. The Company has also published its Conditions of Service which describes Enbridge's operating practices and policies with respect to gas distribution services and customer service. The Conditions of Service as published on the Company's website at enbridgegas.com/ConditionsofService.

With respect to low-income customers, on June 29, 2011, the Board requested that Natural Gas Distributors provide input to the process of developing customer service standards. The Board requested that Gas Distributors review the low-income related customer service rules for electricity distributors and document their current policies and practices in the areas addressed by those rules, and suggest new or modified policies that are appropriate for gas distributors.

Witnesses: K. Culbert
T. Ferguson
K. Lakatos-Hayward
R. Small

The Board issued amendments to the Gas Distribution Access Rule ("GDAR") on July 12, 2012 related to customer service rules for low-income customers. The Board accepted Enbridge's proposed modified policies. As per the notice of proposal, the in force date for the amendments proposed by the Company is January 1, 2013. The Company plans to have all changes to its service policies and practices for low-income customers implemented by January 1, 2013. Enbridge's Conditions of Service presented on its website will also be updated by January 1, 2013 with the relevant changes related to Low-Income customers.

d) Please refer to the response to part a) of this question.

Witnesses: K. Culbert
T. Ferguson
K. Lakatos-Hayward
R. Small

VECC INTERROGATORY #10

INTERROGATORY

Ref: Exhibit A, Tab 2, Schedule 1, Appendix, line 22

a) What is EGDI's Plan for review of the details of the transactions and revenue related to the 2011 TSDA?
a) Provide the composition of the TS and TSDA amounts and the basis for the adjustment to utility revenue.
b) Compare/contrast to 2010.

RESPONSE

a) The planned review of details of the transactions and revenue related to the 2011 TSDA is through interrogatories to be asked and responded to throughout this EB-2012-0055 process which follows the same process used within each of the previous 2008, 2009 and 2010 deferral account review proceedings.

b) Please see response to Board Staff Interrogatory 3, at Exhibit I, Tab 1, Schedule 3.

c) The amount of transactional service activity and revenue generated each year is a function of various market conditions specific to that year.

Witnesses: K. Culbert
D. Small
R. Small

VECC INTERROGATORY #11

INTERROGATORY

Ref: Exhibit A, Tab 2, Schedule 1, Appendix, line 23

a) What is EGDI's plan for review of the details related to the 2011 UAFVA?
b) Provide the composition of the UAFVA amounts.

RESPONSE

a) The planned review of the composition of the amount of the 2011 UAFVA is through interrogatories to be asked and responded to throughout this EB-2012-0055 process which follows the same process used within each of the previous 2008, 2009 and 2010 deferral account review proceedings.

b) The 2011 UAFVA is comprised of the volumetric variance between 2011 year-end accrual UAF and 2011 Board Approved Budget of $1.8 million or 9.1 $10^6 m^3$ as well as the adjustment made in the subsequent year 2011 for the variance between the 2010 actual UAF which could not be calculated until 2011 and 2010 year-end accrual UAF of $6.7 million or 32.8 $10^6 m^3$. Please refer to RP-2001-0032, Exhibit A, Tab 12, Schedule 5, page 3 for the technical definition of the UAFVA composition.

Witnesses: I. Chan
K. Culbert
D. Small
R. Small

VECC INTERROGATORY #12

INTERROGATORY

Ref: Exhibit C, Tab 1 Schedule 4 Page 4 plus Appendix A

a) Provide details of the 2011 Weather and the impact on average use for Rates 1 and 6.
b) Provide version of Tables 4 and 5 that compares the actual normalized volumes for Rate 1 and Rate 6 to Budget/forecast.
c) Reconcile to 2011 Rate 1 and rate 6 AUTVA calculation schedule.

RESPONSE

a) The 2011 Budget volumes reflect the meter reading heating degree days forecast for the Central Region of 3,602.[1] Meter reading heating degree days are acquired by amalgamating Gas Supply heating degree days with the billing schedules. The 2011 actual meter reading heating degree days for the Central Region were 3,639, 37 degree days higher than budget. The majority of the increase in degree days was attributable to colder than normal weather during January and February. The 2011 actual meter reading heating degree days for both Eastern and Niagara Regions were 4,095 and 3,394, respectively. They were both lower than their corresponding budget degree days of 4,421 and 3,447, respectively. The weather impact on average use is a decrease of 15 m^3 for rate 1 and a decrease of 362 m^3 for Rate 6.

b) Tables 1 and 2 below provide versions of Tables 4 and 5 that compares the normalized actual volumes for Rate 1 and Rate 6 to Budget.

[1] Please refer to EB-2010-0146, Exhibit B, Tab 1, Schedule 6, page 1.

Witnesses: P. Baxter
I. Chan

TABLE 1
GENERAL SERVICE RATE 1
2011 ACTUAL NORMALIZED AND BUDGET VOLUME, CUSTOMERS, AVERAGE USE

Item		Col. 1 Jan	Col. 2 Feb	Col. 3 Mar	Col. 4 Apr	Col. 5 May	Col. 6 Jun	Col. 7 Jul	Col. 8 Aug	Col. 9 Sep	Col. 10 Oct	Col. 11 Nov	Col. 12 Dec	Col. 13 Total	Exhibit Reference
1.1	Normalized Volumes ($10^6 m^3$)	793.6	803.2	670.1	492.9	332.9	164.7	105.4	107.0	108.9	167.5	349.6	578.5	4,674.3	Exhibit B, Tab 3, Schedule 2, Page 2
1.2	Customer Meters	1,792,234	1,795,395	1,799,789	1,799,377	1,801,411	1,799,375	1,796,089	1,798,310	1,803,083	1,808,433	1,815,424	1,822,016	1,802,578	Exhibit B, Tab 3, Schedule 4, Col. 1 Item 1.1
1.3	Average Use per Customer (m^3)	443	447	372	274	185	92	59	59	60	93	193	318	2,594	
2.1	Budget Volumes ($10^6 m^3$)	783.6	790.5	693.9	530.1	285.0	175.5	129.6	130.5	124.1	193.4	346.3	581.8	4,764.4	Exhibit B, Tab 3, Schedule 2, Page 1, Col. 2 Item 1.1
2.2	Customer Meters	1,793,694	1,797,583	1,801,261	1,804,196	1,805,637	1,805,115	1,804,286	1,804,273	1,802,055	1,805,438	1,810,905	1,815,825	1,804,189	EB-2010-0146 Exhibit B, Tab 1, Schedule 5, Appendix A, Page 1, Col. 1 Item 1.1
2.3	Average Use per Customer (m^3)	437	440	385	294	158	97	72	72	69	107	191	320	2,643	EB-2010-0146 Exhibit B, Tab 1, Schedule 5, Appendix A, Page 21, Col. 12

Witnesses: P. Baxter
I. Chan

TABLE 2
GENERAL SERVICE RATE 6
2011 ACTUAL NORMALIZED AND BUDGET VOLUME, CUSTOMERS, AVERAGE USE

Item		Col. 1 Jan	Col. 2 Feb	Col. 3 Mar	Col. 4 Apr	Col. 5 May	Col. 6 Jun	Col. 7 Jul	Col. 8 Aug	Col. 9 Sep	Col. 10 Oct	Col. 11 Nov	Col. 12 Dec	Col. 13 Total	Exhibit Reference
1.1	Normalized Volumes ($10^6 m^3$)	694.8	795.7	761.2	490.9	340.2	175.5	110.7	103.0	116.1	172.8	344.1	557.6	4,662.6	Exhibit B, Tab 3, Schedule 2, Page 2
1.2	Customer Meters	157,878	158,622	159,909	158,979	158,482	156,838	155,785	155,178	155,138	155,337	157,019	158,709	157,323	Exhibit B, Tab 3, Schedule 4, Col. 1 Item 1.2
1.3	Average Use per Customer (m^3)	4,401	5,017	4,760	3,088	2,147	1,119	711	664	748	1,113	2,191	3,513	29,471	
2.1	Budget Volumes ($10^6 m^3$)	741.9	734.9	643.4	486.0	305.2	164.1	119.8	118.0	116.7	185.1	361.1	542.4	4,518.4	Exhibit B, Tab 3, Schedule 2, Page 1, Col. 2 Item 1.2
2.2	Customer Meters	160,874	161,495	161,933	162,000	161,757	161,265	160,475	159,793	158,995	159,440	160,433	161,465	160,827	EB-2010-0146 Exhibit B, Tab 1, Schedule 5, Appendix A, Page 1, Col. 1 Item 1.2
2.3	Average Use per Customer (m^3)	4,612	4,550	3,973	3,000	1,887	1,018	747	738	734	1,161	2,250	3,359	28,029	EB-2010-0146 Exhibit B, Tab 1, Schedule 5, Appendix A, Page 21, Col. 12

Witnesses: P. Baxter
I. Chan

c) Normalized Annual Average Use per Customer, Item 1.3 of Tables 1 and 2 above are reconciled to the 2011 Normalized Actual Annual Use in Col. 2 of Exhibit C, Tab1, Schedule 4, Appendix A, page 1.

Budget Average Use per Customer, Item 2.3 of Tables 1 and 2 above are reconciled to the 2011 Budget Annual Use in Col. 1 of Exhibit C, Tab1, Schedule 4, Appendix A, page 1.

Budget Customer Meters, Item 2.2 of Tables 1 and 2 above are reconciled to the Budget Customer Meters in Col. 4 of Exhibit C, Tab1, Schedule 4, Appendix A, page 1.