



SMITH WILLIAMS CONSULTANTS, INC.

Appendix G

Water Balance Results



SMITH WILLIAMS CONSULTANTS, INC.

Appendix G.1

Water Balance Model



SMITH WILLIAMS CONSULTANTS, INC.

Project: CC&V Phase 5 VLF	Job No. 1125
Calculation Title: Phase 5 VLF Water Balance	
Prepared By: JFL	Date: March 14, 2008
Checked By: DTW	Date: March 19, 2008

OBJECTIVE:

Construct a water balance for the Phase 5 VLF extension. The water balance is to consider flows into and from the existing Pregnant Solution Storage Areas (PSSAs), External Pond, and the designed Phase 5 PSSA.

Water balance must account for the operating volume, draindown volume resulting from 12 hours of power loss, solution accumulation due to seasonal climatic variation at a 95-percent confidence level, the 100-year/24-hour design storm event, and available pore space of the ore within the PSSAs, as illustrated in Figure 1. This is consistent with the previous VLF Amendments.

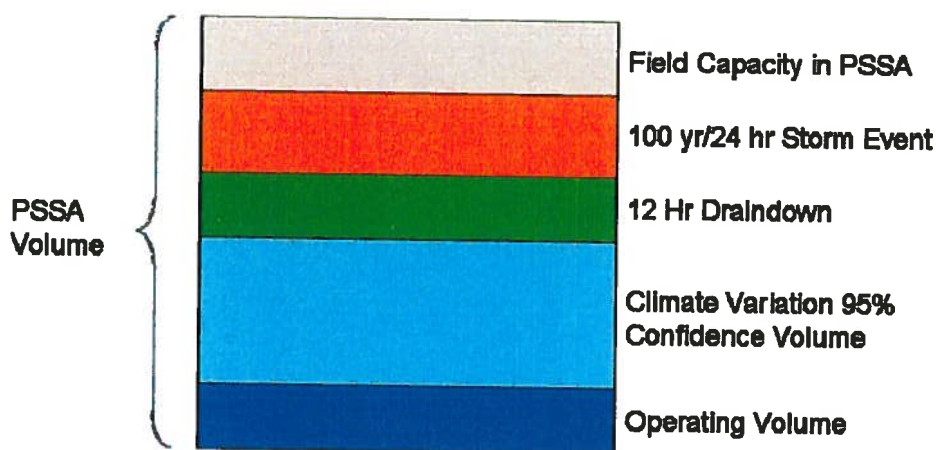


Figure 1 – PSSA Volume Components

METHOD:

GoldSim, a probabilistic, dynamic simulation model was used to construct the water balance. The software is available through the GoldSim Technology Group LLC and was initially developed to model the complex environmental data for the U.S. Department of Energy (DOE) Yucca Mountain High-Level Waste Repository Project. The software has been reviewed and accepted by the U.S. Environmental Protection Agency (U.S. EPA).

The model was constructed to simulate the following conditions for the VLF:

- Climatic data inputs for precipitation and evaporation;



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- Ore loading, facility volumes, areas of coverage, and phases;
- Material properties for initial moisture contents, field capacity, leaching moisture, and moisture uptake;
- Process solution flows from the PSSAs to the process plant; and
- Solution application rates.

The model also simulates an 8-year post-mining leaching period, when no ore is placed on the VLF, but solutions are applied to the ore.

The water balance is essentially a “closed” system. All process solutions are contained within the PSSAs of the VLF. Pregnant solutions from the VLF are pumped to the ADR plant for processing. The ADR processes the pregnant solutions and returns barren leach solution to the VLF. In the existing configuration, the Phase I PSSA collects leach solution from the Phase I, Phase IVa, and a portion of the Phase 5 VLF; the Phase II PSSA collects leach solutions from the Phase II and Phase III VLF; the Phase IV PSSA collects solutions from the Phase IVb and IVc VLF; and the Phase 5 PSSA will collect solutions from the Phase 5 VLF.

If the Phase I PSSA overtops (which is not predicted to occur), the excess solutions will enter the Phase II PSSA. Excess solutions in the Phase II PSSA can be pumped solution to the External Pond, if needed. Both the Phase IV and Phase 5 PSSAs are self-contained; however any leakage from the Phase IV PSSA enters the Phase II PSSA, while leakage from the Phase 5 PSSA will enter the Phase I PSSA.

The current and designed PSSA storage volumes are:

- Phase I: 42.9 million gallons at an elevation of 9,365 feet;
- Phase II: 35.4 million gallons at an elevation of 9,320 feet;
- Phase IV: 54.3 million gallons at an elevation of 9,624 feet;
- Phase 5: 74.5 million gallons at an elevation of 9,765 feet; and
- External Pond: 22.5 million gallons at an elevation of 9,417 feet.

Inflows into the VLF include the barren leach solution applied to the ore, precipitation falling on the VLF, inflow from the Phase 5 sedimentation pond into the Phase IV PSSA, and moisture contained within the as-placed ore. Outflow from the VLF evaporation, ore moisture retention (wetting from as-placed to field capacity), solution pumped from the PSSA to the ADR for processing.

The water balance model also simulates the “dynamic” characteristics of the ore heap, which affect the timing of solutions reporting to the PSSA. Actual ore heaps under leach exhibit time delays



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resulting from two primary factors:

- Solution decay due to draindown, and
- Delay due to travel time (breakthrough) through the ore.

Figure 2 illustrates the breakthrough delay and decay of solution. Prior to leaching, the ore is placed in the VLF at an as-placed moisture content, which is often less than the field capacity moisture content. When leach solutions are applied to the ore, the ore moisture increases from as-placed to field capacity, then to the leaching ore moisture content. Only after the ore reaches the field capacity can the solution begin to travel through the next section of ore. As illustrated, this does not occur instantaneously, but may require days or weeks depending on the amount of ore, the ore characteristics, and the application rate. After the ore has been leached (application rate is zero), the ore continues to drain from the leaching moisture content down to the field capacity. This process also does not occur instantaneously and may require days, months, or even years to fully draindown.

A second, but related, factor affecting the dynamic nature of ore under leach is the ore depth. The greater the ore depth, the longer it will take for solutions to travel from the surface to the PSSA. In addition, as the ore depth increases, the peak flow rate for a given event (solution application, storm event, etc), reduces, but requires more time to flow through the heap. For simplicity, the delay for uptake and travel time can be lumped into a single parameter as "breakthrough".

Figures 3 through 5 illustrate typical time delay and decay curves which reflect the dynamic nature of solutions moving through ore heaps. The dynamic response of ore heaps under leach varies from heap to heap and with different ore types. For the Phase 5 VLF water balance model, curves were developed for the Cresson Ore within the VLF to relate breakthrough delay and draindown to ore depth. The basic curves were derived by calibrating against data gathered at the site. The model calibration is discussed later in this calculation sheet.



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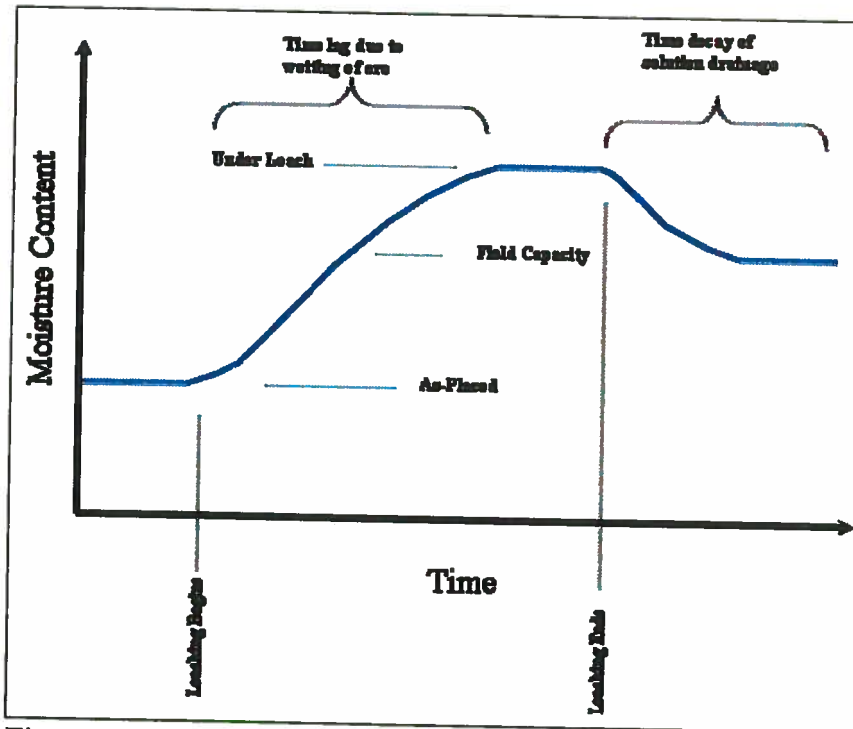


Figure 2 – Ore Breakthrough Delay and Draindown Decay

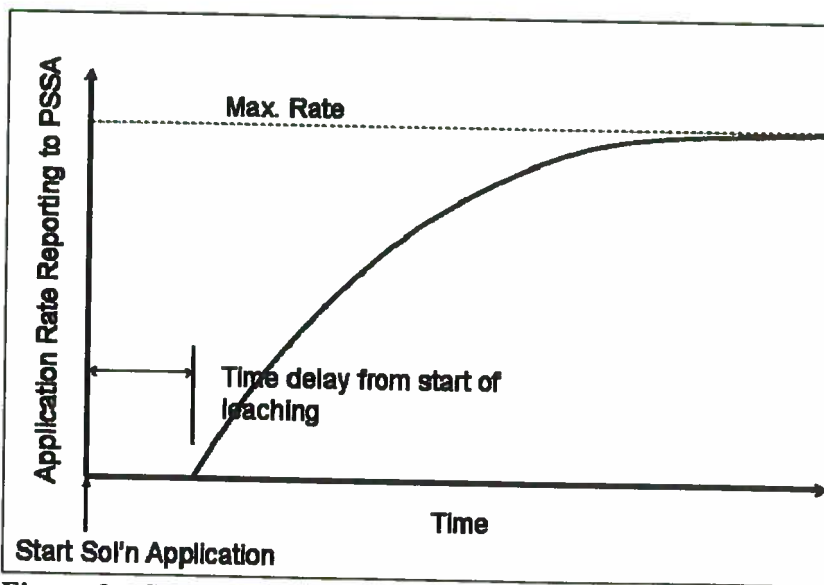


Figure 3 – Solution Application Delay



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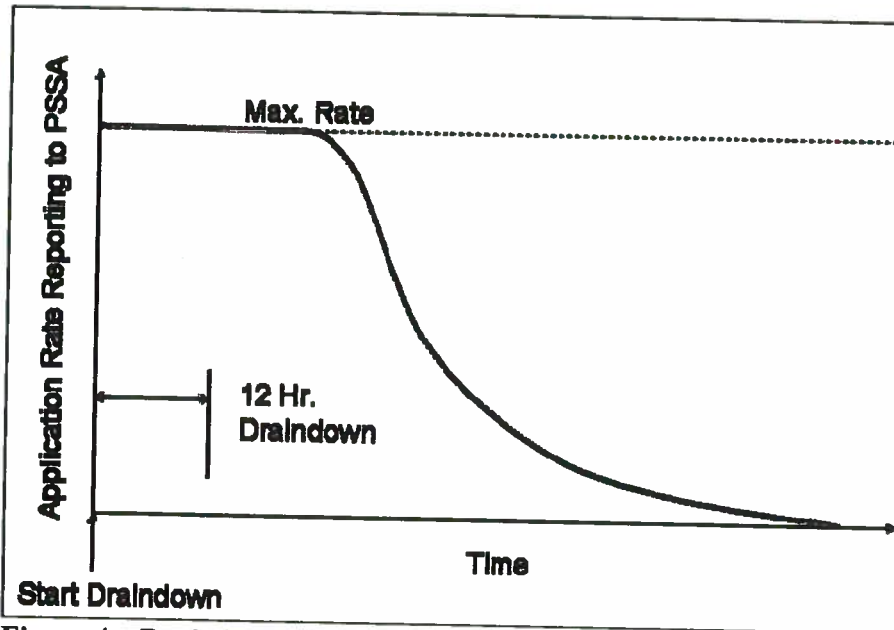


Figure 4 - Draindown Delay

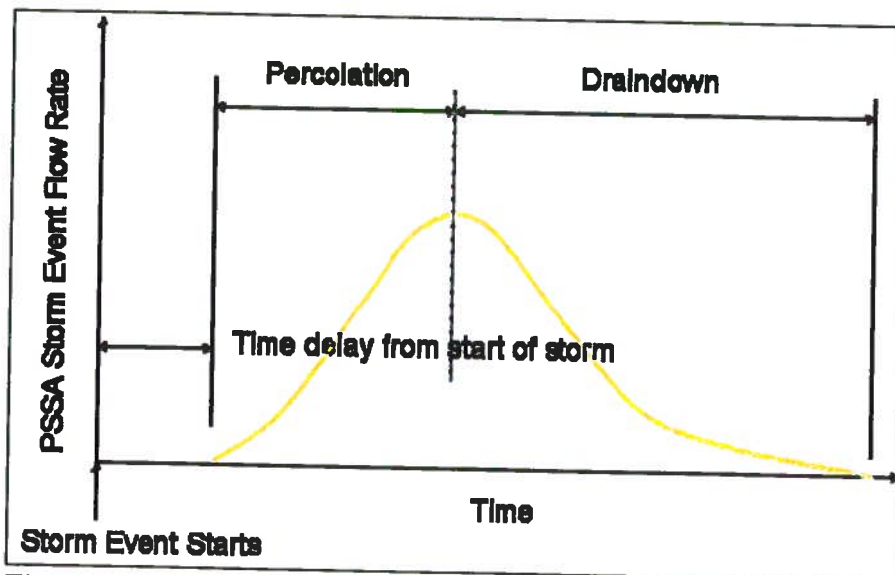


Figure 5 - Precipitation/Storm Event Delay



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ASSUMPTIONS/MODEL INPUT:

The water balance model was constructed using the following data:

- Climatic data inputs for precipitation and evaporation;
- Ore loading, facility volumes, areas of coverage, and phases;
- Material properties for initial moisture contents, field capacity, leaching moisture, and moisture uptake;
- Process solution flows from the PSSAs to the process plant; and
- Solution application rates.

The Phase 5 model starts in August of 2011. Primary leaching continues for 59 months, through July 2016. The model also includes 8 years of post-mining leaching, and continues until the model ends in July 2024 for a total of 153 months.

Climatologic Input

Climatologic Data

Background climatologic data used in the water balance model is presented in the Technical Memos "Cripple Creek & Victor Water Balance – Meteorological Data and Precipitation Modeling" prepared by Ecological Resource Consultants (ERC) dated June 18, 2007 and October 3, 2006, as presented in Attachment A.

Precipitation

Precipitation was simulated in the model to predict the amount of meteorological water that would report to the PSSAs. Precipitation was modeled using probabilistic monthly precipitation cycles. Precipitation reporting to the PSSAs as the result of a 100-year, 24-hour storm event was also simulated by the model.

Mean monthly precipitation values and standard deviations are presented in Table 1. These values were derived using observed site precipitation and regression with recorded data from regional precipitation stations.



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Project: CC&V Phase 5 VLF	Job No. 1125
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Table 1. Mean Monthly Modeled Precipitation

Month	Mean (in)	Standard Deviation (in)
January	0.63	0.42
February	0.55	0.17
March	1.31	0.72
April	1.40	0.89
May	1.63	0.80
June	1.84	1.09
July	4.27	2.00
August	3.54	1.27
September	1.52	0.41
October	1.10	0.62
November	0.60	0.41
December	0.51	0.31
Total	18.90	NA

Monthly Precipitation Infiltration

For conservatism, 100% of the monthly rainfall falling on the heap area and the exposed liner area is assumed to report to the PSSAs.

100-Year, 24-Hour Storm

The 100-year, 24-hour storm precipitation of 3.50 inches was used in the model to simulate the amount of water that would report to the PSSAs. For conservatism, it was assumed that 100% of the precipitation resulting from the 100-year, 24-hour storm instantaneously reported to the PSSAs (e.g. no time delay through ore heap)

Evaporative Losses

Evaporation losses will occur from the PSSA pond surface, from the areas being leached and from precipitation that enters the system. These losses were incorporated into the water balance model.

Evaporative losses from the pond surface were modeled by taking the calculated pond surface area by the monthly evaporation rate. Monthly evaporation rate derivation is described in more detail in Appendix A. Monthly rates used in the model are given in Table 2 below.



SMITH WILLIAMS CONSULTANTS, INC.

Project: CC&V Phase 5 VLF	Job No. 1125
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Table 2. Monthly Evaporation Rates

Month	Monthly Evap (in)
January	2.23
February	2.30
March	3.01
April	3.35
May	4.43
June	6.54
July	6.00
August	4.78
September	3.73
October	3.45
November	2.40
December	2.08
Total	44.29

Evaporation losses were modeled from the pad under active leach. An evaporation coefficient value of 1.2 was used for the actively leached area. Evaporation from areas under active leach were modeled with 20% greater evaporation than a water surface to account for effective increased surface area and the reflective evaporative losses typical with shallow ponding surfaces. It is important to note that evaporation losses were not calculated for the inactive portions of the ore heap. This is considered to be very conservative, as evaporative losses for the inactive portion of the ore heap can be significant.

Ore Production/Placement

The anticipated ore loading schedule was provided by CC&V and used in the water balance model. A summary of monthly loading rates are presented in Attachment B.

Development of the heap and the associated change in geometry over time is a key input parameter for the water balance model. Geometric properties of the pad were calculated on a monthly basis and include the following:

- Total lined area,
- top of heap areas,
- area under leach,



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- heap slope areas,
- average heap height

Of the total lined area, 30% was assumed to be the top area and 70% was assumed to be side slopes. Values for all of these parameters used in the model are presented in Attachment C.

Average heap depth under leach at a given time is a key input parameter as it impacts:

- The amount of solution that will be absorbed by the heap when it is initially leached,
- The amount of time it takes for the drainage to emerge at the PSSA,
- The amount of draindown solution that reports to the PSSA once the ore goes off leach.

Ore depths (above the lined surface) were calculated based on the ore loading schedule and stacking plans provided by CC&V. The ore leach cycle varies with ore depth according to the schedule presented in Table 3, provided by CC&V.

Table 3
Leach Cycle for Newly Stacked Ore

Ore Depth (ft.)	Time Under Leach (days)
0	0
50	25
100	50
150	75
200	100
250	125
300	150
350	175
400+	200

Ore Properties

The following ore properties were used in the water balance model.

- As-Placed Ore Moisture Content: 5.6%
- Draindown Ore Moisture Content: 7.5%



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- Leaching Ore Moisture Content: 9.5 to 10%
- Ore dry density: 110 pcf

Solution Application Rates

The solution application rates for the heap ranges from 0.003 gpm/ft² to 0.0045 gpm/ft², with the total solution flow limited based on the PSSA. The maximum applied solution to the PSSAs is 29,100 gpm, and is distributed by:

- Phase I PSSA: 4,900 gpm
- Phase II PSSA: 5,100 gpm
- Phase IV PSSA: 4,700 gpm
- Phase 5 PSSA: 14,400 gpm

Within the water balance model, the application rates were allowed to vary between 0.003 gpm/ft² to 0.0045 gpm/ft², while not exceeding these limits.

The pumping capacity from the PSSAs to the ADR (process plant) is:

- Phase I PSSA: 6,200 gpm
- Phase II PSSA: 7,500 gpm
- Phase IV PSSA: 8,000 gpm
- Phase 5 PSSA: 14,400 gpm

It is important to note that the total pumping capacity from the PSSAs is 36,100 gpm, while the maximum solution application is 29,100 gpm; therefore the PSSA pumping systems have sufficient capacity to draw the PSSAs down, as needed, to manage solutions.

The water balance model was conducted using the pumping capacity (from PSSA to ADR) to control the solution levels within the PSSAs. For example, when the solution levels increased to a point where the contingency flow (100-year/24 hour storm event and draindown) could no longer be contained within the PSSA, the solution flow to the ADR was increased, and the PSSA was brought back into balance.

During leaching operations, a minimum PSSA volume was maintained for operation flows. The minimum operational volumes included:



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- Phase I PSSA: 5.5 million gallons
- Phase II PSSA: 3.8 million gallons
- Phase IV PSSA: 6.5 million gallons
- Phase 5 PSSA:

During post-mining leaching, the minimum pond volumes were reduced so that

Additional Required PSSA Capacity

In addition to the model components listed above, the water balance model also addressed additional PSSA storage capacity for the following:

- An extra 100,000 gallons for the Phase I PSSA, which is equivalent to the enrichment tank located in Phase I, should it fail;
- Monthly precipitation collected by the Phase 5 sedimentation pond will be pumped into the Phase IV PSSA. This will allow the pond to remain dry, should it be needed to store run-off during extreme precipitation events.

MODEL CALIBRATION:

As indicated earlier, the dynamic components of the model which govern time delays associated with uptake/ore depth travel time (breakthrough), and solution decay were calibrated against actual data from CC&V. Given the complex nature of the VLF, the model calibration was limited the solution levels and output from PSSA I during 2006. This dataset was selected because the leaching schedule for Phase I included high leaching activity for the first nine months of the year, followed by three months of relatively low leaching activity. This allowed both breakthrough (when new areas went under leach) and draindown (during the low leaching period) to be easily observed, thereby providing a meaningful data set for calibration.

For the model calibration, the actual ore configuration and leach solution schedule was applied, and the model dynamic components adjusted to match the actual data. In 2006, the active leaching ore depth in Phase I varied from 150 feet to 400 feet, therefore the breakthrough and draindown curves could be developed for ore depths up to 400 feet. The breakthrough and draindown curves are presented in Figures 6 and 7, respectively. Note that the curves above 400 feet have been estimated, but appear reasonable for the general trend.



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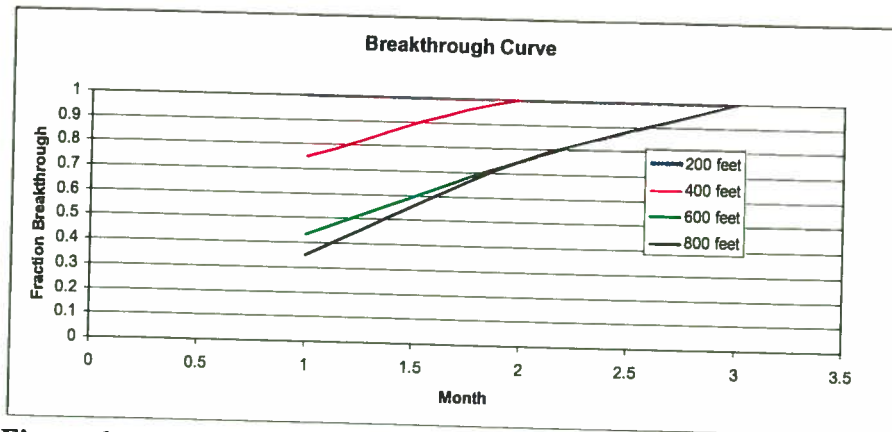


Figure 6 – Breakthrough Curve

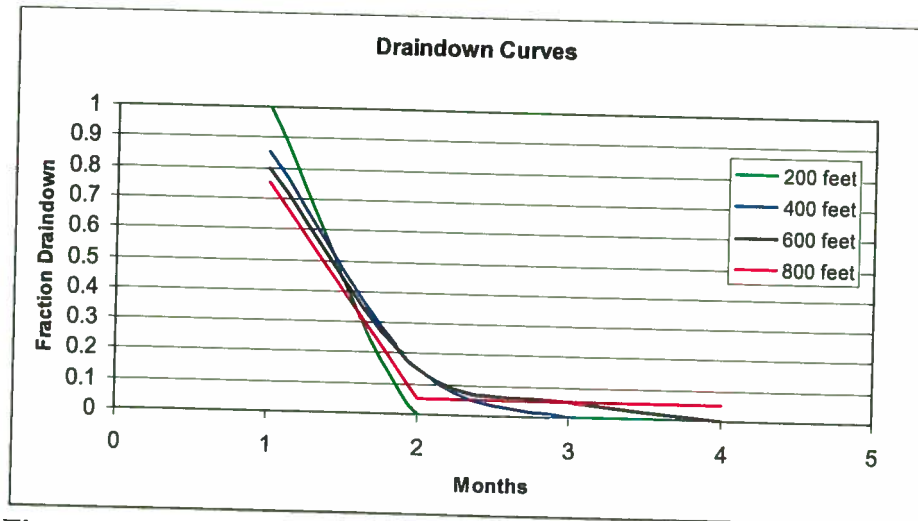


Figure 7 – Draindown Curve

The calibrated model results in terms of predicted outflow and the resulting PSSA I solution elevation are presented in Figures 8 and 9, respectively.



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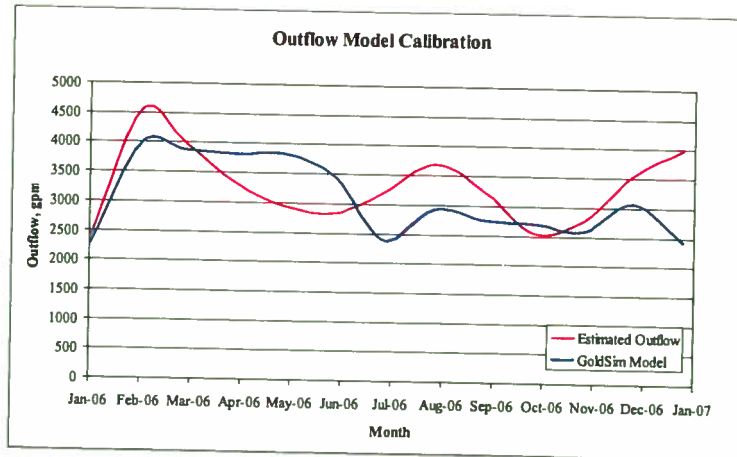


Figure 8 – Model Calibration Predicted Heap Outflow

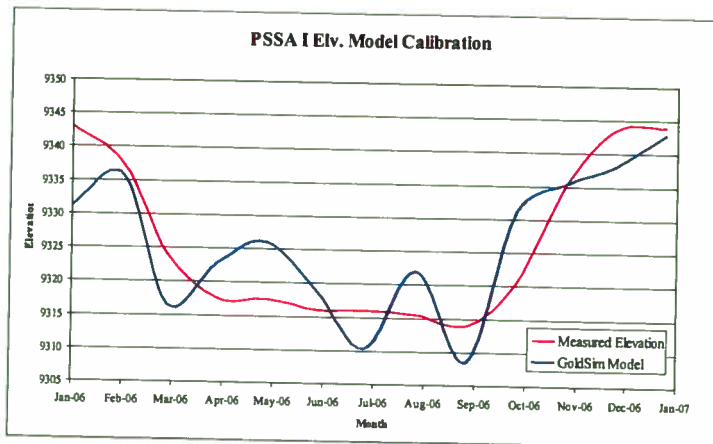


Figure 9 – Model Calibration PSSA Elevation

The calibrated model matches reasonably well with the site data and general trends.

MODEL OUTPUT AND CONCLUSIONS:

The GoldSim Model output is presented in Attachment D. The output includes the predicted PSSA volumes over time. The volumes include all contingency flows (100-year, 24-hour storm event, draindown, 95% climate variation) plus operational volumes and available pore space (less field capacity). The output also includes selected graphs showing the solution application rates (during and post-mining), solution flow to the process plant, and flow from the Phase 5 sedimentation pond



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to the Phase IV PSSA.

The capacity of the Phase I PSSA was calculated based on the average ore depth of 420 feet presented in the ore stacking plan. Using the load-porosity relationship for Cresson ore, this corresponds to a porosity of 0.30, and yields a pore volume of 42.9 million gallons (MG) at an elevation of 9,365 feet. Eighty percent of the total Phase I PSSA volume is 34.3 MG, which corresponds to an elevation of 9358.8 feet. As shown, the Phase I PSSA is predicted to fully contain all solutions, including contingency inflow, reporting to the PSSA. The Phase I PSSA also has sufficient capacity to fully contain the contents of the Enrichment Tank located on Phase I (100,000 gallons of solution), should this tank fail unexpectedly.

The capacity of the Phase II PSSA was calculated based on the average ore depth of 220 feet. Using the load-porosity relationship for Cresson ore presented, this corresponds to a porosity of 0.32, and yields a pore volume of 35.4 MG at an elevation of 9,302 feet. Eighty percent of the total Phase II PSSA volume is 26.1 MG, which corresponds to an elevation of 9294.4 feet. As shown, the Phase II PSSA is predicted to fully contain all solutions, including contingency inflow, reporting to the PSSA.

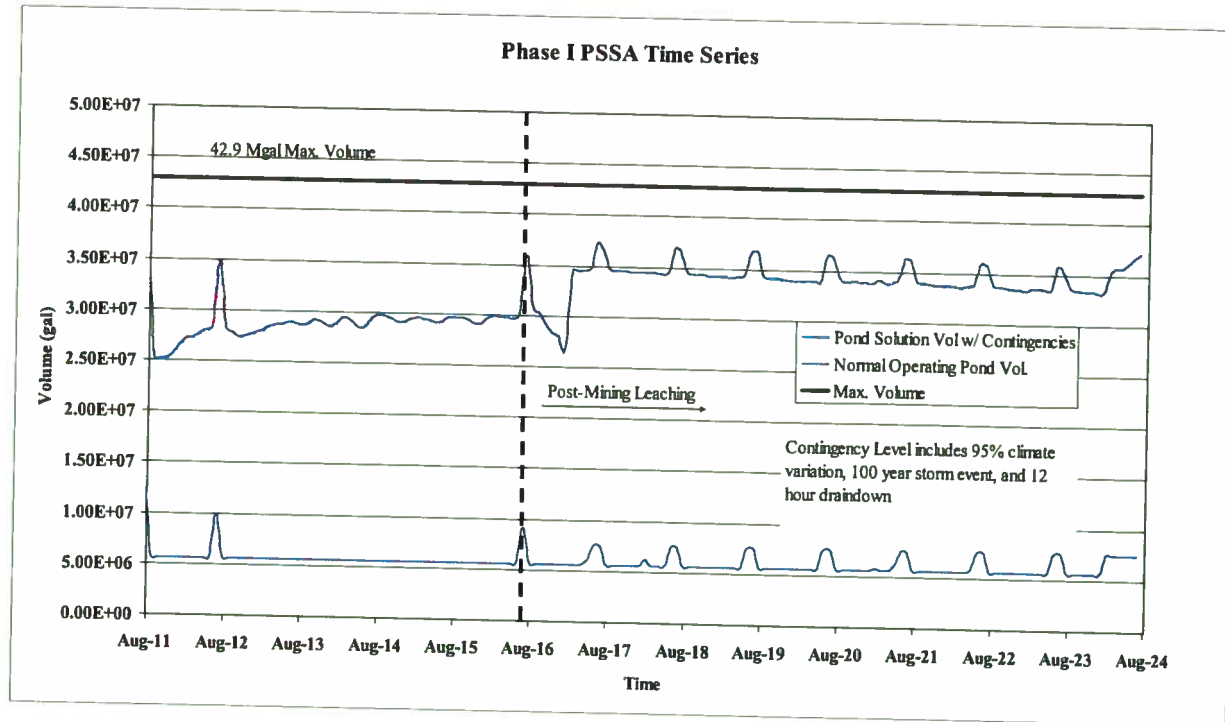
The capacity of the Phase IV PSSA was calculated based on the average ore depth of 440 feet. Using the load-porosity relationship for Cresson ore presented, this corresponds to a porosity of 0.31, and yields a pore volume of 54.2 MG at an elevation of 9,624 feet. Eighty percent of the total Phase IV PSSA volume is 43.4 MG, which corresponds to an elevation of 9616.5 feet. As shown, the Phase IV PSSA is predicted to fully contain all solutions, including contingency inflow, reporting to the PSSA. The Phase IV PSSA also has sufficient capacity to contain inflow from the sedimentation pond. While the sedimentation pond is sized to fully contain twice the run-off from 10 year/24 hour storm event, the intent is to maintain the pond dry. Precipitation and run-off collecting within the pond was assumed to be pumped to the Phase IV PSSA. The Phase IV PSSA is able to fully contain the contents of the sedimentation pond, should it be required.

The capacity of the Phase 5 PSSA was calculated based on the average ore depth of 300 feet. Using the load-porosity relationship for Cresson ore, this corresponds to a porosity of 0.32, and yields a pore volume of 74.5 MG at an elevation of 9,765 feet. Eighty percent of the total Phase 5 PSSA volume is 59.6 MG, which corresponds to an elevation of 9759.8 feet. As shown, the Phase 5 PSSA is predicted to fully contain all solutions, including contingency inflow, reporting to the PSSA



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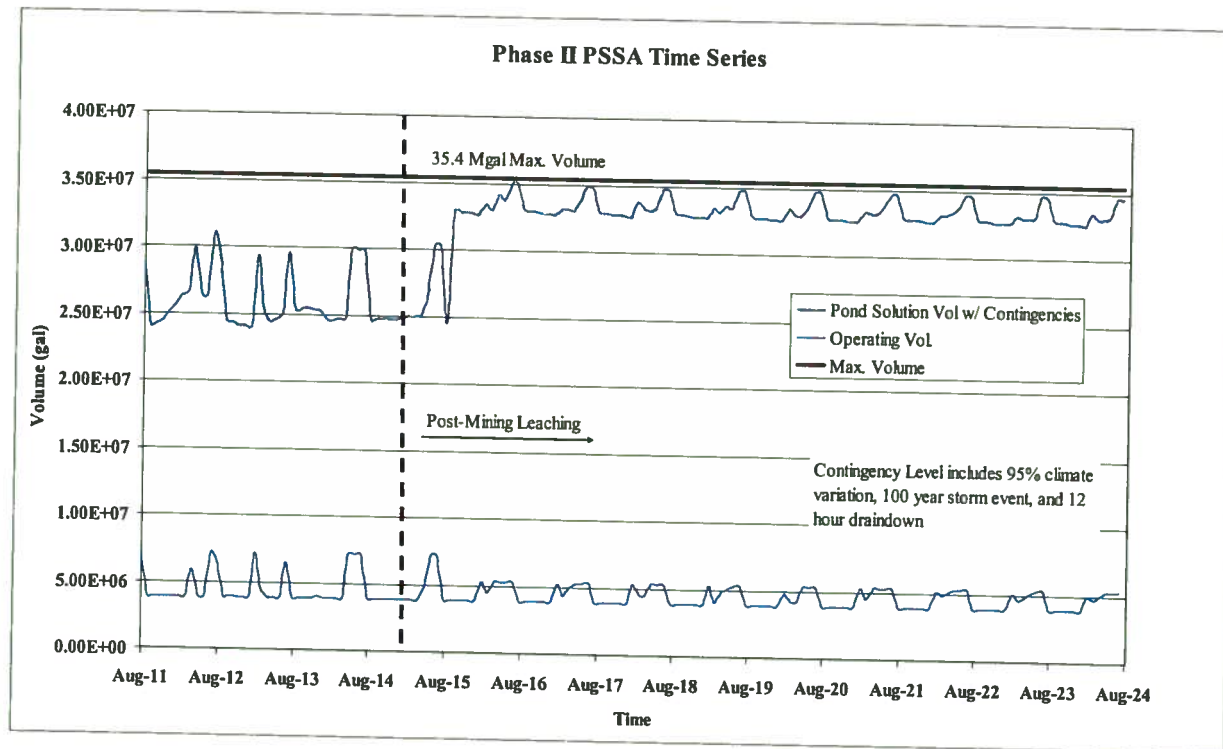
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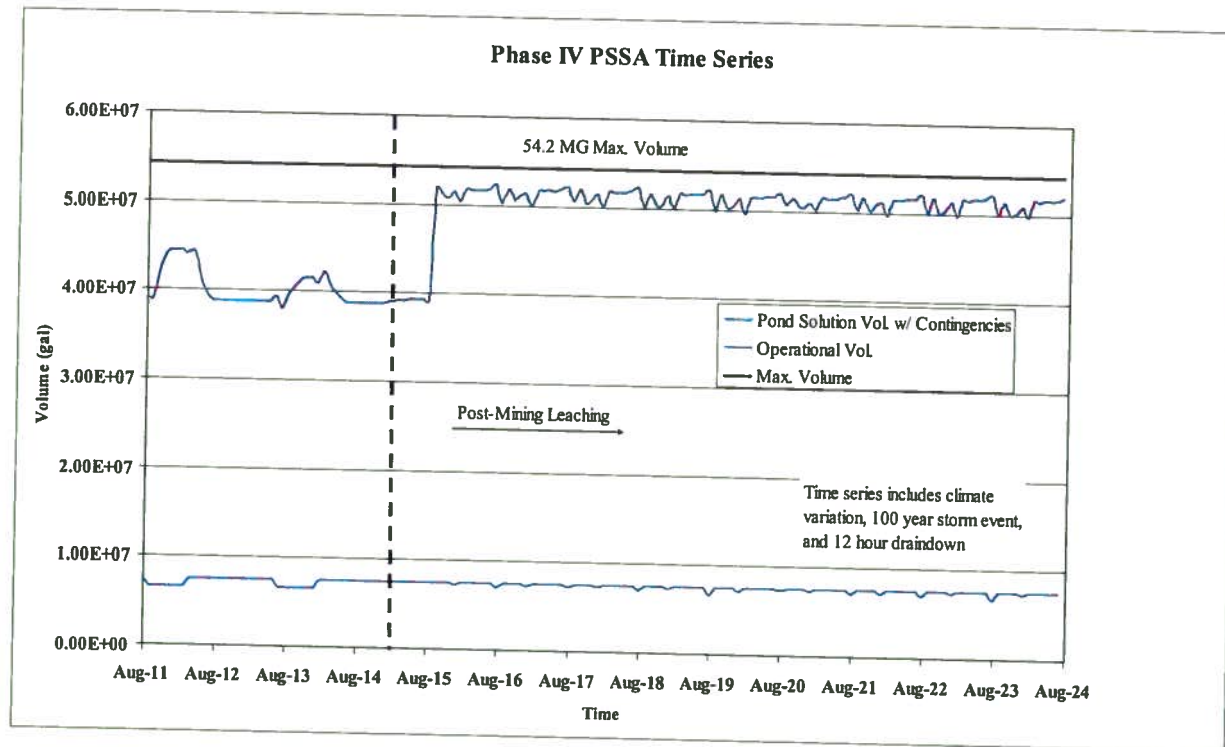
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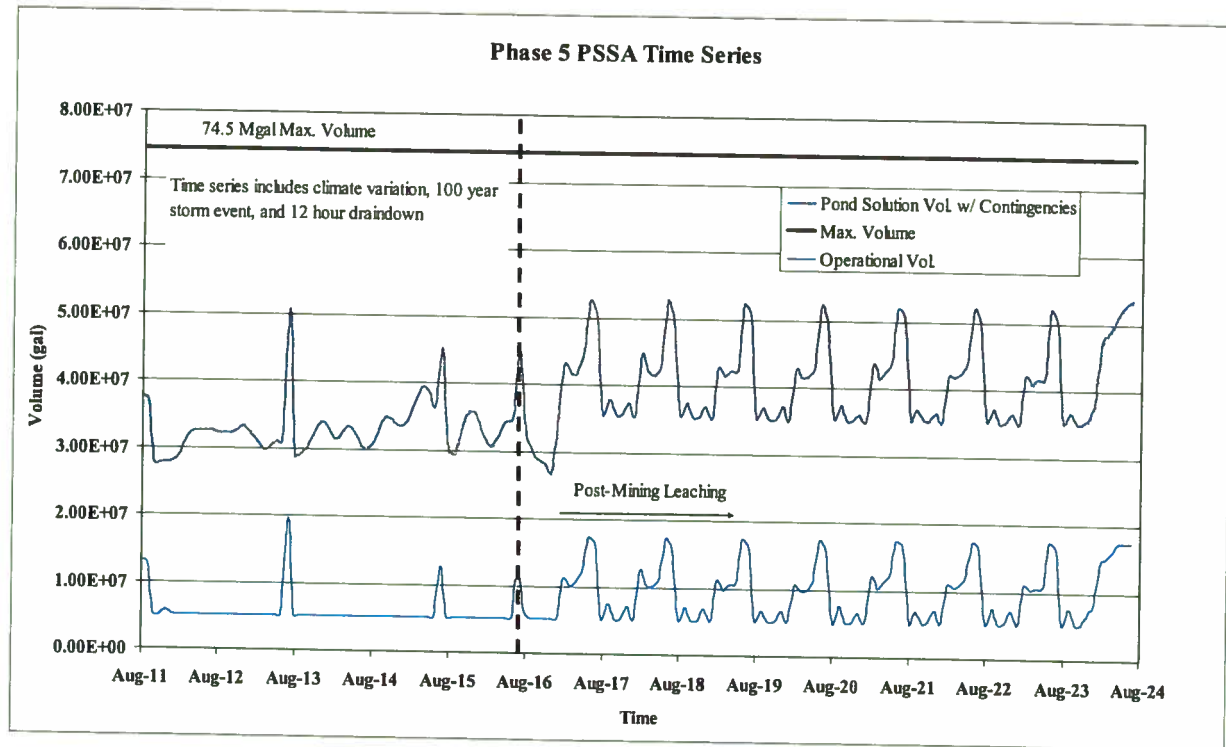
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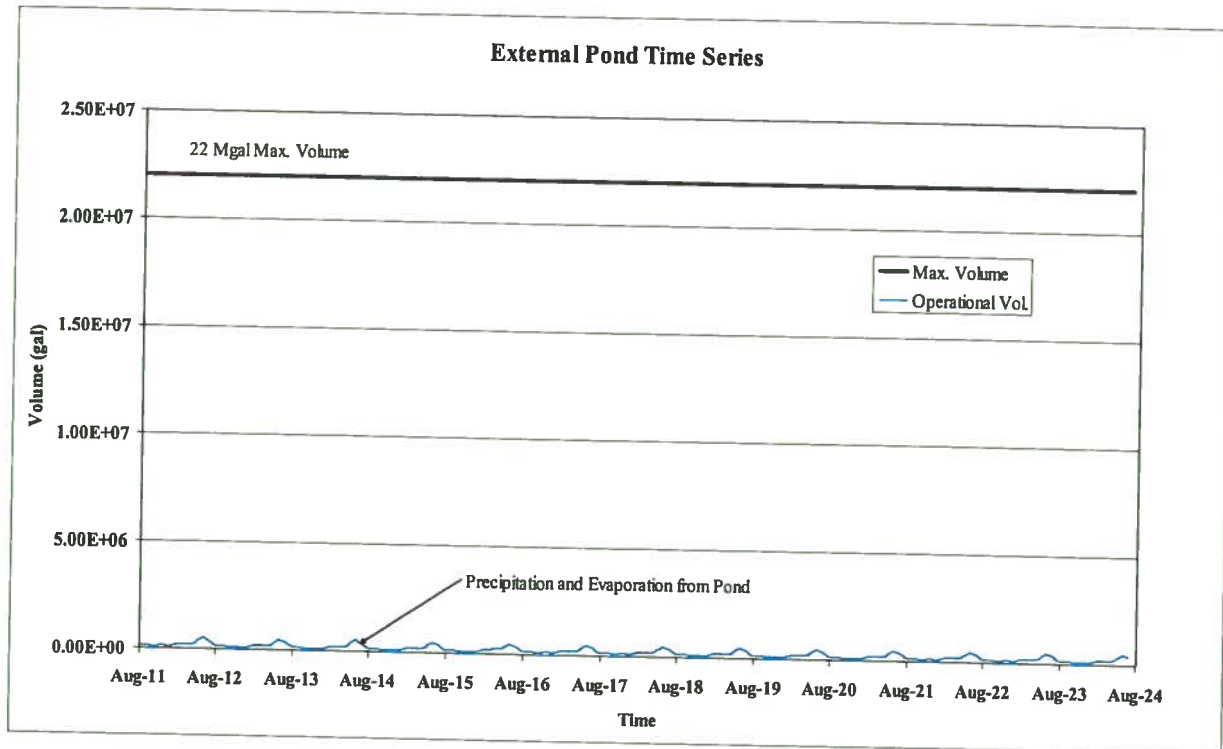
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Attachment A
Climatology Memo



Ecological Resource Consultants, Inc.

35715 US Hwy. 40, Suite D204 ~ Evergreen, CO ~ 80439 ~ 303.679.4820

Technical Memorandum

Date: June 29, 2007
To: Derek Wittwer, Smith Williams Consultants, Inc.
From: Troy Thompson/ Kari Kubista
Project: Cripple Creek & Victor Water Balance
Re: Meteorological Data and Precipitation Modeling

An analysis of meteorological data was conducted by Ecological Resource Consultants, Inc. (ERC) as a component of the Phase 5 Cripple Creek and Victor (CC&V) water balance analysis for Smith Williams Consultants, Inc. (SWC). Long-term regional precipitation records and data collected at the site meteorological station were evaluated. Recommended monthly design precipitation and evaporation data for the CC&V water balance were generated based on the analysis. Results are included herein.

Available Data

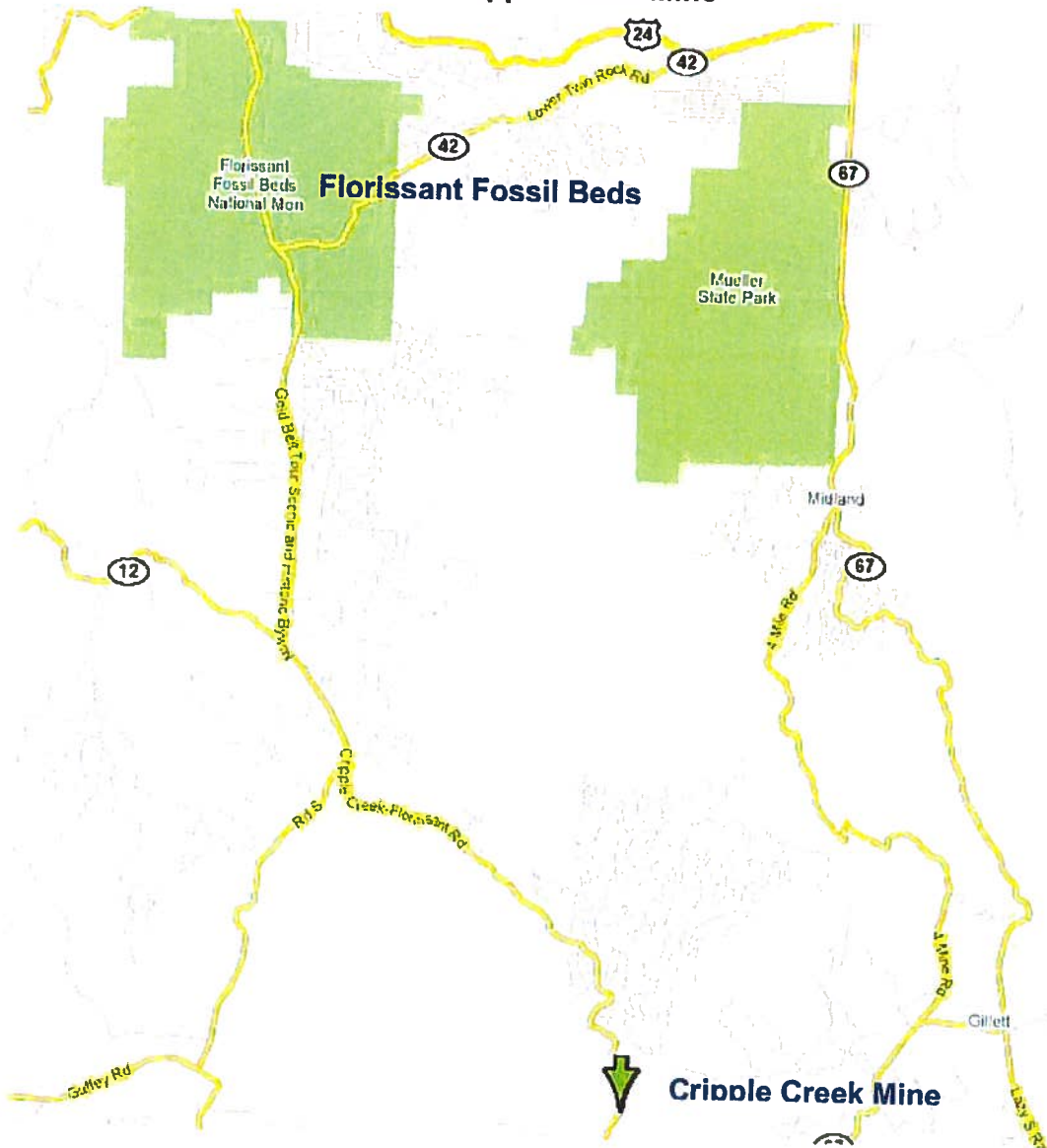
Site meteorological data has been collected and estimated previously including precipitation and evaporation at the Cripple Creek Meteorological Station from January 1966 through December 2004.

The Western Regional Climate Center (WRCC) maintains a database of precipitation data at several sites in the vicinity of the Cripple Creek site. Data are available online at:

<http://www.wrcc.dri.edu/summary/climsmco.html>.

Florissant Fossil Bed, CO, a regional meteorological station located within 20 miles of the Cripple Creek Mine site was used in this study due to its proximity to the site. **Figure 1** indicates the locations of the Florissant Fossil Bed (FFB) site and the location of the Cripple Creek and Victor Gold Mine.

Figure 1. Approximate Location of WRCC Meteorological Stations and Cripple Creek Mine



Precipitation Analysis

ERC evaluated the available monthly Cripple Creek and FFB data from the WRCC for completeness. Months with more than 5 days of missing data were considered incomplete.

The Cripple Creek site design precipitation data set as compiled previously by Golder Associates includes a period of record from January 1966 to December 2004 and has 44 months of incomplete data. The Florissant Fossil Bed data set for the period of record from January 1989 to December 2006 contains 7 months of

incomplete data. The overlapping period of record for the two was evaluated and compared as a means of filling in missing data at the CC&V site.

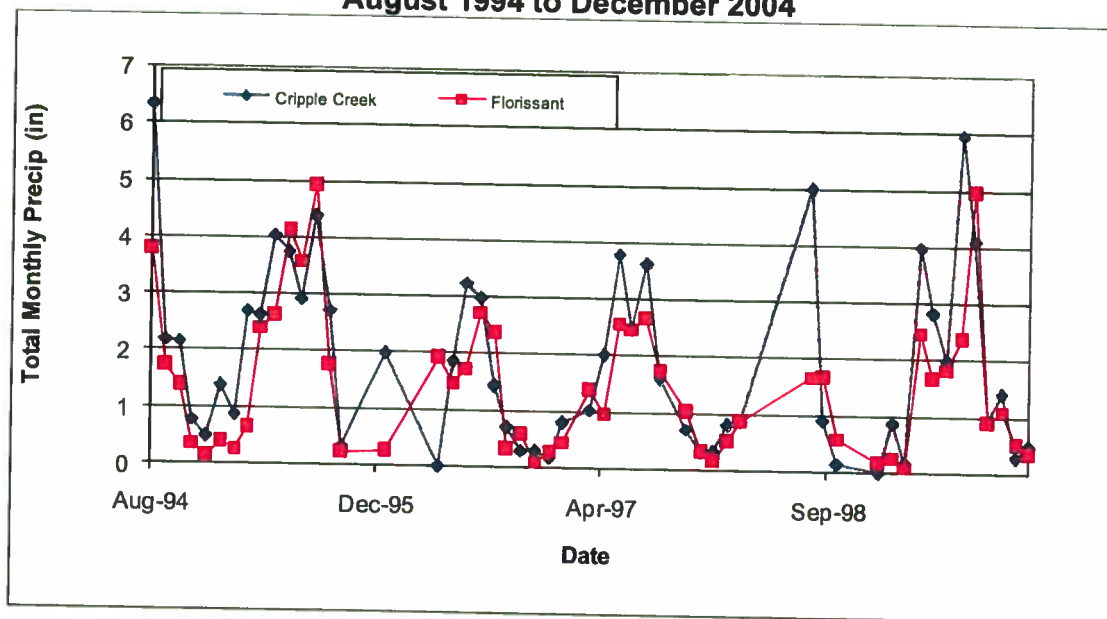
Monthly Precipitation Regression

A linear regression analysis was applied to the Cripple Creek and the Florissant Fossil Bed total monthly precipitation data for concurrent periods of record between August 1994 and December 1999. A linear equation relating Cripple Creek data as a function of Florissant Fossil Bed data was developed. The equation is:

$$\text{Cripple Creek} = 0.996 * (\text{Florissant Fossil Bed}) + 0.428$$

The analysis indicated that the R^2 value of the equation is 0.61. Precipitation at CC&V is typically greater than that at FFB with mean monthly precipitation values of 1.87 and 1.45 inches, respectively. **Figure 2** shows total monthly precipitation for the concurrent period of record at the sites.

**Figure 2. Total Monthly Precipitation at Cripple Creek and the Florissant Fossil Bed
August 1994 to December 2004**



Estimated Precipitation at Cripple Creek

The regression equation developed above was used to estimate monthly precipitation at Cripple Creek for each month missing site data between 1989 and 2006. Actual data from the Cripple Creek Station for the period between January 1966 and December 2004 was added to form a data set of monthly precipitation

for Cripple Creek for January 1966 through December 2006. Months where neither site data were available the monthly average of the site data was used. Statistics for the January 1966 - December 2006 monthly precipitation data used as the basis for the water balance model are shown in Table 1. Average annual precipitation values for Cripple Creek for 1966 – 2006 is estimated to be 18.44 inches.

Table 1. Precipitation Statistics for Cripple Creek 1966 - December 2006.

Month	Cripple Creek Jan 1966 – December 2006			
	Avg (in)	Min (in)	Max (in)	Std Dev (in)
Jan	0.63	0.06	1.98	0.46
Feb	0.53	0.19	0.93	0.20
Mar	1.16	0.00	3.28	0.82
Apr	1.29	0.14	3.64	0.89
May	1.53	0.00	4.03	0.90
Jun	1.84	0.46	3.78	1.07
Jul	4.12	1.38	8.58	2.05
Aug	3.68	0.97	6.68	1.21
Sep	1.50	0.52	2.72	0.62
Oct	1.06	0.06	2.98	0.69
Nov	0.60	0.06	2.10	0.44
Dec	0.51	0.01	1.32	0.34
Annual	18.44	9.46	26.64	NA

*Note: Maximum and minimum values for each month were recorded in any year during the period of record. Annual total maximum and minimum values represent the greatest and least precipitation in a single year.

Modeled Precipitation

The precipitation component of ERC's water balance model was programmed to mimic mean monthly and annual precipitation presented above along with seasonal and year-to year trends that have been observed at the site. In general our analysis of site precipitation data indicated that wet months typically follow other wet months and dry months follow dry months resulting in longer period wet or dry trends. ERC utilized a first order periodic auto-regressive model (PAR-1) to model long-term monthly precipitation. The PAR-1 model considers the amount of precipitation estimated for the previous month when estimating precipitation in the current month. In this manner the likelihood of consecutive wet or dry months predicted by the model replicate observed patterns.

100-years of synthetic monthly precipitation were developed for use in the CC&V water balance utilizing this PAR-1 model. Statistical results of the 100-years of data compared with the generated site data are presented on Table 3.

Table 3. Comparison of Average Monthly Precipitation and Standard Deviations for Cripple Creek Data and PAR-1 Model Results.

Month	1966- 2006 Cripple Creek Data		PAR-1 Model Results	
	Average (in)	St Dev (in)	Average (in)	St Dev (in)
Jan	0.63	0.46	0.63	0.42
Feb	0.53	0.20	0.55	0.17
Mar	1.16	0.82	1.31	0.72
Apr	1.29	0.89	1.40	0.89
May	1.53	0.90	1.63	0.80
Jun	1.84	1.07	1.84	1.09
Jul	4.12	2.05	4.27	2.00
Aug	3.68	1.21	3.54	1.27
Sep	1.50	0.62	1.52	0.41
Oct	1.06	0.69	1.10	0.62
Nov	0.60	0.44	0.60	0.41
Dec	0.51	0.34	0.51	0.31
Total	18.44	NA	18.90	NA

Table 3 indicates that the averages and standard deviations of the 1966 - 2006 Cripple Creek data are preserved by the PAR-1 model. Replication of actual data will help to ensure that the water balance model results accurately depict the full range of likely outcomes. Precipitation averages determined from the PAR-1 model results are anticipated to be slightly greater than observed data. This is characteristic of PAR-1 models, and results from omitting negative precipitation values calculated by the model and replacing them with zero. ERC considers the PAR-1 model to accurately represent observed Cripple Creek precipitation data.

A comparison of annual precipitation exceedance probabilities for the 1966- 2006 synthetic and observed annual rainfall with 100 years of synthetic precipitation generated by the PAR-1 model is presented in Table 4.

Table 4. Annual Exceedance Probabilities for Site and ERC Modeled Precipitation

Annual Exceedance Probability (%)	Site Precipitation (inches)	PAR-1 Model Precipitation (inches)
1%	N/A	25.6
5%	26.46	23.9
25%	19.54	21.3
50%	18.19	18.7
75%	15.70	16.4
95%	10.48	13.4
99%	N/A	11.0

Note: The Cripple Creek site precipitation data set is not large enough to accurately calculate precipitation values for the 1% and 99% exceedance event.

Evaporation

Additional meteorological data including evaporation was available at the Cripple Creek site from January 1994 through December 1999. In this analysis, monthly evaporation data were used to calculate average monthly and annual values. The observed value from August of 1999 was excluded from the analysis due to an apparent error in the recorded values. Average monthly results obtained from the site data that were used in the model are presented in Table 5.

Table 5. Monthly and Annual Averages for Meteorological Data

Month	Evaporation
Jan	2.23
Feb	2.30
Mar	3.01
Apr	3.35
May	4.43
Jun	6.54
Jul	6.00
Aug	4.78
Sep	3.73
Oct	3.45
Nov	2.40
Dec	2.08
Annual Average	44.29



SMITH WILLIAMS CONSULTANTS, INC.

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Calculation Title: Phase 5 VLF Water Balance	
Prepared By: JFL	Date: March 14, 2008
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Attachment B
Ore Loading and Configuration Schedule



SMITH WILLIAMS CONSULTANTS, INC.

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Time		Phase	Tons Placed	Surface Area, ft ²	Depth to Liner, ft
Aug	2011	I	-	-	-
		II/III	253,096	131,977	705
		IV	1,748,423	792,148	575
		5	-	-	-
Sep	2011	I	-	-	-
		II/III	-	-	-
		IV	1,545,336	682,343	410
		5	-	-	-
Oct	2011	I	-	-	-
		II/III	-	-	-
		IV	-	-	-
		5	1,952,628	1,173,605	40
Nov	2011	I	569,357	263,280	690
		II/III	1,401,803	640,410	715
		IV	-	-	-
		5	-	-	-
Dec	2011	I	946,886	449,168	665
		II/III	1,816	4,173	5
		IV	1,816	2,805	35
		5	1,006,526	649,161	50
Jan	2012	I	272,964	199,870	25
		II/III	-	-	-
		IV	-	-	-
		5	1,936,043	698,530	75
Feb	2012	I	-	-	-
		II/III	37,358	24,183	195
		IV	18,679	10,981	195
		5	1,936,043	698,530	105
Mar	2012	I	-	-	-
		II/III	-	-	-
		IV	-	-	-
		5	1,936,043	698,530	120
Apr	2012	I	244,514	125,772	215
		II/III	-	-	-



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		IV	-	-	-
		5	1,773,527	720,178	125
May	2012	I	244,514	125,772	250
		II/III	89,543	45,621	225
		IV	7,619	3,577	225
		5	1,773,527	720,178	155
		I	244,514	125,772	250
June	2012	II/III	-	-	-
		IV	-	-	-
		5	1,773,527	720,178	170
		I	494,385	234,908	280
		II/III	-	-	-
July	2012	IV	-	-	-
		5	1,583,998	721,221	170
		I	494,385	234,908	290
		II/III	99,746	49,301	285
		IV	1,578	779	250
Aug	2012	5	1,583,998	721,221	280
		I	-	-	-
		II/III	-	-	-
		IV	-	-	-
		5	2,027,998	721,221	105
Sep	2012	I	460,330	205,563	325
		II/III	-	-	-
		IV	-	-	-
		5	1,348,635	537,784	220
		I	460,330	205,563	325
Oct	2012	II/III	-	-	-
		IV	-	-	-
		5	1,348,635	537,784	220
		I	460,330	205,563	325
		II/III	-	-	-
Nov	2012	IV	-	-	-
		5	1,348,635	537,784	220
		I	460,330	205,563	325
		II/III	-	-	-
		IV	-	-	-
Dec	2012	5	1,348,635	537,784	220
		I	460,330	205,563	325
		II/III	-	-	-
		IV	-	-	-
		5	1,348,635	537,784	220
Jan	2013	I	919,272	407,264	375
		II/III	421,485	21,135	375
		IV	-	-	-



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Project: CC&V Phase 5 VLF		Job No. 1125
Calculation Title: Phase 5 VLF Water Balance		
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Checked By: DTW	Date: March 19, 2008	

Feb	2013	5	653,592	463,009	240
		I	-	-	-
		II/III	-	-	-
		IV	-	-	-
Mar	2013	5	1,541,592	463,009	220
		I	826,250	387,666	755
		II/III	826,250	387,666	760
		IV	-	-	-
Apr	2013	5	-	-	-
		I	-	-	-
		II/III	-	-	-
		IV	-	-	-
May	2013	5	2,179,861	789,255	100
		I	645,242	279,404	350
		II/III	-	-	-
		IV	-	-	-
June	2013	5	1,587,861	789,255	225
		I	-	-	-
		II/III	-	-	-
		IV	981,483	486,490	470
July	2013	5	-	-	-
		I	-	-	-
		II/III	-	-	-
		IV	1,083,305	470,422	625
Aug	2013	5	529,358	22,992	275
		I	860,479	373,660	395
		II/III	-	-	-
		IV	-	-	-
Sep	2013	5	923,048	504,267	275
		I	860,479	373,660	430
		II/III	264,679	114,936	390
		IV	-	-	-
Oct	2013	5	923,048	504,267	300
		I	-	-	-
		II/III	-	-	-
		IV	-	-	-
		5	1,746,822	720,320	85



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Project: CC&V Phase 5 VLF		Job No. 1125
Calculation Title: Phase 5 VLF Water Balance		
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Nov	2013	I	-	-	-
		II/III	-	-	-
		IV	-	-	-
		5	1,746,822	720,320	195
Dec	2013	I	464,539	208,786	385
		II/III	-	-	-
		IV	-	-	-
		5	1,265,135	504,460	285
Jan	2014	I	1,233,888	552,800	450
		II/III	206,812	155,856	525
		IV	-	-	-
		5	818,446	351,972	400
Feb	2014	I	-	-	-
		II/III	-	-	-
		IV	-	-	-
		5	2,080,893	577,300	105
Mar	2014	I	-	-	-
		II/III	-	-	-
		IV	-	-	-
		5	2,080,893	577,300	105
Apr	2014	I	-	-	-
		II/III	-	-	-
		IV	-	-	-
		5	1,922,224	752,706	200
May	2014	I	956,864	393,445	480
		II/III	-	-	-
		IV	-	-	-
		5	1,184,000	459,987	-
June	2014	I	956,864	393,445	480
		II/III	-	-	-
		IV	-	-	-
		5	1,109,112	459,987	350
July	2014	I	849,868	418,769	465
		II/III	333,688	219,139	620
		IV	4,440	13,407	540
		5	907,204	410,028	210
Aug	2014	I	-	-	-



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		II/III	-	-	-
		IV	-	-	-
		5	2,010,416	845,130	125
		I	-	-	-
Sep	2014	II/III	-	-	-
		IV	-	-	-
		5	2,010,416	845,130	125
		I	-	-	-
Oct	2014	II/III	-	-	-
		IV	-	-	-
		5	1,980,640	790,223	175
		I	-	-	-
Nov	2014	II/III	-	-	-
		IV	-	-	-
		5	1,980,640	790,223	360
		I	-	-	-
Dec	2014	II/III	-	-	-
		IV	-	-	-
		5	2,032,485	835,017	540
		I	-	-	-
Jan	2015	II/III	488,563	319,163	715
		IV	98,643	87,653	605
		5	444,000	300,000	100
		I	-	-	-
Feb	2015	II/III	-	-	-
		IV	-	-	-
		5	1,783,000	755,012	200
		I	-	-	-
Mar	2015	II/III	-	-	-
		IV	-	-	-
		5	1,783,000	755,012	200
		I	-	-	-
Apr	2015	II/III	-	-	-
		IV	-	-	-
		5	2,220,000	877,814	215
		I	-	-	-
May	2015	II/III	-	-	-
		I	-	-	-



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Project: CC&V Phase 5 VLF		Job No. 1125
Calculation Title: Phase 5 VLF Water Balance		
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Checked By: DTW		Date: March 19, 2008

		IV	-	-	-
		5	2,220,000	877,814	420
June	2015	I	1,888,742	779,162	625
		II/III	-	-	-
		IV	-	-	-
		5	375,719	152,663	440
July	2015	I	860,197	397,624	620
		II/III	-	-	-
		IV	-	-	-
		5	740,000	305,833	515
Aug	2015	I	-	-	-
		II/III	-	-	-
		IV	-	-	-
		5	1,840,823	746,592	200
Sep	2015	I	-	-	-
		II/III	-	-	-
		IV	-	-	-
		5	1,840,823	746,592	145
Oct	2015	I	-	-	-
		II/III	-	-	-
		IV	-	-	-
		5	1,960,140	771,271	175
Nov	2015	I	-	-	-
		II/III	-	-	-
		IV	-	-	-
		5	1,960,140	771,271	440
Dec	2015	I	1,659,648	691,423	665
		II/III	-	-	-
		IV	-	-	-
		5	296,000	150,000	-
Jan	2016	I	1,326,114	619,251	745
		II/III	-	-	-
		IV	-	-	-
		5	444,000	183,780	570
Feb	2016	I	-	-	-
		II/III	-	-	-
		IV	-	-	-



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Project: CC&V Phase 5 VLF		Job No. 1125
Calculation Title: Phase 5 VLF Water Balance		
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Checked By: DTW		Date: March 19, 2008

Mar	2016	5	1,804,429	789,689	230
		I	-	-	-
		II/III	-	-	-
		IV	-	-	-
		5	1,804,429	789,689	230
Apr	2016	I	-	-	-
		II/III	-	-	-
		IV	-	-	-
		5	1,888,489	749,962	410
		I	771,613	402,746	710
May	2016	II/III	-	-	-
		IV	-	-	-
		5	1,020,781	428,555	544
		I	1,128,167	474,991	620
		II/III	-	-	-
June	2016	IV	-	-	-
		5	-	-	-



SMITH WILLIAMS CONSULTANTS, INC.

Project: CC&V Phase 5 VLF	Job No. 1125
Calculation Title: Phase 5 VLF Water Balance	
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Checked By: DTW	Date: March 19, 2008

Attachment C
Ore Configuration Tables

Phase I Ore Configuration Table



SMITH WILLIAMS CONSULTANTS, INC.

Project: CC&V Phase 5 VLF	Job No. 1125
Calculation Title: Phase 5 VLF Water Balance	
Prepared By: JFL	Date: March 14, 2008
Checked By: DTW	Date: March 19, 2008

Month	Average Heap Ht. Under Leach ft.	Lined Area ft.	Leached Area ft ²	Exposed Liner ft.	Top Area ft ²	Slope Area ft ²	Ore Production ton
0	0	5,168,010	0	0	1,550,403	3,617,607	0
1	0	5,168,010	0	0	1,550,403	3,617,607	0
2	0	5,168,010	0	0	1,550,403	3,617,607	0
3	0	5,168,010	0	0	1,550,403	3,617,607	0
4	0	5,168,010	0	0	1,550,403	3,617,607	569,357
5	690	5,168,010	263,280	0	1,287,123	3,617,607	946,886
6	674	5,168,010	712,448	0	837,955	3,617,607	272,964
7	532	5,168,010	912,318	0	638,085	3,617,607	0
8	674	5,168,010	712,448	0	837,955	3,617,607	0
9	674	5,168,010	712,448	0	837,955	3,617,607	244,514
10	605	5,168,010	838,220	0	712,183	3,617,607	244,514
11	559	5,168,010	963,992	0	586,411	3,617,607	244,514
12	470	5,168,010	826,484	0	723,919	3,617,607	494,385
13	254	5,168,010	612,224	0	938,179	3,617,607	494,385
14	273	5,168,010	721,360	0	829,043	3,617,607	0
15	278	5,168,010	595,588	0	954,815	3,617,607	460,330
16	297	5,168,010	675,379	0	875,024	3,617,607	460,330
17	304	5,168,010	880,942	0	669,461	3,617,607	460,330
18	315	5,168,010	851,597	0	698,806	3,617,607	919,272
19	345	5,168,010	1,023,953	0	526,450	3,617,607	0
20	345	5,168,010	1,023,953	0	526,450	3,617,607	826,250
21	458	5,168,010	1,411,619	0	138,784	3,617,607	0
22	480	5,168,010	1,206,056	0	344,347	3,617,607	645,242
23	477	5,168,010	1,279,897	0	270,506	3,617,607	0
24	506	5,168,010	1,074,334	0	476,069	3,617,607	0
25	506	5,168,010	1,074,334	0	476,069	3,617,607	860,479
26	517	5,168,010	1,040,730	0	509,673	3,617,607	860,479
27	473	5,168,010	1,414,390	0	136,013	3,617,607	0
28	366	5,168,010	1,026,724	0	523,679	3,617,607	0
29	373	5,168,010	747,320	0	803,083	3,617,607	464,539
30	375	5,168,010	956,106	0	594,297	3,617,607	1,233,888
31	403	5,168,010	1,508,906	0	41,497	3,617,607	0
32	403	5,168,010	1,508,906	0	41,497	3,617,607	0



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33	405	5,168,010	1,135,246	0	415,157	3,617,607	0
34	432	5,168,010	761,586	0	788,817	3,617,607	956,864
35	448	5,168,010	1,155,031	0	395,372	3,617,607	956,864
36	456	5,168,010	1,548,476	0	1,927	3,617,607	849,868
37	467	5,168,010	1,758,459	0	0	3,617,607	0
38	475	5,168,010	1,205,659	0	344,744	3,617,607	0
39	475	5,168,010	1,205,659	0	344,744	3,617,607	0
40	475	5,168,010	1,205,659	0	344,744	3,617,607	0
41	475	5,168,010	1,205,659	0	344,744	3,617,607	2,032,485
42	507	5,168,010	1,647,231	0	0	3,617,607	791,643
43	526	5,168,010	1,623,454	0	0	3,617,607	0
44	548	5,168,010	1,204,685	0	345,718	3,617,607	0
45	548	5,168,010	1,204,685	0	345,718	3,617,607	0
46	548	5,168,010	1,204,685	0	345,718	3,617,607	0
47	548	5,168,010	1,204,685	0	345,718	3,617,607	1,888,742
48	578	5,168,010	1,983,847	0	0	3,617,607	860,197
49	609	5,168,010	1,546,454	0	3,949	3,617,607	0
50	623	5,168,010	1,176,786	0	373,617	3,617,607	0
51	623	5,168,010	1,176,786	0	373,617	3,617,607	0
52	623	5,168,010	1,176,786	0	373,617	3,617,607	0
53	623	5,168,010	1,176,786	0	373,617	3,617,607	1,659,648
54	639	5,168,010	1,868,209	0	0	3,617,607	1,326,114
55	684	5,168,010	1,708,298	0	0	3,617,607	0
56	703	5,168,010	1,310,674	0	239,729	3,617,607	0
57	703	5,168,010	1,310,674	0	239,729	3,617,607	0
58	703	5,168,010	1,310,674	0	239,729	3,617,607	771,613
59	704	5,168,010	1,713,420	0	0	3,617,607	1,128,167
60	686	5,168,010	2,188,411	0	0	3,617,607	0
61	696	5,168,010	1,496,988	0	53,415	3,617,607	0
62	661	5,168,010	877,737	0	672,666	3,617,607	0
63	661	5,168,010	877,737	0	672,666	3,617,607	0
64	661	5,168,010	877,737	0	672,666	3,617,607	0
65	661	5,168,010	877,737	0	672,666	3,617,607	0
66	620	5,168,010	474,991	0	1,075,412	3,617,607	0



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Project: CC&V Phase 5 VLF	Job No. 1125
Calculation Title: Phase 5 VLF Water Balance	
Prepared By: JFL	Date: March 14, 2008
Checked By: DTW	Date: March 19, 2008

Phase II Ore Configuration Table

Month	Average Heap Ht. Under Leach ft.	Lined Area ft.	Leached Area ft ²	Exposed Liner ft.	Top Area ft ²	Slope Area ft ²	Ore Production ton
0	0	5,106,609	0	0	1,531,983	3,574,626	0
1	0	5,106,609	0	0	1,531,983	3,574,626	253,096
2	705	5,106,609	131,977	0	1,400,006	3,574,626	0
3	705	5,106,609	131,977	0	1,400,006	3,574,626	0
4	705	5,106,609	131,977	0	1,400,006	3,574,626	1,401,803
5	713	5,106,609	772,387	0	759,596	3,574,626	1,816
6	709	5,106,609	776,560	0	755,423	3,574,626	0
7	713	5,106,609	772,387	0	759,596	3,574,626	37,358
8	698	5,106,609	796,570	0	735,413	3,574,626	0
9	696	5,106,609	664,593	0	867,390	3,574,626	0
10	696	5,106,609	664,593	0	867,390	3,574,626	89,543
11	682	5,106,609	686,031	0	845,952	3,574,626	0
12	225	5,106,609	45,621	0	1,486,362	3,574,626	0
13	225	5,106,609	45,621	0	1,486,362	3,574,626	99,746
14	256	5,106,609	94,922	0	1,437,061	3,574,626	0
15	285	5,106,609	49,301	0	1,482,682	3,574,626	0
16	285	5,106,609	49,301	0	1,482,682	3,574,626	0
17	285	5,106,609	49,301	0	1,482,682	3,574,626	0
18	285	5,106,609	49,301	0	1,482,682	3,574,626	421,485
19	375	5,106,609	21,135	0	1,510,848	3,574,626	0
20	375	5,106,609	21,135	0	1,510,848	3,574,626	826,250
21	740	5,106,609	408,801	0	1,123,182	3,574,626	0
22	740	5,106,609	408,801	0	1,123,182	3,574,626	0
23	740	5,106,609	408,801	0	1,123,182	3,574,626	0
24	740	5,106,609	408,801	0	1,123,182	3,574,626	0
25	740	5,106,609	408,801	0	1,123,182	3,574,626	0
26	760	5,106,609	387,666	0	1,144,317	3,574,626	264,679
27	675	5,106,609	502,602	0	1,029,381	3,574,626	0
28	390	5,106,609	114,936	0	1,417,047	3,574,626	0
29	390	5,106,609	114,936	0	1,417,047	3,574,626	0
30	390	5,106,609	114,936	0	1,417,047	3,574,626	206,812
31	468	5,106,609	270,792	0	1,261,191	3,574,626	0



SMITH WILLIAMS CONSULTANTS, INC.

Project: CC&V Phase 5 VLF		Job No. 1125
Calculation Title: Phase 5 VLF Water Balance		
Prepared By: JFL		Date: March 14, 2008
Checked By: DTW		Date: March 19, 2008

32	468	5,106,609	270,792	0	1,261,191	3,574,626	0
33	468	5,106,609	270,792	0	1,261,191	3,574,626	0
34	525	5,106,609	155,856	0	1,376,127	3,574,626	0
35	525	5,106,609	155,856	0	1,376,127	3,574,626	0
36	525	5,106,609	155,856	0	1,376,127	3,574,626	333,688
37	581	5,106,609	374,995	0	1,156,988	3,574,626	0
38	620	5,106,609	219,139	0	1,312,844	3,574,626	0
39	620	5,106,609	219,139	0	1,312,844	3,574,626	0
40	620	5,106,609	219,139	0	1,312,844	3,574,626	0
41	620	5,106,609	219,139	0	1,312,844	3,574,626	0
42	620	5,106,609	219,139	0	1,312,844	3,574,626	488,563
43	676	5,106,609	538,302	0	993,681	3,574,626	0
44	715	5,106,609	319,163	0	1,212,820	3,574,626	0
45	715	5,106,609	319,163	0	1,212,820	3,574,626	0
46	715	5,106,609	319,163	0	1,212,820	3,574,626	0
47	715	5,106,609	319,163	0	1,212,820	3,574,626	0
48	715	5,106,609	319,163	0	1,212,820	3,574,626	0
49	715	5,106,609	319,163	0	1,212,820	3,574,626	0

Phase IV Ore Configuration Table

Month	Average Heap Ht. Under Leach ft.	Lined Area ft.	Leached Area ft ²	Exposed Liner ft.	Top Area ft ²	Slope Area ft ²	Ore Production ton
0	0	4,825,625	0	0	1,447,688	3,377,938	0
1	0	4,825,625	0	0	1,447,688	3,377,938	1,748,423
2	575	4,825,625	792,148	0	655,540	3,377,938	1,545,336
3	499	4,825,625	1,474,491	0	0	3,377,938	0
4	499	4,825,625	1,474,491	0	0	3,377,938	0
5	499	4,825,625	1,474,491	0	0	3,377,938	1,816
6	498	4,825,625	1,477,29	0	0	3,377,938	0



SMITH WILLIAMS CONSULTANTS, INC.

Project: CC&V Phase 5 VLF		Job No. 1125
Calculation Title: Phase 5 VLF Water Balance		
Prepared By: JFL		Date: March 14, 2008
Checked By: DTW		Date: March 19, 2008

			6				
7	499	4,825,625	1,474,491	0	0	3,377,938	18,679
8	496	4,825,625	1,485,472	0	0	3,377,938	0
9	407	4,825,625	693,324	0	754,364	3,377,938	0
10	195	4,825,625	10,981	0	1,436,707	3,377,938	7,619
11	225	4,825,625	3,577	0	1,444,111	3,377,938	0
12	225	4,825,625	3,577	0	1,444,111	3,377,938	0
13	225	4,825,625	3,577	0	1,444,111	3,377,938	1,578
14	229	4,825,625	4,356	0	1,443,332	3,377,938	0
15	250	4,825,625	779	0	1,446,909	3,377,938	0
16	250	4,825,625	779	0	1,446,909	3,377,938	0
17	250	4,825,625	779	0	1,446,909	3,377,938	0
18	0	4,825,625	0	0	1,447,688	3,377,938	0
19	0	4,825,625	0	0	1,447,688	3,377,938	0
20	0	4,825,625	0	0	1,447,688	3,377,938	0
21	0	4,825,625	0	0	1,447,688	3,377,938	0
22	0	4,825,625	0	0	1,447,688	3,377,938	0
23	0	4,825,625	0	0	1,447,688	3,377,938	981,483
24	470	4,825,625	486,490	0	961,198	3,377,938	1,083,305
25	546	4,825,625	956,912	0	490,776	3,377,938	0
26	546	4,825,625	956,912	0	490,776	3,377,938	0
27	546	4,825,625	956,912	0	490,776	3,377,938	0
28	546	4,825,625	956,912	0	490,776	3,377,938	0
29	546	4,825,625	956,912	0	490,776	3,377,938	0
30	546	4,825,625	956,912	0	490,776	3,377,938	0
31	625	4,825,625	470,422	0	977,266	3,377,938	0
32	0	4,825,625	0	0	1,447,688	3,377,938	0
33	0	4,825,625	0	0	1,447,688	3,377,938	0
34	0	4,825,625	0	0	1,447,688	3,377,938	0
35	0	4,825,625	0	0	1,447,688	3,377,938	0
36	0	4,825,625	0	0	1,447,688	3,377,938	4,440
37	540	4,825,625	13,407	0	1,434,281	3,377,938	0
38	540	4,825,625	13,407	0	1,434,281	3,377,938	0
39	540	4,825,625	13,407	0	1,434,281	3,377,938	0
40	540	4,825,625	13,407	0	1,434,281	3,377,938	0



SMITH WILLIAMS CONSULTANTS, INC.

Project: CC&V Phase 5 VLF	Job No. 1125
Calculation Title: Phase 5 VLF Water Balance	
Prepared By: JFL	Date: March 14, 2008
Checked By: DTW	Date: March 19, 2008

41	540	4,825,625	13,407	0	1,434,281	3,377,938	0
42	540	4,825,625	13,407	0	1,434,281	3,377,938	98,643
43	596	4,825,625	101,060	0	1,346,628	3,377,938	0
44	605	4,825,625	87,653	0	1,360,035	3,377,938	0
45	605	4,825,625	87,653	0	1,360,035	3,377,938	0
46	605	4,825,625	87,653	0	1,360,035	3,377,938	0
47	605	4,825,625	87,653	0	1,360,035	3,377,938	0
48	605	4,825,625	87,653	0	1,360,035	3,377,938	0
49	605	4,825,625	87,653	0	1,360,035	3,377,938	0

Phase 5 Ore Configuration Table

Month	Average Heap Ht. Under Leach ft.	Lined Area ft.	Leached Area ft ²	Exposed Liner ft.	Top Area ft ²	Slope Area ft ²	Ore Production ton
0	0	5,840,717	0	0	1,752,215	4,088,502	0
1	0	5,840,717	0	0	1,752,215	4,088,502	0
2	0	5,840,717	0	0	1,752,215	4,088,502	0
3	0	5,840,717	0	0	1,752,215	4,088,502	1,952,628
4	220	5,840,717	1,173,605	0	578,610	4,088,502	0
5	0	5,840,717	0	0	1,752,215	4,088,502	1,006,526
6	283	5,840,717	649,161	0	1,103,054	4,088,502	1,936,043
7	75	5,840,717	698,530	0	1,053,685	4,088,502	1,936,043
8	90	5,840,717	1,397,060	0	355,155	4,088,502	1,936,043
9	113	5,840,717	1,397,060	0	355,155	4,088,502	1,773,527
10	117	5,840,717	2,117,238	0	0	4,088,502	1,773,527
11	133	5,840,717	2,138,886	0	0	4,088,502	1,773,527
12	150	5,840,717	2,160,534	0	0	4,088,502	1,583,998
13	165	5,840,717	2,161,577	0	0	4,088,502	1,583,998
14	207	5,840,717	2,162,620	0	0	4,088,502	2,027,998
15	185	5,840,717	2,163,663	0	0	4,088,502	1,348,635
16	200	5,840,717	1,980,226	0	0	4,088,502	1,348,635
17	204	5,840,717	2,518,010	0	0	4,088,502	1,348,635
18	239	5,840,717	2,334,573	0	0	4,088,502	653,592



SMITH WILLIAMS CONSULTANTS, INC.

Project: CC&V Phase 5 VLF		Job No. 1125
Calculation Title: Phase 5 VLF Water Balance		
Prepared By: JFL		Date: March 14, 2008
Checked By: DTW		Date: March 19, 2008

19	224	5,840,717	2,076,361	0	0	4,088,502	1,541,592
20	225	5,840,717	2,001,586	0	0	4,088,502	0
21	226	5,840,717	1,463,802	0	288,413	4,088,502	2,179,861
22	170	5,840,717	1,715,273	0	36,942	4,088,502	1,587,861
23	176	5,840,717	2,041,519	0	0	4,088,502	0
24	225	5,840,717	789,255	0	962,960	4,088,502	529,358
25	226	5,840,717	812,247	0	939,968	4,088,502	923,048
26	405	5,840,717	1,316,514	0	435,701	4,088,502	923,048
27	287	5,840,717	1,031,526	0	720,689	4,088,502	1,746,822
28	204	5,840,717	1,751,846	0	369	4,088,502	1,746,822
29	201	5,840,717	2,472,166	0	0	4,088,502	1,265,135
30	257	5,840,717	2,233,314	0	0	4,088,502	818,446
31	277	5,840,717	2,081,019	0	0	4,088,502	2,080,893
32	225	5,840,717	2,154,052	0	0	4,088,502	2,080,893
33	202	5,840,717	2,011,032	0	0	4,088,502	1,922,224
34	201	5,840,717	2,763,738	0	0	4,088,502	1,184,000
35	209	5,840,717	1,681,978	0	70,237	4,088,502	1,109,112
36	289	5,840,717	1,564,665	0	187,550	4,088,502	907,204
37	317	5,840,717	1,221,987	0	530,228	4,088,502	2,010,416
38	144	5,840,717	1,715,145	0	37,070	4,088,502	2,010,416
39	138	5,840,717	2,560,275	0	0	4,088,502	1,980,640
40	106	5,840,717	3,350,498	0	0	4,088,502	1,980,640
41	191	5,840,717	2,885,563	0	0	4,088,502	0
42	181	5,840,717	1,580,446	0	171,769	4,088,502	444,000
43	261	5,840,717	1,090,223	0	661,992	4,088,502	1,783,000
44	154	5,840,717	1,845,235	0	0	4,088,502	1,783,000
45	167	5,840,717	2,600,247	0	0	4,088,502	2,220,000
46	196	5,840,717	3,178,061	0	0	4,088,502	2,220,000
47	301	5,840,717	3,300,863	0	0	4,088,502	375,719
48	327	5,840,717	1,908,291	0	0	4,088,502	740,000
49	353	5,840,717	2,214,124	0	0	4,088,502	1,840,823
50	357	5,840,717	2,082,902	0	0	4,088,502	1,840,823
51	301	5,840,717	2,829,494	0	0	4,088,502	1,960,140
52	274	5,840,717	3,600,765	0	0	4,088,502	1,960,140
53	324	5,840,717	3,625,444	0	0	4,088,502	296,000
54	349	5,840,717	2,001,038	0	0	4,088,502	444,000
55	477	5,840,717	1,260,884	0	491,331	4,088,502	1,804,429



SMITH WILLIAMS CONSULTANTS, INC.

Project: CC&V Phase 5 VLF		Job No. 1125
Calculation Title: Phase 5 VLF Water Balance		
Prepared By: JFL		Date: March 14, 2008
Checked By: DTW		Date: March 19, 2008

56	359	5,840,717	1,744,740	0	7,475	4,088,502	1,804,429
57	319	5,840,717	2,534,429	0	0	4,088,502	1,888,489
58	339	5,840,717	3,284,391	0	0	4,088,502	1,020,781
59	363	5,840,717	3,712,946	0	0	4,088,502	0
60	384	5,840,717	2,151,986	0	0	4,088,502	0
61	474	5,840,717	1,362,297	0	389,918	4,088,502	0
62	459	5,840,717	1,178,517	0	573,698	4,088,502	0
63	459	5,840,717	1,178,517	0	573,698	4,088,502	0
64	459	5,840,717	1,178,517	0	573,698	4,088,502	0
65	544	5,840,717	428,555	0	1,323,660	4,088,502	0



SMITH WILLIAMS CONSULTANTS, INC.

Project: CC&V Phase 5 VLF	Job No. 1125
Calculation Title: Phase 5 VLF Water Balance	
Prepared By: JFL	Date: March 14, 2008
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Attachment D
GoldSim Output

**SMITH WILLIAMS CONSULTANTS, INC.**

Project: CC&V Phase 5 VLF		Job No. 1125
Calculation Title: Phase 5 VLF Water Balance		
Prepared By: JFL		Date: March 14, 2008
Checked By: DTW		Date: March 19, 2008

Sep-14	38	9355.1	9355.1	9355.1	9355.1	9355.1	9355.1	9355.1
Oct-14	39	9354.9	9354.9	9354.9	9354.9	9354.9	9354.9	9354.9
Nov-14	40	9354.7	9354.7	9354.7	9354.7	9354.7	9354.7	9354.7
Dec-14	41	9354.7	9354.7	9354.7	9354.7	9354.7	9354.7	9354.7
Jan-15	42	9354.9	9354.9	9354.9	9354.9	9354.9	9354.9	9354.9
Feb-15	43	9355	9355	9355	9355	9355	9355	9355
Mar-15	44	9355	9355	9355	9355	9355	9355	9359.2
Apr-15	45	9354.9	9354.8	9354.8	9354.8	9354.8	9354.8	9358.5
May-15	46	9354.6	9354.6	9354.6	9354.6	9354.6	9354.6	9354.6
Jun-15	47	9354.8	9354.8	9354.8	9354.8	9354.8	9354.8	9354.8
Jul-15	48	9355.1	9355.1	9355.1	9355.1	9355.1	9355.1	9355.1
Aug-15	49	9355.1	9355.1	9355.1	9355.1	9355.1	9355.1	9355.1
Sep-15	50	9355.1	9355.1	9355.1	9355.1	9355.1	9355.1	9355.1
Oct-15	51	9355	9355	9355	9355	9355	9355	9355
Nov-15	52	9354.6	9354.6	9354.6	9354.6	9354.6	9354.6	9354.6
Dec-15	53	9354.7	9354.7	9354.7	9354.7	9354.7	9354.7	9354.7
Jan-16	54	9355.1	9355.1	9355.1	9355.1	9355.1	9355.1	9355.1
Feb-16	55	9355.3	9355.3	9355.3	9355.3	9355.3	9355.3	9355.3
Mar-16	56	9355.2	9355.2	9355.2	9355.2	9355.2	9355.2	9355.5
Apr-16	57	9355.2	9355.2	9355.2	9355.2	9355.2	9355.2	9355.3
May-16	58	9355.1	9355.1	9355.1	9355.1	9355.1	9355.1	9355.1
Jun-16	59	9355.3	9355.3	9355.3	9355.3	9355.3	9355.3	9355.3
Jul-16	60	9356.4	9355.8	9355.8	9355.8	9355.8	9360.1	9365
Aug-16	61	9356	9356	9356	9356	9356	9356	9356
Sep-16	62	9355.6	9355.6	9355.6	9355.6	9355.6	9355.6	9357.6
Oct-16	63	9354.7	9354.7	9354.7	9354.7	9354.7	9354.7	9354.7
Nov-16	64	9354	9354	9354	9354	9354	9354	9354
Dec-16	65	9353.6	9353.6	9353.6	9353.6	9353.6	9353.6	9353.6
Jan-17	66	9352.3	9352.3	9352.3	9352.3	9352.3	9352.3	9352.3
Feb-17	67	9358.2	9356.8	9357.2	9357.8	9358.6	9359	9361.1
Mar-17	68	9358.2	9356.7	9357.2	9357.8	9358.6	9359	9359.3
Apr-17	69	9358.2	9356.8	9357.2	9357.8	9358.6	9359	9361.4
May-17	70	9358.2	9356.9	9357.1	9357.8	9358.6	9359.2	9361
Jun-17	71	9358.9	9356.8	9357.3	9358	9359.9	9361	9361.6
Jul-17	72	9358.5	9356.7	9357.5	9358	9358.9	9360.5	9361.2
Aug-17	73	9358.3	9356.5	9357.3	9357.9	9358.6	9359.1	9359.9
Sep-17	74	9358.1	9356.4	9357.1	9357.7	9358.5	9359.1	9359.8
Oct-17	75	9358.1	9356.4	9357.1	9357.7	9358.5	9359	9359.8
Nov-17	76	9358	9356.4	9357	9357.6	9358.4	9358.9	9359.7
Dec-17	77	9358	9356.3	9357	9357.6	9358.4	9358.9	9359.7
Jan-18	78	9358	9356.3	9357	9357.6	9358.4	9358.9	9359.6
Feb-18	79	9358	9356.3	9357	9357.6	9358.4	9359	9360.8
Mar-18	80	9358	9356.3	9356.9	9357.6	9358.4	9358.9	9360.1
Apr-18	81	9358	9356.3	9356.9	9357.6	9358.4	9358.9	9359.7



SMITH WILLIAMS CONSULTANTS, INC.

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May-18	82	9358	9356.3	9357	9357.6	9358.4	9358.9	9360.6
Jun-18	83	9358.7	9356.5	9357	9357.9	9359.6	9360.8	9361.3
Jul-18	84	9358.5	9356.4	9357	9357.7	9358.9	9360.6	9361
Aug-18	85	9358.1	9356.4	9357	9357.7	9358.5	9359	9359.7
Sep-18	86	9358	9356.3	9356.9	9357.6	9358.4	9358.9	9359.5
Oct-18	87	9357.9	9356.3	9356.8	9357.5	9358.4	9358.8	9359.5
Nov-18	88	9357.9	9356.2	9356.8	9357.4	9358.3	9358.8	9359.4
Dec-18	89	9357.8	9356.2	9356.8	9357.4	9358.3	9358.7	9359.4
Jan-19	90	9357.8	9356.1	9356.7	9357.4	9358.3	9358.7	9359.4
Feb-19	91	9357.8	9356.1	9356.7	9357.4	9358.2	9358.7	9359.7
Mar-19	92	9357.8	9356.1	9356.6	9357.4	9358.2	9358.7	9361.5
Apr-19	93	9357.8	9356.1	9356.6	9357.3	9358.2	9358.8	9359.4
May-19	94	9357.8	9356	9356.6	9357.3	9358.2	9358.8	9360.4
Jun-19	95	9358.6	9356	9356.8	9357.7	9359.5	9360.6	9361.7
Jul-19	96	9358.3	9356.1	9356.7	9357.6	9358.7	9360.7	9361.6
Aug-19	97	9357.9	9356.1	9356.8	9357.5	9358.4	9358.8	9359.9
Sep-19	98	9357.8	9356	9356.7	9357.4	9358.3	9358.7	9359.8
Oct-19	99	9357.7	9355.9	9356.6	9357.3	9358.2	9358.6	9359.7
Nov-19	100	9357.7	9355.8	9356.5	9357.3	9358.2	9358.6	9359.6
Dec-19	101	9357.6	9355.8	9356.5	9357.2	9358.1	9358.5	9359.6
Jan-20	102	9357.6	9355.8	9356.5	9357.2	9358.1	9358.5	9359.7
Feb-20	103	9357.6	9355.7	9356.4	9357.2	9358.1	9358.5	9360.2
Mar-20	104	9357.6	9355.7	9356.4	9357.1	9358.1	9358.5	9359.9
Apr-20	105	9357.6	9355.6	9356.4	9357.2	9358.1	9358.5	9359.5
May-20	106	9357.6	9355.5	9356.4	9357.1	9358.1	9358.5	9361.2
Jun-20	107	9358.3	9355.4	9356.6	9357.4	9359.4	9360.5	9361.3
Jul-20	108	9358	9356	9356.6	9357.3	9358.4	9360.1	9360.8
Aug-20	109	9357.7	9355.6	9356.6	9357.2	9358.1	9358.7	9359.7
Sep-20	110	9357.5	9355.5	9356.4	9357	9358	9358.5	9359.6
Oct-20	111	9357.5	9355.4	9356.4	9357	9358	9358.5	9359.6
Nov-20	112	9357.4	9355.3	9356.3	9357	9357.9	9358.5	9359.5
Dec-20	113	9357.4	9355.3	9356.3	9356.9	9357.9	9358.5	9359.4
Jan-21	114	9357.4	9355.3	9356.3	9356.9	9357.8	9358.4	9359.4
Feb-21	115	9357.4	9355.3	9356.2	9356.9	9357.9	9358.6	9359.7
Mar-21	116	9357.4	9355.4	9356.2	9356.9	9357.8	9358.4	9359.4
Apr-21	117	9357.4	9355.3	9356.2	9356.9	9357.8	9358.5	9360.6
May-21	118	9357.4	9355.3	9356.3	9356.9	9357.9	9358.8	9360.7
Jun-21	119	9358.2	9355.7	9356.3	9357.3	9359.5	9360.4	9360.9
Jul-21	120	9357.9	9355.6	9356.3	9357.1	9358.3	9360.2	9360.7
Aug-21	121	9357.5	9355.6	9356.3	9357.1	9358	9358.5	9359
Sep-21	122	9357.4	9355.5	9356.2	9356.9	9357.9	9358.5	9358.9
Oct-21	123	9357.3	9355.3	9356.1	9356.9	9357.8	9358.4	9358.9
Nov-21	124	9357.3	9355.3	9356	9356.8	9357.7	9358.3	9358.9
Dec-21	125	9357.2	9355.2	9356	9356.8	9357.7	9358.3	9358.8



Jan-22	126	9357.2	9355.3	9355.9	9356.8	9357.7	9358.3	9358.8
Feb-22	127	9357.2	9355.2	9355.9	9356.7	9357.7	9358.3	9359.8
Mar-22	128	9357.2	9355.2	9355.9	9356.7	9357.6	9358.2	9358.8
Apr-22	129	9357.2	9355.2	9355.9	9356.7	9357.6	9358.3	9358.8
May-22	130	9357.3	9355.1	9355.9	9356.7	9357.7	9358.5	9360.3
Jun-22	131	9357.9	9355.5	9356.2	9357	9358.8	9360.1	9360.7
Jul-22	132	9357.6	9355.6	9356.1	9356.9	9358.1	9359.8	9360.9
Aug-22	133	9357.3	9355.5	9355.9	9356.8	9357.9	9358.4	9358.9
Sep-22	134	9357.2	9355.4	9355.8	9356.6	9357.8	9358.3	9358.8
Oct-22	135	9357.1	9355.3	9355.8	9356.6	9357.7	9358.2	9358.8
Nov-22	136	9357.1	9355.2	9355.7	9356.6	9357.6	9358.1	9358.8
Dec-22	137	9357	9355.2	9355.7	9356.5	9357.6	9358.1	9358.8
Jan-23	138	9357	9355.2	9355.6	9356.5	9357.6	9358.1	9358.7
Feb-23	139	9357	9355.2	9355.6	9356.5	9357.6	9358.2	9359.2
Mar-23	140	9357	9355.2	9355.6	9356.5	9357.6	9358.3	9359.7
Apr-23	141	9357	9355.3	9355.6	9356.5	9357.6	9358.1	9358.7
May-23	142	9357	9355.3	9355.6	9356.5	9357.5	9358.1	9360.2
Jun-23	143	9357.7	9355.2	9355.8	9356.7	9358.7	9360	9360.4
Jul-23	144	9357.5	9355.1	9355.8	9356.7	9358.1	9359.3	9360.2
Aug-23	145	9357.1	9355.1	9355.7	9356.6	9357.7	9358.3	9359
Sep-23	146	9357	9355	9355.6	9356.5	9357.6	9358.1	9358.8
Oct-23	147	9356.9	9355	9355.5	9356.4	9357.5	9358.1	9358.8
Nov-23	148	9356.9	9354.9	9355.4	9356.3	9357.5	9358	9358.7
Dec-23	149	9356.8	9354.8	9355.4	9356.3	9357.4	9358	9358.7
Jan-24	150	9356.8	9354.8	9355.4	9356.3	9357.4	9358	9358.7
Feb-24	151	9357.2	9354.8	9355.8	9356.5	9357.7	9359.5	9360.9
Mar-24	152	9357.4	9354.9	9355.7	9356.5	9358.1	9359.9	9360.4
Apr-24	153	9357.6	9354.9	9355.7	9356.7	9358.4	9359.9	9360.9
May-24	154	9358.2	9355.2	9356.2	9357.3	9359.2	9360.2	9360.5
Jun-24	155	9359.2	9355.7	9357.4	9358.6	9360	9360.7	9361.2
Jul-24	156	9359.5	9355.5	9357	9358.9	9360.3	9360.9	9361.4

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SMITH WILLIAMS CONSULTANTS, INC.

Project: CC&V Phase 5 VLF		Job No. 1125
Calculation Title: Phase 5 VLF Water Balance		
Prepared By: JFL		Date: March 14, 2008
Checked By: DTW		Date: March 19, 2008

49	2.97E+07	2.97E+07	2.97E+07	2.97E+07	2.97E+07	2.97E+07	2.97E+07
50	2.96E+07	2.96E+07	2.96E+07	2.96E+07	2.96E+07	2.96E+07	2.96E+07
51	2.95E+07	2.95E+07	2.95E+07	2.95E+07	2.95E+07	2.95E+07	2.95E+07
52	2.91E+07	2.91E+07	2.91E+07	2.91E+07	2.91E+07	2.91E+07	2.91E+07
53	2.91E+07	2.91E+07	2.91E+07	2.91E+07	2.91E+07	2.91E+07	2.91E+07
54	2.96E+07	2.96E+07	2.96E+07	2.96E+07	2.96E+07	2.96E+07	2.96E+07
55	2.99E+07	2.99E+07	2.99E+07	2.99E+07	2.99E+07	2.99E+07	2.99E+07
56	2.98E+07	2.98E+07	2.98E+07	2.98E+07	2.98E+07	2.98E+07	3.01E+07
57	2.98E+07	2.98E+07	2.98E+07	2.98E+07	2.98E+07	2.98E+07	2.99E+07
58	2.97E+07	2.97E+07	2.97E+07	2.97E+07	2.97E+07	2.97E+07	2.97E+07
59	2.99E+07	2.99E+07	2.99E+07	2.99E+07	2.99E+07	2.99E+07	2.99E+07
60	3.13E+07	3.05E+07	3.05E+07	3.05E+07	3.05E+07	3.59E+07	4.29E+07
61	3.07E+07	3.07E+07	3.07E+07	3.07E+07	3.07E+07	3.07E+07	3.07E+07
62	3.03E+07	3.02E+07	3.02E+07	3.02E+07	3.02E+07	3.02E+07	3.27E+07
63	2.92E+07	2.92E+07	2.92E+07	2.92E+07	2.92E+07	2.92E+07	2.92E+07
64	2.84E+07	2.84E+07	2.84E+07	2.84E+07	2.84E+07	2.84E+07	2.84E+07
65	2.80E+07	2.80E+07	2.80E+07	2.80E+07	2.80E+07	2.80E+07	2.80E+07
66	2.65E+07	2.65E+07	2.65E+07	2.65E+07	2.65E+07	2.65E+07	2.65E+07
67	3.35E+07	3.17E+07	3.23E+07	3.30E+07	3.39E+07	3.45E+07	3.72E+07
68	3.34E+07	3.17E+07	3.22E+07	3.30E+07	3.40E+07	3.45E+07	3.49E+07
69	3.35E+07	3.17E+07	3.22E+07	3.30E+07	3.40E+07	3.45E+07	3.77E+07
70	3.35E+07	3.18E+07	3.21E+07	3.30E+07	3.40E+07	3.48E+07	3.72E+07
71	3.43E+07	3.17E+07	3.24E+07	3.32E+07	3.56E+07	3.72E+07	3.80E+07
72	3.39E+07	3.16E+07	3.26E+07	3.32E+07	3.44E+07	3.65E+07	3.74E+07
73	3.36E+07	3.14E+07	3.23E+07	3.31E+07	3.41E+07	3.47E+07	3.56E+07
74	3.34E+07	3.13E+07	3.22E+07	3.29E+07	3.39E+07	3.46E+07	3.54E+07
75	3.34E+07	3.12E+07	3.21E+07	3.29E+07	3.39E+07	3.45E+07	3.55E+07
76	3.33E+07	3.12E+07	3.20E+07	3.28E+07	3.38E+07	3.44E+07	3.54E+07
77	3.33E+07	3.11E+07	3.20E+07	3.27E+07	3.38E+07	3.44E+07	3.53E+07
78	3.32E+07	3.12E+07	3.20E+07	3.27E+07	3.37E+07	3.44E+07	3.53E+07
79	3.33E+07	3.11E+07	3.20E+07	3.28E+07	3.38E+07	3.44E+07	3.69E+07
80	3.33E+07	3.11E+07	3.19E+07	3.28E+07	3.38E+07	3.44E+07	3.59E+07
81	3.32E+07	3.12E+07	3.19E+07	3.27E+07	3.37E+07	3.43E+07	3.54E+07
82	3.32E+07	3.11E+07	3.19E+07	3.27E+07	3.38E+07	3.44E+07	3.65E+07
83	3.41E+07	3.14E+07	3.21E+07	3.31E+07	3.52E+07	3.68E+07	3.75E+07
84	3.38E+07	3.12E+07	3.20E+07	3.29E+07	3.44E+07	3.66E+07	3.71E+07
85	3.33E+07	3.13E+07	3.19E+07	3.28E+07	3.39E+07	3.45E+07	3.54E+07
86	3.32E+07	3.12E+07	3.18E+07	3.27E+07	3.38E+07	3.43E+07	3.52E+07
87	3.31E+07	3.11E+07	3.18E+07	3.26E+07	3.37E+07	3.43E+07	3.51E+07
88	3.31E+07	3.10E+07	3.17E+07	3.25E+07	3.36E+07	3.42E+07	3.50E+07
89	3.30E+07	3.09E+07	3.17E+07	3.25E+07	3.36E+07	3.41E+07	3.50E+07
90	3.30E+07	3.09E+07	3.17E+07	3.24E+07	3.36E+07	3.42E+07	3.49E+07
91	3.30E+07	3.09E+07	3.16E+07	3.25E+07	3.35E+07	3.42E+07	3.53E+07
92	3.30E+07	3.09E+07	3.16E+07	3.25E+07	3.35E+07	3.41E+07	3.78E+07



SMITH WILLIAMS CONSULTANTS, INC.

Project: CC&V Phase 5 VLF	Job No. 1125
Calculation Title: Phase 5 VLF Water Balance	
Prepared By: JFL	Date: March 14, 2008
Checked By: DTW	Date: March 19, 2008

93	3.30E+07	3.09E+07	3.15E+07	3.24E+07	3.35E+07	3.42E+07	3.50E+07
94	3.30E+07	3.08E+07	3.15E+07	3.24E+07	3.35E+07	3.43E+07	3.63E+07
95	3.40E+07	3.08E+07	3.18E+07	3.29E+07	3.52E+07	3.65E+07	3.81E+07
96	3.36E+07	3.09E+07	3.17E+07	3.27E+07	3.42E+07	3.66E+07	3.79E+07
97	3.31E+07	3.09E+07	3.17E+07	3.26E+07	3.37E+07	3.43E+07	3.56E+07
98	3.30E+07	3.07E+07	3.16E+07	3.25E+07	3.36E+07	3.41E+07	3.55E+07
99	3.29E+07	3.07E+07	3.15E+07	3.24E+07	3.35E+07	3.41E+07	3.53E+07
100	3.28E+07	3.06E+07	3.14E+07	3.23E+07	3.35E+07	3.39E+07	3.53E+07
101	3.28E+07	3.05E+07	3.14E+07	3.23E+07	3.34E+07	3.39E+07	3.53E+07
102	3.27E+07	3.05E+07	3.13E+07	3.22E+07	3.34E+07	3.39E+07	3.53E+07
103	3.27E+07	3.04E+07	3.13E+07	3.22E+07	3.34E+07	3.38E+07	3.60E+07
104	3.27E+07	3.03E+07	3.13E+07	3.22E+07	3.34E+07	3.39E+07	3.56E+07
105	3.27E+07	3.02E+07	3.13E+07	3.22E+07	3.34E+07	3.38E+07	3.52E+07
106	3.27E+07	3.01E+07	3.13E+07	3.21E+07	3.34E+07	3.39E+07	3.73E+07
107	3.36E+07	3.00E+07	3.15E+07	3.25E+07	3.50E+07	3.64E+07	3.76E+07
108	3.32E+07	3.08E+07	3.15E+07	3.24E+07	3.37E+07	3.58E+07	3.68E+07
109	3.28E+07	3.03E+07	3.15E+07	3.22E+07	3.34E+07	3.41E+07	3.54E+07
110	3.27E+07	3.01E+07	3.13E+07	3.21E+07	3.33E+07	3.39E+07	3.52E+07
111	3.26E+07	3.00E+07	3.12E+07	3.20E+07	3.32E+07	3.39E+07	3.52E+07
112	3.26E+07	2.99E+07	3.11E+07	3.20E+07	3.31E+07	3.38E+07	3.51E+07
113	3.25E+07	2.99E+07	3.11E+07	3.19E+07	3.31E+07	3.38E+07	3.50E+07
114	3.25E+07	2.99E+07	3.11E+07	3.19E+07	3.30E+07	3.38E+07	3.50E+07
115	3.25E+07	2.99E+07	3.10E+07	3.19E+07	3.31E+07	3.40E+07	3.54E+07
116	3.25E+07	2.99E+07	3.10E+07	3.19E+07	3.31E+07	3.38E+07	3.49E+07
117	3.25E+07	2.99E+07	3.10E+07	3.18E+07	3.30E+07	3.39E+07	3.66E+07
118	3.26E+07	2.99E+07	3.11E+07	3.19E+07	3.31E+07	3.42E+07	3.67E+07
119	3.35E+07	3.04E+07	3.11E+07	3.24E+07	3.51E+07	3.62E+07	3.70E+07
120	3.31E+07	3.03E+07	3.11E+07	3.21E+07	3.37E+07	3.60E+07	3.67E+07
121	3.26E+07	3.02E+07	3.11E+07	3.21E+07	3.32E+07	3.39E+07	3.45E+07
122	3.25E+07	3.01E+07	3.10E+07	3.19E+07	3.31E+07	3.38E+07	3.44E+07
123	3.24E+07	2.99E+07	3.09E+07	3.19E+07	3.30E+07	3.37E+07	3.44E+07
124	3.23E+07	2.98E+07	3.08E+07	3.18E+07	3.29E+07	3.37E+07	3.43E+07
125	3.23E+07	2.98E+07	3.07E+07	3.17E+07	3.29E+07	3.36E+07	3.43E+07
126	3.23E+07	2.98E+07	3.07E+07	3.17E+07	3.28E+07	3.36E+07	3.43E+07
127	3.23E+07	2.98E+07	3.07E+07	3.17E+07	3.28E+07	3.36E+07	3.55E+07
128	3.22E+07	2.98E+07	3.06E+07	3.16E+07	3.28E+07	3.35E+07	3.42E+07
129	3.22E+07	2.97E+07	3.06E+07	3.16E+07	3.28E+07	3.36E+07	3.43E+07
130	3.23E+07	2.96E+07	3.06E+07	3.17E+07	3.29E+07	3.39E+07	3.62E+07
131	3.32E+07	3.02E+07	3.10E+07	3.20E+07	3.43E+07	3.59E+07	3.67E+07
132	3.28E+07	3.03E+07	3.09E+07	3.18E+07	3.33E+07	3.55E+07	3.70E+07
133	3.24E+07	3.01E+07	3.07E+07	3.17E+07	3.31E+07	3.38E+07	3.44E+07
134	3.22E+07	2.99E+07	3.05E+07	3.15E+07	3.29E+07	3.36E+07	3.43E+07
135	3.22E+07	2.99E+07	3.05E+07	3.15E+07	3.29E+07	3.35E+07	3.43E+07
136	3.21E+07	2.98E+07	3.04E+07	3.14E+07	3.28E+07	3.34E+07	3.42E+07



137	3.20E+07	2.98E+07	3.04E+07	3.14E+07	3.28E+07	3.34E+07	3.42E+07
138	3.20E+07	2.97E+07	3.03E+07	3.14E+07	3.27E+07	3.33E+07	3.41E+07
139	3.20E+07	2.97E+07	3.03E+07	3.13E+07	3.27E+07	3.35E+07	3.48E+07
140	3.20E+07	2.97E+07	3.03E+07	3.13E+07	3.28E+07	3.36E+07	3.54E+07
141	3.20E+07	2.98E+07	3.03E+07	3.14E+07	3.27E+07	3.34E+07	3.41E+07
142	3.20E+07	2.99E+07	3.02E+07	3.14E+07	3.27E+07	3.34E+07	3.61E+07
143	3.28E+07	2.97E+07	3.05E+07	3.16E+07	3.41E+07	3.58E+07	3.63E+07
144	3.26E+07	2.97E+07	3.04E+07	3.16E+07	3.34E+07	3.49E+07	3.60E+07
145	3.21E+07	2.97E+07	3.04E+07	3.14E+07	3.29E+07	3.36E+07	3.44E+07
146	3.20E+07	2.95E+07	3.03E+07	3.13E+07	3.28E+07	3.34E+07	3.43E+07
147	3.19E+07	2.95E+07	3.02E+07	3.13E+07	3.27E+07	3.34E+07	3.42E+07
148	3.18E+07	2.94E+07	3.00E+07	3.12E+07	3.26E+07	3.33E+07	3.42E+07
149	3.18E+07	2.93E+07	3.00E+07	3.11E+07	3.26E+07	3.32E+07	3.41E+07
150	3.18E+07	2.93E+07	3.00E+07	3.11E+07	3.25E+07	3.32E+07	3.41E+07
151	3.22E+07	2.93E+07	3.05E+07	3.13E+07	3.29E+07	3.51E+07	3.70E+07
152	3.25E+07	2.94E+07	3.04E+07	3.14E+07	3.34E+07	3.57E+07	3.63E+07
153	3.27E+07	2.94E+07	3.04E+07	3.16E+07	3.38E+07	3.57E+07	3.70E+07
154	3.35E+07	2.97E+07	3.09E+07	3.24E+07	3.47E+07	3.61E+07	3.65E+07
155	3.47E+07	3.04E+07	3.25E+07	3.40E+07	3.57E+07	3.66E+07	3.74E+07
156	3.51E+07	3.01E+07	3.20E+07	3.44E+07	3.62E+07	3.70E+07	3.76E+07

[illegible]



SMITH WILLIAMS CONSULTANTS, INC.

Project: CC&V Phase 5 VLF		Job No. 1125
Calculation Title: Phase 5 VLF Water Balance		
Prepared By: JFL		Date: March 14, 2008
Checked By: DTW		Date: March 19, 2008

Dec-12	17	9292.6	9292.5	9292.5	9292.5	9292.5	9292.5	9295.9
Jan-13	18	9292.5	9292.5	9292.5	9292.5	9292.5	9292.5	9292.5
Feb-13	19	9293.5	9292.5	9292.5	9292.5	9294.2	9297.2	9297.2
Mar-13	20	9292.7	9292.5	9292.5	9292.5	9292.5	9293.7	9297.2
Apr-13	21	9292.8	9292.8	9292.8	9292.8	9292.8	9292.8	9292.8
May-13	22	9293.1	9293.1	9293.1	9293.1	9293.1	9293.1	9293.1
Jun-13	23	9293.5	9293.4	9293.4	9293.4	9293.4	9293.4	9298.1
Jul-13	24	9294	9293.7	9293.7	9293.7	9293.7	9297.4	9298.3
Aug-13	25	9293.7	9293.7	9293.7	9293.7	9293.7	9293.7	9293.7
Sep-13	26	9293.7	9293.7	9293.7	9293.7	9293.7	9293.7	9293.7
Oct-13	27	9293.8	9293.8	9293.8	9293.8	9293.8	9293.8	9293.8
Nov-13	28	9293.7	9293.7	9293.7	9293.7	9293.7	9293.7	9293.7
Dec-13	29	9293.4	9293.3	9293.3	9293.3	9293.3	9293.6	9297.6
Jan-14	30	9293	9293	9293	9293	9293	9293	9293
Feb-14	31	9293	9293	9293	9293	9293	9293	9293
Mar-14	32	9293.1	9293.1	9293.1	9293.1	9293.1	9293.1	9293.1
Apr-14	33	9293.1	9293.1	9293.1	9293.1	9293.1	9293.1	9293.1
May-14	34	9294.8	9293	9293	9293	9297.5	9297.7	9297.7
Jun-14	35	9296.5	9292.9	9292.9	9295.6	9297.6	9297.6	9297.6
Jul-14	36	9296.1	9293	9293	9293.9	9297.6	9297.6	9297.6
Aug-14	37	9293.1	9293.1	9293.1	9293.1	9293.1	9293.1	9293.1
Sep-14	38	9293.1	9293.1	9293.1	9293.1	9293.1	9293.1	9293.1
Oct-14	39	9293.2	9293.2	9293.2	9293.2	9293.2	9293.2	9293.2
Nov-14	40	9293.1	9293.1	9293.1	9293.1	9293.1	9293.1	9293.1
Dec-14	41	9293.1	9293.1	9293.1	9293.1	9293.1	9293.1	9293.1
Jan-15	42	9293.2	9293.2	9293.2	9293.2	9293.2	9293.2	9293.2
Feb-15	43	9293.3	9293.3	9293.3	9293.3	9293.3	9293.3	9293.3
Mar-15	44	9293.4	9293.4	9293.4	9293.4	9293.4	9293.4	9298
Apr-15	45	9293.6	9293.5	9293.5	9293.5	9293.5	9293.5	9298.1
May-15	46	9293.7	9293.5	9293.5	9293.5	9293.5	9294.8	9298.1
Jun-15	47	9294.7	9293.4	9293.4	9293.4	9296.3	9298	9298
Jul-15	48	9294.2	9293.4	9293.4	9293.4	9293.4	9298	9298
Aug-15	49	9292.9	9292.9	9292.9	9292.9	9292.9	9292.9	9292.9
Sep-15	50	9299.3	9297.9	9298.4	9298.9	9299.8	9300.1	9300.9
Oct-15	51	9299.3	9297.9	9298.3	9298.9	9299.7	9300.1	9300.4
Nov-15	52	9299.2	9297.8	9298.2	9298.8	9299.6	9300.1	9300.3
Dec-15	53	9299.2	9297.7	9298.2	9298.8	9299.6	9300	9300.3
Jan-16	54	9299.2	9297.7	9298.2	9298.8	9299.6	9300	9300.3
Feb-16	55	9299.3	9297.7	9298.3	9298.8	9299.7	9300.5	9302
Mar-16	56	9299.3	9297.7	9298.2	9298.8	9299.7	9300.2	9301.4
Apr-16	57	9299.4	9297.7	9298.2	9298.8	9299.8	9301	9301.8
May-16	58	9299.4	9297.8	9298.3	9298.8	9299.8	9300.8	9301.4
Jun-16	59	9300	9297.8	9298.4	9299.2	9300.9	9301.6	9302
Jul-16	60	9300.1	9297.9	9298.4	9299.3	9301.1	9301.8	9302.3



SMITH WILLIAMS CONSULTANTS, INC.

Project: CC&V Phase 5 VLF		Job No. 1125
Calculation Title: Phase 5 VLF Water Balance		
Prepared By: JFL		Date: March 14, 2008
Checked By: DTW		Date: March 19, 2008

Aug-16	61	9299.4	9298	9298.3	9298.9	9299.8	9300.3	9300.7
Sep-16	62	9299.3	9297.8	9298.2	9298.8	9299.7	9300.2	9300.6
Oct-16	63	9299.2	9297.8	9298.1	9298.8	9299.6	9300.2	9300.6
Nov-16	64	9299.2	9297.7	9298.1	9298.8	9299.6	9300.1	9300.6
Dec-16	65	9299.2	9297.7	9298	9298.7	9299.6	9300.1	9300.5
Jan-17	66	9299.1	9297.7	9298	9298.7	9299.6	9300.1	9300.5
Feb-17	67	9299.2	9297.6	9298.1	9298.7	9299.7	9300.4	9301.5
Mar-17	68	9299.2	9297.6	9298	9298.7	9299.7	9300.3	9301.4
Apr-17	69	9299.3	9297.6	9298.1	9298.8	9299.7	9300.3	9301.8
May-17	70	9299.3	9297.6	9298.1	9298.8	9299.8	9300.9	9301.9
Jun-17	71	9299.9	9297.5	9298.4	9299.2	9300.8	9301.6	9302.1
Jul-17	72	9299.9	9297.8	9298.4	9299.1	9300.6	9301.4	9302.3
Aug-17	73	9299.3	9297.4	9298.2	9298.9	9299.7	9300.2	9300.8
Sep-17	74	9299.2	9297.3	9298.1	9298.8	9299.6	9300.1	9300.8
Oct-17	75	9299.2	9297.3	9298.1	9298.7	9299.6	9300.1	9300.7
Nov-17	76	9299.1	9297.2	9298	9298.7	9299.5	9300.1	9300.7
Dec-17	77	9299.1	9297.2	9298	9298.6	9299.5	9300	9300.6
Jan-18	78	9299.1	9297.2	9298	9298.6	9299.5	9300	9300.6
Feb-18	79	9299.3	9297.4	9298	9298.7	9299.7	9300.8	9302
Mar-18	80	9299.2	9297.4	9298	9298.7	9299.6	9300.4	9301.6
Apr-18	81	9299.2	9297.4	9298	9298.7	9299.6	9300.3	9301.3
May-18	82	9299.2	9297.3	9298	9298.7	9299.7	9300.5	9301.2
Jun-18	83	9299.9	9297.5	9298.2	9299.1	9300.9	9301.5	9302.1
Jul-18	84	9299.9	9297.6	9298.2	9299.1	9300.7	9301.5	9302.2
Aug-18	85	9299.2	9297.6	9298	9298.8	9299.7	9300.2	9300.7
Sep-18	86	9299.1	9297.5	9297.9	9298.7	9299.6	9300.1	9300.6
Oct-18	87	9299.1	9297.4	9297.9	9298.7	9299.6	9300.1	9300.6
Nov-18	88	9299	9297.4	9297.8	9298.6	9299.5	9300	9300.6
Dec-18	89	9299	9297.3	9297.8	9298.6	9299.5	9300	9300.6
Jan-19	90	9299	9297.3	9297.8	9298.5	9299.4	9300	9300.5
Feb-19	91	9299.1	9297.3	9297.8	9298.6	9299.6	9300.6	9301.5
Mar-19	92	9299	9297.3	9297.8	9298.5	9299.5	9300.3	9302.3
Apr-19	93	9299.1	9297.2	9297.8	9298.5	9299.5	9300.7	9301.7
May-19	94	9299.1	9297.1	9297.9	9298.7	9299.6	9300.5	9301.8
Jun-19	95	9299.9	9297.4	9298.3	9299	9300.8	9301.5	9302.6
Jul-19	96	9299.8	9297.3	9298.2	9299	9300.6	9301.5	9302.2
Aug-19	97	9299.2	9297.2	9297.9	9298.7	9299.7	9300.1	9301.2
Sep-19	98	9299.1	9297.1	9297.8	9298.6	9299.5	9300	9301.2
Oct-19	99	9299	9297.1	9297.8	9298.6	9299.5	9300	9301.1
Nov-19	100	9299	9297	9297.7	9298.5	9299.5	9300	9301
Dec-19	101	9298.9	9297	9297.7	9298.5	9299.4	9299.9	9301
Jan-20	102	9298.9	9297	9297.7	9298.4	9299.4	9299.9	9301.1
Feb-20	103	9299	9296.9	9297.7	9298.4	9299.5	9300.6	9301.4
Mar-20	104	9299	9296.9	9297.6	9298.4	9299.5	9300.2	9301.2



SMITH WILLIAMS CONSULTANTS, INC.

Project: CC&V Phase 5 VLF		Job No. 1125
Calculation Title: Phase 5 VLF Water Balance		
Prepared By: JFL		Date: March 14, 2008
Checked By: DTW		Date: March 19, 2008

Apr-20	105	9299	9296.8	9297.6	9298.5	9299.5	9300.2	9301
May-20	106	9299.1	9296.7	9297.7	9298.5	9299.5	9300.6	9301.8
Jun-20	107	9299.8	9296.6	9297.8	9299	9300.7	9301.5	9302.2
Jul-20	108	9299.6	9296.9	9298	9298.9	9300.4	9301.5	9302.4
Aug-20	109	9299.1	9296.9	9297.8	9298.6	9299.5	9300.1	9301.2
Sep-20	110	9298.9	9296.8	9297.7	9298.5	9299.5	9300	9301.1
Oct-20	111	9298.9	9296.7	9297.7	9298.4	9299.4	9300	9301.1
Nov-20	112	9298.9	9296.6	9297.6	9298.3	9299.4	9300	9301
Dec-20	113	9298.8	9296.6	9297.6	9298.3	9299.3	9299.9	9301
Jan-21	114	9298.8	9296.6	9297.5	9298.3	9299.3	9299.9	9301
Feb-21	115	9298.9	9296.6	9297.6	9298.4	9299.4	9300.5	9301.5
Mar-21	116	9298.9	9296.6	9297.5	9298.3	9299.4	9300.3	9301.2
Apr-21	117	9298.9	9296.6	9297.5	9298.4	9299.5	9300.4	9301.7
May-21	118	9299	9296.6	9297.5	9298.5	9299.6	9300.8	9301.9
Jun-21	119	9299.8	9297.2	9297.9	9298.9	9300.7	9301.4	9302.2
Jul-21	120	9299.7	9297.2	9297.9	9298.8	9300.7	9301.5	9302.5
Aug-21	121	9299	9296.9	9297.7	9298.5	9299.5	9300.2	9300.9
Sep-21	122	9298.9	9296.8	9297.6	9298.4	9299.4	9300.1	9300.8
Oct-21	123	9298.9	9296.7	9297.5	9298.4	9299.4	9300.1	9300.8
Nov-21	124	9298.8	9296.6	9297.4	9298.3	9299.3	9300	9300.8
Dec-21	125	9298.8	9296.6	9297.4	9298.3	9299.3	9300	9300.8
Jan-22	126	9298.8	9296.6	9297.3	9298.2	9299.2	9300	9300.7
Feb-22	127	9298.8	9296.6	9297.4	9298.3	9299.3	9300.3	9301.3
Mar-22	128	9298.9	9296.7	9297.3	9298.2	9299.4	9300.4	9301.2
Apr-22	129	9298.9	9296.7	9297.3	9298.3	9299.3	9300.5	9301.5
May-22	130	9298.9	9296.7	9297.4	9298.3	9299.4	9300.8	9301.4
Jun-22	131	9299.6	9297.2	9297.8	9298.7	9300.7	9301.4	9301.9
Jul-22	132	9299.5	9297.2	9297.8	9298.7	9300.4	9301.4	9302
Aug-22	133	9298.9	9297	9297.4	9298.3	9299.4	9300.2	9300.8
Sep-22	134	9298.8	9296.8	9297.3	9298.2	9299.3	9300.1	9300.7
Oct-22	135	9298.8	9296.8	9297.2	9298.2	9299.3	9300	9300.7
Nov-22	136	9298.7	9296.7	9297.2	9298.1	9299.2	9300	9300.7
Dec-22	137	9298.7	9296.7	9297.1	9298.1	9299.2	9299.9	9300.6
Jan-23	138	9298.7	9296.7	9297.1	9298	9299.2	9299.9	9300.6
Feb-23	139	9298.8	9296.7	9297.2	9298.2	9299.4	9300.4	9301.8
Mar-23	140	9298.7	9296.7	9297.3	9298.1	9299.3	9300.2	9301.1
Apr-23	141	9298.8	9296.7	9297.1	9298.2	9299.5	9300.2	9300.7
May-23	142	9298.8	9296.6	9297.1	9298.2	9299.4	9300.3	9301.6
Jun-23	143	9299.5	9296.6	9297.4	9298.5	9300.6	9301.5	9302.4
Jul-23	144	9299.5	9296.6	9297.6	9298.7	9300.4	9301.3	9302
Aug-23	145	9298.8	9296.6	9297.4	9298.2	9299.5	9300.2	9300.9
Sep-23	146	9298.7	9296.5	9297.2	9298.1	9299.3	9300.1	9300.8
Oct-23	147	9298.7	9296.4	9297.2	9298	9299.3	9300	9300.8
Nov-23	148	9298.6	9296.4	9297.1	9298	9299.2	9300	9300.8



Dec-23	149	9298.6	9296.3	9297.1	9298	9299.2	9299.9	9300.7
Jan-24	150	9298.6	9296.3	9297.1	9298	9299.2	9299.9	9300.7
Feb-24	151	9298.7	9296.3	9297.1	9298	9299.3	9300.5	9301.7
Mar-24	152	9298.7	9296.2	9297	9298	9299.3	9300.2	9301.5
Apr-24	153	9298.7	9296.1	9297	9298	9299.3	9300.3	9301.4
May-24	154	9298.8	9296.2	9297.1	9298	9299.4	9300.4	9301.5
Jun-24	155	9299.5	9296.7	9297.1	9298.7	9300.4	9301.4	9301.9
Jul-24	156	9299.4	9296.4	9297.5	9298.5	9300.3	9301.4	9302.2

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SMITH WILLIAMS CONSULTANTS, INC.

Project: CC&V Phase 5 VLF	Job No. 1125
Calculation Title: Phase 5 VLF Water Balance	
Prepared By: JFL	Date: March 14, 2008
Checked By: DTW	Date: March 19, 2008

29	2.50E+07	2.49E+07	2.49E+07	2.49E+07	2.52E+07	2.98E+07	3.54E+07
30	2.46E+07	2.46E+07	2.46E+07	2.46E+07	2.46E+07	2.46E+07	3.54E+07
31	2.46E+07	2.46E+07	2.46E+07	2.46E+07	2.46E+07	2.46E+07	3.54E+07
32	2.47E+07	2.47E+07	2.47E+07	2.47E+07	2.47E+07	2.47E+07	3.54E+07
33	2.47E+07	2.47E+07	2.47E+07	2.47E+07	2.47E+07	2.47E+07	3.54E+07
34	2.67E+07	2.46E+07	2.46E+07	2.56E+07	2.99E+07	2.99E+07	3.54E+07
35	2.85E+07	2.45E+07	2.45E+07	2.98E+07	2.98E+07	2.98E+07	3.54E+07
36	2.81E+07	2.45E+07	2.45E+07	2.98E+07	2.98E+07	2.98E+07	3.54E+07
37	2.46E+07	2.46E+07	2.46E+07	2.46E+07	2.46E+07	2.46E+07	3.54E+07
38	2.47E+07	2.47E+07	2.47E+07	2.47E+07	2.47E+07	2.47E+07	3.54E+07
39	2.47E+07	2.47E+07	2.47E+07	2.47E+07	2.47E+07	2.47E+07	3.54E+07
40	2.47E+07	2.47E+07	2.47E+07	2.47E+07	2.47E+07	2.47E+07	3.54E+07
41	2.47E+07	2.47E+07	2.47E+07	2.47E+07	2.47E+07	2.47E+07	3.54E+07
42	2.47E+07	2.47E+07	2.47E+07	2.47E+07	2.47E+07	2.47E+07	3.54E+07
43	2.49E+07	2.49E+07	2.49E+07	2.49E+07	2.49E+07	2.49E+07	3.54E+07
44	2.50E+07	2.50E+07	2.50E+07	2.50E+07	2.50E+07	3.03E+07	3.54E+07
45	2.52E+07	2.51E+07	2.51E+07	2.51E+07	2.51E+07	3.04E+07	3.54E+07
46	2.53E+07	2.51E+07	2.51E+07	2.51E+07	2.65E+07	3.04E+07	3.54E+07
47	2.64E+07	2.50E+07	2.50E+07	2.50E+07	3.03E+07	3.03E+07	3.54E+07
48	2.59E+07	2.50E+07	2.50E+07	2.50E+07	3.03E+07	3.03E+07	3.54E+07
49	2.45E+07	2.45E+07	2.45E+07	2.45E+07	2.45E+07	2.45E+07	3.54E+07
50	3.19E+07	3.02E+07	3.07E+07	3.19E+07	3.29E+07	3.39E+07	3.54E+07
51	3.18E+07	3.02E+07	3.07E+07	3.19E+07	3.28E+07	3.31E+07	3.54E+07
52	3.17E+07	3.00E+07	3.06E+07	3.18E+07	3.28E+07	3.31E+07	3.54E+07
53	3.17E+07	3.00E+07	3.05E+07	3.18E+07	3.27E+07	3.31E+07	3.54E+07
54	3.17E+07	2.99E+07	3.05E+07	3.18E+07	3.27E+07	3.31E+07	3.54E+07
55	3.19E+07	2.99E+07	3.06E+07	3.18E+07	3.34E+07	3.53E+07	3.54E+07
56	3.18E+07	2.99E+07	3.05E+07	3.18E+07	3.29E+07	3.45E+07	3.54E+07
57	3.19E+07	3.00E+07	3.05E+07	3.19E+07	3.41E+07	3.51E+07	3.54E+07
58	3.19E+07	3.00E+07	3.06E+07	3.19E+07	3.38E+07	3.46E+07	3.54E+07
59	3.28E+07	3.01E+07	3.07E+07	3.26E+07	3.48E+07	3.54E+07	3.54E+07
60	3.29E+07	3.02E+07	3.08E+07	3.28E+07	3.50E+07	3.57E+07	3.54E+07
61	3.19E+07	3.02E+07	3.06E+07	3.20E+07	3.31E+07	3.36E+07	3.54E+07
62	3.18E+07	3.01E+07	3.05E+07	3.19E+07	3.30E+07	3.35E+07	3.54E+07
63	3.18E+07	3.00E+07	3.04E+07	3.18E+07	3.29E+07	3.35E+07	3.54E+07
64	3.17E+07	3.00E+07	3.03E+07	3.17E+07	3.28E+07	3.34E+07	3.54E+07
65	3.17E+07	2.99E+07	3.03E+07	3.17E+07	3.28E+07	3.34E+07	3.54E+07
66	3.16E+07	2.99E+07	3.03E+07	3.17E+07	3.27E+07	3.33E+07	3.54E+07
67	3.18E+07	2.98E+07	3.04E+07	3.18E+07	3.31E+07	3.47E+07	3.54E+07
68	3.17E+07	2.98E+07	3.03E+07	3.17E+07	3.31E+07	3.45E+07	3.54E+07
69	3.18E+07	2.98E+07	3.04E+07	3.18E+07	3.31E+07	3.51E+07	3.54E+07
70	3.19E+07	2.98E+07	3.04E+07	3.18E+07	3.39E+07	3.52E+07	3.54E+07
71	3.27E+07	2.96E+07	3.07E+07	3.24E+07	3.48E+07	3.55E+07	3.54E+07
72	3.26E+07	3.00E+07	3.08E+07	3.24E+07	3.46E+07	3.58E+07	3.54E+07



SMITH WILLIAMS CONSULTANTS, INC.

Project: CC&V Phase 5 VLF		Job No. 1125
Calculation Title: Phase 5 VLF Water Balance		
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Checked By: DTW		Date: March 19, 2008

73	3.18E+07	2.96E+07	3.05E+07	3.19E+07	3.29E+07	3.38E+07	3.54E+07
74	3.17E+07	2.94E+07	3.04E+07	3.18E+07	3.29E+07	3.37E+07	3.54E+07
75	3.17E+07	2.95E+07	3.04E+07	3.18E+07	3.28E+07	3.36E+07	3.54E+07
76	3.16E+07	2.94E+07	3.03E+07	3.17E+07	3.28E+07	3.36E+07	3.54E+07
77	3.16E+07	2.94E+07	3.02E+07	3.17E+07	3.27E+07	3.35E+07	3.54E+07
78	3.15E+07	2.93E+07	3.02E+07	3.16E+07	3.27E+07	3.35E+07	3.54E+07
79	3.18E+07	2.95E+07	3.03E+07	3.18E+07	3.37E+07	3.53E+07	3.54E+07
80	3.17E+07	2.95E+07	3.03E+07	3.17E+07	3.32E+07	3.48E+07	3.54E+07
81	3.17E+07	2.96E+07	3.03E+07	3.17E+07	3.31E+07	3.44E+07	3.54E+07
82	3.17E+07	2.95E+07	3.03E+07	3.17E+07	3.33E+07	3.43E+07	3.54E+07
83	3.26E+07	2.97E+07	3.05E+07	3.25E+07	3.47E+07	3.55E+07	3.54E+07
84	3.26E+07	2.98E+07	3.05E+07	3.24E+07	3.47E+07	3.57E+07	3.54E+07
85	3.18E+07	2.98E+07	3.03E+07	3.18E+07	3.30E+07	3.36E+07	3.54E+07
86	3.16E+07	2.97E+07	3.02E+07	3.17E+07	3.28E+07	3.35E+07	3.54E+07
87	3.16E+07	2.96E+07	3.02E+07	3.16E+07	3.28E+07	3.35E+07	3.54E+07
88	3.15E+07	2.95E+07	3.01E+07	3.16E+07	3.27E+07	3.34E+07	3.54E+07
89	3.15E+07	2.95E+07	3.00E+07	3.16E+07	3.27E+07	3.34E+07	3.54E+07
90	3.15E+07	2.95E+07	3.00E+07	3.15E+07	3.27E+07	3.34E+07	3.54E+07
91	3.17E+07	2.95E+07	3.00E+07	3.16E+07	3.34E+07	3.47E+07	3.54E+07
92	3.15E+07	2.94E+07	3.00E+07	3.15E+07	3.30E+07	3.58E+07	3.54E+07
93	3.16E+07	2.93E+07	3.00E+07	3.15E+07	3.36E+07	3.50E+07	3.54E+07
94	3.17E+07	2.92E+07	3.01E+07	3.16E+07	3.34E+07	3.51E+07	3.54E+07
95	3.26E+07	2.96E+07	3.06E+07	3.26E+07	3.47E+07	3.62E+07	3.54E+07
96	3.25E+07	2.95E+07	3.05E+07	3.24E+07	3.47E+07	3.56E+07	3.54E+07
97	3.17E+07	2.94E+07	3.02E+07	3.17E+07	3.29E+07	3.43E+07	3.54E+07
98	3.15E+07	2.92E+07	3.01E+07	3.15E+07	3.27E+07	3.43E+07	3.54E+07
99	3.15E+07	2.92E+07	3.00E+07	3.15E+07	3.27E+07	3.41E+07	3.54E+07
100	3.14E+07	2.91E+07	2.99E+07	3.14E+07	3.26E+07	3.41E+07	3.54E+07
101	3.14E+07	2.91E+07	2.99E+07	3.14E+07	3.26E+07	3.41E+07	3.54E+07
102	3.14E+07	2.91E+07	2.99E+07	3.14E+07	3.26E+07	3.41E+07	3.54E+07
103	3.15E+07	2.90E+07	2.99E+07	3.14E+07	3.35E+07	3.45E+07	3.54E+07
104	3.14E+07	2.90E+07	2.99E+07	3.14E+07	3.29E+07	3.42E+07	3.54E+07
105	3.14E+07	2.89E+07	2.99E+07	3.15E+07	3.29E+07	3.40E+07	3.54E+07
106	3.15E+07	2.88E+07	2.99E+07	3.15E+07	3.35E+07	3.52E+07	3.54E+07
107	3.25E+07	2.87E+07	3.01E+07	3.24E+07	3.47E+07	3.57E+07	3.54E+07
108	3.23E+07	2.90E+07	3.03E+07	3.21E+07	3.47E+07	3.59E+07	3.54E+07
109	3.15E+07	2.90E+07	3.01E+07	3.16E+07	3.28E+07	3.43E+07	3.54E+07
110	3.14E+07	2.89E+07	3.00E+07	3.15E+07	3.27E+07	3.42E+07	3.54E+07
111	3.14E+07	2.88E+07	2.99E+07	3.14E+07	3.27E+07	3.42E+07	3.54E+07
112	3.13E+07	2.87E+07	2.98E+07	3.14E+07	3.26E+07	3.41E+07	3.54E+07
113	3.13E+07	2.86E+07	2.98E+07	3.13E+07	3.26E+07	3.40E+07	3.54E+07
114	3.12E+07	2.86E+07	2.97E+07	3.13E+07	3.26E+07	3.40E+07	3.54E+07
115	3.14E+07	2.86E+07	2.98E+07	3.14E+07	3.33E+07	3.46E+07	3.54E+07
116	3.13E+07	2.87E+07	2.97E+07	3.14E+07	3.31E+07	3.42E+07	3.54E+07



SMITH WILLIAMS CONSULTANTS, INC.

Project: CC&V Phase 5 VLF	Job No. 1125
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117	3.14E+07	2.86E+07	2.97E+07	3.14E+07	3.32E+07	3.49E+07	3.54E+07
118	3.15E+07	2.86E+07	2.97E+07	3.15E+07	3.37E+07	3.52E+07	3.54E+07
119	3.25E+07	2.93E+07	3.01E+07	3.24E+07	3.45E+07	3.57E+07	3.54E+07
120	3.24E+07	2.93E+07	3.02E+07	3.22E+07	3.46E+07	3.60E+07	3.54E+07
121	3.15E+07	2.89E+07	2.99E+07	3.16E+07	3.29E+07	3.39E+07	3.54E+07
122	3.14E+07	2.88E+07	2.98E+07	3.14E+07	3.28E+07	3.38E+07	3.54E+07
123	3.13E+07	2.88E+07	2.97E+07	3.14E+07	3.28E+07	3.38E+07	3.54E+07
124	3.12E+07	2.87E+07	2.96E+07	3.14E+07	3.27E+07	3.37E+07	3.54E+07
125	3.12E+07	2.86E+07	2.95E+07	3.13E+07	3.26E+07	3.37E+07	3.54E+07
126	3.12E+07	2.86E+07	2.95E+07	3.13E+07	3.26E+07	3.36E+07	3.54E+07
127	3.13E+07	2.86E+07	2.95E+07	3.14E+07	3.31E+07	3.44E+07	3.54E+07
128	3.13E+07	2.87E+07	2.94E+07	3.14E+07	3.31E+07	3.43E+07	3.54E+07
129	3.13E+07	2.87E+07	2.94E+07	3.13E+07	3.33E+07	3.47E+07	3.54E+07
130	3.14E+07	2.87E+07	2.95E+07	3.13E+07	3.37E+07	3.45E+07	3.54E+07
131	3.23E+07	2.93E+07	3.00E+07	3.22E+07	3.46E+07	3.52E+07	3.54E+07
132	3.21E+07	2.93E+07	3.00E+07	3.19E+07	3.46E+07	3.54E+07	3.54E+07
133	3.14E+07	2.91E+07	2.96E+07	3.14E+07	3.29E+07	3.37E+07	3.54E+07
134	3.12E+07	2.89E+07	2.95E+07	3.13E+07	3.28E+07	3.36E+07	3.54E+07
135	3.12E+07	2.88E+07	2.94E+07	3.13E+07	3.27E+07	3.36E+07	3.54E+07
136	3.11E+07	2.88E+07	2.93E+07	3.12E+07	3.26E+07	3.36E+07	3.54E+07
137	3.11E+07	2.87E+07	2.92E+07	3.12E+07	3.26E+07	3.35E+07	3.54E+07
138	3.11E+07	2.88E+07	2.92E+07	3.11E+07	3.26E+07	3.35E+07	3.54E+07
139	3.12E+07	2.87E+07	2.93E+07	3.12E+07	3.32E+07	3.51E+07	3.54E+07
140	3.12E+07	2.88E+07	2.94E+07	3.12E+07	3.29E+07	3.41E+07	3.54E+07
141	3.12E+07	2.88E+07	2.92E+07	3.12E+07	3.30E+07	3.37E+07	3.54E+07
142	3.12E+07	2.87E+07	2.92E+07	3.12E+07	3.31E+07	3.48E+07	3.54E+07
143	3.21E+07	2.86E+07	2.96E+07	3.21E+07	3.46E+07	3.59E+07	3.54E+07
144	3.21E+07	2.87E+07	2.98E+07	3.21E+07	3.45E+07	3.54E+07	3.54E+07
145	3.13E+07	2.86E+07	2.96E+07	3.13E+07	3.29E+07	3.38E+07	3.54E+07
146	3.12E+07	2.85E+07	2.94E+07	3.12E+07	3.28E+07	3.37E+07	3.54E+07
147	3.11E+07	2.84E+07	2.93E+07	3.12E+07	3.27E+07	3.38E+07	3.54E+07
148	3.10E+07	2.84E+07	2.92E+07	3.11E+07	3.26E+07	3.37E+07	3.54E+07
149	3.10E+07	2.83E+07	2.92E+07	3.11E+07	3.26E+07	3.36E+07	3.54E+07
150	3.10E+07	2.82E+07	2.92E+07	3.11E+07	3.26E+07	3.36E+07	3.54E+07
151	3.11E+07	2.82E+07	2.92E+07	3.11E+07	3.34E+07	3.49E+07	3.54E+07
152	3.11E+07	2.82E+07	2.91E+07	3.11E+07	3.29E+07	3.46E+07	3.54E+07
153	3.11E+07	2.81E+07	2.91E+07	3.12E+07	3.31E+07	3.45E+07	3.54E+07
154	3.12E+07	2.81E+07	2.92E+07	3.11E+07	3.32E+07	3.46E+07	3.54E+07
155	3.21E+07	2.87E+07	2.92E+07	3.22E+07	3.45E+07	3.52E+07	3.54E+07
156	3.20E+07	2.83E+07	2.97E+07	3.18E+07	3.46E+07	3.56E+07	3.54E+07



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Phase IV PSSA Elevation Output

All Contingency Flows								
	Time (mon)	Mean	Lower Bound	5%	25%	75%	95%	Upper Bound
Jul-11	0	9612.7	9610.9	9610.9	9612.9	9612.9	9612.9	9612.9
Aug-11	1	9611.6	9611.3	9611.3	9611.3	9611.3	9613.2	9613.2
Sep-11	2	9612.9	9612.9	9612.9	9612.9	9612.9	9612.9	9612.9
Oct-11	3	9615	9615	9615	9615	9615	9615	9615
Nov-11	4	9616.4	9616.4	9616.4	9616.4	9616.4	9616.4	9616.4
Dec-11	5	9617.1	9617.1	9617.1	9617.1	9617.1	9617.1	9617.1
Jan-12	6	9617.1	9617.1	9617.1	9617.1	9617.1	9617.1	9617.1
Feb-12	7	9617.1	9617.1	9617.1	9617.1	9617.1	9617.1	9618.9
Mar-12	8	9616.8	9616.8	9616.8	9616.8	9616.8	9616.8	9616.8
Apr-12	9	9616.7	9615.2	9615.2	9617	9617	9617	9617
May-12	10	9614.9	9613.1	9613.4	9615	9615	9615	9615
Jun-12	11	9613.6	9611.7	9613.7	9613.7	9613.7	9613.7	9613.7
Jul-12	12	9612.9	9611.9	9612.9	9612.9	9612.9	9612.9	9612.9
Aug-12	13	9612.9	9611	9612.9	9612.9	9612.9	9612.9	9612.9
Sep-12	14	9612.7	9611	9611.3	9612.9	9612.9	9612.9	9612.9
Oct-12	15	9612.6	9610.9	9610.9	9612.9	9612.9	9612.9	9612.9
Nov-12	16	9612.7	9610.9	9611	9612.9	9612.9	9612.9	9612.9
Dec-12	17	9612.7	9610.9	9610.9	9612.9	9612.9	9612.9	9612.9
Jan-13	18	9612.8	9612.1	9612.9	9612.9	9612.9	9612.9	9612.9
Feb-13	19	9612.6	9610.9	9610.9	9612.9	9612.9	9612.9	9612.9
Mar-13	20	9612.7	9610.9	9611.4	9612.9	9612.9	9612.9	9612.9
Apr-13	21	9612.7	9610.9	9610.9	9612.9	9612.9	9612.9	9612.9
May-13	22	9612.8	9610.9	9612.4	9612.9	9612.9	9612.9	9612.9
Jun-13	23	9613.1	9611.4	9611.4	9613.3	9613.3	9613.3	9613.3
Jul-13	24	9612.2	9612.2	9612.2	9612.2	9612.2	9612.2	9612.2
Aug-13	25	9613.4	9613.4	9613.4	9613.4	9613.4	9613.4	9613.4
Sep-13	26	9614.2	9614.2	9614.2	9614.2	9614.2	9614.2	9614.2
Oct-13	27	9614.7	9614.7	9614.7	9614.7	9614.7	9614.7	9614.7
Nov-13	28	9615	9615	9615	9615	9615	9615	9615
Dec-13	29	9615	9615	9615	9615	9615	9615	9615
Jan-14	30	9614.5	9614.5	9614.5	9614.5	9614.5	9614.5	9614.5
Feb-14	31	9615.1	9613.6	9613.6	9615.3	9615.5	9615.5	9615.5
Mar-14	32	9614.5	9612.7	9613.7	9614.6	9614.6	9614.6	9614.6
Apr-14	33	9613.6	9611.8	9611.8	9613.7	9613.7	9613.7	9613.7
May-14	34	9613.1	9611.2	9612.2	9613.2	9613.2	9613.2	9613.2
Jun-14	35	9612.9	9611	9612.9	9612.9	9612.9	9612.9	9612.9
Jul-14	36	9612.9	9612.9	9612.9	9612.9	9612.9	9612.9	9612.9
Aug-14	37	9612.9	9612.9	9612.9	9612.9	9612.9	9612.9	9612.9
Sep-14	38	9612.8	9611	9612.3	9612.9	9612.9	9612.9	9612.9



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Project: CC&V Phase 5 VLF		Job No. 1125
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Oct-14	39	9612.6	9611	9611	9612.9	9612.9	9612.9	9612.9
Nov-14	40	9612.7	9611	9611	9612.9	9612.9	9612.9	9612.9
Dec-14	41	9612.7	9611	9611	9612.9	9612.9	9612.9	9612.9
Jan-15	42	9612.9	9611.3	9612.5	9613	9613	9613	9613
Feb-15	43	9611.3	9611.1	9611.1	9611.1	9611.1	9613.1	9613.1
Mar-15	44	9612	9611.2	9611.2	9611.2	9613.1	9613.1	9613.1
Apr-15	45	9612.7	9611.3	9611.3	9611.3	9613.2	9613.2	9613.2
May-15	46	9612.8	9611.3	9611.3	9613.2	9613.2	9613.2	9613.2
Jun-15	47	9613.2	9611.3	9613.2	9613.2	9613.2	9613.2	9613.2
Jul-15	48	9613.2	9613.2	9613.2	9613.2	9613.2	9613.2	9613.2
Aug-15	49	9611.4	9611.1	9611.1	9611.1	9611.1	9613	9613
Sep-15	50	9620.5	9618.1	9618.8	9619.7	9621.4	9622.4	9622.8
Oct-15	51	9620	9618	9618.6	9619.4	9620.4	9621.8	9622.9
Nov-15	52	9620	9617.9	9618.5	9619.4	9620.6	9621.7	9622.6
Dec-15	53	9620.3	9617.8	9618.6	9619.6	9621.1	9622.1	9622.5
Jan-16	54	9619.8	9617.9	9618.4	9619.3	9620.4	9621.4	9622.1
Feb-16	55	9620.8	9617.9	9619	9620.1	9621.6	9622.3	9622.8
Mar-16	56	9620.8	9618.1	9618.9	9620.1	9621.6	9622.2	9622.8
Apr-16	57	9620.8	9618	9618.8	9620.1	9621.6	9622.2	9622.9
May-16	58	9620.8	9618.4	9618.9	9620	9621.7	9622.3	9623
Jun-16	59	9621.1	9618.2	9619.3	9620.5	9621.8	9622.4	9622.8
Jul-16	60	9621.4	9618.3	9619.8	9620.9	9622	9622.7	9623.2
Aug-16	61	9620	9618.1	9618.5	9619.4	9620.6	9621.3	9622.4
Sep-16	62	9620.5	9617.9	9618.8	9619.7	9621.3	9622.3	9622.7
Oct-16	63	9620	9617.9	9618.6	9619.3	9620.6	9621.5	9622.7
Nov-16	64	9620.1	9617.8	9618.4	9619.3	9620.7	9621.9	9622.8
Dec-16	65	9620.3	9617.8	9618.6	9619.5	9621.1	9622	9622.8
Jan-17	66	9619.8	9617.7	9618.4	9619.2	9620.4	9621.1	9622
Feb-17	67	9620.7	9617.7	9618.7	9619.9	9621.6	9622.3	9623
Mar-17	68	9620.7	9617.9	9618.7	9620.1	9621.6	9622.3	9623
Apr-17	69	9620.8	9617.8	9618.6	9620.2	9621.6	9622.3	9623.1
May-17	70	9620.7	9617.6	9618.8	9619.9	9621.6	9622.3	9623.2
Jun-17	71	9621.1	9617.4	9619.2	9620.6	9621.7	9622.4	9623.2
Jul-17	72	9621.4	9617.8	9619.9	9620.8	9621.9	9622.6	9623.5
Aug-17	73	9619.9	9617.4	9618.5	9619.3	9620.5	9621.6	9622.9
Sep-17	74	9620.5	9617.6	9618.6	9619.8	9621.5	9622.4	9623.3
Oct-17	75	9619.8	9617.3	9618.4	9619.2	9620.4	9621.4	9622.4
Nov-17	76	9619.9	9617.5	9618.3	9619.1	9620.5	9621.6	9622.3
Dec-17	77	9620.3	9617.2	9618.3	9619.5	9621.2	9622.1	9622.6
Jan-18	78	9619.7	9617.1	9618.2	9619	9620.3	9621.1	9622.4
Feb-18	79	9620.7	9617.6	9618.6	9620	9621.6	9622.3	9623.2
Mar-18	80	9620.5	9617.6	9618.5	9619.7	9621.4	9622.3	9623.3
Apr-18	81	9620.6	9617.4	9618.6	9619.7	9621.5	9622.3	9623
May-18	82	9620.6	9617.3	9618.5	9619.9	9621.5	9622.2	9622.8



SMITH WILLIAMS CONSULTANTS, INC.

Project: CC&V Phase 5 VLF	Job No. 1125
Calculation Title: Phase 5 VLF Water Balance	
Prepared By: JFL	Date: March 14, 2008
Checked By: DTW	Date: March 19, 2008

Jun-18	83	9621	9617.6	9619.2	9620.5	9621.7	9622.4	9623.2
Jul-18	84	9621.3	9618.7	9619.5	9620.7	9621.9	9622.6	9623.3
Aug-18	85	9619.8	9617.7	9618.2	9619.3	9620.4	9621.2	9622.2
Sep-18	86	9620.2	9617.5	9618.3	9619.4	9621.1	9622.1	9623.3
Oct-18	87	9619.7	9617.4	9618	9619.2	9620.4	9621.2	9623
Nov-18	88	9619.8	9617.4	9618	9619.2	9620.3	9621.4	9622.3
Dec-18	89	9620.2	9617.4	9618.3	9619.6	9621	9622.1	9622.8
Jan-19	90	9619.6	9617.3	9617.9	9619.1	9620.2	9621.1	9622.4
Feb-19	91	9620.5	9617.3	9618.5	9619.9	9621.3	9622.2	9623.1
Mar-19	92	9620.4	9617.2	9618.4	9619.7	9621.3	9622.1	9623.2
Apr-19	93	9620.5	9617.1	9618.6	9619.7	9621.4	9622.3	9623.5
May-19	94	9620.5	9617	9618.6	9619.7	9621.4	9622.3	9623.6
Jun-19	95	9620.9	9618.5	9619.1	9620.2	9621.6	9622.3	9623.6
Jul-19	96	9621.2	9618.1	9619.5	9620.6	9621.9	9622.5	9624
Aug-19	97	9619.7	9617.2	9618	9619.1	9620.4	9621	9622.8
Sep-19	98	9620.3	9617.4	9618.4	9619.4	9621.1	9622.2	9623.2
Oct-19	99	9619.6	9617	9617.9	9619	9620.4	9621.3	9622.2
Nov-19	100	9619.7	9617.2	9618	9618.9	9620.4	9621.3	9623.8
Dec-19	101	9620	9616.9	9618	9619.2	9620.7	9622	9623.8
Jan-20	102	9619.4	9616.8	9617.8	9618.8	9620.1	9620.9	9623
Feb-20	103	9620.4	9616.8	9618.4	9619.7	9621.4	9622	9623
Mar-20	104	9620.3	9616.8	9618.3	9619.4	9621.3	9622.1	9623.2
Apr-20	105	9620.4	9616.6	9617.8	9619.9	9621.3	9622.1	9623.8
May-20	106	9620.3	9616.5	9618.2	9619.5	9621.3	9622.1	9623.8
Jun-20	107	9620.8	9617.4	9618.8	9620	9621.6	9622.2	9623.9
Jul-20	108	9621.1	9618.3	9619.5	9620.4	9621.7	9622.4	9624
Aug-20	109	9619.6	9616.8	9618	9618.9	9620.3	9621.5	9622.4
Sep-20	110	9620	9616.6	9618	9619.2	9620.9	9622.1	9623.9
Oct-20	111	9619.5	9616.5	9617.8	9618.8	9620.1	9621.4	9622.4
Nov-20	112	9619.5	9616.4	9617.7	9618.7	9620.1	9621.3	9622.5
Dec-20	113	9619.9	9617.1	9618	9619	9621	9621.7	9623.8
Jan-21	114	9619.4	9616.4	9617.6	9618.7	9620.2	9621.2	9622.4
Feb-21	115	9620.3	9617.2	9618.1	9619.4	9621.3	9622	9623.1
Mar-21	116	9620.2	9616.5	9617.9	9619.4	9621.3	9622.1	9622.9
Apr-21	117	9620.4	9616.4	9618.2	9619.8	9621.2	9622.1	9623.1
May-21	118	9620.4	9617.3	9618.1	9619.6	9621.3	9622.2	9623.1
Jun-21	119	9620.7	9617.1	9618.6	9620	9621.5	9622.2	9623.1
Jul-21	120	9621	9618.3	9619.2	9620.3	9621.7	9622.4	9623.4
Aug-21	121	9619.5	9616.7	9617.7	9618.8	9620.2	9621.3	9622.9
Sep-21	122	9620	9616.9	9617.8	9619.2	9620.9	9622.1	9623
Oct-21	123	9619.4	9616.5	9617.5	9618.7	9620.1	9621.2	9622.3
Nov-21	124	9619.5	9616.4	9617.6	9618.8	9620.2	9621.6	9622.4
Dec-21	125	9619.8	9616.7	9618	9619	9620.6	9621.9	9622.9
Jan-22	126	9619.3	9616.3	9617.5	9618.6	9619.9	9620.9	9621.8



Feb-22	127	9620.2	9616.7	9618	9619.4	9621.2	9622	9623.1
Mar-22	128	9620.2	9616.6	9618	9619.5	9621.2	9622.1	9623.3
Apr-22	129	9620.3	9616.5	9618.1	9619.4	9621.3	9622.1	9623.4
May-22	130	9620.2	9616.5	9618	9619.2	9621.3	9622.2	9623.4
Jun-22	131	9620.5	9617.1	9618.3	9619.8	9621.4	9622.2	9623.5
Jul-22	132	9620.8	9617.1	9618.7	9620	9621.6	9622.5	9623.5
Aug-22	133	9619.4	9616.8	9617.4	9618.6	9620.1	9621.1	9622.5
Sep-22	134	9619.9	9616.6	9617.7	9619.1	9620.8	9622.3	9623.4
Oct-22	135	9619.3	9616.6	9617.3	9618.5	9620.2	9621.1	9622
Nov-22	136	9619.3	9616.5	9617.2	9618.4	9620.2	9621.4	9622.5
Dec-22	137	9619.7	9616.7	9617.3	9618.7	9620.8	9622	9622.7
Jan-23	138	9619.2	9616.5	9617.3	9618.4	9620	9620.9	9622.5
Feb-23	139	9620.2	9616.6	9618.1	9619.3	9621.2	9622.1	9623.2
Mar-23	140	9620.1	9616.6	9617.9	9619.3	9621	9622.1	9622.8
Apr-23	141	9620.2	9616.5	9617.8	9619.2	9621.3	9622.2	9622.9
May-23	142	9620.1	9616.5	9617.8	9619.1	9621.1	9622.1	9623.2
Jun-23	143	9620.5	9616.8	9618.3	9619.7	9621.3	9622.3	9623.4
Jul-23	144	9620.8	9616.4	9618.7	9620	9621.6	9622.5	9623.6
Aug-23	145	9619.3	9616.3	9617.4	9618.4	9620.1	9621.1	9621.9
Sep-23	146	9619.9	9616.2	9617.7	9619	9620.8	9622	9623.5
Oct-23	147	9619.2	9616.1	9617.2	9618.4	9620	9621.1	9622.9
Nov-23	148	9619.2	9616.1	9617.1	9618.4	9620.1	9621.2	9622.6
Dec-23	149	9619.7	9616	9617.3	9618.7	9620.7	9621.7	9622.5
Jan-24	150	9619.1	9615.9	9617.1	9618.2	9620	9620.9	9621.7
Feb-24	151	9620	9615.9	9617.8	9619.2	9620.9	9622.1	9623.2
Mar-24	152	9620	9615.9	9617.6	9619.1	9621	9622.1	9622.8
Apr-24	153	9620	9616.5	9617.6	9619.1	9621.1	9622.2	9622.9
May-24	154	9620.2	9616.7	9617.8	9619.4	9621.1	9622.2	9623
Jun-24	155	9620.4	9616.8	9618.2	9619.7	9621.3	9622.3	9623
Jul-24	156	9620.7	9616.6	9618.3	9620	9621.5	9622.4	9623.1

[illegible]



SMITH WILLIAMS CONSULTANTS, INC.

Project: CC&V Phase 5 VLF		Job No. 1125
Calculation Title: Phase 5 VLF Water Balance		
Prepared By: JFL		Date: March 14, 2008
Checked By: DTW		Date: March 19, 2008

Feb-12	7	4.44E+07	4.44E+07	4.44E+07	4.44E+07	4.44E+07	4.44E+07	4.68E+07
Mar-12	8	4.40E+07	4.40E+07	4.40E+07	4.40E+07	4.40E+07	4.40E+07	4.40E+07
Apr-12	9	4.39E+07	4.17E+07	4.17E+07	4.42E+07	4.42E+07	4.42E+07	4.42E+07
May-12	10	4.13E+07	3.90E+07	3.94E+07	4.15E+07	4.15E+07	4.15E+07	4.15E+07
Jun-12	11	3.96E+07	3.73E+07	3.97E+07	3.97E+07	3.97E+07	3.97E+07	3.97E+07
Jul-12	12	3.88E+07	3.75E+07	3.88E+07	3.88E+07	3.88E+07	3.88E+07	3.88E+07
Aug-12	13	3.87E+07	3.63E+07	3.87E+07	3.87E+07	3.87E+07	3.87E+07	3.87E+07
Sep-12	14	3.85E+07	3.63E+07	3.67E+07	3.87E+07	3.87E+07	3.87E+07	3.87E+07
Oct-12	15	3.84E+07	3.63E+07	3.63E+07	3.87E+07	3.87E+07	3.87E+07	3.87E+07
Nov-12	16	3.85E+07	3.63E+07	3.64E+07	3.87E+07	3.87E+07	3.87E+07	3.87E+07
Dec-12	17	3.84E+07	3.63E+07	3.63E+07	3.87E+07	3.87E+07	3.87E+07	3.87E+07
Jan-13	18	3.87E+07	3.77E+07	3.87E+07	3.87E+07	3.87E+07	3.87E+07	3.87E+07
Feb-13	19	3.84E+07	3.62E+07	3.62E+07	3.87E+07	3.87E+07	3.87E+07	3.87E+07
Mar-13	20	3.86E+07	3.62E+07	3.68E+07	3.87E+07	3.87E+07	3.87E+07	3.87E+07
Apr-13	21	3.85E+07	3.62E+07	3.62E+07	3.87E+07	3.87E+07	3.87E+07	3.87E+07
May-13	22	3.86E+07	3.62E+07	3.81E+07	3.87E+07	3.87E+07	3.87E+07	3.87E+07
Jun-13	23	3.91E+07	3.68E+07	3.68E+07	3.93E+07	3.93E+07	3.93E+07	3.93E+07
Jul-13	24	3.79E+07	3.79E+07	3.79E+07	3.79E+07	3.79E+07	3.79E+07	3.79E+07
Aug-13	25	3.94E+07	3.94E+07	3.94E+07	3.94E+07	3.94E+07	3.94E+07	3.94E+07
Sep-13	26	4.05E+07	4.05E+07	4.05E+07	4.05E+07	4.05E+07	4.05E+07	4.05E+07
Oct-13	27	4.11E+07	4.11E+07	4.11E+07	4.11E+07	4.11E+07	4.11E+07	4.11E+07
Nov-13	28	4.15E+07	4.15E+07	4.15E+07	4.15E+07	4.15E+07	4.15E+07	4.15E+07
Dec-13	29	4.15E+07	4.15E+07	4.15E+07	4.15E+07	4.15E+07	4.15E+07	4.15E+07
Jan-14	30	4.08E+07	4.08E+07	4.08E+07	4.08E+07	4.08E+07	4.08E+07	4.08E+07
Feb-14	31	4.16E+07	3.97E+07	3.97E+07	4.19E+07	4.22E+07	4.22E+07	4.22E+07
Mar-14	32	4.09E+07	3.85E+07	3.98E+07	4.10E+07	4.10E+07	4.10E+07	4.10E+07
Apr-14	33	3.96E+07	3.73E+07	3.73E+07	3.98E+07	3.98E+07	3.98E+07	3.98E+07
May-14	34	3.90E+07	3.66E+07	3.79E+07	3.91E+07	3.91E+07	3.91E+07	3.91E+07
Jun-14	35	3.87E+07	3.63E+07	3.88E+07	3.88E+07	3.88E+07	3.88E+07	3.88E+07
Jul-14	36	3.87E+07	3.87E+07	3.87E+07	3.87E+07	3.87E+07	3.87E+07	3.87E+07
Aug-14	37	3.88E+07	3.88E+07	3.88E+07	3.88E+07	3.88E+07	3.88E+07	3.88E+07
Sep-14	38	3.87E+07	3.63E+07	3.80E+07	3.88E+07	3.88E+07	3.88E+07	3.88E+07
Oct-14	39	3.84E+07	3.63E+07	3.63E+07	3.88E+07	3.88E+07	3.88E+07	3.88E+07
Nov-14	40	3.85E+07	3.63E+07	3.63E+07	3.88E+07	3.88E+07	3.88E+07	3.88E+07
Dec-14	41	3.85E+07	3.63E+07	3.63E+07	3.88E+07	3.88E+07	3.88E+07	3.88E+07
Jan-15	42	3.88E+07	3.67E+07	3.82E+07	3.88E+07	3.88E+07	3.88E+07	3.88E+07
Feb-15	43	3.67E+07	3.65E+07	3.65E+07	3.65E+07	3.65E+07	3.90E+07	3.90E+07
Mar-15	44	3.76E+07	3.66E+07	3.66E+07	3.66E+07	3.91E+07	3.91E+07	3.91E+07
Apr-15	45	3.85E+07	3.67E+07	3.67E+07	3.68E+07	3.92E+07	3.92E+07	3.92E+07
May-15	46	3.87E+07	3.67E+07	3.67E+07	3.92E+07	3.92E+07	3.92E+07	3.92E+07
Jun-15	47	3.91E+07	3.67E+07	3.92E+07	3.92E+07	3.92E+07	3.92E+07	3.92E+07
Jul-15	48	3.92E+07	3.92E+07	3.92E+07	3.92E+07	3.92E+07	3.92E+07	3.92E+07
Aug-15	49	3.69E+07	3.65E+07	3.65E+07	3.65E+07	3.65E+07	3.90E+07	3.90E+07
Sep-15	50	4.91E+07	4.57E+07	4.66E+07	4.79E+07	5.04E+07	5.18E+07	5.25E+07



SMITH WILLIAMS CONSULTANTS, INC.

Project: CC&V Phase 5 VLF		Job No. 1125
Calculation Title: Phase 5 VLF Water Balance		
Prepared By: JFL		Date: March 14, 2008
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Oct-15	51	4.84E+07	4.56E+07	4.64E+07	4.76E+07	4.90E+07	5.09E+07	5.26E+07
Nov-15	52	4.84E+07	4.54E+07	4.62E+07	4.75E+07	4.93E+07	5.08E+07	5.22E+07
Dec-15	53	4.89E+07	4.53E+07	4.64E+07	4.78E+07	5.00E+07	5.14E+07	5.20E+07
Jan-16	54	4.81E+07	4.55E+07	4.62E+07	4.73E+07	4.89E+07	5.04E+07	5.15E+07
Feb-16	55	4.96E+07	4.54E+07	4.69E+07	4.85E+07	5.07E+07	5.17E+07	5.24E+07
Mar-16	56	4.95E+07	4.57E+07	4.69E+07	4.84E+07	5.07E+07	5.16E+07	5.24E+07
Apr-16	57	4.95E+07	4.56E+07	4.67E+07	4.85E+07	5.08E+07	5.16E+07	5.26E+07
May-16	58	4.96E+07	4.61E+07	4.68E+07	4.83E+07	5.09E+07	5.17E+07	5.28E+07
Jun-16	59	5.00E+07	4.59E+07	4.73E+07	4.91E+07	5.09E+07	5.18E+07	5.25E+07
Jul-16	60	5.04E+07	4.61E+07	4.81E+07	4.96E+07	5.13E+07	5.23E+07	5.30E+07
Aug-16	61	4.84E+07	4.57E+07	4.63E+07	4.76E+07	4.92E+07	5.02E+07	5.19E+07
Sep-16	62	4.91E+07	4.55E+07	4.67E+07	4.80E+07	5.02E+07	5.18E+07	5.23E+07
Oct-16	63	4.84E+07	4.55E+07	4.64E+07	4.74E+07	4.92E+07	5.06E+07	5.23E+07
Nov-16	64	4.85E+07	4.54E+07	4.62E+07	4.74E+07	4.94E+07	5.11E+07	5.25E+07
Dec-16	65	4.88E+07	4.53E+07	4.65E+07	4.77E+07	4.99E+07	5.12E+07	5.24E+07
Jan-17	66	4.81E+07	4.52E+07	4.61E+07	4.73E+07	4.90E+07	5.00E+07	5.13E+07
Feb-17	67	4.94E+07	4.51E+07	4.66E+07	4.82E+07	5.07E+07	5.17E+07	5.28E+07
Mar-17	68	4.94E+07	4.55E+07	4.65E+07	4.84E+07	5.06E+07	5.17E+07	5.28E+07
Apr-17	69	4.96E+07	4.53E+07	4.64E+07	4.87E+07	5.07E+07	5.18E+07	5.29E+07
May-17	70	4.94E+07	4.50E+07	4.67E+07	4.82E+07	5.07E+07	5.17E+07	5.30E+07
Jun-17	71	5.00E+07	4.48E+07	4.72E+07	4.92E+07	5.09E+07	5.19E+07	5.30E+07
Jul-17	72	5.04E+07	4.54E+07	4.82E+07	4.96E+07	5.12E+07	5.21E+07	5.35E+07
Aug-17	73	4.83E+07	4.47E+07	4.63E+07	4.74E+07	4.91E+07	5.06E+07	5.26E+07
Sep-17	74	4.92E+07	4.50E+07	4.65E+07	4.80E+07	5.05E+07	5.19E+07	5.32E+07
Oct-17	75	4.81E+07	4.46E+07	4.62E+07	4.72E+07	4.90E+07	5.03E+07	5.18E+07
Nov-17	76	4.82E+07	4.49E+07	4.60E+07	4.72E+07	4.91E+07	5.07E+07	5.17E+07
Dec-17	77	4.88E+07	4.44E+07	4.60E+07	4.76E+07	5.02E+07	5.14E+07	5.22E+07
Jan-18	78	4.80E+07	4.44E+07	4.59E+07	4.70E+07	4.87E+07	5.00E+07	5.19E+07
Feb-18	79	4.94E+07	4.51E+07	4.65E+07	4.83E+07	5.06E+07	5.17E+07	5.31E+07
Mar-18	80	4.92E+07	4.50E+07	4.63E+07	4.79E+07	5.04E+07	5.17E+07	5.32E+07
Apr-18	81	4.92E+07	4.47E+07	4.64E+07	4.80E+07	5.06E+07	5.17E+07	5.28E+07
May-18	82	4.93E+07	4.46E+07	4.62E+07	4.82E+07	5.05E+07	5.16E+07	5.24E+07
Jun-18	83	4.99E+07	4.50E+07	4.72E+07	4.91E+07	5.08E+07	5.18E+07	5.31E+07
Jul-18	84	5.02E+07	4.66E+07	4.76E+07	4.93E+07	5.12E+07	5.22E+07	5.31E+07
Aug-18	85	4.82E+07	4.51E+07	4.59E+07	4.74E+07	4.90E+07	5.01E+07	5.16E+07
Sep-18	86	4.87E+07	4.50E+07	4.60E+07	4.75E+07	5.00E+07	5.15E+07	5.31E+07
Oct-18	87	4.80E+07	4.48E+07	4.56E+07	4.72E+07	4.89E+07	5.02E+07	5.28E+07
Nov-18	88	4.81E+07	4.47E+07	4.56E+07	4.72E+07	4.88E+07	5.04E+07	5.18E+07
Dec-18	89	4.86E+07	4.47E+07	4.59E+07	4.77E+07	4.98E+07	5.14E+07	5.24E+07
Jan-19	90	4.78E+07	4.46E+07	4.55E+07	4.71E+07	4.86E+07	4.99E+07	5.19E+07
Feb-19	91	4.92E+07	4.46E+07	4.62E+07	4.82E+07	5.03E+07	5.16E+07	5.29E+07
Mar-19	92	4.90E+07	4.45E+07	4.61E+07	4.79E+07	5.02E+07	5.15E+07	5.31E+07
Apr-19	93	4.91E+07	4.44E+07	4.65E+07	4.80E+07	5.04E+07	5.17E+07	5.34E+07
May-19	94	4.91E+07	4.43E+07	4.64E+07	4.79E+07	5.04E+07	5.17E+07	5.36E+07



SMITH WILLIAMS CONSULTANTS, INC.

Project: CC&V Phase 5 VLF		Job No. 1125
Calculation Title: Phase 5 VLF Water Balance		
Prepared By: JFL		Date: March 14, 2008
Checked By: DTW		Date: March 19, 2008

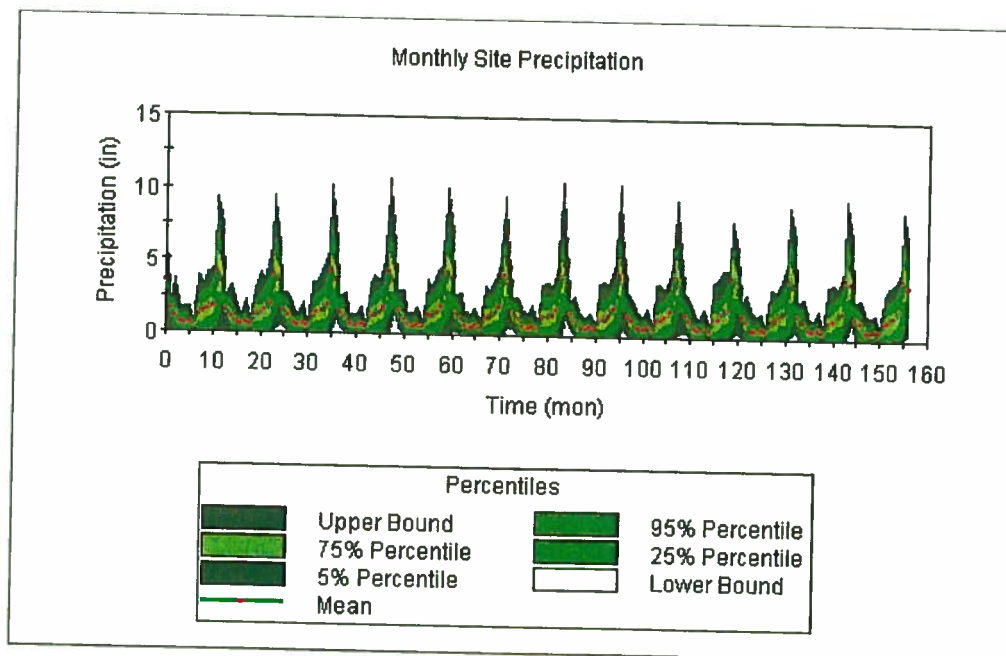
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Jul-19	96	5.01E+07	4.58E+07	4.76E+07	4.92E+07	5.11E+07	5.21E+07	5.42E+07
Aug-19	97	4.80E+07	4.45E+07	4.57E+07	4.72E+07	4.90E+07	4.98E+07	5.24E+07
Sep-19	98	4.88E+07	4.47E+07	4.61E+07	4.76E+07	5.00E+07	5.16E+07	5.30E+07
Oct-19	99	4.79E+07	4.42E+07	4.54E+07	4.69E+07	4.89E+07	5.02E+07	5.16E+07
Nov-19	100	4.79E+07	4.45E+07	4.56E+07	4.69E+07	4.90E+07	5.03E+07	5.40E+07
Dec-19	101	4.84E+07	4.41E+07	4.56E+07	4.72E+07	4.93E+07	5.13E+07	5.40E+07
Jan-20	102	4.76E+07	4.40E+07	4.53E+07	4.67E+07	4.85E+07	4.96E+07	5.27E+07
Feb-20	103	4.90E+07	4.40E+07	4.61E+07	4.80E+07	5.04E+07	5.13E+07	5.27E+07
Mar-20	104	4.88E+07	4.39E+07	4.60E+07	4.76E+07	5.02E+07	5.14E+07	5.30E+07
Apr-20	105	4.90E+07	4.37E+07	4.54E+07	4.82E+07	5.03E+07	5.14E+07	5.39E+07
May-20	106	4.89E+07	4.35E+07	4.59E+07	4.76E+07	5.03E+07	5.15E+07	5.39E+07
Jun-20	107	4.95E+07	4.48E+07	4.67E+07	4.84E+07	5.07E+07	5.16E+07	5.40E+07
Jul-20	108	4.99E+07	4.60E+07	4.77E+07	4.89E+07	5.09E+07	5.19E+07	5.42E+07
Aug-20	109	4.79E+07	4.39E+07	4.56E+07	4.69E+07	4.87E+07	5.06E+07	5.19E+07
Sep-20	110	4.85E+07	4.37E+07	4.56E+07	4.72E+07	4.96E+07	5.14E+07	5.41E+07
Oct-20	111	4.77E+07	4.35E+07	4.53E+07	4.67E+07	4.85E+07	5.04E+07	5.19E+07
Nov-20	112	4.77E+07	4.34E+07	4.52E+07	4.66E+07	4.85E+07	5.03E+07	5.20E+07
Dec-20	113	4.83E+07	4.43E+07	4.56E+07	4.70E+07	4.98E+07	5.08E+07	5.38E+07
Jan-21	114	4.75E+07	4.34E+07	4.51E+07	4.65E+07	4.87E+07	5.01E+07	5.18E+07
Feb-21	115	4.88E+07	4.45E+07	4.58E+07	4.75E+07	5.02E+07	5.14E+07	5.28E+07
Mar-21	116	4.87E+07	4.35E+07	4.54E+07	4.75E+07	5.02E+07	5.14E+07	5.26E+07
Apr-21	117	4.90E+07	4.33E+07	4.59E+07	4.81E+07	5.02E+07	5.14E+07	5.29E+07
May-21	118	4.89E+07	4.46E+07	4.58E+07	4.79E+07	5.02E+07	5.16E+07	5.29E+07
Jun-21	119	4.93E+07	4.44E+07	4.65E+07	4.83E+07	5.05E+07	5.16E+07	5.29E+07
Jul-21	120	4.98E+07	4.60E+07	4.73E+07	4.88E+07	5.08E+07	5.19E+07	5.34E+07
Aug-21	121	4.77E+07	4.38E+07	4.52E+07	4.67E+07	4.87E+07	5.02E+07	5.27E+07
Sep-21	122	4.85E+07	4.41E+07	4.53E+07	4.72E+07	4.97E+07	5.15E+07	5.28E+07
Oct-21	123	4.76E+07	4.36E+07	4.49E+07	4.66E+07	4.85E+07	5.01E+07	5.18E+07
Nov-21	124	4.77E+07	4.34E+07	4.50E+07	4.67E+07	4.86E+07	5.07E+07	5.19E+07
Dec-21	125	4.82E+07	4.38E+07	4.55E+07	4.70E+07	4.92E+07	5.12E+07	5.26E+07
Jan-22	126	4.74E+07	4.33E+07	4.49E+07	4.64E+07	4.83E+07	4.97E+07	5.11E+07
Feb-22	127	4.87E+07	4.38E+07	4.56E+07	4.75E+07	5.01E+07	5.13E+07	5.29E+07
Mar-22	128	4.87E+07	4.36E+07	4.56E+07	4.76E+07	5.00E+07	5.14E+07	5.32E+07
Apr-22	129	4.88E+07	4.35E+07	4.58E+07	4.76E+07	5.03E+07	5.14E+07	5.33E+07
May-22	130	4.87E+07	4.35E+07	4.57E+07	4.73E+07	5.02E+07	5.15E+07	5.33E+07
Jun-22	131	4.92E+07	4.44E+07	4.60E+07	4.81E+07	5.03E+07	5.16E+07	5.34E+07
Jul-22	132	4.96E+07	4.44E+07	4.66E+07	4.84E+07	5.08E+07	5.20E+07	5.34E+07
Aug-22	133	4.76E+07	4.40E+07	4.48E+07	4.65E+07	4.86E+07	5.00E+07	5.19E+07
Sep-22	134	4.83E+07	4.37E+07	4.52E+07	4.72E+07	4.96E+07	5.17E+07	5.33E+07
Oct-22	135	4.74E+07	4.36E+07	4.47E+07	4.63E+07	4.86E+07	5.00E+07	5.13E+07
Nov-22	136	4.74E+07	4.35E+07	4.46E+07	4.62E+07	4.86E+07	5.04E+07	5.20E+07
Dec-22	137	4.80E+07	4.37E+07	4.47E+07	4.65E+07	4.95E+07	5.13E+07	5.23E+07
Jan-23	138	4.72E+07	4.35E+07	4.46E+07	4.61E+07	4.83E+07	4.97E+07	5.19E+07



SMITH WILLIAMS CONSULTANTS, INC.

Project: CC&V Phase 5 VLF		Job No. 1125
Calculation Title: Phase 5 VLF Water Balance		
Prepared By: JFL		Date: March 14, 2008
Checked By: DTW		Date: March 19, 2008

Feb-23	139	4.87E+07	4.37E+07	4.58E+07	4.74E+07	5.01E+07	5.15E+07	5.31E+07
Mar-23	140	4.85E+07	4.37E+07	4.55E+07	4.74E+07	4.98E+07	5.14E+07	5.25E+07
Apr-23	141	4.87E+07	4.36E+07	4.53E+07	4.72E+07	5.03E+07	5.16E+07	5.25E+07
May-23	142	4.86E+07	4.35E+07	4.53E+07	4.71E+07	4.99E+07	5.15E+07	5.31E+07
Jun-23	143	4.91E+07	4.39E+07	4.61E+07	4.79E+07	5.03E+07	5.17E+07	5.33E+07
Jul-23	144	4.95E+07	4.34E+07	4.66E+07	4.84E+07	5.07E+07	5.20E+07	5.35E+07
Aug-23	145	4.74E+07	4.33E+07	4.47E+07	4.62E+07	4.85E+07	4.99E+07	5.12E+07
Sep-23	146	4.82E+07	4.31E+07	4.52E+07	4.70E+07	4.95E+07	5.12E+07	5.35E+07
Oct-23	147	4.73E+07	4.30E+07	4.45E+07	4.62E+07	4.84E+07	4.99E+07	5.26E+07
Nov-23	148	4.73E+07	4.29E+07	4.44E+07	4.61E+07	4.85E+07	5.01E+07	5.22E+07
Dec-23	149	4.79E+07	4.28E+07	4.47E+07	4.66E+07	4.93E+07	5.09E+07	5.21E+07
Jan-24	150	4.71E+07	4.27E+07	4.44E+07	4.59E+07	4.83E+07	4.97E+07	5.08E+07
Feb-24	151	4.84E+07	4.27E+07	4.54E+07	4.73E+07	4.97E+07	5.15E+07	5.30E+07
Mar-24	152	4.83E+07	4.26E+07	4.51E+07	4.72E+07	4.98E+07	5.14E+07	5.25E+07
Apr-24	153	4.84E+07	4.35E+07	4.50E+07	4.71E+07	4.99E+07	5.16E+07	5.26E+07





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Project: CC&V Phase 5 VLF

Job No. 1125

Calculation Title:
Phase 5 VLF Water Balance

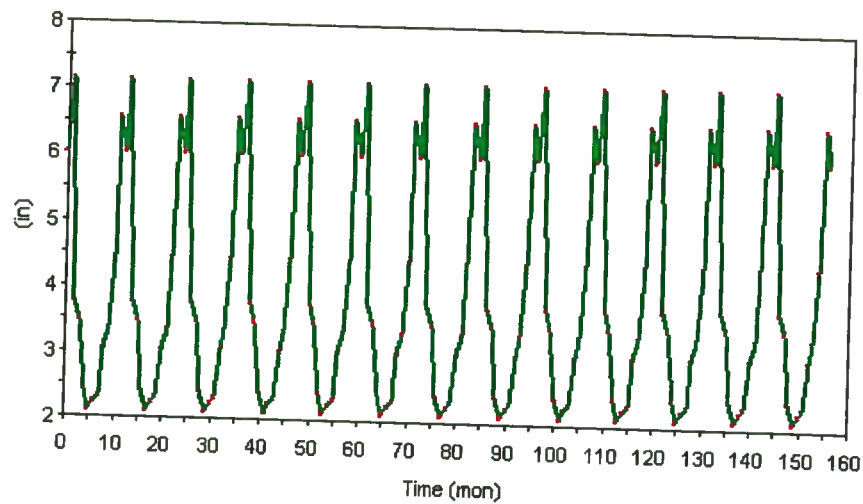
Prepared By: JFL

Date: March 14, 2008

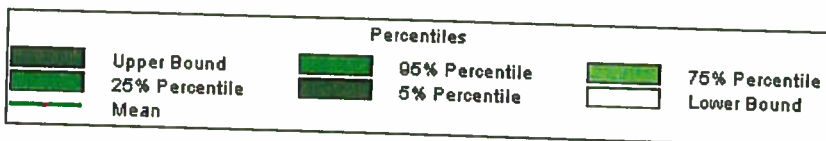
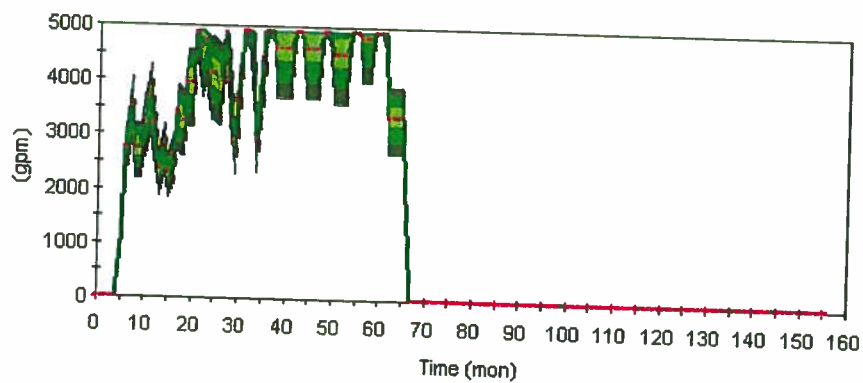
Checked By: DTW

Date: March 19, 2008

Evaporation_data



Phase I Leaching Application Rate





SMITH WILLIAMS CONSULTANTS, INC.

Project: CC&V Phase 5 VLF

Job No. 1125

Calculation Title:
Phase 5 VLF Water Balance

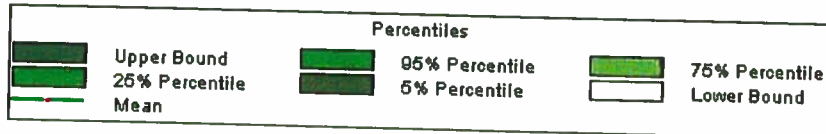
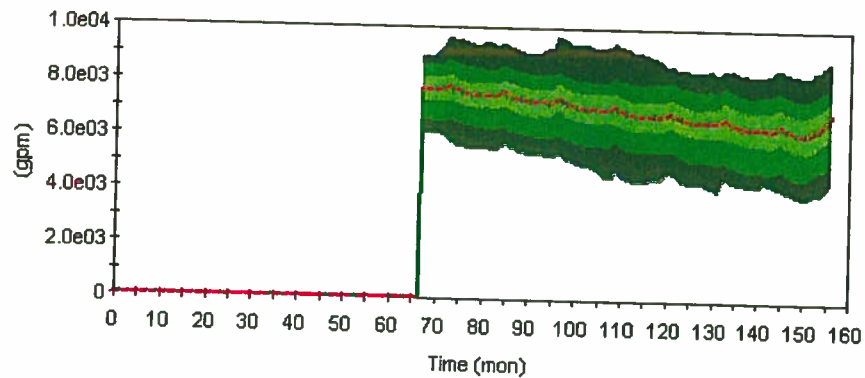
Prepared By: JFL

Date: March 14, 2008

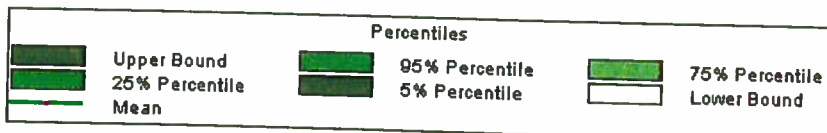
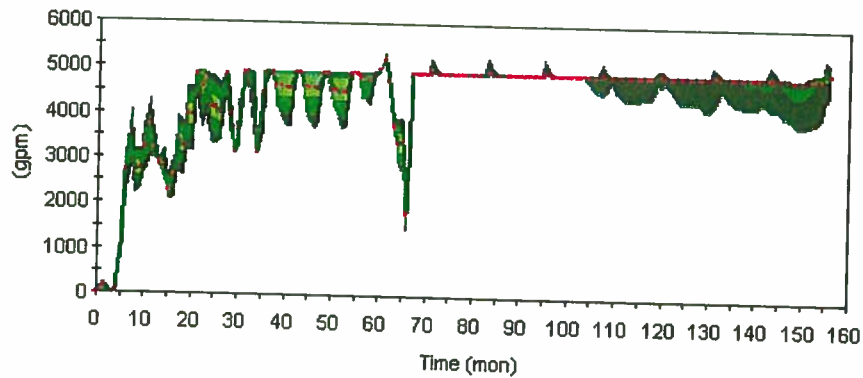
Checked By: DTW

Date: March 19, 2008

Phase I Post Mining Leaching Rate



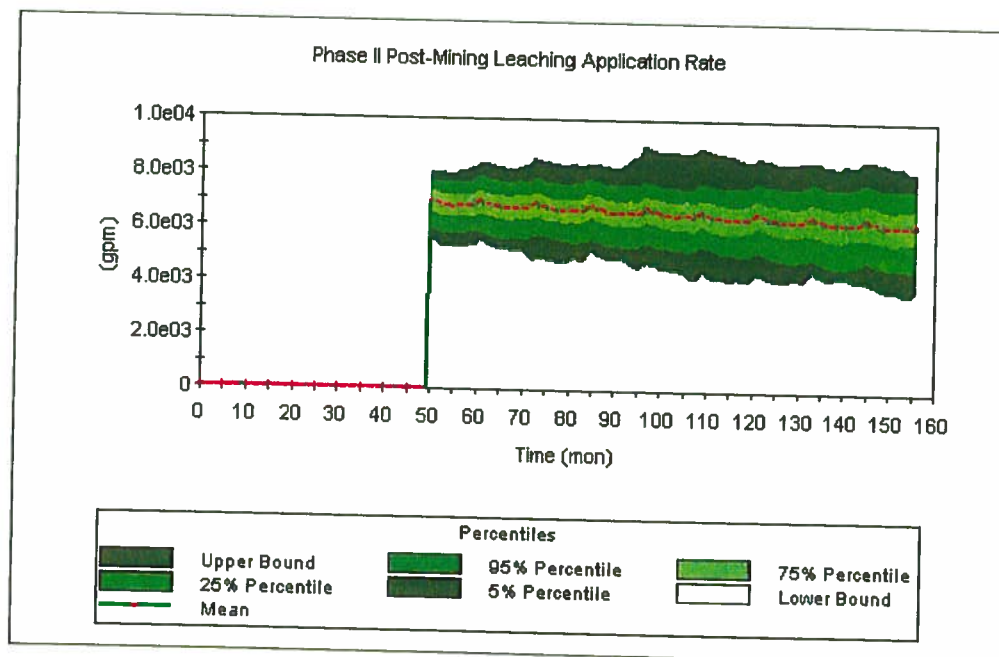
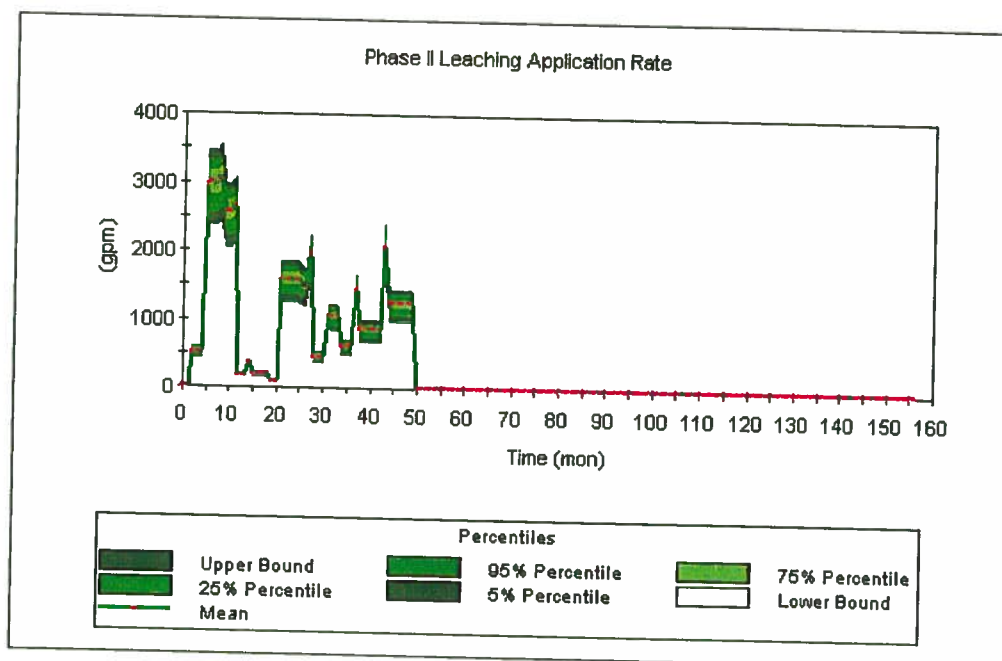
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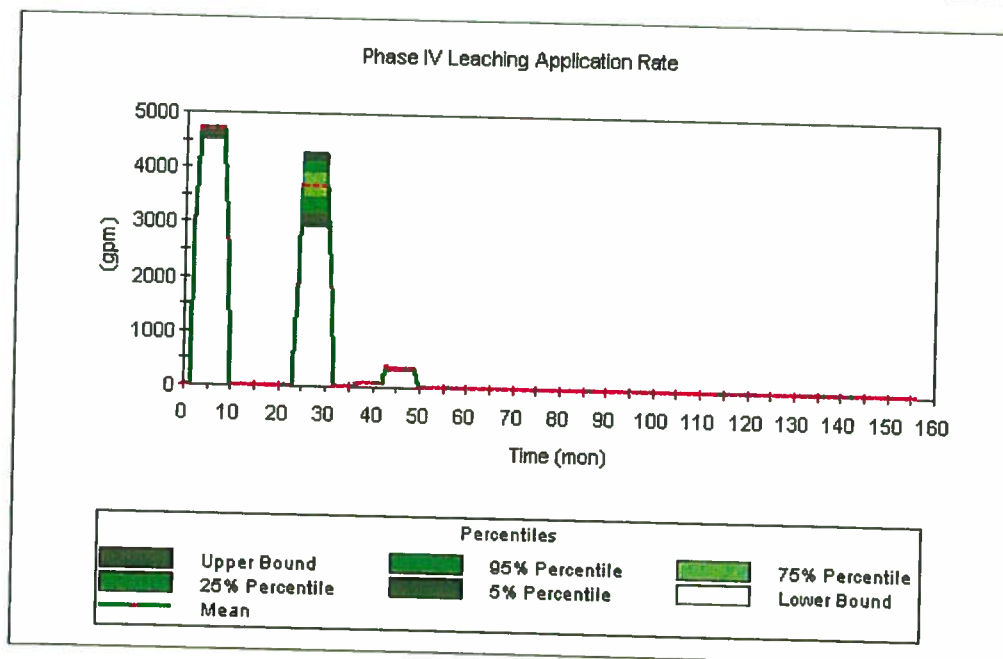
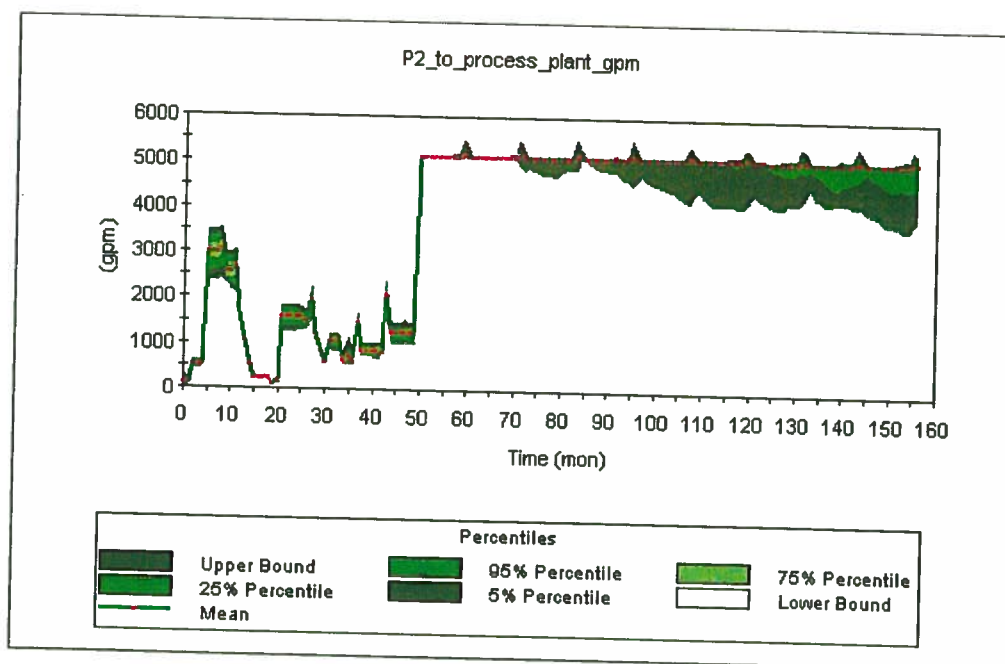
Project: CC&V Phase 5 VLF		Job No. 1125
Calculation Title: Phase 5 VLF Water Balance		
Prepared By: JFL	Date: March 14, 2008	
Checked By: DTW	Date: March 19, 2008	





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Calculation Title: Phase 5 VLF Water Balance		
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Checked By: DTW	Date: March 19, 2008	





SMITH WILLIAMS CONSULTANTS, INC.

Project: CC&V Phase 5 VLF

Job No. 1125

Calculation Title:
Phase 5 VLF Water Balance

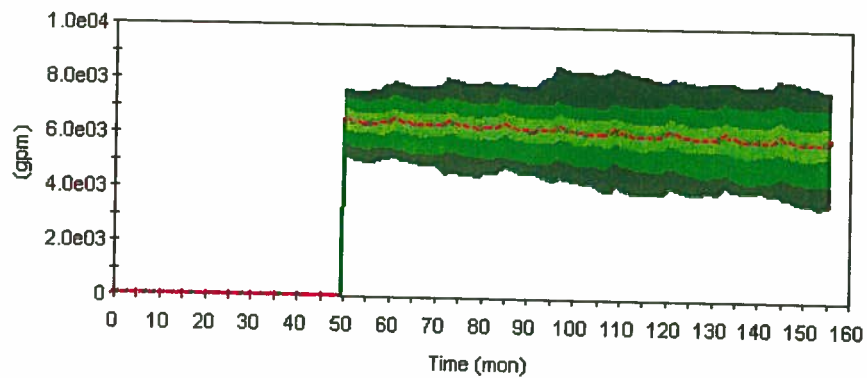
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Date: March 14, 2008

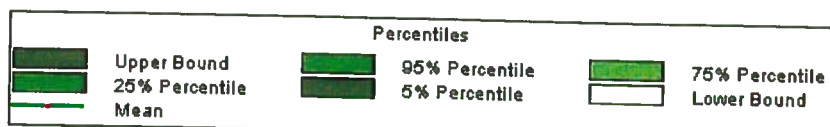
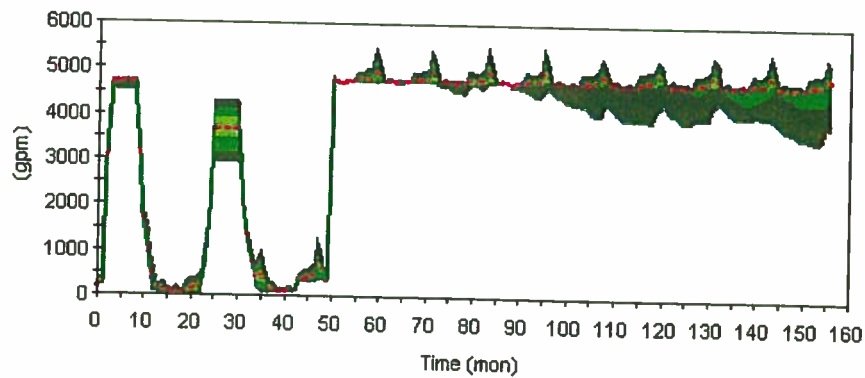
Checked By: DTW

Date: March 19, 2008

Phase IV Post Mining Leaching Application Rate



P4_to_process_plant_gpm





SMITH WILLIAMS CONSULTANTS, INC.

Project: CC&V Phase 5 VLF

Job No. 1125

Calculation Title:
Phase 5 VLF Water Balance

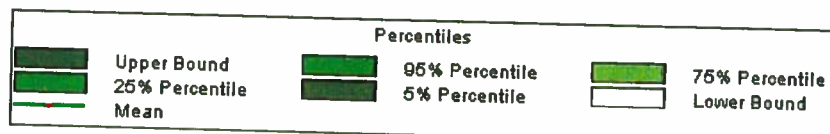
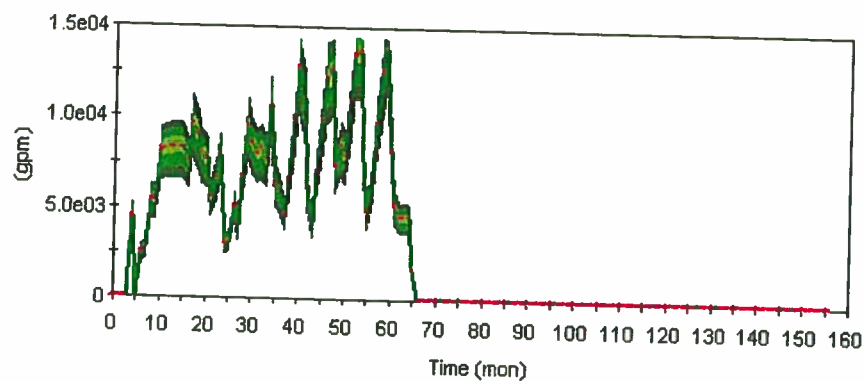
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Date: March 14, 2008

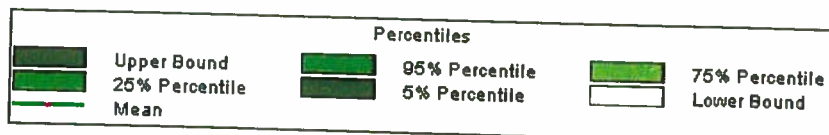
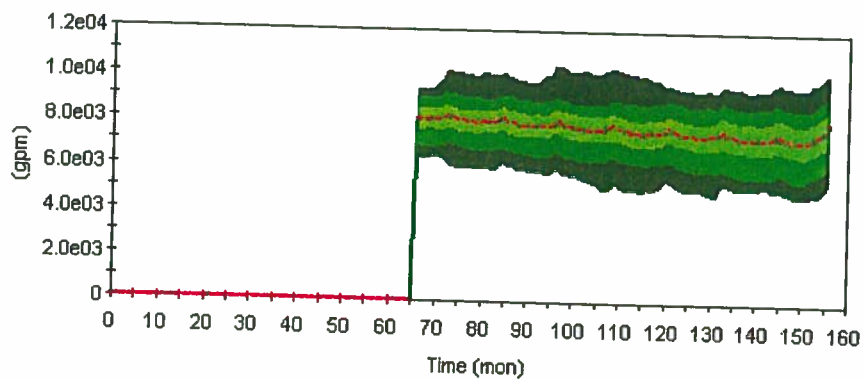
Checked By: DTW

Date: March 19, 2008

Phase 5 Leaching Application Rate



Phase 5 Post Mining Leaching Application Rate





SMITH WILLIAMS CONSULTANTS, INC.

Project: CC&V Phase 5 VLF

Job No. 1125

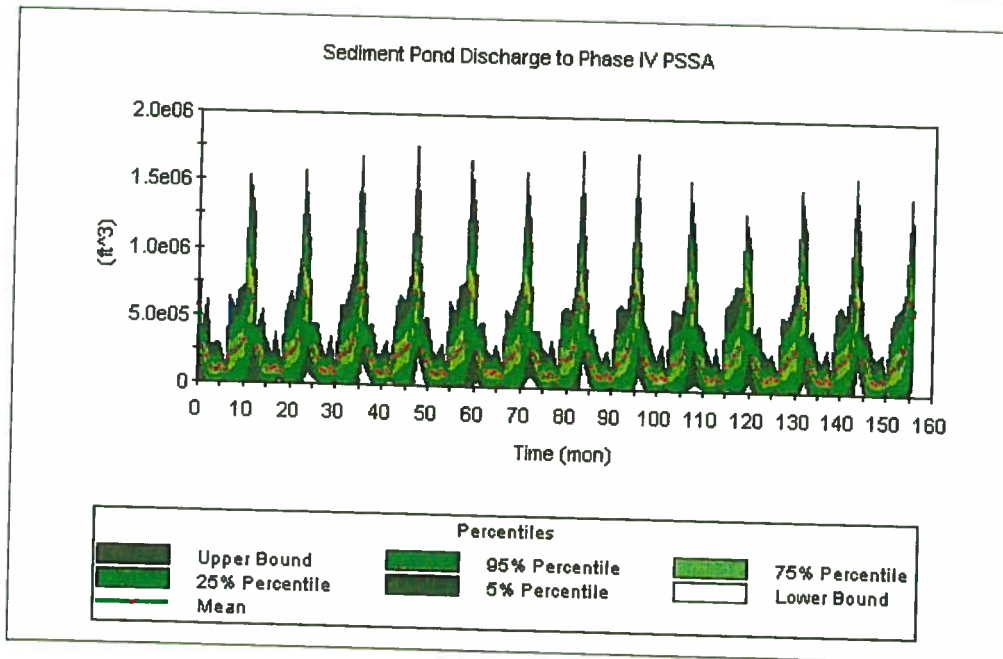
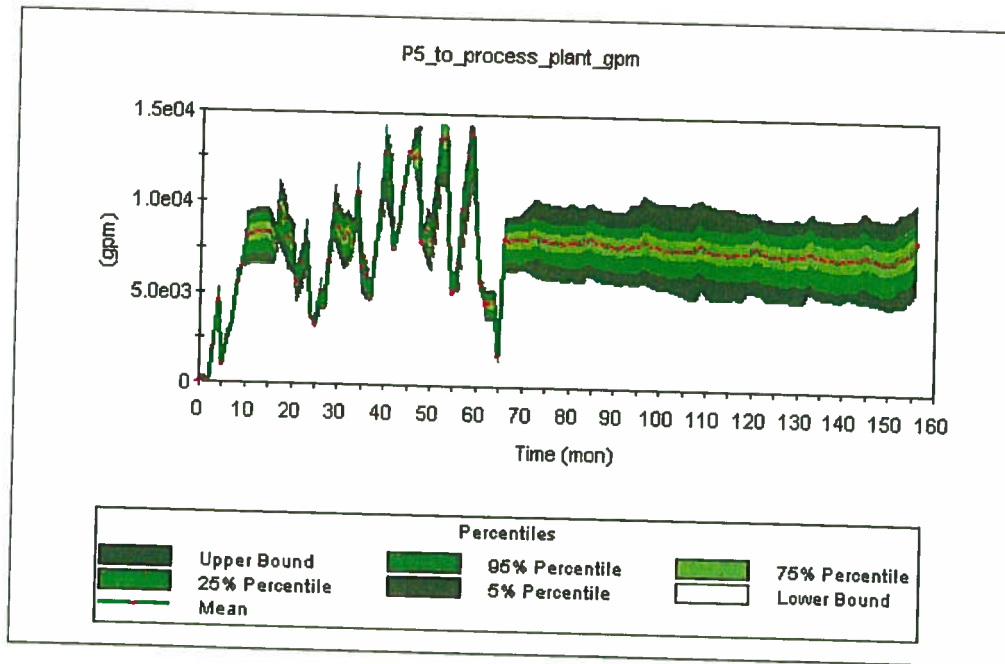
Calculation Title:
Phase 5 VLF Water Balance

Prepared By: JFL

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Checked By: DTW

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