



Table 6.1 - PCE Concentration Trend Analysis, Q4 2006
Vassar Street / E Plumb Lane Plume Subregion Key Wells

Well Designation	Mann-Kendall Analysis Trend Direction at 90% Confidence		Graph of PCE Concentration vs. Time	Remarks
	2001 to 2003 Trend	2004 to 2006 Trend		
CTM18S	No Trend	DECREASING		Decreasing trend since March 2004. Possible correlation between increasing water levels since winter 2004 and decreasing concentrations.
CTM48	n<4	DECREASING		Overall decreasing trend since December 2003. No clear correlation between hydrograph and concentrations.
CTM52	n<4	No Trend		Decreasing trend since September 2004.



Table 6.1 - PCE Concentration Trend Analysis, Q4 2006
Vassar Street / E Plumb Lane Plume Subregion Key Wells

Well Designation	Mann-Kendall Analysis Trend Direction at 90% Confidence		Graph of PCE Concentration vs. Time	Remarks
	2001 to 2003 Trend	2004 to 2006 Trend		
USGSLISTON	No Data	INCREASING		Increasing trend is relatively slight; concentrations relatively constant since 2004.
USGSWOOSTER	n<4	INCREASING		Increasing trend since March 2005 although slight decrease seen in Sept & Dec 2006 from June 2006.
CTM51	n<4	No Trend		Concentrations relatively constant since March 2004.



Table 6.1 - PCE Concentration Trend Analysis, Q4 2006
Vassar Street / E Plumb Lane Plume Subregion Key Wells

Well Designation	Mann-Kendall Analysis Trend Direction at 90% Confidence		Graph of PCE Concentration vs. Time	Remarks
	2001 to 2003 Trend	2004 to 2006 Trend		
CTM60	n<4	No Trend		Concentrations relatively constant since June 2004.
CTM46	n<4	DECREASING		Decreasing trend since June 2003 <i>although an increase in concentration was detected in Dec 2006.</i>
CTM62	n<4	No Trend		Decreasing trend since September 2004 <i>although a spike in concentration observed in Sept 2006.</i>

Notes: n<4:Mann-Kendall trend analysis cannot be performed on data sets smaller than four samples.



Table 6.2 - PCE Concentration Trend Analysis, Q4 2006
South Reno Plume Subregion Key Wells

Well Designation	Mann-Kendall Analysis Trend Direction at 90% Confidence		Graph of PCE Concentration vs. Time	Remarks
	2001 to 2003 Trend	2004 to 2006 Trend		
CTM33D	DECREASING	No Trend		Relatively constant concentrations since 2004. No clear correlation between concentrations and hydrograph.
CTM17D	DECREASING	INCREASING		Increasing trend since June 2005. Possible correlation between water levels and concentrations since 2004.
CORBETT	INCREASING	No Trend		Relatively constant concentrations since 2004.

Notes: n<4: Mann-Kendall trend analysis cannot be performed on data sets smaller than four samples.



Table 6.3 - PCE Concentration Trend Analysis, Q4 2006
West 4th Street Plume Subregion Key Wells

Well Designation	Mann-Kendall Analysis Trend Direction at 90% Confidence		Graph of PCE Concentration vs. Time	Remarks
	2001 to 2003 Trend	2004 to 2006 Trend		
RETRACP2	No Data	No Trend		Concentrations constant (ND) since 2004.
CTM31S	No Trend	No Trend		Relatively constant concentrations since 2001.
CTM28S	No Trend	No Trend		Variable concentrations with no sustained trend since 2004. No clear correlation between hydrographs and concentrations.



Table 6.3 - PCE Concentration Trend Analysis, Q4 2006
West 4th Street Plume Subregion Key Wells

Well Designation	Mann-Kendall Analysis Trend Direction at 90% Confidence		Graph of PCE Concentration vs. Time	Remarks
	2001 to 2003 Trend	2004 to 2006 Trend		
CTM37S	DECREASING	No Trend		Concentrations relatively constant since 2004. Possible correlation between hydrograph and concentrations
CTM3S	INCREASING	No Trend		Variable concentrations with no sustained trend since 2004. No clear correlation between hydrographs and concentrations.
CTM6S	No Trend	No Trend		Relatively constant concentrations since 2003.

Notes: n<4: Mann-Kendall trend analysis cannot be performed on data sets smaller than four samples.



Table 6.4 - PCE Concentration Trend Analysis, Q4 2006
Downtown Reno Plume Subregion Key Wells

Well Designation	Mann-Kendall Analysis Trend Direction at 90% Confidence		Graph of PCE Concentration vs. Time	Remarks
	2001 to 2003 Trend	2004 to 2006 Trend		
MW6ND	n<4	No Trend		Relatively constant concentrations since June 2004.
MW10ND	n<4	No Trend		Increased concentration since Mar 2006 with a slight decrease in Dec 2006.
MW1ND	n<4	No Trend		Flat trend (ND) since December 2003.



Table 6.4 - PCE Concentration Trend Analysis, Q4 2006
Downtown Reno Plume Subregion Key Wells

Well Designation	Mann-Kendall Analysis Trend Direction at 90% Confidence		Graph of PCE Concentration vs. Time	Remarks
	2001 to 2003 Trend	2004 to 2006 Trend		
HIGH	DECREASING	DECREASING		Concentrations relatively constant since January 2004.
MORRILL	No Trend	DECREASING		Overall relatively constant concentrations since 2004.
4THST	No Trend	n<4		Relatively constant concentrations with one minor spike in 2001.



Table 6.4 - PCE Concentration Trend Analysis, Q4 2006
Downtown Reno Plume Subregion Key Wells

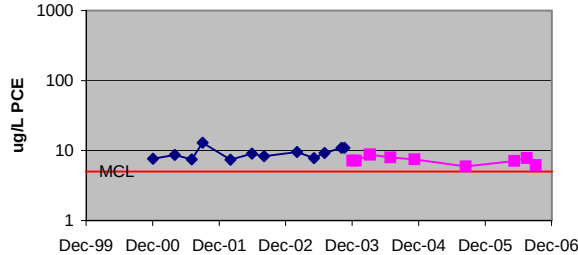
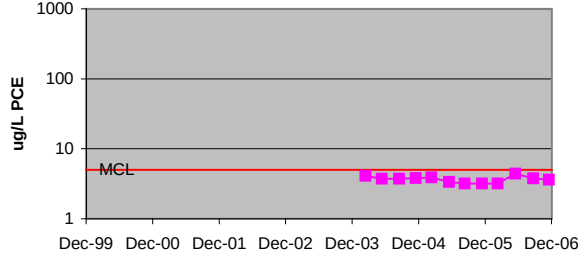
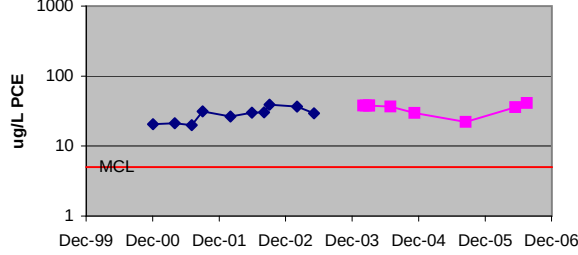
Well Designation	Mann-Kendall Analysis Trend Direction at 90% Confidence		Graph of PCE Concentration vs. Time	Remarks
	2001 to 2003 Trend	2004 to 2006 Trend		
KIETZKE	INCREASING	No Trend		Overall relatively constant concentrations since January 2001.
COURTHOUSE	No Data	No Trend		Relatively constant concentrations since March 2004.
MILL	INCREASING	No Trend		Relatively constant concentrations since 2004, ¹



Table 6.4 - PCE Concentration Trend Analysis, Q4 2006
Downtown Reno Plume Subregion Key Wells

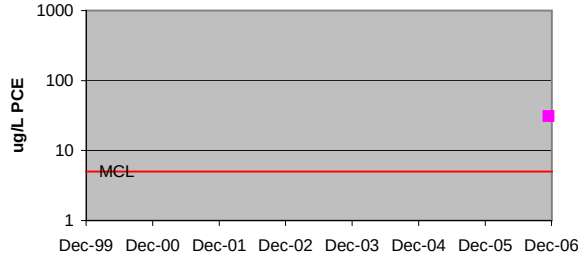
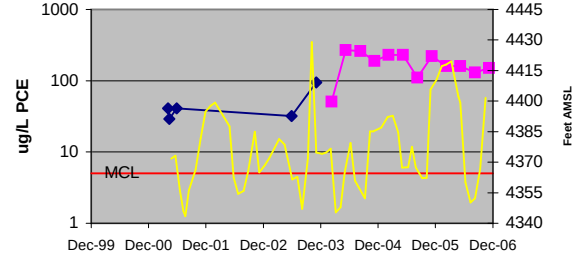
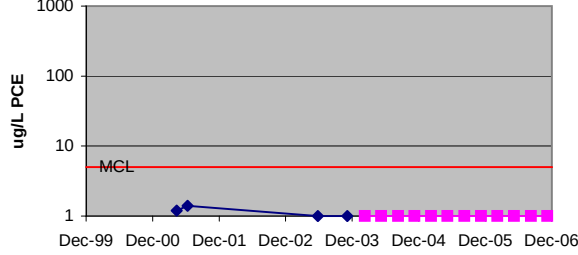
Well Designation	Mann-Kendall Analysis Trend Direction at 90% Confidence		Graph of PCE Concentration vs. Time	Remarks
	2001 to 2003 Trend	2004 to 2006 Trend		
MW8ND	No Data	n<4		Only one data point.
CTM10D	No Trend	DECREASING		Increased concentrations between June 2003 and June 2004 and slightly decreasing concentrations since that time. No clear correlation with hydrograph data.
CTM12D	No Trend	No Trend		Constant concentrations (ND) since June 2003.



Table 6.4 - PCE Concentration Trend Analysis, Q4 2006
Downtown Reno Plume Subregion Key Wells

Well Designation	Mann-Kendall Analysis Trend Direction at 90% Confidence		Graph of PCE Concentration vs. Time	Remarks
	2001 to 2003 Trend	2004 to 2006 Trend		
CTM22D	DECREASING	INCREASING		Slightly increasing trend since 2004. No clear correlation with hydrograph.
CTM8D	No Trend	No Trend		Somewhat variable concentrations with no sustained trend.
CTM137	No Data	No Trend		Relatively constant concentrations since March 2004.



Table 6.4 - PCE Concentration Trend Analysis, Q4 2006
Downtown Reno Plume Subregion Key Wells

Well Designation	Mann-Kendall Analysis Trend Direction at 90% Confidence		Graph of PCE Concentration vs. Time	Remarks
	2001 to 2003 Trend	2004 to 2006 Trend		
CTM4D	No Trend	No Trend		Constant concentrations (ND) since June 2003.
CTM30D	No Trend	INCREASING		Increasing trend since September 2005.
4THMWS	No Data	No Trend		Relatively constant concentrations since September 2004.

Notes: n<4: Mann-Kendall trend analysis cannot be performed on data sets smaller than four samples.



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Table 6.4 - PCE Concentration Trend Analysis, Q4 2006
Downtown Reno Plume Subregion Key Wells

Well Designation	Mann-Kendall Analysis Trend Direction		Graph of PCE Concentration vs. Time	Remarks
	at 90% Confidence			
	2001 to 2003 Trend	2004 to 2006 Trend		

¹ 3/8/04 concentration (0.5 ug/L) removed from analysis (ND are not representative samples).



Table 6.5 - PCE Concentration Trend Analysis, Q4 2006
Mill / Kietzke Plume Subregion Key Wells

Well Designation	Mann-Kendall Analysis Trend Direction at 90% Confidence		Graph of PCE Concentration vs. Time	Remarks
	2001 to 2003 Trend	2004 to 2006 Trend		
CTM13S	INCREASING	DECREASING		Decreasing trend since March 2004.
CTM63	n<4	No Trend		Variable concentrations with no sustained trend
ARCO6018MW11	No Data	INCREASING		Increasing trend since October 2005. Mann-Kendall analysis for 2004 through 2006 data shows a statistically significant increasing trend at 90 percent confidence. Possible correlation of concentration increase with water level increase.



Table 6.5 - PCE Concentration Trend Analysis, Q4 2006
Mill / Kietzke Plume Subregion Key Wells

Well Designation	Mann-Kendall Analysis Trend Direction at 90% Confidence		Graph of PCE Concentration vs. Time	Remarks
	2001 to 2003 Trend	2004 to 2006 Trend		
ARCO6018MW12	n<4	INCREASING		Increasing trend between Dec 2004 and Jun 2006. Decreasing concentrations in Sept and Dec 2006.
CTM11S	No Trend	No Trend		Overall relatively constant concentrations since 2004 to Q206. Increasing concentration in Sept 2006 and Dec 2006
CTM38D	No Trend	No Trend		Overall decreasing trend since June 2001, but relatively stable since 2004. Concentration reached MCL in Dec 2006.



Table 6.5 - PCE Concentration Trend Analysis, Q4 2006
Mill / Kietzke Plume Subregion Key Wells

Well Designation	Mann-Kendall Analysis Trend Direction at 90% Confidence		Graph of PCE Concentration vs. Time	Remarks
	2001 to 2003 Trend	2004 to 2006 Trend		
CTM18S	No Trend	DECREASING		Decreasing trend since March 2004. Increasing water levels beginning in winter 2004, except for sharp drop in Nov 2006. Decreasing concentrations since 2005. Possible correlation between increasing water levels and decreasing concentrations.
CTM64	n<4	DECREASING		Decreasing trend since March 2004.

Notes: n<4:Mann-Kendall trend analysis cannot be performed on data sets smaller than four samples.

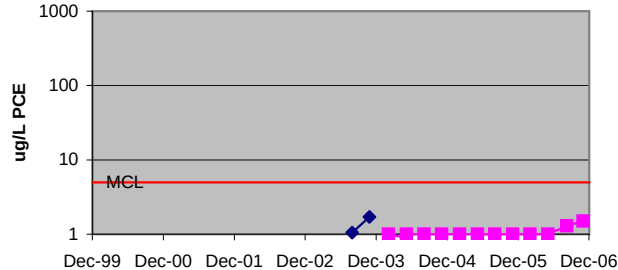


Table 6.6 - PCE Concentration Trend Analysis, Q4 2006
Victorian Ave Plume Subregion Key Wells

Well Designation	Mann-Kendall Analysis Trend Direction at 90% Confidence		Graph of PCE Concentration vs. Time	Remarks
	2001 to 2003 Trend	2004 to 2006 Trend		
CTM65	n<4	INCREASING		Concentrations have been constant since August 2003, with increases during the Q2 and Q3 2006 monitoring event.
CTM70	n<4	No Trend		Concentrations relatively constant since November 2003. No clear correlation between hydrograph and concentrations.
CTM66	n<4	No Trend		Concentrations relatively constant since August 2003. No clear correlation between hydrograph and concentrations.



Table 6.6 - PCE Concentration Trend Analysis, Q4 2006
Victorian Ave Plume Subregion Key Wells

Well Designation	Mann-Kendall Analysis Trend Direction at 90% Confidence		Graph of PCE Concentration vs. Time	Remarks
	2001 to 2003 Trend	2004 to 2006 Trend		
CTM69	n<4	INCREASING		Concentrations constant (ND) from 2004 through June 2006. Increase in concentration in Q3 & Q4 2006.

Notes: n<4:Mann-Kendall trend analysis cannot be performed on data sets smaller than four samples.



Table 6.7 - PCE Concentration Trend Analysis, Q4 2006
Downtown Sparks Plume Subregion Key Wells

Well Designation	Mann-Kendall Analysis Trend Direction at 90% Confidence		Graph of PCE Concentration vs. Time	Remarks
	2001 to 2003 Trend	2004 to 2006 Trend		
CTM68	n<4	No Trend		Constant concentrations (ND) since 2003.
CTM74	n<4	No Trend		Constant concentrations (ND) since March 2004.
CTM75	n<4	No Trend		Variable concentrations with no sustained trend since March 2004. No correlation between concentrations and water level elevations.



Table 6.7 - PCE Concentration Trend Analysis, Q4 2006
Downtown Sparks Plume Subregion Key Wells

Well Designation	Mann-Kendall Analysis Trend Direction at 90% Confidence		Graph of PCE Concentration vs. Time	Remarks
	2001 to 2003 Trend	2004 to 2006 Trend		
CTM67	n<4	INCREASING		Relatively constant concentrations since October 2004. No clear correlation between hydrograph and concentrations.
POPLAR2	INCREASING	DECREASING		Decreasing trend since June 2004 although an increase in concentration noticed on Aug 2006.
SPARKS	INCREASING	n<4		Overall increasing trend since June 2002. Concentration dropped in Aug 2006.

Notes: n<4:Mann-Kendall trend analysis cannot be performed on data sets smaller than four samples.



Table 6.8 - PCE Concentration Trend Analysis, Q4 2006
Wolverine Way Plume Subregion Key Wells

Well Designation	Mann-Kendall Analysis Trend Direction at 90% Confidence		Graph of PCE Concentration vs. Time	Remarks
	2001 to 2003 Trend	2004 to 2006 Trend		
SSFSMW204	n<4	DECREASING		Decreasing trend since June 2005. However, an increase in concentration noticed on Dec 2006. Possible correlation between hydrograph and concentrations.
SSFSMW205	n<4	DECREASING		Slightly decreasing trend since 2004; concentrations relatively constant.
SSFSMW207	n<4	No Trend		Relatively stable concentrations with a slight overall decreasing trend since 2003.



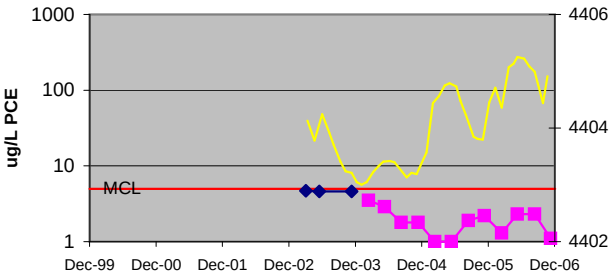
Table 6.8 - PCE Concentration Trend Analysis, Q4 2006
Wolverine Way Plume Subregion Key Wells

Well Designation	Mann-Kendall Analysis Trend Direction at 90% Confidence		Graph of PCE Concentration vs. Time	Remarks
	2001 to 2003 Trend	2004 to 2006 Trend		
CTM19S	No Trend	No Trend		Concentrations constant (ND) since 2003.

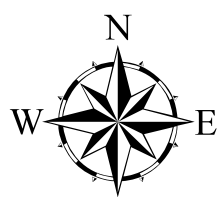
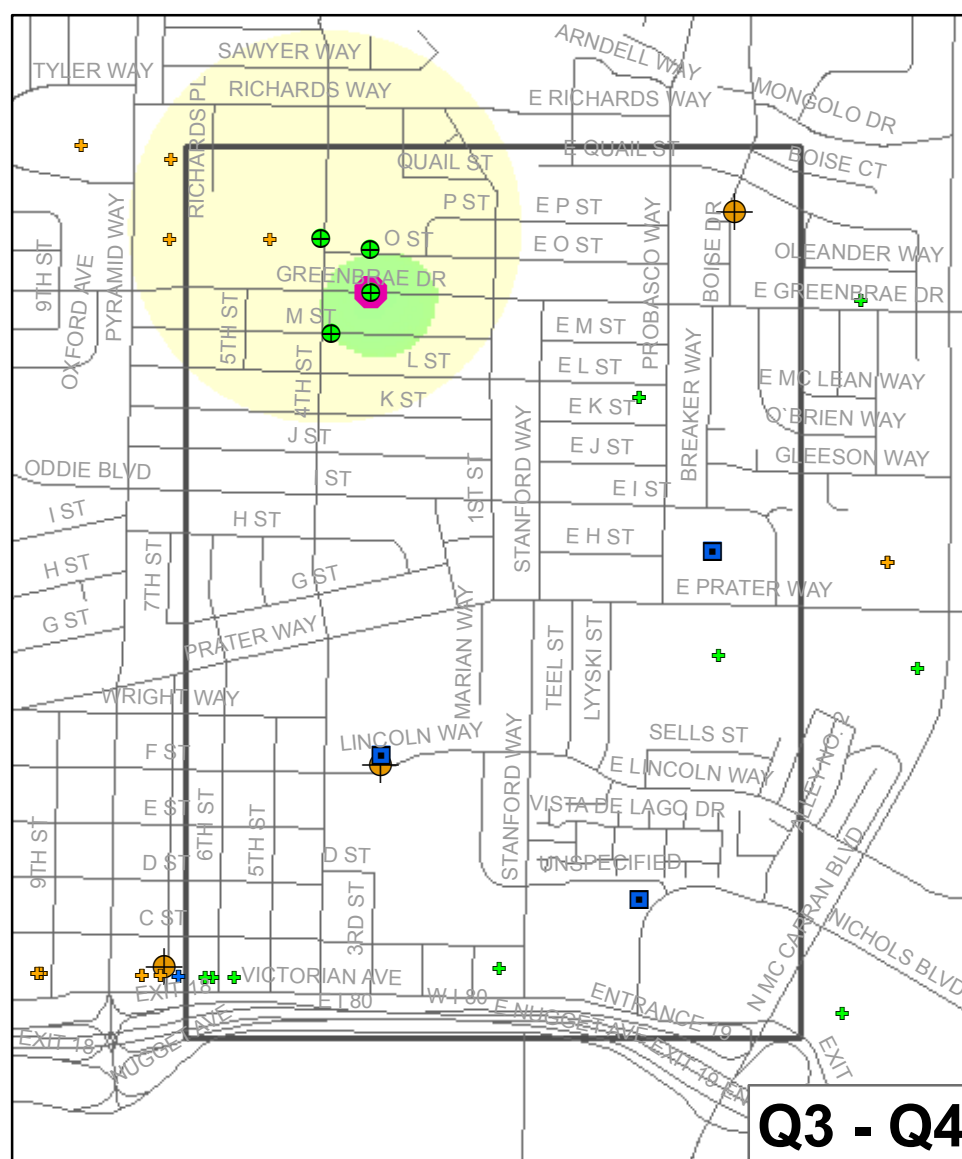
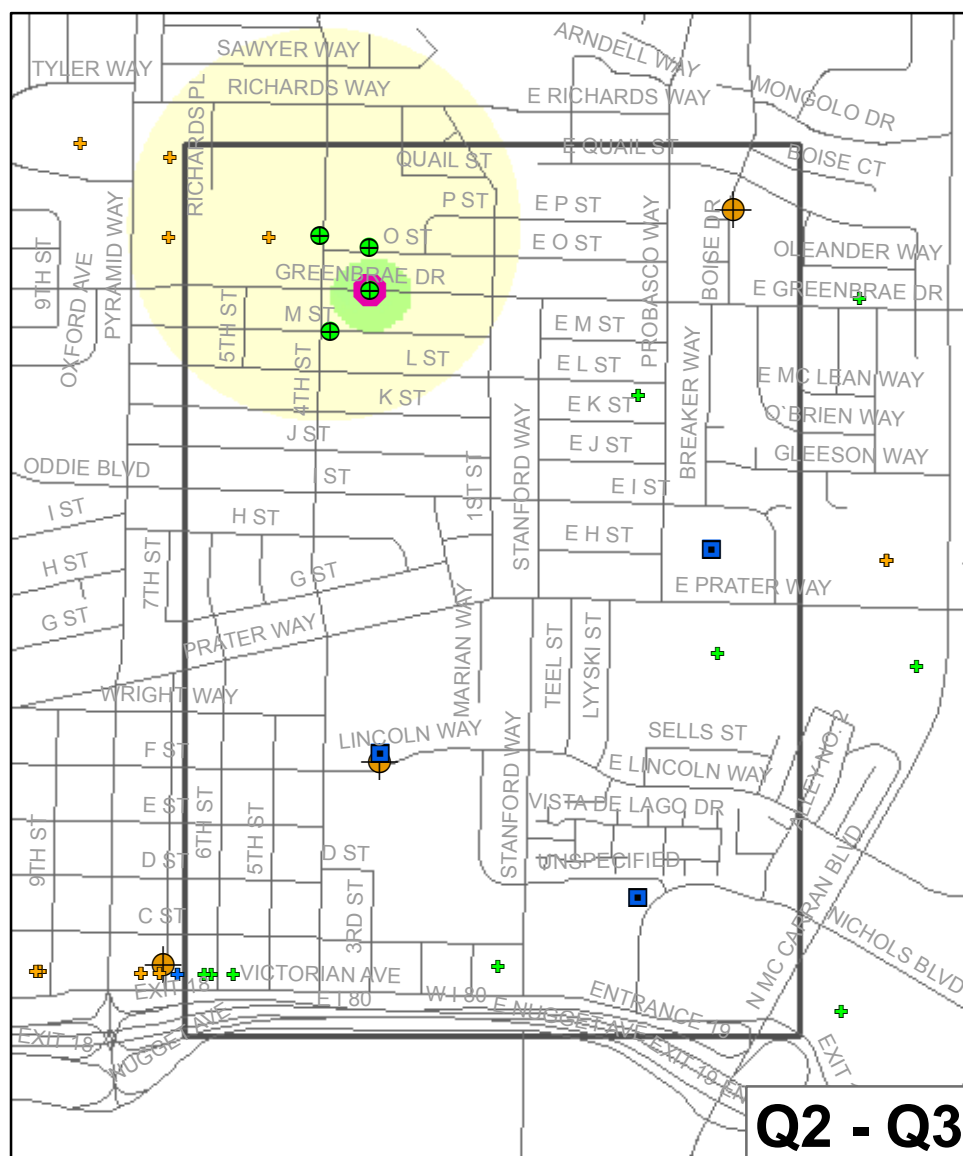
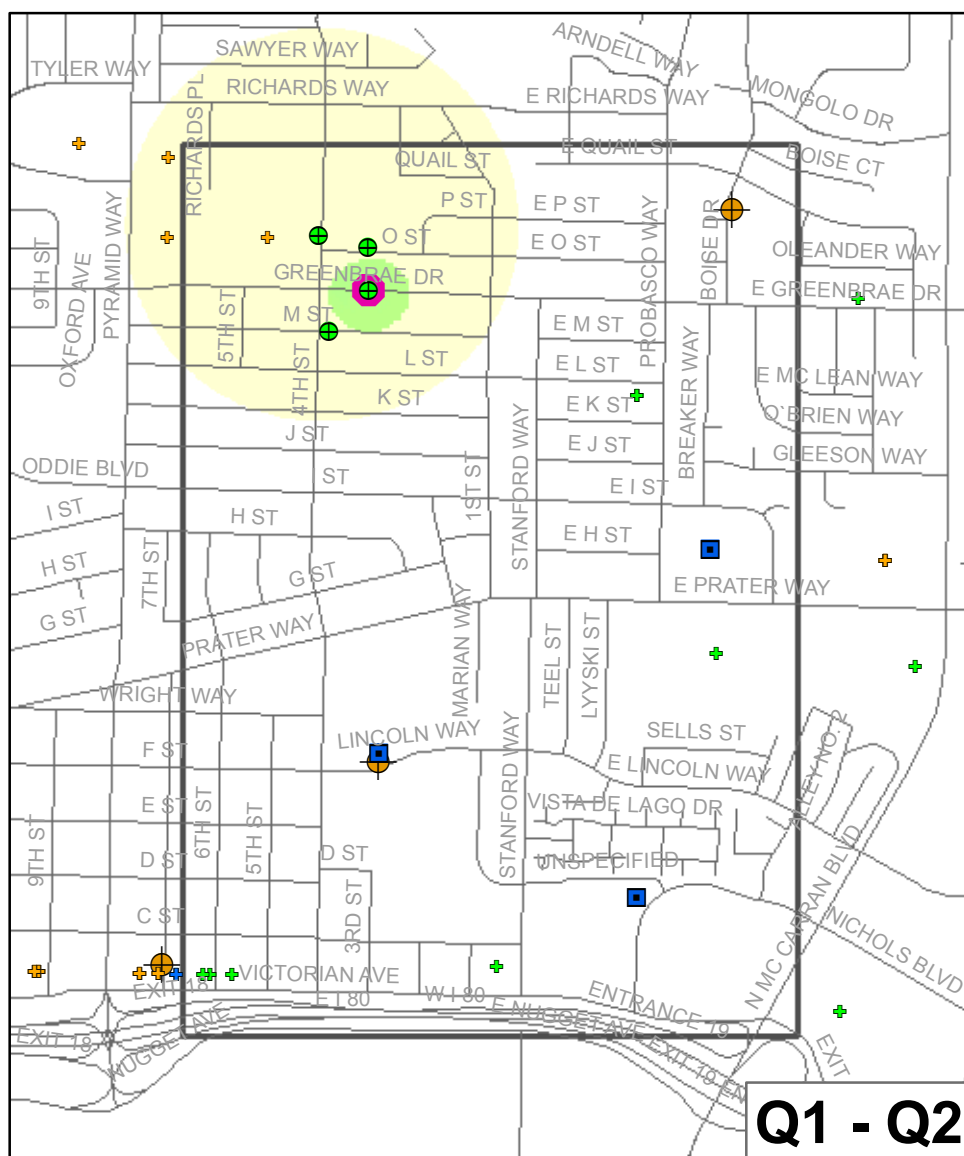
Notes: n<4: Mann-Kendall trend analysis cannot be performed on data sets smaller than four samples.



Table 6.9 - PCE Concentration Trend Analysis, Q4 2006
Greenbrae Drive Plume Subregion Key Wells

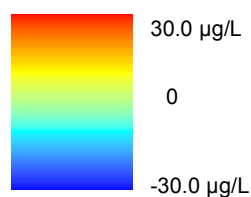
Well Designation	Mann-Kendall Analysis Trend Direction at 90% Confidence		Graph of PCE Concentration vs. Time	Remarks
	2001 to 2003 Trend	2004 to 2006 Trend		
CTM55	n<4	No Trend		Variable concentrations with no sustained trend since June 2005. No clear correlation between concentrations and hydrograph.

Notes: n<4: Mann-Kendall trend analysis cannot be performed on data sets smaller than four samples.



A number line is shown with 0 at the left end and 2,640 at the right end. A point labeled S is marked at the midpoint. Below the number line, a horizontal bar is drawn, divided into two equal segments by a vertical line at S. The left segment is shaded black, and the right segment is white.

Notes:
PCE concentration change calculated using the formula: (Previous quarter subtracted from current quarter, ie., (Q2 - Q1)).



WASHOE COUNTY DWR		 WorleyParsons Komex resources & energy		
GREENBRAE DRIVE SUBREGION 2006 PCE CONCENTRATION CHANGE		SWL	PM	01/2008
		6N637B30		6.34



Figure 6.35: Average 2006 Groundwater Elevation and Groundwater Elevation Difference

Greenbrae Drive Plume Subregion

