

PRATHER SPRINGS DATA REVIEW SUMMARY

Data Package Number: Evergreen Analytical Laboratory 08-4070

Sampling Event: June 12, 2008

Sample-specific Parameter Review? **Yes**Laboratory Performance Parameters? **No**

Data Reviewer: Liz Kraak

Date Completed: 08/14/08

Peer Reviewer: Geoff Webb

Date Completed: 08/15/08

The table below summarizes the results presented in this data package.

Field ID	Sample Type	Lab ID	Matrix	Analyses					
				BTEX (8021B)	Fuel ID (8015B)	Metals (6010 & 6020)	Oil & Grease (E1664A)	Inorganics	Methane (RSK 175)
Marathon	SA	08-4070-01	Soil	X	X	---	---	---	---
Nonsuch	SA	08-4070-02	Soil	X	X	---	---	---	---
Prather Spring	SA	08-4070-03	Water	X	---	X	X	X	X ^m

Analyses:

BTEX – Benzene, Ethylbenzene, Toluene, m,p-Xylene, o-Xylene

Fuel ID including diesel fuel (No. 2), gasoline, jet A, and motor oil.

Metals including calcium, iron, magnesium, potassium, sodium, manganese, arsenic, barium, cadmium, chromium, lead, and selenium.

Inorganics including total alkalinity, carbonate alkalinity, bicarbonate alkalinity (SM2320B), total dissolved solids (SM2540C), specific conductance (SM2510B), fluoride (SM4500-F C), pH (E150.1), nitrite-N (E300.0), bromide (E300.0), chloride (E300.0), nitrate-N (E300.0), sulfate (E300.0)

QC Type: SA - Sample

TB - Trip Blank

m - Matrix Spike/Matrix Spike Duplicate

--- Sample not analyzed for this parameter.

The data review was conducted in accordance with the Data Validation SOP included in Attachment B to the Phase I Site Investigation Work Plan – Prather Spring Investigation dated July 31, 2008.

General Overall Assessment:

- _____ Data are usable without qualification.
_____ **X** Data are usable with qualification (noted below).
_____ Data are usable with qualification (noted below).

Case Narrative Summary: Except as noted below, any of the issues noted in the laboratory case narrative potentially affecting data quality are addressed in the appropriate sections in the table below.

Review Parameter	Criteria Met?	Comments
Sample-specific Parameters	Complete with "Yes", "No", or "Not Applicable (N/A)".	For each "No" response, list what was out, associated acceptance limits, all qualified data, and bias direction or reference associated table with pertinent details.
COC & Sample Receipt	Yes	Samples were received intact and the cooler temperature was 5.8°C upon arrival at the laboratory, within the ≤6°C temperature criterion.
Holding Times	Yes	With the exception of pH, all samples were analyzed within the holding time requirements specified in the Work Plan. Samples for aqueous pH were analyzed one day after collection, which exceeds the holding time requirement of immediate analysis. Therefore, the pH result for the Prather Spring sample was qualified as estimated (J HT-I) with an indeterminate bias.

Review Parameter	Criteria Met?	Comments
Method Blanks	Yes	Target analytes were not reported as detected within the associated method blanks. Data qualification was not required.
Matrix QC <ul style="list-style-type: none"> MS/MSD Prather Spring (Methane) LD N/A 	Yes	The recoveries and RPDs for the matrix spike (MS) and matrix spike duplicate (MSD) analyses were within the laboratory-determined acceptance range. Data qualification was not required.
Field QC <ul style="list-style-type: none"> Field Blanks (Ambient, Rinsate, or Trip) None Field Duplicate None 	N/A	
Surrogates	No	With the exceptions summarized below in Table 1, all surrogate recoveries were within the laboratory acceptance limits.
Laboratory Control Sample (LCS)	Yes	LCS recoveries were within the laboratory determined acceptance limits. Data qualification was not required.
Non-detect Results w/ Elevated RLs?	No	Some of the BTEX and TEH analyses were performed at dilutions. Several results were reported as non-detect at elevated RLs. Therefore, those results that were reported as non-detect at elevated RLs will need to be evaluated with respect to the project objectives.
Package Completeness	Yes	
Other Parameters	Yes	Detected analytes with concentrations between the Instrument Detection Limit (IDL) and the Reporting Limit (RL) were qualified as estimated (J). A qualifier code of "SQL-I" (Sample Quantitation Limit) was assigned to reflect the greater uncertainty in quantitative values below the RL.

Table 1: Surrogate Recovery Outliers and Resultant Data Qualification

Associated Sample	Surrogate	Recovery (Limits)	Qualification
BTEX (Soil)			
Marathon	1,2,4-Trichlorobenzene	1072 (60-140)	As the potential bias was considered to be high, the detected BTEX results for sample Marathon were qualified as estimated (J SUR-H).
Fuel ID (Soil)			
Nonsuch	TBB	561 (39-130) 510 (39-130)	As the potential bias was considered to be high, the detected TEH results for sample Nonsuch were qualified as estimated (J SUR-H).

J – Estimated

SUR – Surrogate recovery failure.

H – High Bias

PRATHER SPRINGS DATA REVIEW SUMMARY

Data Package Number: Evergreen Analytical Laboratory 08-5065

Sampling Event: July 15, 2008

Sample-specific Parameter Review? **Yes**

Laboratory Performance Parameters? **Yes**

Data Reviewer: Liz Kraak

Date Completed: 07/31/08

Peer Reviewer: Sheri O'Connor

Date Completed: 08/01/08

The table below summarizes the results presented in this data package.

Field ID	Sample Type	Lab ID	Matrix	Analyses			
				VOCs (8260B)	TVH – Gasoline (8015B)	TEH – Diesel (8015B)	SVOCs (8270C) ¹
BH-5 @ 12 ½ - 13 ½	SA	08-5065-01	Soil	X	X ^m	X	---
BH-6 @ 15-16	SA	08-5065-02	Soil	X	X	X	---
Trip Blank	TB	08-5065-04	Water	X	---	---	---

Analyses:

¹ Per URS request, the SVOC analysis was placed on hold.

VOCs – Volatile Organic Compounds

SVOCs – Semivolatile Organic Compounds

QC Type: SA - Sample

TB - Trip Blank

m - Matrix Spike/Matrix Spike Duplicate

--- Sample not analyzed for this parameter.

The data review was conducted in accordance with the Phase I Site Investigation Work Plan – Prather Spring Investigation dated July 31, 2008.

General Overall Assessment:

_____ Data are usable without qualification.
 X Data are usable with qualification (noted below).

Case Narrative Summary: Except as noted below, any of the issues noted in the laboratory case narrative potentially affecting data quality are addressed in the appropriate sections in the table below.

Review Parameter	Criteria Met?	Comments
Sample-specific Parameters	Complete with "Yes", "No", or "Not Applicable (N/A)".	For each "No" response, list what was out, associated acceptance limits, all qualified data, and bias direction or reference associated table with pertinent details.
COC & Sample Receipt	Yes	Samples were received intact and the cooler temperature was 5.5°C upon arrival at the laboratory, within the ≤6°C temperature criterion.
Holding Times	Yes	All samples were analyzed within the holding time requirements specified in the Work Plan. Further action was not necessary.
Method Blanks	Yes	Target analytes were not reported as detected within the associated method blanks. Therefore, data qualification based on method blank contamination was not necessary.
Matrix QC <ul style="list-style-type: none"> MS/MSD PS-BH3 20-21.5 LD N/A 	Yes	The recoveries and RPDs for the matrix spike (MS) and matrix spike duplicate (MSD) analyses were within the laboratory-determined acceptance range. Therefore, data qualification was not necessary.

Review Parameter	Criteria Met?	Comments
Field QC <ul style="list-style-type: none"> Field Blanks (Ambient, Rinsate, or Trip) Trip Blank Field Duplicate None 	No	With the exception of acetone, target analytes were reported as non-detect in the trip blank. Acetone was detected in the trip blank at a concentration of 5.9 µg/L. All associated acetone results were reported as non-detect. Therefore, data qualification was not necessary.
Surrogates	No	With the exceptions summarized below in Table 1, all surrogate recoveries were within the laboratory acceptance limits.
Laboratory Control Sample/ Laboratory Control Sample Duplicate (LCS/LCSD)	Yes	LCS and LCSD recoveries were within the laboratory determined acceptance limits. Therefore, data qualification was not necessary.
Non-detect Results w/ Elevated RLs?	No	The VOC and TVH -Gasoline analyses were performed at dilutions. Several results were reported as non-detect at elevated RLs. Therefore, these results that were reported as non-detect at elevated RLs will need to be evaluated with respect to the project objectives.
Package Completeness	Yes	
Other Parameters	Yes	<p>Detected analytes with concentrations between the Instrument Detection Limit (IDL) and the Reporting Limit (RL) were qualified as estimated (J). A qualifier code of "SQL-I" (Sample Quantitation Limit) was assigned to reflect the greater uncertainty in quantitative values below the RL.</p> <p>Split Samples</p> <p>Split sample evaluation criteria were not included in the Work Plan. As such, the following concentration-dependent criteria were used:</p> <ul style="list-style-type: none"> If both results were $\leq 5 \times \text{RL}$, then the absolute difference between the results should agree within $\pm 2 \times \text{RL}$ (Waters) and $\pm 3.5 \times \text{RL}$ (Soils) If both results were $\geq 5 \times \text{RL}$, then the RPD should be $\leq 30\%$ (Waters) and $\leq 50\%$ (Soils) <p>The following split samples were collected:</p> <ul style="list-style-type: none"> BH-6 @ 15-16 (VOCs, TVH – Gasoline, TEH – Diesel) <p>All split sample results and parent sample results were reported as non-detect for these analyses. As such the split sample results demonstrate acceptable agreement.</p>
Laboratory Performance Review		

Review Parameter	Criteria Met?	Comments
Initial Calibration	No	<p>Method 8260B (VOCs)</p> <p>All the minimum relative response factors (RRFs) for the system performance check compounds (SPCCs) were met, satisfying method requirements. For all other target analytes, a minimum RRF of 0.05 was used and all target analytes met this criterion. The percent relative standard deviations (%RSDs) over the initial calibration RRFs for all calibration check compounds (CCCs) satisfied the method requirement of <30%. For all other target compounds, a requirement of 15% RSD was used. The mean of the %RSD values for all target analytes in the calibrations was less than 15%. Therefore, the initial calibrations met method acceptance criteria by satisfying the mean %RSD exception. Although the %RSDs for several target analytes did not meet the 15% RSD criterion, data qualification was not necessary because alternate calibration models (i.e. linear and quadratic regression) were used and the correlation coefficients (r) for the first order curves were >0.995.</p> <p>For the linear curve fit, the laboratory forced the line through 0,0 which is allowed per Method 8000C as long as the absolute value of the percent difference between the calculated and expected concentration for every calibration level is less than or equal to 20%. For acetone, the %D was evaluated for the calibration point at the LQL (Lab Quantitation Limit). The %D between the calculated using the laboratory equation and the true value was 84%, which is greater than the criterion of ≤20%. Therefore, all acetone results less than or equal to the LQL were qualified as estimated (J/UJ ICAL – I) to reflect the imprecision at the low end of the calibration curve.</p> <p>TPH (GRO and DRO)</p> <p>The relationship between instrument response and concentration was established with a blank and at least five standards. All initial calibrations were verified, as applicable. Data qualification on the basis of initial calibrations was not necessary.</p>
Tuning (as applicable to the method)	Yes	<p>Method 8260B (VOCs)</p> <p>A satisfactory tuning event was conducted at the beginning of every 12 hours of sample analysis. No errors in calculation of ion abundance ratios were found and all were within the required acceptance ranges. Data qualification on the basis of instrument tuning was not necessary.</p>
Initial/ Continuing Calibration Verification (ICV/CCV)	No	<p>ICV/CCV</p> <p>With the exceptions listed below, The %Ds for all CCCs in the ICV and CCV were less than 20%, satisfying method requirements, and other target analytes satisfied the %D criterion of 25%.</p> <p>The analyte 2-chloroethylvinyl ether (+81.2%) was outside the requirements for the CCV associated with the trip blank. The associated trip blank result was reported as non-detect and the potential bias indicated by the CCV was considered high; therefore, qualification of data was not considered necessary.</p> <p>The analyte 2-chloroethylvinyl ether (-29.6%) was outside the requirements for the CCV associated with the soil samples reported in this data package. Therefore, the 2-chloroethylvinyl ether results for the soil samples were qualified as estimated (UJ CCAL – L) to reflect the potential low bias.</p> <p>.</p>
Laboratory Control Sample/ Laboratory Control Sample Duplicate (LCS/LCSD)	Yes	<p>LCS and LCSD recoveries were within the laboratory determined acceptance limits. Therefore, data qualification was not necessary.</p>

Review Parameter	Criteria Met?	Comments
Target Compound Identification	Yes	The quantitation sheets and total ion chromatograms were reviewed to assure that compounds reported as identified meet the criteria contained in the method. The mass spectra were reviewed for compounds reported as identified to assure that the reported mass spectral data meet the mass spectral identification criteria contained in the analytical method. No errors in compound identification were found and data qualification was not necessary.
Transcription Errors	Yes	No transcription errors were found in this data package. Data qualification was not necessary.
Recalculation	Yes	No calculation or sample quantitation errors were found in this data package. Data qualification was not necessary.

Table 1: Surrogate Recovery Outliers and Resultant Data Qualification

Associated Sample	Surrogate	Recovery (Limits)	Qualification
TVH – Gasoline LCS	1,2,4-Trichlorobenzene	148 (60-140)	None. As these are QC samples, data qualification based on surrogate recovery failure is not necessary.
TVH – Gasoline MSD	1,2,4-Trichlorobenzene	151 (60-140)	

LCS – Laboratory Control Sample

MSD – Matrix Spike Duplicate

QC – Quality Control

PRATHER SPRINGS DATA REVIEW SUMMARY

Data Package Number: Evergreen Analytical Laboratory 08-5101

Sampling Event: July 16, 2008

Sample-specific Parameter Review? **Yes**

Laboratory Performance Parameters? **No**

Data Reviewer: Liz Kraak

Date Completed: 07/31/08

Peer Reviewer: Sheri O'Connor

Date Completed: 08/01/08

The table below summarizes the results presented in this data package.

Field ID	Sample Type	Lab ID	Matrix	Analyses			
				VOCs (8260B)	TVH – Gasoline (8015B)	TEH – Diesel (8015B)	SVOCs (8270C) ¹
PS-BH3 20-21.5	SA	08-5101-01	Soil	X ^m	X ^m	X ^m	---
PS-BH4 14-16	SA	08-5101-02	Soil	X	X	X	---

Analyses:

¹ Per URS request, the SVOC analysis was placed on hold.

VOCs – Volatile Organic Compounds

SVOCs – Semivolatile Organic Compounds

QC Type: SA - Sample

TB - Trip Blank

m - Matrix Spike/Matrix Spike Duplicate

--- Sample not analyzed for this parameter.

The data review was conducted in accordance with the Phase I Site Investigation Work Plan – Prather Spring Investigation dated July 31, 2008.

General Overall Assessment:

 X Data are usable without qualification.
 Data are usable with qualification (noted below).

Case Narrative Summary: Except as noted below, any of the issues noted in the laboratory case narrative potentially affecting data quality are addressed in the appropriate sections in the table below.

Review Parameter	Criteria Met?	Comments
Sample-specific Parameters	Complete with "Yes", "No", or "Not Applicable (N/A)".	For each "No" response, list what was out, associated acceptance limits, all qualified data, and bias direction or reference associated table with pertinent details.
COC & Sample Receipt	Yes	Samples were received intact and the cooler temperature was 4.2°C upon arrival at the laboratory, within the ≤6°C temperature criterion. The sampler inadvertently listed the sampling date for the split samples as 7/15/08. However, the samples were collected 7/16/08. The correct sampling date for the split samples has been updated in the database. Further action was not necessary.
Holding Times	Yes	All samples were analyzed within the holding time requirements specified in the Work Plan. Further action was not necessary.
Method Blanks	Yes	Target analytes were not reported as detected within the associated method blanks. Therefore, data qualification based on method blank contamination was not necessary.

Review Parameter	Criteria Met?	Comments
Matrix QC <ul style="list-style-type: none"> MS/MSD PS-BH3 20-21.5 LD N/A 	Yes	The recoveries and RPDs for the matrix spike (MS) and matrix spike duplicate (MSD) analyses were within the laboratory-determined acceptance range. Therefore, data qualification was not necessary.
Field QC <ul style="list-style-type: none"> Field Blanks (Ambient, Rinsate, or Trip) None Field Duplicate None 	N/A	A trip blank was inadvertently not submitted with this set of samples. Data quality was not adversely affected because all the associated results were reported as non-detect.
Surrogates	No	With the exceptions summarized below in Table 1, all surrogate recoveries were within the laboratory acceptance limits.
Laboratory Control Sample/ Laboratory Control Sample Duplicate (LCS/LCSD)	Yes	LCS and LCSD recoveries were within the laboratory determined acceptance limits. Therefore, data qualification was not necessary.
Non-detect Results w/ Elevated RLs?	No	The VOC and TVH -Gasoline analyses were performed at dilutions. Several results were reported as non-detect at elevated RLs. Therefore, these results that were reported as non-detect at elevated RLs will need to be evaluated with respect to the project objectives.
Package Completeness	Yes	
Other Parameters	Yes	<p>Detected analytes with concentrations between the Instrument Detection Limit (IDL) and the Reporting Limit (RL) were qualified as estimated (J). A qualifier code of "SQL-I" (Sample Quantitation Limit) was assigned to reflect the greater uncertainty in quantitative values below the RL.</p> <p>Split Samples</p> <p>Split sample evaluation criteria were not included in the Work Plan. As such, the following concentration-dependent criteria were used:</p> <ul style="list-style-type: none"> If both results were $\leq 5 \times \text{RL}$, then the absolute difference between the results should agree within $\pm 2 \times \text{RL}$ (Waters) and $\pm 3.5 \times \text{RL}$ (Soils) If both results were $\geq 5 \times \text{RL}$, then the RPD should be $\leq 30\%$ (Waters) and $\leq 50\%$ (Soils) <p>The following split samples were collected:</p> <ul style="list-style-type: none"> PS-BH3 20-21.5 (VOCs, TVH – Gasoline, TEH – Diesel) PS-BH4 14-16 (VOCs, TVH – Gasoline) <p>All split sample results and parent sample results were reported as non-detect for these analyses. As such, the split sample results demonstrate acceptable agreement.</p>

Table 1: Surrogate Recovery Outliers and Resultant Data Qualification

Associated Sample	Surrogate	Recovery (Limits)	Qualification
TVH – Gasoline LCS	1,2,4-Trichlorobenzene	145 (60-140)	None. As these are QC samples, data qualification based on surrogate recovery failure is not necessary.
PS-BH3 20-21.5 MSD	1,2,4-Trichlorobenzene	150 (60-140)	

LCS – Laboratory Control Sample

MSD – Matrix Spike Duplicate

QC – Quality Control

PRATHER SPRINGS DATA REVIEW SUMMARY

Data Package Number: Evergreen Analytical Laboratory 08-5116

Sampling Event: July 18, 2008

Sample-specific Parameter Review? **Yes**

Laboratory Performance Parameters? **Yes**

Data Reviewer: Liz Kraak

Date Completed: 07/31/08

Peer Reviewer: Sheri O'Connor

Date Completed: 08/01/08

The table below summarizes the results presented in this data package.

Field ID	Sample Type	Lab ID	Matrix	Analyses	
				VOCs (8260B)	Methane (RSK 175-M)
PS-MW4	SA	08-5116-01	Water	X ^m	X ^m
PS-MW3	SA	08-5116-01	Water	X	X

Analyses:

VOCs – Volatile Organic Compounds

SVOCs – Semivolatile Organic Compounds

QC Type: SA - Sample

TB - Trip Blank

m - Matrix Spike/Matrix Spike Duplicate

--- Sample not analyzed for this parameter.

The data review was conducted in accordance with the Phase I Site Investigation Work Plan – Prather Spring Investigation dated July 31, 2008.

General Overall Assessment:

_____ Data are usable without qualification.
 X With the exception of two results, data are usable with qualification (noted below).

Case Narrative Summary: Except as noted below, any of the issues noted in the laboratory case narrative potentially affecting data quality are addressed in the appropriate sections in the table below.

Review Parameter	Criteria Met?	Comments
Sample-specific Parameters	Complete with "Yes", "No", or "Not Applicable (N/A)".	For each "No" response, list what was out, associated acceptance limits, all qualified data, and bias direction or reference associated table with pertinent details.
COC & Sample Receipt	Yes	Samples were received intact and the cooler temperature was 3.0°C upon arrival at the laboratory, within the ≤6°C temperature criterion.
Holding Times	Yes	All samples were analyzed within the holding time requirements specified in the Work Plan. Further action was not necessary.
Method Blanks	Yes	Target analytes were not reported as detected within the associated method blanks. Therefore, data qualification based on method blank contamination was not necessary.
Matrix QC <ul style="list-style-type: none"> MS/MSD PS-MW4 (VOCs, Methane) LD N/A 	No	With the exceptions summarized below in Table 1, the recoveries and RPDs for the matrix spike (MS) and matrix spike duplicate (MSD) analyses were within the laboratory-determined acceptance range.

Review Parameter	Criteria Met?	Comments
Field QC <ul style="list-style-type: none"> Field Blanks (Ambient, Rinsate, or Trip) None Field Duplicate None 	N/A	A trip blank was inadvertently not submitted with this set of samples.
Surrogates	Yes	All surrogate recoveries were within the laboratory acceptance limits. Therefore, data qualification was not considered necessary.
Non-detect Results w/ Elevated RLs?	Yes	
Package Completeness	Yes	
Other Parameters	Yes	<p>Detected analytes with concentrations between the Instrument Detection Limit (IDL) and the Reporting Limit (RL) were qualified as estimated (J). A qualifier code of "SQL-I" (Sample Quantitation Limit) was assigned to reflect the greater uncertainty in quantitative values below the RL.</p> <p>Split Samples</p> <p>Split sample evaluation criteria were not included in the Work Plan. As such, the following concentration-dependent criteria were used:</p> <ul style="list-style-type: none"> If both results were $\leq 5 \times \text{RL}$, then the absolute difference between the results should agree within $\pm 2 \times \text{RL}$ (Waters) and $\pm 3.5 \times \text{RL}$ (Soils) If both results were $\geq 5 \times \text{RL}$, then the RPD should be $\leq 30\%$ (Waters) and $\leq 50\%$ (Soils) <p>The following split samples were collected:</p> <ul style="list-style-type: none"> PS-MW4 (VOCs, Methane) PS- MW3 (VOCs, Methane) <p>A comparison of detected split sample results and detected parent sample results is summarized below in Table 2.</p>
Laboratory Performance Review		

Review Parameter	Criteria Met?	Comments
Initial Calibration	No	<p>Method 8260B (VOCs)</p> <p>All the minimum relative response factors (RRFs) for the system performance check compounds (SPCCs) were met, satisfying method requirements. For all other target analytes, a minimum RRF of 0.05 was used and all target analytes met this criterion. The percent relative standard deviations (%RSDs) over the initial calibration RRFs for all calibration check compounds (CCCs) satisfied the method requirement of <30%. For all other target compounds, a requirement of 15% RSD was used. The mean of the %RSD values for all target analytes in the calibrations was less than 15%. Therefore, the initial calibrations met method acceptance criteria by satisfying the mean %RSD exception. Although the %RSDs for several target analytes did not meet the 15% RSD criterion, data qualification was not necessary because alternate calibration models (i.e. linear and quadratic regression) were used and the correlation coefficients (r) for the first order curves were >0.995.</p> <p>For the linear curve fit, the laboratory forced the line through 0,0 which is allowed per Method 8000C as long as the absolute value of the percent difference between the calculated and expected concentration for every calibration level are less than or equal to 20%. For acetone, the %D was evaluated for the calibration point at the LQL (Laboratory Quantitation Limit). The %D between the calculated using the laboratory equation and the true value was 84%. Therefore, all acetone results less than or equal to the LQL were qualified as estimated (J/UJ ICAL – I) to reflect the imprecision at the low end of the calibration curve.</p> <p>Dissolved Methane</p> <p>The relationship between instrument response and concentration was established with a blank and at least five standards. All initial calibrations were verified, as applicable. Data qualification on the basis of initial calibrations was not necessary.</p>
Tuning (as applicable to the method)	Yes	<p>Method 8260B (VOCs)</p> <p>A satisfactory tuning event was conducted at the beginning of every 12 hours of sample analysis. No errors in calculation of ion abundance ratios were found and all were within the required acceptance ranges. Data qualification on the basis of instrument tuning was not necessary.</p>
Initial/ Continuing Calibration Verification (ICV/CCV)	No	<p>ICV/CCV</p> <p>With the exceptions listed below, The %Ds for all CCCs in the ICV and CCV were less than 20%, satisfying method requirements, and other target analytes satisfied the %D criterion of 25%.</p> <p>The analyte tetrachloroethane (+26.2%) was outside the requirements for the CCV associated with the samples reported in this data package. These results in the associated samples were reported as non-detect and the potential bias indicated by the CCV was considered high; therefore, qualification of data was not considered necessary.</p> <p>.</p>
Laboratory Control Sample/ Laboratory Control Sample Duplicate (LCS/LCSD)	Yes	<p>LCS and LCSD recoveries were within the laboratory determined acceptance limits. Therefore, data qualification was not necessary.</p>

Review Parameter	Criteria Met?	Comments
Target Compound Identification	Yes	Organic Methods The quantitation sheets and total ion chromatograms were reviewed to assure that compounds reported as identified meet the criteria contained in the method. The mass spectra were reviewed for compounds reported as identified to assure that the reported mass spectral data meet the mass spectral identification criteria contained in the analytical method. No errors in compound identification were found and data qualification was not necessary.
Transcription Errors	Yes	No transcription errors were found in this data package. Data qualification was not necessary.
Recalculation	Yes	No calculation or sample quantitation errors were found in this data package. Data qualification was not necessary.

Table 1: MS/MSD Recovery and RPD Outliers and Resultant Data Qualification

Sample	Analyte	MS/MSD %R (Limits)	RPD (Limit)	Qualification
PS-MW4	2-Chloroethylvinylether	0/0 (20-168)	NC (30)	As the percent recoveries were <10%, the 2-chloroethylvinylether result for sample PS-MW4 was qualified as unusable (R). Data qualification was extended to site MW-3, as all MS/MSD recoveries for 2-chloroethylvinylether in this data package and data package 08-5175 were 0%.

MS/MSD – Matrix Spike/ Matrix Spike Duplicate

%R – Percent Recovery

RPD – Relative Percent Difference

R - Rejected

Table 2: Split Sample Comparison

Sample	Detected Analytes	Primary Sample Result (µg/L)	Split Sample Result (µg/L)	RL ¹ (µg/L)	Qualification
PS-MW4	Acetone	5.5	ND	10	None. The absolute difference between the split sample results and parent sample results agrees within 2xRL.
PS-MW3	Acetone	7.1	ND	10	
	Methane	ND	0.003 mg/L	0.00080 mg/L	As the absolute difference between the split sample methane result and parent sample methane result exceeded 2xRL, the methane result was qualified as estimated (J D-I).

¹ RL is for primary sample.

ND – Non-detect

J = Estimated

D = Duplicate analysis evaluation criteria not met.

I = Indeterminate Bias

PRATHER SPRINGS DATA REVIEW SUMMARY

Data Package Number: Evergreen Analytical Laboratory 08-5151

Sampling Event: July 17th and 18th, 2008

Sample-specific Parameter Review? **Yes**

Laboratory Performance Parameters? **No**

Data Reviewer: Liz Kraak

Date Completed: 07/31/08

Peer Reviewer: Sheri O'Connor

Date Completed: 08/01/08

The table below summarizes the results presented in this data package.

Field ID	Sample Type	Lab ID	Matrix	Analyses			
				VOCs (8260B)	TVH – Gasoline (8015B)	TEH – Diesel (8015B)	SVOCs (8270C) ¹
PS BH-11S 17.5-19	SA	08-5151-01	Soil	X	X ^m	X	---
PS BH-11D @ 49'	SA	08-5151-02	Soil	X	X	X	X
Trip Blank	TB	08-5151-03	Water	X	---	---	---

Analyses:

¹ Per URS request, the SVOC analysis was placed on hold. The SVOC analysis for sample PS BH-11D @ 49' was conducted because there were detections in the VOC and TVH analyses.

VOCs – Volatile Organic Compounds

SVOCs – Semivolatile Organic Compounds

QC Type: SA - Sample

TB - Trip Blank

m - Matrix Spike/Matrix Spike Duplicate

--- Sample not analyzed for this parameter.

The data review was conducted in accordance with the Phase I Site Investigation Work Plan – Prather Spring Investigation dated July 31, 2008.

General Overall Assessment:

_____ Data are usable without qualification.
 X Data are usable with qualification (noted below).

Case Narrative Summary: Except as noted below, any of the issues noted in the laboratory case narrative potentially affecting data quality are addressed in the appropriate sections in the table below.

Review Parameter	Criteria Met?	Comments
Sample-specific Parameters	Complete with "Yes", "No", or "Not Applicable (N/A)".	For each "No" response, list what was out, associated acceptance limits, all qualified data, and bias direction or reference associated table with pertinent details.
COC & Sample Receipt	Yes	Samples were received intact and the cooler temperature was 4.5°C upon arrival at the laboratory, within the ≤6°C temperature criterion.
Holding Times	Yes	All samples were analyzed within the holding time requirements specified in the Work Plan. Further action was not necessary.
Method Blanks	Yes	Target analytes were not reported as detected within the associated method blanks. Therefore, data qualification based on method blank contamination was not necessary.
Matrix QC <ul style="list-style-type: none"> MS/MSD PS-BH-11S 17.5-19 (TVH – Gasoline) LD N/A 	Yes	The recoveries and RPDs for the matrix spike (MS) and matrix spike duplicate (MSD) analyses were within the laboratory-determined acceptance range. Therefore, data qualification was not necessary.

Review Parameter	Criteria Met?	Comments
Field QC <ul style="list-style-type: none"> Field Blanks (Ambient, Rinsate, or Trip) Trip Blank Field Duplicate None 	No	With the exception of acetone, target analytes were reported as non-detect in the trip blank. Acetone was detected in the trip blank at a concentration of 4.7 µg/L. Associated acetone results reported at a concentration <10x the trip blank contamination were qualified as non-detect at the reporting limit or reported value, whichever was greater (U TB-I).
Surrogates	No	With the exceptions summarized below in Table 1, all surrogate recoveries were within the laboratory acceptance limits.
Laboratory Control Sample/ Laboratory Control Sample Duplicate (LCS/LCSD)	No	With the exceptions summarized below in Table 2, LCS and LCSD recoveries were within the laboratory determined acceptance limits.
Non-detect Results w/ Elevated RLs?	No	The VOC, TVH – Gasoline, and SVOC analyses were performed at dilutions. Several results were reported as non-detect at elevated RLs. Therefore, these results that were reported as non-detect at elevated RLs will need to be evaluated with respect to the project objectives.
Package Completeness	Yes	
Other Parameters	Yes	<p>Detected analytes with concentrations between the Instrument Detection Limit (IDL) and the Reporting Limit (RL) were qualified as estimated (J). A qualifier code of “SQL-I” (Sample Quantitation Limit) was assigned to reflect the greater uncertainty in quantitative values below the RL.</p> <p>Split Samples</p> <p>Split sample evaluation criteria were not included in the Work Plan. As such, the following concentration-dependent criteria were used:</p> <ul style="list-style-type: none"> If both results were $\leq 5 \times \text{RL}$, then the absolute difference between the results should agree within $\pm 2 \times \text{RL}$ (Waters) and $\pm 3.5 \times \text{RL}$ (Soils) If both results were $\geq 5 \times \text{RL}$, then the RPD should be $\leq 30\%$ (Waters) and $\leq 50\%$ (Soils) <p>The following split samples were collected:</p> <ul style="list-style-type: none"> PS BH-11S 17.5-19 (VOCs, TVH – Gasoline, TEH – Diesel) <p>A comparison of detected split sample results and detected parent sample results is summarized below in Table 3.</p>

Table 1: Surrogate Recovery Outliers and Resultant Data Qualification

Associated Sample	Surrogate	Recovery (Limits)	Qualification
VOCs			
PS BH-11D @ 49'	4-Bromofluorobenzene	64 (70-130)	As the potential bias was considered to be low, all VOC results for sample PS BH-11D @ 49' were qualified as estimated (J/UJ SUR-L).
TVH - Gasoline			
PS BH-11D @ 49'	1,2,4-Trichlorobenzene	32 (60-140)	As the potential bias was considered to be low, the TVH – Gasoline result for sample PS BH-11D @ 49' was qualified as estimated (J/UJ SUR-L).

LCS – Laboratory Control Sample

MSD – Matrix Spike Duplicate

QC – Quality Control

Table 2: LCS/LCSD Recovery Outliers and Resultant Data Qualification

Associated Sample	Analyte	Recovery (Limits)	Qualification
SVOCs			
PS BH-11D @ 49'	2,4-Dinitrotoluene	149/ 146 (62-130)	As the potential bias was considered to be high and all associated results were reported as non-detect, data qualification was not necessary.
	2,6-Dinitrotoluene	134/ 134 (61-130)	
	2-Nitroaniline	138/ 137 (57-130)	
	3-Nitroaniline	137/ 134 (62-130)	
	4-Nitroaniline	154/ 151 (57-130)	
	4-Nitrophenol	133/ 130 (50-130)	

Table 3: Split Sample Comparison

Sample	Detected Analytes	Primary Sample Result (µg/Kg-wet)	Split Sample Result (µg/Kg-wet)	RL ¹ (µg/Kg-wet)	Qualification
PS BH-11S 17.5-19	Benzene	ND	1.13	9.98	None. The absolute difference between the split sample results and parent sample results agrees within 3.5xRL.
	Methylene Chloride	ND	4.51	25.25	
	Toluene	ND	1.20	9.65	

¹ RL is for primary sample. ND – Non-detect

Primary sample results were reported in dry weight and converted to weight wet for comparison purposes.

PRATHER SPRINGS DATA REVIEW SUMMARY

Data Package Number: Evergreen Analytical Laboratory 08-5175

Sampling Event: July 22, 2008

Sample-specific Parameter Review? **Yes**

Laboratory Performance Parameters? **No**

Data Reviewer: Liz Kraak

Date Completed: 07/31/08

Peer Reviewer: Sheri O'Connor

Date Completed: 08/01/08

The table below summarizes the results presented in this data package.

Field ID	Sample Type	Lab ID	Matrix	Analyses	
				VOCs (8260B)	Methane (RSK 175-M)
PS-MW11S	SA	08-5175-01	Water	X ^m	X ^m
PS-MW11S Duplicate	FD	08-5175-02	Water	X	X
Trip Blank	TB	08-5175-03	Water	X	X
PS-MW11d	SA	08-5175-04	Water	X	X

Analyses:

VOCs – Volatile Organic Compounds

SVOCs – Semivolatile Organic Compounds

QC Type: SA - Sample

TB - Trip Blank

m - Matrix Spike/Matrix Spike Duplicate

--- Sample not analyzed for this parameter.

The data review was conducted in accordance with the Phase I Site Investigation Work Plan – Prather Spring Investigation dated July 31, 2008.

General Overall Assessment:

 Data are usable without qualification.

 X With the exception of three results, data are usable with qualification (noted below).

Case Narrative Summary: Except as noted below, any of the issues noted in the laboratory case narrative potentially affecting data quality are addressed in the appropriate sections in the table below.

Review Parameter	Criteria Met?	Comments
Sample-specific Parameters	Complete with "Yes", "No", or "Not Applicable (N/A)".	For each "No" response, list what was out, associated acceptance limits, all qualified data, and bias direction or reference associated table with pertinent details.
COC & Sample Receipt	Yes	Samples were received intact and the cooler temperature was 1.9°C upon arrival at the laboratory, within the ≤6°C temperature criterion.
Holding Times	Yes	All samples were analyzed within the holding time requirements specified in the Work Plan. Further action was not necessary.
Method Blanks	Yes	Target analytes were not reported as detected within the associated method blanks. Therefore, data qualification based on method blank contamination was not necessary.
Matrix QC <ul style="list-style-type: none"> MS/MSD PS-MW11S (VOCs, Methane) LD N/A 	No	With the exceptions summarized below in Table 1, the recoveries and RPDs for the matrix spike (MS) and matrix spike duplicate (MSD) analyses were within the laboratory-determined acceptance range.

Review Parameter	Criteria Met?	Comments
Field QC <ul style="list-style-type: none"> Field Blanks (Ambient, Rinsate, or Trip) Trip Blank Field Duplicate PS-MW11S Duplicate 	Yes	<p>Target analytes were reported as non-detect in the trip blank. Therefore, data qualification was not necessary.</p> <p>The following criteria from the Prather Springs SOP were used to evaluate field duplicate pairs:</p> <ul style="list-style-type: none"> If both results were $\leq 5 \times \text{RL}$, then the absolute difference between the results should agree within $\pm 2 \times \text{RL}$ (Waters) and $\pm 3.5 \times \text{RL}$ (Soils) If both results were $\geq 5 \times \text{RL}$, then the RPD should be $\leq 30\%$ (Waters) and $\leq 50\%$ (Soils) <p>The field duplicate pair PS-MW11S/ PS-MW11S Duplicate met the above criteria. Therefore, data qualification was not necessary.</p>
Surrogates	Yes	All surrogate recoveries were within the laboratory acceptance limits. Therefore, data qualification was not considered necessary.
Laboratory Control Sample/ Laboratory Control Sample Duplicate (LCS/LCSD)	Yes	LCS and LCSD recoveries were within the laboratory determined acceptance limits. Therefore, data qualification was not necessary.
Non-detect Results w/ Elevated RLs?	Yes	
Package Completeness	Yes	
Other Parameters	Yes	<p>Detected analytes with concentrations between the Instrument Detection Limit (IDL) and the Reporting Limit (RL) were qualified as estimated (J). A qualifier code of "SQL-I" (Sample Quantitation Limit) was assigned to reflect the greater uncertainty in quantitative values below the RL.</p> <p>Split Samples</p> <p>Split sample evaluation criteria were not included in the Work Plan. As such, the following concentration-dependent criteria were used:</p> <ul style="list-style-type: none"> If both results were $\leq 5 \times \text{RL}$, then the absolute difference between the results should agree within $\pm 2 \times \text{RL}$ (Waters) and $\pm 3.5 \times \text{RL}$ (Soils) If both results were $\geq 5 \times \text{RL}$, then the RPD should be $\leq 30\%$ (Waters) and $\leq 50\%$ (Soils) <p>The following split samples were collected:</p> <ul style="list-style-type: none"> PS-MW11S (VOCs, Methane) PS-MW11d (VOCs, Methane) <p>A comparison of detected split sample results and detected parent sample results is summarized below in Table 2.</p>

Table 1: MS/MSD Recovery and RPD Outliers and Resultant Data Qualification

Sample	Analyte	MS/MSD %R (Limits)	RPD (Limit)	Qualification
PS-MW11S	2-Chloroethylvinylether	0/ 0 (20-168)	NC (30)	As the percent recoveries were <10%, the 2-chloroethylvinylether results for the parent sample (MW-11S) and its field duplicate were qualified as unusable (R). Data qualification was extended to site MW-11d, because the MS/MSD recoveries for 2-chloroethylvinylether in data package 08-5116 were also 0%.

MS/MSD – Matrix Spike/ Matrix Spike Duplicate

%R – Percent Recovery

RPD – Relative Percent Difference

R – Rejected

NC – Not Calculated

Table 2: Split Sample Comparison

Sample	Detected Analytes	Primary Sample Result (µg/L)	Split Sample Result (µg/L)	RL ¹ (µg/L)	Qualification
PS-MW11S	Acetone	4.7	ND	10	None. The absolute difference between the split sample results and parent sample results agrees within 2xRL.
PS-MW11d	Acetone	39	57.9	10	
	Benzene	0.97	1.21	1	
	2-Butanone	12	18.8	5	
	Toluene	1.1	1.34	2	As the absolute difference between the split sample methane result and parent sample methane result exceeded 2xRL, the methane result was qualified as estimated (J D-I).
	Methane	0.050 mg/L	ND	0.00080 mg/L	

¹ RL is for primary sample.

ND – Non-detect

J = Estimated

D = Duplicate analysis criteria not met.

I = Indeterminate Bias

PRATHER SPRINGS DATA REVIEW SUMMARY

Data Package Number: Evergreen Analytical Laboratory 08-5576

Sampling Event: August 4, 2008

Sample-specific Parameter Review? **Yes**

Laboratory Performance Parameters? **No**

Data Reviewer: Liz Kraak

Date Completed: 08/14/08

Peer Reviewer: Geoff Webb

Date Completed: 08/15/08

The table below summarizes the results presented in this data package.

Field ID	Sample Type	Lab ID	Matrix	Analyses	
				VOCs (8260B)	Anions (E300.0)
Prather Spring	SA	08-5576-01	Water	X ^m	X ^m
Prather Spring Upgradient	SA	08-5576-02	Water	X	X
Ned Prater Cabin	SA	08-5576-03	Water	X	X
Ned Prather Cabin (D)	FD	08-5576-04	Water	X	X
Spring 2	SA	08-5576-05	Water	X	X
Spring 2A	SA	08-5576-06	Water	X	X
Stock Pond	SA	08-5576-07	Water	X	X
Stock Tank	SA	08-5576-08	Water	X	X
Dick Prather Cabin	SA	08-5576-09	Water	X	X
McKay Gulch	SA	08-5576-10	Water	X	X
Stock Pond Discharge	SA	08-5576-11	Water	X	X
Trip Blank	TB	08-5576-12	Water	X	X

Analyses:

VOCs – Volatile Organic Compounds

Anions including chloride, nitrate, nitrite.

QC Type: SA - Sample

TB - Trip Blank

FD – Field Duplicate

m - Matrix Spike/Matrix Spike Duplicate

The data review was conducted in accordance with the Data Validation SOP included as Attachment B to the Phase I Site Investigation Work Plan – Prather Spring Investigation dated July 31, 2008.

General Overall Assessment:

_____ Data are usable without qualification.
 _____ **X** Data are usable with qualification (noted below).
 _____ Some data are unusable for any purpose (noted below).

Case Narrative Summary: Except as noted below, any of the issues noted in the laboratory case narrative potentially affecting data quality are addressed in the appropriate sections in the table below.

Review Parameter	Criteria Met?	Comments
Sample-specific Parameters	Complete with "Yes", "No", or "Not Applicable (N/A)".	For each "No" response, list what was out, associated acceptance limits, all qualified data, and bias direction or reference associated table with pertinent details.
COC & Sample Receipt	Yes	Samples were received intact and the cooler temperature was 2.7°C upon arrival at the laboratory, within the ≤6°C temperature criterion.
Holding Times	Yes	All samples were analyzed within the holding time requirements specified in the Work Plan. Qualification of data was not required.
Method Blanks	Yes	Target analytes were not reported as detected within the associated method blanks. Data qualification was not required

Review Parameter	Criteria Met?	Comments
Matrix QC <ul style="list-style-type: none"> MS/MSD Prather Spring (VOCs, Anions) LD N/A 	No	<p>With the exceptions summarized in Table 1, the recoveries and RPDs for the matrix spike (MS) and matrix spike duplicate (MSD) analyses were within the laboratory-determined acceptance range.</p> <p>Results in the native sample greater than four times the concentration of the spike added during digestions are not considered to be a representative measure of accuracy. Further action or qualification of data was not required.</p>
Field QC <ul style="list-style-type: none"> Field Blanks (Ambient, Rinsate, or Trip) Trip Blank Field Duplicate Ned Prather Cabin (D) 	Yes	<p>No target analytes were reported as detected in the trip blank. Data qualification was not required.</p> <p>The field duplicate pair Ned Prather Cabin/ Ned Prather Cabin (D) met the applicable criteria. Data qualification was not required.</p>
Surrogates	Yes	All surrogate recoveries were within the laboratory acceptance limits. Data qualification was not required.
Laboratory Control Sample	Yes	LCS recoveries were within the laboratory determined acceptance limits. Data qualification was not required.
Non-detect Results w/ Elevated RLs?	No	Some of the VOC and anions analyses were performed at dilutions. Several results were reported as non-detect at elevated RLs. Therefore, these results that were reported as non-detect at elevated RLs will need to be evaluated with respect to the project objectives.
Package Completeness	Yes	
Other Parameters	Yes	Detected analytes with concentrations between the Instrument Detection Limit (IDL) and the Reporting Limit (RL) were qualified as estimated (J). A qualifier code of "SQL-I" (Sample Quantitation Limit) was assigned to reflect the greater uncertainty in quantitative values below the RL.

Table 1: MS/MSD Recovery Outliers and Resultant Data Qualification

Associated Sample	Analyte	Recovery (Limits)	Qualification
VOCs			
Prather Spring	Carbon Tetrachloride	125/ 132 (70-130)	As the potential bias was considered to be high and the carbon tetrachloride result for sample Prather Spring was reported as non-detect, data qualification was not necessary.
	2-Chloroethylvinylether	21.1/ 17.2 (20-168)	As the potential bias was considered to be low, the 2-chloroethylvinylether result was qualified as estimated (UJ MS-L).

UJ – Estimated

MS – Matrix spike recovery failure.

L – Low Bias

PRATHER SPRINGS DATA REVIEW SUMMARY

Data Package Number: Evergreen Analytical Laboratory 08-5777

Sampling Event: August 7, 2008

Sample-specific Parameter Review? **Yes**

Laboratory Performance Parameters? **No**

Data Reviewer: Liz Kraak

Date Completed: 08/14/08

Peer Reviewer: Geoff Webb

Date Completed: 08/15/08

The table below summarizes the results presented in this data package.

Field ID	Sample Type	Lab ID	Matrix	Analyses	
				VOCs (8260B)	Anions (E300.0)
Prather Spring	SA	08-5777-01	Water	X ^m	X ^m
Prather Spring Upgradient	SA	08-5777-02	Water	X	X
Ned Prather Cabin	SA	08-5777-03	Water	X	X
Ned Prather Cabin (D)	FD	08-5777-04	Water	X	X
Spring 2	SA	08-5777-05	Water	X	X
Spring 2A	SA	08-5777-06	Water	X	X
Stock Pond	SA	08-5777-07	Water	X	X
Stock Tank	SA	08-5777-08	Water	X	X
Dick Prather Cabin	SA	08-5777-09	Water	X	X
McKay Gulch	SA	08-5777-10	Water	X	X
Stock Pond Discharge	SA	08-5777-11	Water	X	X
Trip Blank	TB	08-5777-12	Water	X	X

Analyses:

VOCs – Volatile Organic Compounds

Anions including chloride, nitrate, nitrite.

QC Type: SA - Sample

TB - Trip Blank

FD – Field Duplicate

m - Matrix Spike/Matrix Spike Duplicate

The data review was conducted in accordance with the Data Validation SOP included as Attachment B to the Phase I Site Investigation Work Plan – Prather Spring Investigation dated July 31, 2008.

General Overall Assessment:

- _____ Data are usable without qualification.
- X Data are usable with qualification (noted below).
- _____ Some data are unusable for any purpose (noted below).

Case Narrative Summary: Except as noted below, any of the issues noted in the laboratory case narrative potentially affecting data quality are addressed in the appropriate sections in the table below.

Review Parameter	Criteria Met?	Comments
Sample-specific Parameters	Complete with "Yes", "No", or "Not Applicable (N/A)".	For each "No" response, list what was out, associated acceptance limits, all qualified data, and bias direction or reference associated table with pertinent details.
COC & Sample Receipt	Yes	Samples were received intact and the cooler temperature was 2.0°C upon arrival at the laboratory, within the ≤6°C temperature criterion.
Holding Times	Yes	All samples were analyzed within the holding time requirements specified in the Work Plan. Qualification of data was not required.
Method Blanks	Yes	Target analytes were not reported as detected within the associated method blanks. Data qualification was not required.

Review Parameter	Criteria Met?	Comments
Matrix QC <ul style="list-style-type: none"> MS/MSD Prather Spring (VOCs, Anions) LD N/A 	Yes	The recoveries and RPDs for the matrix spike (MS) and matrix spike duplicate (MSD) analyses were within the laboratory-determined acceptance range. Data qualification was not required.
Field QC <ul style="list-style-type: none"> Field Blanks (Ambient, Rinsate, or Trip) Trip Blank Field Duplicate Ned Prather Cabin (D) 	Yes	<p>No target analytes were reported as detected in the trip blank. Data qualification was not required.</p> <p>The field duplicate pair Ned Prather Cabin/ Ned Prather Cabin (D) met the applicable criteria. Data qualification was not required.</p>
Surrogates	Yes	All surrogate recoveries were within the laboratory acceptance limits. Data qualification was not required.
Laboratory Control Sample (LCS)	Yes	LCS recoveries were within the laboratory determined acceptance limits. Data qualification was not required.
Non-detect Results w/ Elevated RLs?	No	Some of the VOC and anion analyses were performed at dilutions. Several results were reported as non-detect at elevated RLs. Therefore, these results that were reported as non-detect at elevated RLs will need to be evaluated with respect to the project objectives.
Package Completeness	Yes	
Other Parameters	Yes	Detected analytes with concentrations between the Instrument Detection Limit (IDL) and the Reporting Limit (RL) were qualified as estimated (J). A qualifier code of "SQL-I" (Sample Quantitation Limit) was assigned to reflect the greater uncertainty in quantitative values below the RL.

PRATHER SPRINGS DATA REVIEW SUMMARY

Data Package Number: Evergreen Analytical Laboratory 08-5833

Sampling Event: August 11, 2008

Sample-specific Parameter Review? **Yes**

Laboratory Performance Parameters? **No**

Data Reviewer: Sheri O'Connor

Date Completed: 08/20/08

Peer Reviewer: Geoff Webb

Date Completed: 08/21/08

The table below summarizes the results presented in this data package.

Field ID	Sample Type	Lab ID	Matrix	Analyses	
				VOCs (8260B)	Anions (E300.0)
Prather Spring	SA	08-5833-01	Water	X ^m	X ^m
Prather Spring Upgradient	SA	08-5833-02	Water	X	X
Ned Prather Cabin	SA	08-5833-03	Water	X	X
Ned Prather Cabin (D)	FD	08-5833-04	Water	X	X
Spring 2	SA	08-5833-05	Water	X	X
Spring 2A	SA	08-5833-06	Water	X	X
Stock Pond	SA	08-5833-07	Water	X	X
Stock Tank	SA	08-5833-08	Water	X	X
Dick Prather Cabin	SA	08-5833-09	Water	X	X
McKay Gulch	SA	08-5833-10	Water	X	X
Stock Pond Discharge	SA	08-5833-11	Water	X	X
Trip Blank	TB	08-5833-12	Water	X	X

Analyses:

VOCs – Volatile Organic Compounds

Anions including chloride, nitrate, nitrite.

QC Type: SA - Sample

TB - Trip Blank

FD – Field Duplicate

m - Matrix Spike/Matrix Spike Duplicate

The data review was conducted in accordance with the Data Validation SOP included as Attachment B to the Phase I Site Investigation Work Plan – Prather Spring Investigation dated July 31, 2008.

General Overall Assessment:

- _____ Data are usable without qualification.
- X Data are usable with qualification (noted below).
- _____ Some data are unusable for any purpose (noted below).

Case Narrative Summary: Except as noted below, any of the issues noted in the laboratory case narrative potentially affecting data quality are addressed in the appropriate sections in the table below.

Review Parameter	Criteria Met?	Comments
Sample-specific Parameters	Complete with "Yes", "No", or "Not Applicable (N/A)".	For each "No" response, list what was out, associated acceptance limits, all qualified data, and bias direction or reference associated table with pertinent details.
COC & Sample Receipt	Yes	Samples were received intact and the cooler temperature was 1.7°C upon arrival at the laboratory, within the ≤6°C temperature criterion.
Holding Times	Yes	All samples were analyzed within the holding time requirements specified in the Work Plan. Qualification of data was not required.
Method Blanks	Yes	Target analytes were not reported as detected within the associated method blanks. Data qualification was not required.

Review Parameter	Criteria Met?	Comments
Matrix QC <ul style="list-style-type: none"> MS/MSD Prather Spring (VOCs, Anions) LD N/A 	No	<p>With one exception, the recoveries and RPDs for the matrix spike (MS) and matrix spike duplicate (MSD) analyses were within the laboratory-determined acceptance range.</p> <p>The RPD between the MS/MSD results for 2-chloroethylvinylether exceeded the criterion of $\leq 30\%$ with a RPD of 38.7%. Therefore, all 2-chloroethylvinyl were qualified as estimated (J/UJ D-I).</p> <p>The chloride MS/MSD results are not considered appropriate for demonstrating accuracy and precision as the sample result was greater than four times the spike amount.</p>
Field QC <ul style="list-style-type: none"> Field Blanks (Ambient, Rinsate, or Trip) Trip Blank Field Duplicate Ned Prather Cabin (D) 	Yes	<p>No target analytes were reported as detected in the trip blank. Data qualification was not required.</p> <p>The field duplicate pair Ned Prather Cabin/ Ned Prather Cabin (D) met the applicable criteria. Data qualification was not required.</p>
Surrogates	Yes	All surrogate recoveries were within the laboratory acceptance limits. Data qualification was not required.
Laboratory Control Sample (LCS)	Yes	LCS recoveries were within the laboratory determined acceptance limits. Data qualification was not required.
Non-detect Results w/ Elevated RLs?	No	Some of the VOC and anion analyses were performed at dilutions. Several results were reported as non-detect at elevated RLs. Therefore, those results that were reported as non-detect at elevated RLs will need to be evaluated with respect to the project objectives.
Package Completeness	Yes	
Other Parameters	Yes	Detected analytes with concentrations between the Instrument Detection Limit (IDL) and the Reporting Limit (RL) were qualified as estimated (J). A qualifier code of "SQL-I" (Sample Quantitation Limit) was assigned to reflect the greater uncertainty in quantitative values below the RL.

PRATHER SPRINGS DATA REVIEW SUMMARY

Data Package Number: Evergreen Analytical Laboratory 08-6048

Sampling Event: August 14, 2008

Sample-specific Parameter Review? **Yes**

Laboratory Performance Parameters? **No**

Data Reviewer: Sheri O'Connor

Date Completed: 08/25/08

Peer Reviewer: Geoff Webb

Date Completed: 08/26/08

The table below summarizes the results presented in this data package.

Field ID	Sample Type	Lab ID	Matrix	Analyses	
				VOCs (8260B)	Anions (E300.0)
Prather Spring	SA	08-6048-01	Water	X	X
Prather Spring (D)	FD	08-6048-02	Water	X	X
Prather Spring Upgradient	SA	08-6048-03	Water	X	X
Ned Prather Cabin	SA	08-6048-04	Water	X	X
Spring 2	SA	08-6048-05	Water	X	X
Spring 2A	SA	08-6048-06	Water	X	X
Stock Pond	SA	08-6048-07	Water	X	X
Stock Tank	SA	08-6048-08	Water	X ^m	X ^m
Dick Prather Cabin	SA	08-6048-09	Water	X	X
McKay Gulch	SA	08-6048-10	Water	X	X
Stock Pond Discharge	SA	08-6048-11	Water	X	X
Trip Blank	TB	08-6048-12	Water	X	

Analyses:

VOCs – Volatile Organic Compounds

Anions including chloride, nitrate, nitrite.

QC Type: SA - Sample

TB - Trip Blank

FD – Field Duplicate

m - Matrix Spike/Matrix Spike Duplicate

The data review was conducted in accordance with the Data Validation SOP included as Attachment B to the Phase I Site Investigation Work Plan – Prather Spring Investigation dated July 31, 2008.

General Overall Assessment:

- _____ Data are usable without qualification.
- _____ Data are usable with qualification (noted below).
- X Some data are unusable for any purpose (noted below).

Case Narrative Summary: Except as noted below, any of the issues noted in the laboratory case narrative potentially affecting data quality are addressed in the appropriate sections in the table below.

Review Parameter	Criteria Met?	Comments
Sample-specific Parameters	Complete with "Yes", "No", or "Not Applicable (N/A)".	For each "No" response, list what was out, associated acceptance limits, all qualified data, and bias direction or reference associated table with pertinent details.
COC & Sample Receipt	Yes	Samples were received intact and the cooler temperature was 1.1°C upon arrival at the laboratory, within the ≤6°C temperature criterion.
Holding Times	Yes	All samples were analyzed within the holding time requirements specified in the Work Plan. Qualification of data was not required.
Method Blanks	No	With the exceptions in Table 1 below, target analytes were not reported as detected within the associated method blanks.

Review Parameter	Criteria Met?	Comments
Matrix QC <ul style="list-style-type: none"> MS/MSD Stock Tank (VOCs, Anions) LD Dick Prather Cabin (Anions) 	No	<p>With one exception, the recoveries and RPDs for the matrix spike (MS) and matrix spike duplicate (MSD) analyses were within the laboratory-determined acceptance range.</p> <p>The MS/MSD recoveries for 2-chloroethylvinylether were below the acceptance limits with recoveries of 0%. Therefore, all 2-chloroethylvinylether were qualified as unusable (R).</p> <p>The chloride MS/MSD results are not considered appropriate for demonstrating accuracy and precision as the sample result was greater than four times the spike amount.</p> <p>The RPD between parent result and the laboratory duplicate results satisfied the applicable evaluation criterion.</p>
Field QC <ul style="list-style-type: none"> Field Blanks (Ambient, Rinsate, or Trip) Trip Blank Field Duplicate Prather Spring (D) 	No	<p>After accounting for method blank contamination, one target analytes was reported as detected in the trip blank. Table 2 presents the trip blank results and the resultant qualification.</p> <p>The field duplicate pair Prather Spring/Prather Spring (D) met the applicable criteria. Data qualification was not required.</p>
Surrogates	Yes	All surrogate recoveries were within the laboratory acceptance limits. Data qualification was not required.
Laboratory Control Sample (LCS)	Yes	LCS recoveries were within the laboratory determined acceptance limits. Data qualification was not required.
Non-detect Results w/ Elevated RLs?	No	Some of the VOC and anion analyses were performed at dilutions. Several results were reported as non-detect at elevated RLs. Therefore, those results that were reported as non-detect at elevated RLs will need to be evaluated with respect to the project objectives.
Package Completeness	Yes	
Other Parameters	Yes	Detected analytes with concentrations between the Instrument Detection Limit (IDL) and the Reporting Limit (RL) were qualified as estimated (J). A qualifier code of "SQL-I" (Sample Quantitation Limit) was assigned to reflect the greater uncertainty in quantitative values below the RL.

Table 1
Method Blank Contamination and Resultant Qualification

Analyte	Concentration (µg/l)	Resultant Qualification
Acetone	2.59	The acetone results for samples Prather Springs, Prather Springs (D), Spring 2, and Stock Pond and were qualified as nondetect (U) at the reported concentration.
Naphthalene	0.91	The naphthalene results for samples Prather Springs, Prather Springs (D), Spring 2, Stock Pond, and Trip Blank were qualified as nondetect (U) at either the reported concentration or reporting limit, whichever is greater.

µg/l – micrograms per liter

Table 2
Trip Blank Contamination and Resultant Qualification

Analyte	Concentration (µg/l)	Resultant Qualification
Chloromethane	0.20	The chloromethane results for samples Prather Spring Upgradient, Ned Prather Cabin,, Spring 2 A, Stock Pond, Stock, Dick Prather Cabin Tank have been qualified as nondetect (U) at the reporting limit.

PRATHER SPRINGS DATA REVIEW SUMMARY

Data Package Number: Evergreen Analytical Laboratory 08-6082

Sampling Event: August 14 & 15, 2008

Sample-specific Parameter Review? **Yes**

Laboratory Performance Parameters? **No**

Data Reviewer: Liz Kraak

Date Completed: 09/02/08

Peer Reviewer: Geoff Webb

Date Completed: 09/02/08

The table below summarizes the results presented in this data package.

Field ID	Sample Type	Lab ID	Matrix	Analyses	
				VOCs (8260B)	Methane (RSK 175)
PS-MW4	SA	08-6082-01	Water	X	X
PS-MW11D	SA	08-6082-02	Water	X	X
PS-MW11D (DUP)	FD	08-6082-03	Water	X	X
PS-MW11S	SA	08-6082-04	Water	X	X
PS-MW3	SA	08-6082-05	Water	X ^m	X ^m

Analyses:

VOCs – Volatile Organic Compounds

QC Type: SA - Sample

FD – Field Duplicate

m - Matrix Spike/Matrix Spike Duplicate

The data review was conducted in accordance with the Data Validation SOP included in Attachment B to the Phase I Site Investigation Work Plan – Prather Spring Investigation dated July 31, 2008.

General Overall Assessment:

- _____ Data are usable without qualification.
- X Data are usable with qualification (noted below).
- _____ Data are usable with qualification (noted below).

Case Narrative Summary: Except as noted below, any of the issues noted in the laboratory case narrative potentially affecting data quality are addressed in the appropriate sections in the table below.

Review Parameter	Criteria Met?	Comments
Sample-specific Parameters	Complete with "Yes", "No", or "Not Applicable (N/A)".	For each "No" response, list what was out, associated acceptance limits, all qualified data, and bias direction or reference associated table with pertinent details.
COC & Sample Receipt	No	Samples were received intact and the cooler temperature was 15.6°C upon arrival at the laboratory, exceeding the ≤6°C temperature criterion. All VOC and methane results were qualified as estimated (UJ/J P-I).
Holding Times	Yes	All samples were analyzed within the holding time requirements specified in the Work Plan.
Method Blanks	Yes	Target analytes were not reported as detected within the associated method blanks. Data qualification was not required.
Matrix QC <ul style="list-style-type: none"> MS/MSD PS-MW3 (VOCs, Methane) LD N/A 	No	With the exception described below in Table 1, the recoveries and RPDs for the matrix spike (MS) and matrix spike duplicate (MSD) analyses were within the laboratory-determined acceptance range.

Review Parameter	Criteria Met?	Comments
Field QC <ul style="list-style-type: none"> Field Blanks (Ambient, Rinsate, or Trip) None Field Duplicate PS-MW11D/ PS-MW11D (DUP) 	Yes	The following criteria from the Prather Springs SOP were used to evaluate field duplicate pairs: <ul style="list-style-type: none"> If both results were $\leq 5 \times \text{RL}$, then the absolute difference between the results should agree within $\pm 2 \times \text{RL}$ (Waters) and $\pm 3.5 \times \text{RL}$ (Soils) If both results were $\geq 5 \times \text{RL}$, then the RPD should be $\leq 30\%$ (Waters) and $\leq 50\%$ (Soils) The field duplicate pair PS-MW11D/ PS-MW11D (DUP) met the above criteria. Therefore, data qualification was not necessary.
Surrogates	Yes	All surrogate recoveries were within the laboratory acceptance limits. Data qualification was not required.
Laboratory Control Sample (LCS)	Yes	LCS recoveries were within the laboratory determined acceptance limits. Data qualification was not required.
Non-detect Results w/ Elevated RLs?	Yes	No results were reported as non-detect at elevated RLs. Further action was not necessary.
Package Completeness	Yes	
Other Parameters	Yes	Detected analytes with concentrations between the Instrument Detection Limit (IDL) and the Reporting Limit (RL) were qualified as estimated (J). A qualifier code of "SQL-I" (Sample Quantitation Limit) was assigned to reflect the greater uncertainty in quantitative values below the RL.

Table 1: MS/MSD Recovery Outliers and Resultant Data Qualification

Associated Sample	Analyte	Recovery (Limits)	Qualification
VOCs			
PS-MW3	2-Chloroethylvinylether	0/0 (70-130)	As the percent recoveries were $< 10\%$, the 2-chloroethylvinylether result for sample PS-MW3 was qualified as unusable (R). As this was the only MS/MSD conducted on a sample from this data package, data qualification was extended to all other sites.

MS/MSD – Matrix spike and/or matrix spike duplicate

R - Rejected

PRATHER SPRINGS DATA REVIEW SUMMARY

Data Package Number: Evergreen Analytical Laboratory 08-6168

Sampling Event: August 19, 2008

Sample-specific Parameter Review? **Yes**

Laboratory Performance Parameters? **No**

Data Reviewer: Liz Kraak

Date Completed: 09/02/08

Peer Reviewer: Geoff Webb

Date Completed: 09/02/08

The table below summarizes the results presented in this data package.

Field ID	Sample Type	Lab ID	Matrix	Analyses	
				VOCs (8260B)	Anions (300.0)
Prather Spring	SA	08-6168-01A	Water	X	X
Prather Spring Upgradient	SA	08-6168-02A	Water	X	X
Ned Prather Cabin	SA	08-6168-03A	Water	X	X
Spring 2	SA	08-6168-04A	Water	X	X
Spring 2-Dup	FD	08-6168-05A	Water	X	X
Spring 2A	SA	08-6168-06A	Water	X	X
Stock Pond	SA	08-6168-07A	Water	X	X
Stock Tank	SA	08-6168-08A	Water	X	X
Dick Prather cabin	SA	08-6168-09A	Water	X	X
McKay Gulch	SA	08-6168-10A	Water	X ^m	X ^m
Stock Pond Discharge	SA	08-6168-11A	Water	X	X
Trip Blank	TB	08-6168-12A	Water	X	X

Analyses:

Anions: Chloride, Nitrate as N, Nitrite as N, Nitrate + Nitrite as N

QC Type: SA - Sample TB - Trip Blank FD - Field Duplicate m - Matrix Spike/Matrix Spike Duplicate

The data review was conducted in accordance with the Data Validation SOP included in Attachment B to the Phase I Site Investigation Work Plan – Prather Spring Investigation dated July 31, 2008.

General Overall Assessment:

- _____ Data are usable without qualification.
- X Data are usable with qualification (noted below).
- _____ Data are usable with qualification (noted below).

Case Narrative Summary: Except as noted below, any of the issues noted in the laboratory case narrative potentially affecting data quality are addressed in the appropriate sections in the table below.

Review Parameter	Criteria Met?	Comments
<i>Sample-specific Parameters</i>	Complete with "Yes", "No", or "Not Applicable (N/A)".	For each "No" response, list what was out, associated acceptance limits, all qualified data, and bias direction or reference associated table with pertinent details.
COC & Sample Receipt	Yes	Samples were received intact and the cooler temperature was 1.9°C upon arrival at the laboratory, within the ≤6°C temperature criterion.
Holding Times	Yes	Samples were analyzed within the holding time requirements specified in the Work Plan.
Method Blanks	Yes	Target analytes were not reported as detected within the associated method blanks. Data qualification was not required.

Review Parameter	Criteria Met?	Comments
Matrix QC <ul style="list-style-type: none"> MS/MSD McKay Gulch (VOCs, Anions) LD N/A 	No	With the exceptions noted in Table 1, the recoveries and RPDs for the matrix spike (MS) and matrix spike duplicate (MSD) analyses were within the laboratory-determined acceptance range.
Field QC <ul style="list-style-type: none"> Field Blanks (Ambient, Rinsate, or Trip) Trip Blank Field Duplicate None 	Yes	Target analytes were not reported as detected in the trip blank. Data qualification was not required.
Surrogates	Yes	All surrogate recoveries were within the laboratory acceptance limits. Data qualification was not required.
Laboratory Control Sample (LCS)	Yes	LCS recoveries were within the laboratory determined acceptance limits. Data qualification was not required.
Non-detect Results w/ Elevated RLs?	No	Some of the VOC and anion analyses were performed at dilutions. Several results were reported as non-detect at elevated RLs. Therefore, those results that were reported as non-detect at elevated RLs will need to be evaluated with respect to the project objectives.
Package Completeness	Yes	
Other Parameters	Yes	Detected analytes with concentrations between the Instrument Detection Limit (IDL) and the Reporting Limit (RL) were qualified as estimated (J). A qualifier code of "SQL-I" (Sample Quantitation Limit) was assigned to reflect the greater uncertainty in quantitative values below the RL.

Table 1: MS/MSD Recovery Outliers and Resultant Data Qualification

Associated Sample	Analyte	Recoveries (Limits)	Qualification
VOCs			
McKay Gulch	2-Chloroethylvinylether	0/0 (70-130)	As the percent recoveries were <10%, all 2-chloroethylvinylether results were qualified as unusable (R).
Anions			
McKay Gulch	Chloride	59.8/ 60.3 (80-120)	As the potential bias was considered to be low, the chloride result for all samples was qualified as estimated (J MS-L).

R – Rejected

J – Estimated

MS – Matrix spike and/or matrix spike duplicate.

L – Low Bias

PRATHER SPRINGS DATA REVIEW SUMMARY

Data Package Number: Evergreen Analytical Laboratory 08-6291

Sampling Event: August 21, 2008

Sample-specific Parameter Review? **Yes**

Laboratory Performance Parameters? **No**

Data Reviewer: Liz Kraak

Date Completed: 09/08/08

Peer Reviewer: Geoff Webb

Date Completed: 09/09/08

The table below summarizes the results presented in this data package.

Field ID	Sample Type	Lab ID	Matrix	Analyses	
				VOCs (8260B)	Anions (E300.0)
Prather Spring	SA	08-6291-01	Water	X	X
Prather Spring (DUP)	FD	08-6291-02	Water	X	X
Prather Spring Upgradient	SA	08-6291-03	Water	X	X
Ned Prather Cabin	SA	08-6291-04	Water	X	X
Spring 2	SA	08-6291-05	Water	X	X
Spring 2A	SA	08-6291-06	Water	X	X
Stock Pond	SA	08-6291-07	Water	X	X
Stock Tank	SA	08-6291-08	Water	X	X
Dick Prather Cabin	SA	08-6291-09	Water	X ^m	X ^m
McKay Gulch	SA	08-6291-10	Water	X	X
Stock Pond Discharge	SA	08-6291-11	Water	X	X
Trip Blank	TB	08-6291-12	Water	X	X

Analyses:

VOCs – Volatile Organic Compounds

Anions including chloride, nitrate, nitrite, and nitrate + nitrite as N.

QC Type: SA - Sample

TB - Trip Blank

FD – Field Duplicate

m - Matrix Spike/Matrix Spike Duplicate

The data review was conducted in accordance with the Data Validation SOP included as Attachment B to the Phase I Site Investigation Work Plan – Prather Spring Investigation dated July 31, 2008.

General Overall Assessment:

- _____ Data are usable without qualification.
- _____ Data are usable with qualification (noted below).
- X Some data are unusable for any purpose (noted below).

Case Narrative Summary: Except as noted below, any of the issues noted in the laboratory case narrative potentially affecting data quality are addressed in the appropriate sections in the table below.

Review Parameter	Criteria Met?	Comments
Sample-specific Parameters	Complete with "Yes", "No", or "Not Applicable (N/A)".	For each "No" response, list what was out, associated acceptance limits, all qualified data, and bias direction or reference associated table with pertinent details.
COC & Sample Receipt	Yes	<p>Samples were received intact and the cooler temperature was 0.9°C upon arrival at the laboratory, within the ≤6°C temperature criterion.</p> <p>VOCs</p> <p>According to the laboratory, sample Ned Prather Cabin was reanalyzed to confirm the original benzene result of 0.10 µg/L. For the reanalysis, a benzene result of 0.090 µg/L was obtained, which compared well to the initial analyses. The VOC results from the original run were selected for reporting. Further action was not required.</p>

Review Parameter	Criteria Met?	Comments
Holding Times	Yes	All samples were analyzed within the holding time requirements specified in the Work Plan. Qualification of data was not required.
Method Blanks	Yes	Target analytes were not reported as detected within the associated method blanks. Data qualification was not required
Matrix QC <ul style="list-style-type: none"> MS/MSD Dick Prather Cabin (VOCs, Anions) LD N/A 	No	With the exceptions summarized in Table 1, the recoveries and RPDs for the matrix spike (MS) and matrix spike duplicate (MSD) analyses were within the laboratory-determined acceptance range.
Field QC <ul style="list-style-type: none"> Field Blanks (Ambient, Rinsate, or Trip) Trip Blank Field Duplicate Prather Spring (DUP) 	Yes	No target analytes were reported as detected in the trip blank. Data qualification was not required. The field duplicate pair Prather Spring/ Prather Spring (DUP) met the applicable criteria. Data qualification was not required.
Surrogates	Yes	All surrogate recoveries were within the laboratory acceptance limits. Data qualification was not required.
Laboratory Control Sample	Yes	LCS recoveries were within the laboratory determined acceptance limits. Data qualification was not required.
Non-detect Results w/ Elevated RLs?	No	Some of the VOC and anions analyses were performed at dilutions. Several results were reported as non-detect at elevated RLs. Therefore, those results that were reported as non-detect at elevated RLs will need to be evaluated with respect to the project objectives.
Package Completeness	Yes	
Other Parameters	Yes	Detected analytes with concentrations between the Instrument Detection Limit (IDL) and the Reporting Limit (RL) were qualified as estimated (J). A qualifier code of "SQL-I" (Sample Quantitation Limit) was assigned to reflect the greater uncertainty in quantitative values below the RL.

Table 1: MS/MSD Recovery Outliers and Resultant Data Qualification

Associated Sample	Analyte	Recovery (Limits)	RPD (Limits)	Qualification
VOCs				
Dick Prather Cabin	2-Chloroethylvinylether	0/ 0 (70-130)	0 (30)	As the percent recoveries were <10%, the 2-chloroethylvinylether result was qualified as unusable (R).
	Acetone	111/ 80.2 (50-150)	32.2 (30)	As the potential bias was considered to be indeterminate, the acetone result was qualified as estimated (UJ D-I).

UJ – Estimated MS – Matrix spike recovery failure.

D – Duplicate evaluation criteria not met.

L – Low Bias

I – Indeterminate Bias

PRATHER SPRINGS DATA REVIEW SUMMARY

Data Package Number: Evergreen Analytical Laboratory 08-6359

Sampling Event: August 25, 2008

Sample-specific Parameter Review? **Yes**

Laboratory Performance Parameters? **No**

Data Reviewer: Liz Kraak

Date Completed: 09/15/08

Peer Reviewer: Sheri O'Connor

Date Completed: 09/16/08

The table below summarizes the results presented in this data package.

Field ID	Sample Type	Lab ID	Matrix	Analyses	
				VOCs (8260B)	Anions (E300.0)
Prather Spring	SA	08-6359-01	Water	X	X
Prather Spring Upgradient	SA	08-6359-02	Water	X	X
Ned Prather Cabin	SA	08-6359-03	Water	X	X ^m
Spring 2	SA	08-6359-04	Water	X	X
Spring 2A	SA	08-6359-05	Water	X	X
Spring 2 (Dup)	FD	08-6359-06	Water	X	X
Stock Pond	SA	08-6359-07	Water	X ^m	X ^m
Stock Tank	SA	08-6359-08	Water	X	X
Dick Prather Cabin	SA	08-6359-09	Water	X	X
McKay Gulch	SA	08-6359-10	Water	X	X
Stock Pond Discharge	SA	08-6359-11	Water	X	X
Trip Blank	TB	08-6359-12	Water	X	--

Analyses:

VOCs – Volatile Organic Compounds

Anions including chloride, nitrate, nitrite, and nitrate + nitrite as N.

QC Type: SA - Sample

TB - Trip Blank

FD – Field Duplicate

m - Matrix Spike/Matrix Spike Duplicate

The data review was conducted in accordance with the Data Validation SOP included as Attachment B to the Phase I Site Investigation Work Plan – Prather Spring Investigation dated July 31, 2008.

General Overall Assessment:

- _____ Data are usable without qualification.
- _____ Data are usable with qualification (noted below).
- X Some data are unusable for any purpose (noted below).

Case Narrative Summary: Except as noted below, any of the issues noted in the laboratory case narrative potentially affecting data quality are addressed in the appropriate sections in the table below.

Review Parameter	Criteria Met?	Comments
Sample-specific Parameters	Complete with "Yes", "No", or "Not Applicable (N/A)".	For each "No" response, list what was out, associated acceptance limits, all qualified data, and bias direction or reference associated table with pertinent details.
COC & Sample Receipt	Yes	Samples were received intact and the cooler temperature was 1.7°C upon arrival at the laboratory, within the ≤6°C temperature criterion.
Holding Times	Yes	All samples were analyzed within the holding time requirements specified in the Work Plan. Qualification of data was not required.
Method Blanks	No	With the exception summarized in Table 1, target analytes were not reported as detected within the associated method blanks.

Review Parameter	Criteria Met?	Comments
Matrix QC <ul style="list-style-type: none"> MS/MSD Stock Pond (VOCs, Anions) Ned Prather Cabin (Nitrate, Nitrate + Nitrite) LD N/A 	No	With the exceptions summarized in Table 2, the recoveries and RPDs for the matrix spike (MS) and matrix spike duplicate (MSD) analyses were within the laboratory-determined acceptance range.
Field QC <ul style="list-style-type: none"> Field Blanks (Ambient, Rinsate, or Trip) Trip Blank Field Duplicate Spring 2 (Dup) 	Yes	<p>No target analytes were reported as detected in the trip blank. Data qualification was not required.</p> <p>The field duplicate pair Spring 2/ Spring 2 (DUP) met the applicable criteria. Data qualification was not required.</p>
Surrogates	Yes	All surrogate recoveries were within the laboratory acceptance limits. Data qualification was not required.
Laboratory Control Sample	Yes	LCS recoveries were within the laboratory determined acceptance limits. Data qualification was not required.
Non-detect Results w/ Elevated RLs?	No	Some of the VOC and anions analyses were performed at dilutions. Several results were reported as non-detect at elevated RLs. Therefore, those results that were reported as non-detect at elevated RLs will need to be evaluated with respect to the project objectives.
Package Completeness	Yes	
Other Parameters	Yes	Detected analytes with concentrations between the Instrument Detection Limit (IDL) and the Reporting Limit (RL) were qualified as estimated (J). A qualifier code of "SQL-I" (Sample Quantitation Limit) was assigned to reflect the greater uncertainty in quantitative values below the RL.

Table 1: Method Blank Outliers and Resultant Data Qualification

Associated Samples	Analyte	Concentration	Qualification
MB4082808 (All Samples)	Methylene Chloride	0.36 µg/L	As all associated methylene chloride results were reported as non-detect, data qualification was not required.

µg/L – Micrograms per Liter

Table 1: MS/MSD Recovery Outliers and Resultant Data Qualification

Associated Sample	Analyte	Recovery (Limits)	RPD (Limits)	Qualification
VOCs				
Stock Pond	2-Chloroethylvinylether	0/ 0 (70-130)	0 (30)	As the percent recoveries were <10%, all associated 2-chloroethylvinylether results were qualified as unusable (R).
Anions				
Stock Pond	Chloride	59.6/ 65.2 (80-120)	0.214 (20)	As the potential bias was considered to be low, all associated chloride results were qualified as estimated (J MS-L).

R – Rejected

J – Estimated

MS- Matrix spike and/or matrix spike duplicate recovery failure. L-Low Bias

PRATHER SPRINGS DATA REVIEW SUMMARY

Data Package Number: Evergreen Analytical Laboratory 08-6596

Sampling Event: August 29, 2008

Sample-specific Parameter Review? **Yes**

Laboratory Performance Parameters? **No**

Data Reviewer: Liz Kraak

Date Completed: 09/15/08

Peer Reviewer: Sheri O'Connor

Date Completed: 09/16/08

The table below summarizes the results presented in this data package.

Field ID	Sample Type	Lab ID	Matrix	Analyses			
				VOCs (8260)	Metals (6010 & 6020)	Inorganics	Methane (RSK 175)
Ned Prather Spring	SA	08-6596-01	Water	X	X	X	X
Ned Prather Spring (Dup)	FD	08-6596-02	Water	X	X	X	X
Ned Prather Cabin	SA	08-6596-03	Water	X ^m	X ^m	X ^m	X
Spring 2	SA	08-6596-04	Water	X	X	X	X
Spring 2 DS-100	SA	08-6596-05	Water	X	X	X	X
Ned Prather Stock Pond	SA	08-6596-06	Water	X	X	X	X
Donna Stock Tank	SA	08-6596-07	Water	X	X	X	X
McKay Gulch	SA	08-6596-08	Water	X	X	X	X
Dick Prather Cabin	SA	08-6596-09	Water	X	X	X	X
Ned Prather Stock Pond DS-500	SA	08-6596-10	Water	X	X	X	X
Ned Prather Spring DS-440	SA	08-6596-11	Water	X	X	X	X
Trip Blank Cooler 1	TB	08-6596-12	Water	X	---	---	---
Trip Blank Cooler 2	TB	08-6596-13	Water	X	---	---	---
Trip Blank Cooler 3	TB	08-6596-14	Water	X	---	---	---

Analyses:

VOCs –Volatile Organic Compounds

Metals including calcium, iron, magnesium, manganese, potassium, sodium, arsenic, barium, boron, cadmium, chromium, copper, lead, selenium, and silver.

Inorganics including total alkalinity, carbonate alkalinity, bicarbonate alkalinity, hydroxide alkalinity (SM2320B), total dissolved solids (SM2540C), specific conductance (SM2510B), fluoride (SM4500-F C), bromide (E300.0), chloride (E300.0), sulfate (E300.0), and total sulfide (SM 4500),

QC Type: SA - Sample

FD – Field Duplicate

TB - Trip Blank

m - Matrix Spike/Matrix Spike Duplicate

--- Sample not analyzed for this parameter.

The data review was conducted in accordance with the Data Validation SOP included in Attachment B to the Phase I Site Investigation Work Plan – Prather Spring Investigation dated July 31, 2008.

General Overall Assessment:

- _____ Data are usable without qualification.
- _____ Data are usable with qualification (noted below).
- X Some data are unusable for any purpose (noted below).

Case Narrative Summary: Except as noted below, any of the issues noted in the laboratory case narrative potentially affecting data quality are addressed in the appropriate sections in the table below.

Review Parameter	Criteria Met?	Comments
Sample-specific Parameters	Complete with "Yes", "No", or "Not Applicable (N/A)".	For each "No" response, list what was out, associated acceptance limits, all qualified data, and bias direction or reference associated table with pertinent details.
COC & Sample Receipt	Yes	Samples were received intact and the cooler temperature was 3.3°C upon arrival at the laboratory, within the $\leq 6^{\circ}\text{C}$ temperature criterion.
Holding Times	Yes	All samples were analyzed within the holding time requirements specified in the Work Plan. Data qualification was not required.
Method Blanks	Yes	Target analytes were not reported as detected within the associated method blanks. Data qualification was not required.
Matrix QC <ul style="list-style-type: none"> MS/MSD Ned Prather Cabin (VOCs, Metals, Chloride, Bromide, Sulfate, Total Sulfide, Total Alkalinity, Fluoride, Methane) LD Ned Prather Spring (Total Sulfide, Fluoride) Ned Prather Cabin (TDS, Specific Conductance) Dick Prather Cabin (Total Alkalinity) 	No	<p>With the exceptions summarized in Table 1, the recoveries and RPDs for the matrix spike (MS) and matrix spike duplicate (MSD) analyses were within the laboratory-determined acceptance range.</p> <p>The RPD between parent result and the laboratory duplicate results satisfied the applicable evaluation criterion.</p>
Field QC <ul style="list-style-type: none"> Field Blanks (Ambient, Rinsate, or Trip) Trip Blank Cooler 1 Trip Blank Cooler 2 Trip Blank Cooler 3 Field Duplicate Ned Prather Spring (Dup) 	Yes	<p>No target analytes were reported as detected in the trip blank. Data qualification was not required.</p> <p>The field duplicate pair Ned Prather Spring/ Ned Prather Spring (Dup) met the applicable criteria. Data qualification was not required.</p>
Surrogates	Yes	All surrogate recoveries were within the laboratory acceptance limits. Data qualification was not required.
Laboratory Control Sample (LCS)	Yes	LCS recoveries were within the laboratory determined acceptance limits. Data qualification was not required.
Non-detect Results w/ Elevated RLs?	No	Some of the VOC, chloride, sulfate, and bromide analyses were performed at dilutions. Several VOC and bromide results were reported as non-detect at elevated RLs. Therefore, those results that were reported as non-detect at elevated RLs will need to be evaluated with respect to the project objectives.
Package Completeness	Yes	
Other Parameters	Yes	Detected analytes with concentrations between the Instrument Detection Limit (IDL) and the Reporting Limit (RL) were qualified as estimated (J). A qualifier code of "SQL-I" (Sample Quantitation Limit) was assigned to reflect the greater uncertainty in quantitative values below the RL.

Table 1: MS/MSD Recovery Outliers and Resultant Data Qualification

Associated Samples	Analyte	%R (%)	Qualification
VOCs			
Ned Prather Cabin	2-Chloroethylvinylether	0/ 0 (70-130)	As the percent recoveries were <10%, all associated nondetect 2-chloroethylvinylether and chloroform results were qualified as unusable (R) and detected results were qualified as estimated (J).
	Chloroform	-3/-37.4 (70-130)	
	Bromodichloromethane	80.2/ 59.2 (70-130)	As the potential bias was considered to be low, all bromodichloromethane results were qualified as estimated (UJ/ J MS-L).

%R – Percent Recovery

R – Rejected

J - Estimated

MS- Matrix spike and/or matrix spike duplicate recovery failure.

L – Low Bias

PRATHER SPRINGS DATA REVIEW SUMMARY

Data Package Number: Evergreen Analytical Laboratory 08-6745

Sampling Event: September 4, 2008

Sample-specific Parameter Review? **Yes**

Laboratory Performance Parameters? **No**

Data Reviewer: Liz Kraak

Date Completed: 09/15/08

Peer Reviewer: Sheri O'Connor

Date Completed: 09/16/08

The table below summarizes the results presented in this data package.

Field ID	Sample Type	Lab ID	Matrix	Analyses			
				VOCs (8260)	Metals (6010 & 6020)	Inorganics	Methane (RSK 175)
Ned Prather Spring	SA	08-6745-01	Water	X	X	X	X
Ned Prather Spring DS-440	SA	08-6745-02	Water	X	X	X	X
Ned Prather Cabin	SA	08-6745-03	Water	X	X	X	X
Spring 2	SA	08-6745-04	Water	X	X	X	X
Spring 2 DS-100	SA	08-6745-05	Water	X	X	X	X
Spring 2 (DUP)	FD	08-6745-06	Water	X	X	X	X
Ned Prather Stock Pond	SA	08-6745-07	Water	X	X	X	X
Donna Stock Pond	SA	08-6745-08	Water	X	X	X	X
Dick Prather Cabin	SA	08-6745-09	Water	X ^m	X ^m	X ^m	X ^m
McKay Gulch	SA	08-6745-10	Water	X	X	X	X
Ned Prather Stock Pond DS-550	SA	08-6745-11	Water	X	X	X	X
Trip Blank	TB	08-6745-12	Water	X	---	---	---

Analyses:

VOCs – Volatile Organic Compounds

Metals including calcium, iron, magnesium, manganese, potassium, sodium (6010), arsenic, barium, boron, cadmium, chromium, copper, lead, selenium, and silver (6020).

Inorganics including total alkalinity, bicarbonate alkalinity, carbonate alkalinity, hydroxide alkalinity, specific conductance, fluoride, total sulfide, total dissolved solids, bromide, nitrate as N, chloride, nitrite as N, nitrate + nitrite as N, and sulfate

QC Type: SA - Sample TB - Trip Blank m - Matrix Spike/Matrix Spike Duplicate

--- Sample not analyzed for this parameter.

The data review was conducted in accordance with the Data Validation SOP included in Attachment B to the Phase I Site Investigation Work Plan – Prather Spring Investigation dated July 31, 2008.

General Overall Assessment:

_____ Data are usable without qualification.
 _____ Data are usable with qualification (noted below).
 X Some or all data is unusable for any purpose (noted below).

Case Narrative Summary: Except as noted below, any of the issues noted in the laboratory case narrative potentially affecting data quality are addressed in the appropriate sections in the table below.

Review Parameter	Criteria Met?	Comments
<i>Sample-specific Parameters</i>	Complete with "Yes", "No", or "Not Applicable (N/A)".	For each "No" response, list what was out, associated acceptance limits, all qualified data, and bias direction or reference associated table with pertinent details.
COC & Sample Receipt	Yes	Samples were received intact and the cooler temperature was 2.0°C upon arrival at the laboratory, within the ≤6°C temperature criterion.
Holding Times	Yes	All samples were analyzed within the holding time requirements specified in the Work Plan. Data qualification was not required.

Review Parameter	Criteria Met?	Comments
Method Blanks	No	With the exception summarized in Table 1, target analytes were not reported as detected within the associated method blanks.
Matrix QC <ul style="list-style-type: none"> MS/MSD Dick Prather Cabin (VOCs, Metals, Anions – Chloride, Nitrite, Bromide, Nitrate, Nitrate + Nitrite as N, Sulfate, Total Alkalinity, Total Sulfide, Fluoride, Methane) LD Dick Prather Cabin (Total Alkalinity, Bicarbonate Alkalinity, Carbonate Alkalinity, Hydroxide Alkalinity, Specific Conductance, TDS, Total Sulfide, Fluoride) 	No	<p>With the exceptions summarized in Table 2, the recoveries and RPDs for the matrix spike (MS) and matrix spike duplicate (MSD) analyses were within the laboratory-determined acceptance range.</p> <p>The RPD between parent result and the laboratory duplicate results satisfied the applicable evaluation criterion.</p>
Field QC <ul style="list-style-type: none"> Field Blanks (Ambient, Rinsate, or Trip) Trip Blank Field Duplicate Spring 2 (DUP) 	Yes	<p>No target analytes were detected in the trip blank. Data qualification was not required.</p> <p>The field duplicate pair Spring 2/ Spring 2 (DUP) met the applicable criteria. Data qualification was not required.</p>
Surrogates	Yes	All surrogate recoveries were within the laboratory acceptance limits. Data qualification was not required.
Laboratory Control Sample (LCS)	No	With the exception summarized in Table 3, LCS recoveries were within the laboratory determined acceptance limits.
Non-detect Results w/ Elevated RLs?	No	Some of the VOC and anion analyses were performed at dilutions. Several results were reported as non-detect at elevated RLs. Therefore, those results that were reported as non-detect at elevated RLs will need to be evaluated with respect to the project objectives.
Package Completeness	Yes	
Other Parameters	Yes	Detected analytes with concentrations between the Instrument Detection Limit (IDL) and the Reporting Limit (RL) were qualified as estimated (J). A qualifier code of "SQL-I" (Sample Quantitation Limit) was assigned to reflect the greater uncertainty in quantitative values below the RL.

Table 1: Method Blank Outliers and Resultant data Qualification

Associated Samples	Analyte	Concentration	Qualification
VOCs			
Batch MB4090808 (All Samples)	Acetone	2.54 µg/L	As the acetone result in sample Ned Prather Stock Pond was reported at a concentration <10x the blank contamination, the acetone result was qualified as non-detect at the reporting limit (U MB-I). All other associated sample acetone results were reported as non-detect and data qualification was not required.

U – Non-detect

MB – Method Blank Contamination

I – Indeterminate Bias

Table 2: MS/MSD Recovery Outliers and Resultant Data Qualification

Sample	Analyte	%R (%)	Qualification
Dick Prather Cabin	2-Chloroethylvinylether	0/ 0 (70-130)	As the percent recoveries were <10%, all 2-chloroethylvinylether results for all samples were qualified as unusable (R).
	Vinyl Acetate	137/ 152 (50-150)	As the potential bias was considered to be high and all associated vinyl acetate results were reported as non-detect, data qualification was not required.

%R – Percent Recovery

R – Rejected

Table 3: LCS Recovery Outliers and Resultant Data Qualification

Associated Samples	Analyte	%R (%)	Qualification
LCS4090808 (All Samples)	Vinyl Acetate	173 (50-150)	As the potential bias was considered to be high and the associated results were reported as non-detect, data qualification was not required.

%R – Percent Recovery

PRATHER SPRINGS DATA REVIEW SUMMARY

Data Package Number: Evergreen Analytical Laboratory 08-6749

Sampling Event: September 4, 2008

Sample-specific Parameter Review? **Yes**

Laboratory Performance Parameters? **No**

Data Reviewer: Liz Kraak

Date Completed: 09/15/08

Peer Reviewer: Sheri O'Connor

Date Completed: 09/16/08

The table below summarizes the results presented in this data package.

Field ID	Sample Type	Lab ID	Matrix	Analyses			
				VOCs (8260)	Metals (6010 & 6020)	Inorganics	Methane (RSK 175)
Potable Water Tank	SA	08-6749-01	Water	X	X	X	X
Potable Water Tank (Dup)	SA	08-6749-02	Water	X	---	---	---
Trip Blank	TB	08-6749-03	Water	X	---	---	---

Analyses:

VOCs – Volatile Organic Compounds

Metals including calcium, iron, magnesium, manganese, potassium, sodium, arsenic, barium, boron, cadmium, chromium, copper, lead, selenium, and silver.

Inorganics including total alkalinity, bicarbonate alkalinity, carbonate alkalinity, hydroxide alkalinity, specific conductance, fluoride, total sulfide, total dissolved solids, bromide, nitrate as N, chloride, nitrite as N, nitrate + nitrite as N, and sulfate

QC Type: SA - Sample TB - Trip Blank m - Matrix Spike/Matrix Spike Duplicate

--- Sample not analyzed for this parameter.

The data review was conducted in accordance with the Data Validation SOP included in Attachment B to the Phase I Site Investigation Work Plan – Prather Spring Investigation dated July 31, 2008.

General Overall Assessment:

- _____ Data are usable without qualification.
- X Data are usable with qualification (noted below).
- _____ Some data are unusable for any purpose (noted below).

Case Narrative Summary: Except as noted below, any of the issues noted in the laboratory case narrative potentially affecting data quality are addressed in the appropriate sections in the table below.

Review Parameter	Criteria Met?	Comments
Sample-specific Parameters	Complete with "Yes", "No", or "Not Applicable (N/A)".	For each "No" response, list what was out, associated acceptance limits, all qualified data, and bias direction or reference associated table with pertinent details.
COC & Sample Receipt	Yes	Samples were received intact and the cooler temperature was 2.0°C upon arrival at the laboratory, within the ≤6°C temperature criterion.
Holding Times	Yes	All samples were analyzed within the holding time requirements specified in the Work Plan. Data qualification was not required.
Method Blanks	No	With the exception summarized in Table 1, target analytes were not reported as detected within the associated method blanks.
Matrix QC <ul style="list-style-type: none"> MS/MSD Potable Water Tank (Total Alkalinity) LD Potable Water Tank (TDS) 	Yes	The recoveries and RPDs for the matrix spike (MS) and matrix spike duplicate (MSD) analyses were within the laboratory-determined acceptance range. Data qualification was not required.

Review Parameter	Criteria Met?	Comments
Field QC <ul style="list-style-type: none"> Field Blanks (Ambient, Rinsate, or Trip) Field Duplicate Potable Water Tank (Dup) - VOCs 	Yes	No target analytes were reported as detected in the trip blank. Data qualification was not required. The field duplicate pair Potable Water Tank/ Potable Water Tank (Dup) met the applicable criteria for the VOC analyses. Data qualification was not required.
Surrogates	Yes	All surrogate recoveries were within the laboratory acceptance limits. Data qualification was not required.
Laboratory Control Sample (LCS)	No	With the exception summarized in Table 2, LCS recoveries were within the laboratory determined acceptance limits.
Non-detect Results w/ Elevated RLs?	No	The analysis for chloride, nitrate as N, nitrite as N, and sulfate for sample Potable Water Tank was performed at a dilution; the nitrite as N result was reported as non-detect with an elevated reporting limit. Therefore, the nitrite as N result that was reported as non-detect at an elevated RL will need to be evaluated with respect to the project objectives.
Package Completeness	Yes	
Other Parameters	N/A	

Table 1: Method Blank Outliers and Resultant data Qualification

Associated Samples	Analyte	Concentration	Qualification
VOCs			
Batch MB4090808 (All Samples)	Acetone	2.54 µg/L	As the acetone result in the sample Potable Water Tank was reported at a concentration <10x the blank contamination, the acetone result for Potable Water Tank was qualified as non-detect at the reporting limit (U MB-I).

U – Non-detect

MB – Method Blank Contamination

I – Indeterminate Bias

Table 2: LCS Recovery Outliers and Resultant Data Qualification

Associated Samples	Analyte	%R (%)	Qualification
LCS4090808 (All Samples)	Vinyl Acetate	173 (50-150)	As the potential bias was considered to be high and the associated results were reported as non-detect, data qualification was not required.

%R – Percent Recovery

PRATHER SPRINGS DATA REVIEW SUMMARY

Data Package Number: Evergreen Analytical Laboratory 08-6780

Sampling Event: September 5, 2008

Sample-specific Parameter Review? **Yes**

Laboratory Performance Parameters? **No**

Data Reviewer: Liz Kraak

Date Completed: 09/15/08

Peer Reviewer: Sheri O'Connor

Date Completed: 09/16/08

The table below summarizes the results presented in this data package.

Field ID	Sample Type	Lab ID	Matrix	Analyses			
				VOCs (8260)	Metals (6010 & 6020)	Inorganics	Methane (RSK 175)
Potable Water Hydrant	SA	08-6780-01	Water	X	X	X	X ^m
Trip Blank	TB	08-6780-02	Water	X	---	---	---

Analyses:

VOCs – Volatile Organic Compounds

Metals including calcium, iron, magnesium, manganese, potassium, sodium, arsenic, barium, boron, cadmium, chromium, copper, lead and selenium.

Inorganics including total alkalinity, bicarbonate alkalinity, carbonate alkalinity, hydroxide alkalinity, specific conductance, fluoride, total sulfide, total dissolved solids, bromide, nitrate as N, chloride, nitrite as N, nitrate + nitrite as N, and sulfate

QC Type: SA - Sample

TB - Trip Blank

m - Matrix Spike/Matrix Spike Duplicate

--- Sample not analyzed for this parameter.

The data review was conducted in accordance with the Data Validation SOP included in Attachment B to the Phase I Site Investigation Work Plan – Prather Spring Investigation dated July 31, 2008.

General Overall Assessment:

- _____ Data are usable without qualification.
- X Data are usable with qualification (noted below).
- _____ Some data are unusable for any purpose (noted below).

Case Narrative Summary: Except as noted below, any of the issues noted in the laboratory case narrative potentially affecting data quality are addressed in the appropriate sections in the table below.

Review Parameter	Criteria Met?	Comments
<i>Sample-specific Parameters</i>	Complete with "Yes", "No", or "Not Applicable (N/A)".	For each "No" response, list what was out, associated acceptance limits, all qualified data, and bias direction or reference associated table with pertinent details.
COC & Sample Receipt	Yes	Samples were received intact and the cooler temperature was 5.8°C upon arrival at the laboratory, within the ≤6°C temperature criterion.
Holding Times	No	With the exception of nitrate as N and nitrite as N, all samples were analyzed within the holding time requirements specified in the Work Plan. Sample Potable Water Hydrant was received after the 48 hour holding time requirement for the nitrate as N and nitrite as N analyses. Therefore, the nitrate as N and nitrite as N results for sample Potable Water Hydrant were qualified as estimated (U/J HT-I). In addition, the nitrate/ nitrite as N result was qualified as estimated (J HT-I) as the nitrate/ nitrite as N result was calculated from the nitrate as N and nitrite as N results.
Method Blanks	No	With the exception summarized in Table 1, target analytes were not reported as detected within the associated method blanks.

Review Parameter	Criteria Met?	Comments
Matrix QC <ul style="list-style-type: none"> MS/MSD Potable Water Hydrant (Methane) LD Potable Water Hydrant (TDS) 	Yes	The recoveries and RPDs for the matrix spike (MS) and matrix spike duplicate (MSD) analyses were within the laboratory-determined acceptance range. Data qualification was not required.
Field QC <ul style="list-style-type: none"> Field Blanks (Ambient, Rinsate, or Trip) Trip Blank Field Duplicate None 	Yes	After for accounting for method blank contamination, no target analytes were detected in the trip blank. Data qualification was not required.
Surrogates	Yes	All surrogate recoveries were within the laboratory acceptance limits. Data qualification was not required.
Laboratory Control Sample (LCS)	No	With the exception summarized in Table 2, LCS recoveries were within the laboratory determined acceptance limits.
Non-detect Results w/ Elevated RLs?	No	The analysis for chloride, nitrate as N, nitrite as N, and sulfate was performed at a dilution; the nitrite as N result was reported as non-detect with an elevated reporting limit. Therefore, the nitrite as N result that was reported as non-detect at an elevated RL will need to be evaluated with respect to the project objectives.
Package Completeness	Yes	
Other Parameters	Yes	Detected analytes with concentrations between the Instrument Detection Limit (IDL) and the Reporting Limit (RL) were qualified as estimated (J). A qualifier code of "SQL-I" (Sample Quantitation Limit) was assigned to reflect the greater uncertainty in quantitative values below the RL.

Table 1: Method Blank Outliers and Resultant data Qualification

Associated Samples	Analyte	Concentration	Qualification
VOCs			
Batch MB4090808 (All Samples)	Acetone	2.54 µg/L	As the acetone results in the sample and trip blank were reported at concentrations <10x the blank contamination, the acetone results for both samples were qualified as non-detect at the reporting limit (U MB-I).

U – Non-detect

MB – Method Blank Contamination

I – Indeterminate Bias

Table 2: LCS Recovery Outliers and Resultant Data Qualification

Associated Samples	Analyte	%R (%)	Qualification
LCS4090808 (All Samples)	Vinyl Acetate	173 (50-150)	As the potential bias was considered to be high and the associated results were reported as non-detect, data qualification was not required.

%R – Percent Recovery

PRATHER SPRINGS DATA REVIEW SUMMARY

Data Package Number: Evergreen Analytical Laboratory 08-6809

Sampling Event: September 7, 2008

Sample-specific Parameter Review? **Yes**

Laboratory Performance Parameters? **Yes**

Data Reviewer: Liz Kraak

Date Completed: 09/15/08

Peer Reviewer: Sheri O'Connor

Date Completed: 09/16/08

The table below summarizes the results presented in this data package.

Field ID	Sample Type	Lab ID	Matrix	Analyses		
				VOCs (8260B)	TVH – Gasoline (8015B)	TEH – Diesel (8015B)
PSMW-06R Pre. Dev.	SA	08-6809-01	Water	X	X	---
PSMW-09S	SA	08-6809-02	Soil	X	X	X
PSMW-10S	SA	08-6809-03	Soil	X ^m	X	X

Analyses:

VOCs – Volatile Organic Compounds

SVOCs – Semivolatile Organic Compounds

QC Type: SA - Sample

TB - Trip Blank

m - Matrix Spike/Matrix Spike Duplicate

--- Sample not analyzed for this parameter.

The data review was conducted in accordance with the Phase I Site Investigation Work Plan – Prather Spring Investigation dated July 31, 2008.

General Overall Assessment:

_____ Data are usable without qualification.
 X Data are usable with qualification (noted below).

Case Narrative Summary: Except as noted below, any of the issues noted in the laboratory case narrative potentially affecting data quality are addressed in the appropriate sections in the table below.

Review Parameter	Criteria Met?	Comments
Sample-specific Parameters	Complete with "Yes", "No", or "Not Applicable (N/A)".	For each "No" response, list what was out, associated acceptance limits, all qualified data, and bias direction or reference associated table with pertinent details.
COC & Sample Receipt	Yes	Samples were received intact and the cooler temperature was 2.5°C upon arrival at the laboratory, within the ≤6°C temperature criterion. As insufficient sample volume was received, sample PSMW-06R Pre. Dev. was not analyzed for TEH-Diesel. Further action was not necessary.
Holding Times	Yes	All samples were analyzed within the holding time requirements specified in the Work Plan. Further action was not necessary.
Method Blanks	No	With the exception in Table 1, target analytes were not reported as detected within the associated method blanks.
Matrix QC • MS/MSD PSMW-10S (VOCs) • LD N/A	Yes	The recoveries and RPDs for the matrix spike (MS) and matrix spike duplicate (MSD) analyses were within the laboratory-determined acceptance range. Therefore, data qualification was not necessary.

Review Parameter	Criteria Met?	Comments
Field QC <ul style="list-style-type: none"> Field Blanks (Ambient, Rinsate, or Trip) None Field Duplicate None 	No	A trip blank was inadvertently not included for this sampling event.
Surrogates	No	With the following exception, all surrogate recoveries were within the laboratory acceptance limits. TVH-Gasoline The 1,2,4-Trichlorobenzene surrogate recovery for the LCS exceeded the laboratory determined acceptance limits of 60-140%, with a recovery of 159 %. Data qualification was not required as this was a quality control sample.
Laboratory Control Sample	No	With the exception summarized in Table 2, LCS recoveries were within the laboratory determined acceptance limits.
Non-detect Results w/ Elevated RLs?	No	Some VOC and TVH -Gasoline analyses were performed at dilutions. Several results were reported as non-detect at elevated RLs. Therefore, these results that were reported as non-detect at elevated RLs will need to be evaluated with respect to the project objectives.
Package Completeness	Yes	
Other Parameters	Yes	Detected analytes with concentrations between the Instrument Detection Limit (IDL) and the Reporting Limit (RL) were qualified as estimated (J). A qualifier code of "SQL-I" (Sample Quantitation Limit) was assigned to reflect the greater uncertainty in quantitative values below the RL.

Table 1: Method Blank Outliers and Resultant Data Qualification

Associated Samples	Analyte	Concentration	Qualification
VOCs			
MB4090808 (All Samples)	Acetone	2.54 µg/L	The associated acetone results that were reported at concentrations <10x the method blank contamination were qualified as non-detect at the reporting limit (U MB-I).

µg/L – Micrograms per Liter

U – Non-detect

MB – Method blank contamination.

I – Indeterminate Bias

Table 2: LCS Recovery Outliers and Resultant Data Qualification

Associated Samples	Analyte	%R (%)	Qualification
LCS4090808 (All Samples)	Vinyl Acetate	173 (50-150)	As the potential bias was considered to be high and all vinyl acetate results were reported as non-detect, data qualification was not required.

%R – Percent Recovery

PRATHER SPRINGS DATA REVIEW SUMMARY

Data Package Number: Evergreen Analytical Laboratory 08-7173

Sampling Event: September 17, 2008

Sample-specific Parameter Review? **Yes**

Laboratory Performance Parameters? **No**

Data Reviewer: Liz Kraak

Date Completed: 09/29/08

Peer Reviewer: Geoff Webb

Date Completed: 09/30/08

The table below summarizes the results presented in this data package.

Field ID	Sample Type	Lab ID	Sampling Date	Matrix	Analyses		
					VOCs (8260B)	Metals	Inorganics
Ned Prather Spring	SA	08-7173-01	09/17/08	Water	X	X	X
Ned Prather Spring DS-440	SA	08-7173-02	09/17/08	Water	X	X	X
Ned Prather Cabin	SA	08-7173-03	09/17/08	Water	X ^m	X ^m	X ^m
Spring 2	SA	08-7173-04	09/17/08	Water	X	X	X
Spring 2 (DUP)	FD	08-7173-05	09/17/08	Water	X	X	X
Spring 2 DS-100	SA	08-7173-06	09/17/08	Water	X	X	X
Ned Prather Stock Pond	SA	08-7173-07	09/17/08	Water	X	X	X ^m
Donna Stock Tank	SA	08-7173-08	09/17/08	Water	X	X	X
Dick Prather Cabin	SA	08-7173-09	09/17/08	Water	X	X	X
McKay Gulch	SA	08-7173-10	09/17/08	Water	X	X	X
Ned Prather Stock Pond DS-500	SA	08-7173-11	09/17/08	Water	X	X	X
Trip Blank	TB	08-7173-12	09/17/08	Water	X	---	---

Analyses:

VOCs – Volatile Organic Compounds

Metals includes Calcium, Iron, Magnesium, Manganese, Potassium, Sodium (6010B), Arsenic, Barium, Boron, Cadmium, Chromium, Copper, Lead, Selenium, and Silver (6020)

Inorganics includes Total Alkalinity, Bicarbonate Alkalinity, Carbonate Alkalinity, Hydroxide Alkalinity, Fluoride, Specific Conductivity, Total Dissolved Solids, Total Sulfide, Bromide, Chloride, Sulfate, Nitrate as N, Nitrite as N, and Nitrate + Nitrite as N.

QC Type: SA - Sample FD – Field Duplicate TB - Trip Blank m - Matrix Spike/Matrix Spike Duplicate

--- Sample not analyzed for this parameter.

The data review was conducted in accordance with the Phase I Site Investigation Work Plan – Prather Spring Investigation dated July 31, 2008.

General Overall Assessment:

_____ Data are usable without qualification.
 _____ Data are usable with qualification (noted below).
 X Some data are unusable for any purpose (noted below).

Case Narrative Summary: Except as noted below, any of the issues noted in the laboratory case narrative potentially affecting data quality are addressed in the appropriate sections in the table below.

Review Parameter	Criteria Met?	Comments
Sample-specific Parameters	Complete with "Yes", "No", or "Not Applicable (N/A)".	For each "No" response, list what was out, associated acceptance limits, all qualified data, and bias direction or reference associated table with pertinent details.
COC & Sample Receipt	Yes	Samples were received intact and the cooler temperature was 1.9°C upon arrival at the laboratory, within the ≤6°C temperature criterion.

Review Parameter	Criteria Met?	Comments
Holding Times	No	<p>With the exception of nitrate as N and nitrite as N, all samples were analyzed within the holding time requirements specified in the Work Plan.</p> <p>Samples Ned Prather Spring, Ned Prather Spring DS-440, Ned Prather Cabin, Spring 2 (DUP), Spring 2 DS-100, and Ned Prather Stock Pond DS-500 were received after the 48 hour holding time requirement for the nitrate as N and nitrite as N analyses. Therefore, the nitrate as N and nitrite as N results for these samples were qualified as estimated (UJ/J HT-I). In addition, the nitrate/ nitrite as N result was qualified as estimated (J HT-I) as the nitrate/ nitrite as N result was calculated from the nitrate as N and nitrite as N results.</p>
Method Blanks	Yes	Target analytes were not reported as detected within the associated method blanks. Data qualification was not required.
Matrix QC <ul style="list-style-type: none"> MS/MSD Ned Prather Cabin (VOCs, Total Alkalinity, Fluoride, Total Sulfide, Metals, Chloride, Nitrite as N, Bromide, Nitrate as N, Nitrate + Nitrite as N, Sulfate) Ned Prather Stock Pond (Total Alkalinity) LD Ned Prather Cabin (Total Alkalinity, Fluoride, Total Dissolved Solids, Total Sulfide, Chloride, Nitrite as N, Bromide, Nitrate as N, Nitrite + Nitrate as N, Sulfate) 	No	<p>With the exceptions summarized in Table 1, the recoveries and RPDs for the matrix spike (MS) and matrix spike duplicate (MSD) analyses were within the laboratory-determined acceptance range.</p> <p>The MS/MSD recoveries for sample Ned Prather Cabin could not be evaluated for chloroform because the results in the native sample were greater than four times the concentration of the spike added during digestion. Since the sample concentration was so much greater than the spike added, the MS/MSD recoveries are not considered to be a representative measure of accuracy. Further action or qualification was not required.</p>
Field QC <ul style="list-style-type: none"> Field Blanks (Ambient, Rinsate, or Trip) Trip Blank Field Duplicate Spring 2 (DUP) 	No	<p>With the exception of acetone, no target analytes were reported as detected in the trip blank. Acetone was detected in the trip blank at a concentration of 8.2 µg/L. Associated samples results reported at concentrations <10x the trip blank contamination were qualified as non-detect at the reporting limit or reported value, whichever was greater (U TB-I).</p> <p>The field duplicate pair Spring 2/ Spring 2 (DUP) met the applicable criteria. Data qualification was not required.</p>
Surrogates	Yes	All surrogate recoveries were within the laboratory acceptance limits. Data qualification was not required.
Laboratory Control Sample	No	With the exception summarized in Table 2, LCS recoveries were within the laboratory determined acceptance limits.
Non-detect Results w/ Elevated RLs?	No	Some VOC and anion analyses were performed at dilutions. Several results were reported as non-detect at elevated RLs. Therefore, those results that were reported as non-detect at elevated RLs will need to be evaluated with respect to the project objectives.
Package Completeness	Yes	
Other Parameters	Yes	Detected analytes with concentrations between the Instrument Detection Limit (IDL) and the Reporting Limit (RL) were qualified as estimated (J). A qualifier code of "SQL-I" (Sample Quantitation Limit) was assigned to reflect the greater uncertainty in quantitative values below the RL.

Table 1: MS/MSD Recovery and RPD Outliers and Resultant Data Qualification

Sample	Analyte	%Rs (Limit)	RPD (Limit)	Qualification
VOCs				
Ned Prather Cabin	2-Chloroethylvinylether	0/ 0 (70-130)	0 (30)	As the MS/MSD percent recoveries were <10%, all non-detect 2-chlorovinylether results were qualified as unusable (R).
	Vinyl Acetate	157/ 148 (50-150)	5.91 (30)	As the potential bias was considered to be high and all vinyl acetate results were reported as non-detect, data qualification was not required.
	Bromodichloromethane	70.8/ 46.8 (70-130)	5.67 (30)	As the potential bias was considered to be low, all bromodichloromethane results were qualified as estimated (UJ/J MS-L).
Inorganics				
Ned Prather Cabin	Chloride	79.8/ 78.6 (80-120)	0.0892 (20)	As the potential bias was considered to be low, all chloride results were qualified as estimated (J MS-L).

%R – Percent Recovery

RPD – Relative Percent Difference

R – Rejected

UJ/J – Estimated

MS – Matrix spike and/or matrix spike duplicate recovery failure.

L – Low Bias

Table 2: LCS Recovery Outliers and Resultant Data Qualification

Associated Samples	Analyte	%R (%)	Qualification
VOCs			
LCS4092208 (All Samples)	Vinyl Acetate	161 (50-150)	As the potential bias was considered to be high and all vinyl acetate results were reported as non-detect, data qualification was not required.

%R – Percent Recovery

PRATHER SPRINGS DATA REVIEW SUMMARY

Data Package Number: Evergreen Analytical Laboratory 08-7364

Sampling Event: September 24, 2008

Sample-specific Parameter Review? **Yes**

Laboratory Performance Parameters? **No**

Data Reviewer: Liz Kraak

Date Completed: 10/13/08

Peer Reviewer: Geoff Webb

Date Completed: 10/14/08

The table below summarizes the results presented in this data package.

Field ID	Sample Type	Lab ID	Sampling Date	Matrix	Analyses
					VOCs (8260B)
Ned Prather Spring	SA	08-7364-01	09/24/08	Water	X ^m
Ned Prather Spring (Dup)	FD	08-7364-02	09/24/08	Water	X
Ned Prather Spring DS-440	SA	08-7364-03	09/24/08	Water	X
Ned Prather Cabin	SA	08-7364-04	09/24/08	Water	X
Spring 2	SA	08-7364-05	09/24/08	Water	X
Spring 2 DS-100	SA	08-7364-06	09/24/08	Water	X
Ned Prather Stock Pond	SA	08-7364-07	09/24/08	Water	X
Donna Stock Tank	SA	08-7364-08	09/24/08	Water	X
Dick Prather Cabin	SA	08-7364-09	09/24/08	Water	X
McKay Gulch	SA	08-7364-10	09/24/08	Water	X
Ned Prather Stock Pond DS-500	SA	08-7364-11	09/24/08	Water	X
Trip Blank	TB	08-7364-12	09/24/08	Water	X

Analyses:

VOCs – Volatile Organic Compounds

QC Type: SA - Sample

FD – Field Duplicate

TB - Trip Blank

m - Matrix Spike/Matrix Spike Duplicate

The data review was conducted in accordance with the Phase I Site Investigation Work Plan – Prather Spring Investigation dated July 31, 2008.

General Overall Assessment:

- _____ Data are usable without qualification.
- _____ Data are usable with qualification (noted below).
- X Some data are unusable for any purpose (noted below).

Case Narrative Summary: Except as noted below, any of the issues noted in the laboratory case narrative potentially affecting data quality are addressed in the appropriate sections in the table below.

Review Parameter	Criteria Met?	Comments
Sample-specific Parameters	Complete with "Yes", "No", or "Not Applicable (N/A)".	For each "No" response, list what was out, associated acceptance limits, all qualified data, and bias direction or reference associated table with pertinent details.
COC & Sample Receipt	Yes	Samples were received intact and the cooler temperature was 2.5°C upon arrival at the laboratory, within the ≤6°C temperature criterion. Per client request, the metals and inorganic analyses were put on hold. Further action was not required.
Holding Times	Yes	All samples were analyzed within the holding time requirements specified in the Work Plan. Data qualification was not required.

Review Parameter	Criteria Met?	Comments
Method Blanks	Yes	Target analytes were not reported as detected within the associated method blanks. Data qualification was not required.
Matrix QC <ul style="list-style-type: none"> MS/MSD Ned Prather Spring (VOCs) LD None 	No	With the exceptions summarized in Table 1, the recoveries and RPDs for the matrix spike (MS) and matrix spike duplicate (MSD) analyses were within the laboratory-determined acceptance range.
Field QC <ul style="list-style-type: none"> Field Blanks (Ambient, Rinsate, or Trip) Trip Blank Field Duplicate Ned Prather Spring (DUP) 	Yes	No target analytes were reported as detected in the trip blank. Data qualification was not required. The field duplicate pair Ned Prather Spring/ Ned Prather Spring (DUP) met the applicable criteria. Data qualification was not required.
Surrogates	Yes	All surrogate recoveries were within the laboratory acceptance limits. Data qualification was not required.
Laboratory Control Sample	No	With the exception summarized in Table 2, LCS recoveries were within the laboratory determined acceptance limits.
Non-detect Results w/ Elevated RLs?	No	Some VOC analyses were performed at dilutions. Several results were reported as non-detect at elevated RLs. Therefore, those results that were reported as non-detect at elevated RLs will need to be evaluated with respect to the project objectives.
Package Completeness	Yes	
Other Parameters	Yes	Detected analytes with concentrations between the Instrument Detection Limit (IDL) and the Reporting Limit (RL) were qualified as estimated (J). A qualifier code of "SQL-I" (Sample Quantitation Limit) was assigned to reflect the greater uncertainty in quantitative values below the RL.

Table 1: MS/MSD Recovery and RPD Outliers and Resultant Data Qualification

Sample	Analyte	%Rs (Limit)	RPD (Limit)	Qualification
VOCs				
Ned Prather Spring	2-Chloroethylvinylether	0/ 0 (70-130)	0 (30)	As the MS/MSD percent recoveries were <10%, all non-detect 2-chlorovinylether results were qualified as unusable (R).
	Vinyl Acetate	152/ 143 (50-150)	6.22 (30)	As the potential bias was considered to be high and all vinyl acetate results were reported as non-detect, data qualification was not required.

%R – Percent Recovery

RPD – Relative Percent Difference

R – Rejected

Table 2: LCS Recovery Outliers and Resultant Data Qualification

Associated Samples	Analyte	%R (%)	Qualification
VOCs			
Batch R42339 (All Samples)	Vinyl Acetate	161 (50-150)	As the potential bias was considered to be high and all vinyl acetate results were reported as non-detect, data qualification was not required.

%R – Percent Recovery

PRATHER SPRINGS DATA REVIEW SUMMARY

Data Package Number: Evergreen Analytical Laboratory 08-7373

Sampling Event: September 24, 2008

Sample-specific Parameter Review? **Yes**

Laboratory Performance Parameters? **No**

Data Reviewer: Liz Kraak

Date Completed: 10/13/08

Peer Reviewer: Geoff Webb

Date Completed: 10/14/08

The table below summarizes the results presented in this data package.

Field ID	Sample Type	Lab ID	Sampling Date	Matrix	Analyses
					VOCs (8260B)
PSMW-3S	SA	08-7373-01	09/24/08	Water	X

Analyses:

VOCs – Volatile Organic Compounds

QC Type: SA - Sample

The data review was conducted in accordance with the Phase I Site Investigation Work Plan – Prather Spring Investigation dated July 31, 2008.

General Overall Assessment:

- ☒ Data are usable without qualification.
- ☐ Data are usable with qualification (noted below).
- ☐ Some data are unusable for any purpose (noted below).

Case Narrative Summary: Except as noted below, any of the issues noted in the laboratory case narrative potentially affecting data quality are addressed in the appropriate sections in the table below.

Review Parameter	Criteria Met?	Comments
Sample-specific Parameters	Complete with "Yes", "No", or "Not Applicable (N/A)".	For each "No" response, list what was out, associated acceptance limits, all qualified data, and bias direction or reference associated table with pertinent details.
COC & Sample Receipt	Yes	Samples were received intact and the cooler temperature was 2.5°C upon arrival at the laboratory, within the ≤6°C temperature criterion.
Holding Times	Yes	All samples were analyzed within the holding time requirements specified in the Work Plan. Data qualification was not required.
Method Blanks	Yes	Target analytes were not reported as detected within the associated method blanks. Data qualification was not required.
Matrix QC <ul style="list-style-type: none"> MS/MSD None LD None 	N/A	
Field QC <ul style="list-style-type: none"> Field Blanks (Ambient, Rinsate, or Trip) None Field Duplicate None 	N/A	Inadvertently, a trip blank was not collected with this sampling event.

Review Parameter	Criteria Met?	Comments
Surrogates	Yes	All surrogate recoveries were within the laboratory acceptance limits. Data qualification was not required.
Laboratory Control Sample	No	With the exception summarized in Table 1, LCS recoveries were within the laboratory determined acceptance limits.
Elevated RLs without associated non-detect results	Yes	
Package Completeness	Yes	
Other Parameters	Yes	Detected analytes with concentrations between the Instrument Detection Limit (IDL) and the Reporting Limit (RL) were qualified as estimated (J). A qualifier code of "SQL-I" (Sample Quantitation Limit) was assigned to reflect the greater uncertainty in quantitative values below the RL.

Table 1: LCS Recovery Outliers and Resultant Data Qualification

Associated Samples	Analyte	%R (%)	Qualification
VOCs			
Batch R42339 (All Samples)	Vinyl Acetate	161 (50-150)	As the potential bias was considered to be high and all vinyl acetate results were reported as non-detect, data qualification was not required.

%R – Percent Recovery

PRATHER SPRINGS DATA REVIEW SUMMARY

Data Package Number: Evergreen Analytical Laboratory 08-7609

Sampling Event: October 1, 2008

Sample-specific Parameter Review? **Yes**

Laboratory Performance Parameters? **No**

Data Reviewer: Liz Kraak

Date Completed: 10/17/08

Peer Reviewer: Geoff Webb

Date Completed: 10/20/08

The table below summarizes the results presented in this data package.

Field ID	Sample Type	Lab ID	Sampling Date	Matrix	Analyses	
					VOCs (8260B)	Chloride
Ned Prather Spring	SA	08-7609-1	10/01/08	Water	X	X
Ned Prather Spring DS-440	SA	08-7609-2	10/01/08	Water	X	X
Ned Prather Cabin	SA	08-7609-3	10/01/08	Water	X	X
Spring 2	SA	08-7609-4	10/01/08	Water	X	X
Spring 2 (DUP)	FD	08-7609-5	10/01/08	Water	X	X
Spring 2 DS-100	SA	08-7609-6	10/01/08	Water	X ^M	X
Ned Prather Stock Pond	SA	08-7609-7	10/01/08	Water	X	X
Donna Stock Tank	SA	08-7609-8	10/01/08	Water	X	X
Dick Prather Cabin	SA	08-7609-9	10/01/08	Water	X	X
McKay Gulch	SA	08-7609-10	10/01/08	Water	X	X
Ned Prather Stock Pond DS-500	SA	08-7609-11	10/01/08	Water	X	X
Trip Blank	TB	08-7609-12	10/01/08	Water	X	X

Analyses:

VOCs – Volatile Organic Compounds

QC Type: SA – Sample

FD- Field Duplicate

TB – Trip Blank

X^M = Matrix spike and/ or matrix spike duplicate recovery.

The data review was conducted in accordance with the Phase I Site Investigation Work Plan – Prather Spring Investigation dated July 31, 2008.

General Overall Assessment:

- _____ Data are usable without qualification.
- X Data are usable with qualification (noted below).
- _____ Some data are unusable for any purpose (noted below).

Case Narrative Summary: Except as noted below, any of the issues noted in the laboratory case narrative potentially affecting data quality are addressed in the appropriate sections in the table below.

Review Parameter	Criteria Met?	Comments
Sample-specific Parameters	Complete with "Yes", "No", or "Not Applicable (N/A)".	For each "No" response, list what was out, associated acceptance limits, all qualified data, and bias direction or reference associated table with pertinent details.
COC & Sample Receipt	Yes	Samples were received intact and the cooler temperature was 2.0°C upon arrival at the laboratory, within the ≤6°C temperature criterion.
Holding Times	Yes	All samples were analyzed within the holding time requirements specified in the Work Plan. Data qualification was not required.
Method Blanks	Yes	Target analytes were not reported as detected within the associated method blanks. Data qualification was not required.

Review Parameter	Criteria Met?	Comments
Matrix QC <ul style="list-style-type: none"> MS/MSD Spring 2 DS-100 (VOCs, Chloride) LD Donna Stock Tank (Chloride) 	No	<p>With the exceptions summarized in Table 1, the recoveries and RPDs for the matrix spike (MS) and matrix spike duplicate (MSD) analyses were within the laboratory-determined acceptance range.</p> <p>The RPD between parent result and the laboratory duplicate results satisfied the applicable evaluation criterion.</p>
Field QC <ul style="list-style-type: none"> Field Blanks (Ambient, Rinsate, or Trip) None Field Duplicate Spring 2 (DUP) 	No	<p>With the exception of acetone, no target analytes were detected in the trip blank. Acetone was detected in the trip blank at a concentration of 3.2 µg/L. All acetone results reported at concentrations <10x the trip blank contamination were qualified as non-detect at the reported value (U TB-I).</p> <p>The field duplicate pair Spring 2/ Spring 2 (DUP) met the applicable criteria. Data qualification was not required.</p>
Surrogates	Yes	All surrogate recoveries were within the laboratory acceptance limits. Data qualification was not required.
Laboratory Control Sample	No	With the exception summarized in Table 2, LCS recoveries were within the laboratory determined acceptance limits.
Elevated RLs without associated non-detect results	No	Some VOC results in this package were analyzed at dilutions and the results were reported as non-detect at elevated RLs. These results will need to be evaluated by the end user with respect to the project objectives.
Package Completeness	Yes	
Other Parameters	Yes	Detected analytes with concentrations between the Instrument Detection Limit (IDL) and the Reporting Limit (RL) were qualified as estimated (J). A qualifier code of "SQL-I" (Sample Quantitation Limit) was assigned to reflect the greater uncertainty in quantitative values below the RL.

Table 1: MS/MSD Recovery Outliers and Resultant Data Qualification

Sample	Analyte	%R (%)	Qualification
Spring 2 DS-100	2-Chloroethylvinylether	0/ 0 (70-130)	As the percent recoveries were <10%, all 2-chloroethylvinylether results for all samples were qualified as unusable (R).
	Vinyl Acetate	159/ 163 (50-150)	As the potential bias was considered to be high and all associated vinyl acetate results were reported as non-detect, data qualification was not required.

%R – Percent Recovery

R – Rejected

Table 2: LCS Recovery Outliers and Resultant Data Qualification

Associated Samples	Analyte	%R (%)	Qualification
VOCs			
Batch R42542 (All Samples)	Vinyl Acetate	169 (50-150)	As the potential bias was considered to be high and all vinyl acetate results were reported as non-detect, data qualification was not required.

%R – Percent Recovery

PRATHER SPRINGS DATA REVIEW SUMMARY

Data Package Number: Evergreen Analytical Laboratory 08-7657

Sampling Event: October 3, 2008

Sample-specific Parameter Review? **Yes**

Laboratory Performance Parameters? **No**

Data Reviewer: Liz Kraak & Joe Capotrio

Date Completed: 10/17/08 & 11/17/08

Peer Reviewer: Geoff Webb & Sheri O'Connor

Date Completed: 10/20/08 & 11/17/08

The table below summarizes the results presented in this data package.

Field ID	Sample Type	Lab ID	Sampling Date	Matrix	Analyses						
					Metals	DRO & MRO	VOCs	SVOCs	Glycols	Oil & Grease	Inorganics
Cistern 100308	SA	08-7657-01	10/03/08	Water	X	X	X	X	X ^M	X	X ^M
Trip Blank	TB	08-7657-02	10/03/08	Water	---	---	X	---	---	---	---

Analyses:

Metals including arsenic, barium, cadmium, chromium, lead, selenium, silver, and mercury (6010B, 7470A).

DRO – Diesel Range Organics

MRO – Motor Oil Range Organics

VOCs – Volatile Organic Compounds

SVOCs – Semivolatile Organic Compounds

Inorganics including alkalinity (SM2320B), total dissolved solids (SM2540C), pH (E150.1), specific conductivity (SM2510B), nitrate + nitrite, and sulfide (SM4500-S C/F), chloride, fluoride, nitrate as N, bromide, nitrite as N, and sulfate (E300.0)

QC Type: SA – Sample

TB – Trip Blank

X^M = Matrix spike and/ or matrix spike duplicate recovery.

These samples are a subset split of native samples reported in Paragon data package 08-10-031. The data review was conducted in accordance with the Phase I Site Investigation Work Plan – Prather Spring Investigation dated July 31, 2008.

General Overall Assessment:

- _____ Data are usable without qualification.
- X Data are usable with qualification (noted below).
- _____ Some data are unusable for any purpose (noted below).

Case Narrative Summary: Except as noted below, any of the issues noted in the laboratory case narrative potentially affecting data quality are addressed in the appropriate sections in the table below.

Review Parameter	Criteria Met?	Comments
Sample-specific Parameters	Complete with "Yes", "No", or "Not Applicable (N/A)".	For each "No" response, list what was out, associated acceptance limits, all qualified data, and bias direction or reference associated table with pertinent details.
COC & Sample Receipt	No	Samples were received intact and the cooler temperatures were 2.0°C and 4.1°C upon arrival at the laboratory, within the ≤6°C temperature criterion. The laboratory inadvertently did not report fluoride for sample Cistern 100308 in the data package reported on 10/15/08. Fluoride was reported in an addendum on 11/14/08.
Holding Times	Yes	All samples were analyzed within the holding time requirements specified in the Work Plan. Data qualification was not required.
Method Blanks	No	With the exception in Table 1, target analytes were not reported as detected within the associated method blanks.

Review Parameter	Criteria Met?	Comments
Matrix QC <ul style="list-style-type: none"> MS/MSD Cistern 100308 (Glycols, Fluoride) LD Cistern 100308 (Fluoride) 	Yes	<p>The recoveries and RPDs for the matrix spike (MS) and matrix spike duplicate (MSD) analyses were within the laboratory-determined acceptance range. Data qualification was not required.</p> <p>The RPD between the parent sample result and laboratory duplicate result satisfied the applicable evaluation criteria. Data qualification was not required.</p>
Field QC <ul style="list-style-type: none"> Field Blanks (Ambient, Rinsate, or Trip) Trip Blank Field Duplicate None 	No	With the exception of acetone, no target analytes were detected in the trip blank. Acetone was detected in the trip blank at a concentration of 1.6 µg/L. As the acetone result for Cistern 100308 was reported as non-detect, data qualification was not required.
Surrogates	Yes	All surrogate recoveries were within the laboratory acceptance limits. Data qualification was not required.
Laboratory Control Sample	No	With the exception summarized in Table 2, LCS recoveries were within the laboratory determined acceptance limits.
Elevated RLs without associated non-detect results	No	Some VOC results in this package were analyzed at dilutions and the results were reported as non-detect at elevated RLs. These results will need to be evaluated by the end user with respect to the project objectives.
Package Completeness	Yes	
Other Parameters	Yes	<p>Detected analytes with concentrations between the Instrument Detection Limit (IDL) and the Reporting Limit (RL) were qualified as estimated (J). A qualifier code of "SQL-I" (Sample Quantitation Limit) was assigned to reflect the greater uncertainty in quantitative values below the RL.</p> <p>Split Samples</p> <p>Split sample evaluation criteria were not included in the Work Plan. As such, the following concentration-dependent criteria were used:</p> <ul style="list-style-type: none"> If both results were $\leq 5 \times \text{RL}$, then the absolute difference between the results should agree within $\pm 2 \times \text{RL}$ (Waters) and $\pm 3.5 \times \text{RL}$ (Soils) If both results were $\geq 5 \times \text{RL}$, then the RPD should be $\leq 30\%$ (Waters) and $\leq 50\%$ (Soils) <p>The following split samples were collected:</p> <ul style="list-style-type: none"> Cistern 100308 (Metals, DRP & MRO, VOCs, SVOCs, Glycols, Oil & Grease, and Inorganics) <p>A comparison of detected split sample results and detected parent sample results is summarized below in Table 3. As applicable, qualification has been applied to both the native and split samples.</p>

Table 1: Method Blank Outliers and Resultant Data Qualification

Sample	Analyte	Concentration	Qualification
Metals			
Cistern 100308	Barium	0.003784 mg/L	None. The associated barium result was reported at a concentration >5x the method blank contamination.
VOCs			
MB Batch R42542	Acetone	1.15 µg/L	None. The associated acetone result was reported as non-detect.

m/L – Milligrams per Liter

µg/L – Micrograms per Liter

Table 2: LCS Recovery Outliers and Resultant Data Qualification

Associated Samples	Analyte	%R (%)	Qualification
VOCs			
Batch R42542 (All Samples)	Vinyl Acetate	169 (50-150)	As the potential bias was considered to be high and all vinyl acetate results were reported as non-detect, data qualification was not required.
SVOCs			
Batch 16902	Chrysene	131 (58-130)	As the potential bias was considered to be high and the chrysene result was reported as non-detect, data qualification was not required.

%R – Percent Recovery

Table 3: Split Sample Comparison

Sample	Detected Analytes	Primary Sample Result (µg/L)	Split Sample Result (µg/L)	RL ¹ (µg/L)	Qualification
Cistern 100308	Barium	68	71	100	None. The absolute difference between the split sample results and parent sample results agrees within 2xRL.
	Bicarbonate Alkalinity	240 mg/L	238 mg/L	20 mg/L	None. The RPD between the split sample result and parent sample result was ≤30%.
	Total Alkalinity	240 mg/L	238 mg/L	20 mg/L	
	TDS	340 mg/L	370 mg/L	20 mg/L	
	Chloride	24 mg/L	19.9 mg/L	1 mg/L	
	Bromide	ND	0.0921 mg/L	0.2 mg/L	None. The absolute difference between the split sample results and parent sample results agrees within 2xRL.
	Fluoride	0.092 mg/L	ND	0.1 mg/L	
	Sulfate	51 mg/L	44.5 mg/L	1 mg/L	None. The RPDs between the split sample results and parent sample results were ≤30%.
	Benzene	ND	0.080	1	None. The absolute difference between the split sample results and parent sample results agrees within 2xRL.
	1,3,5-Trimethylbenzene	0.22	0.44	1	
	m,p-Xylene	ND	0.67	1	
	o-Xylene	0.19	0.65	1	
	2,4-Dimethylphenol	ND	2.0	9.4	
	Ethylene Glycol	3100	ND	20000	
	Oil & Grease	ND	7250	4700	

¹ RL is for primary sample.

ND – Non-detect

RPD – Relative Percent Difference

RL – Reporting Limit

mg/L – Milligrams per Liter

µg/L – Micrograms per Liter

PRATHER SPRINGS DATA REVIEW SUMMARY

Data Package Number: Evergreen Analytical Laboratory 08-7885

Sampling Event: October 8, 2008

Sample-specific Parameter Review? **Yes**

Laboratory Performance Parameters? **No**

Data Reviewer: Liz Kraak

Date Completed: 10/29/08

Peer Reviewer: Geoff Webb

Date Completed: 10/29/08

The table below summarizes the results presented in this data package.

Field ID	Sample Type	Lab ID	Sampling Date	Matrix	Analyses	
					VOCs (8260B)	Chloride (E300.0)
Ned Prather Spring	SA	08-7885-01	10/08/08	Water	X	X
Ned Prather Spring (DUP)	FD	08-7885-02	10/08/08	Water	X	X
Ned Prather Spring DS-440	SA	08-7885-03	10/08/08	Water	X	X
Ned Prather Cabin	SA	08-7885-04	10/08/08	Water	X	X
Spring 2	SA	08-7885-05	10/08/08	Water	X	X
Spring 2 DS-100	SA	08-7885-06	10/08/08	Water	X	X
Ned Prather Stock Pond	SA	08-7885-07	10/08/08	Water	X	X
Donna Stock Tank	SA	08-7885-08	10/08/08	Water	X ^M	X ^M
Dick Prather Cabin	SA	08-7885-09	10/08/08	Water	X	X
McKay Gulch	SA	08-7885-10	10/08/08	Water	X	X
Ned Prather Stock Pond DS-500	SA	08-7885-11	10/08/08	Water	X	X
Trip Blank	TB	08-7885-12	10/08/08	Water	X	---

Analyses:

VOCs – Volatile Organic Compounds

QC Type: SA – Sample

FD = Field Duplicate

TB – Trip Blank

X^M = Matrix spike and/ or matrix spike duplicate recovery.

--- Not analyzed for this parameter.

The data review was conducted in accordance with the Phase I Site Investigation Work Plan – Prather Spring Investigation dated July 31, 2008.

General Overall Assessment:

- _____ Data are usable without qualification.
- _____ Data are usable with qualification (noted below).
- X Some data are unusable for any purpose (noted below).

Case Narrative Summary: Except as noted below, any of the issues noted in the laboratory case narrative potentially affecting data quality are addressed in the appropriate sections in the table below.

Review Parameter	Criteria Met?	Comments
<i>Sample-specific Parameters</i>	Complete with "Yes", "No", or "Not Applicable (N/A)".	For each "No" response, list what was out, associated acceptance limits, all qualified data, and bias direction or reference associated table with pertinent details.
COC & Sample Receipt	Yes	Samples were received intact and the cooler temperature was 2.0°C upon arrival at the laboratory, within the ≤6°C temperature criterion.
Holding Times	Yes	All samples were analyzed within the holding time requirements specified in the Work Plan. Data qualification was not required.
Method Blanks	Yes	Target analytes were not reported as detected within the associated method blanks. Data qualification was not required.

Review Parameter	Criteria Met?	Comments
Matrix QC <ul style="list-style-type: none"> MS/MSD Donna Stock Tank (VOCs, Chloride) LD Donna Stock Tank (Chloride) 	No	<p>With the exception summarized below in Table 1, the recoveries and RPDs for the matrix spike (MS) and matrix spike duplicate (MSD) analyses were within the laboratory-determined acceptance range.</p> <p>The RPD between parent result and the laboratory duplicate result satisfied the applicable evaluation criterion.</p>
Field QC <ul style="list-style-type: none"> Field Blanks (Ambient, Rinsate, or Trip) Trip Blank Field Duplicate Ned Prather Spring (DUP) 	Yes	<p>No target analytes were detected in the trip blank. Data qualification was not required.</p> <p>The field duplicate pair Ned Prather Spring/ Ned Prather Spring (DUP) met the applicable criteria. Data qualification was not required.</p>
Surrogates	Yes	All surrogate recoveries were within the laboratory acceptance limits. Data qualification was not required.
Laboratory Control Sample	Yes	LCS recoveries were within the laboratory determined acceptance limits. Data qualification was not required.
Elevated RLs without associated non-detect results	No	Some VOC results in this package were analyzed at dilutions and the results were reported as non-detect at elevated RLs. These results will need to be evaluated by the end user with respect to the project objectives.
Package Completeness	Yes	
Other Parameters	Yes	Detected analytes with concentrations between the Instrument Detection Limit (IDL) and the Reporting Limit (RL) were qualified as estimated (J). A qualifier code of "SQL-I" (Sample Quantitation Limit) was assigned to reflect the greater uncertainty in quantitative values below the RL.

Table 1: MS/MSD Recovery Outliers and Resultant Data Qualification

Sample	Analyte	%R (Limits)	Qualification
Metals			
Donna Stock Tank	2-Chloroethylvinylether	0/ 0 (70-130)	As the percent recoveries were <10%, all sample 2-chloroethylvinylether results were qualified as unusable (R).

%R – Percent Recovery

R - Rejected

PRATHER SPRINGS DATA REVIEW SUMMARY

Data Package Number: Evergreen Analytical Laboratory 08-8073

Sampling Event: October 16 & 17, 2008

Sample-specific Parameter Review? **Yes**

Laboratory Performance Parameters? **No**

Data Reviewer: Liz Kraak

Date Completed: 11/13/08

Peer Reviewer: Sheri O'Connor

Date Completed: 11/14/08

The table below summarizes the results presented in this data package.

Field ID	Sample Type	Lab ID	Sampling Date	Matrix	Analyses			
					VOCs (8260B)	Metals	Inorganics	Methane (RSK 175)
PSMW-2D	SA	08-8073-01	10/16/08	Water	X	X	X	X
PSMW-3S	SA	08-8073-02	10/16/08	Water	X	X	X	X
PSMW-3D	SA	08-8073-03	10/16/08	Water	X	X	X	X
PSMW-3D (DUP)	FD	08-8073-04	10/16/08	Water	X	X	X	X
PSMW-11S	SA	08-8073-05	10/16/08	Water	X	X	X	X
PSMW-4S	SA	08-8073-06	10/16/08	Water	X ^m	X ^m	X ^m	X ^m
PSMW-12M	SA	08-8073-07	10/17/08	Water	X	X	X	X
PSMW-4D	SA	08-8073-08	10/17/08	Water	X	X	X	X
PSMW-5D	SA	08-8073-09	10/17/08	Water	X	X	X	X
PSMW-6R	SA	08-8073-10	10/17/08	Water	X	X	X	X
PSMW-8D	SA	08-8073-11	10/17/08	Water	X	X	X	X
PSMW-8S	SA	08-8073-12	10/17/08	Water	X	X	X	X
PSMW-10D	SA	08-8073-13	10/17/08	Water	X	X	X	X
PSMW-10S	SA	08-8073-14	10/17/08	Water	X	X	X	X
PSMW-7S	SA	08-8073-15	10/17/08	Water	X	X	X	X
PSMW-7D	SA	08-8073-16	10/17/08	Water	X	X	X	X
PSMW-9S	SA	08-8073-17	10/17/08	Water	X	X	X	X
Trip Blank	TB	08-8073-18	10/17/08	Water	X	---	---	---

Analyses:

VOCs – Volatile Organic Compounds

Metals includes Calcium, Iron, Magnesium, Manganese, Potassium, Sodium (6010B), Arsenic, Barium, Boron, Cadmium, Chromium, Copper, Lead, Selenium, and Silver (6020)

Inorganics includes Total Alkalinity, Bicarbonate Alkalinity, Carbonate Alkalinity, Hydroxide Alkalinity, Fluoride, Specific Conductivity, Total Dissolved Solids, Total Sulfide, Bromide, Chloride, Sulfate, Nitrate as N, Nitrite as N, and Nitrate + Nitrite as N.

QC Type: SA - Sample FD – Field Duplicate TB - Trip Blank m - Matrix Spike/Matrix Spike Duplicate

--- Sample not analyzed for this parameter.

The data review was conducted in accordance with the Phase I Site Investigation Work Plan – Prather Spring Investigation dated July 31, 2008.

General Overall Assessment:

- _____ Data are usable without qualification.
 _____ **X** Data are usable with qualification (noted below).
 _____ Some data are unusable for any purpose (noted below).

Case Narrative Summary: Except as noted below, any of the issues noted in the laboratory case narrative potentially affecting data quality are addressed in the appropriate sections in the table below.

Review Parameter	Criteria Met?	Comments
<i>Sample-specific Parameters</i>	Complete with "Yes", "No", or "Not Applicable (N/A)".	For each "No" response, list what was out, associated acceptance limits, all qualified data, and bias direction or reference associated table with pertinent details.
COC & Sample Receipt	No	Samples were received intact and the cooler temperature was 7.8°C upon arrival at the laboratory, above the $\leq 6^{\circ}\text{C}$ temperature criterion. As the samples were hand delivered and received on ice, data qualification was not required. The sampler inadvertently labeled sample PSMW-6R as PSMW-6D on the chain of custody. All data sheets have been corrected to reflect the proper sample nomenclature.
Holding Times	No	With the exception of nitrate as N and nitrite as N, all samples were analyzed within the holding time requirements specified in the Work Plan. All samples were received after the 48 hour holding time requirement for the nitrate as N and nitrite as N analyses. Therefore, the nitrate as N and nitrite as N results for these samples were qualified as estimated (UJ/J HT-I). In addition, the nitrate/ nitrite as N result was qualified as estimated (J HT-I) as the nitrate/ nitrite as N result was calculated from the nitrate as N and nitrite as N results.
Method Blanks	Yes	Target analytes were not reported as detected within the associated method blanks. Data qualification was not required.
Matrix QC <ul style="list-style-type: none"> MS/MSD PSMW-4S (VOCs, Total Alkalinity, Fluoride, Metals, Chloride, Nitrite as N, Bromide, Nitrate as N, Nitrate + Nitrite as N, Sulfate, Total Sulfide, Methane) LD PSMW-4S (Total Alkalinity, Specific Conductance, Fluoride, TDS, Total Sulfide) PSMW-5D (Total Alkalinity) 	No	With the exceptions summarized in Table 1, the recoveries and RPDs for the matrix spike (MS) and matrix spike duplicate (MSD) analyses were within the laboratory-determined acceptance range. The RPD between parent results and the laboratory duplicate results satisfied the applicable evaluation criterion.
Field QC <ul style="list-style-type: none"> Field Blanks (Ambient, Rinsate, or Trip) Trip Blank Field Duplicate PSMW-3D (DUP) 	No	No target analytes were detected in the trip blank sample. Data qualification was not required. With the exception of chloride, the field duplicate pair PSMW-3D/ PSMW-3D (DUP) met the applicable evaluation criteria. The RPD between the chloride results exceed the evaluation criterion of 30% with a RPD of 40%. Therefore, the chloride results for both the parent sample and field duplicate sample were qualified as estimated (J FD-I).
Surrogates	Yes	All surrogate recoveries were within the laboratory acceptance limits. Data qualification was not required.
Laboratory Control Sample	Yes	LCS recoveries were within the laboratory determined acceptance limits. Data qualification was not required.
Non-detect Results w/ Elevated RLs?	No	Some anion analyses were performed at dilutions. Several nitrite as N results were reported as non-detect at elevated RLs. Therefore, those results that were reported as non-detect at elevated RLs will need to be evaluated with respect to the project objectives.
Package Completeness	Yes	

Review Parameter	Criteria Met?	Comments
Other Parameters	Yes	<p>Detected analytes with concentrations between the Instrument Detection Limit (IDL) and the Reporting Limit (RL) were qualified as estimated (J). A qualifier code of "SQL-I" (Sample Quantitation Limit) was assigned to reflect the greater uncertainty in quantitative values below the RL.</p> <p>The anion/ cation balance for sample PSMW-5D exceeded the evaluation criterion of a percent difference $\leq 13\%$, with a percent difference of 54%. Therefore, the anion results (chloride, sulfate, carbonate alkalinity, bicarbonate alkalinity, nitrate as N, and nitrite as N) and cation results (calcium, magnesium, potassium, and sodium) for sample PSMW-5D were qualified as estimated (J CAB-I) to reflect the indeterminate bias.</p>

Table 1: MS/MSD Recovery and RPD Outliers and Resultant Data Qualification

Sample	Analyte	%Rs (Limit)	RPD (Limit)	Qualification
VOCs				
PSMW-4S	Vinyl Chloride	133/ 134 (70-130)	0.601 (30)	As the potential bias was considered to be high and all vinyl chloride results were reported as non-detect, data qualification was not required.
Metals				
PSMW-4S	Barium	68.9/ 60.9 (75-125)	2.63 (20)	As the potential bias was considered to be low, all the barium results were qualified as estimated (J MS-L).
Inorganics				
PSMW-4S	Total Sulfide	41.4/ 33.8 (60-120)	12.5 (30)	As the potential bias was considered to be low, all the total sulfide results were qualified as estimated (UJ/J MS-L).

%R – Percent Recovery

RPD – Relative Percent Difference

UJ/J – Estimated

MS – Matrix spike and/or matrix spike duplicate recovery failure.

L – Low Bias

PRATHER SPRINGS DATA REVIEW SUMMARY

Data Package Number: Evergreen Analytical Laboratory 08-8074

Sampling Event: October 16, 2008

Sample-specific Parameter Review? **Yes**

Laboratory Performance Parameters? **No**

Data Reviewer: Liz Kraak

Date Completed: 11/14/08

Peer Reviewer: Geoff Webb

Date Completed: 11/17/08

The table below summarizes the results presented in this data package.

Field ID	Sample Type	Lab ID	Sampling Date	Matrix	Analyses	
					VOCs (8260B)	Chloride
Ned Prather Spring	SA	08-8074-01	10/16/08	Water	X	X
Ned Prather Spring DS-440	SA	08-8074-02	10/16/08	Water	X	X
Ned Prather Cabin	SA	08-8074-03	10/16/08	Water	X	X
Spring 2	SA	08-8074-04	10/16/08	Water	X	X
Spring 2 (DUP)	FD	08-8074-05	10/16/08	Water	X	X
Spring 2 DS-100	SA	08-8074-06	10/16/08	Water	X	X
Ned Prather Stock Pond	SA	08-8074-07	10/16/08	Water	X	X
Donna Stock Tank	SA	08-8074-08	10/16/08	Water	X	X
Dick Prather Cabin	SA	08-8074-09	10/16/08	Water	X ^M	X ^M
McKay Gulch	SA	08-8074-10	10/16/08	Water	X	X
Ned Prather Stock Pond DS-500	SA	08-8074-11	10/16/08	Water	X	X
Trip Blank	TB	08-8074-12	10/16/08	Water	X	---

Analyses:

VOCs – Volatile Organic Compounds

QC Type: SA – Sample

FD- Field Duplicate

TB – Trip Blank

X^M = Matrix spike and/ or matrix spike duplicate recovery.

The data review was conducted in accordance with the Phase I Site Investigation Work Plan – Prather Spring Investigation dated July 31, 2008.

General Overall Assessment:

- _____ Data are usable without qualification.
- _____ Data are usable with qualification (noted below).
- X Some data are unusable for any purpose (noted below).

Case Narrative Summary: Except as noted below, any of the issues noted in the laboratory case narrative potentially affecting data quality are addressed in the appropriate sections in the table below.

Review Parameter	Criteria Met?	Comments
Sample-specific Parameters	Complete with "Yes", "No", or "Not Applicable (N/A)".	For each "No" response, list what was out, associated acceptance limits, all qualified data, and bias direction or reference associated table with pertinent details.
COC & Sample Receipt	Yes	Samples were received intact and the cooler temperature was 6.0°C upon arrival at the laboratory, within the ≤6°C temperature criterion.
Holding Times	Yes	All samples were analyzed within the holding time requirements specified in the Work Plan. Data qualification was not required.
Method Blanks	Yes	Target analytes were not reported as detected within the associated method blanks. Data qualification was not required.

Review Parameter	Criteria Met?	Comments
Matrix QC <ul style="list-style-type: none"> MS/MSD Dick Prather Cabin (VOCs, Chloride) LD None 	No	With the exceptions summarized in Table 1, the recoveries and RPDs for the matrix spike (MS) and matrix spike duplicate (MSD) analyses were within the laboratory-determined acceptance range.
Field QC <ul style="list-style-type: none"> Field Blanks (Ambient, Rinsate, or Trip) Trip Blank Field Duplicate Spring 2 (DUP) 	No	<p>No target analytes were detected in the trip blank. Data qualification was not required.</p> <p>The field duplicate pair Spring 2/ Spring 2 (DUP) met the applicable criteria. Data qualification was not required.</p>
Surrogates	Yes	All surrogate recoveries were within the laboratory acceptance limits. Data qualification was not required.
Laboratory Control Sample	Yes	LCS recoveries were within the laboratory determined acceptance limits. Data qualification was not required.
Elevated RLs without associated non-detect results	No	Some VOC results in this package were analyzed at dilutions and the results were reported as non-detect at elevated RLs. These results will need to be evaluated by the end user with respect to the project objectives.
Package Completeness	Yes	
Other Parameters	Yes	Detected analytes with concentrations between the Instrument Detection Limit (IDL) and the Reporting Limit (RL) were qualified as estimated (J). A qualifier code of "SQL-I" (Sample Quantitation Limit) was assigned to reflect the greater uncertainty in quantitative values below the RL.

Table 1: MS/MSD Recovery Outliers and Resultant Data Qualification

Sample	Analyte	%R (%)	Qualification
Dick Prather Cabin	2-Chloroethylvinylether	0/ 0 (70-130)	As the percent recoveries were <10%, all 2-chloroethylvinylether results for all samples were qualified as unusable (R).

%R – Percent Recovery

R – Rejected

PRATHER SPRINGS DATA REVIEW SUMMARY

Data Package Number: Evergreen Analytical Laboratory 08-8263

Sampling Event: October 23, 2008

Sample-specific Parameter Review? **Yes**

Laboratory Performance Parameters? **No**

Data Reviewer: Liz Kraak

Date Completed: 11/14/08

Peer Reviewer: Geoff Webb

Date Completed: 11/17/08

The table below summarizes the results presented in this data package.

Field ID	Sample Type	Lab ID	Sampling Date	Matrix	Analyses	
					VOCs (8260B)	Chloride
Ned Prather Spring	SA	08-8263-01	10/23/08	Water	X	X
Ned Prather Spring DS-440	SA	08-8263-02	10/23/08	Water	X	X
Ned Prather Cabin	SA	08-8263-03	10/23/08	Water	X	X
Spring 2	SA	08-8263-04	10/23/08	Water	X ^M	X
Spring 2 DS-100	SA	08-8263-05	10/23/08	Water	X	X
Ned Prather Stock Pond	SA	08-8263-06	10/23/08	Water	X	X
Donna Stock Tank	SA	08-8263-07	10/23/08	Water	X	X
Dick Prather Cabin	SA	08-8263-08	10/23/08	Water	X	X ^M
McKay Gulch	SA	08-8263-09	10/23/08	Water	X	X
Ned Prather Stock Pond DS-500	SA	08-8263-10	10/23/08	Water	X	X
Trip Blank	TB	08-8263-11	10/23/08	Water	X	---

Analyses:

VOCs – Volatile Organic Compounds

QC Type: SA – Sample

TB – Trip Blank

X^M = Matrix spike and/ or matrix spike duplicate recovery.

The data review was conducted in accordance with the Phase I Site Investigation Work Plan – Prather Spring Investigation dated July 31, 2008.

General Overall Assessment:

- _____ Data are usable without qualification.
- X Data are usable with qualification (noted below).
- _____ Some data are unusable for any purpose (noted below).

Case Narrative Summary: Except as noted below, any of the issues noted in the laboratory case narrative potentially affecting data quality are addressed in the appropriate sections in the table below.

Review Parameter	Criteria Met?	Comments
Sample-specific Parameters	Complete with "Yes", "No", or "Not Applicable (N/A)".	For each "No" response, list what was out, associated acceptance limits, all qualified data, and bias direction or reference associated table with pertinent details.
COC & Sample Receipt	Yes	Samples were received intact and the cooler temperature was 5.5°C upon arrival at the laboratory, within the ≤6°C temperature criterion.
Holding Times	Yes	All samples were analyzed within the holding time requirements specified in the Work Plan. Data qualification was not required.
Method Blanks	Yes	Target analytes were not reported as detected within the associated method blanks. Data qualification was not required.

Review Parameter	Criteria Met?	Comments
Matrix QC <ul style="list-style-type: none"> MS/MSD Spring 2 (VOCs) Dick Prather Cabin (Chloride) LD Ned Prather Spring (Chloride) 	No	<p>With the exceptions summarized in Table 1, the recoveries and RPDs for the matrix spike (MS) and matrix spike duplicate (MSD) analyses were within the laboratory-determined acceptance range.</p> <p>The RPD between parent result and the laboratory duplicate result satisfied the applicable evaluation criterion.</p>
Field QC <ul style="list-style-type: none"> Field Blanks (Ambient, Rinsate, or Trip) Trip Blank Field Duplicate None 	No	<p>With the exception of acetone, no target analytes were detected in the trip blank. Acetone was detected in the trip blank at a concentration of 3.9 µg/L. Associated acetone results reported at concentrations <10x the trip blank contamination were qualified as non-detect (U TB-I) at the reporting limit or reported value, whichever is greater.</p>
Surrogates	Yes	All surrogate recoveries were within the laboratory acceptance limits. Data qualification was not required.
Laboratory Control Sample	No	With the exceptions listed below in Table 2, LCS recoveries were within the laboratory determined acceptance limits.
Elevated RLs without associated non-detect results	No	Some VOC results in this package were analyzed at dilutions and the results were reported as non-detect at elevated RLs. These results will need to be evaluated by the end user with respect to the project objectives.
Package Completeness	Yes	
Other Parameters	Yes	Detected analytes with concentrations between the Instrument Detection Limit (IDL) and the Reporting Limit (RL) were qualified as estimated (J). A qualifier code of "SQL-I" (Sample Quantitation Limit) was assigned to reflect the greater uncertainty in quantitative values below the RL.

Table 1: MS/MSD Recovery Outliers and Resultant Data Qualification

Sample	Analyte	%R (Limits)	Qualification
Spring 2	Carbon Disulfide	134/ 130 (70-130)	As the potential bias was considered to be high and all associated sample carbon disulfide and vinyl acetate results were reported as non-detect, data qualification was not required.
	Vinyl Acetate	173/ 165 (50-150)	
	2-Chloroethylvinylether	23/ 14.4 (70-130)	As the potential bias was considered to be low, all 2-chloroethylvinylether results were qualified as estimated (UJ/J MS-L).

%R – Percent Recovery

UJ/J – Estimated

MS – Matrix spike and/or matrix spike duplicate recovery.

L – Low Bias

Table 2: LCS Recovery Outliers and Resultant Data Qualification

Associated Sample	Analyte	%R (Limits)	Qualification
Batch R43219	Carbon Disulfide	133 (70-130)	As the potential bias was considered to be high and all associated sample carbon disulfide and vinyl acetate results were reported as non-detect, data qualification was not required.
	Vinyl Acetate	166 (50-150)	

%R – Percent Recovery

PRATHER SPRINGS DATA REVIEW SUMMARY

Data Package Number: Evergreen Analytical Laboratory 08-8409

Sampling Event: October 29, 2008

Sample-specific Parameter Review? **Yes**

Laboratory Performance Parameters? **No**

Data Reviewer: Liz Kraak

Date Completed: 11/17/08

Peer Reviewer: Sheri O'Connor

Date Completed: 11/18/08

The table below summarizes the results presented in this data package.

Field ID	Sample Type	Lab ID	Sampling Date	Matrix	Analyses	
					VOCs (8260B)	Chloride
Ned Prather Spring	SA	08-8409-01	10/29/08	Water	X	X
Ned Prather Spring DS-440	SA	08-8409-02	10/29/08	Water	X	X
Ned Prather Cabin	SA	08-8409-03	10/29/08	Water	X	X
Spring 2	SA	08-8409-04	10/29/08	Water	X	X
Spring 2 DS-100	SA	08-8409-05	10/29/08	Water	X	X
Ned Prather Stock Pond	SA	08-8409-06	10/29/08	Water	X	X
Donna Stock Tank	SA	08-8409-07	10/29/08	Water	X ^M	X ^M
McKay Gulch	SA	08-8409-08	10/29/08	Water	X	X
Dick Prather Cabin	SA	08-8409-09	10/29/08	Water	X	X
Ned Prather Stock Pond DS-500	SA	08-8409-10	10/29/08	Water	X	X
Ned Prather Spring (DUP)	FD	08-8409-11	10/29/08	Water	X	X

Analyses:

VOCs – Volatile Organic Compounds

QC Type: SA – Sample

FD – Field Duplicate

X^M = Matrix spike and/ or matrix spike duplicate recovery.

The data review was conducted in accordance with the Phase I Site Investigation Work Plan – Prather Spring Investigation dated July 31, 2008.

General Overall Assessment:

- _____ Data are usable without qualification.
- X Data are usable with qualification (noted below).
- _____ Some data are unusable for any purpose (noted below).

Case Narrative Summary: Except as noted below, any of the issues noted in the laboratory case narrative potentially affecting data quality are addressed in the appropriate sections in the table below.

Review Parameter	Criteria Met?	Comments
<i>Sample-specific Parameters</i>	Complete with "Yes", "No", or "Not Applicable (N/A)".	For each "No" response, list what was out, associated acceptance limits, all qualified data, and bias direction or reference associated table with pertinent details.
COC & Sample Receipt	Yes	Samples were received intact and the cooler temperatures were 2.4°C and 3.1°C upon arrival at the laboratory, within the ≤6°C temperature criterion.
Holding Times	Yes	All samples were analyzed within the holding time requirements specified in the Work Plan. Data qualification was not required.
Method Blanks	Yes	Target analytes were not reported as detected within the associated method blanks. Data qualification was not required.

Review Parameter	Criteria Met?	Comments
Matrix QC <ul style="list-style-type: none"> MS/MSD Donna Stock Tank (VOCs, Chloride) LD 	No	With the exceptions summarized in Table 1, the recoveries and RPDs for the matrix spike (MS) and matrix spike duplicate (MSD) analyses were within the laboratory-determined acceptance range. The RPD between parent result and the laboratory duplicate result satisfied the applicable evaluation criterion.
Field QC <ul style="list-style-type: none"> Field Blanks (Ambient, Rinsate, or Trip) None Field Duplicate Ned Prather Spring (DUP) 	Yes	A trip blank was inadvertently not collected with this sampling event. The field duplicate pair Ned Prather Spring/ Ned Prather Spring (DUP) met the applicable criteria. Data qualification was not required.
Surrogates	Yes	All surrogate recoveries were within the laboratory acceptance limits. Data qualification was not required.
Laboratory Control Sample	No	With the exceptions listed below in Table 2, LCS recoveries were within the laboratory determined acceptance limits.
Elevated RLs without associated non-detect results	No	Some VOC results in this package were analyzed at dilutions and the results were reported as non-detect at elevated RLs. These results will need to be evaluated by the end user with respect to the project objectives.
Package Completeness	Yes	
Other Parameters	Yes	Detected analytes with concentrations between the Instrument Detection Limit (IDL) and the Reporting Limit (RL) were qualified as estimated (J). A qualifier code of "SQL-I" (Sample Quantitation Limit) was assigned to reflect the greater uncertainty in quantitative values below the RL.

Table 1: MS/MSD Recovery Outliers and Resultant Data Qualification

Sample	Analyte	%R (Limits)	Qualification
Donna Stock Tank	Vinyl Chloride	150/ 149 (70-130)	As the potential bias was considered to be high and all associated sample vinyl chloride results were reported as non-detect, data qualification was not required.

%R – Percent Recovery

Table 2: LCS Recovery Outliers and Resultant Data Qualification

Associated Sample	Analyte	%R (Limits)	Qualification
Batch R43422	Vinyl Acetate	145 (70-130)	As the potential bias was considered to be high and all associated sample vinyl acetate results were reported as non-detect, data qualification was not required.

%R – Percent Recovery

PRATHER SPRINGS DATA REVIEW SUMMARY

Data Package Number: Evergreen Analytical Laboratory 08-8584

Sampling Event: November 4, 2008

Sample-specific Parameter Review? **Yes**

Laboratory Performance Parameters? **No**

Data Reviewer: Liz Kraak

Date Completed: 11/14/08

Peer Reviewer: Geoff Webb

Date Completed: 11/17/08

The table below summarizes the results presented in this data package.

Field ID	Sample Type	Lab ID	Sampling Date	Matrix	Analyses		
					BTEX	TVH-Gasoline (8015)	TEH - Diesel (8015)
Ned Prather Spring	SA	08-8584-01	11/04/08	Water	X	X	

Analyses:

BTEX - Benzene, Toluene, Ethylbenzene, m,p-Xylene, and o-Xylene

TVH - Total Volatile Hydrocarbons

TEH - Total Extractable Hydrocarbons

QC Type: SA - Sample X^M - Matrix spike and/ or matrix spike duplicate recovery.

The data review was conducted in accordance with the Phase I Site Investigation Work Plan – Prather Spring Investigation dated July 31, 2008.

General Overall Assessment:

- ☒ Data are usable without qualification.
- ☐ Data are usable with qualification (noted below).
- ☐ Some data are unusable for any purpose (noted below).

Case Narrative Summary: Except as noted below, any of the issues noted in the laboratory case narrative potentially affecting data quality are addressed in the appropriate sections in the table below.

Review Parameter	Criteria Met?	Comments
Sample-specific Parameters	Complete with "Yes", "No", or "Not Applicable (N/A)".	For each "No" response, list what was out, associated acceptance limits, all qualified data, and bias direction or reference associated table with pertinent details.
COC & Sample Receipt	Yes	Samples were received intact and the cooler temperature was 2.9°C upon arrival at the laboratory, within the ≤6°C temperature criterion.
Holding Times	Yes	All samples were analyzed within the holding time requirements specified in the Work Plan. Data qualification was not required.
Method Blanks	Yes	Target analytes were not reported as detected within the associated method blanks. Data qualification was not required.
Matrix QC <ul style="list-style-type: none"> MS/MSD None LD None 	N/A	Since a sample from this work order was not the selected quality control sample, quality control results were not included in this report.
Field QC <ul style="list-style-type: none"> Field Blanks (Ambient, Rinsate, or Trip) None Field Duplicate None 	No	A trip blank was inadvertently not collected with this sampling event.

Review Parameter	Criteria Met?	Comments
Surrogates	No	With the exception noted below in Table 1, surrogate recoveries were within the laboratory acceptance limits.
Laboratory Control Sample	Yes	LCS recoveries were within the laboratory determined acceptance limits. Data qualification was not required.
Elevated RLs without associated non-detect results	No	Some BTEX results in this package were analyzed at dilutions and the results were reported as non-detect at elevated RLs. These results will need to be evaluated by the end user with respect to the project objectives.
Package Completeness	Yes	
Other Parameters	Yes	Detected analytes with concentrations between the Instrument Detection Limit (IDL) and the Reporting Limit (RL) were qualified as estimated (J). A qualifier code of "SQL-I" (Sample Quantitation Limit) was assigned to reflect the greater uncertainty in quantitative values below the RL.

Table 1: Surrogate Recovery Outliers and Resultant Data Qualification

Sample	Analyte	%R (Limits)	Qualification
LCS Batch R43296	TVH - Gasoline	173 (60-140)	None. Data qualification was not issued on the basis of quality control sample surrogate recovery failures.

%R – Percent Recovery

TVH – Total Volatile Hydrocarbons

PRATHER SPRINGS DATA REVIEW SUMMARY

Data Package Number: Evergreen Analytical Laboratory 08-5544, 08-5418, 08-5309, 08-5218, 08-5117, 08-5011, 08-4774, 08-4611, 08-4339, 08-4235, 08-3842, 08-3744

Sampling Event: May 2008- August 2008

Sample-specific Parameter Review? **Yes**

Laboratory Performance Parameters? **No**

Data Reviewer: Liz Kraak

Date Completed: 08/12/08

Peer Reviewer: Geoff Webb

Date Completed: 08/14/08

The table below summarizes the results presented in this data package.

Field ID	Sample Type	Lab ID	Sampling Date	Matrix	Analyses					
					VOCs (8260B)	GRO (8015B)	Anions (EPA 300.0)	BTEX (8021)	Inorganics	Methane (RSK 175)
08-5544										
Prather Spring	SA	08-5544-01	8/1/08	Water	X ^m	---	X ^{m,2}	---	---	---
Prather Spring Upgradient	SA	08-5544-02	8/1/08	Water	X	---	X ²	---	---	---
Stock Pond	SA	08-5544-03	8/1/08	Water	X	---	X ²	---	---	---
Stock Tank	SA	08-5544-04	8/1/08	Water	X	---	X ²	---	---	---
Dick Prather Cabin	SA	08-5544-05	8/1/08	Water	X	---	X ²	---	---	---
McKay Gulch	SA	08-5544-06	8/1/08	Water	X	---	X ²	---	---	---
Ned Prather Cabin	SA	08-5544-07	8/1/08	Water	X	---	X ²	---	---	---
Ned Prather Cabin (D)	FD	08-5544-08	8/1/08	Water	X	---	X ²	---	---	---
Stock Pond Discharge	SA	08-5544-09	8/1/08	Water	X	---	X ²	---	---	---
Spring 2A	SA	08-5544-10	8/1/08	Water	X	---	X ²	---	---	---
Spring 2	SA	08-5544-11	8/1/08	Water	X	---	X ²	---	---	---
Trip Blank	TB	08-5544-12	8/1/08	Water	---	---	---	---	---	---
08-5418										
Prather Spring	SA	08-5418-01	7/29/08	Water	X ^m	---	X ^m	---	---	---
Prather Spring Upgradient	SA	08-5418-02	7/29/08	Water	X	---	X	---	---	---
Ned Prather Cabin	SA	08-5418-03	7/29/08	Water	X	---	X	---	---	---
Ned Prather Cabin (D)	FD	08-5418-04	7/29/08	Water	X	---	X	---	---	---
Spring 2	SA	08-5418-05	7/29/08	Water	X	---	X	---	---	---
Stock Tank	SA	08-5418-06	7/29/08	Water	X	---	X	---	---	---
Dick Prather Cabin	SA	08-5418-07	7/29/08	Water	X	---	X	---	---	---
McKay Gulch	SA	08-5418-08	7/29/08	Water	X	---	X	---	---	---
Stock Pond	SA	08-5418-09	7/29/08	Water	X	---	X	---	---	---
Stock Pond Discharge	SA	08-5418-10	7/29/08	Water	X	---	X	---	---	---
08-5309										
Prather Spring	SA	08-5309-01	7/24/08	Water	X ^m	---	X ^m	---	---	---
Prather Spring Upgradient	SA	08-5309-02	7/24/08	Water	X	---	X	---	---	---
Ned Prather Cabin	SA	08-5309-03	7/24/08	Water	X	---	X	---	---	---
Ned Prather Cabin (D)	FD	08-5309-04	7/24/08	Water	X	---	X	---	---	---
Spring 2	SA	08-5309-05	7/24/08	Water	X	---	X	---	---	---
Stock Pond	SA	08-5309-06	7/24/08	Water	X	---	X	---	---	---
Stock Tank	SA	08-5309-07	7/24/08	Water	X	---	X	---	---	---
Dick Prather Cabin	SA	08-5309-08	7/24/08	Water	X	---	X	---	---	---
McKay Gulch	SA	08-5309-09	7/24/08	Water	X	---	X	---	---	---
Stock Pond Discharge	SA	08-5309-10	7/24/08	Water	X	---	X	---	---	---
08-5218										
Prather Spring Upgradient	SA	08-5218-01	7/22/08	Water	X	---	X	---	---	---
Stock Pond Discharge	SA	08-5218-02	7/22/08	Water	X	---	X	---	---	---
Prather Spring	SA	08-5218-03	7/22/08	Water	X	---	X ^m	---	X	X ^m
Ned Prather Cabin	SA	08-5218-04	7/22/08	Water	X	---	X	---	---	---
Dick Prather Cabin	SA	08-5218-05	7/22/08	Water	X	---	X ^m	---	---	---
Stock Tank	SA	08-5218-06	7/22/08	Water	X	---	X	---	---	---

Field ID	Sample Type	Lab ID	Sampling Date	Matrix	Analyses					
					VOCs (8260B)	GRO (8015B)	Anions (EPA 300.0)	BTEX (8021)	Inorganics	Methane (RSK 175)
McKay Gulch	SA	08-5218-07	7/22/08	Water	X ^m	---	X	---	---	---
Ned Prather Cabin (D)	FD	08-5218-08	7/22/08	Water	X	---	X	---	---	---
Spring 2	SA	08-5218-09	7/22/08	Water	X	---	X	---	---	---
Stock Pond	SA	08-5218-10	7/22/08	Water	X	---	X	---	---	---
Trip Blank	TB	08-5218-11	7/22/08	Water	X	---	X	---	---	---
08-5117										
Prather Spring	SA	08-5117-01	7/17/08	Water	X	---	X	---	---	---
Ned Prather Cabin	SA	08-5117-02	7/17/08	Water	X	---	X	---	---	---
Spring 2	SA	08-5117-03	7/17/08	Water	X	---	X	---	---	---
Dick Prather Cabin	SA	08-5117-04	7/17/08	Water	X	---	X	---	---	---
Stock Pond	SA	08-5117-05	7/17/08	Water	X	---	X	---	---	---
Stock Pond Discharge	SA	08-5117-06	7/17/08	Water	X	---	X	---	---	---
Stock Tank	SA	08-5117-07	7/17/08	Water	X	---	X	---	---	---
Prather Stream Upgradient	SA	08-5117-08	7/17/08	Water	X	---	X	---	---	---
McKay Gulch	SA	08-5117-09	7/17/08	Water	X	---	X	---	---	---
08-5011										
Prather Spring	SA	08-5011-01	7/16/08	Water	X	---	X	---	---	---
Prather Stream Upgradient	SA	08-5011-02	7/16/08	Water	X	---	X	---	---	---
Ned Prather Cabin	SA	08-5011-03	7/16/08	Water	X	---	X	---	---	---
Spring 2	SA	08-5011-04	7/16/08	Water	X	---	X	---	---	---
Stock Tank	SA	08-5011-05	7/16/08	Water	X	---	X	---	---	---
Stock Pond	SA	08-5011-06	7/16/08	Water	X	---	X	---	---	---
Dick Prather Cabin	SA	08-5011-07	7/16/08	Water	X	---	X	---	---	---
McKay Gulch	SA	08-5011-08	7/16/08	Water	X	---	X	---	---	---
Stock Pond Discharge	SA	08-5011-09	7/16/08	Water	X	---	X	---	---	---
08-4774										
Cabin 1 Overflow Pipe	SA	08-4774-01	7/8/08	Water	---	---	X	X	---	---
Mid. Pt. Cabin 1 & Overflow Pipe	SA	08-4774-01	7/8/08	Water	---	---	X	X ^m	---	---
Cabin 1 Discharge Pipe	SA	08-4774-01	7/8/08	Water	---	---	X	X	---	---
Cabin 1 Pond Outlet	SA	08-4774-01	7/8/08	Water	---	---	X	X	---	---
Mid. Pt. Cabin 2 & Pond Outlet	SA	08-4774-01	7/8/08	Water	---	---	X	X	---	---
Cabin 2 Piping	SA	08-4774-01	7/8/08	Water	---	---	X	X	---	---
08-4611										
Cabin 1 Spring Overflow	SA	08-4611-01	7/1/08	Water	---	---	X	X	---	---
Mid. Pt. Overflow & Cabin 1	SA	08-4611-02	7/1/08	Water	---	---	X	X	---	---
Cabin 1 Discharge Pipe	SA	08-4611-03	7/1/08	Water	---	---	X	X	---	---
Cabin 1 Pond Outlet	SA	08-4611-04	7/1/08	Water	---	---	X	X	---	---
Mid. Pt. Cabin 2 & Pond Outlet	SA	08-4611-05	7/1/08	Water	---	---	X	X	---	---
Cabin 2 Piping	SA	08-4611-06	7/1/08	Water	---	---	X	X	---	---
08-4339										
Inlet	SA	08-4339-01	6/23/08	Water	---	---	X	X	---	---
Mid. Pt. Inlet & Cabin 1	SA	08-4339-02	6/23/08	Water	---	---	X	X	---	---
Cabin 1 Discharge Pipe	SA	08-4339-03	6/23/08	Water	---	---	X	X	---	---
Cabin 1 Pond Outlet	SA	08-4339-04	6/23/08	Water	---	---	X	X	---	---
Cabin 2 Piping	SA	08-4339-05	6/23/08	Water	---	---	X	X	---	---
Mid. Pt. Cabin 2 & P. Outlet	SA	08-4339-06	6/23/08	Water	---	---	X	X ^m	---	---
08-4235										
Cabin 2 Piping	SA	08-4235-01	6/18/08	Water	---	---	---	X ^m	---	X
Cabin 1 Discharge Pipe	SA	08-4235-02	6/18/08	Water	---	---	---	X	---	X
Spring Inlet Pipe	SA	08-4235-03	6/18/08	Water	---	---	---	X	---	X
08-3842										

Field ID	Sample Type	Lab ID	Sampling Date	Matrix	Analyses					
					VOCs (8260B)	GRO (8015B)	Anions (EPA 300.0)	BTEX (8021)	Inorganics	Methane (RSK 175)
Cabin Tap	SA	08-3842-01	6/3/08	Water	---	X	X ³	X	X ^m	X ^m
Spring	SA	08-3842-02	6/3/08	Water	---	X	X ³	X	X	X
08-3744										
Spring	SA	08-3744-01	6/2/08	Water	---	X	X ³	X	X	X
Cabin Tap	SA	08-3744-02	6/2/08	Water	---	X	X ³	X	X	X
Spring	SA	08-3744-03	6/2/08	Water	---	X	X ³	X	X	X
Cabin Tap	SA	08-3744-04	6/2/08	Water	---	X	X ³	X	X	X
Spring	SA	08-3744-05	6/2/08	Water	---	X	X ³	X	X	X
Cabin Tap	SA	08-3744-06	6/2/08	Water	---	X	X ³	X	X	X

Analyses:

VOCs – Volatile Organic Compounds

GRO – Gasoline Range Organics

Anions – Chloride, Nitrate, Nitrite

BTEX – Benzene, Toluene, Ethylbenzene, m,p-Xylene, o-Xylene

Inorganics – Total Dissolved Solids (SM2545C)

QC Type: SA - Sample

TB - Trip Blank

FD – Field Duplicate

m - Matrix Spike/Matrix Spike Duplicate

--- Sample not analyzed for this parameter.

¹ Per client request, the VOC analysis was placed on hold for the trip blank.² The anion analyses included chloride only.³ The anion analyses included nitrate and nitrite only.

The data review was conducted in accordance with the Data Validation SOP included as Attachment B to the Phase I Site Investigation Work Plan – Prather Spring Investigation dated July 31, 2008.

General Overall Assessment:

- _____ Data are usable without qualification.
- _____ Data are usable with qualification (noted below).
- X Some data are unusable for any purpose (noted below).

Case Narrative Summary: Except as noted below, any of the issues noted in the laboratory case narrative potentially affecting data quality are addressed in the appropriate sections in the table below.

Review Parameter	Criteria Met?	Comments
Sample-specific Parameters	Complete with "Yes", "No", or "Not Applicable (N/A)".	For each "No" response, list what was out, associated acceptance limits, all qualified data, and bias direction or reference associated table with pertinent details.
COC & Sample Receipt	Yes	Samples were received intact and the cooler temperatures were 4.3°C, 1.7°C, 1.7°C, 1.2°C, 3.0°C, 1.1°C, 2.0°C, 2.0°C, 2.9°C, 1.5°C, and 3.4°C upon arrival at the laboratory, within the ≤6°C temperature criterion.
Holding Times	No	With the exceptions summarized below in Table 1, all samples were analyzed within the holding time requirements specified in the Work Plan.
Method Blanks	Yes	Target analytes were not reported as detected within the associated method blanks. Data qualification was not required.

Review Parameter	Criteria Met?	Comments
Matrix QC <ul style="list-style-type: none"> MS/MSD <ul style="list-style-type: none"> 08-5544 Prather Spring (VOCs, Anions – Chloride only) 08-5418 Prather Spring (VOCs, Anions) 08-5309 Prather Spring (VOCs, Anions) 08-5218 Prather Spring (Anions, Methane) Dick Prather Cabin (Anions) McKay Gulch (VOCs) 08-4774 Mid. Pt. Cabin 1 & Overflow Pipe (BTEX) 08-4339 Mid. Pt. Cabin 2 & P. Outlet (BTEX) 08-4235 Cabin 2 Piping (BTEX) 08-3842 Cabin Tap (Inorganics, methane) LD <ul style="list-style-type: none"> 08-5117 Ned Prather Cabin (Anions) 08-5218 Ned Prather Cabin (Anions) 08-5309 Ned Prather Cabin (Anions) 08-5418 Ned Prather Cabin (Anions) 08-5544 Stock Pond (Anions – Chloride only) 	No	<p>With the exceptions summarized below in Table 2, the recoveries and RPDs for the matrix spike (MS) and matrix spike duplicate (MSD) analyses were within the laboratory-determined acceptance range.</p> <p>The RPDs for the laboratory duplicate analyses were within the applicable acceptance criteria. Data qualification was not required.</p>
Field QC <ul style="list-style-type: none"> Field Blanks (Ambient, Rinsate, or Trip) Trip Blank (7/22/08) Field Duplicate Ned Prather Cabin/ Ned Prather Cabin (D) 	Yes	<p>No target analytes were reported as detected in the trip blank sample. Data qualification was not required.</p> <p>The field duplicate pair Ned Prather Cabin/ Ned Prather Cabin (D) was collected each time during four sampling events: 8/1/08, 7/29/08, 7/24/08, and 7/22/08. All field duplicate results met the applicable criteria. Data qualification was not required.</p>
Surrogates	No	With the exceptions summarized below in Table 3, all surrogate recoveries were within the laboratory acceptance limits.
Laboratory Control Sample	Yes	LCS recoveries were within the laboratory determined acceptance limits. Data qualification was not required.
Non-detect Results w/ Elevated RLs?	No	The VOC, BTEX, nitrate, and nitrite analyses were performed at dilutions for some samples. Several results were reported as non-detect at elevated RLs. Therefore, these results that were reported as non-detect at elevated RLs will need to be evaluated with respect to the project objectives.
Package Completeness	Yes	
Other Parameters	Yes	Detected analytes with concentrations between the Instrument Detection Limit (IDL) and the Reporting Limit (RL) were qualified as estimated (J). A qualifier code of "SQL-I" (Sample Quantitation Limit) was assigned to reflect the greater uncertainty in quantitative values below the RL.

Table 1: Holding Time Outliers and Resultant Data Qualification

Samples	Analyte	Holding Time Criteria	Qualification
08-3744			
Spring (08-3744-01)	Nitrate as N	48 hours	The nitrate as N and nitrite as N results for these samples were qualified as estimated (J HT-I).
Cabin Tap (08-3744-02)	Nitrite as N		
Spring (08-3744-03)			
Cabin Tap (08-3744-04)			

J – Estimated HT – Holding time I – Indeterminate Bias

Table 2: MS/MSD Recovery and RPD Outliers and Resultant Data Qualification

Associated Sample	Analyte	Recovery (Limits)	RPD (Limit)	Qualification
08-5544				
Prather Spring	Total Xylene	134/135 (36-132)	1.89 (30)	As the potential bias was considered to be high, the total xylene result for sample Prather Spring was qualified as estimated (J MS-H).
	2-Chloroethylvinylether ¹	21.3/ 16.1 (20-168)	83.8 (30)	As the potential bias was considered to be low, the 2-chloroethylvinylether result for sample Prather Spring was qualified as estimated (UJ MS, D-L).
08-5418				
Prather Spring	2-Chloroethylvinylether ¹	13.4/ 10.9 (20-168)	20.4 (30)	As the potential bias was considered to be low, the 2-chloroethylvinylether result for sample Prather Spring was qualified as estimated (UJ MS, D-L).
08-5309				
Prather Springs	2-Chloroethylvinylether ¹	0/ 0 (20-168)	0 (30)	As the MS/MSD percent recoveries were <10%, the 2-chloroethylvinylether result for sample Prather Spring was qualified as unusable (R).
08-5218				
McKay Gulch	2-Chloroethylvinylether ¹	0/ 0 (20-168)	0 (30)	As the MS/MSD percent recoveries were <10%, the 2-chloroethylvinylether result for sample McKay gulch was qualified as unusable (R).

RPD – Relative percent difference. UJ/J – Estimated MS – Matrix spike and/or matrix spike duplicate recovery failure.

D – Duplicate failure. H – High Bias L – Low Bias R – Rejected

¹ Due to the acid preservation 2-chloroethylvinylether does not recover well, which is evident by the low matrix spike recoveries. As all the recoveries were biased low and four recoveries were <10%, parent sample results were qualified as indicated in Table 1 and all other 2-chloroethylvinylether results were qualified as estimated (J/UJ MS-L).

Table 3: Surrogate Recovery Outliers and Resultant Data Qualification

Sample	Surrogate	%R (Limits)	Qualification
08-3744			
GRO LCS	1,2,4-Trichlorobenzene	143 (60-140)	None. As this is a QC sample, data qualification based on surrogate recovery failure is not necessary.

GRO – Gasoline Range Organics

LCS – Laboratory Control Spike

%R – Percent Recovery