



## Rocky Flats Site

# Quarterly Report of Site Surveillance and Maintenance Activities First Quarter Calendar Year 2006

June 2006



U.S. Department  
of Energy

## Office of Legacy Management

**U.S. Department of Energy  
Office of Legacy Management**

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**First Quarter Calendar Year 2006**

**June 2006**

Work Performed by S.M. Stoller Corporation under DOE Contract No. DE-AC01-02GJ79491  
for the U.S. Department of Energy Office of Legacy Management, Grand Junction, Colorado

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## Executive Summary

The Department of Energy (DOE) Office of Legacy Management (LM) has assumed responsibility of all surveillance and maintenance activities at the Rocky Flats Site to continue protection of human health and the environment. To accomplish this, the accelerated actions that were completed by the DOE Office of Environmental Management (EM) will be maintained and any monitoring and maintenance requirements specified in previous decision documents will be conducted as described in the draft Interim Surveillance and Maintenance Plan for the Rocky Flats Site. These surveillance and maintenance requirements include environmental monitoring; maintenance of the erosion controls, landfill covers, dams, and ground water treatment systems; and operation of the ground water treatment systems.

This report addresses the first calendar quarter of 2006 (January 1 through March 31). During that time LM continued responsibility of surveillance and maintenance activities at the Site.

Highlights of the surveillance and maintenance activities include:

- Non-routine (project-specific) and routine (per the Integrated Monitoring Plan, IMP Rev. 1, K-H 2005f) ground water monitoring, and non-routine maintenance of ground water treatment systems;
- Routine surface-water monitoring as required by the IMP, and routine pond operations and management;
- Compilation and review of the ecology data that had been collected throughout the growing season in 2005; and
- Routine Site Perimeter Air Monitoring as required by the IMP using the reduced three-station network.

This report also includes descriptions of activities that LM implemented including Site security, maintenance and repair of erosion controls to protect bare soil areas, and inspection of the landfills to assure protection of the environment, including ground water and surface water quality.

End of current text

# 1.0 Introduction

As of the issuance of this report, all accelerated actions have been completed at the Rocky Flats Site (the Site) according to requirements in the Rocky Flats Cleanup Agreement (RFCA) (CDPHE et. al 1996). The U.S. Department of Energy (DOE) continues to conduct surveillance and maintenance activities at the Site to maintain these accelerated actions, to protect human health and the environment, and to comply with DOE Orders and applicable U.S. Environmental Protection Agency (EPA), Colorado Department of Public Health and Environment (CDPHE), and local regulations. This report describes the environmental monitoring, maintenance, and associated operations that were conducted during the period January 1 through March 31, 2006.

## 1.1 Purpose and Scope

This report is required by Section 3.4.B of Attachment 5 of the RFCA. The purpose of this report is to inform the regulatory agencies and stakeholders regarding the surveillance and maintenance activities being conducted at the Site. DOE Office of Legacy Management (LM) is committed to periodic communications such as this report and through other means such as web-based tools and public meetings.

As of mid-October 2005, all physical activities related to closure of the Site had been completed. This report focuses on routine maintenance and monitoring activities that were conducted during the first quarter of calendar year (CY) 2006 following completion of Site closure-related activities.

## 1.2 Background

Surveillance and maintenance activities, including environmental monitoring, are conducted according to the Interim Surveillance and Maintenance Plan (ISMP; DOE 2005c). This plan references the Integrated Monitoring Plan (IMP Rev 1; K-H 2005f) as well as other operational, monitoring and maintenance plans for the landfills, ground water treatment systems, and ponds. These plans include:

- RFETS Integrated Monitoring Plan FY05 Summary Document, Revision 1 (K-H 2005e)
- RFETS Integrated Monitoring Plan FY05 Background Document, Revision 1 (K-H 2005f)
- Operations and Maintenance Instructions for Rocky Flats Surface Water Control Project (Dams and Reservoirs) (DOE 2005d)
- Rocky Flats Environmental Technology Site Surface Water Pond Operations Plan (DOE 2005f)
- Rocky Flats Environmental Technology Site Emergency Response Plan for Rocky Flats Dams (DOE 2005e)
- Ground Water Plume Treatment Systems Operations and Maintenance Manual (DOE 2005b)

- RFETS Revegetation Plan (DOE 2005g)
- RFETS Erosion Control Management Plan (DOE 2006a)
- Vegetation Management Plan for RFETS (DOE 2005h)
- Ecological Monitoring Methods Handbook (DOE 2005a)

## 2.0 Surface Water Monitoring

This section presents data collected to satisfy selected surface water monitoring objectives implemented at the Rocky Flats Site (Site) in accordance with the RFCA (CDPHE et al. 1996) and the *FY05 Integrated Monitoring Plan: Summary and Background Documents* (IMP Revision 1; K-H 2005e, 2005f). The IMP provides a framework for monitoring in support of closure activities at the Site. This framework includes implementation of a high-resolution surface water monitoring program that supports data-driven decisions determined by the IMP Data Quality Objectives (DQO) process. Figure 2–1 shows a map with the surface water monitoring locations operating in the 1st quarter of CY 2006.

This Quarterly Report presents data collected during the 1st quarter of CY 2006 (January–March 2006). This section includes:

- An evaluation of analytical results as required for the Point of Compliance (POC), Point of Evaluation (POE), Present Landfill, and Original Landfill monitoring objectives;
- A discussion of investigative and non-POC monitoring; and
- Analytical water-quality data available in the following format:
  - Compact disk (CD) for hard copy distribution

During the 1st quarter of CY 2006, the surface water monitoring network successfully fulfilled the targeted monitoring objectives as required by the Site IMP. The network consists of 15 gaging stations, eight grab sampling locations, and seven precipitation gages. During the quarter, 21 flow-paced composite samples and seven grab samples were collected and submitted for analysis.<sup>1</sup>

Prior to the Rocky Flats Environmental Technology Site's declaration of physical completion on October 13, 2005, demonstration of compliance for Pu and Am concentrations at RFCA POEs used calculated 30-day average values. Subsequent to the declaration of physical completion, compliance for Pu and Am at POEs is demonstrated using the agreed upon 12-month rolling average calculation for the last day of each month. Based on these new reporting criteria, reportable 12-month rolling average Pu and Am concentrations have been observed in surface water at RFCA POE surface water monitoring station GS10, which is located in the South Walnut Creek upstream of Pond B-1 in the Walnut Creek basin.

This notification reported, on a 12-month rolling average basis per the Rocky Flats IMP, results that have been reported previously on a 30-day averaged basis. This notification was triggered by the transition from the 30-day to the 12-month reporting window, and was provided for information only. Since source evaluation letters/reports have also been previously completed for those results, no additional action is warranted at this time.

All other POE analytes remained below reporting levels as of the end of the 1st quarter of CY 2006. Erosion and runoff controls, as well as extensive revegetation efforts, have proven to be effective in measurably reducing both sediment transport and constituent concentrations. As of the end of the 1st quarter of CY 2006, all of the POEs were showing Pu and Am

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<sup>1</sup> Composite samples consist of multiple aliquots ('grabs') of identical volume. Each grab is delivered by the automatic sampler to the composite container at each predetermined flow-volume or time interval.

concentrations well below the action level. With the removal of impervious areas resulting in decreased runoff, the stabilization of soils within the drainages, and the progression of revegetation, water quality is expected to continue to improve.

All water-quality data at the RFCA POCs remain well below the applicable reporting thresholds through the 1st quarter of CY 2006.

## 2.1 Point of Compliance (POC) Monitoring

RFCA provides specific standards for Walnut and Woman Creeks below the terminal ponds. This section deals only with monitoring discharges from the terminal ponds (Ponds A-4, B-5, and C-2) and the additional POCs at Indiana Street. Terminal pond discharges are monitored by POCs GS08, GS11, and GS31. Walnut Creek is monitored at Indiana Street by POC GS03. Woman Creek is monitored at Indiana Street by POC GS01. These locations are shown on Figure 2-1.

Sampling for analytes of interest (AoIs) at POCs is performed by collecting continuous flow-paced composite samples. Total Pu, Am, and U<sup>2</sup> are evaluated using volume-weighted 30-day moving averages at the Indiana Street POCs.<sup>3</sup>

With the implementation of Revision 1 of the IMP (October 13, 2005), AoI evaluation at the Indiana Street POCs will continue to use the 30-day average. However, evaluation of AoIs at the terminal pond POCs uses a 12-month rolling average<sup>4</sup> calculated on the last day of each month.

Generally, analytical data evaluation is performed as preliminary data become available. If an initial qualitative screening indicates that an analytical result is higher than the action level for a particular AoI, then the 30-day or 12-month rolling average is calculated immediately upon receipt of the preliminary result. If the 30-day or 12-month rolling average values are reportable, then validation is requested for all data packages used in the calculation. The desired evaluation frequency is semi-monthly, within 1 week of the 15th and last day of any given month. RFCA requires that DOE, RFPO inform regulators within 15 days of DOE, RFPO gaining knowledge (not just a suspicion) that an exceedance (verified) has (actually) occurred. The DQO decision rule is:

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<sup>2</sup> Pu and Am refer specifically to Pu-239,240 and Am-241, respectively. Total U refers to total uranium (the sum of the analyzed isotopes: U-233,234 + U-235 + U-238).

<sup>3</sup> The 30-day average for a particular day is calculated as a volume-weighted average of a 'window' of time containing the previous 30 days which had both flow and an analytical result. Each day has its own discharge volume (measured at the location with a flow meter) and activity (analytical result from the sample in place at the end of that day). Therefore, there are 365 30-day moving averages for a location which flows all year (366 in a leap year). At locations which monitor pond discharges or have intermittent flows, 30-day averages are calculated as averages of the previous 30 days of greater than zero flow. For days where no activity is available, either due to failed lab analysis, excessive duplicate error ratio (DER), or NSQ for analysis, no 30-day average is reported.

<sup>4</sup> The 12-month rolling average for the last day of a particular month is calculated as a volume-weighted average of a "window" of time containing the previous 12 months. Each 12-month "window" includes daily discharge volumes (measured at the location with a flow meter) and daily activities (from the sample carboy in place at the end of that day). Therefore, there are twelve 12-month rolling averages for a given calendar year. Days with no flow or no analytical result, either due to failed laboratory analysis, excessive DER, or NSQ for analysis, are not included in the average. When no pond discharge has occurred in the last 12 months, no 12-month rolling average is reported.

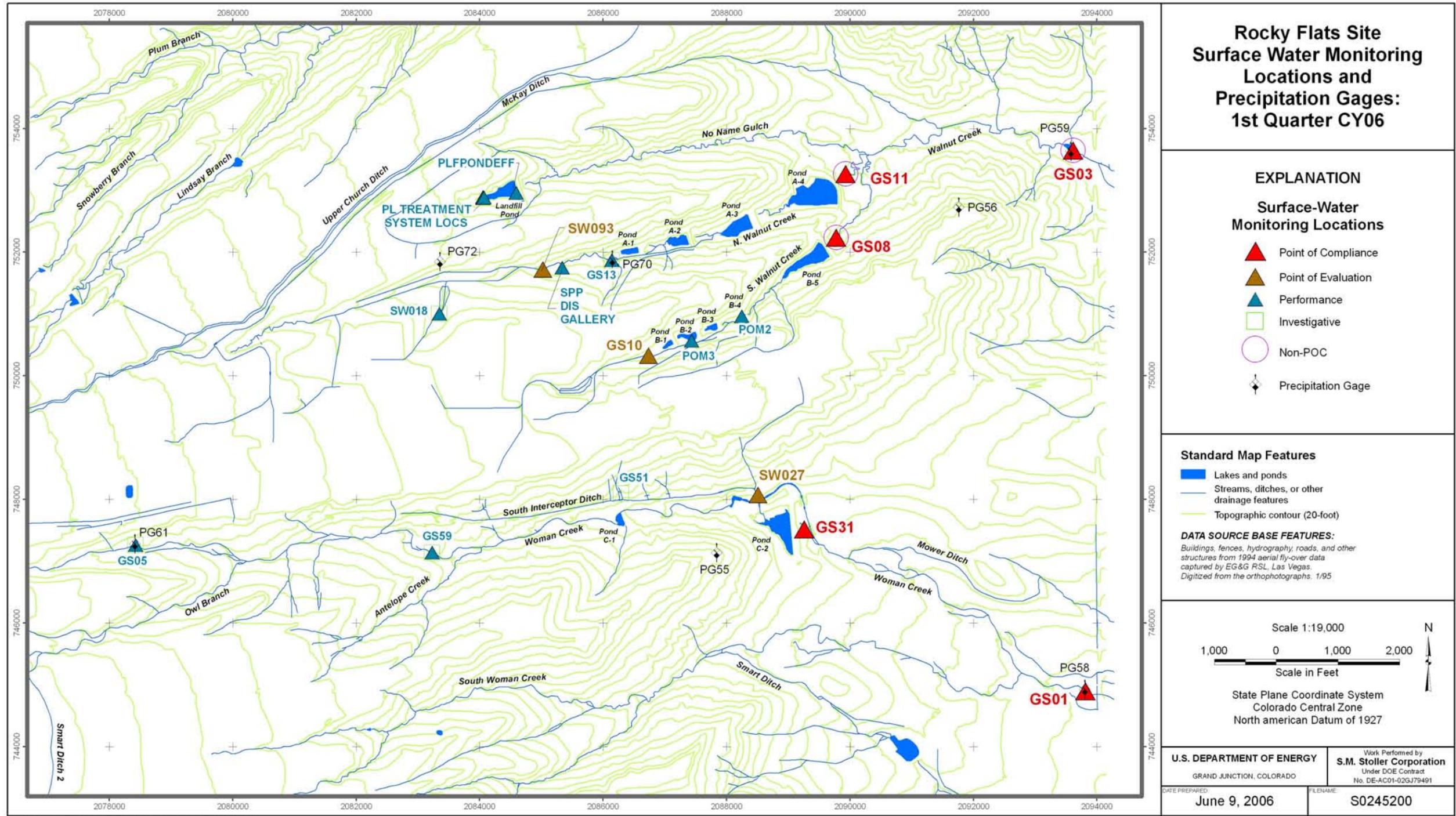


Figure 2-1. Rocky Flats Site Surface Water Monitoring Locations and Precipitation Gages: 1st Quarter CY 2006

**IF** The volume-weighted 30-day moving average for any AoI, as represented by samples from the specified Indiana Street RFCA POCs (GS01 [POC1] and GS03 [POC2]), exceeds the appropriate RFCA standard (Table 2-1)—

**THEN** The Site must:

- Notify EPA, CDPHE, and either Broomfield or Westminster, whichever is affected;
- Submit a plan and schedule to evaluate for source location, and implement mitigating action if appropriate; and
- The Site may receive a notice of violation.

**IF** The volume-weighted 12-month rolling average for any AoI, as represented by samples from the specified terminal pond RFCA POCs (GS08 [POC4], GS11 [POC3], and GS31 [POC5]), exceeds the appropriate RFCA standard (Table 2-1)—

**THEN** The Site must:

- Notify EPA, CDPHE, and either Broomfield or Westminster, whichever is affected;
- Submit a plan and schedule to evaluate for source location, and implement mitigating action if appropriate; and
- The Site may receive a notice of violation.

*Table 2-1. POC Monitoring RFCA Standards*

Analyte	Standard
Am-241	0.15 pCi/L
Pu-239,240	0.15 pCi/L
Total Uranium	10 pCi/L (Walnut Creek); 11 pCi/L (Woman Creek)

Note: The above standards only apply to 30-day or 12-month rolling average values, as appropriate.

The following sections include summary tables and plots showing the 30-day and 12-month rolling averages for the POC analytes. The following evaluations include all results that were not rejected through the verification and validation process. Data are generally presented to decimal places as reported by the laboratories. Accuracy should not be inferred; minimum detectable concentrations/activities and analytical error are often greater than the precision presented. When a sample has a corresponding field duplicate, the value used in calculations is the arithmetic average of the 'real' and the 'duplicate' values. When a sample has multiple 'real' analyses (Site requested 'reruns'), the value used in calculations is the arithmetic average of the multiple 'real' analyses.

Refer to the analytical data accompanying this document (see Section 2.0 for additional information).

### 2.1.1 Location GS01

Monitoring location GS01 is located on Woman Creek at Indiana Street (Figure 2–1). The Woman Creek headwaters, the southern portion of the former Industrial Area (IA), and Pond C-2 contribute flow to GS01.

Table 2–2 shows that all of the annual average Pu and Am activities were well below 0.15 picocuries per liter (pCi/L).<sup>5</sup> Additionally, the long-term Pu and Am averages (water year [WY] 1997–2006)<sup>6</sup> are well below 0.15 pCi/L. The average total uranium activities are all well below 11 pCi/L.

Figure 2–2 and Figure 2–3 show no occurrences of reportable 30-day averages for the quarter.

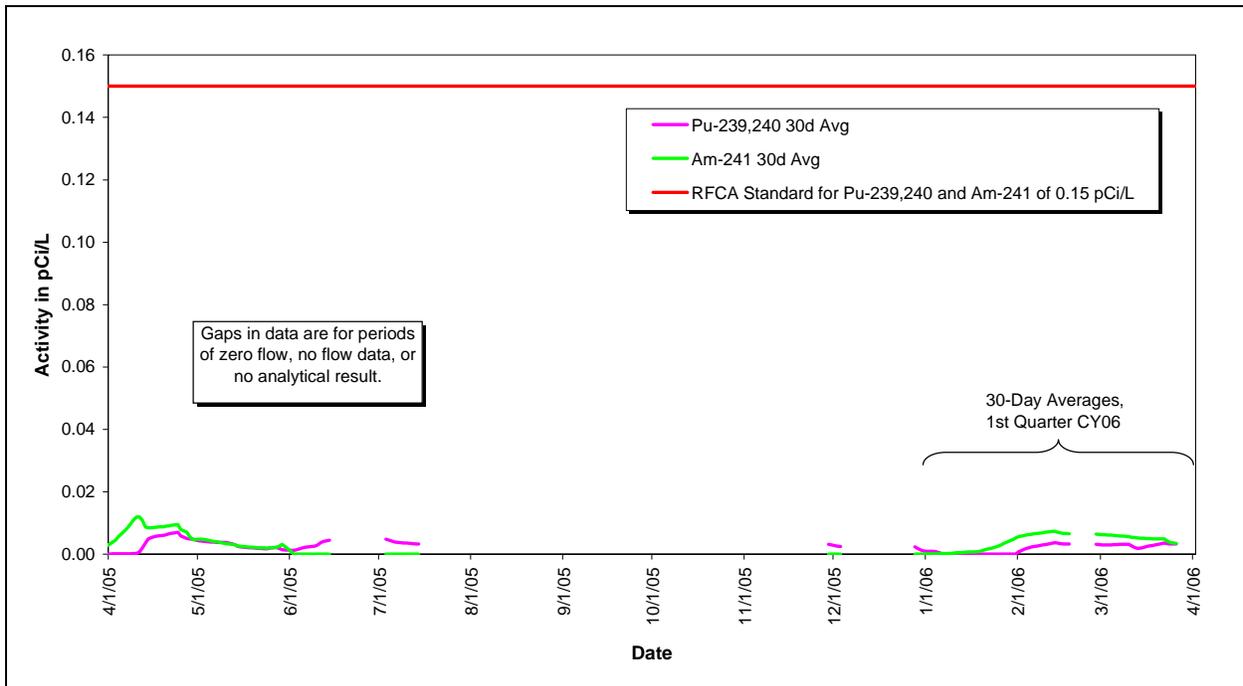
*Table 2–2. Annual Volume-Weighted Average Radionuclide Activities at GS01 in WY 1997–2006*

Water Year	Volume-Weighted Average Activity (pCi/L)		
	Am-241	Pu-239,240	Total Uranium
1997	0.003	0.010	NA
1998	0.005	0.006	NA
1999	0.005	0.008	NA
2000	0.004	0.003	NA
2001	0.004	0.006	NA
2002	0.003	0.001	NA
2003	0.002	0.004	1.24
2004	0.004	0.003	2.64
2005	0.003	0.003	2.94
2006	0.004	0.003	5.22
Total (WY 1997–2006)	0.004	0.005	2.12

Collection of total uranium data began on February 3, 2003. Data through March 26, 2006.

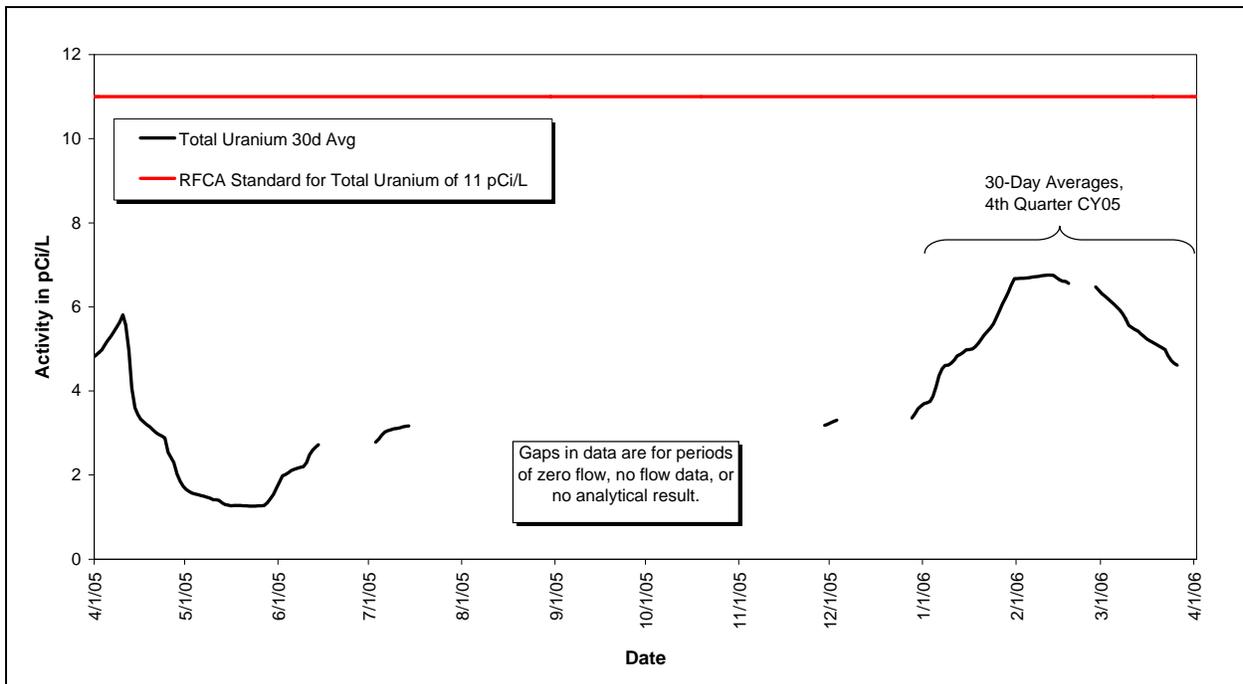
<sup>5</sup> As of the publication of this report, analytical results for the composite sample at GS01 for the period March 27 to April 11, 2006, were not available. Therefore, the analytical results for this sample are not included.

<sup>6</sup> The term ‘water year’ (abbreviated as WY) is defined as the period from October 1 through September 30. For example, WY 2005 refers to the period from October 1, 2004, through September 30, 2005.



Note: Data through March 26, 2006.

Figure 2-2. Volume-Weighted 30-Day Average Pu and Am Activities at GS01: Calendar Year Ending 1st Quarter CY 2006



Note: Data through March 26, 2006.

Figure 2-3. Volume-Weighted 30-Day Average Total Uranium Activities at GS01: Calendar Year Ending 1st Quarter CY 2006

## 2.1.2 Location GS03

Monitoring location GS03 is located on Walnut Creek at Indiana Street (Figure 2–1). The Walnut Creek headwaters, the majority of the former IA, Pond A-4, and Pond B-5 contribute flow to GS03.

Table 2–3 shows that all of the annual average Pu and Am activities were well below 0.15 pCi/L.<sup>7</sup> Additionally, the long-term Pu and Am averages (WY 1997–2006) are well below 0.15 pCi/L. The average total uranium activities are all well below 10 pCi/L.

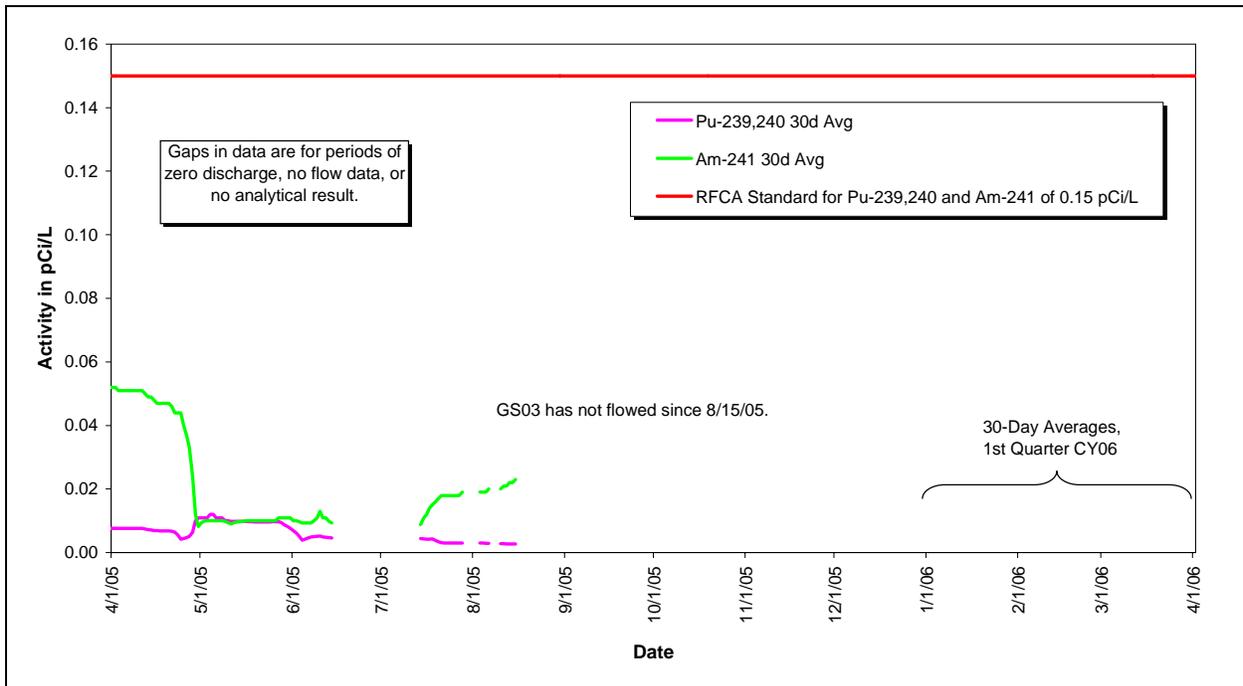
Table 2–3. Annual Volume-Weighted Average Radionuclide Activities at GS03 in WY 1997–2006

Water Year	Volume-Weighted Average Activity (pCi/L)		
	Am-241	Pu-239,240	Total Uranium
1997	0.015	0.030	NA
1998	0.009	0.012	NA
1999	0.010	0.015	NA
2000	0.007	0.005	NA
2001	0.005	0.009	NA
2002	0.004	0.012	NA
2003	0.005	0.006	1.81
2004	0.008	0.007	1.75
2005	0.021	0.008	3.80
2006	NA (no flow)	NA (no flow)	NA (no flow)
Total (WY 1997–2006)	0.009	0.012	2.21

Collection of total uranium data began on November 5, 2002. Data through January 4, 2006.

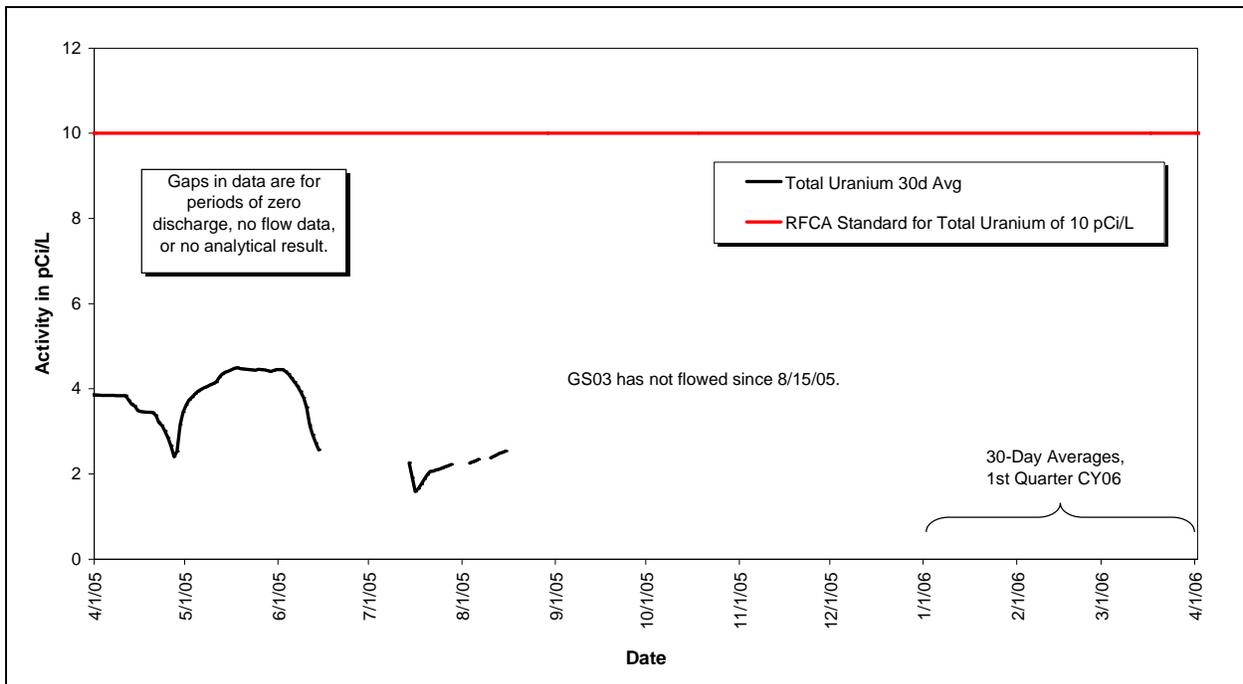
Figure 2–4 and Figure 2–5 show no occurrences of reportable 30-day averages for the quarter.

<sup>7</sup> As of the publication of this report, analytical results for the composite sample at GS03 started on January 5 2006, was still in progress. Therefore, the analytical results for this sample are not included in this section.



Note: Data through January 4, 2006.

Figure 2-4. Volume-Weighted 30-Day Average Pu and Am Activities at GS03: Calendar Year Ending 1st Quarter CY 2006



Note: Data through January 4, 2006.

Figure 2-5. Volume-Weighted 30-Day Average Total Uranium Activities at GS03: Calendar Year Ending 1st Quarter CY 2006

### 2.1.3 Location GS08

Monitoring location GS08 is located on South Walnut Creek at the outlet of Pond B-5 (Figure 2–1). The central portion of the former IA contributes flow to GS08.

Table 2–4 shows that all of the annual average Pu and Am activities were well below 0.15 pCi/L. Additionally, the long-term Pu and Am averages (WY 1997–2006) are well below 0.15 pCi/L. The average uranium activities are all below 10 pCi/L.

*Table 2–4. Annual Volume-Weighted Average Radionuclide Activities at GS08 in WY 1997–2006*

Water Year	Volume-Weighted Average Activity (pCi/L)		
	Am-241	Pu-239,240	Total Uranium
1997	0.007	0.007	1.74
1998	0.007	0.008	2.26
1999	0.020	0.061	1.45
2000	0.025	0.041	1.00
2001	0.005	0.007	1.27
2002	0.003	0.003	0.751
2003	0.005	0.025	1.31
2004	0.010	0.008	1.23
2005	0.019	0.008	5.65
2006	NA	NA	NA
Total (WY 1997–2006)	0.012	0.022	1.60

Note: There has been no Pond B-5 discharge during WY 2006 through March 31, 2006.

Figure 2–6 and Figure 2–7 show no occurrences of reportable 12-month rolling averages for the quarter.

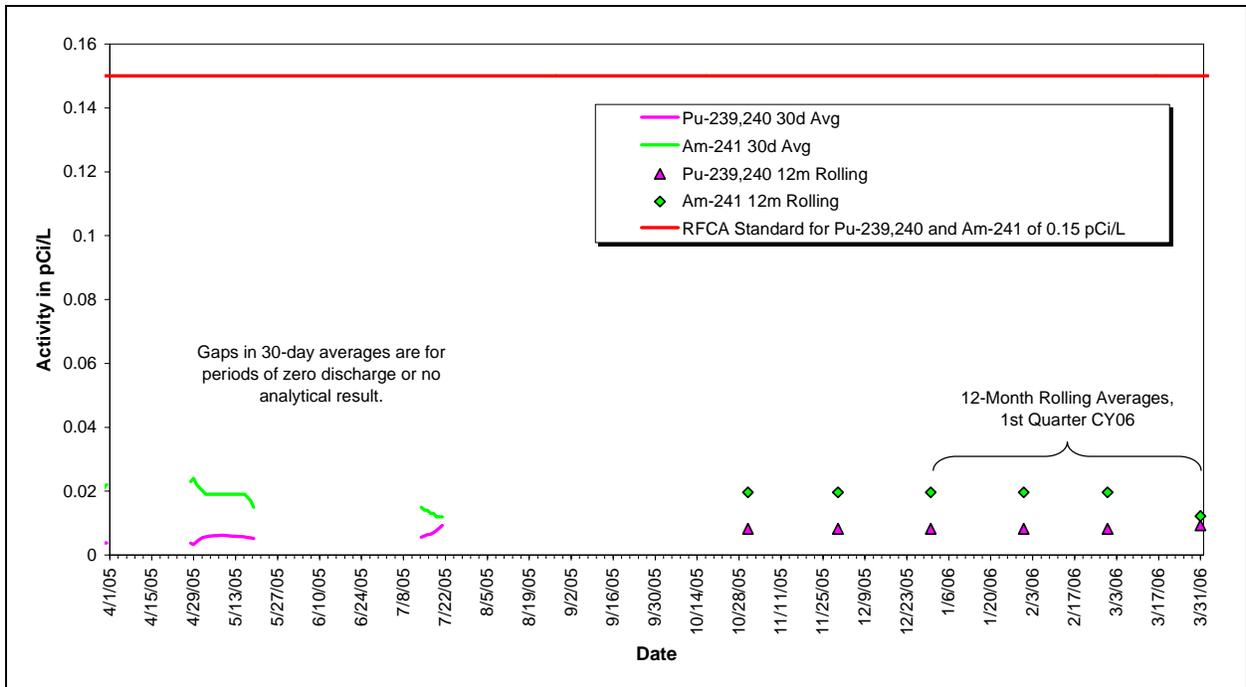


Figure 2-6. Volume-Weighted Average Pu and Am Compliance Values at GS08: Calendar Year Ending 1st Quarter CY 2006

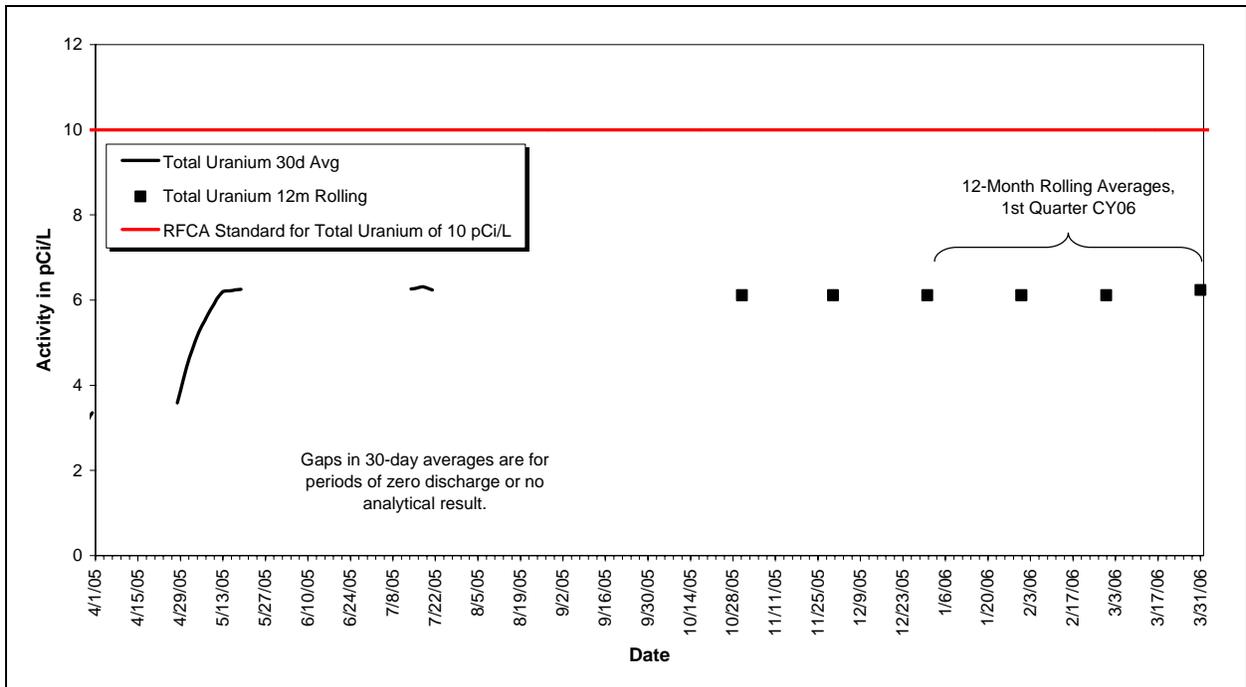


Figure 2-7. Volume-Weighted Average Total Uranium Compliance Values at GS08: Calendar Year Ending 1st Quarter CY 2006

## 2.1.4 Location GS11

Monitoring location GS11 is located on North Walnut Creek at the outlet of Pond A-4 (Figure 2–1). The northern portion of the former IA contributes flow to GS11.

Table 2–5 shows that all of the annual average Pu and Am activities were well below 0.15 pCi/L. Additionally, the long-term Pu and Am averages (WY 1997–2006) are well below 0.15 pCi/L. The average uranium activities are all well below 10 pCi/L.

*Table 2–5. Annual Volume-Weighted Average Radionuclide Activities at GS11 in WY 1997–2006*

Water Year	Volume-Weighted Average Activity (pCi/L)		
	Am-241	Pu-239,240	Total Uranium
1997	0.005	0.009	1.89
1998	0.009	0.004	2.07
1999	0.004	0.006	1.74
2000	0.001	0.029	3.23
2001	0.002	0.002	2.49
2002	0.003	0.000	2.96
2003	0.003	0.002	2.88
2004	0.005	0.003	2.56
2005	0.022	0.002	1.78
2006	NA	NA	NA
Total (WY 1997–2006)	0.006	0.006	2.19

Note: There has been no Pond A-4 discharge during WY 2006 through March 31, 2006.

Figure 2–8 and Figure 2–9 show no occurrences of reportable 12-month rolling averages for the quarter.

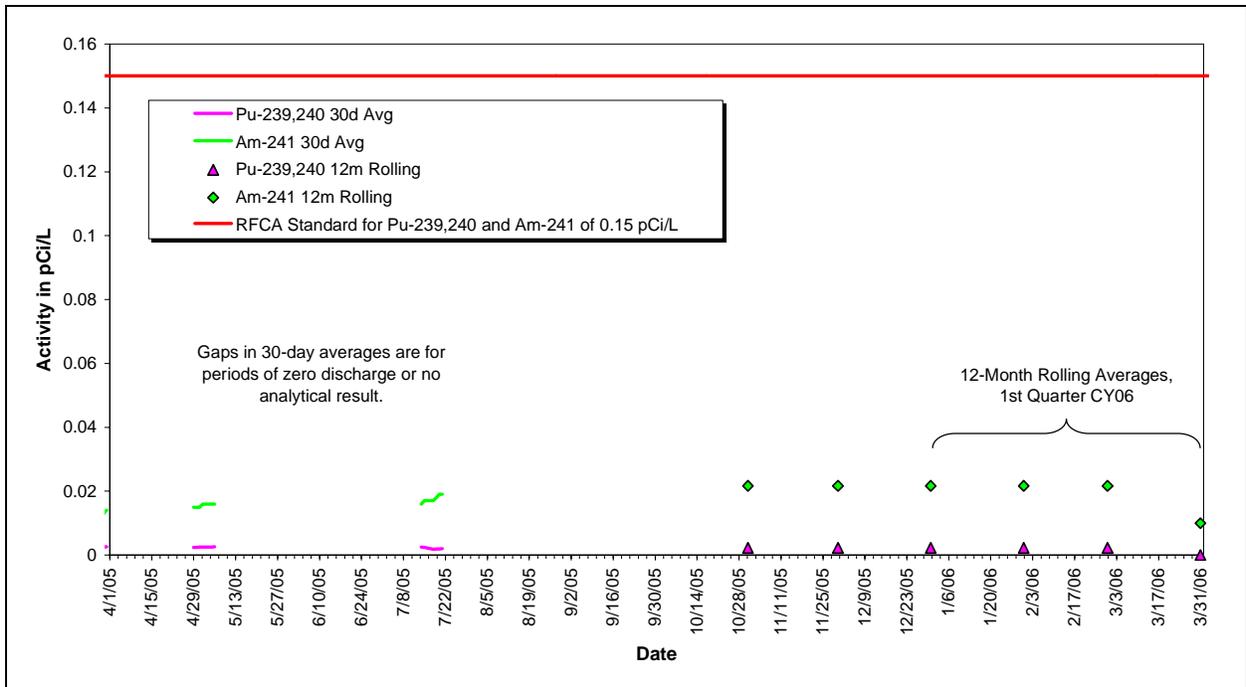


Figure 2-8. Volume-Weighted Average Pu and Am Compliance Values at GS11: Calendar Year Ending 1st Quarter CY 2006

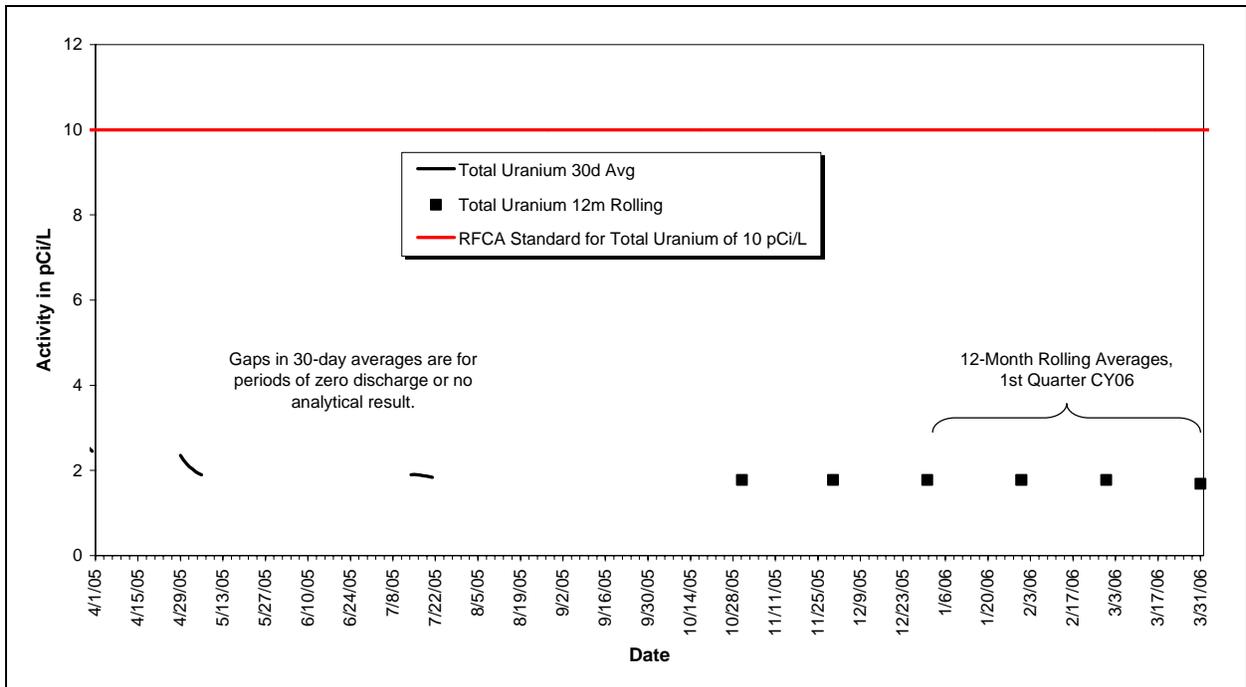


Figure 2-9. Volume-Weighted Average Total Uranium Compliance Values at GS11: Calendar Year Ending 1st Quarter CY 2006

### 2.1.5 Location GS31

Monitoring location GS31 is located on Woman Creek at the outlet of Pond C-2 (Figure 2–1). The southern portion of the former IA contributes flow to GS31.

Table 2–6 shows that all of the annual average Pu and Am activities were below 0.15 pCi/L. Additionally, the long-term Pu and Am averages (WY 1997–2006) are below 0.15 pCi/L. The average uranium activities are all well below 11 pCi/L.

*Table 2–6. Annual Volume-Weighted Average Radionuclide Activities at GS31 in WY 1997–2006*

Water Year	Volume-Weighted Average Activity (pCi/L)		
	Am-241	Pu-239,240	Total Uranium
1997	0.005	0.018	2.48
1998	0.015	0.009	2.22
1999	0.010	0.043	2.70
2000	No C-2 Discharge	No C-2 Discharge	No C-2 Discharge
2001	0.013	0.021	1.250
2002	0.015	0.089	2.43
2003	0.006	0.015	1.62
2004	No C-2 Discharge	No C-2 Discharge	No C-2 Discharge
2005	0.009	0.020	2.42
2006	NA	NA	NA
Total (WY 1997–2006)	0.011	0.019	2.13

Note: There has been no Pond C-2 discharge during WY 2006 through March 31, 2006.

Figure 2–10 and Figure 2–11 show no occurrences of reportable 12-month rolling averages for the quarter.

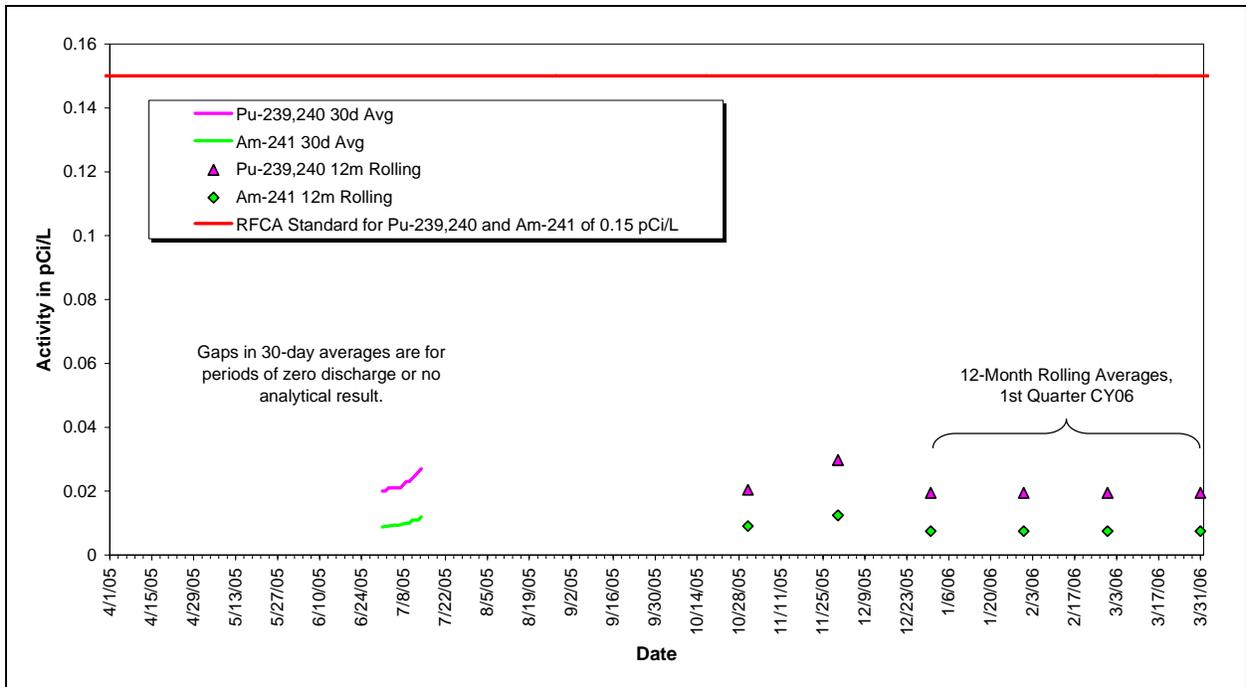


Figure 2-10. Volume-Weighted Average Pu and Am Compliance Values at GS31: Calendar Year Ending 1st Quarter CY 2006

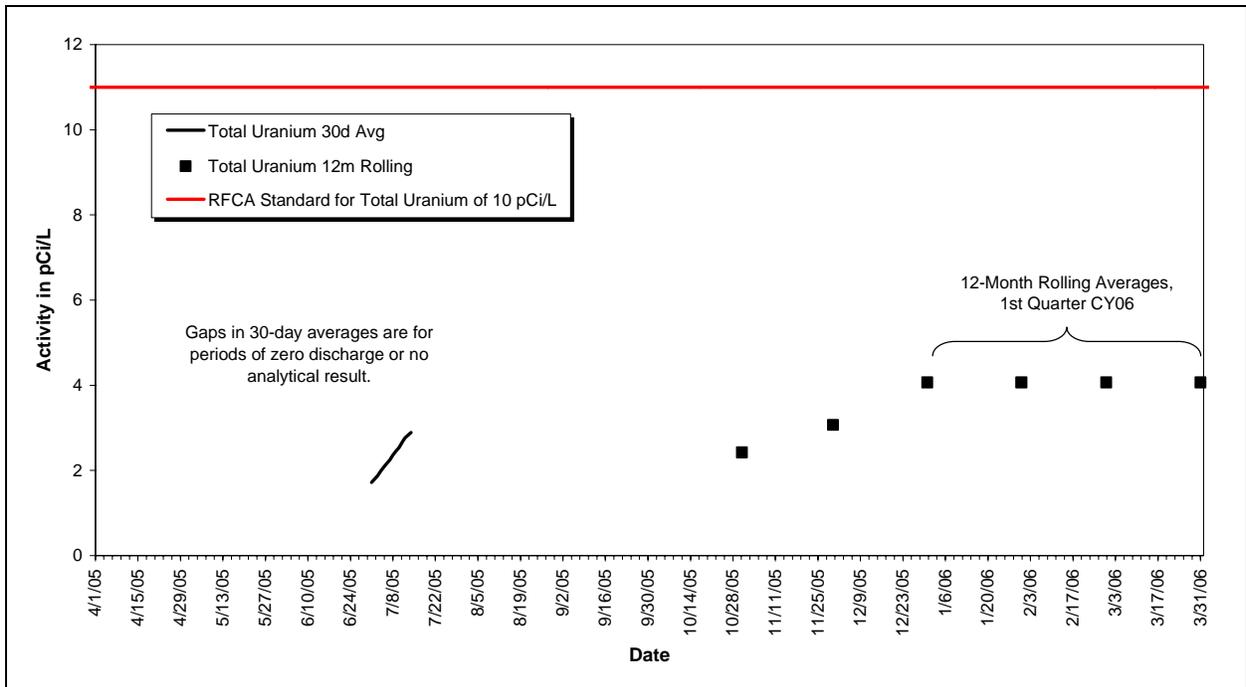


Figure 2-11. Volume-Weighted Average Total Uranium Compliance Values at GS31: Calendar Year Ending 1st Quarter CY 2006

## 2.2 Point of Evaluation (POE) Monitoring

This section deals only with POE monitoring of flow from the former IA upstream of the ponds for adherence with the RFCA Action Level Framework (ALF). POE monitoring is performed in North Walnut Creek, South Walnut Creek, and the South Interceptor Ditch (SID) at locations SW093, GS10, and SW027, respectively.

Sampling for AoIs at POEs is performed by collecting continuous flow-paced composite samples. Total Pu, Am, U<sup>8</sup>, Cr, and Be, and dissolved Ag and Cd are evaluated using volume-weighted averages at POEs.

With the implementation of Revision 1 of the IMP (October 13, 2005), radionuclide evaluations at the POEs use a 12-month rolling average<sup>9</sup> calculated on the last day of each month. Metals AoIs are evaluated using the 85th percentile of 30-day averages<sup>10</sup> for the preceding calendar year.

Data collected during RFCA monitoring in the past have resulted in reportable values for Pu, Am, U, and Cr under the RFCA action level criteria at the designated POEs. Such reportable values have required source evaluation and the development of a mitigation plan, when appropriate. These reportable values have caused the Site to evaluate upstream monitoring data, perform special monitoring tailored to the specific source evaluation, and take action upstream of the POEs to reduce contaminant transport that caused the reportable values.

Generally, analytical data evaluation is performed as preliminary data become available. If an initial qualitative screening indicates that an analytical result is higher than the action level for a particular AoI, then the 30-day or 12-month rolling average is calculated immediately upon receipt of the preliminary result. If the 30-day or 12-month rolling average values are reportable, then validation is requested for all data packages used in the calculation. The desired evaluation frequency is semi-monthly, within 1 week of the 15th and last day of any given month. RFCA requires that DOE, RFPO inform regulators within 15 days of DOE, RFPO gaining knowledge (not just a suspicion) that an exceedance (verified) has (actually) occurred. The DQO decision rules are:

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<sup>8</sup> Pu and Am refer specifically to Pu-239,240 and Am-241, respectively. Total U refers to total uranium (the sum of the analyzed isotopes: U-233,234 + U-235 + U-238).

<sup>9</sup> The 12-month rolling average for the last day of a particular month is calculated as a volume-weighted average of a “window” of time containing the previous 12 months. Each 12-month “window” includes daily discharge volumes (measured at the location with a flow meter) and daily activities (from the sample carboy in place at the end of that day). Therefore, there are twelve 12-month rolling averages for a given calendar year. Days with no flow or no analytical result, either due to failed laboratory analysis, NSQ for analysis, or excessive duplicate error ratio (DER), are not included in the. When no discharge has occurred in the last 12 months, no 12-month rolling average is reported.

<sup>10</sup> The 30-day average for a particular day is calculated as a volume-weighted average of a ‘window’ of time containing the previous 30 days which had both flow and an analytical result. Each day has its own discharge volume (measured at the location with a flow meter) and concentration (analytical result from the sample in place at the end of that day). Therefore, there are 365 30-day moving averages for a location which flows all year (366 in a leap year). At locations which have intermittent flows, 30-day averages are calculated as averages of the previous 30 days of greater than zero flow. For days where no concentration is available, either due to failed lab analysis, excessive relative percent difference (RPD), or NSQ for analysis, no 30-day average is reported.

- IF** The volume-weighted 12-month rolling average for any radionuclide AoI, as represented by samples from the specified RFCA POEs (GS10 [POE2], SW027 [POE3], and SW093 [POE1]), exceeds the appropriate RFCA action level<sup>11</sup> (Table 2–7)—
- THEN** The Site must notify EPA and CDPHE, evaluate for source location, and implement mitigating action<sup>12</sup> if appropriate.<sup>13</sup>
- IF** The 85th percentile of the volume-weighted 30-day moving averages of a given calendar year for any metals AoI, as represented by samples from the specified RFCA POEs (GS10 [POE2], SW027 [POE3], and SW093 [POE1]) exceeds the appropriate RFCA action level—
- THEN** The Site must notify EPA and CDPHE, evaluate for source location, and implement mitigating action if appropriate.

*Table 2–7. POE Monitoring RFCA Action Levels*

Analyte	Action Level
Am-241	0.15 pCi/L
Pu-239,240	0.15 pCi/L
Total Uranium	10 pCi/L (GS10 and SW093); 11 pCi/L (SW027)
Total Be	4 µg/L
Dissolved Cd	1.5 µg/L
Total Cr	50 µg/L
Dissolved Ag	0.6 µg/L

Note: The above action levels only apply to 30-day or 12-month rolling average values, as appropriate.

The following evaluations include all results that were not rejected through the verification and validation process. Data are generally presented to decimal places as reported by the laboratories. Accuracy should not be inferred; minimum detectable concentrations/activities and analytical error are often greater than the precision presented. When a sample has a corresponding field duplicate, the value used in calculations is the arithmetic average of the ‘real’ and the ‘duplicate’ values. When a sample has multiple ‘real’ analyses (Site requested ‘reruns’), the value used in calculations is the arithmetic average of the multiple ‘real’ analyses.

Refer to the analytical data accompanying this document (see Section 2.0 for additional information).

<sup>11</sup> Appropriate action levels for volume-weighted 30-day and 12-month rolling averages are specified for individual contaminants in RFCA.

<sup>12</sup> Mitigating action may include, but not be limited to, the following examples: (1) immediate action to halt a discharge or contain a spill; or (2) use of upstream monitoring data to seek out and mitigate upstream contaminant sources.

<sup>13</sup> RFCA may actually specify consequences for an exceedance of any action level (not just those for AoIs) at any location within the segment (not just at the consensus monitoring points). This decision rule presents the consensus decision rule that drives our monitoring activities. It is an implementation, rather than a reiteration, of RFCA.

## 2.2.1 Location GS10

Monitoring location GS10 is located on South Walnut Creek at the perimeter of the former IA just upstream of the B-Series Ponds (Figure 2–1). The central portion of the former IA contributes flow to GS10 through Functional Channels 4 and 5.

Table 2–8 shows that many of the annual average Pu and Am activities at GS10 were greater than 0.15 pCi/L during active Site closure. However, a significant reduction in both Pu and Am activities has been observed following Site closure.<sup>14</sup> With the completion of the functional channels, implementation of enhanced erosion controls, revegetation, soil stabilization, and lack of substantial runoff, transport of Pu and Am has been virtually eliminated.

Table 2–8. Annual Volume-Weighted Average Radionuclide Activities at GS10 in WY 1997–2006

Water Year	Volume-Weighted Average Activity (pCi/L)		
	Am-241	Pu-239,240	Total Uranium
1997	0.302	0.295	2.85
1998	0.105	0.152	2.99
1999	0.276	0.140	2.48
2000	0.397	0.185	2.19
2001	0.072	0.078	2.84
2002	0.083	0.053	3.04
2003	0.114	0.113	2.69
2004	0.148	0.362	2.43
2005	0.166	0.197	6.45
2006	0.002	0.007	14.8
Total (WY 1997–2006)	0.190	0.174	3.10

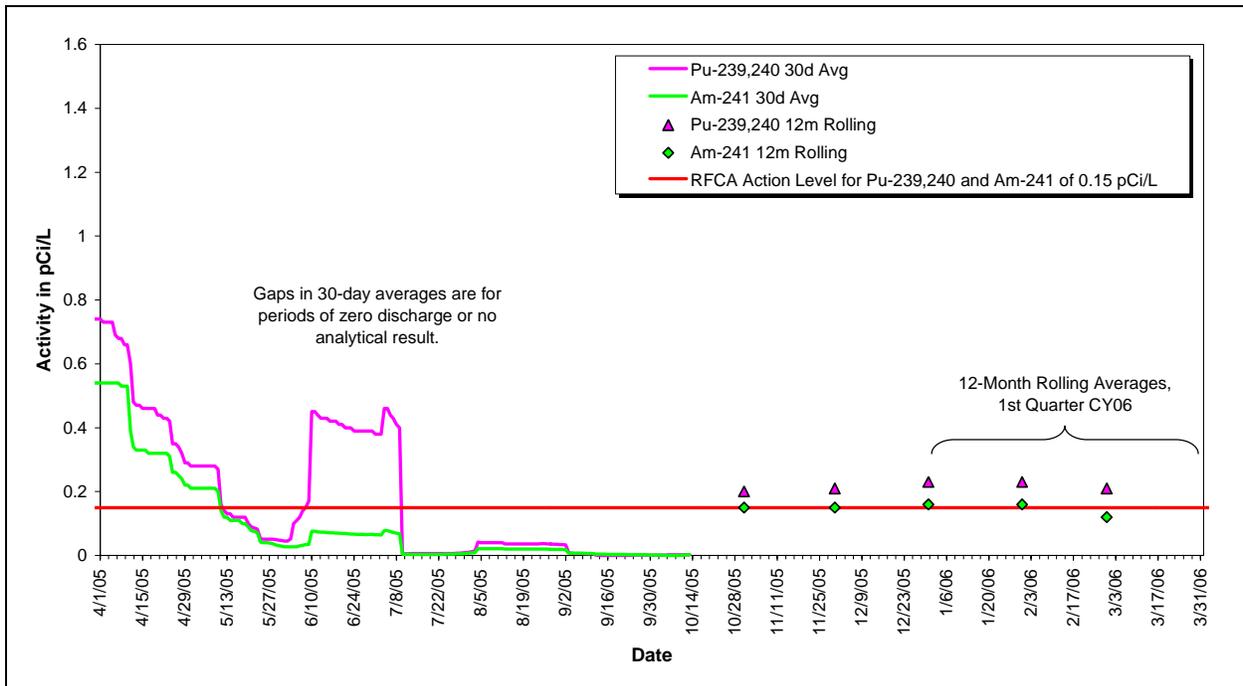
Note: Data through March 26, 2006.

Prior to the Site's declaration of physical completion on October 13, 2005, demonstration of compliance for Pu-239,240 and Am-241 concentrations at RFCA POEs used calculated 30-day average values. Subsequent to the declaration of physical completion, compliance for Pu and Am at POEs is demonstrated using the 12-month rolling average calculation for the last day of each month, per the Revision 1 of the IMP.

Based on results using the 12-month rolling average method (Figure 2–12), the Site notified the Regulators that reportable Pu and Am values had been observed at GS10. This notification was triggered by the transition from the 30-day to the 12-month reporting window, and was provided for information only. All of the analytical results causing the reportable 12-month rolling averages occurred prior to June 11, 2005. Since source evaluation letters/reports have been previously completed for those results, no additional action is warranted at this time.

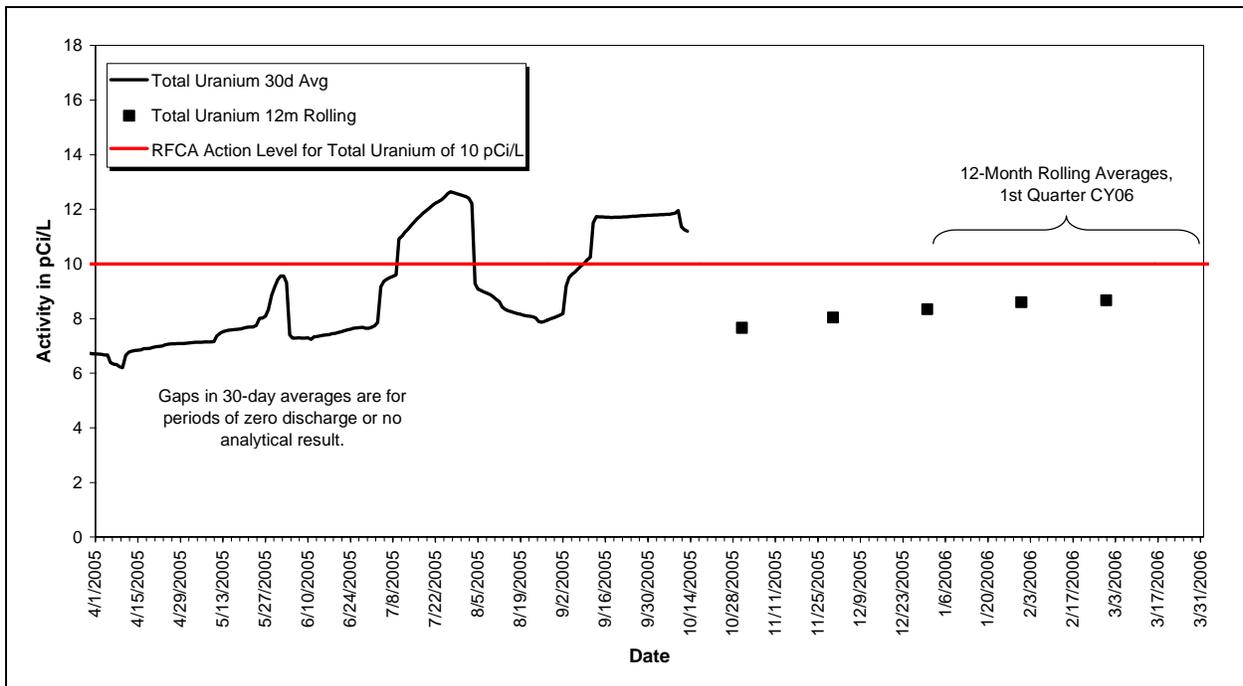
Figure 2–13 shows that none of the 12-month rolling averages for total uranium required reporting during the quarter. However, recent increases in uranium activity at GS10 have been observed. Source evaluation for GS10 has identified hydrologic changes at GS10 as the cause

<sup>14</sup> As of the publication of this report, analytical results for the composite sample at GS10 for the period March 27 to April 24, 2006, were not available. Therefore, the analytical results for this sample are not included.



Note: Data through March 26, 2006.

Figure 2-12. Volume-Weighted Average Pu and Am Compliance Values at GS10: Calendar Year Ending 1st Quarter CY 2006



Note: Data through March 26, 2006.

Figure 2-13. Volume-Weighted Average Total Uranium Compliance Values at GS10: Calendar Year Ending 1st Quarter CY 2006

of the increases in total uranium. As impervious areas were removed at the Site (reducing direct runoff during precipitation events), ground water contributions to the creek with naturally occurring uranium represented a larger portion of the streamflow monitored at GS10. Without direct runoff contributions to mix with the ground water uranium contributions, samples from GS10 began to reflect the naturally occurring ground water uranium concentrations (often significantly greater than the surface water action level).

In the past, Site ground water and surface water samples from select locations were sent to Los Alamos National Laboratory for HR ICP/MS and/or TIMS analyses. These analyses measure mass ratios of four uranium isotopes (masses 234, 235, 236, and 238) and are detailed in the reports titled *Uranium in Surface Soil, Surface Water, and Ground Water at the Rocky Flats Environmental Technology Site*, dated June 2004, and in the *Interim Measure/Interim Remedial Action for Ground Water at the Rocky Flats Environmental Technology Site*, dated June 21, 2005. Isotopic ratios provide a signature that indicates whether the source of uranium is natural or anthropogenic (man-made). The results to date indicate that all the surface water and almost all ground water locations at the Site display a predominately natural signature.

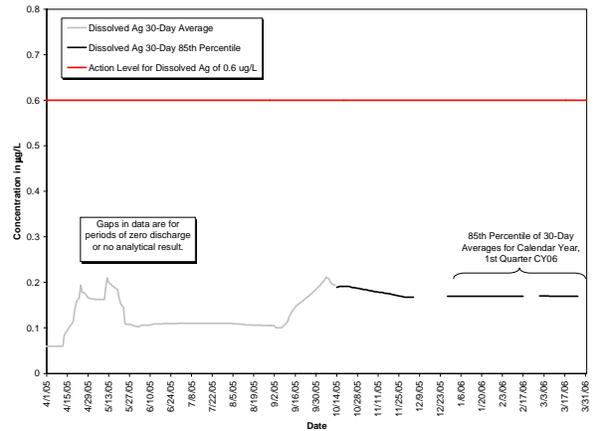
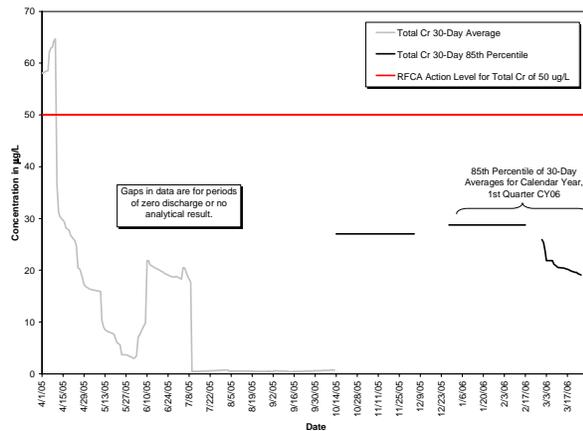
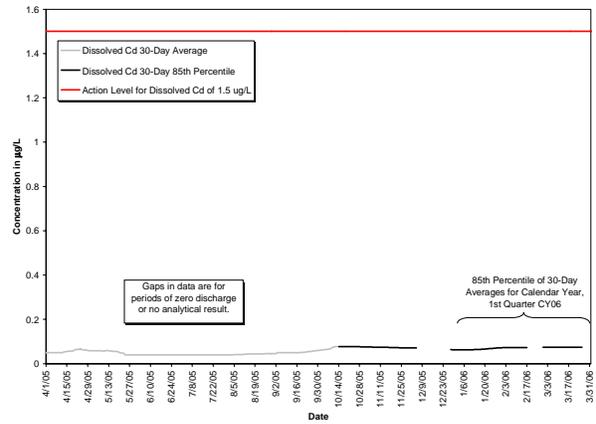
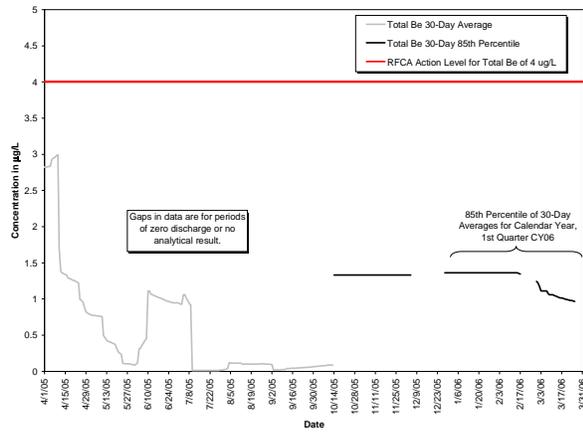
Table 2–9 shows that all of the annual average metals concentrations were less than the action level. Additionally, the long-term metals averages (WY 1997–2006) were all less than the action levels.

Figure 2–14 shows that none of the 85th percentile 30-day average metals concentrations were reportable for the quarter.

*Table 2–9. Annual Volume-Weighted Average Hardness and Metals Concentrations at GS10 in WY 1997–2006*

Water Year	Volume-Weighted Average Concentration (µg/L)				
	Hardness [mg/L]	Total Be	Dissolved Cd	Total Cr	Dissolved Ag
1997	137	0.64	0.09	4.62	0.08
1998	159	0.14	0.13	3.19	0.24
1999	134	0.17	0.07	4.09	0.13
2000	173	0.20	0.11	3.53	0.11
2001	213	0.32	0.11	5.82	0.12
2002	283	0.24	0.08	5.10	0.08
2003	229	0.22	0.11	6.80	0.13
2004	232	0.61	0.11	13.4	0.12
2005	347	0.79	0.06	16.3	0.15
2006	617	0.33	0.07	0.73	0.14
Total (WY 1997–2006)	203	0.35	0.10	6.38	0.13

Note: Hardness units in milligrams per liter (mg/L). Data through March 26, 2006.



Note: Data through March 26, 2006.

Figure 2–14. Volume-Weighted Average Metals Compliance Values at GS10: Calendar Year Ending 1st Quarter CY 2006

## 2.2.2 Location SW027

Monitoring location SW027 is located at the end of the SID at the inlet to Pond C-2 (Figure 2–1). The southern portion of the former IA contributes flow to SW027 through the SID.

Table 2–10 shows that the majority of the annual average Pu and Am activities were less than 0.15 pCi/L. The significant increase in WY 2004 was the result of increased solids transport from disturbed areas associated with the 903 Pad/Lip accelerated actions. However, a significant reduction in both Pu and Am activities has been observed following completion of accelerated actions in the drainage. With the completion of the 903 Pad/Lip actions, implementation of enhanced erosion controls, revegetation, soil stabilization, and lack of substantial runoff, transport of Pu and Am approaching the action level has been virtually eliminated. The total uranium annual average activities are well below 11 pCi/L.

Table 2–10. Annual Volume-Weighted Average Radionuclide Activities at SW027 in WY 1997–2006

Water Year	Volume-Weighted Average Activity (pCi/L)		
	Am-241	Pu-239,240	Total Uranium
1997	0.007	0.037	1.43
1998	0.021	0.140	3.21
1999	0.018	0.067	1.87
2000	0.059	0.327	1.21
2001	0.006	0.025	1.33
2002	0.001	0.002	0.497
2003	0.010	0.079	1.68
2004	0.478	2.67	1.14
2005	0.032	0.136	1.78
2006	NA	NA	NA
Total (WY 1997–2006)	0.059	0.330	1.82

Note: No flow at SW027 through March 31, 2006.

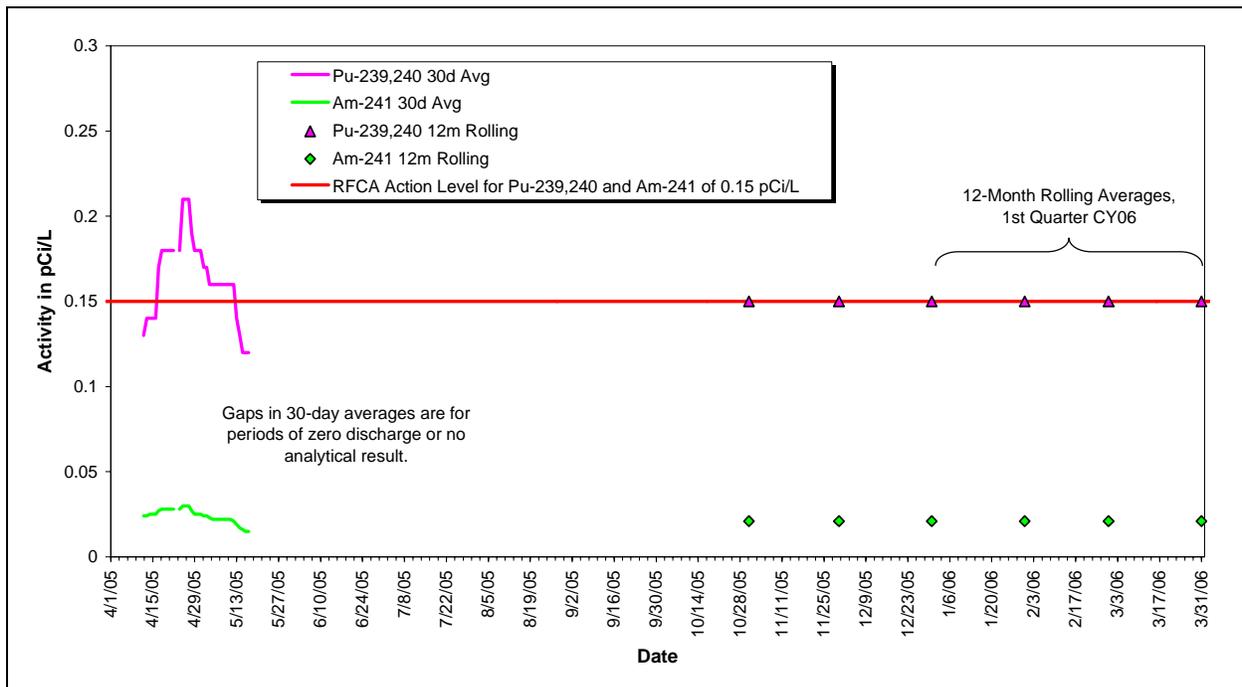


Figure 2–15. Volume-Weighted Average Pu and Am Compliance Values at SW027: Calendar Year Ending 1st Quarter CY 2006

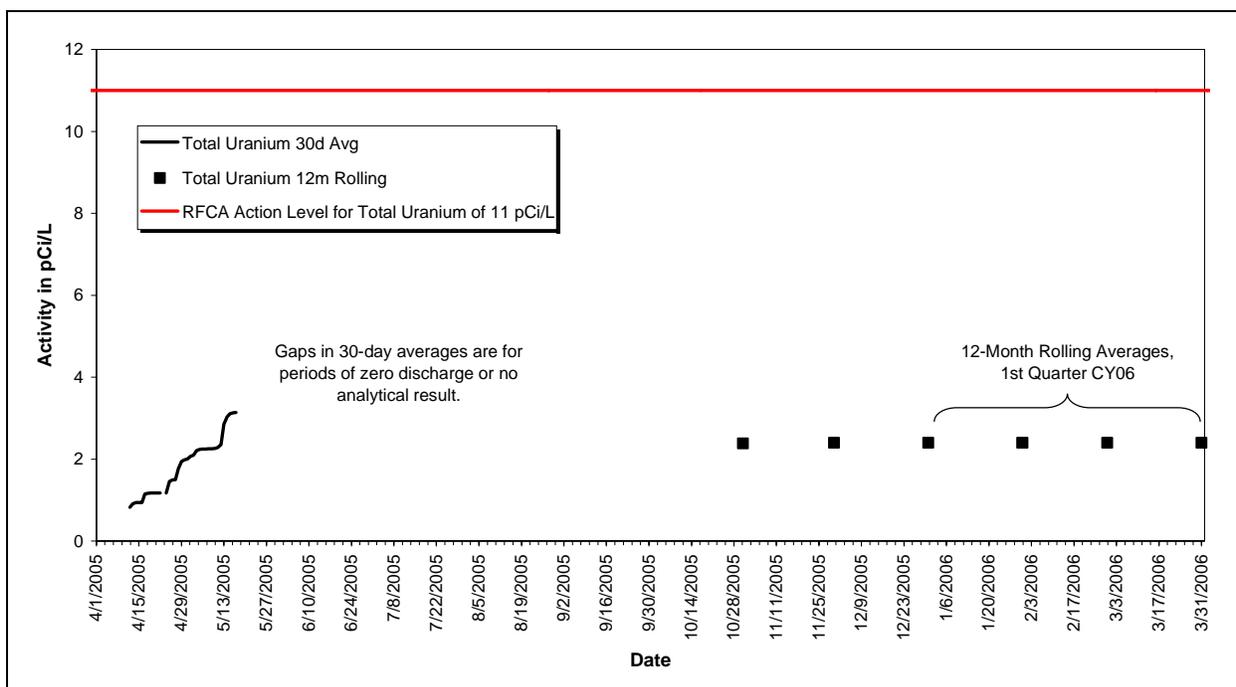


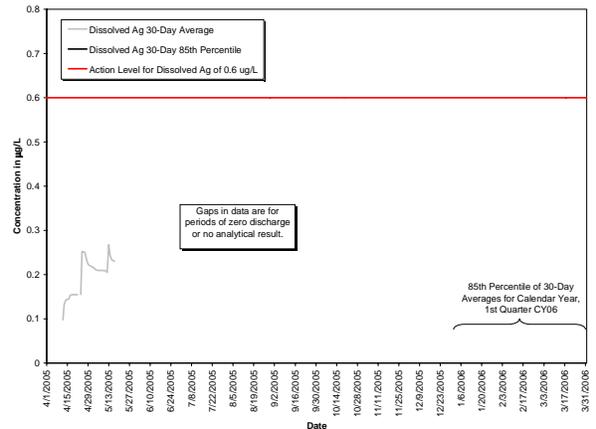
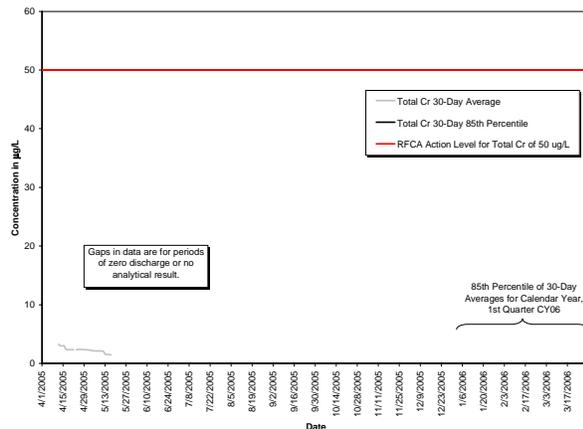
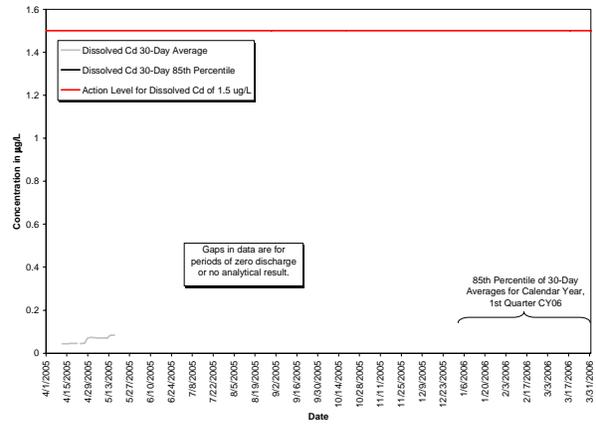
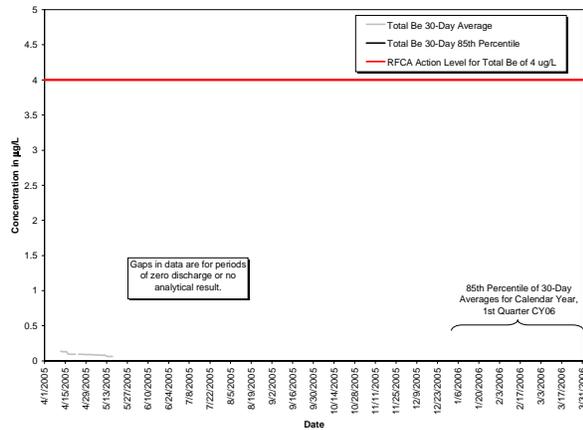
Figure 2–16. Volume-Weighted Average Total Uranium Compliance Values at SW027: Calendar Year Ending 1st Quarter CY 2006

Table 2–11 shows that all of the annual average metals concentrations were less than the action level. Additionally, the long-term metals averages (WY 1997–2006) were less than the action levels.

Table 2–11. Annual Volume-Weighted Average Hardness and Metals Concentrations at SW027 in WY 1997–2006

Water Year	Volume-Weighted Average Concentration (µg/L)				
	Hardness [mg/L]	Total Be	Dissolved Cd	Total Cr	Dissolved Ag
1997	103	0.53	0.06	2.01	0.06
1998	149	0.13	0.15	0.85	0.21
1999	109	0.03	0.10	1.56	0.25
2000	148	0.26	0.06	3.92	0.09
2001	147	0.23	0.07	1.81	0.12
2002	112	0.13	0.05	3.04	0.09
2003	148	0.06	0.06	1.75	0.15
2004	136	0.32	0.06	7.36	0.20
2005	193	0.16	0.06	3.80	0.17
2006	NA	NA	NA	NA	NA
Total (WY 1997–2006)	137	0.19	0.09	2.37	0.16

Note: Hardness units in milligrams per liter (mg/L). No flow at SW027 through March 31, 2006.



Note: The sample for the period May 18, 2005–April 17, 2006 was discarded (NSQ) on April 17, 2006. At the time the carboy contained 2.2 liters. As such, no compliance values are calculated for the period.

Figure 2–17. Volume-Weighted Average Metals Compliance Values at SW027: Calendar Year Ending 1st Quarter CY 2006

### 2.2.3 Location SW093

Monitoring location SW093 is located on North Walnut Creek at the perimeter of the former IA, 1,300 feet upstream of the A-Series Ponds (Figure 2–1). The northern portion of the former IA contributes flow to SW093 through Functional Channels 2 and 3.

Table 2–12 shows that the majority of the annual average Pu and Am activities were below 0.15 pCi/L. Additionally, the long-term Pu and Am averages (WY 1997–2006) are below 0.15 pCi/L. The average total uranium activities are all well below 10 pCi/L.

Table 2–12 shows an increase in Pu activities during WY 2004 and Am activities in WY 2004–2005. However, a significant reduction in both Pu and Am activities has been observed following Site closure. With the completion of the functional channels, implementation of enhanced erosion controls, revegetation, soil stabilization, and lack of substantial runoff, transport of Pu and Am has been virtually eliminated.

Table 2–12. Annual Volume-Weighted Average Radionuclide Activities at SW093 in WY 1997–2006

Water Year	Volume-Weighted Average Activity (pCi/L)		
	Am-241	Pu-239,240	Total Uranium
1997	0.045	0.073	2.76
1998	0.018	0.019	2.12
1999	0.025	0.039	1.94
2000	0.022	0.038	2.14
2001	0.011	0.015	2.09
2002	0.017	0.007	2.76
2003	0.036	0.050	2.43
2004	0.367	0.689	2.27
2005	0.446	0.037	3.74
2006	0.003	0.005	5.57
Total (WY 1997–2006)	0.083	0.089	2.41

Note: Data through April 3, 2006.

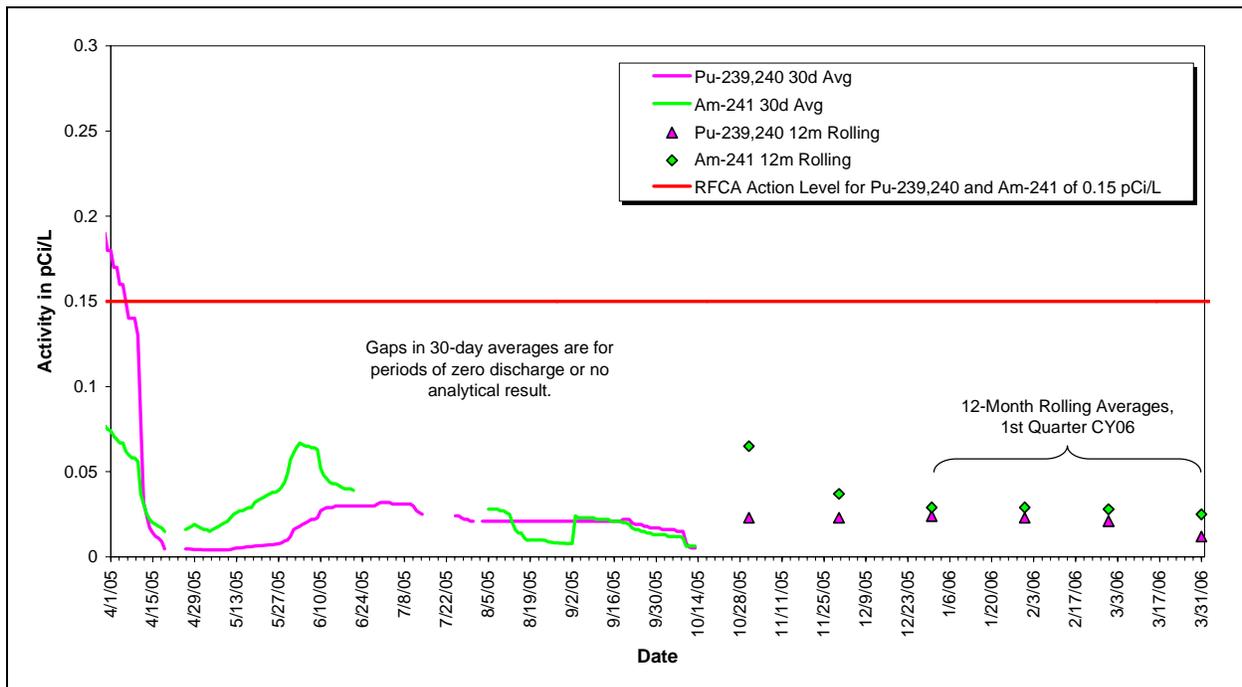


Figure 2–18. Volume-Weighted Average Pu and Am Compliance Values at SW093: Calendar Year Ending 1st Quarter CY 2006

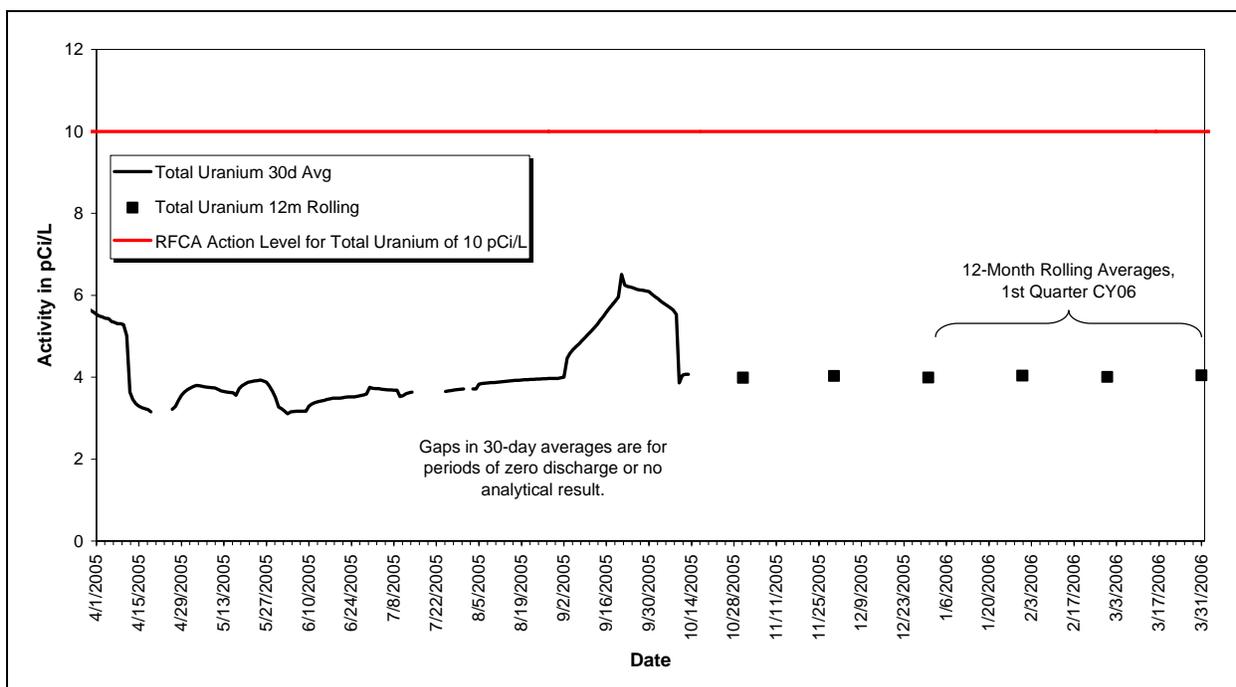


Figure 2–19. Volume-Weighted Average Total Uranium Compliance Values at SW093: Calendar Year Ending 1st Quarter CY 2006

Table 2–13 shows that all of the annual average metals concentrations were less than the action level. Additionally, the long-term metals averages (WY 1997–2006) were less than the action levels.

Table 2–13. Annual Volume-Weighted Average Hardness and Metals Concentrations at SW093 in WY 1997–2006

Water Year	Volume-Weighted Average Concentration (µg/L)				
	Hardness [mg/L]	Total Be	Dissolved Cd	Total Cr	Dissolved Ag
1997	172	0.57	0.09	2.79	0.06
1998	175	0.12	0.20	2.12	0.25
1999	151	0.21	0.10	5.16	0.14
2000	220	0.20	0.13	3.85	0.13
2001	239	0.36	0.07	6.38	0.12
2002	351	0.30	0.07	5.84	0.08
2003	283	0.28	0.11	4.49	0.15
2004	304	0.53	0.09	11.4	0.11
2005	334	0.24	0.05	5.25	0.12
2006	510	0.32	0.06	0.80	0.14
Total (WY 1997–2006)	234	0.30	0.11	5.08	0.14

Note: Hardness units in milligrams per liter (mg/L). Data through April 3, 2006.

Figure 2–20 shows that none of the 85th percentile 30-day average metals concentrations were reportable for the quarter.

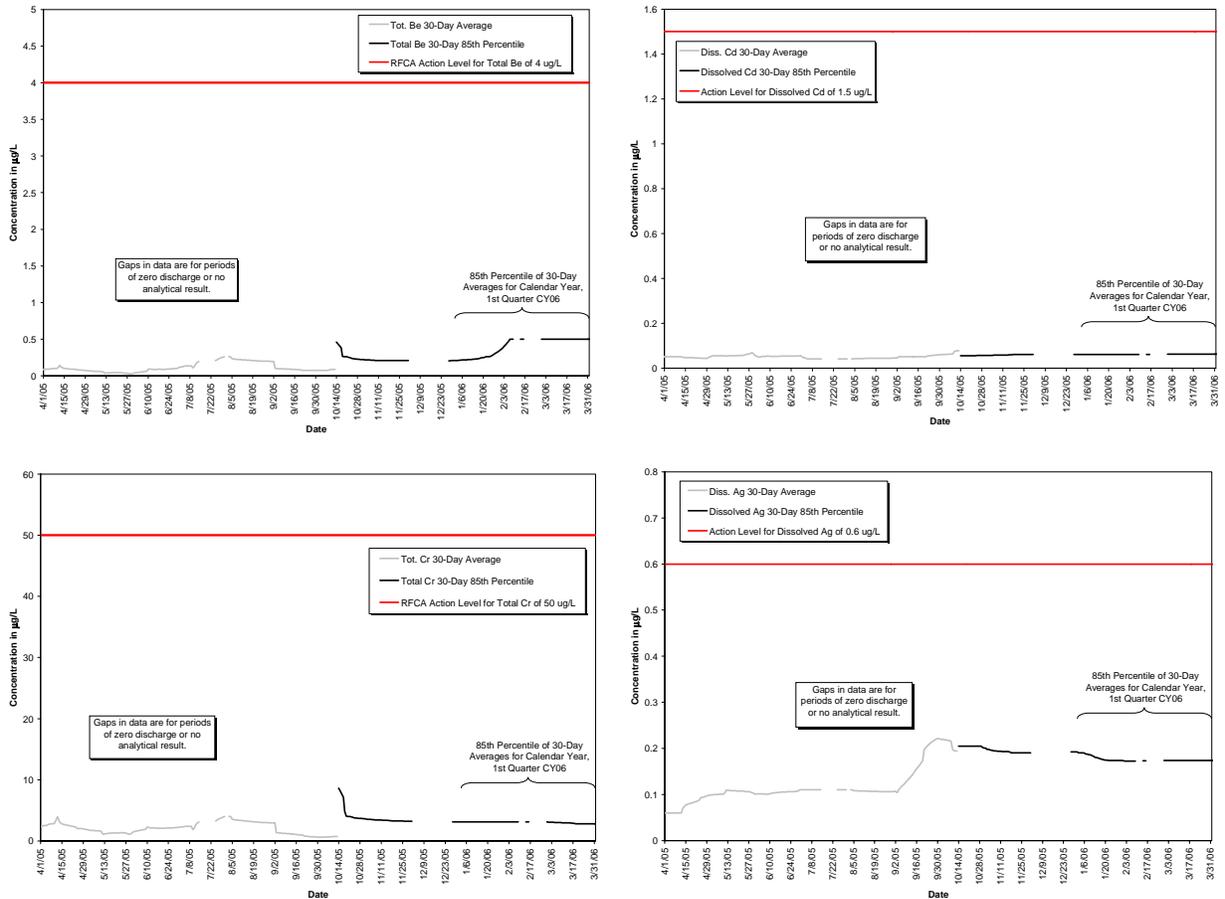


Figure 2–20. Volume-Weighted Average Metals Compliance Values at SW093: Calendar Year Ending 1st Quarter CY 2006

## 2.3 Performance Monitoring

### 2.3.1 Present Landfill

This monitoring objective is intended to determine the short- and long-term effectiveness of the Present Landfill remedy as related to surface water. These requirements are identified in the *Final Interim Measures/Interim Remedial Action for IHSS 114 and RCRA Closure of the RFETS Present Landfill (IM/IRA)*, “Appendix B: Post-Accelerated Action Monitoring and Long-Term Surveillance and Monitoring Considerations” (K-H 2004), including institutional controls, inspection and maintenance, and environmental monitoring.

As part of Present Landfill closure, a passive seep interception and treatment system has been installed to treat landfill seep water and ground water intercept system (GWIS) water. There are three sources of influent to the treatment system: two GWIS pipes, and the Present Landfill seep. Effluent for the treatment system (point discharge) eventually flows to the East Landfill Pond. This section presents the monitoring data for treatment system influent and effluent as well as the

East Landfill Pond if the treatment system effluent exceeds surface water standards. Details regarding surface water monitoring for the Present Landfill can be found in the *Present Landfill Monitoring and Maintenance Plan and Post Closure Plan*, (DOE 2006d).

As detailed in the IM/IRA, seep monitoring requirements will consist of quarterly monitoring until the first CERCLA review. A validated exceedance of a treatment system effluent limit will trigger monthly monitoring for three consecutive months. Continued exceedances during the 3-month period will trigger consultation between the RFCA parties to determine whether a change in the remedy is required, additional parameters need to be analyzed, or a different sampling frequency is required. Continued exceedances will also trigger sampling of the East Landfill Pond for those constituent standards that were exceeded in the treatment system effluent. If surface water standards are exceeded in the pond, RFCA parties will be consulted to determine if further sampling is required, if the water in the pond can overflow the East Landfill Pond dam spillway, or if another water management strategy should be applied (IM/IRA).

The GWIS influent (if any) into the seep treatment system will also be sampled. The water will be sampled quarterly for one year, and the analytical results will be evaluated by the RFCA parties.

Present Landfill sampling locations, data collection protocols, and analyte suites are given in Table 2–14.

*Table 2–14. Sampling Locations for Present Landfill*

Location Code	Location Description	Routine Data Collection	Analytes
GWISINFNORTH	Northern GWIS influent to the treatment system	Quarterly grab samples	VOCs, isotopic uranium, total and dissolved metals, nitrate/nitrite, total mercury
GWISINFSOUTH	Southern GWIS influent to the treatment system	Quarterly grab samples	VOCs, isotopic uranium, total and dissolved metals, nitrate/nitrite, total mercury
PLFSEEPINF	Landfill seep influent to the treatment system	Quarterly grab samples; instantaneous flow rate at sample event	VOCs, isotopic uranium, total and dissolved metals, total mercury
PLFSYSEFF	Effluent from the treatment system	Quarterly grab samples	VOCs, isotopic uranium, total and dissolved metals, SVOCs, total mercury
PLFPONDEFF	East Landfill pond at the downstream (east) end	As needed; triggered by decision rule	As needed; determined by decision rule

Note: Flow at the seep influent is measured using a 'bucket-and-stopwatch' method

Analytical methodologies and RLs, data reporting procedures, laboratory quality assurance/quality control (QA/QC) procedures, and laboratory data validation and contractor validation procedures are conducted in accordance with EPA-approved methods. Samples are submitted to an EPA-approved analytical laboratory for the following analysis methods.

- SW-846 Method 8260B—Volatile Organic Compounds (VOCs)
- SW-846 Method 6010B—Metals (Total and Dissolved)
- SW-846 Method 7470A—Mercury (Total)
- SW-846 Method 8270C—Semi-Volatile Organic Compounds (SVOCs)

- Alpha Spectrometry—Isotopic Uranium
- EPA-600 / 4-79-020 Method 353.2—Nitrate/Nitrite

This objective is intended to evaluate water quality for the inflows to the passive seep treatment system at the Present Landfill. Monitoring of the treatment system effluent is intended to demonstrate compliance with surface water standards.

Generally, analytical data evaluation is performed quarterly as data become available. Analytical data from the GWIS (GWISINFNORTH and GWISINF SOUTH) and seep (PLFSEEPINF) influent sources are routinely reported to the RFCA parties. GWIS sampling results will be reviewed by the RFCA parties after 1 year to determine if further sampling is required. The DQO decision rule for the treatment system effluent (PLFSYSEFF) is as follows:

**IF** Quarterly effluent results are greater than surface water standards listed in the RFCA, Attachment 5, Table 1—

**THEN** Sampling frequency will be increased to monthly for three consecutive months (increased sampling, in addition to the routine quarterly sampling, will be limited to the constituents that triggered the increased sampling frequency)

**IF** Monthly effluent results continue to be greater than surface water standards listed in the RFCA, Attachment 5, Table 1—

**THEN** Notify the RFCA parties and sample the East Landfill Pond for the constituents that were greater than the surface water standards during monthly sampling—

**ELSE** Discontinue monthly sampling and resume quarterly sampling for the constituents that were less than the surface water standards

**IF** East Landfill Pond sampling results are greater than surface water standards listed in the RFCA, Attachment 5, Table 1—

**THEN** Consult the RFCA parties to determine if further sampling is required, or if another water management strategy should be applied (IM/IRA)—

**ELSE** Resume quarterly sampling for the constituents that were sampled in the East Landfill Pond

#### 2.3.1.1 Data Evaluation

Table 2–15 summarizes the Present Landfill routine sample collection for the 1st quarter of CY 2006. During the February 23, 2006, sample at the PLFSEEPINF, the flow rate was 0.42 gallons per minute. As of March 31, 2005, the East Landfill Pond remained in a flow-through configuration.

Refer to the analytical data accompanying this document (see Section 2.0 for additional information).

Table 2–15. 1st Quarter CY 2006 Routine Grab Sampling at the Present Landfill

Location Code	Collection Date/Time	Analytes
GWISINFNORTH	2/23/06 12:00	VOCs, isotopic uranium, total and dissolved metals, nitrate/nitrite, total mercury
GWISINFSOUTH	DRY	NA
PLFSEEPINF	2/23/06 11:30	VOCs, isotopic uranium, total and dissolved metals, total mercury
PLFSYSEFF	2/23/06 11:15	VOCs, isotopic uranium, total and dissolved metals, SVOCs, total mercury

Analytical results for the treatment system effluent (PLFSYSEFF) are compared to the appropriate surface water standards listed in RFCA Attachment 5, Table 1. Table 2–16 summarizes the Table 2–15 results that were greater than the applicable surface water standard. All other analytical results were less than the applicable surface water standard.

Table 2–16. Present Landfill Treatment System Effluent (PLFSYSEFF): Summary of Routine Grab Sampling Analytical Results Exceeding RFCA Surface Water Standards

Analyte	Sample Date	Result	Units	RFCA Standard
Arsenic, total	2/23/06	18.1	µg/L	0.018
<b>Boron, total</b>	<b>2/23/06</b>	<b>1,930</b>	<b>µg/L</b>	<b>750</b>
Cadmium, dissolved	2/23/06	2	µg/L	1.5
<b>Manganese, total</b>	<b>2/23/06</b>	<b>5,650</b>	<b>µg/L</b>	<b>1,858</b>
Silver, dissolved	2/23/06	1.2	µg/L	0.6
Thallium, total	2/23/06	20.2	µg/L	0.5
Phenenthrene	2/23/06	0.36	µg/L	2.0

Note: Monthly sampling for the analytes in **bold** was triggered by previous sample results.

For the analytes listed in Table 2–16, monthly sampling will be initiated at the PLFSYSEFF per the decision rule. The routine quarterly 2nd quarter CY 2006 Present Landfill sampling occurred on April 19, 2006. Monthly sampling for B and Mn began on March 20, 2006 (Table 2–17); the first monthly sampling for the remaining Table 2–16 analytes will begin in May 2006.

Table 2–17. Present Landfill Treatment System Effluent (PLFSYSEFF): Summary of Monthly Analytical Results

Analyte	Sample Date	Result	Units	RFCA Standard
Boron, total	2/23/06	1,930	µg/L	750
	3/20/06	1,600	µg/L	750
	4/19/06	Pending		
Manganese, total	2/23/06	5,650	µg/L	1,858
	3/20/06	5,430	µg/L	1,858
	4/19/06	Pending		

### 2.3.2 Original Landfill

This monitoring objective is intended to determine the short- and long-term effectiveness of the Original Landfill remedy as related to surface water. These requirements are identified in the *Final Interim Measure/Interim Remedial Action for the Original Landfill*, “Appendix B: Post-Accelerated Action Monitoring and Long-Term Surveillance and Monitoring Considerations” (K-H 2005a), including institutional controls, inspection and maintenance, and environmental monitoring.

Details regarding surface water monitoring for the Original Landfill can be found in the *Final Landfill Monitoring and Maintenance Plan, RFETS Original Landfill* (DOE 2006b). As part of Original Landfill closure, surface water will be monitored at both upgradient and downgradient locations in Woman Creek (locations GS05 and GS59, respectively). Applicable surface water standards are listed in the RFCA, Attachment 5, Table 1.

As detailed in the IM/IRA, monitoring requirements will consist of quarterly monitoring until the first CERCLA review. A validated exceedance of an effluent limit will trigger monthly monitoring for 3 consecutive months. Continued exceedances during the 3-month period will trigger consultation between the RFCA parties to determine whether a change in the remedy is required, additional parameters need to be analyzed, or a different sampling frequency is required.

Original Landfill sampling locations, data collection protocols, and analyte suites are given in Table 2–18.

Table 2–18. Sampling Locations for Original Landfill

Location Code	Location Description	Routine Data Collection	Analytes
GS05; upgradient	Woman Creek at west fenceline	Quarterly grab samples	VOCs, isotopic uranium, total and dissolved metals, total mercury
GS59; downgradient	Woman Creek 800 feet downstream of Original Landfill	Quarterly grab samples	VOCs, isotopic uranium, total and dissolved metals, total mercury

Notes: Flow is measured at 15-minute intervals as part of the Investigative monitoring objective (Section 2.4); isotopic uranium, dissolved metals, and total metals are currently collected as continuous flow-paced composites using automated samplers, also as part of Investigative monitoring

Analytical methodologies and RLs, data reporting procedures, laboratory QA/QC procedures, and laboratory data validation and contractor validation procedures are conducted in accordance with EPA-approved methods. Samples are submitted to an EPA-approved analytical laboratory for the following analysis methods.

- SW-846 Method 8260B—Volatile Organic Compounds (VOCs)
- SW-846 Method 6010B—Metals (Total and Dissolved)
- SW-846 Method 7470A—Mercury (Total)
- Alpha Spectrometry—Isotopic Uranium

This objective is intended to evaluate water quality in Woman Creek by monitoring both upstream and downstream of the Original Landfill. Monitoring is intended to demonstrate compliance with surface water standards.

Generally, analytical data evaluation is performed quarterly as data become available. The surface water DQO decision rule for the Original Landfill is as follows:

- IF** Quarterly mean concentrations at downstream location GS59 are greater than surface water standards listed in the RFCA, Attachment 5, Table 1
- AND** Quarterly mean concentrations at downstream location GS59 are greater than quarterly mean concentrations at upstream location GS05
- THEN** Sampling frequency will be increased to monthly for three consecutive months
  
- IF** Quarterly mean concentrations for monthly sampling at downstream location GS59 are greater than surface water standards listed in the RFCA, Attachment 5, Table 1
- AND** Quarterly mean concentrations for monthly sampling at downstream location GS59 are greater than quarterly mean concentrations for monthly sampling at upstream location GS05
- THEN** Consult the RFCA parties to determine whether a change in the remedy is required, additional parameters need to be analyzed, or a different sampling frequency is required
- ELSE** Resume quarterly sampling

### 2.3.2.1 Data Evaluation

Table 2–19 summarizes the Original Landfill sample collection for the 1st quarter of CY 2006.

Refer to the analytical data accompanying this document (see Section 2.0 for additional information).

*Table 2–19. 1st Quarter CY 2006 Routine Sampling for the Original Landfill*

Location Code	Collection Date/Time(s)	Analytes
GS05	<b>10/3/05 15:25–1/5/06 13:08</b>	<b>isotopic uranium, total and dissolved metals</b>
	1/5/06 13:08–2/27/06 13:27	isotopic uranium, total and dissolved metals
	2/23/06 10:00	VOCs, total mercury
	2/27/06 13:27–4/3/06 13:00	isotopic uranium, total and dissolved metals
GS59	<b>10/10/05 17:06–1/3/06 11:14</b>	<b>isotopic uranium, total and dissolved metals</b>
	1/3/06 11:14–2/27/06 12:59	isotopic uranium, total and dissolved metals
	2/23/06 10:30	VOCs, total mercury
	2/27/06 12:59–4/3/06 11:29	isotopic uranium, total and dissolved metals

Note: grab samples show a unique date/time; continuous flow-paced composites show the start and end date/times. Results for samples listed in **bold** were not available for the last quarterly report; they are included here for completeness.

Analytical results for GS59 and GS05 are compared, per the decision rule, to the appropriate surface water standards listed in RFCA Attachment 5, Table 1. Table 2–20 summarizes the

Table 2–19 results that triggered monthly sampling per the decision rule. All other analytical results were acceptable.

*Table 2–20. Original Landfill Surface Water Monitoring: Summary of Routine Grab Sampling Analytical Results Triggering Monthly Sampling*

Analyte	Sample Date	Result	Units	RFCA Standard
Arsenic, total	10/10/05	12.3	µg/L	0.018
	1/3/06	9.0	µg/L	0.018
	2/27/06	16.0	µg/L	0.018
Thallium, total	10/10/05	8.2	µg/L	0.5
	1/3/06	10.5	µg/L	0.5
	2/27/06	15.9	µg/L	0.5

For the analytes listed in Table 2–20, monthly sampling will be initiated at GS05 and GS59 per the decision rule. The first monthly composite sampling began in April 2006.

## 2.4 Investigative Monitoring

When reportable water-quality measurements are detected by surface water monitoring at POEs or POCs, additional monitoring may be required to identify<sup>15</sup> the source and evaluate for mitigating action pursuant to RFCA through the consultative process. This Investigative Monitoring objective is intended to provide upstream water-quality information should reportable water-quality values be detected at RFCA POEs or POCs. Data collection is limited to POE and POC AoIs and is intended to be discontinued once acceptable water quality has been demonstrated at POEs and POCs for an extended period.

During the 4th quarter of CY 2005, five investigative locations were operational (Table 2–21). Data collection upstream of POEs and POCs is not limited to the investigative locations. The Site may also elect to collect data using other methods, subject to the characteristics of the reportable water-quality values and through the consultative process.

<sup>15</sup> Note that the term “identify” is used here to mean “locate.” Characterization is also implied.

Table 2–21. Investigative Surface Water Monitoring Locations

Location Code	Location Description	Sample Collection	Field Data Collection	Primary Flow Measurement Device	Telemetry
GS05	Woman Creek at western Site boundary	Flow-paced composites; isotopic U	Continuous flow data at 15-minute intervals	9-inch Parshall flume	Yes
GS13	North Walnut Creek just upstream of A-Series Bypass	Flow-paced composites; isotopic U	Continuous flow data at 15-minute intervals	6-inch Parshall flume	Yes
GS51	Drainage area south of former 903 Pad/Lip tributary to the SID	Flow-paced composites; Pu, Am, TSS	Continuous flow data at 15-minute intervals	0.75-foot H-flume	Yes
GS59	Woman Creek 800 feet east of OLF	Flow-paced composites; isotopic U	Continuous flow data at 15-minute intervals	1.5-foot Parshall flume	Yes
SW018	North Walnut Creek tributary west of former Building 771 area	Flow-paced composites; Pu, Am, TSS	Continuous flow data at 15-minute intervals	1-foot H-flume	Yes

Notes: OLF = Original Landfill; SID = South Interceptor Ditch

No routine data evaluation for the Investigative objective is presented in this quarterly report. Refer to the analytical data accompanying this document (see Section 2.0 for additional information).

## 2.5 Rocky Flats Non-POC Monitoring

This objective is intended to evaluate nitrate concentrations in Walnut Creek by monitoring at the Walnut Creek POCs (Table 2–22) during pond discharges only. Monitoring is intended to demonstrate compliance with surface water standards by using 12-month rolling averages at the terminal pond POCs (GS08 and GS11), and by using the 85th percentile of 30-day averages for the preceding calendar year at the Indiana Street POC (GS03).

Table 2–22. Non-POC Monitoring Station Designators

POC	Monitoring Station Designators
Pond A-4	GS11 (POC3)
Pond B-5	GS08 (POC4)
Walnut Creek at Indiana Street	GS03 (POC2)

Generally, analytical data evaluation is performed as preliminary data become available. If an initial qualitative screening indicates that an analytical result is higher than the action level for a particular AoI, then the 30-day 85th percentiles or 12-month rolling averages are calculated immediately upon receipt of the preliminary result. If the 30-day 85th percentile or 12-month rolling average values are reportable, then validation is requested for all data packages used in the calculation. The desired evaluation frequency is semi-monthly, within one week of the 15th and last day of any given month. RFCA requires that DOE, RFPO inform regulators within 15 days of DOE, RFPO gaining knowledge (not just a suspicion) that an exceedance (verified) has (actually) occurred. The DQO decision rule is:

- IF** The volume-weighted 12-month rolling average<sup>16</sup> for nitrate, as represented by samples from the specified terminal pond non-POC monitoring locations (GS08 [POC4] and GS11 [POC3]), exceeds the appropriate RFCA standard—
- THEN** DOE must notify EPA and CDPHE within 15 days of DOE, RFPO gaining knowledge that an exceedance (verified) has occurred to initiate the consultative process.
- IF** The 85th percentile of the volume-weighted 30-day moving averages<sup>17</sup> of a given calendar year for nitrate, as represented by samples from non-POC monitoring location GS03 (POC2) exceeds the appropriate RFCA standard—
- THEN** DOE must notify EPA and CDPHE within 15 days of DOE, RFPO gaining knowledge that an exceedance (verified) has occurred to initiate the consultative process.

*Table 2–23. Non-POC Monitoring RFCA Standards*

Analyte	Standard
Nitrate	10 mg/L

Note: The above action levels only apply to 30-day 85th percentile or 12-month rolling average values, as appropriate.

Implementation of this objective will begin with the first Walnut Creek terminal pond discharge in CY 2006. Data presentation and evaluation under this objective will be included when available.

<sup>16</sup> The 12-month rolling average for the last day of a particular month is calculated as a volume-weighted average of a “window” of time containing the previous 12 months. Each 12-month “window” includes daily discharge volumes (measured at the location with a flow meter) and daily concentrations (from the sample carboy in place at the end of that day). Therefore, there are twelve 12-month rolling averages for a given calendar year. Days with no flow or no analytical result, either due to failed laboratory analysis or NSQ for analysis, are not included in the average. When no pond discharge has occurred in the last 12 months, no 12-month rolling average is reported.

<sup>17</sup> The 30-day average for a particular day is calculated as a volume-weighted average of a “window” of time containing the previous 30-days that had flow. Each day has its own discharge volume (measured at the location with a flow meter) and concentration (from the sample carboy in place at the end of that day). Therefore, there are 365 30-day moving averages for a location that flows all year. At locations that have intermittent flows, 30-day averages are reported as averages of the previous 30 days of greater than zero flow. For days where no concentration is available, either due to failed laboratory analysis or NSQ for analysis, no 30-day average is reported.

End of current text

### 3.0 Ground Water Monitoring

This section presents a summary discussion of ground water monitoring results from the first calendar quarter (January 1–March 31) of 2006 (1CQ06). Corresponding analytical data are presented in Appendix A.

Section 3.1 includes a summary of IMP well classifications and corresponding monitoring requirements. Section 3.2 presents a discussion of monitoring performed in compliance with the IMP, a summary of how the resulting data are to be evaluated, and the outcome of those data evaluations. Section 3.3 presents a summary of ground water monitoring performed outside of the IMP, and Section 3.4 summarizes non-routine events. References are included in Section 7.0, and analytical data are in Appendix A.

#### 3.1 IMP Well Classifications

The revised FY 2005 IMP (K-H 2005f) defines the monitoring well classifications and sets forth the monitoring requirements for each classification. These are summarized in Table 3–1.

Table 3–1. IMP Classifications and Corresponding Monitoring Requirements

Well Classification	General Objective	Monitoring Frequency
AOC	Monitor ground water quality and water levels in a drainage downgradient of a contaminant plume or group of plumes	Semiannual (2x/year)
Boundary	Monitor ground water quality and water levels in Woman Creek and Walnut Creek drainages at eastern (downgradient) Site boundary	Annual (1x/year)
Sentinel	Monitor ground water quality and water levels near contaminant plume edges and in drainages	Semiannual (2x/year)
Evaluation	Monitor ground water quality and water levels in or near contaminant source areas and in the former Industrial Area	Biennial (1x/every 2 years)
RCRA	Monitor ground water quality and water levels upgradient and downgradient of the Present Landfill and Original Landfill	Quarterly (4x/year)
Decision Doc	Monitor ground water quality and/or water levels in accordance with published decision documents	Varies
Water Level	Monitor ground water levels (not water quality) in areas lacking coverage or of special interest	Semiannual (2x/year)
Treatment System*	Monitor quality of ground water treatment system influent, effluent, and downgradient surface water	Semiannual (2x/year)
Surface Water Support*	Monitor quality of surface water downgradient of contaminant plume(s)	Semiannual (2x/year)

Notes:

AOC = Area of Concern

RCRA = Resource Conservation and Recovery Act

\* Treatment System and Surface Water Support locations are not monitoring wells but are included for completeness.

Per the FY 2005 IMP (KH 2005f), locations sampled during the first and third quarter of a calendar year include those with RCRA and Decision Document classifications.

### 3.2 IMP Monitoring

As stated above, wells scheduled for sampling in 1CQ06 included RCRA and Decision Doc wells. However, because monitoring requirements at the Present Landfill and the Original Landfill were still not finalized in this quarter, the corresponding analytical suites were also not yet final. When these requirements are finalized, the IMP will be updated accordingly. Monitoring that was performed at the Present Landfill and Original Landfill complied with the analytical suites as then understood; see Table 3–2 for this information.

Table 3–2. IMP Samples Requested During 1CQ06 (Excluding QA/QC Samples)

Location	VOCs	SVOCs	Metals
<b>RCRA Wells</b>			
<b>Present Landfill</b>			
70193	X		X
70393	X		X
70693	X		X
73005	X		X
73105	X		X
73205	X		X
<b>Original Landfill</b>			
P416589	X	X	X
80005	X	X	X
80105	X	X	X
80205	X	X	X
<b>Decision Document Wells</b>			
<b>OU1 Plume</b>			
891WEL	X		
0487	X		

VOCs = volatile organic compounds  
 SVOCs = semivolatile organic compounds  
 X = sample requested  
 (Blank) = sample not requested

Figure 3–1 displays a map of the IMP ground water monitoring locations to be sampled in 1CQ06. Of the 24 individual “real” samples requested (i.e., not including QA/QC samples), 24 were successfully collected (100 percent).

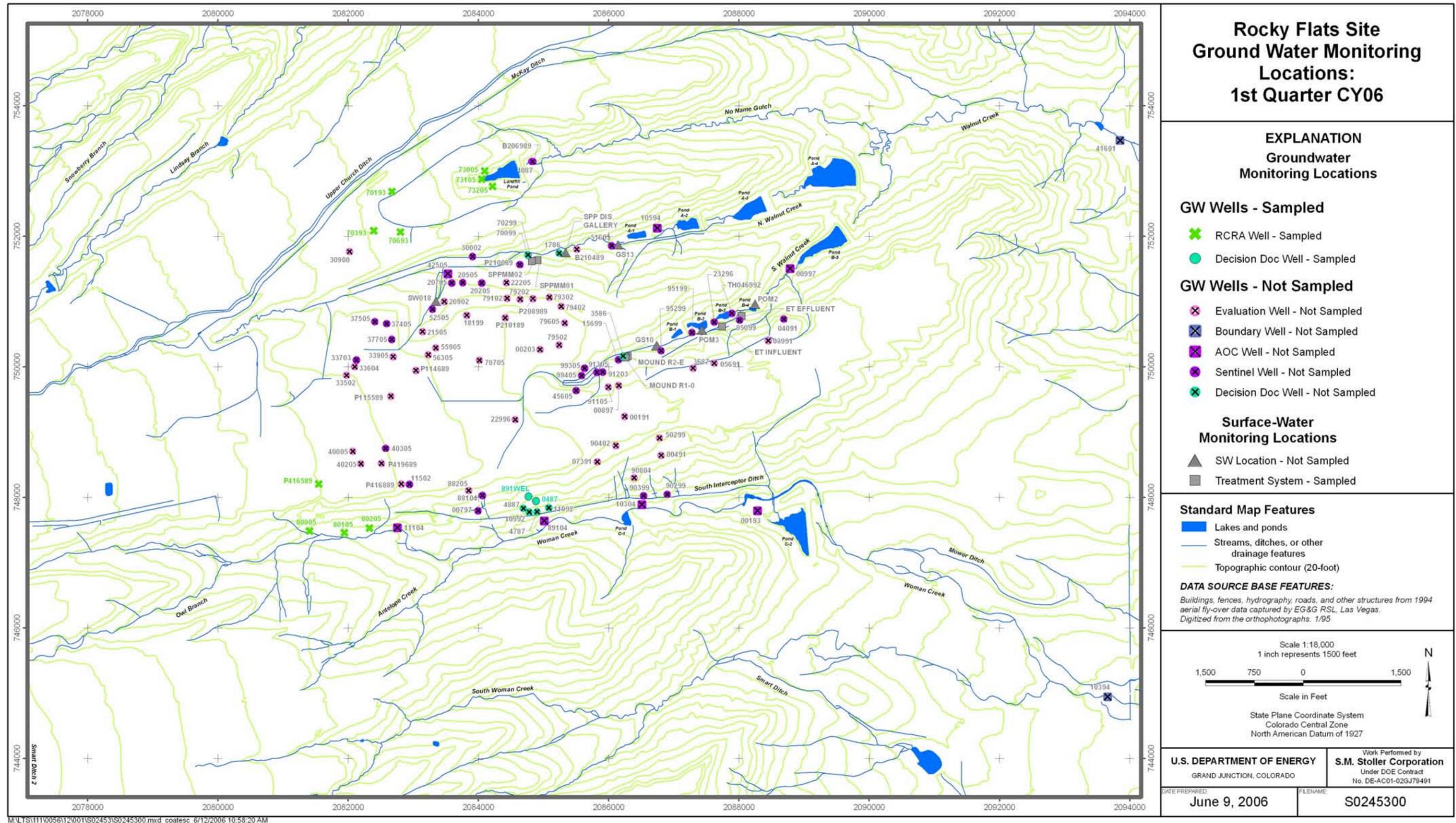


Figure 3-1. Rocky Flats Site Ground Water Monitoring Locations: 1st Quarter CY 2006

### **3.2.1 Summary of Results for IMP Monitoring**

Analytical data representing samples collected in 1CQ06 are presented in Appendix A.

#### **3.2.1.1 RCRA Wells**

Ground water data collected from RCRA wells are analyzed annually via comparison of upgradient vs. downgradient concentrations. This comparison will be included as a part of the Annual Report for 2006.

At the Original Landfill, water quality data from the three downgradient wells are also compared against surface water standards in the manner described in the IMP (K-H 2005f) for Sentinel wells. This comparison employs the 85th percentile of the data for each given analyte of interest, and a calculation of the concentration trend with decisions based on a 95 percent level of confidence. Eight sets of quarterly data (i.e., 2 years of data, assuming the wells all produce the needed samples) will be necessary before sufficient data are available to perform these comparisons.

#### **3.2.1.2 Decision Document Wells**

None of the ground water data collected from Decision Doc wells in 1CQ06 trigger decisions. Both Decision Doc wells support the OU1 Plume CAD/ROD (DOE 2001). According to this document, decisions are triggered when all VOCs are below RFCA Tier II Action Levels in wells 0487 and 891COLWEL (now 891WEL) for 4 consecutive quarters, or when trichloroethene (TCE) concentrations are above RFCA Tier I Action Levels in well 891COLWEL (891WEL) for 4 consecutive quarters. Neither of these conditions were met in 1CQ06.

### **3.3 Non-IMP Monitoring**

Non-IMP ground water monitoring was performed in January at the Solar Ponds Plume Treatment System (SPPTS) to collect additional data from the three monitoring locations at this system. Samples were collected from the influent (SPPMM02), effluent (SPPMM01), and discharge gallery (SPP Discharge Gallery) for nitrate and uranium.

Results indicate uranium is adequately treated by the system, but nitrate is still elevated in system effluent. Concentrations of nitrate were lowest in the influent and highest at the discharge gallery. See Appendix A for analytical data.

The SPPTS is the focus of ongoing evaluation and investigation. Plans will be developed in FY 2006 to resolve this issue in FY 2007. Correcting the current inadequate treatment of nitrate will be the primary focus of this effort, but consideration is also being given to addressing water quality at the SPP Discharge Gallery. As plans are developed and implemented, they will be described in future quarterly reports.

### **3.4 Ground Water-Related Events**

Two events took place during 1CQ06 that warrant special mention. First, the ground water treatment systems received non-routine maintenance upgrades. At the East Trenches Plume

Treatment System (ETPTS), this consists of a concrete vault installed to house instrumentation that monitors influent, effluent, and in-cell conditions. Parameters that are monitored include flow rates, pH, and pressure in the influent and effluent lines and within the line between the two treatment cells; and water level and oxygen content within the two cells. See Figure 3–2 for a schematic. In addition, although flow direction was not changed, lines were added to allow upflow configuration within the cells (i.e., water entering near the bottom of the cells and flowing upward through the media).

At the SPPTS, work was begun to restore access to three of the five valves controlling flow to the system. These valves have been inaccessible due to shifting of subsurface soils, which probably occurred during earth moving and media replacement shortly before Site closure.

At the Mound Site Plume Treatment System (MSPTS), work was begun to restore access to the discharge line. This line has been inaccessible due to closure-related reconfiguration of South Walnut Creek and the addition of fill. Access is needed in case the line becomes blocked and needs to be cleared. Work at the SPPTS and MSPTS will be completed in 2CQ06.

The second event warranting mention is the development of a slump south of former B991. Prior to closure, a French drain outfall known as SW056 was producing water containing low levels of VOCs above surface water standards. As this water was flowing directly into the new FC-4 wetland area, correcting this condition was necessary.

At the end of September 2005, the outfall was removed, the east-west portion of the drain was interrupted, and Sentinel well 45605 was installed upgradient (west) of this interruption but downgradient (north) of the remaining portion of the drain.

Removing the outfall eliminated the source of the flow into FC-4. However, in January 2006 several cracks were observed in the ground surface at the top of the area of backfill, where an excavation had been formed to access and remove/disrupt the French drain components. These cracks displayed increasing vertical displacement and grew in number through the quarter, and the floor of FC-4 in the vicinity of former SW056 experienced uplift.

Immediately after the cracks were observed, LM had a geotechnical engineer inspect the area to determine the potential for mass wasting and suggest actions that could stabilize the slope. The potential was estimated to be fairly significant, and stabilization would entail surface grading and backfilling as well as loading the toe of the slope. Both of these activities would cause considerable damage to the newly-graded ground in this area, and could require the establishment of new roads to the bottom of the slope.

Representatives of CDPHE and EPA also inspected the area in the middle of the quarter. Because the formation of a slump at the Site is not a CERCLA issue, the consensus of the regulators was to continue to observe conditions in this area. When conditions have stabilized, LM will develop a plan to regrade the to meet general aesthetic and safety objectives. Well 45605 will continue to be monitored in accordance with the IMP for as long as that is feasible, both from the perspective of the well's condition (i.e., intact vs. broken) and from a safety perspective. When conditions are stable, whether and where to replace well 45605 will be discussed through the RFCA consultative process. Figure 3–3 includes photographs of the slump.

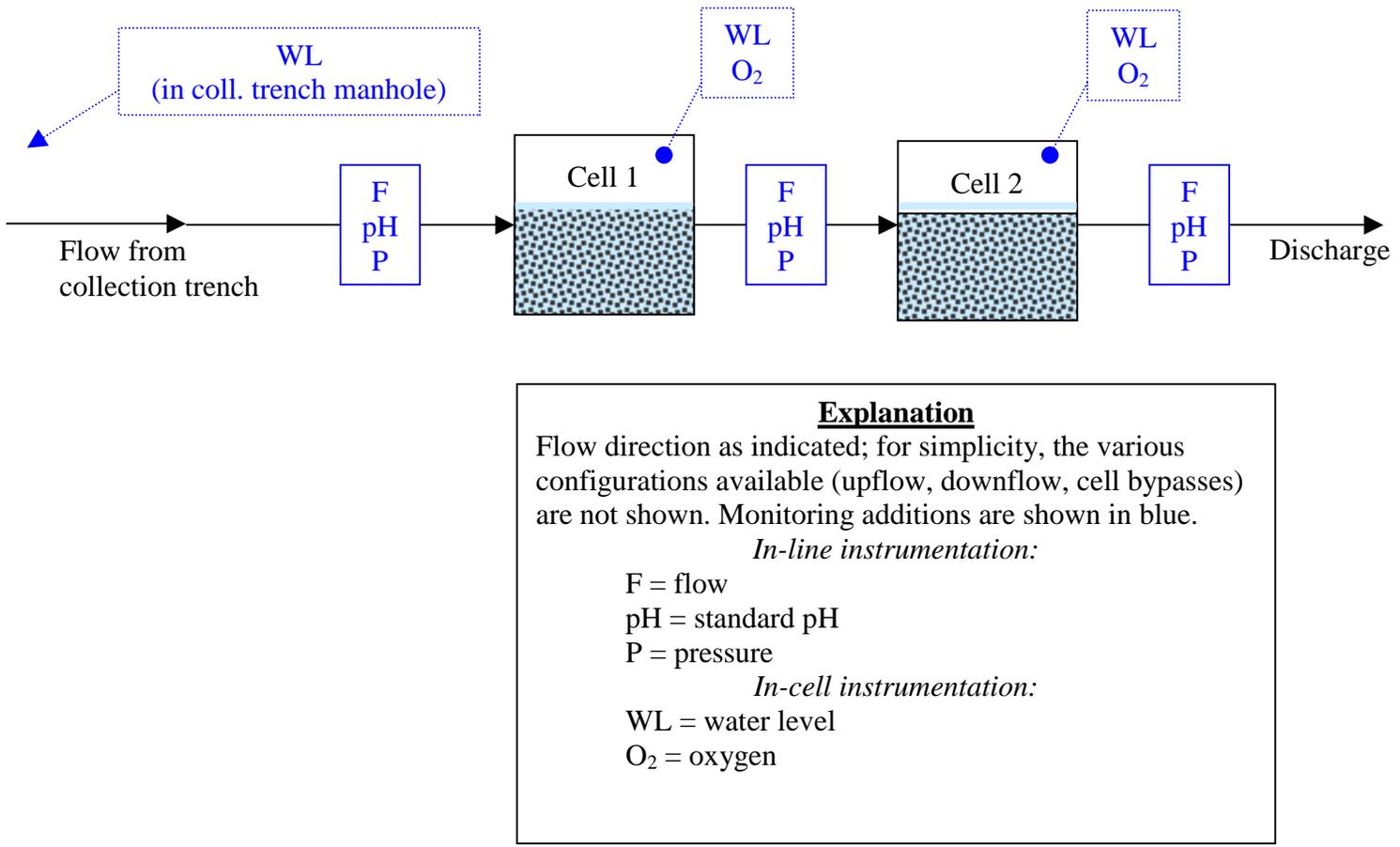


Figure 3-2 Schematic of Monitoring Upgrades Installed at the ETPTS



**1/12/06**



**4/19/06**

Above (left and right): Fractures on the top surface of the slump grew from January through April. Well 45605 is visible in the upper right in the January photo, but is difficult to see (at the far end of the line of wattles) in the April photo. View is toward the west. Vertical displacement in January along the main fracture was negligible; in April, it had grown to over 10 feet.



Above: Uplift of the valley floor (which is covered with erosion matting) in response to slumping soils. Main body of the slump is off camera, to the upper right. View is toward the east; photo taken April 19, 2006. Maximum uplift was approximately 4 ft.



Above: View of the slump from across the valley (from NE). Well 45605 may be seen as a small, vertical, light-colored sliver on the edge of the slope appearing just below the right-most conifer in the row of trees. The footprint of the excavation to remove SW056 and interrupt the French drain is marked by horizontal wattles and that portion of the slope face lacking vegetation. Also visible in the mid-ground is the confluence of FC-4 and FC-5, and the constructed wetland in FC-4. Photo taken April 19, 2006.

*Figure 3–3 Photographs of Slump South of Former B991 (Area of Former SW056 and Well 45605)*

## 4.0 Air Monitoring

### 4.1 Ambient Air Monitoring

#### 4.1.1 Perimeter Sampler Locations

Figure 4–1 illustrates the current perimeter Radioactive Ambient Air Monitoring Program (RAAMP) sampler locations. Many other locations existed during the twelve months prior to the completion of demolition activities at the Site in October 2005. Once the demolition and soil disturbance activities had been completed, the complete network was no longer needed for Rad-NESHAP compliance demonstration purposes. DOE has continued monitoring at locations S-132, S-136 and S-138 to monitor expected changes in downwind air quality as the soil weathers; the other locations were removed from service. S-136 and S-138 sample the air quality predominantly downwind of the Site; S-132 captures mainly ambient non-Site emissions on the predominantly upwind side of the Site.

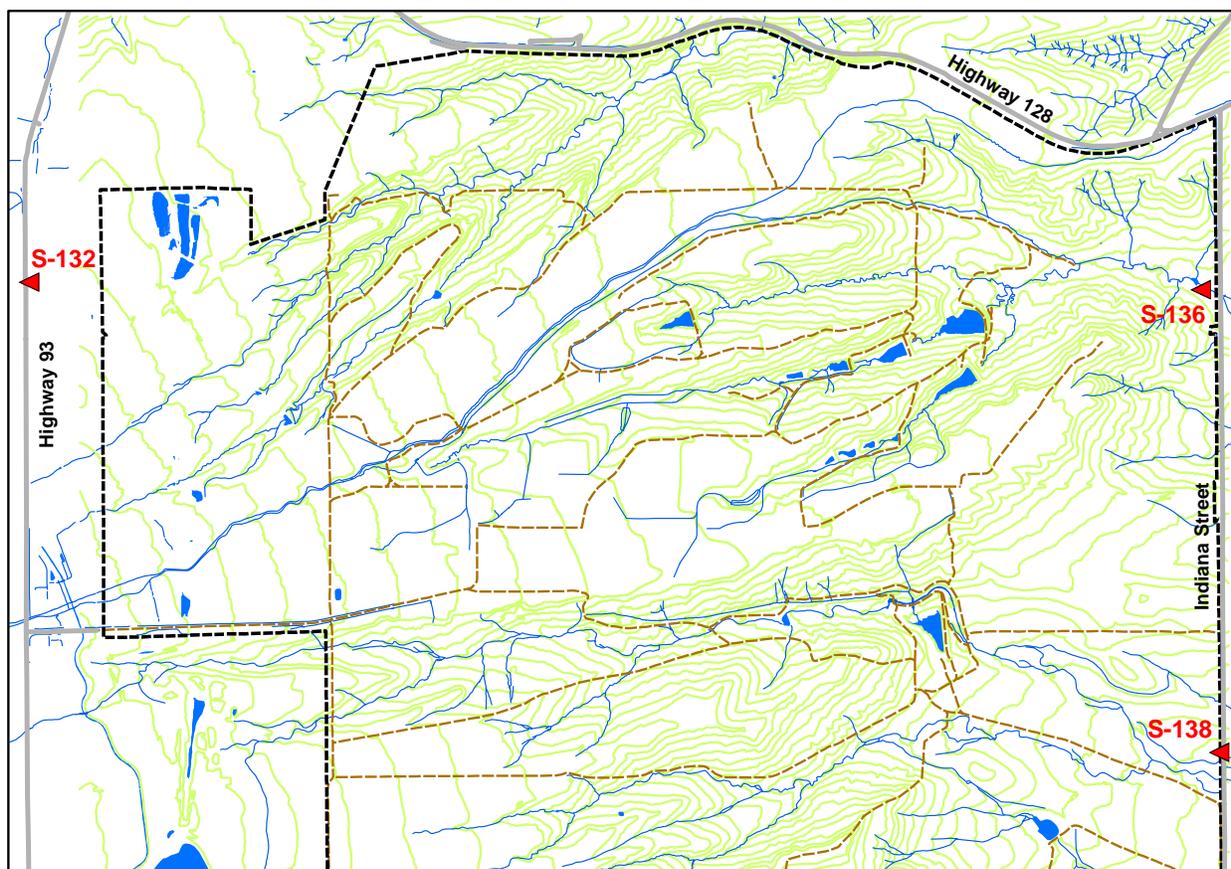


Figure 4–1. Location of Perimeter Air Samplers

Figure 4–2 illustrates the annualized potential dose for the period October 2005 through March 2006 for the three remaining perimeter samplers. Dose values are expressed as a percentage of EPA’s air concentration-based dose limit for members of the public. The percentage values are based on the measured air concentrations, extrapolated for a 12-month

period at the measured average concentrations and converted to a percent of the Rad-NESHAP concentration limits, equivalent to a 10 mrem effective dose equivalent (EDE). All dose is calculated in EDE units.

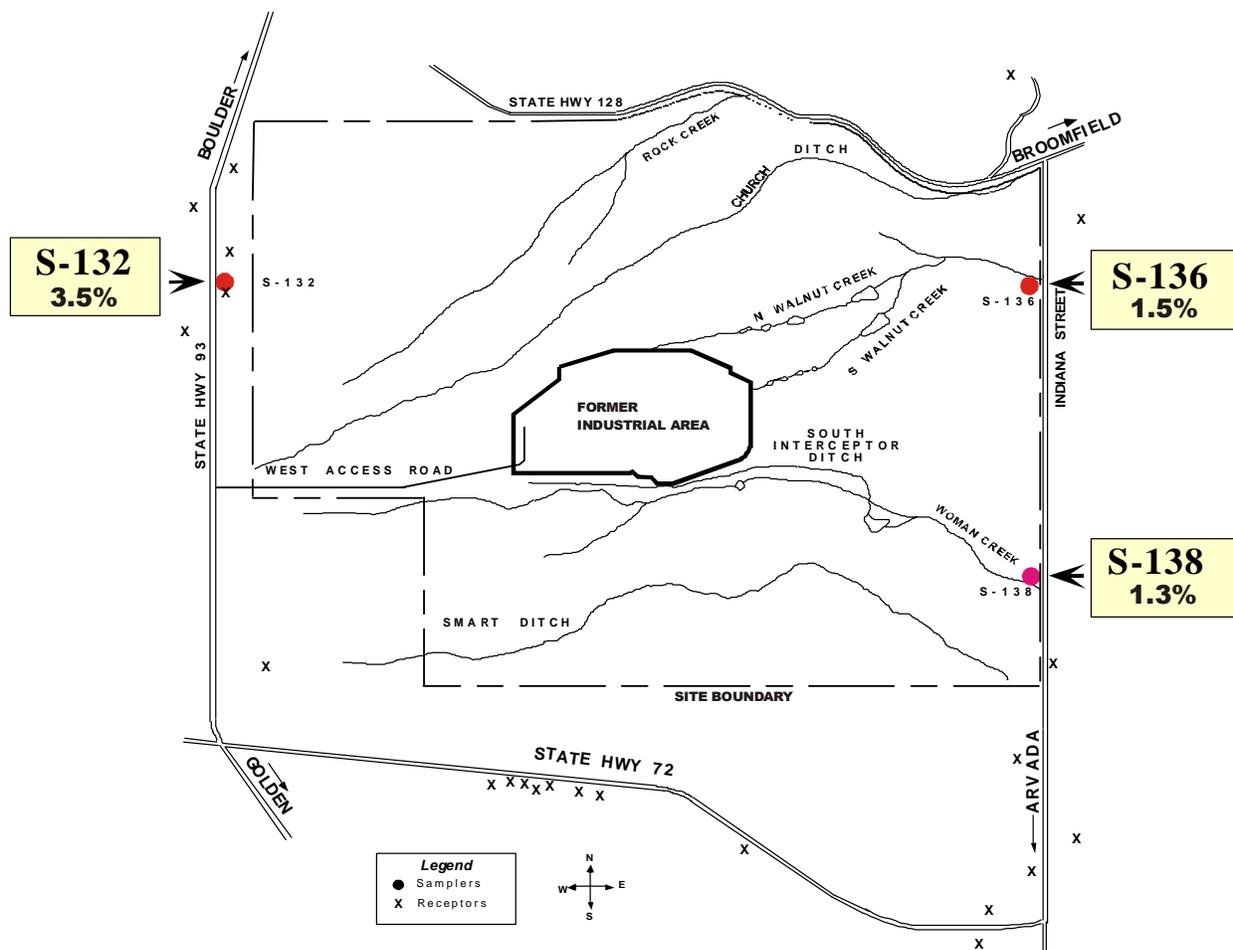


Figure 4-2. Perimeter Samplers Dose Map

The dose percentages include naturally-occurring uranium isotopes as well as Pu-239 and Am-241. These results are generally consistent with data from previous years, with expected minor increases in emissions following the more recent periods of large-scale soil disturbance during the final months of Site closure.

#### 4.1.2 Perimeter Sampler Locations Dose-Rate Summaries

Figure 4-3 illustrates the estimated potential dose rates from the three perimeter sampler locations for each month during the period from October 2005 through March 2006. These results include contributions from naturally-occurring uranium isotopes. In the samples collected since October, only U-234 and U-238 are observed frequently above detection limits, Pu and Am are rarely detected. The results shown here report the concentrations derived from the laboratory data, whether the data were above or below actual detection limits. The highest potential dose rates for all periods except February were observed at S-132. This consistency is not surprising

considering the typical dose from natural uranium at this location. The dose rates due to Pu and Am alone, though not well quantified, suggest themselves to be about an order of magnitude less than the dose rates with uranium included.

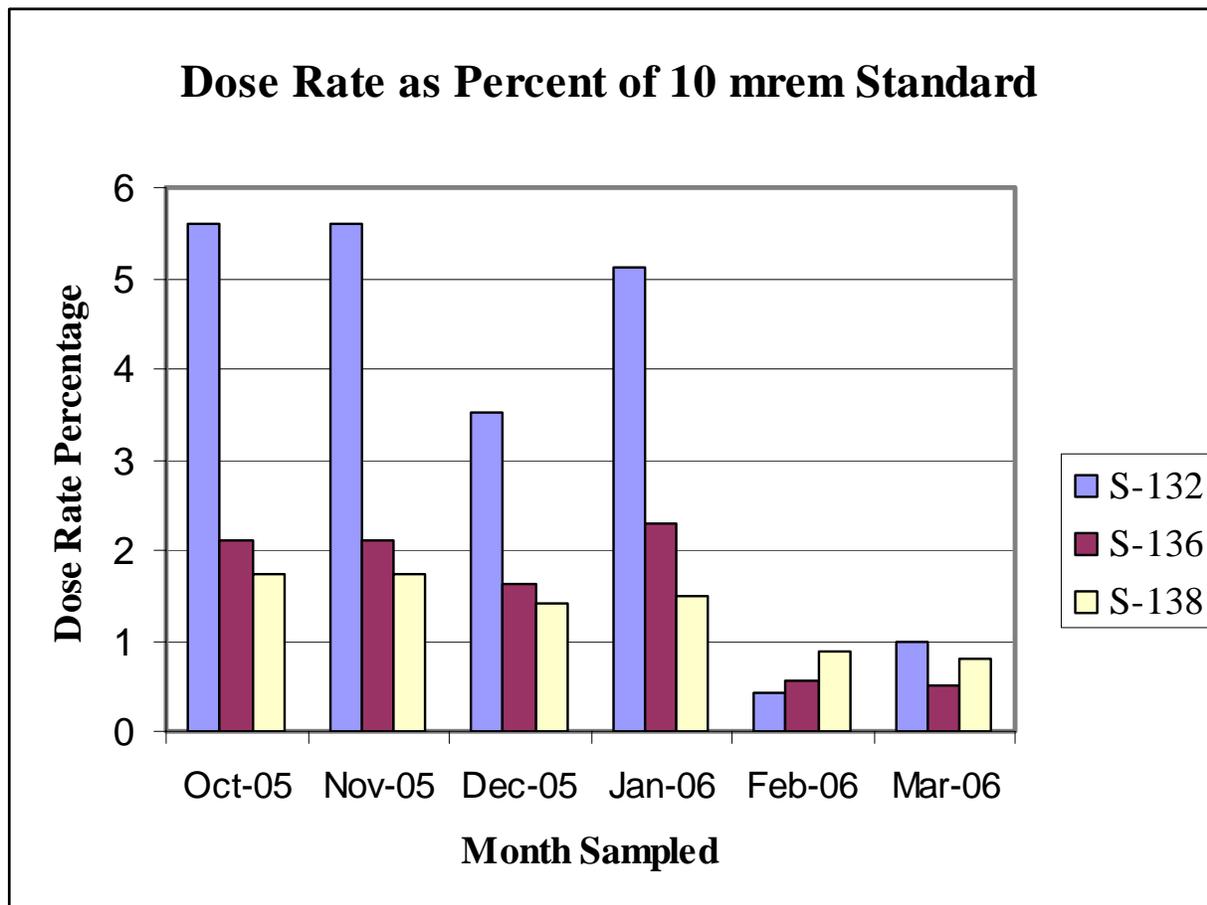


Figure 4-3. Dose Rate Summary

## 4.2 Meteorology and Climatology

In previous quarterly reports, wind roses for each month have been presented as part of the data summary. Now that the Site no longer performs the typical production and cleanup activities that could lead to emission incidents needing detailed wind analyses, these wind summaries are no longer needed. The Site no longer measures meteorological parameters, instead the data are accessed through the nearby NREL National Wind Technology Center (Windsite). No meteorological data is included in this report.

A wildfire took place during the first week of April, and was analyzed using these Windsite data. See Appendix B for a report on this fire.

End of current text

## 5.0 Ecological Monitoring

During the 1st quarter of 2006, the Ecology Program continued compiling and summarizing the data that had been collected throughout the growing season in 2005. Because the ecological monitoring fieldwork is largely conducted during the growing season, the winter months are spent compiling, summarizing, and interpreting the data for reporting requirements and use in resource management. Data were entered into electronic databases and quality checked prior to data analysis.

### 5.1 Data Management

Data management was continued on data collected during the 2005 field season. Selected datasets were entered into electronic databases and quality checked prior to data analysis for reporting. The remaining data will be entered, quality checked, and summarized during the 2nd quarter of 2006. The ecological data collected during 2005 will be summarized and presented in the Annual Report for the Site that will be final in June 2006.

### 5.2 Wildlife Surveys

During the 1st quarter of 2006, the monthly site-wide wildlife surveys were conducted. The species included in this survey are large mammals (deer, elk), carnivores (coyotes), waterfowl, raptors, gamebirds, small game mammals, furbearers, and herpetiles. The monthly site-wide surveys were discontinued after the March surveys were completed.

The site-wide wildlife surveys were conducted at the Site from 1993 to March 2006. These surveys were originally intended to provide a list of species observed at the Site, a measure of their abundance, and an indication of the locations where the species are typically observed. After 13 years of conducting these surveys, the data are no longer providing useful information. The following reasons for discontinuing the surveys are provided below:

- There are no defined questions for which the data are being collected.
- The 13 years of data provide a solid baseline of information on the species that have been observed during these surveys, and the monthly collection of the same information is no longer needed.
- There are methodological problems with the survey method that warrant discontinuing the surveys.
- There is no regulatory requirement to conduct this wildlife monitoring at the Site.
- The site-wide survey is listed as a BMP type monitoring in the most recent IMP and not as required monitoring. Therefore, it can be discontinued if no longer deemed necessary.

If additional wildlife data are needed in the future for management, alternative and more appropriate methodologies are available, and will be evaluated at that time.

### **5.3 Regulatory Reporting**

The regulatory report for the 903 Lip Area wetlands was submitted to the U.S. Environmental Protection Agency (EPA) per the requirements of a letter received from the EPA regarding the 903 Lip Area cleanup project. This report describes the current condition (as of late summer 2005) of several small isolated wetland areas on the hillsides below the 903 Pad/Lip area that were disturbed by the closure activities.

### **5.4 Erosion Control Monitoring**

Monitoring of erosion controls in Preble's mouse habitat and other revegetated areas at the Site was conducted weekly to ensure continued functionality of the erosion control measures.

A subcontract was put in place for large-scale erosion control repairs. As needed, small repairs were made to wattles, hay bales, and erosion matting by Site personnel.

### **5.5 Weed Control**

A subcontract was awarded for weed control herbicide applications at the Site. Preparations were begun to determine where weed control activities would be most effective.

### **5.6 Wetland Plantings**

Coyote willow stakes were cut and installed at two wetland locations during the 1st quarter of 2006. At a small wetland on the hillside in Functional Channel 2, approximately 81 coyote willow stakes were installed and the area was seeded with native wetland species. In the larger Functional Channel 2 engineered wetland, approximately 151 coyote willow stakes were installed along the western edge of the wetland area.

## **6.0 Site Operations and Maintenance**

### **6.1 Pond Operations**

During the 1st quarter of CY 2006, the Site performed no pond water transfers and discharges. The location of the ponds and drainage features are given in Figure 2–1. As of March 31, 2006, Ponds A-3, A-4, B-5, C-2, and the Landfill Pond were holding approximately 14.8 million gallons (15 percent of total capacity [99 MG]).

Monthly routine dam inspections, pond level measurements, and piezometer measurements were performed as scheduled during the quarter.

### **6.2 Passive Ground Water Treatment Systems**

Maintenance and operation of ground water treatment systems at the Site by LM personnel was begun in late October 2005. The system-specific summaries below focus on tasks performed by LM.

#### **6.2.1 Mound Site Plume Treatment System (MSPTS)**

Routine maintenance activities continued at the MSPTS through 1CQ06. This included weekly raking of the media and inspection of influent and effluent flow conditions. The calibration of the flow monitoring instrumentation was made in January.

In late March work began to extend the outflow pipe at the MSPTS and add a new distribution pipe to increase the capacity of the treatment system to dissipate treated water. A clean out will also be added to the effluent line. The intent of these upgrades is to reduce or eliminate the sporadic backup and plugging problems observed in the outflow system. This work will be completed in 2CQ06. See Section 3.0 for additional information on these upgrades.

The MSPTS media itself began to indicate flow difficulties, and water quality in treated effluent has begun to degrade slightly (see analytical data included with the 4CQ05 Quarterly Report, DOE 2006c). As a result, replacement of the media is being considered for later in FY06.

#### **6.2.2 East Trenches Plume Treatment System (ETPTS)**

Routine maintenance activities continued at the ETPTS through 1CQ06. This included weekly raking of the media (which was replaced in September 2005) and inspection of influent and effluent flow conditions. The calibration of the flow monitoring instrumentation was made in January.

Monitoring instruments were installed at the ETPTS in early March. The goal of these upgrades was to better evaluate conditions in this treatment system, and determine why it is not performing as well as expected. The instruments allow near-realtime monitoring of pH, pressure, flow, oxygen, and water level at various locations in the system. See Section 3.0 for additional information on these upgrades.

In late March work began to replace the outflow pipe at the ETPTS to improve the efficiency of the distribution system and prevent the back-up of water into the metering manhole. This activity will be completed in 2CQ06. Operation of the data logger system was verified, and monitoring sensors were recalibrated and tested.

### **6.2.3 Solar Ponds Plume Treatment System (SPPTS)**

Routine maintenance activities continued at the SPPTS through 1CQ06. This included weekly inspection of the solar/battery system that powers the pump, operation of the pump, and influent and effluent flow conditions. In addition, the flow monitoring instrumentation was calibrated in January.

In late March work began to restore access to three control valves at the SPPTS. During Site closure, the riser pipes through which these valves were accessed were bent or otherwise obstructed. Replacing the risers will allow access to all control valves from above the ground surface with the 15-foot valve key. This work will be completed in 2CQ06. See Section 3.0 for additional information on these upgrades.

Additional investigation of the SPPTS to address water quality issues reported previously (e.g., 4CQ06 Quarterly Report, DOE 2006c) continued in 1CQ06. Restoring access to all valves, as described above, will allow workers to confirm all valves are properly configured and to test the water treatment provided by each cell. Additional results will be reported in subsequent quarterly Reports.

## **6.3 Landfills**

The RCRA Subtitle C-compliant cover for the Present Landfill was completed May 2005. The engineered cover for the Original Landfill was completed August 2005. LM personnel were not involved in either of these activities, but initiated the landfill inspections in October 2005. The general approach for the Present and Original Landfill monitoring and inspections, along with the results of those inspections, are shown below.

### **6.3.1 Present Landfill**

The Present Landfill consists of approximately 22 acres of an engineered RCRA Subtitle C-compliant cover over a former sanitary/construction debris landfill. A diversion channel surrounds the landfill and diverts stormwater runoff away from the landfill to No Name Gulch. The landfill has a leachate collection and treatment system that discharges into the East Landfill Pond. A gas extraction system is also built into the landfill and allows subsurface gas to vent to the atmosphere. The landfill final construction site conditions will be used as a baseline for comparisons made during site inspections.

Inspection of the Present Landfill is conducted on a quarterly basis. Quarterly inspections will continue for 5 years and will be evaluated at the next Comprehensive Environmental Response, Compensation, and Liability Act (CERCLA) review scheduled for 2007. The findings and observations of the inspections will be presented in the Annual Report, which will be submitted to EPA and CDPHE. Inspections and monitoring tasks are addressed in Appendix A of the *Final IM/IRA for IHSS 114 and RCRA Closure of the RFETS Present Landfill* (K-H 2004), and include

ground water and surface-water monitoring (see Sections 2 and 3), monitoring subsidence/consolidation, slope stability, soil cover, vegetation, stormwater management structures, and erosion in surrounding features so that corrective actions can be taken in a timely manner.

#### 6.3.1.1 Inspection Results

An inspection was performed March 7 at the Present Landfill. The inspection process followed the format and protocol established in the *Present Landfill Monitoring and Maintenance Plan and Post-Closure Plan* (K-H 2006d). No significant problems were observed during either of these inspections. Refer to the inspection forms accompanying this document for additional information.

### 6.3.2 Original Landfill

The Original Landfill consists of approximately 20 acres of an engineered cover over a former solid sanitary and construction debris landfill. The final cover consists of a 2-foot-thick Rocky Flats Alluvium soil cover that was constructed over both a regraded surface and a buttress fill. The original surface was regraded to provide a consistent slope. A 20-foot-high, 1,000-foot-long soil mass buttress fill was placed at the toe of the landfill. Erosion is controlled by a series of diversion berms that carry storm runoff away from the cover in lined channels. In addition, the soil cover was covered with both straw mulch and a spray-on erosion control medium called "Flexterra." A perimeter channel collects runoff from the diversion berms and carries it away from the landfill.

Inspection of the Original Landfill is conducted on a quarterly basis. Quarterly inspections will continue for 5 years and will be evaluated at the next CERCLA review in 2007. The findings and observations of the site inspections will be presented in the Annual Report, which will be submitted to EPA and CDPHE. Inspections and monitoring tasks are addressed in Appendix B of the *Final IM/IRA for the Original Landfill* (K-H 2005a), and include ground water and surface-water monitoring (see Sections 2 and 3), monitoring subsidence/consolidation, slope stability, soil cover, vegetation, stormwater management structures, and erosion in surrounding features so that corrective actions can be taken in a timely manner.

#### 6.3.2.1 Inspection Results

An inspection was performed March 7 at the Original Landfill. The inspection process followed the format and protocol established in the *Final Landfill Monitoring and Maintenance Plan, Rocky Flats Environmental Technology Site, Original Landfill* (K-H 2006b). No significant problems were observed during either of these inspections. Refer to the inspection forms accompanying this document for additional information.

#### 6.3.2.2 Seep #7

An area of saturated soil was observed in the above Seep #7 in December 2005. K-H personnel were contacted to investigate the problem. K-H asked LM personnel to dig several "potholes" in one area of subsidence near the lower end of the seep collection system. Two potholes were made, one to a depth of about 4.5 feet and the other to a depth of about 2.5 feet. Neither pothole

exposed the drain collection system. K-H continued their investigation and discussions into 2CQ06.

## **6.4 General Site M&O**

The Site will be managed and maintained to protect the remediation activities that have taken place in the closure of the Site. Assessment of the Site will be performed on both a scheduled and continuous basis.

### **6.4.1 Plainview Fire Fighting Support**

Rocky Flats LM supported efforts to fight the January 11 Plainview fire located just west of the Site by allowing firefighters to fill their pumper trucks from the RFS Raw Water pond. The fire burned more than 2,700 acres of grassland, but never crossed Highway 93 to threaten the Site. Firefighters were very appreciative of the support from the Site and for allowing them access to a water source in such close proximity to the fire.

### **6.4.2 Slumping at SW056**

In early January the hillside above the former monitoring location SW056 was observed to have cracking near the top of the slope. The cracking indicated either subsidence from the excavation required to remove SW056, or from a rotational movement of soil on the face of the slope due to gravity. A geotechnical engineer was consulted, and confirmed that the soil was at the point of incipient movement on the slope face. Since no real damage would result from even a catastrophic slope failure, the field crews continued with observations and measurements.

Stakes were placed in several locations to allow a quantifiable measurement of the soil movement. Vertical movement of soil at the top of the slope continued throughout the quarter, with obvious movement of soil near the pad for well 45605 located near the crest of the slope. Uplifting along the south edge of the functional channel consistent with a rotational movement of soil on the slope was also observed. See Section 3.0 for additional information and photographs.

### **6.4.3 Erosion Control**

The existing erosion controls are maintained and repaired to protect the bare soil areas until the vegetation can stabilize the soil. Assessing the erosion control is especially important following high wind events which are common at the Site. Reestablishment of the vegetation in the disturbed areas will be assessed during the growing season. Areas lacking sufficient vegetative cover will be reseeded to assure adequate establishment of the native vegetation in these areas.

Maintenance of the Site erosion control required effort throughout 1CQ06, but especially during the windy months of January and February. Erosion matting required replacement of the stakes and/or wire spikes originally used to secure the matting. In areas of very rocky soil, a common characteristic of Rocky Flats alluvium, staking was ineffective and large rocks and cobbles were used to secure the matting.

Erosion wattles were also loosened and displaced by the wind, and required restaking. In areas where the soil allowed, the original stakes were replaced with longer stakes to allow deeper penetration of the stake in the soil to better hold the wattle.

Reestablishment of the vegetative cover was not assessed during this quarter, since it was during the period of minimal growth.

#### **6.4.4 Site Security**

##### **6.4.4.1 Fence Maintenance**

The security of the Site is assessed on a continuous basis. The perimeter fence is maintained and replaced as required. Excess or unnecessary gates in the perimeter fence are being removed and replaced with fence to reduce the number of access points to the Site.

In January and February general upgrades were made to the east perimeter fence. Posts were installed and wire replaced and/or repaired as necessary to make the fence intact. Although the fence is nearing the end of its useable life, it should be functional for maintaining a barrier to Site access from Indiana Avenue.

In March an SUV slid off Indiana and rolled over the East Perimeter fence. Emergency Response crews cut through the fence just south of the accident to allow access for rescue operations. Both areas of damage to the perimeter fence were repaired as the tow truck was removing the vehicle from the Site.

In March the fence just south of the West gate was damaged by a vehicle that apparently could not make a complete stop before contacting the fence. Repairs were minor, and required a new "T" post and re-stretching of the lower two strands of barbed wire.

##### **6.4.4.2 Security Issues**

Site management personnel are working with local law enforcement agencies to assure adequate surveillance when maintenance personnel are not on Site. Evening, weekend, and holiday surveillance of the Site is scheduled to be initiated April 19. Observations of that surveillance will be reported in subsequent quarterly reports.

End of current text

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## Analytical Data Tables

Table 1. Analytical Results for Water Samples – 1st Quarter CY06

LOCATION_CODE	DATE_SAMPLED	LAB_REQUISITION_NUMBER	CAS	ANALYTE	SAMPLE_ID	RESULT	WATER_UNIT_OF_MEASURE	LAB_QUALIFIERS	SAMPLE_TYPE	DETECTION_LIMIT	UNCERTAINTY	DATA_VALIDATION_QUALIFIERS
0487	3/6/2006	06020315	000071-55-6	1,1,1-Trichloroethane	N001	0.16	ug/L	U	F	0.16		valid
0487	3/6/2006	06020315	000079-34-5	1,1,2,2-Tetrachloroethane	N001	0.2	ug/L	U	F	0.2		valid
0487	3/6/2006	06020315	000079-00-5	1,1,2-Trichloroethane	N001	0.32	ug/L	U	F	0.32		valid
0487	3/6/2006	06020315	000075-34-3	1,1-Dichloroethane	N001	0.16	ug/L	U	F	0.16		valid
0487	3/6/2006	06020315	000075-35-4	1,1-Dichloroethene	N001	0.14	ug/L	U	F	0.14		valid
0487	3/6/2006	06020315	000120-82-1	1,2,4-Trichlorobenzene	N001	0.32	ug/L	U	F	0.32		valid
0487	3/6/2006	06020315	000096-12-8	1,2-Dibromo-3-chloropropane	N001	0.43	ug/L	U	F	0.43		valid
0487	3/6/2006	06020315	000106-93-4	1,2-Dibromoethane	N001	0.18	ug/L	U	F	0.18		valid
0487	3/6/2006	06020315	000095-50-1	1,2-Dichlorobenzene	N001	0.13	ug/L	U	F	0.13		valid
0487	3/6/2006	06020315	000107-06-2	1,2-Dichloroethane	N001	0.13	ug/L	U	F	0.13		valid
0487	3/6/2006	06020315	000078-87-5	1,2-Dichloropropane	N001	0.13	ug/L	U	F	0.13		valid
0487	3/6/2006	06020315	000541-73-1	1,3-Dichlorobenzene	N001	0.16	ug/L	U	F	0.16		valid
0487	3/6/2006	06020315	000106-46-7	1,4-Dichlorobenzene	N001	0.16	ug/L	U	F	0.16		valid
0487	3/6/2006	06020315	000078-93-3	2-Butanone	N001	1.7	ug/L	U	F	1.7		valid
0487	3/6/2006	06020315	000108-10-1	4-Methyl-2-Pentanone	N001	0.49	ug/L	U	F	0.49		valid
0487	3/6/2006	06020315	000067-64-1	Acetone	N001	1.9	ug/L	U	F	1.9		valid
0487	3/6/2006	06020315	000107-02-8	Acrolein	N001	2.8	ug/L	U	F	2.8		R
0487	3/6/2006	06020315	000107-13-1	Acrylonitrile	N001	1.4	ug/L	U	F	1.4		valid
0487	3/6/2006	06020315	ALKALINITY	Alkalinity, Total (As CaCO3)	N001	310	mg/L		F			valid
0487	3/6/2006	06020315	000071-43-2	Benzene	N001	0.16	ug/L	U	F	0.16		valid
0487	3/6/2006	06020315	000075-27-4	Bromodichloromethane	N001	0.17	ug/L	U	F	0.17		valid
0487	3/6/2006	06020315	000075-25-2	Bromoform	N001	0.19	ug/L	U	F	0.19		valid
0487	3/6/2006	06020315	000074-83-9	Bromomethane	N001	0.21	ug/L	U	F	0.21		valid
0487	3/6/2006	06020315	000075-15-0	Carbon Disulfide	N001	0.45	ug/L	U	F	0.45		valid
0487	3/6/2006	06020315	000056-23-5	Carbon tetrachloride	N001	0.85	ug/L	J	F	0.19		valid
0487	3/6/2006	06020315	000108-90-7	Chlorobenzene	N001	0.17	ug/L	U	F	0.17		valid
0487	3/6/2006	06020315	000124-48-1	Chlorodibromomethane	N001	0.17	ug/L	U	F	0.17		valid
0487	3/6/2006	06020315	000075-00-3	Chloroethane	N001	0.13	ug/L	U	F	0.13		valid
0487	3/6/2006	06020315	000067-66-3	Chloroform	N001	1.4	ug/L		F	0.16		valid
0487	3/6/2006	06020315	000074-87-3	Chloromethane	N001	0.3	ug/L	U	F	0.3		valid
0487	3/6/2006	06020315	000156-59-2	cis-1,2-Dichloroethene	N001	0.15	ug/L	U	F	0.15		valid
0487	3/6/2006	06020315	000087-68-3	Hexachlorobutadiene	N001	0.12	ug/L	U	F	0.12		valid
0487	3/6/2006	06020315	M&P XYLENE	m,p-Xylene	N001	0.34	ug/L	U	F	0.34		valid
0487	3/6/2006	06020315	000075-09-2	Methylene chloride	N001	0.32	ug/L	U	F	0.32		valid
0487	3/6/2006	06020315	000091-20-3	Naphthalene	N001	0.22	ug/L	U	F	0.22		valid
0487	3/6/2006	06020315	000095-47-6	o-Xylene	N001	0.19	ug/L	U	F	0.19		valid
0487	3/6/2006	06020315	000100-42-5	Styrene	N001	0.17	ug/L	U	F	0.17		valid
0487	3/6/2006	06020315	000127-18-4	Tetrachloroethene	N001	1.2	ug/L		F	0.2		valid
0487	3/6/2006	06020315	000108-88-3	Toluene	N001	0.17	ug/L	U	F	0.17		valid
0487	3/6/2006	06020315	000100-41-4	Total Xylene	N001	0.16	ug/L	U	F	0.16		valid
0487	3/6/2006	06020315	000156-60-5	trans-1,2-Dichloroethene	N001	0.15	ug/L	U	F	0.15		valid
0487	3/6/2006	06020315	000079-01-6	Trichloroethene	N001	58	ug/L		F	0.16		valid
0487	3/6/2006	06020315	000075-01-4	Vinyl chloride	N001	0.38	ug/L	U	F	0.38		valid
70193	3/2/2006	06020315	000071-55-6	1,1,1-Trichloroethane	N001	0.16	ug/L	U	F	0.16		valid
70193	3/2/2006	06020315	000079-34-5	1,1,2,2-Tetrachloroethane	N001	0.2	ug/L	U	F	0.2		valid
70193	3/2/2006	06020315	000079-00-5	1,1,2-Trichloroethane	N001	0.32	ug/L	U	F	0.32		valid
70193	3/2/2006	06020315	000075-34-3	1,1-Dichloroethane	N001	0.16	ug/L	U	F	0.16		valid
70193	3/2/2006	06020315	000075-35-4	1,1-Dichloroethene	N001	0.14	ug/L	U	F	0.14		valid
70193	3/2/2006	06020315	000120-82-1	1,2,4-Trichlorobenzene	N001	0.32	ug/L	U	F	0.32		valid
70193	3/2/2006	06020315	000096-12-8	1,2-Dibromo-3-chloropropane	N001	0.43	ug/L	U	F	0.43		valid
70193	3/2/2006	06020315	000106-93-4	1,2-Dibromoethane	N001	0.18	ug/L	U	F	0.18		valid
70193	3/2/2006	06020315	000095-50-1	1,2-Dichlorobenzene	N001	0.13	ug/L	U	F	0.13		valid
70193	3/2/2006	06020315	000107-06-2	1,2-Dichloroethane	N001	0.13	ug/L	U	F	0.13		valid
70193	3/2/2006	06020315	000078-87-5	1,2-Dichloropropane	N001	0.13	ug/L	U	F	0.13		valid
70193	3/2/2006	06020315	000541-73-1	1,3-Dichlorobenzene	N001	0.16	ug/L	U	F	0.16		valid
70193	3/2/2006	06020315	000106-46-7	1,4-Dichlorobenzene	N001	0.16	ug/L	U	F	0.16		valid
70193	3/2/2006	06020315	000078-93-3	2-Butanone	N001	1.7	ug/L	U	F	1.7		valid
70193	3/2/2006	06020315	000108-10-1	4-Methyl-2-Pentanone	N001	0.49	ug/L	U	F	0.49		valid
70193	3/2/2006	06020315	000067-64-1	Acetone	N001	1.9	ug/L	U	F	1.9		valid
70193	3/2/2006	06020315	000107-02-8	Acrolein	N001	2.8	ug/L	U	F	2.8		R
70193	3/2/2006	06020315	000107-13-1	Acrylonitrile	N001	1.4	ug/L	U	F	1.4		valid
70193	3/2/2006	06020315	ALKALINITY	Alkalinity, Total (As CaCO3)	N001	37	mg/L		F			valid
70193	3/2/2006	06020315	07429-90-5	Aluminum	N001	0.027	mg/L	B	F	0.017		valid
70193	3/2/2006	06020315	07440-36-0	Antimony	N001	0.0033	mg/L	B	F	0.0031		valid
70193	3/2/2006	06020315	07440-38-2	Arsenic	N001	0.0044	mg/L	U	F	0.0044		valid
70193	3/2/2006	06020315	07440-39-3	Barium	N001	0.091	mg/L		F	0.0007		valid
70193	3/2/2006	06020315	000071-43-2	Benzene	N001	0.16	ug/L	U	F	0.16		valid
70193	3/2/2006	06020315	07440-41-7	Beryllium	N001	0.00047	mg/L	U	F	0.00047		valid
70193	3/2/2006	06020315	07440-42-8	Boron	N001	0.012	mg/L	B	F	0.0059		valid
70193	3/2/2006	06020315	000075-27-4	Bromodichloromethane	N001	0.17	ug/L	U	F	0.17		valid
70193	3/2/2006	06020315	000075-25-2	Bromoform	N001	0.19	ug/L	U	F	0.19		valid
70193	3/2/2006	06020315	000074-83-9	Bromomethane	N001	0.21	ug/L	U	F	0.21		valid
70193	3/2/2006	06020315	07440-43-9	Cadmium	N001	0.00045	mg/L	U	F	0.00045		valid
70193	3/2/2006	06020315	000075-15-0	Carbon Disulfide	N001	0.45	ug/L	U	F	0.45		valid
70193	3/2/2006	06020315	000056-23-5	Carbon tetrachloride	N001	0.19	ug/L	U	F	0.19		valid
70193	3/2/2006	06020315	000108-90-7	Chlorobenzene	N001	0.17	ug/L	U	F	0.17		valid
70193	3/2/2006	06020315	000124-48-1	Chlorodibromomethane	N001	0.17	ug/L	U	F	0.17		valid
70193	3/2/2006	06020315	000075-00-3	Chloroethane	N001	0.13	ug/L	U	F	0.13		valid
70193	3/2/2006	06020315	000067-66-3	Chloroform	N001	0.16	ug/L	U	F	0.16		valid

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Table 1. Analytical results for Water Samples - 1st Quarter CY06

LOCATION_CODE	DATE_SAMPLED	LAB_REQUISITION_NUMBER	CAS	ANALYTE	SAMPLE_ID	RESULT	WATER_UNIT_OF_MEASURE	LAB_QUALIFIERS	SAMPLE_TYPE	DETECTION_LIMIT	UNCERTAINTY	DATA_VALIDATION_QUALIFIERS
70193	3/2/2006	06020315	000074-87-3	Chloromethane	N001	0.73	ug/L	J	F	0.3		valid
70193	3/2/2006	06020315	07440-47-3	Chromium	N001	0.0026	mg/L	U	F	0.0026		valid
70193	3/2/2006	06020315	000156-59-2	cis-1,2-Dichloroethene	N001	0.15	ug/L	U	F	0.15		valid
70193	3/2/2006	06020315	07440-50-8	Copper	N001	0.0045	mg/L	U	F	0.0045		valid
70193	3/2/2006	06020315	000087-68-3	Hexachlorobutadiene	N001	0.12	ug/L	U	F	0.12		valid
70193	3/2/2006	06020315	07439-92-1	Lead	N001	0.0026	mg/L	U	F	0.0026		valid
70193	3/2/2006	06020315	M&P XYLENE	m,p-Xylene	N001	0.34	ug/L	U	F	0.34		valid
70193	3/2/2006	06020315	07439-96-5	Manganese	N001	0.0066	mg/L	B	F	0.00087		valid
70193	3/2/2006	06020315	07439-97-6	Mercury	N001	0.000027	mg/L	U	F	0.000027		valid
70193	3/2/2006	06020315	000075-09-2	Methylene chloride	N001	0.32	ug/L	U	F	0.32		valid
70193	3/2/2006	06020315	000091-20-3	Naphthalene	N001	0.22	ug/L	U	F	0.22		valid
70193	3/2/2006	06020315	07440-02-0	Nickel	N001	0.0028	mg/L	B	F	0.0012		U
70193	3/2/2006	06020315	000095-47-6	o-Xylene	N001	0.19	ug/L	U	F	0.19		valid
70193	3/2/2006	06020315	07782-49-2	Selenium	N001	0.0048	mg/L	B	F	0.0046		valid
70193	3/2/2006	06020315	07440-22-4	Silver	N001	0.0028	mg/L	U	F	0.0028		valid
70193	3/2/2006	06020315	000100-42-5	Styrene	N001	0.17	ug/L	U	F	0.17		valid
70193	3/2/2006	06020315	000127-18-4	Tetrachloroethene	N001	0.2	ug/L	U	F	0.2		valid
70193	3/2/2006	06020315	07440-28-0	Thallium	N001	0.0049	mg/L	U	F	0.0049		valid
70193	3/2/2006	06020315	000108-88-3	Toluene	N001	0.17	ug/L	U	F	0.17		valid
70193	3/2/2006	06020315	000100-41-4	Total Xylene	N001	0.16	ug/L	U	F	0.16		valid
70193	3/2/2006	06020315	000156-60-5	trans-1,2-Dichloroethene	N001	0.15	ug/L	U	F	0.15		valid
70193	3/2/2006	06020315	000079-01-6	Trichloroethene	N001	0.17	ug/L	J	F	0.16		valid
70193	3/2/2006	06020315	000075-01-4	Vinyl chloride	N001	0.38	ug/L	U	F	0.38		valid
70193	3/2/2006	06020315	07440-66-6	Zinc	N001	0.0045	mg/L	U	F	0.0045		valid
70393	3/2/2006	06020315	000071-55-6	1,1,1-Trichloroethane	N001	4.7	ug/L		F	0.16		valid
70393	3/2/2006	06020315	000079-34-5	1,1,2,2-Tetrachloroethane	N001	0.2	ug/L	U	F	0.2		valid
70393	3/2/2006	06020315	000079-00-5	1,1,2-Trichloroethane	N001	0.32	ug/L	U	F	0.32		valid
70393	3/2/2006	06020315	000075-34-3	1,1-Dichloroethane	N001	0.16	ug/L	U	F	0.16		valid
70393	3/2/2006	06020315	000075-35-4	1,1-Dichloroethene	N001	5.3	ug/L		F	0.14		valid
70393	3/2/2006	06020315	000120-82-1	1,2,4-Trichlorobenzene	N001	0.32	ug/L	U	F	0.32		valid
70393	3/2/2006	06020315	000096-12-8	1,2-Dibromo-3-chloropropane	N001	0.43	ug/L	U	F	0.43		valid
70393	3/2/2006	06020315	000106-93-4	1,2-Dibromoethane	N001	0.18	ug/L	U	F	0.18		valid
70393	3/2/2006	06020315	000095-50-1	1,2-Dichlorobenzene	N001	0.13	ug/L	U	F	0.13		valid
70393	3/2/2006	06020315	000107-06-2	1,2-Dichloroethane	N001	0.13	ug/L	U	F	0.13		valid
70393	3/2/2006	06020315	000078-87-5	1,2-Dichloropropane	N001	0.13	ug/L	U	F	0.13		valid
70393	3/2/2006	06020315	000541-73-1	1,3-Dichlorobenzene	N001	0.16	ug/L	U	F	0.16		valid
70393	3/2/2006	06020315	000106-46-7	1,4-Dichlorobenzene	N001	0.16	ug/L	U	F	0.16		valid
70393	3/2/2006	06020315	000078-93-3	2-Butanone	N001	1.7	ug/L	U	F	1.7		valid
70393	3/2/2006	06020315	000108-10-1	4-Methyl-2-Pentanone	N001	0.49	ug/L	U	F	0.49		valid
70393	3/2/2006	06020315	000067-64-1	Acetone	N001	1.9	ug/L	U	F	1.9		valid
70393	3/2/2006	06020315	000107-02-8	Acrolein	N001	2.8	ug/L	U	F	2.8		R
70393	3/2/2006	06020315	000107-13-1	Acrylonitrile	N001	1.4	ug/L	U	F	1.4		valid
70393	3/2/2006	06020315	ALKALINITY	Alkalinity, Total (As CaCO3)	N001	2.5	mg/L		F			valid
70393	3/2/2006	06020315	07429-90-5	Aluminum	N001	0.033	mg/L	B	F	0.017		valid
70393	3/2/2006	06020315	07440-36-0	Antimony	N001	0.0031	mg/L	U	F	0.0031		valid
70393	3/2/2006	06020315	07440-38-2	Arsenic	N001	0.0044	mg/L	U	F	0.0044		valid
70393	3/2/2006	06020315	07440-39-3	Barium	N001	0.067	mg/L		F	0.0007		valid
70393	3/2/2006	06020315	000071-43-2	Benzene	N001	0.16	ug/L	U	F	0.16		valid
70393	3/2/2006	06020315	07440-41-7	Beryllium	N001	0.00047	mg/L	U	F	0.00047		valid
70393	3/2/2006	06020315	07440-42-8	Boron	N001	0.0059	mg/L	U	F	0.0059		valid
70393	3/2/2006	06020315	000075-27-4	Bromodichloromethane	N001	0.17	ug/L	U	F	0.17		valid
70393	3/2/2006	06020315	000075-25-2	Bromoform	N001	0.19	ug/L	U	F	0.19		valid
70393	3/2/2006	06020315	000074-83-9	Bromomethane	N001	0.21	ug/L	U	F	0.21		valid
70393	3/2/2006	06020315	07440-43-9	Cadmium	N001	0.00045	mg/L	U	F	0.00045		valid
70393	3/2/2006	06020315	000075-15-0	Carbon Disulfide	N001	0.45	ug/L	U	F	0.45		valid
70393	3/2/2006	06020315	000056-23-5	Carbon tetrachloride	N001	0.3	ug/L	J	F	0.19		valid
70393	3/2/2006	06020315	000108-90-7	Chlorobenzene	N001	0.17	ug/L	U	F	0.17		valid
70393	3/2/2006	06020315	000124-48-1	Chlorodibromomethane	N001	0.17	ug/L	U	F	0.17		valid
70393	3/2/2006	06020315	000075-00-3	Chloroethane	N001	0.13	ug/L	U	F	0.13		valid
70393	3/2/2006	06020315	000067-66-3	Chloroform	N001	0.17	ug/L	J	F	0.16		valid
70393	3/2/2006	06020315	000074-87-3	Chloromethane	N001	0.3	ug/L	U	F	0.3		valid
70393	3/2/2006	06020315	07440-47-3	Chromium	N001	0.0026	mg/L	U	F	0.0026		valid
70393	3/2/2006	06020315	000156-59-2	cis-1,2-Dichloroethene	N001	0.15	ug/L	U	F	0.15		valid
70393	3/2/2006	06020315	07440-50-8	Copper	N001	0.0045	mg/L	U	F	0.0045		valid
70393	3/2/2006	06020315	000087-68-3	Hexachlorobutadiene	N001	0.12	ug/L	U	F	0.12		valid
70393	3/2/2006	06020315	07439-92-1	Lead	N001	0.0026	mg/L	U	F	0.0026		valid
70393	3/2/2006	06020315	M&P XYLENE	m,p-Xylene	N001	0.34	ug/L	U	F	0.34		valid
70393	3/2/2006	06020315	07439-96-5	Manganese	N001	0.0094	mg/L	B	F	0.00087		valid
70393	3/2/2006	06020315	07439-97-6	Mercury	N001	0.000027	mg/L	U	F	0.000027		valid
70393	3/2/2006	06020315	000075-09-2	Methylene chloride	N001	0.33	ug/L	J	F	0.32		valid
70393	3/2/2006	06020315	000091-20-3	Naphthalene	N001	0.22	ug/L	U	F	0.22		valid
70393	3/2/2006	06020315	07440-02-0	Nickel	N001	0.0034	mg/L	B	F	0.0012		valid
70393	3/2/2006	06020315	000095-47-6	o-Xylene	N001	0.19	ug/L	U	F	0.19		valid
70393	3/2/2006	06020315	07782-49-2	Selenium	N001	0.0046	mg/L	U	F	0.0046		valid
70393	3/2/2006	06020315	07440-22-4	Silver	N001	0.0028	mg/L	U	F	0.0028		valid
70393	3/2/2006	06020315	000100-42-5	Styrene	N001	0.17	ug/L	U	F	0.17		valid
70393	3/2/2006	06020315	000127-18-4	Tetrachloroethene	N001	3.6	ug/L		F	0.2		valid
70393	3/2/2006	06020315	07440-28-0	Thallium	N001	0.0062	mg/L	B	F	0.0049		valid
70393	3/2/2006	06020315	000108-88-3	Toluene	N001	0.17	ug/L	U	F	0.17		valid
70393	3/2/2006	06020315	000100-41-4	Total Xylene	N001	0.16	ug/L	U	F	0.16		valid
70393	3/2/2006	06020315	000156-60-5	trans-1,2-Dichloroethene	N001	0.15	ug/L	U	F	0.15		valid

Table 1. Analytical results for Water Samples - 1st Quarter CY06

LOCATION_CODE	DATE_SAMPLED	LAB_REQUISITION_NUMBER	CAS	ANALYTE	SAMPLE_ID	RESULT	WATER_UNIT_OF_MEASURE	LAB_QUALIFIERS	SAMPLE_TYPE	DETECTION_LIMIT	UNCERTAINTY	DATA_VALIDATION_QUALIFIERS
70393	3/2/2006	06020315	000079-01-6	Trichloroethene	N001	14	ug/L		F	0.16		valid
70393	3/2/2006	06020315	000075-01-4	Vinyl chloride	N001	0.38	ug/L	U	F	0.38		valid
70393	3/2/2006	06020315	07440-66-6	Zinc	N001	0.0057	mg/L	B	F	0.0045		valid
70693	3/2/2006	06020315	000071-55-6	1,1,1-Trichloroethane	N001	6.4	ug/L		F	0.16		valid
70693	3/2/2006	06020315	000079-34-5	1,1,2,2-Tetrachloroethane	N001	0.2	ug/L	U	F	0.2		valid
70693	3/2/2006	06020315	000079-00-5	1,1,2-Trichloroethane	N001	0.32	ug/L	U	F	0.32		valid
70693	3/2/2006	06020315	000075-34-3	1,1-Dichloroethane	N001	0.16	ug/L	U	F	0.16		valid
70693	3/2/2006	06020315	000075-35-4	1,1-Dichloroethene	N001	6.1	ug/L		F	0.14		valid
70693	3/2/2006	06020315	000120-82-1	1,2,4-Trichlorobenzene	N001	0.32	ug/L	U	F	0.32		valid
70693	3/2/2006	06020315	000096-12-8	1,2-Dibromo-3-chloropropane	N001	0.43	ug/L	U	F	0.43		valid
70693	3/2/2006	06020315	000106-93-4	1,2-Dibromoethane	N001	0.18	ug/L	U	F	0.18		valid
70693	3/2/2006	06020315	000095-50-1	1,2-Dichlorobenzene	N001	0.13	ug/L	U	F	0.13		valid
70693	3/2/2006	06020315	000107-06-2	1,2-Dichloroethane	N001	0.13	ug/L	U	F	0.13		valid
70693	3/2/2006	06020315	000078-87-5	1,2-Dichloropropane	N001	0.13	ug/L	U	F	0.13		valid
70693	3/2/2006	06020315	000541-73-1	1,3-Dichlorobenzene	N001	0.16	ug/L	U	F	0.16		valid
70693	3/2/2006	06020315	000106-46-7	1,4-Dichlorobenzene	N001	0.16	ug/L	U	F	0.16		valid
70693	3/2/2006	06020315	000078-93-3	2-Butanone	N001	1.7	ug/L	U	F	1.7		valid
70693	3/2/2006	06020315	000108-10-1	4-Methyl-2-Pentanone	N001	0.49	ug/L	U	F	0.49		valid
70693	3/2/2006	06020315	000067-64-1	Acetone	N001	1.9	ug/L	U	F	1.9		valid
70693	3/2/2006	06020315	000107-02-8	Acrolein	N001	2.8	ug/L	U	F	2.8		R
70693	3/2/2006	06020315	000107-13-1	Acrylonitrile	N001	1.4	ug/L	U	F	1.4		valid
70693	3/2/2006	06020315	ALKALINITY	Alkalinity, Total (As CaCO3)	N001	25	mg/L		F			valid
70693	3/2/2006	06020315	07429-90-5	Aluminum	N001	0.032	mg/L	B	F	0.017		valid
70693	3/2/2006	06020315	07440-36-0	Antimony	N001	0.0031	mg/L	U	F	0.0031		valid
70693	3/2/2006	06020315	07440-38-2	Arsenic	N001	0.0044	mg/L	U	F	0.0044		valid
70693	3/2/2006	06020315	07440-39-3	Barium	N001	0.11	mg/L		F	0.0007		valid
70693	3/2/2006	06020315	000071-43-2	Benzene	N001	0.16	ug/L	U	F	0.16		valid
70693	3/2/2006	06020315	07440-41-7	Beryllium	N001	0.00047	mg/L	U	F	0.00047		valid
70693	3/2/2006	06020315	07440-42-8	Boron	N001	0.019	mg/L	B	F	0.0059		valid
70693	3/2/2006	06020315	000075-27-4	Bromodichloromethane	N001	0.17	ug/L	U	F	0.17		valid
70693	3/2/2006	06020315	000075-25-2	Bromoform	N001	0.19	ug/L	U	F	0.19		valid
70693	3/2/2006	06020315	000074-83-9	Bromomethane	N001	0.21	ug/L	U	F	0.21		valid
70693	3/2/2006	06020315	07440-43-9	Cadmium	N001	0.00045	mg/L	U	F	0.00045		valid
70693	3/2/2006	06020315	000075-15-0	Carbon Disulfide	N001	0.45	ug/L	U	F	0.45		valid
70693	3/2/2006	06020315	000056-23-5	Carbon tetrachloride	N001	0.54	ug/L	J	F	0.19		valid
70693	3/2/2006	06020315	000108-90-7	Chlorobenzene	N001	0.17	ug/L	U	F	0.17		valid
70693	3/2/2006	06020315	000124-48-1	Chlorodibromomethane	N001	0.17	ug/L	U	F	0.17		valid
70693	3/2/2006	06020315	000075-00-3	Chloroethane	N001	0.13	ug/L	U	F	0.13		valid
70693	3/2/2006	06020315	000067-66-3	Chloroform	N001	0.26	ug/L	J	F	0.16		valid
70693	3/2/2006	06020315	000074-87-3	Chloromethane	N001	0.3	ug/L	U	F	0.3		valid
70693	3/2/2006	06020315	07440-47-3	Chromium	N001	0.0026	mg/L	U	F	0.0026		valid
70693	3/2/2006	06020315	000156-59-2	cis-1,2-Dichloroethene	N001	0.15	ug/L	U	F	0.15		valid
70693	3/2/2006	06020315	07440-50-8	Copper	N001	0.0045	mg/L	U	F	0.0045		valid
70693	3/2/2006	06020315	000087-68-3	Hexachlorobutadiene	N001	0.12	ug/L	U	F	0.12		valid
70693	3/2/2006	06020315	07439-92-1	Lead	N001	0.0026	mg/L	U	F	0.0026		valid
70693	3/2/2006	06020315	M&P XYLENE	m,p-Xylene	N001	0.34	ug/L	U	F	0.34		valid
70693	3/2/2006	06020315	07439-96-5	Manganese	N001	0.0037	mg/L	B	F	0.00087		valid
70693	3/2/2006	06020315	07439-97-6	Mercury	N001	0.000027	mg/L	U	F	0.000027		valid
70693	3/2/2006	06020315	000075-09-2	Methylene chloride	N001	0.32	ug/L	U	F	0.32		valid
70693	3/2/2006	06020315	000091-20-3	Naphthalene	N001	0.22	ug/L	U	F	0.22		valid
70693	3/2/2006	06020315	07440-02-0	Nickel	N001	0.0035	mg/L	B	F	0.0012		valid
70693	3/2/2006	06020315	000095-47-6	o-Xylene	N001	0.19	ug/L	U	F	0.19		valid
70693	3/2/2006	06020315	07782-49-2	Selenium	N001	0.0046	mg/L	U	F	0.0046		valid
70693	3/2/2006	06020315	07440-22-4	Silver	N001	0.0028	mg/L	U	F	0.0028		valid
70693	3/2/2006	06020315	000100-42-5	Styrene	N001	0.17	ug/L	U	F	0.17		valid
70693	3/2/2006	06020315	000127-18-4	Tetrachloroethene	N001	1.9	ug/L		F	0.2		valid
70693	3/2/2006	06020315	07440-28-0	Thallium	N001	0.0049	mg/L	U	F	0.0049		valid
70693	3/2/2006	06020315	000108-88-3	Toluene	N001	0.17	ug/L	U	F	0.17		valid
70693	3/2/2006	06020315	000100-41-4	Total Xylene	N001	0.16	ug/L	U	F	0.16		valid
70693	3/2/2006	06020315	000156-60-5	trans-1,2-Dichloroethene	N001	0.15	ug/L	U	F	0.15		valid
70693	3/2/2006	06020315	000079-01-6	Trichloroethene	N001	4.3	ug/L		F	0.16		valid
70693	3/2/2006	06020315	000075-01-4	Vinyl chloride	N001	0.38	ug/L	U	F	0.38		valid
70693	3/2/2006	06020315	07440-66-6	Zinc	N001	0.0045	mg/L	U	F	0.0045		valid
73005	3/6/2006	06020315	000071-55-6	1,1,1-Trichloroethane	N001	0.16	ug/L	U	F	0.16		valid
73005	3/6/2006	06020315	000079-34-5	1,1,2,2-Tetrachloroethane	N001	0.2	ug/L	U	F	0.2		valid
73005	3/6/2006	06020315	000079-00-5	1,1,2-Trichloroethane	N001	0.32	ug/L	U	F	0.32		valid
73005	3/6/2006	06020315	000075-34-3	1,1-Dichloroethane	N001	0.16	ug/L	U	F	0.16		valid
73005	3/6/2006	06020315	000075-35-4	1,1-Dichloroethene	N001	0.14	ug/L	U	F	0.14		valid
73005	3/6/2006	06020315	000120-82-1	1,2,4-Trichlorobenzene	N001	0.32	ug/L	U	F	0.32		valid
73005	3/6/2006	06020315	000096-12-8	1,2-Dibromo-3-chloropropane	N001	0.43	ug/L	U	F	0.43		valid
73005	3/6/2006	06020315	000106-93-4	1,2-Dibromoethane	N001	0.18	ug/L	U	F	0.18		valid
73005	3/6/2006	06020315	000095-50-1	1,2-Dichlorobenzene	N001	0.13	ug/L	U	F	0.13		valid
73005	3/6/2006	06020315	000107-06-2	1,2-Dichloroethane	N001	0.13	ug/L	U	F	0.13		valid
73005	3/6/2006	06020315	000078-87-5	1,2-Dichloropropane	N001	0.13	ug/L	U	F	0.13		valid
73005	3/6/2006	06020315	000541-73-1	1,3-Dichlorobenzene	N001	0.16	ug/L	U	F	0.16		valid
73005	3/6/2006	06020315	000106-46-7	1,4-Dichlorobenzene	N001	0.16	ug/L	U	F	0.16		valid
73005	3/6/2006	06020315	000078-93-3	2-Butanone	N001	1.7	ug/L	U	F	1.7		valid
73005	3/6/2006	06020315	000108-10-1	4-Methyl-2-Pentanone	N001	0.49	ug/L	U	F	0.49		valid
73005	3/6/2006	06020315	000067-64-1	Acetone	N001	1.9	ug/L	U	F	1.9		valid
73005	3/6/2006	06020315	000107-02-8	Acrolein	N001	2.8	ug/L	U	F	2.8		R
73005	3/6/2006	06020315	000107-13-1	Acrylonitrile	N001	1.4	ug/L	U	F	1.4		valid

Table 1. Analytical results for Water Samples - 1st Quarter CY06

LOCATION_CODE	DATE_SAMPLED	LAB_REQUISITION_NUMBER	CAS	ANALYTE	SAMPLE_ID	RESULT	WATER_UNIT_OF_MEASURE	LAB_QUALIFIERS	SAMPLE_TYPE	DETECTION_LIMIT	UNCERTAINTY	DATA_VALIDATION_QUALIFIERS
73005	3/6/2006	06020315	ALKALINITY	Alkalinity, Total (As CaCO3)	N001	250	mg/L		F			valid
73005	3/6/2006	06020315	07429-90-5	Aluminum	N001	0.023	mg/L	B	F	0.017		valid
73005	3/6/2006	06020315	07440-36-0	Antimony	N001	0.0033	mg/L	B	F	0.0031		valid
73005	3/6/2006	06020315	07440-38-2	Arsenic	N001	0.0044	mg/L	U	F	0.0044		valid
73005	3/6/2006	06020315	07440-39-3	Barium	N001	0.09	mg/L		F	0.0007		valid
73005	3/6/2006	06020315	000071-43-2	Benzene	N001	0.16	ug/L	U	F	0.16		valid
73005	3/6/2006	06020315	07440-41-7	Beryllium	N001	0.00047	mg/L	U	F	0.00047		valid
73005	3/6/2006	06020315	07440-42-8	Boron	N001	0.028	mg/L	B	F	0.0059		valid
73005	3/6/2006	06020315	000075-27-4	Bromodichloromethane	N001	0.17	ug/L	U	F	0.17		valid
73005	3/6/2006	06020315	000075-25-2	Bromoform	N001	0.19	ug/L	U	F	0.19		valid
73005	3/6/2006	06020315	000074-83-9	Bromomethane	N001	0.21	ug/L	U	F	0.21		valid
73005	3/6/2006	06020315	07440-43-9	Cadmium	N001	0.00045	mg/L	U	F	0.00045		valid
73005	3/6/2006	06020315	000075-15-0	Carbon Disulfide	N001	0.45	ug/L	U	F	0.45		valid
73005	3/6/2006	06020315	000056-23-5	Carbon tetrachloride	N001	0.19	ug/L	U	F	0.19		valid
73005	3/6/2006	06020315	000108-90-7	Chlorobenzene	N001	0.17	ug/L	U	F	0.17		valid
73005	3/6/2006	06020315	000124-48-1	Chlorodibromomethane	N001	0.17	ug/L	U	F	0.17		valid
73005	3/6/2006	06020315	000075-00-3	Chloroethane	N001	0.13	ug/L	U	F	0.13		valid
73005	3/6/2006	06020315	000067-66-3	Chloroform	N001	0.16	ug/L	U	F	0.16		valid
73005	3/6/2006	06020315	000074-87-3	Chloromethane	N001	0.3	ug/L	U	F	0.3		valid
73005	3/6/2006	06020315	07440-47-3	Chromium	N001	0.0026	mg/L	U	F	0.0026		valid
73005	3/6/2006	06020315	000156-59-2	cis-1,2-Dichloroethene	N001	0.15	ug/L	U	F	0.15		valid
73005	3/6/2006	06020315	07440-50-8	Copper	N001	0.0045	mg/L	U	F	0.0045		valid
73005	3/6/2006	06020315	000087-68-3	Hexachlorobutadiene	N001	0.12	ug/L	U	F	0.12		valid
73005	3/6/2006	06020315	07439-92-1	Lead	N001	0.0026	mg/L	U	F	0.0026		valid
73005	3/6/2006	06020315	M&P XYLENE	m,p-Xylene	N001	0.34	ug/L	U	F	0.34		valid
73005	3/6/2006	06020315	07439-96-5	Manganese	N001	0.005	mg/L	B	F	0.00087		valid
73005	3/6/2006	06020315	07439-97-6	Mercury	N001	0.000027	mg/L	U	F	0.000027		valid
73005	3/6/2006	06020315	000075-09-2	Methylene chloride	N001	0.32	ug/L	U	F	0.32		valid
73005	3/6/2006	06020315	000091-20-3	Naphthalene	N001	0.22	ug/L	U	F	0.22		valid
73005	3/6/2006	06020315	07440-02-0	Nickel	N001	0.002	mg/L	B	F	0.0012		valid
73005	3/6/2006	06020315	000095-47-6	o-Xylene	N001	0.19	ug/L	U	F	0.19		valid
73005	3/6/2006	06020315	07782-49-2	Selenium	N001	0.026	mg/L		F	0.0046		valid
73005	3/6/2006	06020315	07440-22-4	Silver	N001	0.0028	mg/L	U	F	0.0028		valid
73005	3/6/2006	06020315	000100-42-5	Styrene	N001	0.17	ug/L	U	F	0.17		valid
73005	3/6/2006	06020315	000127-18-4	Tetrachloroethene	N001	0.2	ug/L	U	F	0.2		valid
73005	3/6/2006	06020315	07440-28-0	Thallium	N001	0.0049	mg/L	U	F	0.0049		valid
73005	3/6/2006	06020315	000108-88-3	Toluene	N001	0.17	ug/L	U	F	0.17		valid
73005	3/6/2006	06020315	000100-41-4	Total Xylene	N001	0.16	ug/L	U	F	0.16		valid
73005	3/6/2006	06020315	000156-60-5	trans-1,2-Dichloroethene	N001	0.15	ug/L	U	F	0.15		valid
73005	3/6/2006	06020315	000079-01-6	Trichloroethene	N001	0.16	ug/L	U	F	0.16		valid
73005	3/6/2006	06020315	000075-01-4	Vinyl chloride	N001	0.38	ug/L	U	F	0.38		valid
73005	3/6/2006	06020315	07440-66-6	Zinc	N001	0.0045	mg/L	U	F	0.0045		valid
73105	3/6/2006	06020315	000071-55-6	1,1,1-Trichloroethane	N001	0.16	ug/L	U	F	0.16		valid
73105	3/6/2006	06020315	000079-34-5	1,1,2,2-Tetrachloroethane	N001	0.2	ug/L	U	F	0.2		valid
73105	3/6/2006	06020315	000079-00-5	1,1,2-Trichloroethane	N001	0.32	ug/L	U	F	0.32		valid
73105	3/6/2006	06020315	000075-34-3	1,1-Dichloroethane	N001	0.16	ug/L	U	F	0.16		valid
73105	3/6/2006	06020315	000075-35-4	1,1-Dichloroethene	N001	0.14	ug/L	U	F	0.14		valid
73105	3/6/2006	06020315	000120-82-1	1,2,4-Trichlorobenzene	N001	0.32	ug/L	U	F	0.32		valid
73105	3/6/2006	06020315	000096-12-8	1,2-Dibromo-3-chloropropane	N001	0.43	ug/L	U	F	0.43		valid
73105	3/6/2006	06020315	000106-93-4	1,2-Dibromoethane	N001	0.18	ug/L	U	F	0.18		valid
73105	3/6/2006	06020315	000095-50-1	1,2-Dichlorobenzene	N001	0.13	ug/L	U	F	0.13		valid
73105	3/6/2006	06020315	000107-06-2	1,2-Dichloroethane	N001	0.13	ug/L	U	F	0.13		valid
73105	3/6/2006	06020315	000078-87-5	1,2-Dichloropropane	N001	0.13	ug/L	U	F	0.13		valid
73105	3/6/2006	06020315	000541-73-1	1,3-Dichlorobenzene	N001	0.16	ug/L	U	F	0.16		valid
73105	3/6/2006	06020315	000106-46-7	1,4-Dichlorobenzene	N001	0.16	ug/L	U	F	0.16		valid
73105	3/6/2006	06020315	000078-93-3	2-Butanone	N001	1.7	ug/L	U	F	1.7		valid
73105	3/6/2006	06020315	000108-10-1	4-Methyl-2-Pentanone	N001	0.49	ug/L	U	F	0.49		valid
73105	3/6/2006	06020315	000067-64-1	Acetone	N001	1.9	ug/L	U	F	1.9		valid
73105	3/6/2006	06020315	000107-02-8	Acrolein	N001	2.8	ug/L	U	F	2.8		R
73105	3/6/2006	06020315	000107-13-1	Acrylonitrile	N001	1.4	ug/L	U	F	1.4		valid
73105	3/6/2006	06020315	ALKALINITY	Alkalinity, Total (As CaCO3)	N001	330	mg/L		F			valid
73105	3/6/2006	06020315	07429-90-5	Aluminum	N001	0.017	mg/L	U	F	0.017		valid
73105	3/6/2006	06020315	07440-36-0	Antimony	N001	0.0031	mg/L	B	F	0.0031		valid
73105	3/6/2006	06020315	07440-38-2	Arsenic	N001	0.0044	mg/L	U	F	0.0044		valid
73105	3/6/2006	06020315	07440-39-3	Barium	N001	0.096	mg/L		F	0.0007		valid
73105	3/6/2006	06020315	000071-43-2	Benzene	N001	0.16	ug/L	U	F	0.16		valid
73105	3/6/2006	06020315	07440-41-7	Beryllium	N001	0.00047	mg/L	U	F	0.00047		valid
73105	3/6/2006	06020315	07440-42-8	Boron	N001	0.087	mg/L		F	0.0059		valid
73105	3/6/2006	06020315	000075-27-4	Bromodichloromethane	N001	0.17	ug/L	U	F	0.17		valid
73105	3/6/2006	06020315	000075-25-2	Bromoform	N001	0.19	ug/L	U	F	0.19		valid
73105	3/6/2006	06020315	000074-83-9	Bromomethane	N001	0.21	ug/L	U	F	0.21		valid
73105	3/6/2006	06020315	07440-43-9	Cadmium	N001	0.00045	mg/L	U	F	0.00045		valid
73105	3/6/2006	06020315	000075-15-0	Carbon Disulfide	N001	0.45	ug/L	U	F	0.45		valid
73105	3/6/2006	06020315	000056-23-5	Carbon tetrachloride	N001	0.19	ug/L	U	F	0.19		valid
73105	3/6/2006	06020315	000108-90-7	Chlorobenzene	N001	0.17	ug/L	U	F	0.17		valid
73105	3/6/2006	06020315	000124-48-1	Chlorodibromomethane	N001	0.17	ug/L	U	F	0.17		valid
73105	3/6/2006	06020315	000075-00-3	Chloroethane	N001	0.13	ug/L	U	F	0.13		valid
73105	3/6/2006	06020315	000067-66-3	Chloroform	N001	0.45	ug/L	J	F	0.16		valid
73105	3/6/2006	06020315	000074-87-3	Chloromethane	N001	0.43	ug/L	J	F	0.3		valid
73105	3/6/2006	06020315	07440-47-3	Chromium	N001	0.0026	mg/L	U	F	0.0026		valid
73105	3/6/2006	06020315	000156-59-2	cis-1,2-Dichloroethene	N001	0.15	ug/L	U	F	0.15		valid

Table 1. Analytical results for Water Samples - 1st Quarter CY06

LOCATION_CODE	DATE_SAMPLED	LAB_REQUISITION_NUMBER	CAS	ANALYTE	SAMPLE_ID	RESULT	WATER_UNIT_OF_MEASURE	LAB_QUALIFIERS	SAMPLE_TYPE	DETECTION_LIMIT	UNCERTAINTY	DATA_VALIDATION_QUALIFIERS
73105	3/6/2006	06020315	07440-50-8	Copper	N001	0.0045	mg/L	U	F	0.0045		valid
73105	3/6/2006	06020315	000087-68-3	Hexachlorobutadiene	N001	0.12	ug/L	U	F	0.12		valid
73105	3/6/2006	06020315	07439-92-1	Lead	N001	0.0026	mg/L	U	F	0.0026		valid
73105	3/6/2006	06020315	M&P XYLENE	m,p-Xylene	N001	0.34	ug/L	U	F	0.34		valid
73105	3/6/2006	06020315	07439-96-5	Manganese	N001	0.26	mg/L		F	0.00087		valid
73105	3/6/2006	06020315	07439-97-6	Mercury	N001	0.000027	mg/L	U	F	0.000027		valid
73105	3/6/2006	06020315	000075-09-2	Methylene chloride	N001	0.32	ug/L	U	F	0.32		valid
73105	3/6/2006	06020315	000091-20-3	Naphthalene	N001	0.22	ug/L	U	F	0.22		valid
73105	3/6/2006	06020315	07440-02-0	Nickel	N001	0.0036	mg/L	B	F	0.0012		valid
73105	3/6/2006	06020315	000095-47-6	o-Xylene	N001	0.19	ug/L	U	F	0.19		valid
73105	3/6/2006	06020315	07782-49-2	Selenium	N001	0.0046	mg/L	U	F	0.0046		valid
73105	3/6/2006	06020315	07440-22-4	Silver	N001	0.0028	mg/L	U	F	0.0028		valid
73105	3/6/2006	06020315	000100-42-5	Styrene	N001	0.17	ug/L	U	F	0.17		valid
73105	3/6/2006	06020315	000127-18-4	Tetrachloroethene	N001	0.2	ug/L	U	F	0.2		valid
73105	3/6/2006	06020315	07440-28-0	Thallium	N001	0.0049	mg/L	U	F	0.0049		valid
73105	3/6/2006	06020315	000108-88-3	Toluene	N001	0.17	ug/L	U	F	0.17		valid
73105	3/6/2006	06020315	000100-41-4	Total Xylene	N001	0.16	ug/L	U	F	0.16		valid
73105	3/6/2006	06020315	000156-60-5	trans-1,2-Dichloroethene	N001	0.15	ug/L	U	F	0.15		valid
73105	3/6/2006	06020315	000079-01-6	Trichloroethene	N001	0.16	ug/L	U	F	0.16		valid
73105	3/6/2006	06020315	000075-01-4	Vinyl chloride	N001	0.38	ug/L	U	F	0.38		valid
73105	3/6/2006	06020315	07440-66-6	Zinc	N001	0.0062	mg/L	B	F	0.0045		valid
73205	3/6/2006	06020315	000071-55-6	1,1,1-Trichloroethane	N001	0.16	ug/L	U	F	0.16		valid
73205	3/6/2006	06020315	000079-34-5	1,1,2,2-Tetrachloroethane	N001	0.2	ug/L	U	F	0.2		valid
73205	3/6/2006	06020315	000079-00-5	1,1,2-Trichloroethane	N001	0.32	ug/L	U	F	0.32		valid
73205	3/6/2006	06020315	000075-34-3	1,1-Dichloroethane	N001	0.16	ug/L	U	F	0.16		valid
73205	3/6/2006	06020315	000075-35-4	1,1-Dichloroethene	N001	0.14	ug/L	U	F	0.14		valid
73205	3/6/2006	06020315	000120-82-1	1,2,4-Trichlorobenzene	N001	0.32	ug/L	U	F	0.32		valid
73205	3/6/2006	06020315	000096-12-8	1,2-Dibromo-3-chloropropane	N001	0.43	ug/L	U	F	0.43		valid
73205	3/6/2006	06020315	000106-93-4	1,2-Dibromoethane	N001	0.18	ug/L	U	F	0.18		valid
73205	3/6/2006	06020315	000095-50-1	1,2-Dichlorobenzene	N001	0.13	ug/L	U	F	0.13		valid
73205	3/6/2006	06020315	000107-06-2	1,2-Dichloroethane	N001	0.13	ug/L	U	F	0.13		valid
73205	3/6/2006	06020315	000078-87-5	1,2-Dichloropropane	N001	0.13	ug/L	U	F	0.13		valid
73205	3/6/2006	06020315	000541-73-1	1,3-Dichlorobenzene	N001	0.16	ug/L	U	F	0.16		valid
73205	3/6/2006	06020315	000106-46-7	1,4-Dichlorobenzene	N001	0.16	ug/L	U	F	0.16		valid
73205	3/6/2006	06020315	000078-93-3	2-Butanone	N001	1.7	ug/L	U	F	1.7		valid
73205	3/6/2006	06020315	000108-10-1	4-Methyl-2-Pentanone	N001	0.49	ug/L	U	F	0.49		valid
73205	3/6/2006	06020315	000067-64-1	Acetone	N001	1.9	ug/L	U	F	1.9		valid
73205	3/6/2006	06020315	000107-02-8	Acrolein	N001	2.8	ug/L	U	F	2.8		R
73205	3/6/2006	06020315	000107-13-1	Acrylonitrile	N001	1.4	ug/L	U	F	1.4		valid
73205	3/6/2006	06020315	ALKALINITY	Alkalinity, Total (As CaCO3)	N001	270	mg/L		F			valid
73205	3/6/2006	06020315	07429-90-5	Aluminum	N001	0.024	mg/L	B	F	0.017		valid
73205	3/6/2006	06020315	07440-36-0	Antimony	N001	0.0038	mg/L	B	F	0.0031		valid
73205	3/6/2006	06020315	07440-38-2	Arsenic	N001	0.0044	mg/L	U	F	0.0044		valid
73205	3/6/2006	06020315	07440-39-3	Barium	N001	0.065	mg/L		F	0.0007		valid
73205	3/6/2006	06020315	000071-43-2	Benzene	N001	0.16	ug/L	U	F	0.16		valid
73205	3/6/2006	06020315	07440-41-7	Beryllium	N001	0.00047	mg/L	U	F	0.00047		valid
73205	3/6/2006	06020315	07440-42-8	Boron	N001	0.045	mg/L		F	0.0059		valid
73205	3/6/2006	06020315	000075-27-4	Bromodichloromethane	N001	0.17	ug/L	U	F	0.17		valid
73205	3/6/2006	06020315	000075-25-2	Bromofrom	N001	0.19	ug/L	U	F	0.19		valid
73205	3/6/2006	06020315	000074-83-9	Bromomethane	N001	0.21	ug/L	U	F	0.21		valid
73205	3/6/2006	06020315	07440-43-9	Cadmium	N001	0.00045	mg/L	U	F	0.00045		valid
73205	3/6/2006	06020315	000075-15-0	Carbon Disulfide	N001	0.45	ug/L	U	F	0.45		valid
73205	3/6/2006	06020315	000056-23-5	Carbon tetrachloride	N001	0.19	ug/L	U	F	0.19		valid
73205	3/6/2006	06020315	000108-90-7	Chlorobenzene	N001	0.17	ug/L	U	F	0.17		valid
73205	3/6/2006	06020315	000124-48-1	Chlorodibromomethane	N001	0.17	ug/L	U	F	0.17		valid
73205	3/6/2006	06020315	000075-00-3	Chloroethane	N001	0.13	ug/L	U	F	0.13		valid
73205	3/6/2006	06020315	000067-66-3	Chloroform	N001	0.16	ug/L	U	F	0.16		valid
73205	3/6/2006	06020315	000074-87-3	Chloromethane	N001	0.65	ug/L	J	F	0.3		valid
73205	3/6/2006	06020315	07440-47-3	Chromium	N001	0.0026	mg/L	U	F	0.0026		valid
73205	3/6/2006	06020315	000156-59-2	cis-1,2-Dichloroethene	N001	0.15	ug/L	U	F	0.15		valid
73205	3/6/2006	06020315	07440-50-8	Copper	N001	0.0045	mg/L	U	F	0.0045		valid
73205	3/6/2006	06020315	000087-68-3	Hexachlorobutadiene	N001	0.12	ug/L	U	F	0.12		valid
73205	3/6/2006	06020315	07439-92-1	Lead	N001	0.0026	mg/L	U	F	0.0026		valid
73205	3/6/2006	06020315	M&P XYLENE	m,p-Xylene	N001	0.34	ug/L	U	F	0.34		valid
73205	3/6/2006	06020315	07439-96-5	Manganese	N001	0.036	mg/L		F	0.00087		valid
73205	3/6/2006	06020315	07439-97-6	Mercury	N001	0.000027	mg/L	U	F	0.000027		valid
73205	3/6/2006	06020315	000075-09-2	Methylene chloride	N001	0.32	ug/L	U	F	0.32		valid
73205	3/6/2006	06020315	000091-20-3	Naphthalene	N001	0.22	ug/L	U	F	0.22		valid
73205	3/6/2006	06020315	07440-02-0	Nickel	N001	0.0034	mg/L	B	F	0.0012		valid
73205	3/6/2006	06020315	000095-47-6	o-Xylene	N001	0.19	ug/L	U	F	0.19		valid
73205	3/6/2006	06020315	07782-49-2	Selenium	N001	0.4	mg/L		F	0.0046		valid
73205	3/6/2006	06020315	07440-22-4	Silver	N001	0.0028	mg/L	U	F	0.0028		valid
73205	3/6/2006	06020315	000100-42-5	Styrene	N001	0.17	ug/L	U	F	0.17		valid
73205	3/6/2006	06020315	000127-18-4	Tetrachloroethene	N001	0.2	ug/L	U	F	0.2		valid
73205	3/6/2006	06020315	07440-28-0	Thallium	N001	0.0049	mg/L	U	F	0.0049		valid
73205	3/6/2006	06020315	000108-88-3	Toluene	N001	0.17	ug/L	U	F	0.17		valid
73205	3/6/2006	06020315	000100-41-4	Total Xylene	N001	0.16	ug/L	U	F	0.16		valid
73205	3/6/2006	06020315	000156-60-5	trans-1,2-Dichloroethene	N001	0.15	ug/L	U	F	0.15		valid
73205	3/6/2006	06020315	000079-01-6	Trichloroethene	N001	0.16	ug/L	U	F	0.16		valid
73205	3/6/2006	06020315	000075-01-4	Vinyl chloride	N001	0.38	ug/L	U	F	0.38		valid
73205	3/6/2006	06020315	07440-66-6	Zinc	N001	0.0056	mg/L	B	F	0.0045		valid

Table 1. Analytical results for Water Samples - 1st Quarter CY06

LOCATION_CODE	DATE_SAMPLED	LAB_REQUISITION_NUMBER	CAS	ANALYTE	SAMPLE_ID	RESULT	WATER_UNIT_OF_MEASURE	LAB_QUALIFIERS	SAMPLE_TYPE	DETECTION_LIMIT	UNCERTAINTY	DATA_VALIDATION_QUALIFIERS
80005	2/28/2006	06020315	000071-55-6	1,1,1-Trichloroethane	N001	0.16	ug/L	U	F	0.16		valid
80005	2/28/2006	06020315	000079-34-5	1,1,2,2-Tetrachloroethane	N001	0.2	ug/L	U	F	0.2		valid
80005	2/28/2006	06020315	000079-00-5	1,1,2-Trichloroethane	N001	0.32	ug/L	U	F	0.32		valid
80005	2/28/2006	06020315	000075-34-3	1,1-Dichloroethane	N001	0.16	ug/L	U	F	0.16		valid
80005	2/28/2006	06020315	000075-35-4	1,1-Dichloroethene	N001	0.14	ug/L	U	F	0.14		valid
80005	2/28/2006	06020315	000095-94-3	1,2,4,5-Tetrachlorobenzene	N001	2	ug/L	U	F	2		valid
80005	2/28/2006	06020315	000120-82-1	1,2,4-Trichlorobenzene	N001	0.32	ug/L	U	F	0.32		valid
80005	2/28/2006	06020315	000096-12-8	1,2-Dibromo-3-chloropropane	N001	0.43	ug/L	U	F	0.43		valid
80005	2/28/2006	06020315	000106-93-4	1,2-Dibromoethane	N001	0.18	ug/L	U	F	0.18		valid
80005	2/28/2006	06020315	000095-50-1	1,2-Dichlorobenzene	N001	0.13	ug/L	U	F	0.13		valid
80005	2/28/2006	06020315	000107-06-2	1,2-Dichloroethane	N001	0.13	ug/L	U	F	0.13		valid
80005	2/28/2006	06020315	000078-87-5	1,2-Dichloropropane	N001	0.13	ug/L	U	F	0.13		valid
80005	2/28/2006	06020315	000122-66-7	1,2-Diphenylhydrazine	N001	2	ug/L	U	F	2		valid
80005	2/28/2006	06020315	000541-73-1	1,3-Dichlorobenzene	N001	0.16	ug/L	U	F	0.16		valid
80005	2/28/2006	06020315	000106-46-7	1,4-Dichlorobenzene	N001	0.16	ug/L	U	F	0.16		valid
80005	2/28/2006	06020315	000105-67-9	2,4-Dimethylphenol	N001	1.4	ug/L	U	F	1.4		valid
80005	2/28/2006	06020315	000088-06-2	2,4,6-Trichlorophenol	N001	1.5	ug/L	U	F	1.5		valid
80005	2/28/2006	06020315	000120-83-2	2,4-Dichlorophenol	N001	1.3	ug/L	U	F	1.3		valid
80005	2/28/2006	06020315	000051-28-5	2,4-Dinitrophenol	N001	10	ug/L	U	F	10		valid
80005	2/28/2006	06020315	000121-14-2	2,4-Dinitrotoluene	N001	1.8	ug/L	U	F	1.8		valid
80005	2/28/2006	06020315	000606-20-2	2,6-Dinitrotoluene	N001	1.6	ug/L	U	F	1.6		valid
80005	2/28/2006	06020315	000078-93-3	2-Butanone	N001	1.7	ug/L	U	F	1.7		valid
80005	2/28/2006	06020315	000091-58-7	2-Chloronaphthalene	N001	1.7	ug/L	U	F	1.7		valid
80005	2/28/2006	06020315	000095-57-8	2-Chlorophenol	N001	1.7	ug/L	U	F	1.7		valid
80005	2/28/2006	06020315	000095-48-7	2-Methylphenol	N001	1.4	ug/L	U	F	1.4		valid
80005	2/28/2006	06020315	000091-94-1	3,3-Dichlorobenzidine	N001	0.63	ug/L	U	F	0.63		valid
80005	2/28/2006	06020315	000534-52-1	4,6-Dinitro-2-methyl phenol	N001	9.8	ug/L	U	F	9.8		valid
80005	2/28/2006	06020315	000059-50-7	4-Chloro-3-methylphenol	N001	1.3	ug/L	U	F	1.3		valid
80005	2/28/2006	06020315	000108-10-1	4-Methyl-2-Pentanone	N001	0.49	ug/L	U	F	0.49		valid
80005	2/28/2006	06020315	000100-02-7	4-Nitrophenol	N001	11	ug/L	U	F	11		valid
80005	2/28/2006	06020315	000083-32-9	Acenaphthene	N001	1.7	ug/L	U	F	1.7		valid
80005	2/28/2006	06020315	000208-96-8	Acenaphthylene	N001	1.8	ug/L	U	F	1.8		valid
80005	2/28/2006	06020315	000067-64-1	Acetone	N001	1.9	ug/L	U	F	1.9		valid
80005	2/28/2006	06020315	000107-02-8	Acrolein	N001	2.8	ug/L	U	F	2.8		valid
80005	2/28/2006	06020315	000107-13-1	Acrylonitrile	N001	1.4	ug/L	U	F	1.4		valid
80005	2/28/2006	06020315	ALKALINITY	Alkalinity, Total (As CaCO3)	N001	290	mg/L	U	F			valid
80005	2/28/2006	06020315	07429-90-5	Aluminum	N001	0.017	mg/L	U	F	0.017		valid
80005	2/28/2006	06020315	000120-12-7	Anthracene	N001	1.9	ug/L	U	F	1.9		valid
80005	2/28/2006	06020315	07440-36-0	Antimony	N001	0.0037	mg/L	B	F	0.0031		valid
80005	2/28/2006	06020315	07440-38-2	Arsenic	N001	0.0044	mg/L	U	F	0.0044		valid
80005	2/28/2006	06020315	07440-39-3	Barium	N001	0.14	mg/L		F	0.0007		valid
80005	2/28/2006	06020315	000056-55-3	Benz(a)anthracene	N001	1.7	ug/L	U	F	1.7		valid
80005	2/28/2006	06020315	000071-43-2	Benzene	N001	0.16	ug/L	U	F	0.16		valid
80005	2/28/2006	06020315	000092-87-5	Benzidine	N001	40	ug/L	U	F	40		valid
80005	2/28/2006	06020315	000050-32-8	Benzo(a)pyrene	N001	1.3	ug/L	U	F	1.3		valid
80005	2/28/2006	06020315	000205-99-2	Benzo(b)fluoranthene	N001	1.4	ug/L	U	F	1.4		valid
80005	2/28/2006	06020315	000191-24-2	Benzo(g,h,i)Perylene	N001	2	ug/L	U	F	2		valid
80005	2/28/2006	06020315	000207-08-9	Benzo(k)fluoranthene	N001	2.1	ug/L	U	F	2.1		valid
80005	2/28/2006	06020315	07440-41-7	Beryllium	N001	0.00047	mg/L	U	F	0.00047		valid
80005	2/28/2006	06020315	000111-44-4	Bis(2-chloroethyl) ether	N001	1.8	ug/L	U	F	1.8		valid
80005	2/28/2006	06020315	000108-60-1	Bis(2-chloroisopropyl) ether	N001	1.4	ug/L	U	F	1.4		valid
80005	2/28/2006	06020315	000117-81-7	Bis(2-ethylhexyl) phthalate	N001	1.4	ug/L	U	F	1.4		valid
80005	2/28/2006	06020315	07440-42-8	Boron	N001	0.054	mg/L		F	0.0059		valid
80005	2/28/2006	06020315	000075-27-4	Bromodichloromethane	N001	0.17	ug/L	U	F	0.17		valid
80005	2/28/2006	06020315	000075-25-2	Bromoform	N001	0.19	ug/L	U	F	0.19		valid
80005	2/28/2006	06020315	000074-83-9	Bromomethane	N001	0.21	ug/L	U	F	0.21		valid
80005	2/28/2006	06020315	000085-68-7	Butyl benzyl phthalate	N001	1.7	ug/L	U	F	1.7		valid
80005	2/28/2006	06020315	07440-43-9	Cadmium	N001	0.00045	mg/L	U	F	0.00045		valid
80005	2/28/2006	06020315	000075-15-0	Carbon Disulfide	N001	0.45	ug/L	U	F	0.45		valid
80005	2/28/2006	06020315	000056-23-5	Carbon tetrachloride	N001	0.19	ug/L	U	F	0.19		valid
80005	2/28/2006	06020315	000108-90-7	Chlorobenzene	N001	0.17	ug/L	U	F	0.17		valid
80005	2/28/2006	06020315	000124-48-1	Chlorodibromomethane	N001	0.17	ug/L	U	F	0.17		valid
80005	2/28/2006	06020315	000075-00-3	Chloroethane	N001	0.13	ug/L	U	F	0.13		valid
80005	2/28/2006	06020315	000067-66-3	Chloroform	N001	0.16	ug/L	U	F	0.16		valid
80005	2/28/2006	06020315	000074-87-3	Chloromethane	N001	0.3	ug/L	U	F	0.3		valid
80005	2/28/2006	06020315	07440-47-3	Chromium	N001	0.0026	mg/L	U	F	0.0026		valid
80005	2/28/2006	06020315	000218-01-9	Chrysene	N001	2	ug/L	U	F	2		valid
80005	2/28/2006	06020315	000156-59-2	cis-1,2-Dichloroethene	N001	0.15	ug/L	U	F	0.15		valid
80005	2/28/2006	06020315	07440-50-8	Copper	N001	0.0045	mg/L	U	F	0.0045		valid
80005	2/28/2006	06020315	000053-70-3	Dibenz(a,h)anthracene	N001	1.4	ug/L	U	F	1.4		valid
80005	2/28/2006	06020315	000084-66-2	Diethyl phthalate	N001	1.8	ug/L	U	F	1.8		valid
80005	2/28/2006	06020315	000131-11-3	Dimethyl phthalate	N001	1.7	ug/L	U	F	1.7		valid
80005	2/28/2006	06020315	000084-74-2	Di-n-butyl phthalate	N001	1.9	ug/L	U	F	1.9		valid
80005	2/28/2006	06020315	000206-44-0	Fluoranthene	N001	1.8	ug/L	U	F	1.8		valid
80005	2/28/2006	06020315	000086-73-7	Fluorene	N001	1.7	ug/L	U	F	1.7		valid
80005	2/28/2006	06020315	000118-74-1	Hexachlorobenzene	N001	2.1	ug/L	U	F	2.1		valid
80005	2/28/2006	06020315	000087-68-3	Hexachlorobutadiene	N001	0.12	ug/L	U	F	0.12		valid
80005	2/28/2006	06020315	000077-47-4	Hexachlorocyclopentadiene	N001	5	ug/L	U	F	5		valid
80005	2/28/2006	06020315	000193-39-5	Indeno(1,2,3-cd)pyrene	N001	1.5	ug/L	U	F	1.5		valid
80005	2/28/2006	06020315	000078-59-1	Isophorone	N001	1.5	ug/L	U	F	1.5		valid
80005	2/28/2006	06020315	07439-92-1	Lead	N001	0.0026	mg/L	U	F	0.0026		valid

Table 1. Analytical results for Water Samples - 1st Quarter CY06

LOCATION_CODE	DATE_SAMPLED	LAB_REQUISITION_NUMBER	CAS	ANALYTE	SAMPLE_ID	RESULT	WATER_UNIT_OF_MEASURE	LAB_QUALIFIERS	SAMPLE_TYPE	DETECTION_LIMIT	UNCERTAINTY	DATA_VALIDATION_QUALIFIERS
80005	2/28/2006	06020315	M&P XYLENE	m,p-Xylene	N001	0.34	ug/L	U	F	0.34		valid
80005	2/28/2006	06020315	07439-96-5	Manganese	N001	0.015	mg/L		F	0.00087		valid
80005	2/28/2006	06020315	07439-97-6	Mercury	N001	0.000027	mg/L	U	F	0.000027		valid
80005	2/28/2006	06020315	000075-09-2	Methylene chloride	N001	0.32	ug/L	U	F	0.32		valid
80005	2/28/2006	06020315	000091-20-3	Naphthalene	N001	0.22	ug/L	U	F	0.22		valid
80005	2/28/2006	06020315	07440-02-0	Nickel	N001	0.0031	mg/L	B	F	0.0012		U
80005	2/28/2006	06020315	000055-18-5	N-Nitrosodiethylamine	N001	2	ug/L	U	F	2		valid
80005	2/28/2006	06020315	000062-75-9	N-Nitrosodimethylamine	N001	1.6	ug/L	U	F	1.6		valid
80005	2/28/2006	06020315	000621-64-7	N-Nitrosodi-n-propylamine	N001	1.4	ug/L	U	F	1.4		valid
80005	2/28/2006	06020315	000086-30-6	N-Nitrosodiphenylamine	N001	2.6	ug/L	U	F	2.6		valid
80005	2/28/2006	06020315	000930-55-2	N-Nitrosopyrrolidine	N001	2	ug/L	U	F	2		valid
80005	2/28/2006	06020315	000095-47-6	o-Xylene	N001	0.19	ug/L	U	F	0.19		valid
80005	2/28/2006	06020315	000056-38-2	Parathion, ethyl	N001	2	ug/L	U	F	2		valid
80005	2/28/2006	06020315	000608-93-5	Pentachlorobenzene	N001	2	ug/L	U	F	2		valid
80005	2/28/2006	06020315	000087-86-5	Pentachlorophenol	N001	10	ug/L	U	F	10		valid
80005	2/28/2006	06020315	000085-01-8	Phenanthrene	N001	2	ug/L	U	F	2		valid
80005	2/28/2006	06020315	000108-95-2	Phenol	N001	1.4	ug/L	U	F	1.4		valid
80005	2/28/2006	06020315	000129-00-0	Pyrene	N001	2.1	ug/L	U	F	2.1		valid
80005	2/28/2006	06020315	07782-49-2	Selenium	N001	0.0046	mg/L	U	F	0.0046		valid
80005	2/28/2006	06020315	07440-22-4	Silver	N001	0.0028	mg/L	U	F	0.0028		valid
80005	2/28/2006	06020315	000100-42-5	Styrene	N001	0.17	ug/L	U	F	0.17		valid
80005	2/28/2006	06020315	000127-18-4	Tetrachloroethene	N001	0.2	ug/L	U	F	0.2		valid
80005	2/28/2006	06020315	07440-28-0	Thallium	N001	0.0049	mg/L	U	F	0.0049		valid
80005	2/28/2006	06020315	000108-88-3	Toluene	N001	0.17	ug/L	U	F	0.17		valid
80005	2/28/2006	06020315	000100-41-4	Total Xylene	N001	0.16	ug/L	U	F	0.16		valid
80005	2/28/2006	06020315	000156-60-5	trans-1,2-Dichloroethene	N001	0.15	ug/L	U	F	0.15		valid
80005	2/28/2006	06020315	000079-01-6	Trichloroethene	N001	0.16	ug/L	U	F	0.16		valid
80005	2/28/2006	06020315	000075-01-4	Vinyl chloride	N001	0.38	ug/L	U	F	0.38		valid
80005	2/28/2006	06020315	07440-66-6	Zinc	N001	0.0045	mg/L	U	F	0.0045		valid
80105	2/28/2006	06020315	000071-55-6	1,1,1-Trichloroethane	N001	0.16	ug/L	U	F	0.16		valid
80105	2/28/2006	06020315	000079-34-5	1,1,2,2-Tetrachloroethane	N001	0.2	ug/L	U	F	0.2		valid
80105	2/28/2006	06020315	000079-00-5	1,1,2-Trichloroethane	N001	0.32	ug/L	U	F	0.32		valid
80105	2/28/2006	06020315	000075-34-3	1,1-Dichloroethane	N001	0.16	ug/L	U	F	0.16		valid
80105	2/28/2006	06020315	000075-35-4	1,1-Dichloroethene	N001	0.14	ug/L	U	F	0.14		valid
80105	2/28/2006	06020315	000095-94-3	1,2,4,5-Tetrachlorobenzene	N001	2	ug/L	U	F	2		valid
80105	2/28/2006	06020315	000120-82-1	1,2,4-Trichlorobenzene	N001	0.32	ug/L	U	F	0.32		valid
80105	2/28/2006	06020315	000096-12-8	1,2-Dibromo-3-chloropropane	N001	0.43	ug/L	U	F	0.43		valid
80105	2/28/2006	06020315	000106-93-4	1,2-Dibromoethane	N001	0.18	ug/L	U	F	0.18		valid
80105	2/28/2006	06020315	000095-50-1	1,2-Dichlorobenzene	N001	0.13	ug/L	U	F	0.13		valid
80105	2/28/2006	06020315	000107-06-2	1,2-Dichloroethane	N001	0.13	ug/L	U	F	0.13		valid
80105	2/28/2006	06020315	000078-87-5	1,2-Dichloropropane	N001	0.13	ug/L	U	F	0.13		valid
80105	2/28/2006	06020315	000122-66-7	1,2-Diphenylhydrazine	N001	2	ug/L	U	F	2		valid
80105	2/28/2006	06020315	000541-73-1	1,3-Dichlorobenzene	N001	0.16	ug/L	U	F	0.16		valid
80105	2/28/2006	06020315	000106-46-7	1,4-Dichlorobenzene	N001	0.16	ug/L	U	F	0.16		valid
80105	2/28/2006	06020315	000105-67-9	2,4-Dimethylphenol	N001	1.4	ug/L	U	F	1.4		valid
80105	2/28/2006	06020315	000088-06-2	2,4,6-Trichlorophenol	N001	1.5	ug/L	U	F	1.5		valid
80105	2/28/2006	06020315	000120-83-2	2,4-Dichlorophenol	N001	1.3	ug/L	U	F	1.3		valid
80105	2/28/2006	06020315	000051-28-5	2,4-Dinitrophenol	N001	10	ug/L	U	F	10		valid
80105	2/28/2006	06020315	000121-14-2	2,4-Dinitrotoluene	N001	1.8	ug/L	U	F	1.8		valid
80105	2/28/2006	06020315	000606-20-2	2,6-Dinitrotoluene	N001	1.6	ug/L	U	F	1.6		valid
80105	2/28/2006	06020315	000078-93-3	2-Butanone	N001	1.7	ug/L	U	F	1.7		valid
80105	2/28/2006	06020315	000091-58-7	2-Chloronaphthalene	N001	1.7	ug/L	U	F	1.7		valid
80105	2/28/2006	06020315	000095-57-8	2-Chlorophenol	N001	1.7	ug/L	U	F	1.7		valid
80105	2/28/2006	06020315	000095-48-7	2-Methylphenol	N001	1.4	ug/L	U	F	1.4		valid
80105	2/28/2006	06020315	000091-94-1	3,3-Dichlorobenzidine	N001	0.63	ug/L	U	F	0.63		valid
80105	2/28/2006	06020315	000534-52-1	4,6-Dinitro-2-methyl phenol	N001	9.8	ug/L	U	F	9.8		valid
80105	2/28/2006	06020315	000059-50-7	4-Chloro-3-methylphenol	N001	1.3	ug/L	U	F	1.3		valid
80105	2/28/2006	06020315	000108-10-1	4-Methyl-2-Pentanone	N001	0.49	ug/L	U	F	0.49		valid
80105	2/28/2006	06020315	000100-02-7	4-Nitrophenol	N001	11	ug/L	U	F	11		valid
80105	2/28/2006	06020315	000083-32-9	Acenaphthene	N001	1.7	ug/L	U	F	1.7		valid
80105	2/28/2006	06020315	000208-96-8	Acenaphthylene	N001	1.8	ug/L	U	F	1.8		valid
80105	2/28/2006	06020315	000067-64-1	Acetone	N001	1.9	ug/L	U	F	1.9		valid
80105	2/28/2006	06020315	000107-02-8	Acrolein	N001	2.8	ug/L	U	F	2.8		valid
80105	2/28/2006	06020315	000107-13-1	Acrylonitrile	N001	1.4	ug/L	U	F	1.4		valid
80105	2/28/2006	06020315	ALKALINITY	Alkalinity, Total (As CaCO3)	N001	610	mg/L		F			valid
80105	2/28/2006	06020315	07429-90-5	Aluminum	N001	0.017	mg/L	U	F	0.017		valid
80105	2/28/2006	06020315	000120-12-7	Anthracene	N001	1.9	ug/L	U	F	1.9		valid
80105	2/28/2006	06020315	07440-36-0	Antimony	N001	0.0031	mg/L	U	F	0.0031		valid
80105	2/28/2006	06020315	07440-38-2	Arsenic	N001	0.0044	mg/L	U	F	0.0044		valid
80105	2/28/2006	06020315	07440-39-3	Barium	N001	0.076	mg/L		F	0.0007		valid
80105	2/28/2006	06020315	000056-55-3	Benz(a)anthracene	N001	1.7	ug/L	U	F	1.7		valid
80105	2/28/2006	06020315	000071-43-2	Benzene	N001	0.16	ug/L	U	F	0.16		valid
80105	2/28/2006	06020315	000092-87-5	Benzidine	N001	40	ug/L	U	F	40		valid
80105	2/28/2006	06020315	000050-32-8	Benzo(a)pyrene	N001	1.3	ug/L	U	F	1.3		valid
80105	2/28/2006	06020315	000205-99-2	Benzo(b)fluoranthene	N001	1.4	ug/L	U	F	1.4		valid
80105	2/28/2006	06020315	000191-24-2	Benzo(g,h,i)Perylene	N001	2	ug/L	U	F	2		valid
80105	2/28/2006	06020315	000207-08-9	Benzo(k)fluoranthene	N001	2.1	ug/L	U	F	2.1		valid
80105	2/28/2006	06020315	07440-41-7	Beryllium	N001	0.00047	mg/L	U	F	0.00047		valid
80105	2/28/2006	06020315	000111-44-4	Bis(2-chloroethyl) ether	N001	1.8	ug/L	U	F	1.8		valid
80105	2/28/2006	06020315	000108-60-1	Bis(2-chloroisopropyl) ether	N001	1.4	ug/L	U	F	1.4		valid
80105	2/28/2006	06020315	000117-81-7	Bis(2-ethylhexyl) phthalate	N001	3.8	ug/L	J	F	1.4		valid

Table 1. Analytical results for Water Samples - 1st Quarter CY06

LOCATION_CODE	DATE_SAMPLED	LAB_REQUISITION_NUMBER	CAS	ANALYTE	SAMPLE_ID	RESULT	WATER_UNIT_OF_MEASURE	LAB_QUALIFIERS	SAMPLE_TYPE	DETECTION_LIMIT	UNCERTAINTY	DATA_VALIDATION_QUALIFIERS
80105	2/28/2006	06020315	07440-42-8	Boron	N001	0.12	mg/L		F	0.0059		valid
80105	2/28/2006	06020315	000075-27-4	Bromodichloromethane	N001	0.17	ug/L	U	F	0.17		valid
80105	2/28/2006	06020315	000075-25-2	Bromoform	N001	0.19	ug/L	U	F	0.19		valid
80105	2/28/2006	06020315	000074-83-9	Bromomethane	N001	0.21	ug/L	U	F	0.21		valid
80105	2/28/2006	06020315	000085-68-7	Butyl benzyl phthalate	N001	1.7	ug/L	U	F	1.7		valid
80105	2/28/2006	06020315	07440-43-9	Cadmium	N001	0.00045	mg/L	U	F	0.00045		valid
80105	2/28/2006	06020315	000075-15-0	Carbon Disulfide	N001	0.45	ug/L	U	F	0.45		valid
80105	2/28/2006	06020315	000056-23-5	Carbon tetrachloride	N001	0.19	ug/L	U	F	0.19		valid
80105	2/28/2006	06020315	000108-90-7	Chlorobenzene	N001	0.17	ug/L	U	F	0.17		valid
80105	2/28/2006	06020315	000124-48-1	Chlorodibromomethane	N001	0.17	ug/L	U	F	0.17		valid
80105	2/28/2006	06020315	000075-00-3	Chloroethane	N001	0.13	ug/L	U	F	0.13		valid
80105	2/28/2006	06020315	000067-66-3	Chloroform	N001	0.16	ug/L	U	F	0.16		valid
80105	2/28/2006	06020315	000074-87-3	Chloromethane	N001	0.3	ug/L	U	F	0.3		valid
80105	2/28/2006	06020315	07440-47-3	Chromium	N001	0.0026	mg/L	U	F	0.0026		valid
80105	2/28/2006	06020315	000218-01-9	Chrysene	N001	2	ug/L	U	F	2		valid
80105	2/28/2006	06020315	000156-59-2	cis-1,2-Dichloroethene	N001	0.15	ug/L	U	F	0.15		valid
80105	2/28/2006	06020315	07440-50-8	Copper	N001	0.0045	mg/L	U	F	0.0045		valid
80105	2/28/2006	06020315	000053-70-3	Dibenz(a,h)anthracene	N001	1.4	ug/L	U	F	1.4		valid
80105	2/28/2006	06020315	000084-66-2	Diethyl phthalate	N001	1.8	ug/L	U	F	1.8		valid
80105	2/28/2006	06020315	000131-11-3	Dimethyl phthalate	N001	1.7	ug/L	U	F	1.7		valid
80105	2/28/2006	06020315	000084-74-2	Di-n-butyl phthalate	N001	1.9	ug/L	U	F	1.9		valid
80105	2/28/2006	06020315	000206-44-0	Fluoranthene	N001	1.8	ug/L	U	F	1.8		valid
80105	2/28/2006	06020315	000086-73-7	Fluorene	N001	1.7	ug/L	U	F	1.7		valid
80105	2/28/2006	06020315	000118-74-1	Hexachlorobenzene	N001	2.1	ug/L	U	F	2.1		valid
80105	2/28/2006	06020315	000087-68-3	Hexachlorobutadiene	N001	0.12	ug/L	U	F	0.12		valid
80105	2/28/2006	06020315	000077-47-4	Hexachlorocyclopentadiene	N001	5	ug/L	U	F	5		valid
80105	2/28/2006	06020315	000193-39-5	Indeno(1,2,3-cd)pyrene	N001	1.5	ug/L	U	F	1.5		valid
80105	2/28/2006	06020315	000078-59-1	Isophorone	N001	1.5	ug/L	U	F	1.5		valid
80105	2/28/2006	06020315	07439-92-1	Lead	N001	0.0026	mg/L	U	F	0.0026		valid
80105	2/28/2006	06020315	M&P XYLENE	m,p-Xylene	N001	0.34	ug/L	U	F	0.34		valid
80105	2/28/2006	06020315	07439-96-5	Manganese	N001	0.11	mg/L		F	0.00087		valid
80105	2/28/2006	06020315	07439-97-6	Mercury	N001	0.000027	mg/L	U	F	0.000027		valid
80105	2/28/2006	06020315	000075-09-2	Methylene chloride	N001	0.32	ug/L	U	F	0.32		valid
80105	2/28/2006	06020315	000091-20-3	Naphthalene	N001	0.22	ug/L	U	F	0.22		valid
80105	2/28/2006	06020315	07440-02-0	Nickel	N001	0.0037	mg/L	B	F	0.0012		U
80105	2/28/2006	06020315	000055-18-5	N-Nitrosodiethylamine	N001	2	ug/L	U	F	2		valid
80105	2/28/2006	06020315	000062-75-9	N-Nitrosodimethylamine	N001	1.6	ug/L	U	F	1.6		valid
80105	2/28/2006	06020315	000621-64-7	N-Nitrosodi-n-propylamine	N001	1.4	ug/L	U	F	1.4		valid
80105	2/28/2006	06020315	000086-30-6	N-Nitrosodiphenylamine	N001	2.6	ug/L	U	F	2.6		valid
80105	2/28/2006	06020315	000930-55-2	N-Nitrosopyrrolidine	N001	2	ug/L	U	F	2		valid
80105	2/28/2006	06020315	000095-47-6	o-Xylene	N001	0.19	ug/L	U	F	0.19		valid
80105	2/28/2006	06020315	000056-38-2	Parathion, ethyl	N001	2	ug/L	U	F	2		valid
80105	2/28/2006	06020315	000608-93-5	Pentachlorobenzene	N001	2	ug/L	U	F	2		valid
80105	2/28/2006	06020315	000087-86-5	Pentachlorophenol	N001	10	ug/L	U	F	10		valid
80105	2/28/2006	06020315	000085-01-8	Phenanthrene	N001	2	ug/L	U	F	2		valid
80105	2/28/2006	06020315	000108-95-2	Phenol	N001	1.4	ug/L	U	F	1.4		valid
80105	2/28/2006	06020315	000129-00-0	Pyrene	N001	2.1	ug/L	U	F	2.1		valid
80105	2/28/2006	06020315	07782-49-2	Selenium	N001	0.0046	mg/L	U	F	0.0046		valid
80105	2/28/2006	06020315	07440-22-4	Silver	N001	0.0028	mg/L	U	F	0.0028		valid
80105	2/28/2006	06020315	000100-42-5	Styrene	N001	0.17	ug/L	U	F	0.17		valid
80105	2/28/2006	06020315	000127-18-4	Tetrachloroethene	N001	0.2	ug/L	U	F	0.2		valid
80105	2/28/2006	06020315	07440-28-0	Thallium	N001	0.0049	mg/L	U	F	0.0049		valid
80105	2/28/2006	06020315	000108-88-3	Toluene	N001	0.17	ug/L	U	F	0.17		valid
80105	2/28/2006	06020315	000100-41-4	Total Xylene	N001	0.16	ug/L	U	F	0.16		valid
80105	2/28/2006	06020315	000156-60-5	trans-1,2-Dichloroethene	N001	0.15	ug/L	U	F	0.15		valid
80105	2/28/2006	06020315	000079-01-6	Trichloroethene	N001	0.16	ug/L	U	F	0.16		valid
80105	2/28/2006	06020315	000075-01-4	Vinyl chloride	N001	0.38	ug/L	U	F	0.38		valid
80105	2/28/2006	06020315	07440-66-6	Zinc	N001	0.005	mg/L	B	F	0.0045		valid
80205	3/2/2006	06020315	000071-55-6	1,1,1-Trichloroethane	N001	0.16	ug/L	U	E	0.16		valid
80205	3/2/2006	06020315	000071-55-6	1,1,1-Trichloroethane	N002	0.16	ug/L	U	D	0.16		valid
80205	3/2/2006	06020315	000071-55-6	1,1,1-Trichloroethane	N001	0.16	ug/L	U	F	0.16		valid
80205	3/2/2006	06020315	000079-34-5	1,1,2,2-Tetrachloroethane	N001	0.2	ug/L	U	E	0.2		valid
80205	3/2/2006	06020315	000079-34-5	1,1,2,2-Tetrachloroethane	N002	0.2	ug/L	U	D	0.2		valid
80205	3/2/2006	06020315	000079-34-5	1,1,2,2-Tetrachloroethane	N001	0.2	ug/L	U	F	0.2		valid
80205	3/2/2006	06020315	000079-00-5	1,1,2-Trichloroethane	N001	0.32	ug/L	U	E	0.32		valid
80205	3/2/2006	06020315	000079-00-5	1,1,2-Trichloroethane	N002	0.32	ug/L	U	D	0.32		valid
80205	3/2/2006	06020315	000079-00-5	1,1,2-Trichloroethane	N001	0.32	ug/L	U	F	0.32		valid
80205	3/2/2006	06020315	000075-34-3	1,1-Dichloroethane	N001	0.16	ug/L	U	E	0.16		valid
80205	3/2/2006	06020315	000075-34-3	1,1-Dichloroethane	N002	0.16	ug/L	U	D	0.16		valid
80205	3/2/2006	06020315	000075-34-3	1,1-Dichloroethane	N001	0.16	ug/L	U	F	0.16		valid
80205	3/2/2006	06020315	000075-35-4	1,1-Dichloroethene	N001	0.14	ug/L	U	E	0.14		valid
80205	3/2/2006	06020315	000075-35-4	1,1-Dichloroethene	N002	0.14	ug/L	U	D	0.14		valid
80205	3/2/2006	06020315	000075-35-4	1,1-Dichloroethene	N001	0.14	ug/L	U	F	0.14		valid
80205	3/2/2006	06020315	000095-94-3	1,2,4,5-Tetrachlorobenzene	N001	2	ug/L	U	E	2		valid
80205	3/2/2006	06020315	000095-94-3	1,2,4,5-Tetrachlorobenzene	N002	2	ug/L	U	D	2		valid
80205	3/2/2006	06020315	000095-94-3	1,2,4,5-Tetrachlorobenzene	N001	2	ug/L	U	F	2		valid
80205	3/2/2006	06020315	000120-82-1	1,2,4-Trichlorobenzene	N001	0.32	ug/L	U	E	0.32		valid
80205	3/2/2006	06020315	000120-82-1	1,2,4-Trichlorobenzene	N002	0.32	ug/L	U	D	0.32		valid
80205	3/2/2006	06020315	000120-82-1	1,2,4-Trichlorobenzene	N001	0.32	ug/L	U	F	0.32		valid
80205	3/2/2006	06020315	000096-12-8	1,2-Dibromo-3-chloropropane	N001	0.43	ug/L	U	E	0.43		valid
80205	3/2/2006	06020315	000096-12-8	1,2-Dibromo-3-chloropropane	N002	0.43	ug/L	U	D	0.43		valid

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LOCATION_CODE	DATE_SAMPLED	LAB_REQUISITION_NUMBER	CAS	ANALYTE	SAMPLE_ID	RESULT	WATER_UNIT_OF_MEASURE	LAB_QUALIFIERS	SAMPLE_TYPE	DETECTION_LIMIT	UNCERTAINTY	DATA_VALIDATION_QUALIFIERS
80205	3/2/2006	06020315	000096-12-8	1,2-Dibromo-3-chloropropane	N001	0.43	ug/L	U	F	0.43		valid
80205	3/2/2006	06020315	000106-93-4	1,2-Dibromoethane	N001	0.18	ug/L	U	E	0.18		valid
80205	3/2/2006	06020315	000106-93-4	1,2-Dibromoethane	N002	0.18	ug/L	U	D	0.18		valid
80205	3/2/2006	06020315	000106-93-4	1,2-Dibromoethane	N001	0.18	ug/L	U	F	0.18		valid
80205	3/2/2006	06020315	000095-50-1	1,2-Dichlorobenzene	N001	0.13	ug/L	U	E	0.13		valid
80205	3/2/2006	06020315	000095-50-1	1,2-Dichlorobenzene	N002	0.13	ug/L	U	D	0.13		valid
80205	3/2/2006	06020315	000095-50-1	1,2-Dichlorobenzene	N001	0.13	ug/L	U	F	0.13		valid
80205	3/2/2006	06020315	000107-06-2	1,2-Dichloroethane	N001	0.13	ug/L	U	E	0.13		valid
80205	3/2/2006	06020315	000107-06-2	1,2-Dichloroethane	N002	0.13	ug/L	U	D	0.13		valid
80205	3/2/2006	06020315	000107-06-2	1,2-Dichloroethane	N001	0.13	ug/L	U	F	0.13		valid
80205	3/2/2006	06020315	000078-87-5	1,2-Dichloropropane	N001	0.13	ug/L	U	E	0.13		valid
80205	3/2/2006	06020315	000078-87-5	1,2-Dichloropropane	N002	0.13	ug/L	U	D	0.13		valid
80205	3/2/2006	06020315	000078-87-5	1,2-Dichloropropane	N001	0.13	ug/L	U	F	0.13		valid
80205	3/2/2006	06020315	000122-66-7	1,2-Diphenylhydrazine	N001	2	ug/L	U	E	2		valid
80205	3/2/2006	06020315	000122-66-7	1,2-Diphenylhydrazine	N002	2	ug/L	U	D	2		valid
80205	3/2/2006	06020315	000122-66-7	1,2-Diphenylhydrazine	N001	2	ug/L	U	F	2		valid
80205	3/2/2006	06020315	000541-73-1	1,3-Dichlorobenzene	N001	0.16	ug/L	U	E	0.16		valid
80205	3/2/2006	06020315	000541-73-1	1,3-Dichlorobenzene	N002	0.16	ug/L	U	D	0.16		valid
80205	3/2/2006	06020315	000541-73-1	1,3-Dichlorobenzene	N001	0.16	ug/L	U	F	0.16		valid
80205	3/2/2006	06020315	000106-46-7	1,4-Dichlorobenzene	N001	0.16	ug/L	U	E	0.16		valid
80205	3/2/2006	06020315	000106-46-7	1,4-Dichlorobenzene	N002	0.16	ug/L	U	D	0.16		valid
80205	3/2/2006	06020315	000106-46-7	1,4-Dichlorobenzene	N001	0.16	ug/L	U	F	0.16		valid
80205	3/2/2006	06020315	000105-67-9	2,4-Dimethylphenol	N001	1.4	ug/L	U	E	1.4		valid
80205	3/2/2006	06020315	000105-67-9	2,4-Dimethylphenol	N002	1.4	ug/L	U	D	1.4		valid
80205	3/2/2006	06020315	000105-67-9	2,4-Dimethylphenol	N001	1.4	ug/L	U	F	1.4		valid
80205	3/2/2006	06020315	000088-06-2	2,4,6-Trichlorophenol	N001	1.5	ug/L	U	E	1.5		valid
80205	3/2/2006	06020315	000088-06-2	2,4,6-Trichlorophenol	N002	1.5	ug/L	U	D	1.5		valid
80205	3/2/2006	06020315	000088-06-2	2,4,6-Trichlorophenol	N001	1.5	ug/L	U	F	1.5		valid
80205	3/2/2006	06020315	000120-83-2	2,4-Dichlorophenol	N001	1.3	ug/L	U	E	1.3		valid
80205	3/2/2006	06020315	000120-83-2	2,4-Dichlorophenol	N002	1.3	ug/L	U	D	1.3		valid
80205	3/2/2006	06020315	000120-83-2	2,4-Dichlorophenol	N001	1.3	ug/L	U	F	1.3		valid
80205	3/2/2006	06020315	000051-28-5	2,4-Dinitrophenol	N001	10	ug/L	U	E	10		valid
80205	3/2/2006	06020315	000051-28-5	2,4-Dinitrophenol	N002	10	ug/L	U	D	10		valid
80205	3/2/2006	06020315	000051-28-5	2,4-Dinitrophenol	N001	10	ug/L	U	F	10		valid
80205	3/2/2006	06020315	000121-14-2	2,4-Dinitrotoluene	N001	1.8	ug/L	U	E	1.8		valid
80205	3/2/2006	06020315	000121-14-2	2,4-Dinitrotoluene	N002	1.8	ug/L	U	D	1.8		valid
80205	3/2/2006	06020315	000121-14-2	2,4-Dinitrotoluene	N001	1.8	ug/L	U	F	1.8		valid
80205	3/2/2006	06020315	000606-20-2	2,6-Dinitrotoluene	N001	1.6	ug/L	U	E	1.6		valid
80205	3/2/2006	06020315	000606-20-2	2,6-Dinitrotoluene	N002	1.6	ug/L	U	D	1.6		valid
80205	3/2/2006	06020315	000606-20-2	2,6-Dinitrotoluene	N001	1.6	ug/L	U	F	1.6		valid
80205	3/2/2006	06020315	000078-93-3	2-Butanone	N001	16	ug/L		E	1.7		valid
80205	3/2/2006	06020315	000078-93-3	2-Butanone	N002	1.7	ug/L	U	D	1.7		valid
80205	3/2/2006	06020315	000078-93-3	2-Butanone	N001	1.7	ug/L	U	F	1.7		valid
80205	3/2/2006	06020315	000091-58-7	2-Chloronaphthalene	N001	1.7	ug/L	U	E	1.7		valid
80205	3/2/2006	06020315	000091-58-7	2-Chloronaphthalene	N002	1.7	ug/L	U	D	1.7		valid
80205	3/2/2006	06020315	000091-58-7	2-Chloronaphthalene	N001	1.7	ug/L	U	F	1.7		valid
80205	3/2/2006	06020315	000095-57-8	2-Chlorophenol	N001	1.7	ug/L	U	E	1.7		valid
80205	3/2/2006	06020315	000095-57-8	2-Chlorophenol	N002	1.7	ug/L	U	D	1.7		valid
80205	3/2/2006	06020315	000095-57-8	2-Chlorophenol	N001	1.7	ug/L	U	F	1.7		valid
80205	3/2/2006	06020315	000095-48-7	2-Methylphenol	N001	1.4	ug/L	U	E	1.4		valid
80205	3/2/2006	06020315	000095-48-7	2-Methylphenol	N002	1.4	ug/L	U	D	1.4		valid
80205	3/2/2006	06020315	000095-48-7	2-Methylphenol	N001	1.4	ug/L	U	F	1.4		valid
80205	3/2/2006	06020315	000091-94-1	3,3'-Dichlorobenzidine	N001	0.63	ug/L	U	E	0.63		valid
80205	3/2/2006	06020315	000091-94-1	3,3'-Dichlorobenzidine	N002	0.63	ug/L	U	D	0.63		valid
80205	3/2/2006	06020315	000091-94-1	3,3'-Dichlorobenzidine	N001	0.63	ug/L	U	F	0.63		valid
80205	3/2/2006	06020315	000534-52-1	4,6-Dinitro-2-methyl phenol	N001	9.8	ug/L	U	E	9.8		valid
80205	3/2/2006	06020315	000534-52-1	4,6-Dinitro-2-methyl phenol	N002	9.8	ug/L	U	D	9.8		valid
80205	3/2/2006	06020315	000534-52-1	4,6-Dinitro-2-methyl phenol	N001	9.8	ug/L	U	F	9.8		valid
80205	3/2/2006	06020315	000059-50-7	4-Chloro-3-methylphenol	N001	1.3	ug/L	U	E	1.3		valid
80205	3/2/2006	06020315	000059-50-7	4-Chloro-3-methylphenol	N002	1.3	ug/L	U	D	1.3		valid
80205	3/2/2006	06020315	000059-50-7	4-Chloro-3-methylphenol	N001	1.3	ug/L	U	F	1.3		valid
80205	3/2/2006	06020315	000108-10-1	4-Methyl-2-Pentanone	N001	0.49	ug/L	U	E	0.49		valid
80205	3/2/2006	06020315	000108-10-1	4-Methyl-2-Pentanone	N002	0.49	ug/L	U	D	0.49		valid
80205	3/2/2006	06020315	000108-10-1	4-Methyl-2-Pentanone	N001	0.49	ug/L	U	F	0.49		valid
80205	3/2/2006	06020315	000100-02-7	4-Nitrophenol	N001	11	ug/L	U	E	11		valid
80205	3/2/2006	06020315	000100-02-7	4-Nitrophenol	N002	11	ug/L	U	D	11		valid
80205	3/2/2006	06020315	000100-02-7	4-Nitrophenol	N001	11	ug/L	U	F	11		valid
80205	3/2/2006	06020315	000083-32-9	Acenaphthene	N001	1.7	ug/L	U	E	1.7		valid
80205	3/2/2006	06020315	000083-32-9	Acenaphthene	N002	1.7	ug/L	U	D	1.7		valid
80205	3/2/2006	06020315	000083-32-9	Acenaphthene	N001	1.7	ug/L	U	F	1.7		valid
80205	3/2/2006	06020315	000208-96-8	Acenaphthylene	N001	1.8	ug/L	U	E	1.8		valid
80205	3/2/2006	06020315	000208-96-8	Acenaphthylene	N002	1.8	ug/L	U	D	1.8		valid
80205	3/2/2006	06020315	000208-96-8	Acenaphthylene	N001	1.8	ug/L	U	F	1.8		valid
80205	3/2/2006	06020315	000067-64-1	Acetone	N001	28	ug/L		E	1.9		J
80205	3/2/2006	06020315	000067-64-1	Acetone	N002	1.9	ug/L	U	D	1.9		valid
80205	3/2/2006	06020315	000067-64-1	Acetone	N001	1.9	ug/L	U	F	1.9		valid
80205	3/2/2006	06020315	000107-02-8	Acrolein	N001	2.8	ug/L	U	E	2.8		valid
80205	3/2/2006	06020315	000107-02-8	Acrolein	N002	2.8	ug/L	U	D	2.8		valid
80205	3/2/2006	06020315	000107-02-8	Acrolein	N001	2.8	ug/L	U	F	2.8		valid
80205	3/2/2006	06020315	000107-13-1	Acrylonitrile	N001	1.4	ug/L	U	E	1.4		valid
80205	3/2/2006	06020315	000107-13-1	Acrylonitrile	N002	1.4	ug/L	U	D	1.4		valid

Table 1. Analytical results for Water Samples - 1st Quarter CY06

LOCATION_CODE	DATE_SAMPLED	LAB_REQUISITION_NUMBER	CAS	ANALYTE	SAMPLE_ID	RESULT	WATER_UNIT_OF_MEASURE	LAB_QUALIFIERS	SAMPLE_TYPE	DETECTION_LIMIT	UNCERTAINTY	DATA_VALIDATION_QUALIFIERS
80205	3/2/2006	06020315	000107-13-1	Acrylonitrile	N001	1.4	ug/L	U	F	1.4		valid
80205	3/2/2006	06020315	ALKALINITY	Alkalinity, Total (As CaCO3)	N001	1160	mg/L		F			valid
80205	3/2/2006	06020315	07429-90-5	Aluminum	N001	0.017	mg/L	U	E	0.017		valid
80205	3/2/2006	06020315	07429-90-5	Aluminum	N002	0.017	mg/L	U	D	0.017		valid
80205	3/2/2006	06020315	07429-90-5	Aluminum	N001	0.017	mg/L	U	F	0.017		valid
80205	3/2/2006	06020315	000120-12-7	Anthracene	N001	1.9	ug/L	U	E	1.9		valid
80205	3/2/2006	06020315	000120-12-7	Anthracene	N002	1.9	ug/L	U	D	1.9		valid
80205	3/2/2006	06020315	000120-12-7	Anthracene	N001	1.9	ug/L	U	F	1.9		valid
80205	3/2/2006	06020315	07440-36-0	Antimony	N001	0.0031	mg/L	U	E	0.0031		valid
80205	3/2/2006	06020315	07440-36-0	Antimony	N002	0.0031	mg/L	U	D	0.0031		valid
80205	3/2/2006	06020315	07440-36-0	Antimony	N001	0.0031	mg/L	B	F	0.0031		valid
80205	3/2/2006	06020315	07440-38-2	Arsenic	N001	0.0044	mg/L	U	E	0.0044		valid
80205	3/2/2006	06020315	07440-38-2	Arsenic	N002	0.0044	mg/L	U	D	0.0044		valid
80205	3/2/2006	06020315	07440-38-2	Arsenic	N001	0.0044	mg/L	U	F	0.0044		valid
80205	3/2/2006	06020315	07440-39-3	Barium	N001	0.0007	mg/L	U	E	0.0007		valid
80205	3/2/2006	06020315	07440-39-3	Barium	N002	0.09	mg/L		D	0.0007		valid
80205	3/2/2006	06020315	07440-39-3	Barium	N001	0.088	mg/L		F	0.0007		valid
80205	3/2/2006	06020315	000056-55-3	Benz(a)anthracene	N001	1.7	ug/L	U	E	1.7		valid
80205	3/2/2006	06020315	000056-55-3	Benz(a)anthracene	N002	1.7	ug/L	U	D	1.7		valid
80205	3/2/2006	06020315	000056-55-3	Benz(a)anthracene	N001	1.7	ug/L	U	F	1.7		valid
80205	3/2/2006	06020315	000071-43-2	Benzene	N001	0.16	ug/L	U	E	0.16		valid
80205	3/2/2006	06020315	000071-43-2	Benzene	N002	0.16	ug/L	U	D	0.16		valid
80205	3/2/2006	06020315	000071-43-2	Benzene	N001	0.16	ug/L	U	F	0.16		valid
80205	3/2/2006	06020315	000092-87-5	Benzidine	N001	40	ug/L	U	E	40		valid
80205	3/2/2006	06020315	000092-87-5	Benzidine	N002	40	ug/L	U	D	40		valid
80205	3/2/2006	06020315	000092-87-5	Benzidine	N001	40	ug/L	U	F	40		valid
80205	3/2/2006	06020315	000050-32-8	Benzo(a)pyrene	N001	1.3	ug/L	U	E	1.3		valid
80205	3/2/2006	06020315	000050-32-8	Benzo(a)pyrene	N002	1.3	ug/L	U	D	1.3		valid
80205	3/2/2006	06020315	000050-32-8	Benzo(a)pyrene	N001	1.3	ug/L	U	F	1.3		valid
80205	3/2/2006	06020315	000205-99-2	Benzo(b)fluoranthene	N001	1.4	ug/L	U	E	1.4		valid
80205	3/2/2006	06020315	000205-99-2	Benzo(b)fluoranthene	N002	1.4	ug/L	U	D	1.4		valid
80205	3/2/2006	06020315	000205-99-2	Benzo(b)fluoranthene	N001	1.4	ug/L	U	F	1.4		valid
80205	3/2/2006	06020315	000191-24-2	Benzo(g,h,i)Perylene	N001	2	ug/L	U	E	2		valid
80205	3/2/2006	06020315	000191-24-2	Benzo(g,h,i)Perylene	N002	2	ug/L	U	D	2		valid
80205	3/2/2006	06020315	000191-24-2	Benzo(g,h,i)Perylene	N001	2	ug/L	U	F	2		valid
80205	3/2/2006	06020315	000207-08-9	Benzo(k)fluoranthene	N001	2.1	ug/L	U	E	2.1		valid
80205	3/2/2006	06020315	000207-08-9	Benzo(k)fluoranthene	N002	2.1	ug/L	U	D	2.1		valid
80205	3/2/2006	06020315	000207-08-9	Benzo(k)fluoranthene	N001	2.1	ug/L	U	F	2.1		valid
80205	3/2/2006	06020315	07440-41-7	Beryllium	N001	0.00047	mg/L	U	E	0.00047		valid
80205	3/2/2006	06020315	07440-41-7	Beryllium	N002	0.00047	mg/L	U	D	0.00047		valid
80205	3/2/2006	06020315	07440-41-7	Beryllium	N001	0.00047	mg/L	U	F	0.00047		valid
80205	3/2/2006	06020315	000111-44-4	Bis(2-chloroethyl) ether	N001	1.8	ug/L	U	E	1.8		valid
80205	3/2/2006	06020315	000111-44-4	Bis(2-chloroethyl) ether	N002	1.8	ug/L	U	D	1.8		valid
80205	3/2/2006	06020315	000111-44-4	Bis(2-chloroethyl) ether	N001	1.8	ug/L	U	F	1.8		valid
80205	3/2/2006	06020315	000108-60-1	Bis(2-chloroisopropyl) ether	N001	1.4	ug/L	U	E	1.4		valid
80205	3/2/2006	06020315	000108-60-1	Bis(2-chloroisopropyl) ether	N002	1.4	ug/L	U	D	1.4		valid
80205	3/2/2006	06020315	000108-60-1	Bis(2-chloroisopropyl) ether	N001	1.4	ug/L	U	F	1.4		valid
80205	3/2/2006	06020315	000117-81-7	Bis(2-ethylhexyl) phthalate	N001	3.4	ug/L	J	E	1.4		valid
80205	3/2/2006	06020315	000117-81-7	Bis(2-ethylhexyl) phthalate	N002	6.2	ug/L	J	D	1.4		valid
80205	3/2/2006	06020315	000117-81-7	Bis(2-ethylhexyl) phthalate	N001	1.4	ug/L	U	F	1.4		valid
80205	3/2/2006	06020315	07440-42-8	Boron	N001	0.0059	mg/L	U	E	0.0059		valid
80205	3/2/2006	06020315	07440-42-8	Boron	N002	0.055	mg/L		D	0.0059		valid
80205	3/2/2006	06020315	07440-42-8	Boron	N001	0.053	mg/L		F	0.0059		valid
80205	3/2/2006	06020315	000075-27-4	Bromodichloromethane	N001	0.17	ug/L	U	E	0.17		valid
80205	3/2/2006	06020315	000075-27-4	Bromodichloromethane	N002	0.17	ug/L	U	D	0.17		valid
80205	3/2/2006	06020315	000075-27-4	Bromodichloromethane	N001	0.17	ug/L	U	F	0.17		valid
80205	3/2/2006	06020315	000075-25-2	Bromoform	N001	0.19	ug/L	U	E	0.19		valid
80205	3/2/2006	06020315	000075-25-2	Bromoform	N002	0.19	ug/L	U	D	0.19		valid
80205	3/2/2006	06020315	000075-25-2	Bromoform	N001	0.19	ug/L	U	F	0.19		valid
80205	3/2/2006	06020315	000074-83-9	Bromomethane	N001	0.21	ug/L	U	E	0.21		valid
80205	3/2/2006	06020315	000074-83-9	Bromomethane	N002	0.21	ug/L	U	D	0.21		valid
80205	3/2/2006	06020315	000074-83-9	Bromomethane	N001	0.21	ug/L	U	F	0.21		valid
80205	3/2/2006	06020315	000085-68-7	Butyl benzyl phthalate	N001	1.7	ug/L	U	E	1.7		valid
80205	3/2/2006	06020315	000085-68-7	Butyl benzyl phthalate	N002	1.7	ug/L	U	D	1.7		valid
80205	3/2/2006	06020315	000085-68-7	Butyl benzyl phthalate	N001	1.7	ug/L	U	F	1.7		valid
80205	3/2/2006	06020315	07440-43-9	Cadmium	N001	0.00045	mg/L	U	E	0.00045		valid
80205	3/2/2006	06020315	07440-43-9	Cadmium	N002	0.00045	mg/L	U	D	0.00045		valid
80205	3/2/2006	06020315	07440-43-9	Cadmium	N001	0.00045	mg/L	U	F	0.00045		valid
80205	3/2/2006	06020315	000075-15-0	Carbon Disulfide	N001	0.45	ug/L	U	E	0.45		valid
80205	3/2/2006	06020315	000075-15-0	Carbon Disulfide	N002	0.45	ug/L	U	D	0.45		valid
80205	3/2/2006	06020315	000075-15-0	Carbon Disulfide	N001	0.45	ug/L	U	F	0.45		valid
80205	3/2/2006	06020315	000056-23-5	Carbon tetrachloride	N001	0.19	ug/L	U	E	0.19		valid
80205	3/2/2006	06020315	000056-23-5	Carbon tetrachloride	N002	0.19	ug/L	U	D	0.19		valid
80205	3/2/2006	06020315	000056-23-5	Carbon tetrachloride	N001	0.19	ug/L	U	F	0.19		valid
80205	3/2/2006	06020315	000108-90-7	Chlorobenzene	N001	0.17	ug/L	U	E	0.17		valid
80205	3/2/2006	06020315	000108-90-7	Chlorobenzene	N002	0.17	ug/L	U	D	0.17		valid
80205	3/2/2006	06020315	000108-90-7	Chlorobenzene	N001	0.17	ug/L	U	F	0.17		valid
80205	3/2/2006	06020315	000124-48-1	Chlorodibromomethane	N001	0.17	ug/L	U	E	0.17		valid
80205	3/2/2006	06020315	000124-48-1	Chlorodibromomethane	N002	0.17	ug/L	U	D	0.17		valid
80205	3/2/2006	06020315	000124-48-1	Chlorodibromomethane	N001	0.17	ug/L	U	F	0.17		valid
80205	3/2/2006	06020315	000075-00-3	Chloroethane	N001	0.13	ug/L	U	E	0.13		valid

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LOCATION_CODE	DATE_SAMPLED	LAB_REQUISITION_NUMBER	CAS	ANALYTE	SAMPLE_ID	RESULT	WATER_UNIT_OF_MEASURE	LAB_QUALIFIERS	SAMPLE_TYPE	DETECTION_LIMIT	UNCERTAINTY	DATA_VALIDATION_QUALIFIERS
80205	3/2/2006	06020315	000075-00-3	Chloroethane	N002	0.13	ug/L	U	D	0.13		valid
80205	3/2/2006	06020315	000075-00-3	Chloroethane	N001	0.13	ug/L	U	F	0.13		valid
80205	3/2/2006	06020315	000067-66-3	Chloroform	N001	1.6	ug/L	U	E	0.16		valid
80205	3/2/2006	06020315	000067-66-3	Chloroform	N002	0.16	ug/L	U	D	0.16		valid
80205	3/2/2006	06020315	000067-66-3	Chloroform	N001	0.16	ug/L	U	F	0.16		valid
80205	3/2/2006	06020315	000074-87-3	Chloromethane	N001	0.3	ug/L	U	E	0.3		valid
80205	3/2/2006	06020315	000074-87-3	Chloromethane	N002	0.3	ug/L	U	D	0.3		valid
80205	3/2/2006	06020315	000074-87-3	Chloromethane	N001	0.3	ug/L	U	F	0.3		valid
80205	3/2/2006	06020315	07440-47-3	Chromium	N001	0.0026	mg/L	U	E	0.0026		valid
80205	3/2/2006	06020315	07440-47-3	Chromium	N002	0.0026	mg/L	U	D	0.0026		valid
80205	3/2/2006	06020315	07440-47-3	Chromium	N001	0.0026	mg/L	U	F	0.0026		valid
80205	3/2/2006	06020315	000218-01-9	Chrysene	N001	2	ug/L	U	E	2		valid
80205	3/2/2006	06020315	000218-01-9	Chrysene	N002	2	ug/L	U	D	2		valid
80205	3/2/2006	06020315	000218-01-9	Chrysene	N001	2	ug/L	U	F	2		valid
80205	3/2/2006	06020315	000156-59-2	cis-1,2-Dichloroethene	N001	0.15	ug/L	U	E	0.15		valid
80205	3/2/2006	06020315	000156-59-2	cis-1,2-Dichloroethene	N002	0.15	ug/L	U	D	0.15		valid
80205	3/2/2006	06020315	000156-59-2	cis-1,2-Dichloroethene	N001	0.15	ug/L	U	F	0.15		valid
80205	3/2/2006	06020315	07440-50-8	Copper	N001	0.0045	mg/L	U	E	0.0045		valid
80205	3/2/2006	06020315	07440-50-8	Copper	N002	0.0045	mg/L	U	D	0.0045		valid
80205	3/2/2006	06020315	07440-50-8	Copper	N001	0.0045	mg/L	U	F	0.0045		valid
80205	3/2/2006	06020315	000053-70-3	Dibenz(a,h)anthracene	N001	1.4	ug/L	U	E	1.4		valid
80205	3/2/2006	06020315	000053-70-3	Dibenz(a,h)anthracene	N002	1.4	ug/L	U	D	1.4		valid
80205	3/2/2006	06020315	000053-70-3	Dibenz(a,h)anthracene	N001	1.4	ug/L	U	F	1.4		valid
80205	3/2/2006	06020315	000084-66-2	Diethyl phthalate	N001	1.8	ug/L	U	E	1.8		valid
80205	3/2/2006	06020315	000084-66-2	Diethyl phthalate	N002	1.8	ug/L	U	D	1.8		valid
80205	3/2/2006	06020315	000084-66-2	Diethyl phthalate	N001	1.8	ug/L	U	F	1.8		valid
80205	3/2/2006	06020315	000131-11-3	Dimethyl phthalate	N001	1.7	ug/L	U	E	1.7		valid
80205	3/2/2006	06020315	000131-11-3	Dimethyl phthalate	N002	1.7	ug/L	U	D	1.7		valid
80205	3/2/2006	06020315	000131-11-3	Dimethyl phthalate	N001	1.7	ug/L	U	F	1.7		valid
80205	3/2/2006	06020315	000084-74-2	Di-n-butyl phthalate	N001	1.9	ug/L	U	E	1.9		valid
80205	3/2/2006	06020315	000084-74-2	Di-n-butyl phthalate	N002	1.9	ug/L	U	D	1.9		valid
80205	3/2/2006	06020315	000084-74-2	Di-n-butyl phthalate	N001	1.9	ug/L	U	F	1.9		valid
80205	3/2/2006	06020315	000206-44-0	Fluoranthene	N001	1.8	ug/L	U	E	1.8		valid
80205	3/2/2006	06020315	000206-44-0	Fluoranthene	N002	1.8	ug/L	U	D	1.8		valid
80205	3/2/2006	06020315	000206-44-0	Fluoranthene	N001	1.8	ug/L	U	F	1.8		valid
80205	3/2/2006	06020315	000086-73-7	Fluorene	N001	1.7	ug/L	U	E	1.7		valid
80205	3/2/2006	06020315	000086-73-7	Fluorene	N002	1.7	ug/L	U	D	1.7		valid
80205	3/2/2006	06020315	000086-73-7	Fluorene	N001	1.7	ug/L	U	F	1.7		valid
80205	3/2/2006	06020315	000118-74-1	Hexachlorobenzene	N001	2.1	ug/L	U	E	2.1		valid
80205	3/2/2006	06020315	000118-74-1	Hexachlorobenzene	N002	2.1	ug/L	U	D	2.1		valid
80205	3/2/2006	06020315	000118-74-1	Hexachlorobenzene	N001	2.1	ug/L	U	F	2.1		valid
80205	3/2/2006	06020315	000087-68-3	Hexachlorobutadiene	N001	0.12	ug/L	U	E	0.12		valid
80205	3/2/2006	06020315	000087-68-3	Hexachlorobutadiene	N002	0.12	ug/L	U	D	0.12		valid
80205	3/2/2006	06020315	000087-68-3	Hexachlorobutadiene	N001	0.12	ug/L	U	F	0.12		valid
80205	3/2/2006	06020315	000077-47-4	Hexachlorocyclopentadiene	N001	5	ug/L	U	E	5		valid
80205	3/2/2006	06020315	000077-47-4	Hexachlorocyclopentadiene	N002	5	ug/L	U	D	5		valid
80205	3/2/2006	06020315	000077-47-4	Hexachlorocyclopentadiene	N001	5	ug/L	U	F	5		valid
80205	3/2/2006	06020315	000193-39-5	Indeno(1,2,3-cd)pyrene	N001	1.5	ug/L	U	E	1.5		valid
80205	3/2/2006	06020315	000193-39-5	Indeno(1,2,3-cd)pyrene	N002	1.5	ug/L	U	D	1.5		valid
80205	3/2/2006	06020315	000193-39-5	Indeno(1,2,3-cd)pyrene	N001	1.5	ug/L	U	F	1.5		valid
80205	3/2/2006	06020315	000078-59-1	Isophorone	N001	1.5	ug/L	U	E	1.5		valid
80205	3/2/2006	06020315	000078-59-1	Isophorone	N002	1.5	ug/L	U	D	1.5		valid
80205	3/2/2006	06020315	000078-59-1	Isophorone	N001	1.5	ug/L	U	F	1.5		valid
80205	3/2/2006	06020315	07439-92-1	Lead	N001	0.0026	mg/L	U	E	0.0026		valid
80205	3/2/2006	06020315	07439-92-1	Lead	N002	0.0026	mg/L	U	D	0.0026		valid
80205	3/2/2006	06020315	07439-92-1	Lead	N001	0.0026	mg/L	U	F	0.0026		valid
80205	3/2/2006	06020315	M&P XYLENE	m,p-Xylene	N001	0.34	ug/L	U	E	0.34		valid
80205	3/2/2006	06020315	M&P XYLENE	m,p-Xylene	N002	0.34	ug/L	U	D	0.34		valid
80205	3/2/2006	06020315	M&P XYLENE	m,p-Xylene	N001	0.34	ug/L	U	F	0.34		valid
80205	3/2/2006	06020315	07439-96-5	Manganese	N001	0.003	mg/L	B	E	0.00087		valid
80205	3/2/2006	06020315	07439-96-5	Manganese	N002	0.0077	mg/L	B	D	0.00087		valid
80205	3/2/2006	06020315	07439-96-5	Manganese	N001	0.003	mg/L	B	F	0.00087		valid
80205	3/2/2006	06020315	07439-97-6	Mercury	N001	0.000027	mg/L	U	E	0.000027		valid
80205	3/2/2006	06020315	07439-97-6	Mercury	N002	0.000027	mg/L	U	D	0.000027		valid
80205	3/2/2006	06020315	07439-97-6	Mercury	N001	0.000027	mg/L	U	F	0.000027		valid
80205	3/2/2006	06020315	000075-09-2	Methylene chloride	N001	0.32	ug/L	U	E	0.32		valid
80205	3/2/2006	06020315	000075-09-2	Methylene chloride	N002	0.32	ug/L	U	D	0.32		valid
80205	3/2/2006	06020315	000075-09-2	Methylene chloride	N001	0.32	ug/L	U	F	0.32		valid
80205	3/2/2006	06020315	000091-20-3	Naphthalene	N001	0.22	ug/L	U	E	0.22		valid
80205	3/2/2006	06020315	000091-20-3	Naphthalene	N002	0.22	ug/L	U	D	0.22		valid
80205	3/2/2006	06020315	000091-20-3	Naphthalene	N001	0.22	ug/L	U	F	0.22		valid
80205	3/2/2006	06020315	07440-02-0	Nickel	N001	0.0029	mg/L	B	E	0.0012		U
80205	3/2/2006	06020315	07440-02-0	Nickel	N002	0.0042	mg/L	B	D	0.0012		U
80205	3/2/2006	06020315	07440-02-0	Nickel	N001	0.0036	mg/L	B	F	0.0012		U
80205	3/2/2006	06020315	000055-18-5	N-Nitrosodiethylamine	N001	2	ug/L	U	E	2		valid
80205	3/2/2006	06020315	000055-18-5	N-Nitrosodiethylamine	N002	2	ug/L	U	D	2		valid
80205	3/2/2006	06020315	000055-18-5	N-Nitrosodiethylamine	N001	2	ug/L	U	F	2		valid
80205	3/2/2006	06020315	000062-75-9	N-Nitrosodimethylamine	N001	1.6	ug/L	U	E	1.6		valid
80205	3/2/2006	06020315	000062-75-9	N-Nitrosodimethylamine	N002	1.6	ug/L	U	D	1.6		valid
80205	3/2/2006	06020315	000062-75-9	N-Nitrosodimethylamine	N001	1.6	ug/L	U	F	1.6		valid
80205	3/2/2006	06020315	000621-64-7	N-Nitrosodi-n-propylamine	N001	1.4	ug/L	U	E	1.4		valid

Table 1. Analytical results for Water Samples - 1st Quarter CY06

LOCATION_CODE	DATE_SAMPLED	LAB_REQUISITION_NUMBER	CAS	ANALYTE	SAMPLE_ID	RESULT	WATER_UNIT_OF_MEASURE	LAB_QUALIFIERS	SAMPLE_TYPE	DETECTION_LIMIT	UNCERTAINTY	DATA_VALIDATION_QUALIFIERS
80205	3/2/2006	06020315	000621-64-7	N-Nitrosodi-n-propylamine	N002	1.4	ug/L	U	D	1.4		valid
80205	3/2/2006	06020315	000621-64-7	N-Nitrosodi-n-propylamine	N001	1.4	ug/L	U	F	1.4		valid
80205	3/2/2006	06020315	000086-30-6	N-Nitrosodiphenylamine	N001	2.6	ug/L	U	E	2.6		valid
80205	3/2/2006	06020315	000086-30-6	N-Nitrosodiphenylamine	N002	2.6	ug/L	U	D	2.6		valid
80205	3/2/2006	06020315	000086-30-6	N-Nitrosodiphenylamine	N001	2.6	ug/L	U	F	2.6		valid
80205	3/2/2006	06020315	000930-55-2	N-Nitrosopyrrolidine	N001	2	ug/L	U	E	2		valid
80205	3/2/2006	06020315	000930-55-2	N-Nitrosopyrrolidine	N002	2	ug/L	U	D	2		valid
80205	3/2/2006	06020315	000930-55-2	N-Nitrosopyrrolidine	N001	2	ug/L	U	F	2		valid
80205	3/2/2006	06020315	000095-47-6	o-Xylene	N001	0.19	ug/L	U	E	0.19		valid
80205	3/2/2006	06020315	000095-47-6	o-Xylene	N002	0.19	ug/L	U	D	0.19		valid
80205	3/2/2006	06020315	000095-47-6	o-Xylene	N001	0.19	ug/L	U	F	0.19		valid
80205	3/2/2006	06020315	000056-38-2	Parathion, ethyl	N001	2	ug/L	U	E	2		valid
80205	3/2/2006	06020315	000056-38-2	Parathion, ethyl	N002	2	ug/L	U	D	2		valid
80205	3/2/2006	06020315	000056-38-2	Parathion, ethyl	N001	2	ug/L	U	F	2		valid
80205	3/2/2006	06020315	000608-93-5	Pentachlorobenzene	N001	2	ug/L	U	E	2		valid
80205	3/2/2006	06020315	000608-93-5	Pentachlorobenzene	N002	2	ug/L	U	D	2		valid
80205	3/2/2006	06020315	000608-93-5	Pentachlorobenzene	N001	2	ug/L	U	F	2		valid
80205	3/2/2006	06020315	000087-86-5	Pentachlorophenol	N001	10	ug/L	U	E	10		valid
80205	3/2/2006	06020315	000087-86-5	Pentachlorophenol	N002	10	ug/L	U	D	10		valid
80205	3/2/2006	06020315	000087-86-5	Pentachlorophenol	N001	10	ug/L	U	F	10		valid
80205	3/2/2006	06020315	000085-01-8	Phenanthrene	N001	2	ug/L	U	E	2		valid
80205	3/2/2006	06020315	000085-01-8	Phenanthrene	N002	2	ug/L	U	D	2		valid
80205	3/2/2006	06020315	000085-01-8	Phenanthrene	N001	2	ug/L	U	F	2		valid
80205	3/2/2006	06020315	000108-95-2	Phenol	N001	1.4	ug/L	U	E	1.4		valid
80205	3/2/2006	06020315	000108-95-2	Phenol	N002	1.4	ug/L	U	D	1.4		valid
80205	3/2/2006	06020315	000108-95-2	Phenol	N001	1.4	ug/L	U	F	1.4		valid
80205	3/2/2006	06020315	000129-00-0	Pyrene	N001	2.1	ug/L	U	E	2.1		valid
80205	3/2/2006	06020315	000129-00-0	Pyrene	N002	2.1	ug/L	U	D	2.1		valid
80205	3/2/2006	06020315	000129-00-0	Pyrene	N001	2.1	ug/L	U	F	2.1		valid
80205	3/2/2006	06020315	07782-49-2	Selenium	N001	0.0046	mg/L	U	E	0.0046		valid
80205	3/2/2006	06020315	07782-49-2	Selenium	N002	0.0046	mg/L	U	D	0.0046		valid
80205	3/2/2006	06020315	07782-49-2	Selenium	N001	0.0046	mg/L	U	F	0.0046		valid
80205	3/2/2006	06020315	07440-22-4	Silver	N001	0.0028	mg/L	U	E	0.0028		valid
80205	3/2/2006	06020315	07440-22-4	Silver	N002	0.0028	mg/L	U	D	0.0028		valid
80205	3/2/2006	06020315	07440-22-4	Silver	N001	0.0028	mg/L	U	F	0.0028		valid
80205	3/2/2006	06020315	000100-42-5	Styrene	N001	0.17	ug/L	U	E	0.17		valid
80205	3/2/2006	06020315	000100-42-5	Styrene	N002	0.17	ug/L	U	D	0.17		valid
80205	3/2/2006	06020315	000100-42-5	Styrene	N001	0.17	ug/L	U	F	0.17		valid
80205	3/2/2006	06020315	000127-18-4	Tetrachloroethene	N001	0.2	ug/L	U	E	0.2		valid
80205	3/2/2006	06020315	000127-18-4	Tetrachloroethene	N002	0.2	ug/L	U	D	0.2		valid
80205	3/2/2006	06020315	000127-18-4	Tetrachloroethene	N001	0.2	ug/L	U	F	0.2		valid
80205	3/2/2006	06020315	07440-28-0	Thallium	N001	0.0049	mg/L	U	E	0.0049		valid
80205	3/2/2006	06020315	07440-28-0	Thallium	N002	0.0049	mg/L	U	D	0.0049		valid
80205	3/2/2006	06020315	07440-28-0	Thallium	N001	0.0049	mg/L	U	F	0.0049		valid
80205	3/2/2006	06020315	000108-88-3	Toluene	N001	0.17	ug/L	U	E	0.17		valid
80205	3/2/2006	06020315	000108-88-3	Toluene	N002	0.17	ug/L	U	D	0.17		valid
80205	3/2/2006	06020315	000108-88-3	Toluene	N001	0.17	ug/L	U	F	0.17		valid
80205	3/2/2006	06020315	000100-41-4	Total Xylene	N001	0.16	ug/L	U	E	0.16		valid
80205	3/2/2006	06020315	000100-41-4	Total Xylene	N002	0.16	ug/L	U	D	0.16		valid
80205	3/2/2006	06020315	000100-41-4	Total Xylene	N001	0.16	ug/L	U	F	0.16		valid
80205	3/2/2006	06020315	000156-60-5	trans-1,2-Dichloroethene	N001	0.15	ug/L	U	E	0.15		valid
80205	3/2/2006	06020315	000156-60-5	trans-1,2-Dichloroethene	N002	0.15	ug/L	U	D	0.15		valid
80205	3/2/2006	06020315	000156-60-5	trans-1,2-Dichloroethene	N001	0.15	ug/L	U	F	0.15		valid
80205	3/2/2006	06020315	000079-01-6	Trichloroethene	N001	0.16	ug/L	U	E	0.16		valid
80205	3/2/2006	06020315	000079-01-6	Trichloroethene	N002	0.16	ug/L	U	D	0.16		valid
80205	3/2/2006	06020315	000079-01-6	Trichloroethene	N001	0.16	ug/L	U	F	0.16		valid
80205	3/2/2006	06020315	000075-01-4	Vinyl chloride	N001	0.38	ug/L	U	E	0.38		valid
80205	3/2/2006	06020315	000075-01-4	Vinyl chloride	N002	0.38	ug/L	U	D	0.38		valid
80205	3/2/2006	06020315	000075-01-4	Vinyl chloride	N001	0.38	ug/L	U	F	0.38		valid
80205	3/2/2006	06020315	07440-66-6	Zinc	N001	0.0045	mg/L	U	E	0.0045		valid
80205	3/2/2006	06020315	07440-66-6	Zinc	N002	0.013	mg/L	B	D	0.0045		valid
80205	3/2/2006	06020315	07440-66-6	Zinc	N001	0.0045	mg/L	U	F	0.0045		valid
891WEL	3/6/2006	06020315	000071-55-6	1,1,1-Trichloroethane	N001	2.1	ug/L		F	0.32		valid
891WEL	3/6/2006	06020315	000079-34-5	1,1,2,2-Tetrachloroethane	N001	0.4	ug/L	U	F	0.4		valid
891WEL	3/6/2006	06020315	000079-00-5	1,1,2-Trichloroethane	N001	0.64	ug/L	U	F	0.64		valid
891WEL	3/6/2006	06020315	000075-34-3	1,1-Dichloroethane	N001	0.4	ug/L	J	F	0.32		valid
891WEL	3/6/2006	06020315	000075-35-4	1,1-Dichloroethene	N001	2.9	ug/L		F	0.28		valid
891WEL	3/6/2006	06020315	000120-82-1	1,2,4-Trichlorobenzene	N001	0.64	ug/L	U	F	0.64		valid
891WEL	3/6/2006	06020315	000096-12-8	1,2-Dibromo-3-chloropropane	N001	0.86	ug/L	U	F	0.86		valid
891WEL	3/6/2006	06020315	000106-93-4	1,2-Dibromoethane	N001	0.36	ug/L	U	F	0.36		valid
891WEL	3/6/2006	06020315	000095-50-1	1,2-Dichlorobenzene	N001	0.26	ug/L	U	F	0.26		valid
891WEL	3/6/2006	06020315	000107-06-2	1,2-Dichloroethane	N001	0.26	ug/L	U	F	0.26		valid
891WEL	3/6/2006	06020315	000078-87-5	1,2-Dichloropropane	N001	0.26	ug/L	U	F	0.26		valid
891WEL	3/6/2006	06020315	000541-73-1	1,3-Dichlorobenzene	N001	0.32	ug/L	U	F	0.32		valid
891WEL	3/6/2006	06020315	000106-46-7	1,4-Dichlorobenzene	N001	0.32	ug/L	U	F	0.32		valid
891WEL	3/6/2006	06020315	000078-93-3	2-Butanone	N001	3.4	ug/L	U	F	3.4		valid
891WEL	3/6/2006	06020315	000108-10-1	4-Methyl-2-Pentanone	N001	0.98	ug/L	U	F	0.98		valid
891WEL	3/6/2006	06020315	000067-64-1	Acetone	N001	3.8	ug/L	U	F	3.8		valid
891WEL	3/6/2006	06020315	000107-02-8	Acrolein	N001	5.6	ug/L	U	F	5.6		R
891WEL	3/6/2006	06020315	000107-13-1	Acrylonitrile	N001	2.8	ug/L	U	F	2.8		valid
891WEL	3/6/2006	06020315	ALKALINITY	Alkalinity, Total (As CaCO3)	N001	370	mg/L		F			valid

Table 1. Analytical results for Water Samples - 1st Quarter CY06

LOCATION_CODE	DATE_SAMPLED	LAB_REQUISITION_NUMBER	CAS	ANALYTE	SAMPLE_ID	RESULT	WATER_UNIT_OF_MEASURE	LAB_QUALIFIERS	SAMPLE_TYPE	DETECTION_LIMIT	UNCERTAINTY	DATA_VALIDATION_QUALIFIERS
891WEL	3/6/2006	06020315	000071-43-2	Benzene	N001	0.32	ug/L	U	F	0.32		valid
891WEL	3/6/2006	06020315	000075-27-4	Bromodichloromethane	N001	0.34	ug/L	U	F	0.34		valid
891WEL	3/6/2006	06020315	000075-25-2	Bromoform	N001	0.38	ug/L	U	F	0.38		valid
891WEL	3/6/2006	06020315	000074-83-9	Bromomethane	N001	0.42	ug/L	U	F	0.42		valid
891WEL	3/6/2006	06020315	000075-15-0	Carbon Disulfide	N001	0.9	ug/L	U	F	0.9		valid
891WEL	3/6/2006	06020315	000056-23-5	Carbon tetrachloride	N001	7.4	ug/L		F	0.38		valid
891WEL	3/6/2006	06020315	000108-90-7	Chlorobenzene	N001	0.34	ug/L	U	F	0.34		valid
891WEL	3/6/2006	06020315	000124-48-1	Chlorodibromomethane	N001	0.34	ug/L	U	F	0.34		valid
891WEL	3/6/2006	06020315	000075-00-3	Chloroethane	N001	0.26	ug/L	U	F	0.26		valid
891WEL	3/6/2006	06020315	000067-66-3	Chloroform	N001	3.3	ug/L		F	0.32		valid
891WEL	3/6/2006	06020315	000074-87-3	Chloromethane	N001	0.6	ug/L	U	F	0.6		valid
891WEL	3/6/2006	06020315	000156-59-2	cis-1,2-Dichloroethene	N001	6.3	ug/L		F	0.3		valid
891WEL	3/6/2006	06020315	000087-68-3	Hexachlorobutadiene	N001	0.24	ug/L	U	F	0.24		valid
891WEL	3/6/2006	06020315	M&P_XYLENE	m,p-Xylene	N001	0.68	ug/L	U	F	0.68		valid
891WEL	3/6/2006	06020315	000075-09-2	Methylene chloride	N001	0.75	ug/L	J	F	0.64		valid
891WEL	3/6/2006	06020315	000091-20-3	Naphthalene	N001	0.44	ug/L	U	F	0.44		valid
891WEL	3/6/2006	06020315	000095-47-6	o-Xylene	N001	0.38	ug/L	U	F	0.38		valid
891WEL	3/6/2006	06020315	000100-42-5	Styrene	N001	0.34	ug/L	U	F	0.34		valid
891WEL	3/6/2006	06020315	000127-18-4	Tetrachloroethene	N001	54	ug/L		F	0.4		valid
891WEL	3/6/2006	06020315	000108-88-3	Toluene	N001	0.34	ug/L	U	F	0.34		valid
891WEL	3/6/2006	06020315	000100-41-4	Total Xylene	N001	0.32	ug/L	U	F	0.32		valid
891WEL	3/6/2006	06020315	000156-60-5	trans-1,2-Dichloroethene	N001	0.36	ug/L	J	F	0.3		valid
891WEL	3/6/2006	06020315	000079-01-6	Trichloroethene	N001	330	ug/L		F	1.6		valid
891WEL	3/6/2006	06020315	000075-01-4	Vinyl chloride	N001	0.76	ug/L	U	F	0.76		valid
GS01	12/8/2005	06010299	AM-241	Americium-241	N001	0.001	pCi/L	U	F	0.034	0.007	valid
GS01	12/8/2005	06010299	PU-239,240	Plutonium-239, 240	N001	-0.002	pCi/L	U	F	0.027	0.009	valid
GS01	12/8/2005	06010299	U-234	Uranium-234	N001	2.730	pCi/L		F	0.076	0.159	valid
GS01	12/8/2005	06010299	U-235+236	Uranium-235/236	N001	0.217	pCi/L		F	0.037	0.050	valid
GS01	12/8/2005	06010299	U-238	Uranium-238	N001	2.210	pCi/L		F	0.042	0.143	valid
GS01	1/19/2006	06020312	AM-241	Americium-241	N001	0.008	pCi/L	U	F	0.029	0.017	valid
GS01	1/19/2006	06020312	PU-239,240	Plutonium-239, 240	N001	-0.035	pCi/L	U	F	0.025	0.021	valid
GS01	1/19/2006	06020312	U-234	Uranium-234	N001	4.160	pCi/L		F	0.637	0.597	valid
GS01	1/19/2006	06020312	U-235+236	Uranium-235/236	N001	0.569	pCi/L		F	0.309	0.270	J
GS01	1/19/2006	06020312	U-238	Uranium-238	N001	2.800	pCi/L		F	0.357	0.499	valid
GS01	2/1/2006	06020312	AM-241	Americium-241	N001	0.008	pCi/L	U	F	0.035	0.023	valid
GS01	2/1/2006	06020312	PU-239,240	Plutonium-239, 240	N001	0.008	pCi/L	U	F	0.027	0.010	valid
GS01	2/1/2006	06020312	U-234	Uranium-234	N001	3.420	pCi/L		F	0.519	0.484	valid
GS01	2/1/2006	06020312	U-235+236	Uranium-235/236	N001	0.242	pCi/L	U	F	0.252	0.148	valid
GS01	2/1/2006	06020312	U-238	Uranium-238	N001	2.410	pCi/L		F	0.291	0.389	valid
GS01	2/14/2006	06020318	AM-241	Americium-241	N001	0.001	pCi/L	U	F	0.027	0.010	valid
GS01	2/14/2006	06020318	PU-239,240	Plutonium-239, 240	N001	-0.020	pCi/L	U	F	0.024	0.014	valid
GS01	2/14/2006	06020318	U-234	Uranium-234	N001	2.960	pCi/L		F	0.073	0.162	valid
GS01	2/14/2006	06020318	U-235+236	Uranium-235/236	N001	0.155	pCi/L		F	0.035	0.041	valid
GS01	2/14/2006	06020318	U-238	Uranium-238	N001	2.180	pCi/L		F	0.041	0.139	valid
GS01	2/27/2006	06030330	AM-241	Americium-241	N001	0.005	pCi/L	U	F	0.034	0.007	valid
GS01	2/27/2006	06030330	PU-239,240	Plutonium-239, 240	N001	0.000	pCi/L	U	F	0.026	0.005	valid
GS01	2/27/2006	06030330	U-234	Uranium-234	N001	2.770	pCi/L		F	0.072	0.155	valid
GS01	2/27/2006	06030330	U-235+236	Uranium-235/236	N001	0.133	pCi/L		F	0.035	0.038	valid
GS01	2/27/2006	06030330	U-238	Uranium-238	N001	2.310	pCi/L		F	0.040	0.141	valid
GS01	3/14/2006	06030336	AM-241	Americium-241	N001	0.005	pCi/L	U	F	0.028	0.026	valid
GS01	3/14/2006	06030336	PU-239,240	Plutonium-239, 240	N001	0.007	pCi/L	U	F	0.024	0.007	valid
GS01	3/14/2006	06030336	U-234	Uranium-234	N001	2.490	pCi/L		F	0.131	0.200	valid
GS01	3/14/2006	06030336	U-235+236	Uranium-235/236	N001	0.163	pCi/L		F	0.064	0.061	J
GS01	3/14/2006	06030336	U-238	Uranium-238	N001	2.020	pCi/L		F	0.074	0.180	valid
GS01	3/23/2006	06030336	AM-241	Americium-241	N001	0.000	pCi/L	U	F	0.028	0.005	valid
GS01	3/23/2006	06030336	PU-239,240	Plutonium-239, 240	N001	0.002	pCi/L	U	F	0.026	0.007	valid
GS01	3/23/2006	06030336	TSS	Total Suspended Solids	N001	2.85	mg/L	U	F	2.85		valid
GS01	3/23/2006	06030336	U-234	Uranium-234	N001	2.130	pCi/L		F	0.143	0.200	valid
GS01	3/23/2006	06030336	U-235+236	Uranium-235/236	N001	0.072	pCi/L		F	0.069	0.052	J
GS01	3/23/2006	06030336	U-238	Uranium-238	N001	1.760	pCi/L		F	0.080	0.181	valid
GS03	7/28/2005	06010299	AM-241	Americium-241	N001	0.021	pCi/L	U	F	0.030	0.015	valid
GS03	7/28/2005	06010299	PU-239,240	Plutonium-239, 240	N001	-0.022	pCi/L	U	F	0.025	0.020	valid
GS03	7/28/2005	06010299	U-234	Uranium-234	N001	0.568	pCi/L		F	0.074	0.074	valid
GS03	7/28/2005	06010299	U-235+236	Uranium-235/236	N001	0.037	pCi/L		F	0.036	0.022	J
GS03	7/28/2005	06010299	U-238	Uranium-238	N001	0.521	pCi/L		F	0.042	0.070	valid
GS05	10/3/2005	06010299	07429-90-5	Aluminum	0001	0.131	mg/L	B	F	0.068		valid
GS05	10/3/2005	06010299	07440-36-0	Antimony	N001	0.004	mg/L	U	F	0.004		valid
GS05	10/3/2005	06010299	07440-38-2	Arsenic	N001	0.0093	mg/L	B	F	0.006		valid
GS05	10/3/2005	06010299	07440-39-3	Barium	N001	0.0617	mg/L		F	0.001		valid
GS05	10/3/2005	06010299	07440-41-7	Beryllium	N001	0.001	mg/L	U	F	0.001		valid
GS05	10/3/2005	06010299	07440-42-8	Boron	N001	0.0179	mg/L	B	F	0.01		valid
GS05	10/3/2005	06010299	07440-43-9	Cadmium	0001	0.001	mg/L	U	F	0.001		valid
GS05	10/3/2005	06010299	07440-47-3	Chromium	N001	0.001	mg/L	U	F	0.001		valid
GS05	10/3/2005	06010299	07440-50-8	Copper	0001	0.003	mg/L	U	F	0.003		valid
GS05	10/3/2005	06010299	07439-92-1	Lead	0001	0.0025	mg/L	U	F	0.0025		valid
GS05	10/3/2005	06010299	07439-96-5	Manganese	N001	0.0316	mg/L		F	0.002		valid
GS05	10/3/2005	06010299	07439-97-6	Mercury	N001	0.00005	mg/L	U	F	0.00005		valid
GS05	10/3/2005	06010299	07440-02-0	Nickel	0001	0.001	mg/L	U	F	0.001		valid
GS05	10/3/2005	06010299	07782-49-2	Selenium	N001	0.006	mg/L	U	F	0.006		valid
GS05	10/3/2005	06010299	07440-22-4	Silver	0001	0.001	mg/L	U	F	0.001		valid
GS05	10/3/2005	06010299	07440-28-0	Thallium	N001	0.008	mg/L	B	F	0.005		valid

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LOCATION_CODE	DATE_SAMPLED	LAB_REQUISITION_NUMBER	CAS	ANALYTE	SAMPLE_ID	RESULT	WATER_UNIT_OF_MEASURE	LAB_QUALIFIERS	SAMPLE_TYPE	DETECTION_LIMIT	UNCERTAINTY	DATA_VALIDATION_QUALIFIERS
GS05	10/3/2005	06010299	U-234	Uranium-234	N001	0.095	pCi/L	U	F	0.132	0.045	valid
GS05	10/3/2005	06010299	U-235+236	Uranium-235/236	N001	0.026	pCi/L	U	F	0.064	0.030	valid
GS05	10/3/2005	06010299	U-238	Uranium-238	N001	0.104	pCi/L		F	0.074	0.042	J
GS05	10/3/2005	06010299	07440-66-6	Zinc	0001	0.0136	mg/L		F	0.002		U
GS05	1/5/2006	06020318	07429-90-5	Aluminum	0001	0.068	mg/L	U	F	0.068		valid
GS05	1/5/2006	06020318	07440-36-0	Antimony	N001	0.004	mg/L	U	F	0.004		valid
GS05	1/5/2006	06020318	07440-38-2	Arsenic	N001	0.0082	mg/L	J	F	0.006		valid
GS05	1/5/2006	06020318	07440-39-3	Barium	N001	0.0563	mg/L	J	F	0.001		valid
GS05	1/5/2006	06020318	07440-41-7	Beryllium	N001	0.001	mg/L	U	F	0.001		valid
GS05	1/5/2006	06020318	07440-42-8	Boron	N001	0.0109	mg/L	J	F	0.01		valid
GS05	1/5/2006	06020318	07440-43-9	Cadmium	0001	0.001	mg/L	U	F	0.001		valid
GS05	1/5/2006	06020318	07440-47-3	Chromium	N001	0.001	mg/L	U	F	0.001		valid
GS05	1/5/2006	06020318	07440-50-8	Copper	0001	0.003	mg/L	U	F	0.003		valid
GS05	1/5/2006	06020318	07439-92-1	Lead	0001	0.0025	mg/L	U	F	0.0025		valid
GS05	1/5/2006	06020318	07439-96-5	Manganese	N001	0.0027	mg/L	J	F	0.002		valid
GS05	1/5/2006	06020318	07439-97-6	Mercury	N001	0.00005	mg/L	HUh	F	0.00005		valid
GS05	1/5/2006	06020318	07440-02-0	Nickel	0001	0.001	mg/L	U	F	0.001		valid
GS05	1/5/2006	06020318	07782-49-2	Selenium	N001	0.006	mg/L	U	F	0.006		valid
GS05	1/5/2006	06020318	07440-22-4	Silver	0001	0.001	mg/L	U	F	0.001		valid
GS05	1/5/2006	06020318	07440-28-0	Thallium	N001	0.008	mg/L	J	F	0.005		valid
GS05	1/5/2006	06020318	U-234	Uranium-234	N001	0.279	pCi/L		F	0.098	0.060	J
GS05	1/5/2006	06020318	U-235+236	Uranium-235/236	N001	0.030	pCi/L	U	F	0.047	0.024	valid
GS05	1/5/2006	06020318	U-238	Uranium-238	N001	0.215	pCi/L		F	0.055	0.052	valid
GS05	1/5/2006	06020318	07440-66-6	Zinc	0001	0.0051	mg/L	J	F	0.002		valid
GS05	2/23/2006	06020316	000071-55-6	1,1,1-Trichloroethane	N001	0.5	ug/L	U	F	0.5		valid
GS05	2/23/2006	06020316	000079-34-5	1,1,2,2-Tetrachloroethane	N001	0.5	ug/L	U	F	0.5		valid
GS05	2/23/2006	06020316	000079-00-5	1,1,2-Trichloroethane	N001	0.5	ug/L	U	F	0.5		valid
GS05	2/23/2006	06020316	000075-34-3	1,1-Dichloroethane	N001	0.5	ug/L	U	F	0.5		valid
GS05	2/23/2006	06020316	000075-35-4	1,1-Dichloroethene	N001	0.5	ug/L	U	F	0.5		valid
GS05	2/23/2006	06020316	000120-82-1	1,2,4-Trichlorobenzene	N001	0.5	ug/L	U	F	0.5		valid
GS05	2/23/2006	06020316	000096-12-8	1,2-Dibromo-3-chloropropane	N001	0.5	ug/L	U	F	0.5		valid
GS05	2/23/2006	06020316	000106-93-4	1,2-Dibromoethane	N001	0.5	ug/L	U	F	0.5		valid
GS05	2/23/2006	06020316	000095-50-1	1,2-Dichlorobenzene	N001	0.5	ug/L	U	F	0.5		valid
GS05	2/23/2006	06020316	000107-06-2	1,2-Dichloroethane	N001	0.5	ug/L	U	F	0.5		valid
GS05	2/23/2006	06020316	000078-87-5	1,2-Dichloropropane	N001	0.5	ug/L	U	F	0.5		valid
GS05	2/23/2006	06020316	000541-73-1	1,3-Dichlorobenzene	N001	0.5	ug/L	U	F	0.5		valid
GS05	2/23/2006	06020316	000106-46-7	1,4-Dichlorobenzene	N001	0.5	ug/L	U	F	0.5		valid
GS05	2/23/2006	06020316	000078-93-3	2-Butanone	N001	1	ug/L	U	F	1		valid
GS05	2/23/2006	06020316	000108-10-1	4-Methyl-2-Pentanone	N001	1	ug/L	U	F	1		valid
GS05	2/23/2006	06020316	000067-64-1	Acetone	N001	1	ug/L	U	F	1		valid
GS05	2/23/2006	06020316	000071-43-2	Benzene	N001	0.5	ug/L	U	F	0.5		valid
GS05	2/23/2006	06020316	000075-27-4	Bromodichloromethane	N001	0.5	ug/L	U	F	0.5		valid
GS05	2/23/2006	06020316	000075-25-2	Bromoform	N001	0.5	ug/L	U	F	0.5		valid
GS05	2/23/2006	06020316	000074-83-9	Bromomethane	N001	0.5	ug/L	U	F	0.5		valid
GS05	2/23/2006	06020316	000075-15-0	Carbon Disulfide	N001	1	ug/L	U	F	1		valid
GS05	2/23/2006	06020316	000056-23-5	Carbon tetrachloride	N001	0.5	ug/L	U	F	0.5		valid
GS05	2/23/2006	06020316	000108-90-7	Chlorobenzene	N001	0.5	ug/L	U	F	0.5		valid
GS05	2/23/2006	06020316	000124-48-1	Chlorodibromomethane	N001	0.5	ug/L	U	F	0.5		valid
GS05	2/23/2006	06020316	000075-00-3	Chloroethane	N001	0.5	ug/L	U	F	0.5		valid
GS05	2/23/2006	06020316	000067-66-3	Chloroform	N001	0.5	ug/L	U	F	0.5		valid
GS05	2/23/2006	06020316	000074-87-3	Chloromethane	N001	0.5	ug/L	U	F	0.5		valid
GS05	2/23/2006	06020316	000156-59-2	cis-1,2-Dichloroethene	N001	0.5	ug/L	U	F	0.5		valid
GS05	2/23/2006	06020316	000087-68-3	Hexachlorobutadiene	N001	0.5	ug/L	U	F	0.5		valid
GS05	2/23/2006	06020316	M&P XYLENE	m,p-Xylene	N001	0.5	ug/L	U	F	0.5		valid
GS05	2/23/2006	06020316	07439-97-6	Mercury	N001	0.00005	mg/L	U	F	0.00005		valid
GS05	2/23/2006	06020316	000075-09-2	Methylene chloride	N001	0.5	ug/L	U	F	0.5		valid
GS05	2/23/2006	06020316	000091-20-3	Naphthalene	N001	0.5	ug/L	U	F	0.5		valid
GS05	2/23/2006	06020316	000095-47-6	o-Xylene	N001	0.5	ug/L	U	F	0.5		valid
GS05	2/23/2006	06020316	000100-42-5	Styrene	N001	0.5	ug/L	U	F	0.5		valid
GS05	2/23/2006	06020316	000127-18-4	Tetrachloroethene	N001	0.5	ug/L	U	F	0.5		valid
GS05	2/23/2006	06020316	000108-88-3	Toluene	N001	0.5	ug/L	U	F	0.5		valid
GS05	2/23/2006	06020316	000100-41-4	Total Xylene	N001	0.5	ug/L	U	F	0.5		valid
GS05	2/23/2006	06020316	000156-60-5	trans-1,2-Dichloroethene	N001	0.5	ug/L	U	F	0.5		valid
GS05	2/23/2006	06020316	000079-01-6	Trichloroethene	N001	0.5	ug/L	U	F	0.5		valid
GS05	2/23/2006	06020316	000075-01-4	Vinyl chloride	N001	0.5	ug/L	U	F	0.5		valid
GS10	12/1/2005	06010299	AM-241	Americium-241	N001	0.014	pCi/L	U	F	0.030	0.010	valid
GS10	12/1/2005	06010299	07440-41-7	Beryllium	N001	0.001	mg/L	U	F	0.001		valid
GS10	12/1/2005	06010299	07440-43-9	Cadmium	0001	0.00014	mg/L	B	F	0.0001		valid
GS10	12/1/2005	06010299	07440-47-3	Chromium	N001	0.001	mg/L	U	F	0.001		valid
GS10	12/1/2005	06010299	HARDNESS	Hardness	N001	562	mg/L		F	2		valid
GS10	12/1/2005	06010299	PU-239,240	Plutonium-239, 240	N001	0.018	pCi/L	U	F	0.026	0.013	valid
GS10	12/1/2005	06010299	07440-22-4	Silver	0001	0.0002	mg/L	U	F	0.0002		valid
GS10	12/1/2005	06010299	U-234	Uranium-234	N001	8.460	pCi/L		F	0.119	0.348	valid
GS10	12/1/2005	06010299	U-235+236	Uranium-235/236	N001	0.470	pCi/L		F	0.058	0.093	valid
GS10	12/1/2005	06010299	U-238	Uranium-238	N001	8.240	pCi/L		F	0.067	0.345	valid
GS10	1/17/2006	06020318	AM-241	Americium-241	N001	-0.005	pCi/L	U	F	0.029	0.007	valid
GS10	1/17/2006	06020318	07440-41-7	Beryllium	N001	0.001	mg/L	U	F	0.001		valid
GS10	1/17/2006	06020318	07440-43-9	Cadmium	0001	0.0001	mg/L	U	F	0.0001		valid
GS10	1/17/2006	06020318	07440-47-3	Chromium	N001	0.001	mg/L	U	F	0.001		valid
GS10	1/17/2006	06020318	HARDNESS	Hardness	N001	725	mg/L		F	5		valid
GS10	1/17/2006	06020318	PU-239,240	Plutonium-239, 240	N001	0.015	pCi/L	U	F	0.027	0.011	valid

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LOCATION_CODE	DATE_SAMPLED	LAB_REQUISITION_NUMBER	CAS	ANALYTE	SAMPLE_ID	RESULT	WATER_UNIT_OF_MEASURE	LAB_QUALIFIERS	SAMPLE_TYPE	DETECTION_LIMIT	UNCERTAINTY	DATA_VALIDATION_QUALIFIERS
GS10	1/17/2006	06020318	07440-22-4	Silver	0001	0.0002	mg/L	U	F	0.0002		valid
GS10	1/17/2006	06020318	U-234	Uranium-234	N001	11.300	pCi/L		F	0.134	0.428	valid
GS10	1/17/2006	06020318	U-235+236	Uranium-235/236	N001	0.577	pCi/L		F	0.065	0.110	valid
GS10	1/17/2006	06020318	U-238	Uranium-238	N001	12.600	pCi/L		F	0.075	0.452	valid
GS10	2/27/2006	06030336	AM-241	Americium-241	N001	-0.001	pCi/L	U	F	0.026	0.018	valid
GS10	2/27/2006	06030336	07440-41-7	Beryllium	N001	0.001	mg/L	U	F	0.001		valid
GS10	2/27/2006	06030336	07440-43-9	Cadmium	0001	0.0001	mg/L	U	F	0.0001		valid
GS10	2/27/2006	06030336	07440-47-3	Chromium	N001	0.0018	mg/L	B	F	0.001		valid
GS10	2/27/2006	06030336	HARDNESS	Hardness	N001	630	mg/L		F	10		valid
GS10	2/27/2006	06030336	PU-239,240	Plutonium-239, 240	N001	0.013	pCi/L	U	F	0.028	0.012	valid
GS10	2/27/2006	06030336	07440-22-4	Silver	0001	0.0002	mg/L	U	F	0.0002		valid
GS10	2/27/2006	06030336	U-234	Uranium-234	N001	9.650	pCi/L		F	0.134	0.399	valid
GS10	2/27/2006	06030336	U-235+236	Uranium-235/236	N001	0.343	pCi/L		F	0.065	0.097	valid
GS10	2/27/2006	06030336	U-238	Uranium-238	N001	9.590	pCi/L		F	0.075	0.396	valid
GS13	10/26/2005	06030322	U-234	Uranium-234	N001	7.500	pCi/L		F	0.134	0.349	valid
GS13	10/26/2005	06030322	U-235+236	Uranium-235/236	N001	0.311	pCi/L		F	0.065	0.083	valid
GS13	10/26/2005	06030322	U-238	Uranium-238	N001	6.940	pCi/L		F	0.075	0.335	valid
GS59	10/10/2005	06010288	07429-90-5	Aluminum	0001	0.068	mg/L	U	F	0.068		valid
GS59	10/10/2005	06010288	07440-36-0	Antimony	N001	0.0053	mg/L	B	F	0.004		valid
GS59	10/10/2005	06010288	07440-38-2	Arsenic	N001	0.0123	mg/L	B	F	0.006		valid
GS59	10/10/2005	06010288	07440-39-3	Barium	N001	0.0437	mg/L		F	0.001		valid
GS59	10/10/2005	06010288	07440-41-7	Beryllium	N001	0.001	mg/L	U	F	0.001		valid
GS59	10/10/2005	06010288	07440-42-8	Boron	N001	0.0252	mg/L	B	F	0.01		U
GS59	10/10/2005	06010288	07440-43-9	Cadmium	0001	0.001	mg/L	U	F	0.001		valid
GS59	10/10/2005	06010288	07440-47-3	Chromium	N001	0.001	mg/L	U	F	0.001		valid
GS59	10/10/2005	06010288	07440-50-8	Copper	0001	0.003	mg/L	U	F	0.003		valid
GS59	10/10/2005	06010288	07439-92-1	Lead	0001	0.0025	mg/L	U	F	0.0025		valid
GS59	10/10/2005	06010288	07439-96-5	Manganese	N001	0.0084	mg/L	B	F	0.002		valid
GS59	10/10/2005	06010288	07439-97-6	Mercury	N001	0.00005	mg/L	U	F	0.00005		valid
GS59	10/10/2005	06010288	07440-02-0	Nickel	0001	0.001	mg/L	U	F	0.001		valid
GS59	10/10/2005	06010288	07782-49-2	Selenium	N001	0.006	mg/L	U	F	0.006		valid
GS59	10/10/2005	06010288	07440-22-4	Silver	0001	0.001	mg/L	U	F	0.001		valid
GS59	10/10/2005	06010288	07440-28-0	Thallium	N001	0.0082	mg/L	B	F	0.005		valid
GS59	10/10/2005	06010288	U-234	Uranium-234	N001	1.050	pCi/L		F	0.145	0.143	valid
GS59	10/10/2005	06010288	U-235+236	Uranium-235/236	N001	0.158	pCi/L		F	0.070	0.064	J
GS59	10/10/2005	06010288	U-238	Uranium-238	N001	0.811	pCi/L		F	0.081	0.126	valid
GS59	10/10/2005	06010288	07440-66-6	Zinc	0001	0.0896	mg/L	*	F	0.002		J
GS59	1/3/2006	06020318	07429-90-5	Aluminum	0001	0.068	mg/L	U	F	0.068		valid
GS59	1/3/2006	06020318	07440-36-0	Antimony	N001	0.004	mg/L	U	F	0.004		valid
GS59	1/3/2006	06020318	07440-38-2	Arsenic	N001	0.009	mg/L	J	F	0.006		valid
GS59	1/3/2006	06020318	07440-39-3	Barium	N001	0.0428	mg/L	J	F	0.001		valid
GS59	1/3/2006	06020318	07440-41-7	Beryllium	N001	0.001	mg/L	U	F	0.001		valid
GS59	1/3/2006	06020318	07440-42-8	Boron	N001	0.0141	mg/L	J	F	0.01		valid
GS59	1/3/2006	06020318	07440-43-9	Cadmium	0001	0.001	mg/L	U	F	0.001		valid
GS59	1/3/2006	06020318	07440-47-3	Chromium	N001	0.001	mg/L	U	F	0.001		valid
GS59	1/3/2006	06020318	07440-50-8	Copper	0001	0.003	mg/L	U	F	0.003		valid
GS59	1/3/2006	06020318	07439-92-1	Lead	0001	0.0025	mg/L	U	F	0.0025		valid
GS59	1/3/2006	06020318	07439-96-5	Manganese	N001	0.0032	mg/L	J	F	0.002		valid
GS59	1/3/2006	06020318	07439-97-6	Mercury	N001	0.00005	mg/L	HUh	F	0.00005		valid
GS59	1/3/2006	06020318	07440-02-0	Nickel	0001	0.001	mg/L	J	F	0.001		valid
GS59	1/3/2006	06020318	07782-49-2	Selenium	N001	0.006	mg/L	U	F	0.006		valid
GS59	1/3/2006	06020318	07440-22-4	Silver	0001	0.001	mg/L	U	F	0.001		valid
GS59	1/3/2006	06020318	07440-28-0	Thallium	N001	0.0105	mg/L	J	F	0.005		valid
GS59	1/3/2006	06020318	U-234	Uranium-234	N001	1.010	pCi/L		F	0.091	0.107	valid
GS59	1/3/2006	06020318	U-235+236	Uranium-235/236	N001	0.042	pCi/L	U	F	0.044	0.024	valid
GS59	1/3/2006	06020318	U-238	Uranium-238	N001	0.701	pCi/L		F	0.051	0.088	valid
GS59	1/3/2006	06020318	07440-66-6	Zinc	0001	0.0036	mg/L	J	F	0.002		valid
GS59	2/23/2006	06020316	000071-55-6	1,1,1-Trichloroethane	N001	0.5	ug/L	U	F	0.5		valid
GS59	2/23/2006	06020316	000079-34-5	1,1,2,2-Tetrachloroethane	N001	0.5	ug/L	U	F	0.5		valid
GS59	2/23/2006	06020316	000079-00-5	1,1,2-Trichloroethane	N001	0.5	ug/L	U	F	0.5		valid
GS59	2/23/2006	06020316	000075-34-3	1,1-Dichloroethane	N001	0.5	ug/L	U	F	0.5		valid
GS59	2/23/2006	06020316	000075-35-4	1,1-Dichloroethene	N001	0.5	ug/L	U	F	0.5		valid
GS59	2/23/2006	06020316	000120-82-1	1,2,4-Trichlorobenzene	N001	0.5	ug/L	U	F	0.5		valid
GS59	2/23/2006	06020316	000096-12-8	1,2-Dibromo-3-chloropropane	N001	0.5	ug/L	U	F	0.5		valid
GS59	2/23/2006	06020316	000106-93-4	1,2-Dibromoethane	N001	0.5	ug/L	U	F	0.5		valid
GS59	2/23/2006	06020316	000095-50-1	1,2-Dichlorobenzene	N001	0.5	ug/L	U	F	0.5		valid
GS59	2/23/2006	06020316	000107-06-2	1,2-Dichloroethane	N001	0.5	ug/L	U	F	0.5		valid
GS59	2/23/2006	06020316	000078-87-5	1,2-Dichloropropane	N001	0.5	ug/L	U	F	0.5		valid
GS59	2/23/2006	06020316	000541-73-1	1,3-Dichlorobenzene	N001	0.5	ug/L	U	F	0.5		valid
GS59	2/23/2006	06020316	000106-46-7	1,4-Dichlorobenzene	N001	0.5	ug/L	U	F	0.5		valid
GS59	2/23/2006	06020316	000078-93-3	2-Butanone	N001	1	ug/L	U	F	1		valid
GS59	2/23/2006	06020316	000108-10-1	4-Methyl-2-Pentanone	N001	1	ug/L	U	F	1		valid
GS59	2/23/2006	06020316	000067-64-1	Acetone	N001	1	ug/L	U	F	1		valid
GS59	2/23/2006	06020316	000071-43-2	Benzene	N001	0.5	ug/L	U	F	0.5		valid
GS59	2/23/2006	06020316	000075-27-4	Bromodichloromethane	N001	0.5	ug/L	U	F	0.5		valid
GS59	2/23/2006	06020316	000075-25-2	Bromoform	N001	0.5	ug/L	U	F	0.5		valid
GS59	2/23/2006	06020316	000074-83-9	Bromomethane	N001	0.5	ug/L	U	F	0.5		valid
GS59	2/23/2006	06020316	000075-15-0	Carbon Disulfide	N001	1	ug/L	U	F	1		valid
GS59	2/23/2006	06020316	000056-23-5	Carbon tetrachloride	N001	0.5	ug/L	U	F	0.5		valid
GS59	2/23/2006	06020316	000108-90-7	Chlorobenzene	N001	0.5	ug/L	U	F	0.5		valid
GS59	2/23/2006	06020316	000124-48-1	Chlorodibromomethane	N001	0.5	ug/L	U	F	0.5		valid

Table 1. Analytical results for Water Samples - 1st Quarter CY06

LOCATION_CODE	DATE_SAMPLED	LAB_REQUISITION_NUMBER	CAS	ANALYTE	SAMPLE_ID	RESULT	WATER_UNIT_OF_MEASURE	LAB_QUALIFIERS	SAMPLE_TYPE	DETECTION_LIMIT	UNCERTAINTY	DATA_VALIDATION_QUALIFIERS
GS59	2/23/2006	06020316	000075-00-3	Chloroethane	N001	0.5	ug/L	U	F	0.5		valid
GS59	2/23/2006	06020316	000067-66-3	Chloroform	N001	0.5	ug/L	U	F	0.5		valid
GS59	2/23/2006	06020316	000074-87-3	Chloromethane	N001	0.5	ug/L	U	F	0.5		valid
GS59	2/23/2006	06020316	000156-59-2	cis-1,2-Dichloroethene	N001	0.5	ug/L	U	F	0.5		valid
GS59	2/23/2006	06020316	000087-68-3	Hexachlorobutadiene	N001	0.5	ug/L	U	F	0.5		valid
GS59	2/23/2006	06020316	M&P_XYLENE	m,p-Xylene	N001	0.5	ug/L	U	F	0.5		valid
GS59	2/23/2006	06020316	07439-97-6	Mercury	N001	0.00005	mg/L	U	F	0.00005		valid
GS59	2/23/2006	06020316	000075-09-2	Methylene chloride	N001	0.5	ug/L	U	F	0.5		valid
GS59	2/23/2006	06020316	000091-20-3	Naphthalene	N001	0.5	ug/L	U	F	0.5		valid
GS59	2/23/2006	06020316	000095-47-6	o-Xylene	N001	0.5	ug/L	U	F	0.5		valid
GS59	2/23/2006	06020316	000100-42-5	Styrene	N001	0.5	ug/L	U	F	0.5		valid
GS59	2/23/2006	06020316	000127-18-4	Tetrachloroethene	N001	0.5	ug/L	U	F	0.5		valid
GS59	2/23/2006	06020316	000108-88-3	Toluene	N001	0.5	ug/L	U	F	0.5		valid
GS59	2/23/2006	06020316	000100-41-4	Total Xylene	N001	0.5	ug/L	U	F	0.5		valid
GS59	2/23/2006	06020316	000156-60-5	trans-1,2-Dichloroethene	N001	0.5	ug/L	U	F	0.5		valid
GS59	2/23/2006	06020316	000079-01-6	Trichloroethene	N001	0.5	ug/L	U	F	0.5		valid
GS59	2/23/2006	06020316	000075-01-4	Vinyl chloride	N001	0.5	ug/L	U	F	0.5		valid
GWISINFNORTH	2/23/2006	06020316	000071-55-6	1,1,1-Trichloroethane	N001	3.2	ug/L		F	0.5		valid
GWISINFNORTH	2/23/2006	06020316	000079-34-5	1,1,2,2-Tetrachloroethane	N001	0.5	ug/L	U	F	0.5		valid
GWISINFNORTH	2/23/2006	06020316	000079-00-5	1,1,2-Trichloroethane	N001	0.5	ug/L	U	F	0.5		valid
GWISINFNORTH	2/23/2006	06020316	000075-34-3	1,1-Dichloroethane	N001	4.6	ug/L		F	0.5		valid
GWISINFNORTH	2/23/2006	06020316	000075-35-4	1,1-Dichloroethene	N001	0.5	ug/L	U	F	0.5		valid
GWISINFNORTH	2/23/2006	06020316	000120-82-1	1,2,4-Trichlorobenzene	N001	0.5	ug/L	U	F	0.5		valid
GWISINFNORTH	2/23/2006	06020316	000096-12-8	1,2-Dibromo-3-chloropropane	N001	0.5	ug/L	U	F	0.5		valid
GWISINFNORTH	2/23/2006	06020316	000106-93-4	1,2-Dibromoethane	N001	0.5	ug/L	U	F	0.5		valid
GWISINFNORTH	2/23/2006	06020316	000095-50-1	1,2-Dichlorobenzene	N001	0.5	ug/L	U	F	0.5		valid
GWISINFNORTH	2/23/2006	06020316	000107-06-2	1,2-Dichloroethane	N001	0.5	ug/L	U	F	0.5		valid
GWISINFNORTH	2/23/2006	06020316	000078-87-5	1,2-Dichloropropane	N001	0.5	ug/L	U	F	0.5		valid
GWISINFNORTH	2/23/2006	06020316	000541-73-1	1,3-Dichlorobenzene	N001	0.5	ug/L	U	F	0.5		valid
GWISINFNORTH	2/23/2006	06020316	000106-46-7	1,4-Dichlorobenzene	N001	0.5	ug/L	U	F	0.5		valid
GWISINFNORTH	2/23/2006	06020316	000078-93-3	2-Butanone	N001	1	ug/L	U	F	1		valid
GWISINFNORTH	2/23/2006	06020316	000108-10-1	4-Methyl-2-Pentanone	N001	1	ug/L	U	F	1		valid
GWISINFNORTH	2/23/2006	06020316	000067-64-1	Acetone	N001	1	ug/L	U	F	1		valid
GWISINFNORTH	2/23/2006	06020316	07429-90-5	Aluminum	0001	0.068	mg/L	U	F	0.068		valid
GWISINFNORTH	2/23/2006	06020316	07440-36-0	Antimony	N001	0.0074	mg/L	J	F	0.004		valid
GWISINFNORTH	2/23/2006	06020316	07440-38-2	Arsenic	N001	0.0163	mg/L		F	0.006		valid
GWISINFNORTH	2/23/2006	06020316	07440-39-3	Barium	N001	0.231	mg/L		F	0.001		valid
GWISINFNORTH	2/23/2006	06020316	000071-43-2	Benzene	N001	0.5	ug/L	U	F	0.5		valid
GWISINFNORTH	2/23/2006	06020316	07440-41-7	Beryllium	N001	0.001	mg/L	U	F	0.001		valid
GWISINFNORTH	2/23/2006	06020316	07440-42-8	Boron	N001	0.113	mg/L		F	0.01		valid
GWISINFNORTH	2/23/2006	06020316	000075-27-4	Bromodichloromethane	N001	0.5	ug/L	U	F	0.5		valid
GWISINFNORTH	2/23/2006	06020316	000075-25-2	Bromoform	N001	0.6	ug/L		F	0.5		valid
GWISINFNORTH	2/23/2006	06020316	000074-83-9	Bromomethane	N001	0.5	ug/L	U	F	0.5		valid
GWISINFNORTH	2/23/2006	06020316	07440-43-9	Cadmium	0001	0.0016	mg/L	J	F	0.001		valid
GWISINFNORTH	2/23/2006	06020316	000075-15-0	Carbon Disulfide	N001	1	ug/L	U	F	1		valid
GWISINFNORTH	2/23/2006	06020316	000056-23-5	Carbon tetrachloride	N001	0.5	ug/L	U	F	0.5		valid
GWISINFNORTH	2/23/2006	06020316	000108-90-7	Chlorobenzene	N001	0.5	ug/L	U	F	0.5		valid
GWISINFNORTH	2/23/2006	06020316	000124-48-1	Chlorodibromomethane	N001	0.5	ug/L	U	F	0.5		valid
GWISINFNORTH	2/23/2006	06020316	000075-00-3	Chloroethane	N001	2.4	ug/L		F	0.5		valid
GWISINFNORTH	2/23/2006	06020316	000067-66-3	Chloroform	N001	0.5	ug/L	U	F	0.5		valid
GWISINFNORTH	2/23/2006	06020316	000074-87-3	Chloromethane	N001	0.5	ug/L	U	F	0.5		valid
GWISINFNORTH	2/23/2006	06020316	07440-47-3	Chromium	N001	0.001	mg/L	U	F	0.001		valid
GWISINFNORTH	2/23/2006	06020316	000156-59-2	cis-1,2-Dichloroethene	N001	2.3	ug/L		F	0.5		valid
GWISINFNORTH	2/23/2006	06020316	07440-50-8	Copper	0001	0.003	mg/L	U	F	0.003		valid
GWISINFNORTH	2/23/2006	06020316	000087-68-3	Hexachlorobutadiene	N001	0.5	ug/L	U	F	0.5		valid
GWISINFNORTH	2/23/2006	06020316	07439-92-1	Lead	0001	0.0025	mg/L	U	F	0.0025		valid
GWISINFNORTH	2/23/2006	06020316	M&P_XYLENE	m,p-Xylene	N001	0.5	ug/L	U	F	0.5		valid
GWISINFNORTH	2/23/2006	06020316	07439-96-5	Manganese	N001	0.106	mg/L		F	0.002		valid
GWISINFNORTH	2/23/2006	06020316	07439-97-6	Mercury	N001	0.00005	mg/L	U	F	0.00005		valid
GWISINFNORTH	2/23/2006	06020316	000075-09-2	Methylene chloride	N001	0.5	ug/L	U	F	0.5		valid
GWISINFNORTH	2/23/2006	06020316	000091-20-3	Naphthalene	N001	0.5	ug/L	U	F	0.5		valid
GWISINFNORTH	2/23/2006	06020316	07440-02-0	Nickel	0001	0.0015	mg/L	J	F	0.001		valid
GWISINFNORTH	2/23/2006	06020316	NO3+NO2 AS N	Nitrate + Nitrite as Nitrogen	N001	0.268	mg/L		F	0.017		valid
GWISINFNORTH	2/23/2006	06020316	000095-47-6	o-Xylene	N001	0.5	ug/L	U	F	0.5		valid
GWISINFNORTH	2/23/2006	06020316	07782-49-2	Selenium	N001	0.06	mg/L	U	F	0.06		valid
GWISINFNORTH	2/23/2006	06020316	07440-22-4	Silver	0001	0.001	mg/L	U	F	0.001		valid
GWISINFNORTH	2/23/2006	06020316	000100-42-5	Styrene	N001	0.5	ug/L	U	F	0.5		valid
GWISINFNORTH	2/23/2006	06020316	000127-18-4	Tetrachloroethene	N001	0.68	ug/L		F	0.5		valid
GWISINFNORTH	2/23/2006	06020316	07440-28-0	Thallium	N001	0.0145	mg/L	J	F	0.005		valid
GWISINFNORTH	2/23/2006	06020316	000108-88-3	Toluene	N001	0.5	ug/L	U	F	0.5		valid
GWISINFNORTH	2/23/2006	06020316	000100-41-4	Total Xylene	N001	0.5	ug/L	U	F	0.5		valid
GWISINFNORTH	2/23/2006	06020316	000156-60-5	trans-1,2-Dichloroethene	N001	0.5	ug/L	U	F	0.5		valid
GWISINFNORTH	2/23/2006	06020316	000079-01-6	Trichloroethene	N001	0.3	ug/L	J	F	0.5		valid
GWISINFNORTH	2/23/2006	06020316	U-234	Uranium-234	N001	0.819	pCi/L		F	0.266	0.165	valid
GWISINFNORTH	2/23/2006	06020316	U-235+236	Uranium-235/236	N001	0.041	pCi/L	U	F	0.129	0.050	valid
GWISINFNORTH	2/23/2006	06020316	U-238	Uranium-238	N001	0.811	pCi/L		F	0.149	0.166	valid
GWISINFNORTH	2/23/2006	06020316	000075-01-4	Vinyl chloride	N001	0.62	ug/L		F	0.5		valid
GWISINFNORTH	2/23/2006	06020316	07440-66-6	Zinc	0001	0.0083	mg/L	J	F	0.002		U
P416589	2/28/2006	06020315	000071-55-6	1,1,1-Trichloroethane	N001	0.16	ug/L	U	F	0.16		valid
P416589	2/28/2006	06020315	000079-34-5	1,1,2,2-Tetrachloroethane	N001	0.2	ug/L	U	F	0.2		valid
P416589	2/28/2006	06020315	000079-00-5	1,1,2-Trichloroethane	N001	0.32	ug/L	U	F	0.32		valid

Table 1. Analytical results for Water Samples - 1st Quarter CY06

LOCATION_CODE	DATE_SAMPLED	LAB_REQUISITION_NUMBER	CAS	ANALYTE	SAMPLE_ID	RESULT	WATER_UNIT_OF_MEASURE	LAB_QUALIFIERS	SAMPLE_TYPE	DETECTION_LIMIT	UNCERTAINTY	DATA_VALIDATION_QUALIFIERS
P416589	2/28/2006	06020315	000075-34-3	1,1-Dichloroethane	N001	0.16	ug/L	U	F	0.16		valid
P416589	2/28/2006	06020315	000075-35-4	1,1-Dichloroethene	N001	0.14	ug/L	U	F	0.14		valid
P416589	2/28/2006	06020315	000095-94-3	1,2,4,5-Tetrachlorobenzene	N001	2	ug/L	U	F	2		valid
P416589	2/28/2006	06020315	000120-82-1	1,2,4-Trichlorobenzene	N001	0.32	ug/L	U	F	0.32		valid
P416589	2/28/2006	06020315	000096-12-8	1,2-Dibromo-3-chloropropane	N001	0.43	ug/L	U	F	0.43		valid
P416589	2/28/2006	06020315	000106-93-4	1,2-Dibromoethane	N001	0.18	ug/L	U	F	0.18		valid
P416589	2/28/2006	06020315	000095-50-1	1,2-Dichlorobenzene	N001	0.13	ug/L	U	F	0.13		valid
P416589	2/28/2006	06020315	000107-06-2	1,2-Dichloroethane	N001	0.13	ug/L	U	F	0.13		valid
P416589	2/28/2006	06020315	000078-87-5	1,2-Dichloropropane	N001	0.13	ug/L	U	F	0.13		valid
P416589	2/28/2006	06020315	000122-66-7	1,2-Diphenylhydrazine	N001	2	ug/L	U	F	2		valid
P416589	2/28/2006	06020315	000541-73-1	1,3-Dichlorobenzene	N001	0.16	ug/L	U	F	0.16		valid
P416589	2/28/2006	06020315	000106-46-7	1,4-Dichlorobenzene	N001	0.16	ug/L	U	F	0.16		valid
P416589	2/28/2006	06020315	000105-67-9	2,4-Dimethylphenol	N001	1.4	ug/L	U	F	1.4		valid
P416589	2/28/2006	06020315	000088-06-2	2,4,6-Trichlorophenol	N001	1.5	ug/L	U	F	1.5		valid
P416589	2/28/2006	06020315	000120-83-2	2,4-Dichlorophenol	N001	1.3	ug/L	U	F	1.3		valid
P416589	2/28/2006	06020315	000051-28-5	2,4-Dinitrophenol	N001	10	ug/L	U	F	10		valid
P416589	2/28/2006	06020315	000121-14-2	2,4-Dinitrotoluene	N001	1.8	ug/L	U	F	1.8		valid
P416589	2/28/2006	06020315	000606-20-2	2,6-Dinitrotoluene	N001	1.6	ug/L	U	F	1.6		valid
P416589	2/28/2006	06020315	000078-93-3	2-Butanone	N001	1.7	ug/L	U	F	1.7		valid
P416589	2/28/2006	06020315	000091-58-7	2-Chloronaphthalene	N001	1.7	ug/L	U	F	1.7		valid
P416589	2/28/2006	06020315	000095-57-8	2-Chlorophenol	N001	1.7	ug/L	U	F	1.7		valid
P416589	2/28/2006	06020315	000095-48-7	2-Methylphenol	N001	1.4	ug/L	U	F	1.4		valid
P416589	2/28/2006	06020315	000091-94-1	3,3-Dichlorobenzidine	N001	0.63	ug/L	U	F	0.63		valid
P416589	2/28/2006	06020315	000534-52-1	4,6-Dinitro-2-methyl phenol	N001	9.8	ug/L	U	F	9.8		valid
P416589	2/28/2006	06020315	000059-50-7	4-Chloro-3-methylphenol	N001	1.3	ug/L	U	F	1.3		valid
P416589	2/28/2006	06020315	000108-10-1	4-Methyl-2-Pentanone	N001	0.49	ug/L	U	F	0.49		valid
P416589	2/28/2006	06020315	000100-02-7	4-Nitrophenol	N001	11	ug/L	U	F	11		valid
P416589	2/28/2006	06020315	000083-32-9	Acenaphthene	N001	1.7	ug/L	U	F	1.7		valid
P416589	2/28/2006	06020315	000208-96-8	Acenaphthylene	N001	1.8	ug/L	U	F	1.8		valid
P416589	2/28/2006	06020315	000067-64-1	Acetone	N001	1.9	ug/L	U	F	1.9		valid
P416589	2/28/2006	06020315	000107-02-8	Acrolein	N001	2.8	ug/L	U	F	2.8		valid
P416589	2/28/2006	06020315	000107-13-1	Acrylonitrile	N001	1.4	ug/L	U	F	1.4		valid
P416589	2/28/2006	06020315	ALKALINITY	Alkalinity, Total (As CaCO3)	N001	196	mg/L		F			valid
P416589	2/28/2006	06020315	07429-90-5	Aluminum	N001	0.017	mg/L	B	F	0.017		valid
P416589	2/28/2006	06020315	000120-12-7	Anthracene	N001	1.9	ug/L	U	F	1.9		valid
P416589	2/28/2006	06020315	07440-36-0	Antimony	N001	0.0049	mg/L	B	F	0.0031		valid
P416589	2/28/2006	06020315	07440-38-2	Arsenic	N001	0.0047	mg/L	B	F	0.0044		valid
P416589	2/28/2006	06020315	07440-39-3	Barium	N001	0.24	mg/L		F	0.0007		valid
P416589	2/28/2006	06020315	000056-55-3	Benz(a)anthracene	N001	1.7	ug/L	U	F	1.7		valid
P416589	2/28/2006	06020315	000071-43-2	Benzene	N001	0.16	ug/L	U	F	0.16		valid
P416589	2/28/2006	06020315	000092-87-5	Benzidine	N001	40	ug/L	U	F	40		valid
P416589	2/28/2006	06020315	000050-32-8	Benzo(a)pyrene	N001	1.3	ug/L	U	F	1.3		valid
P416589	2/28/2006	06020315	000205-99-2	Benzo(b)fluoranthene	N001	1.4	ug/L	U	F	1.4		valid
P416589	2/28/2006	06020315	000191-24-2	Benzo(g,h,i)Perylene	N001	2	ug/L	U	F	2		valid
P416589	2/28/2006	06020315	000207-08-9	Benzo(k)fluoranthene	N001	2.1	ug/L	U	F	2.1		valid
P416589	2/28/2006	06020315	07440-41-7	Beryllium	N001	0.0015	mg/L	B	F	0.00047		valid
P416589	2/28/2006	06020315	000111-44-4	Bis(2-chloroethyl) ether	N001	1.8	ug/L	U	F	1.8		valid
P416589	2/28/2006	06020315	000108-60-1	Bis(2-chloroisopropyl) ether	N001	1.4	ug/L	U	F	1.4		valid
P416589	2/28/2006	06020315	000117-81-7	Bis(2-ethylhexyl) phthalate	N001	3.6	ug/L	J	F	1.4		valid
P416589	2/28/2006	06020315	07440-42-8	Boron	N001	0.0059	mg/L	U	F	0.0059		valid
P416589	2/28/2006	06020315	000075-27-4	Bromodichloromethane	N001	0.17	ug/L	U	F	0.17		valid
P416589	2/28/2006	06020315	000075-25-2	Bromoform	N001	0.19	ug/L	U	F	0.19		valid
P416589	2/28/2006	06020315	000074-83-9	Bromomethane	N001	0.21	ug/L	U	F	0.21		valid
P416589	2/28/2006	06020315	000085-68-7	Butyl benzyl phthalate	N001	1.7	ug/L	U	F	1.7		valid
P416589	2/28/2006	06020315	07440-43-9	Cadmium	N001	0.0022	mg/L	B	F	0.00045		valid
P416589	2/28/2006	06020315	000075-15-0	Carbon Disulfide	N001	0.45	ug/L	U	F	0.45		valid
P416589	2/28/2006	06020315	000056-23-5	Carbon tetrachloride	N001	0.19	ug/L	U	F	0.19		valid
P416589	2/28/2006	06020315	000108-90-7	Chlorobenzene	N001	0.17	ug/L	U	F	0.17		valid
P416589	2/28/2006	06020315	000124-48-1	Chlorodibromomethane	N001	0.17	ug/L	U	F	0.17		valid
P416589	2/28/2006	06020315	000075-00-3	Chloroethane	N001	0.13	ug/L	U	F	0.13		valid
P416589	2/28/2006	06020315	000067-66-3	Chloroform	N001	0.18	ug/L	J	F	0.16		valid
P416589	2/28/2006	06020315	000074-87-3	Chloromethane	N001	0.3	ug/L	U	F	0.3		valid
P416589	2/28/2006	06020315	07440-47-3	Chromium	N001	0.0032	mg/L	B	F	0.0026		valid
P416589	2/28/2006	06020315	000218-01-9	Chrysene	N001	2	ug/L	U	F	2		valid
P416589	2/28/2006	06020315	000156-59-2	cis-1,2-Dichloroethene	N001	0.15	ug/L	U	F	0.15		valid
P416589	2/28/2006	06020315	07440-50-8	Copper	N001	0.0045	mg/L	U	F	0.0045		valid
P416589	2/28/2006	06020315	000053-70-3	Dibenz(a,h)anthracene	N001	1.4	ug/L	U	F	1.4		valid
P416589	2/28/2006	06020315	000084-66-2	Diethyl phthalate	N001	1.8	ug/L	U	F	1.8		valid
P416589	2/28/2006	06020315	000131-11-3	Dimethyl phthalate	N001	1.7	ug/L	U	F	1.7		valid
P416589	2/28/2006	06020315	000084-74-2	Di-n-butyl phthalate	N001	1.9	ug/L	U	F	1.9		valid
P416589	2/28/2006	06020315	000206-44-0	Fluoranthene	N001	1.8	ug/L	U	F	1.8		valid
P416589	2/28/2006	06020315	000086-73-7	Fluorene	N001	1.7	ug/L	U	F	1.7		valid
P416589	2/28/2006	06020315	000118-74-1	Hexachlorobenzene	N001	2.1	ug/L	U	F	2.1		valid
P416589	2/28/2006	06020315	000087-68-3	Hexachlorobutadiene	N001	0.12	ug/L	U	F	0.12		valid
P416589	2/28/2006	06020315	000077-47-4	Hexachlorocyclopentadiene	N001	5	ug/L	U	F	5		valid
P416589	2/28/2006	06020315	000193-39-5	Indeno(1,2,3-cd)pyrene	N001	1.5	ug/L	U	F	1.5		valid
P416589	2/28/2006	06020315	000078-59-1	Isophorone	N001	1.5	ug/L	U	F	1.5		valid
P416589	2/28/2006	06020315	07439-92-1	Lead	N001	0.0026	mg/L	U	F	0.0026		valid
P416589	2/28/2006	06020315	M&P XYLENE	m,p-Xylene	N001	0.34	ug/L	U	F	0.34		valid
P416589	2/28/2006	06020315	07439-96-5	Manganese	N001	0.01	mg/L		F	0.00087		valid
P416589	2/28/2006	06020315	07439-97-6	Mercury	N001	0.000027	mg/L	U	F	0.000027		valid

Table 1. Analytical results for Water Samples - 1st Quarter CY06

LOCATION_CODE	DATE_SAMPLED	LAB_REQUISITION_NUMBER	CAS	ANALYTE	SAMPLE_ID	RESULT	WATER_UNIT_OF_MEASURE	LAB_QUALIFIERS	SAMPLE_TYPE	DETECTION_LIMIT	UNCERTAINTY	DATA_VALIDATION_QUALIFIERS
P416589	2/28/2006	06020315	000075-09-2	Methylene chloride	N001	0.32	ug/L	U	F	0.32		valid
P416589	2/28/2006	06020315	000091-20-3	Naphthalene	N001	0.22	ug/L	U	F	0.22		valid
P416589	2/28/2006	06020315	07440-02-0	Nickel	N001	0.008	mg/L	B	F	0.0012		U
P416589	2/28/2006	06020315	000055-18-5	N-Nitrosodiethylamine	N001	2	ug/L	U	F	2		valid
P416589	2/28/2006	06020315	000062-75-9	N-Nitrosodimethylamine	N001	1.6	ug/L	U	F	1.6		valid
P416589	2/28/2006	06020315	000621-64-7	N-Nitrosodi-n-propylamine	N001	1.4	ug/L	U	F	1.4		valid
P416589	2/28/2006	06020315	000086-30-6	N-Nitrosodiphenylamine	N001	2.6	ug/L	U	F	2.6		valid
P416589	2/28/2006	06020315	000930-55-2	N-Nitrosopyrrolidine	N001	2	ug/L	U	F	2		valid
P416589	2/28/2006	06020315	000095-47-6	o-Xylene	N001	0.19	ug/L	U	F	0.19		valid
P416589	2/28/2006	06020315	000056-38-2	Parathion, ethyl	N001	2	ug/L	U	F	2		valid
P416589	2/28/2006	06020315	000608-93-5	Pentachlorobenzene	N001	2	ug/L	U	F	2		valid
P416589	2/28/2006	06020315	000087-86-5	Pentachlorophenol	N001	10	ug/L	U	F	10		valid
P416589	2/28/2006	06020315	000085-01-8	Phenanthrene	N001	2	ug/L	U	F	2		valid
P416589	2/28/2006	06020315	000108-95-2	Phenol	N001	1.4	ug/L	U	F	1.4		valid
P416589	2/28/2006	06020315	000129-00-0	Pyrene	N001	2.1	ug/L	U	F	2.1		valid
P416589	2/28/2006	06020315	07782-49-2	Selenium	N001	0.021	mg/L		F	0.0046		valid
P416589	2/28/2006	06020315	07440-22-4	Silver	N001	0.0028	mg/L	U	F	0.0028		valid
P416589	2/28/2006	06020315	000100-42-5	Styrene	N001	0.17	ug/L	U	F	0.17		valid
P416589	2/28/2006	06020315	000127-18-4	Tetrachloroethene	N001	0.2	ug/L	U	F	0.2		valid
P416589	2/28/2006	06020315	07440-28-0	Thallium	N001	0.022	mg/L		F	0.0049		valid
P416589	2/28/2006	06020315	000108-88-3	Toluene	N001	0.17	ug/L	U	F	0.17		valid
P416589	2/28/2006	06020315	000100-41-4	Total Xylene	N001	0.16	ug/L	U	F	0.16		valid
P416589	2/28/2006	06020315	000156-60-5	trans-1,2-Dichloroethene	N001	0.15	ug/L	U	F	0.15		valid
P416589	2/28/2006	06020315	000079-01-6	Trichloroethene	N001	0.16	ug/L	U	F	0.16		valid
P416589	2/28/2006	06020315	000075-01-4	Vinyl chloride	N001	0.38	ug/L	U	F	0.38		valid
P416589	2/28/2006	06020315	07440-66-6	Zinc	N001	0.0073	mg/L	B	F	0.0045		valid
PLFSEEPINF	2/23/2006	06020316	000071-55-6	1,1,1-Trichloroethane	N001	0.5	ug/L	U	F	0.5		valid
PLFSEEPINF	2/23/2006	06020316	000079-34-5	1,1,2,2-Tetrachloroethane	N001	0.5	ug/L	U	F	0.5		valid
PLFSEEPINF	2/23/2006	06020316	000079-00-5	1,1,2-Trichloroethane	N001	0.5	ug/L	U	F	0.5		valid
PLFSEEPINF	2/23/2006	06020316	000075-34-3	1,1-Dichloroethane	N001	1.4	ug/L		F	0.5		valid
PLFSEEPINF	2/23/2006	06020316	000075-35-4	1,1-Dichloroethene	N001	0.5	ug/L	U	F	0.5		valid
PLFSEEPINF	2/23/2006	06020316	000120-82-1	1,2,4-Trichlorobenzene	N001	0.5	ug/L	U	F	0.5		valid
PLFSEEPINF	2/23/2006	06020316	000096-12-8	1,2-Dibromo-3-chloropropane	N001	0.5	ug/L	U	F	0.5		valid
PLFSEEPINF	2/23/2006	06020316	000106-93-4	1,2-Dibromoethane	N001	0.5	ug/L	U	F	0.5		valid
PLFSEEPINF	2/23/2006	06020316	000095-50-1	1,2-Dichlorobenzene	N001	0.5	ug/L	U	F	0.5		valid
PLFSEEPINF	2/23/2006	06020316	000107-06-2	1,2-Dichloroethane	N001	0.5	ug/L	U	F	0.5		valid
PLFSEEPINF	2/23/2006	06020316	000078-87-5	1,2-Dichloropropane	N001	0.5	ug/L	U	F	0.5		valid
PLFSEEPINF	2/23/2006	06020316	000541-73-1	1,3-Dichlorobenzene	N001	0.5	ug/L	U	F	0.5		valid
PLFSEEPINF	2/23/2006	06020316	000106-46-7	1,4-Dichlorobenzene	N001	0.5	ug/L	U	F	0.5		valid
PLFSEEPINF	2/23/2006	06020316	000078-93-3	2-Butanone	N001	0.71	ug/L	J	F	1		valid
PLFSEEPINF	2/23/2006	06020316	000108-10-1	4-Methyl-2-Pentanone	N001	1	ug/L	U	F	1		valid
PLFSEEPINF	2/23/2006	06020316	000067-64-1	Acetone	N001	4.9	ug/L		F	1		valid
PLFSEEPINF	2/23/2006	06020316	07429-90-5	Aluminum	0001	0.068	mg/L	U	F	0.068		valid
PLFSEEPINF	2/23/2006	06020316	07440-36-0	Antimony	N001	0.007	mg/L	J	F	0.004		valid
PLFSEEPINF	2/23/2006	06020316	07440-38-2	Arsenic	N001	0.0191	mg/L		F	0.006		valid
PLFSEEPINF	2/23/2006	06020316	07440-39-3	Barium	N001	0.568	mg/L		F	0.001		valid
PLFSEEPINF	2/23/2006	06020316	000071-43-2	Benzene	N001	1.2	ug/L		F	0.5		valid
PLFSEEPINF	2/23/2006	06020316	07440-41-7	Beryllium	N001	0.001	mg/L	U	F	0.001		valid
PLFSEEPINF	2/23/2006	06020316	07440-42-8	Boron	N001	3.47	mg/L		F	0.01		valid
PLFSEEPINF	2/23/2006	06020316	000075-27-4	Bromodichloromethane	N001	0.5	ug/L	U	F	0.5		valid
PLFSEEPINF	2/23/2006	06020316	000075-25-2	Bromoform	N001	0.5	ug/L	U	F	0.5		valid
PLFSEEPINF	2/23/2006	06020316	000074-83-9	Bromomethane	N001	0.5	ug/L	U	F	0.5		valid
PLFSEEPINF	2/23/2006	06020316	07440-43-9	Cadmium	0001	0.0016	mg/L	J	F	0.001		valid
PLFSEEPINF	2/23/2006	06020316	000075-15-0	Carbon Disulfide	N001	1	ug/L	U	F	1		valid
PLFSEEPINF	2/23/2006	06020316	000056-23-5	Carbon tetrachloride	N001	0.5	ug/L	U	F	0.5		valid
PLFSEEPINF	2/23/2006	06020316	000108-90-7	Chlorobenzene	N001	0.5	ug/L	U	F	0.5		valid
PLFSEEPINF	2/23/2006	06020316	000124-48-1	Chlorodibromomethane	N001	0.5	ug/L	U	F	0.5		valid
PLFSEEPINF	2/23/2006	06020316	000075-00-3	Chloroethane	N001	18	ug/L		F	0.5		valid
PLFSEEPINF	2/23/2006	06020316	000067-66-3	Chloroform	N001	0.5	ug/L	U	F	0.5		valid
PLFSEEPINF	2/23/2006	06020316	000074-87-3	Chloromethane	N001	0.5	ug/L	U	F	0.5		valid
PLFSEEPINF	2/23/2006	06020316	07440-47-3	Chromium	N001	0.0011	mg/L	J	F	0.001		valid
PLFSEEPINF	2/23/2006	06020316	000156-59-2	cis-1,2-Dichloroethene	N001	0.5	ug/L	U	F	0.5		valid
PLFSEEPINF	2/23/2006	06020316	07440-50-8	Copper	0001	0.003	mg/L	U	F	0.003		valid
PLFSEEPINF	2/23/2006	06020316	000087-68-3	Hexachlorobutadiene	N001	0.5	ug/L	U	F	0.5		valid
PLFSEEPINF	2/23/2006	06020316	07439-92-1	Lead	0001	0.0025	mg/L	U	F	0.0025		valid
PLFSEEPINF	2/23/2006	06020316	M&P XYLENE	m,p-Xylene	N001	0.35	ug/L	J	F	0.5		valid
PLFSEEPINF	2/23/2006	06020316	07439-96-5	Manganese	N001	5.68	mg/L		F	0.002		valid
PLFSEEPINF	2/23/2006	06020316	07439-97-6	Mercury	N001	0.00005	mg/L	U	F	0.00005		valid
PLFSEEPINF	2/23/2006	06020316	000075-09-2	Methylene chloride	N001	0.5	ug/L	U	F	0.5		valid
PLFSEEPINF	2/23/2006	06020316	000091-20-3	Naphthalene	N001	0.75	ug/L		F	0.5		valid
PLFSEEPINF	2/23/2006	06020316	07440-02-0	Nickel	0001	0.0082	mg/L		F	0.001		valid
PLFSEEPINF	2/23/2006	06020316	000095-47-6	o-Xylene	N001	0.5	ug/L	U	F	0.5		valid
PLFSEEPINF	2/23/2006	06020316	07782-49-2	Selenium	N001	0.06	mg/L	U	F	0.06		valid
PLFSEEPINF	2/23/2006	06020316	07440-22-4	Silver	0001	0.001	mg/L	U	F	0.001		valid
PLFSEEPINF	2/23/2006	06020316	000100-42-5	Styrene	N001	0.5	ug/L	U	F	0.5		valid
PLFSEEPINF	2/23/2006	06020316	000127-18-4	Tetrachloroethene	N001	0.5	ug/L	U	F	0.5		valid
PLFSEEPINF	2/23/2006	06020316	07440-28-0	Thallium	N001	0.0199	mg/L	J	F	0.005		valid
PLFSEEPINF	2/23/2006	06020316	000108-88-3	Toluene	N001	0.5	ug/L	U	F	0.5		valid
PLFSEEPINF	2/23/2006	06020316	000100-41-4	Total Xylene	N001	0.5	ug/L	U	F	0.5		valid
PLFSEEPINF	2/23/2006	06020316	000156-60-5	trans-1,2-Dichloroethene	N001	0.5	ug/L	U	F	0.5		valid
PLFSEEPINF	2/23/2006	06020316	000079-01-6	Trichloroethene	N001	0.5	ug/L	U	F	0.5		valid

Table 1. Analytical results for Water Samples - 1st Quarter CY06

LOCATION_CODE	DATE_SAMPLED	LAB_REQUISITION_NUMBER	CAS	ANALYTE	SAMPLE_ID	RESULT	WATER_UNIT_OF_MEASURE	LAB_QUALIFIERS	SAMPLE_TYPE	DETECTION_LIMIT	UNCERTAINTY	DATA_VALIDATION_QUALIFIERS
PLFSEEPINF	2/23/2006	06020316	U-234	Uranium-234	N001	3.310	pCi/L		F	0.592	0.494	valid
PLFSEEPINF	2/23/2006	06020316	U-235+236	Uranium-235/236	N001	0.299	pCi/L		F	0.287	0.162	J
PLFSEEPINF	2/23/2006	06020316	U-238	Uranium-238	N001	2.940	pCi/L		F	0.332	0.463	valid
PLFSEEPINF	2/23/2006	06020316	000075-01-4	Vinyl chloride	N001	1.4	ug/L		F	0.5		valid
PLFSEEPINF	2/23/2006	06020316	07440-66-6	Zinc	0001	0.0076	mg/L	J	F	0.002		U
PLFSYSEFF	2/23/2006	06020316	000071-55-6	1,1,1-Trichloroethane	N001	0.5	ug/L	U	F	0.5		valid
PLFSYSEFF	2/23/2006	06020316	000079-34-5	1,1,2,2-Tetrachloroethane	N001	0.5	ug/L	U	F	0.5		valid
PLFSYSEFF	2/23/2006	06020316	000079-00-5	1,1,2-Trichloroethane	N001	0.5	ug/L	U	F	0.5		valid
PLFSYSEFF	2/23/2006	06020316	000075-34-3	1,1-Dichloroethane	N001	0.47	ug/L	J	F	0.5		valid
PLFSYSEFF	2/23/2006	06020316	000075-35-4	1,1-Dichloroethene	N001	0.5	ug/L	U	F	0.5		valid
PLFSYSEFF	2/23/2006	06020316	000120-82-1	1,2,4-Trichlorobenzene	N001	0.5	ug/L	U	F	0.5		valid
PLFSYSEFF	2/23/2006	06020316	000096-12-8	1,2-Dibromo-3-chloropropane	N001	0.5	ug/L	U	F	0.5		valid
PLFSYSEFF	2/23/2006	06020316	000106-93-4	1,2-Dibromoethane	N001	0.5	ug/L	U	F	0.5		valid
PLFSYSEFF	2/23/2006	06020316	000095-50-1	1,2-Dichlorobenzene	N001	0.5	ug/L	U	F	0.5		valid
PLFSYSEFF	2/23/2006	06020316	000107-06-2	1,2-Dichloroethane	N001	0.5	ug/L	U	F	0.5		valid
PLFSYSEFF	2/23/2006	06020316	000078-87-5	1,2-Dichloropropane	N001	0.5	ug/L	U	F	0.5		valid
PLFSYSEFF	2/23/2006	06020316	000122-66-7	1,2-Diphenylhydrazine	N001	10	ug/L	U	F	10		valid
PLFSYSEFF	2/23/2006	06020316	000541-73-1	1,3-Dichlorobenzene	N001	0.5	ug/L	U	F	0.5		valid
PLFSYSEFF	2/23/2006	06020316	000106-46-7	1,4-Dichlorobenzene	N001	0.5	ug/L	U	F	0.5		valid
PLFSYSEFF	2/23/2006	06020316	000105-67-9	2, 4-Dimethylphenol	N001	10	ug/L	U	F	10		valid
PLFSYSEFF	2/23/2006	06020316	000088-06-2	2,4,6-Trichlorophenol	N001	10	ug/L	U	F	10		valid
PLFSYSEFF	2/23/2006	06020316	000120-83-2	2,4-Dichlorophenol	N001	10	ug/L	U	F	10		valid
PLFSYSEFF	2/23/2006	06020316	000051-28-5	2,4-Dinitrophenol	N001	20	ug/L	U	F	20		valid
PLFSYSEFF	2/23/2006	06020316	000121-14-2	2,4-Dinitrotoluene	N001	10	ug/L	U	F	10		valid
PLFSYSEFF	2/23/2006	06020316	000606-20-2	2,6-Dinitrotoluene	N001	10	ug/L	U	F	10		valid
PLFSYSEFF	2/23/2006	06020316	000078-93-3	2-Butanone	N001	0.58	ug/L	J	F	1		valid
PLFSYSEFF	2/23/2006	06020316	000091-58-7	2-Chloronaphthalene	N001	1	ug/L	U	F	1		valid
PLFSYSEFF	2/23/2006	06020316	000095-57-8	2-Chlorophenol	N001	10	ug/L	U	F	10		valid
PLFSYSEFF	2/23/2006	06020316	000095-48-7	2-Methylphenol	N001	10	ug/L	U	F	10		valid
PLFSYSEFF	2/23/2006	06020316	000091-94-1	3,3'-Dichlorobenzidine	N001	10	ug/L	U	F	10		valid
PLFSYSEFF	2/23/2006	06020316	000072-54-8	4,4'-DDD	N001	10	ug/L	U	F	10		valid
PLFSYSEFF	2/23/2006	06020316	000072-55-9	4,4'-DDE	N001	10	ug/L	U	F	10		valid
PLFSYSEFF	2/23/2006	06020316	000050-29-3	4,4'-DDT	N001	10	ug/L	U	F	10		valid
PLFSYSEFF	2/23/2006	06020316	000534-52-1	4,6-Dinitro-2-methyl phenol	N001	10	ug/L	U	F	10		valid
PLFSYSEFF	2/23/2006	06020316	000059-50-7	4-Chloro-3-methylphenol	N001	10	ug/L	U	F	10		valid
PLFSYSEFF	2/23/2006	06020316	000108-10-1	4-Methyl-2-Pentanone	N001	1	ug/L	U	F	1		valid
PLFSYSEFF	2/23/2006	06020316	000100-02-7	4-Nitrophenol	N001	10	ug/L	U	F	10		valid
PLFSYSEFF	2/23/2006	06020316	000083-32-9	Acenaphthene	N001	0.55	ug/L	J	F	1		valid
PLFSYSEFF	2/23/2006	06020316	000208-96-8	Acenaphthylene	N001	1	ug/L	U	F	1		valid
PLFSYSEFF	2/23/2006	06020316	000067-64-1	Acetone	N001	0.64	ug/L	J	F	1		valid
PLFSYSEFF	2/23/2006	06020316	000309-00-2	Aldrin	N001	10	ug/L	U	F	10		valid
PLFSYSEFF	2/23/2006	06020316	000319-84-6	alpha-BHC	N001	10	ug/L	U	F	10		valid
PLFSYSEFF	2/23/2006	06020316	07429-90-5	Aluminum	0001	0.068	mg/L	U	F	0.068		valid
PLFSYSEFF	2/23/2006	06020316	000120-12-7	Anthracene	N001	1	ug/L	U	F	1		valid
PLFSYSEFF	2/23/2006	06020316	07440-36-0	Antimony	N001	0.0056	mg/L	J	F	0.004		valid
PLFSYSEFF	2/23/2006	06020316	07440-38-2	Arsenic	N001	0.0181	mg/L		F	0.006		valid
PLFSYSEFF	2/23/2006	06020316	07440-39-3	Barium	N001	0.408	mg/L		F	0.001		valid
PLFSYSEFF	2/23/2006	06020316	000056-55-3	Benz(a)anthracene	N001	1	ug/L	U	F	1		valid
PLFSYSEFF	2/23/2006	06020316	000071-43-2	Benzene	N001	0.5	ug/L	U	F	0.5		valid
PLFSYSEFF	2/23/2006	06020316	000092-87-5	Benzidine	N001	50	ug/L	U	F	50		valid
PLFSYSEFF	2/23/2006	06020316	000050-32-8	Benzo(a)pyrene	N001	1	ug/L	U	F	1		valid
PLFSYSEFF	2/23/2006	06020316	000205-99-2	Benzo(b)fluoranthene	N001	1	ug/L	U	F	1		valid
PLFSYSEFF	2/23/2006	06020316	000191-24-2	Benzo(g,h,i)Perylene	N001	1	ug/L	U	F	1		valid
PLFSYSEFF	2/23/2006	06020316	000207-08-9	Benzo(k)fluoranthene	N001	1	ug/L	U	F	1		valid
PLFSYSEFF	2/23/2006	06020316	07440-41-7	Beryllium	N001	0.001	mg/L	U	F	0.001		valid
PLFSYSEFF	2/23/2006	06020316	000319-85-7	beta-BHC	N001	10	ug/L	U	F	10		valid
PLFSYSEFF	2/23/2006	06020316	000111-44-4	Bis(2-chloroethyl) ether	N001	10	ug/L	U	F	10		valid
PLFSYSEFF	2/23/2006	06020316	000108-60-1	Bis(2-chloroisopropyl) ether	N001	10	ug/L	U	F	10		valid
PLFSYSEFF	2/23/2006	06020316	000117-81-7	Bis(2-ethylhexyl) phthalate	N001	10	ug/L	U	F	10		valid
PLFSYSEFF	2/23/2006	06020316	07440-42-8	Boron	N001	1.93	mg/L		F	0.01		valid
PLFSYSEFF	2/23/2006	06020316	000075-27-4	Bromodichloromethane	N001	0.5	ug/L	U	F	0.5		valid
PLFSYSEFF	2/23/2006	06020316	000075-25-2	Bromoform	N001	0.5	ug/L	U	F	0.5		valid
PLFSYSEFF	2/23/2006	06020316	000074-83-9	Bromomethane	N001	0.5	ug/L	U	F	0.5		valid
PLFSYSEFF	2/23/2006	06020316	000085-68-7	Butyl benzyl phthalate	N001	10	ug/L	U	F	10		valid
PLFSYSEFF	2/23/2006	06020316	07440-43-9	Cadmium	0001	0.002	mg/L	J	F	0.001		valid
PLFSYSEFF	2/23/2006	06020316	000075-15-0	Carbon Disulfide	N001	1	ug/L	U	F	1		valid
PLFSYSEFF	2/23/2006	06020316	000056-23-5	Carbon tetrachloride	N001	0.5	ug/L	U	F	0.5		valid
PLFSYSEFF	2/23/2006	06020316	000108-90-7	Chlorobenzene	N001	0.5	ug/L	U	F	0.5		valid
PLFSYSEFF	2/23/2006	06020316	000124-48-1	Chlorodibromomethane	N001	0.5	ug/L	U	F	0.5		valid
PLFSYSEFF	2/23/2006	06020316	000075-00-3	Chloroethane	N001	3.7	ug/L		F	0.5		valid
PLFSYSEFF	2/23/2006	06020316	000067-66-3	Chloroform	N001	0.5	ug/L	U	F	0.5		valid
PLFSYSEFF	2/23/2006	06020316	000074-87-3	Chloromethane	N001	0.5	ug/L	U	F	0.5		valid
PLFSYSEFF	2/23/2006	06020316	07440-47-3	Chromium	N001	0.0015	mg/L	J	F	0.001		valid
PLFSYSEFF	2/23/2006	06020316	000218-01-9	Chrysene	N001	1	ug/L	U	F	1		valid
PLFSYSEFF	2/23/2006	06020316	000156-59-2	cis-1,2-Dichloroethene	N001	0.5	ug/L	U	F	0.5		valid
PLFSYSEFF	2/23/2006	06020316	07440-50-8	Copper	0001	0.003	mg/L	U	F	0.003		valid
PLFSYSEFF	2/23/2006	06020316	000053-70-3	Dibenz(a,h)anthracene	N001	1	ug/L	U	F	1		valid
PLFSYSEFF	2/23/2006	06020316	000060-57-1	Dieldrin	N001	10	ug/L	U	F	10		valid
PLFSYSEFF	2/23/2006	06020316	000084-66-2	Diethyl phthalate	N001	10	ug/L	U	F	10		valid
PLFSYSEFF	2/23/2006	06020316	000131-11-3	Dimethyl phthalate	N001	10	ug/L	U	F	10		valid
PLFSYSEFF	2/23/2006	06020316	000084-74-2	Di-n-butyl phthalate	N001	10	ug/L	U	F	10		valid

Table 1. Analytical results for Water Samples - 1st Quarter CY06

LOCATION_CODE	DATE_SAMPLED	LAB_REQUISITION_NUMBER	CAS	ANALYTE	SAMPLE_ID	RESULT	WATER_UNIT_OF_MEASURE	LAB_QUALIFIERS	SAMPLE_TYPE	DETECTION_LIMIT	UNCERTAINTY	DATA_VALIDATION_QUALIFIERS
PLFSYSEFF	2/23/2006	06020316	001031-07-8	Endosulfan sulfate	N001	10	ug/L	U	F	10		valid
PLFSYSEFF	2/23/2006	06020316	000072-20-8	Endrin	N001	10	ug/L	U	F	10		valid
PLFSYSEFF	2/23/2006	06020316	007421-93-4	Endrin aldehyde	N001	10	ug/L	U	F	10		valid
PLFSYSEFF	2/23/2006	06020316	000206-44-0	Fluoranthene	N001	1	ug/L	U	F	1		valid
PLFSYSEFF	2/23/2006	06020316	000058-89-9	gamma-BHC (Lindane)	N001	10	ug/L	U	F	10		valid
PLFSYSEFF	2/23/2006	06020316	000076-44-8	Heptachlor	N001	10	ug/L	U	F	10		valid
PLFSYSEFF	2/23/2006	06020316	001024-57-3	Heptachlor epoxide	N001	10	ug/L	U	F	10		valid
PLFSYSEFF	2/23/2006	06020316	000118-74-1	Hexachlorobenzene	N001	10	ug/L	U	F	10		valid
PLFSYSEFF	2/23/2006	06020316	000087-68-3	Hexachlorobutadiene	N001	0.5	ug/L	U	F	0.5		valid
PLFSYSEFF	2/23/2006	06020316	000077-47-4	Hexachlorocyclopentadiene	N001	10	ug/L	U	F	10		valid
PLFSYSEFF	2/23/2006	06020316	000193-39-5	Indeno(1,2,3-cd)pyrene	N001	1	ug/L	U	F	1		valid
PLFSYSEFF	2/23/2006	06020316	000078-59-1	Isophorone	N001	10	ug/L	U	F	10		valid
PLFSYSEFF	2/23/2006	06020316	07439-92-1	Lead	0001	0.0025	mg/L	U	F	0.0025		valid
PLFSYSEFF	2/23/2006	06020316	M&P_XYLENE	m,p-Xylene	N001	0.5	ug/L	U	F	0.5		valid
PLFSYSEFF	2/23/2006	06020316	07439-96-5	Manganese	N001	5.65	mg/L		F	0.002		valid
PLFSYSEFF	2/23/2006	06020316	07439-97-6	Mercury	N001	0.00005	mg/L	U	F	0.00005		valid
PLFSYSEFF	2/23/2006	06020316	000075-09-2	Methylene chloride	N001	0.5	ug/L	U	F	0.5		valid
PLFSYSEFF	2/23/2006	06020316	000091-20-3	Naphthalene	N001	0.5	ug/L	U	F	0.5		valid
PLFSYSEFF	2/23/2006	06020316	07440-02-0	Nickel	0001	0.0086	mg/L		F	0.001		valid
PLFSYSEFF	2/23/2006	06020316	000924-16-3	N-Nitrosodibutylamine	N001	10	ug/L	U	F	10		valid
PLFSYSEFF	2/23/2006	06020316	000062-75-9	N-Nitrosodimethylamine	N001	10	ug/L	U	F	10		valid
PLFSYSEFF	2/23/2006	06020316	000621-64-7	N-Nitrosodi-n-propylamine	N001	10	ug/L	U	F	10		valid
PLFSYSEFF	2/23/2006	06020316	000095-47-6	o-Xylene	N001	0.5	ug/L	U	F	0.5		valid
PLFSYSEFF	2/23/2006	06020316	000087-86-5	Pentachlorophenol	N001	10	ug/L	U	F	10		valid
PLFSYSEFF	2/23/2006	06020316	000085-01-8	Phenanthrene	N001	0.36	ug/L	J	F	1		valid
PLFSYSEFF	2/23/2006	06020316	000108-95-2	Phenol	N001	10	ug/L	U	F	10		valid
PLFSYSEFF	2/23/2006	06020316	000129-00-0	Pyrene	N001	1	ug/L	U	F	1		valid
PLFSYSEFF	2/23/2006	06020316	07782-49-2	Selenium	N001	0.06	mg/L	U	F	0.06		valid
PLFSYSEFF	2/23/2006	06020316	07440-22-4	Silver	0001	0.0012	mg/L	J	F	0.001		valid
PLFSYSEFF	2/23/2006	06020316	000100-42-5	Styrene	N001	0.5	ug/L	U	F	0.5		valid
PLFSYSEFF	2/23/2006	06020316	000127-18-4	Tetrachloroethene	N001	0.5	ug/L	U	F	0.5		valid
PLFSYSEFF	2/23/2006	06020316	07440-28-0	Thallium	N001	0.0202	mg/L		F	0.005		valid
PLFSYSEFF	2/23/2006	06020316	000108-88-3	Toluene	N001	0.5	ug/L	U	F	0.5		valid
PLFSYSEFF	2/23/2006	06020316	000100-41-4	Total Xylene	N001	0.5	ug/L	U	F	0.5		valid
PLFSYSEFF	2/23/2006	06020316	000156-60-5	trans-1,2-Dichloroethene	N001	0.5	ug/L	U	F	0.5		valid
PLFSYSEFF	2/23/2006	06020316	000079-01-6	Trichloroethene	N001	0.5	ug/L	U	F	0.5		valid
PLFSYSEFF	2/23/2006	06020316	U-234	Uranium-234	N001	4.350	pCi/L		F	0.349	0.433	valid
PLFSYSEFF	2/23/2006	06020316	U-235+236	Uranium-235/236	N001	0.162	pCi/L	U	F	0.169	0.113	valid
PLFSYSEFF	2/23/2006	06020316	U-238	Uranium-238	N001	3.920	pCi/L		F	0.196	0.408	valid
PLFSYSEFF	2/23/2006	06020316	000075-01-4	Vinyl chloride	N001	0.23	ug/L	J	F	0.5		valid
PLFSYSEFF	2/23/2006	06020316	07440-66-6	Zinc	0001	0.0082	mg/L	J	F	0.002		U
PLFSYSEFF	3/20/2006	06030333	07440-42-8	Boron	N001	1.6	mg/L		F	0.01		valid
PLFSYSEFF	3/20/2006	06030333	07439-96-5	Manganese	N001	5.43	mg/L		F	0.002		valid
SPPDISCHARGE GALLER	1/23/2006	06010303	NO3+NO2 AS N	Nitrate + Nitrite as Nitrogen	N001	620	mg/L		F	3.8		valid
SPPDISCHARGE GALLER	1/23/2006	06010303	07440-61-1	Uranium	N001	0.05	mg/L		F	0.00005		valid
SPPMM01	1/23/2006	06010303	NO3+NO2 AS N	Nitrate + Nitrite as Nitrogen	N001	390	mg/L		F	1.9		valid
SPPMM01	1/23/2006	06010303	07440-61-1	Uranium	N001	0.0015	mg/L		F	0.00005		valid
SPPMM02	1/23/2006	06010303	NO3+NO2 AS N	Nitrate + Nitrite as Nitrogen	N001	220	mg/L		F	1.9		valid
SPPMM02	1/23/2006	06010303	07440-61-1	Uranium	N001	0.036	mg/L		F	0.00005		valid
SW018	11/14/2005	06010288	AM-241	Americium-241	N001	-0.001	pCi/L	U	F	0.026	0.010	valid
SW018	11/14/2005	06010288	PU-239,240	Plutonium-239, 240	N001	-0.002	pCi/L	U	F	0.025	0.015	valid
SW018	11/14/2005	06010288	U-234	Uranium-234	N001	3.110	pCi/L		F	0.079	0.174	valid
SW018	11/14/2005	06010288	U-235+236	Uranium-235/236	N001	0.156	pCi/L		F	0.038	0.048	valid
SW018	11/14/2005	06010288	U-238	Uranium-238	N001	3.150	pCi/L		F	0.044	0.174	valid
SW018	12/27/2005	06020312	AM-241	Americium-241	N001	-0.004	pCi/L	U	F	0.030	0.015	valid
SW018	12/27/2005	06020312	PU-239,240	Plutonium-239, 240	N001	0.004	pCi/L	U	F	0.029	0.011	valid
SW018	12/27/2005	06020312	U-234	Uranium-234	N001	3.560	pCi/L		F	0.442	0.447	valid
SW018	12/27/2005	06020312	U-235+236	Uranium-235/236	N001	0.206	pCi/L	U	F	0.214	0.143	valid
SW018	12/27/2005	06020312	U-238	Uranium-238	N001	4.020	pCi/L		F	0.248	0.464	valid
SW093	10/26/2005	06010299	AM-241	Americium-241	N001	-0.002	pCi/L	U	F	0.028	0.006	valid
SW093	10/26/2005	06010299	07440-41-7	Beryllium	N001	0.001	mg/L	U	F	0.001		valid
SW093	10/26/2005	06010299	07440-43-9	Cadmium	0001	0.0001	mg/L	U	F	0.0001		valid
SW093	10/26/2005	06010299	07440-47-3	Chromium	N001	0.001	mg/L	U	F	0.001		valid
SW093	10/26/2005	06010299	HARDNESS	Hardness	N001	523	mg/L		F	10		valid
SW093	10/26/2005	06010299	PU-239,240	Plutonium-239, 240	N001	0.006	pCi/L	U	F	0.028	0.009	valid
SW093	10/26/2005	06010299	07440-22-4	Silver	0001	0.0002	mg/L	U	F	0.0002		valid
SW093	10/26/2005	06010299	U-234	Uranium-234	N001	2.910	pCi/L		F	0.070	0.157	valid
SW093	10/26/2005	06010299	U-235+236	Uranium-235/236	N001	0.178	pCi/L		F	0.034	0.046	valid
SW093	10/26/2005	06010299	U-238	Uranium-238	N001	2.530	pCi/L		F	0.039	0.146	valid
SW093	1/5/2006	06020312	AM-241	Americium-241	N001	0.012	pCi/L	U	F	0.039	0.037	valid
SW093	1/5/2006	06020312	07440-41-7	Beryllium	N001	0.001	mg/L	U	F	0.001		valid
SW093	1/5/2006	06020312	07440-43-9	Cadmium	0001	0.0001	mg/L	U	F	0.0001		valid
SW093	1/5/2006	06020312	07440-47-3	Chromium	N001	0.0019	mg/L	B	F	0.001		valid
SW093	1/5/2006	06020312	HARDNESS	Hardness	N001	700	mg/L		F	5		valid
SW093	1/5/2006	06020312	PU-239,240	Plutonium-239, 240	N001	0.025	pCi/L	U	F	0.028	0.016	valid
SW093	1/5/2006	06020312	07440-22-4	Silver	0001	0.0002	mg/L	U	F	0.0002		valid
SW093	1/5/2006	06020312	U-234	Uranium-234	N001	5.000	pCi/L		F	0.818	0.713	valid
SW093	1/5/2006	06020312	U-235+236	Uranium-235/236	N001	0.349	pCi/L	U	F	0.397	0.206	valid
SW093	1/5/2006	06020312	U-238	Uranium-238	N001	4.850	pCi/L		F	0.459	0.699	valid
SW093	2/9/2006	06030322	AM-241	Americium-241	N001	-0.002	pCi/L	U	F	0.027	0.007	valid
SW093	2/9/2006	06030322	07440-41-7	Beryllium	N001	0.001	mg/L	U	F	0.001		valid

LOCATION_CODE	DATE_SAMPLED	LAB_REQUISITION_NUMBER	CAS	ANALYTE	SAMPLE_ID	RESULT	WATER_UNIT_OF_MEASURE	LAB_QUALIFIERS	SAMPLE_TYPE	DETECTION_LIMIT	UNCERTAINTY	DATA_VALIDATION_QUALIFIERS
SW093	2/9/2006	06030322	07440-43-9	Cadmium	0001	0.0001	mg/L	U	F	0.0001		valid
SW093	2/9/2006	06030322	07440-47-3	Chromium	N001	0.001	mg/L	U	F	0.001		valid
SW093	2/9/2006	06030322	HARDNESS	Hardness	N001	675	mg/L		F	5		valid
SW093	2/9/2006	06030322	PU-239,240	Plutonium-239, 240	N001	-0.028	pCi/L	U	F	0.027	0.026	valid
SW093	2/9/2006	06030322	07440-22-4	Silver	0001	0.0002	mg/L	U	F	0.0002		valid
SW093	2/9/2006	06030322	U-234	Uranium-234	N001	4.470	pCi/L		F	0.082	0.211	valid
SW093	2/9/2006	06030322	U-235+236	Uranium-235/236	N001	0.194	pCi/L		F	0.040	0.051	valid
SW093	2/9/2006	06030322	U-238	Uranium-238	N001	3.850	pCi/L		F	0.046	0.196	valid
SW093	3/2/2006	06030336	AM-241	Americium-241	N001	-0.008	pCi/L	U	F	0.029	0.014	valid
SW093	3/2/2006	06030336	07440-41-7	Beryllium	N001	0.001	mg/L	U	F	0.001		valid
SW093	3/2/2006	06030336	07440-43-9	Cadmium	0001	0.0001	mg/L	U	F	0.0001		valid
SW093	3/2/2006	06030336	07440-47-3	Chromium	N001	0.0014	mg/L	B	F	0.001		valid
SW093	3/2/2006	06030336	HARDNESS	Hardness	N001	591	mg/L		F	10		valid
SW093	3/2/2006	06030336	PU-239,240	Plutonium-239, 240	N001	0.004	pCi/L	U	F	0.027	0.017	valid
SW093	3/2/2006	06030336	07440-22-4	Silver	0001	0.0002	mg/L	U	F	0.0002		valid
SW093	3/2/2006	06030336	U-234	Uranium-234	N001	3.850	pCi/L		F	0.129	0.247	valid
SW093	3/2/2006	06030336	U-235+236	Uranium-235/236	N001	0.191	pCi/L		F	0.063	0.061	valid
SW093	3/2/2006	06030336	U-238	Uranium-238	N001	3.430	pCi/L		F	0.073	0.232	valid

**EXPLANATION**

**SAMPLE\_ID**  
 N00x Sample was not filtered.  
 000x Sample was filtered.

**WATER\_UNIT\_OF\_MEASURE**  
 mg/L = milligrams per liter  
 pCi/L = picocuries per liter  
 ug/L = micrograms per liter

**SAMPLE\_TYPE**  
 F = Field Sample  
 D = Duplicate  
 E = Equipment Blank

**LAB\_QUALIFIERS**

*	Replicate analysis not within control limits.
+	Correlation coefficient for MSA < 0.995.
>	Result above upper detection limit.
A	TIC is a suspected aldol-condensation product.
B	Inorganic: Result is between the IDL and CRDL. Organic & Radiochemistry: Analyte also found in method blank.
C	Pesticide result confirmed by GC-MS.
D	Analyte determined in diluted sample.
E	Inorganic: Estimate value because of interference, see case narrative. Organic: Analyte exceeded calibration range of the GC-MS.
H	Holding time expired, value suspect.
I	Increased detection limit due to required dilution.
J	Estimated
M	GFAA duplicate injection precision not met.
N	Inorganic or radiochemical: Spike sample recovery not within control limits. Organic: Tentatively identified compound (TIC).
P	> 25% difference in detected pesticide or Arochlor concentrations between 2 columns.
S	Result determined by method of standard addition (MSA).
U	Analytical result below detection limit.
W	Post-digestion spike outside control limits while sample absorbance < 50% of analytical spike absorbance.
X	Laboratory defined (USEPA CLP organic) qualifier, see case narrative.
Y	Laboratory defined (USEPA CLP organic) qualifier, see case narrative.
Z	Laboratory defined (USEPA CLP organic) qualifier, see case narrative.

**DATA\_VALIDATION\_QUALIFIERS**

valid	Result is valid.
F	Low flow sampling method used.
G	Possible grout contamination, pH > 9.
J	Estimated value.
L	Less than 3 bore volumes purged prior to sampling.
Q	Qualitative result due to sampling technique
R	Unusable result.
U	Parameter analyzed for but was not detected.
X	Location is undefined.
X	Location is undefined.
999	Validation not complete

## **Assessment of April 2006 Grass Fire at the Rocky Flats Site: Modeling of Grass Fire Emissions and Discussion of Air Sampling as it Relates to a Grass Fire**

On April 2, 2006, a grass fire ignited in the northeastern quadrant of the RFS (Rocky Flats Site). A “small wildland fire” was reported at 1:46 P.M. at the end of the power line on the south side of Rock Creek at Highway 128 (next to the Colorado Department of Public Health and Environment air sampler location within the RFS boundary); firefighting teams were called in immediately and the fire was reported as controlled at approximately 8:06 P.M., having burned over a thousand acres, including a portion of the Open Space between Indiana Street and Great Western Reservoir. Winds were generally out of the northwest at speeds from 6 to 25 miles per hour with gusts reported as high as 39 miles per hour. The map attached as Figure 1 shows the extent of the burned area within the RFS boundary, and Figure 2 includes photographs taken 1 day and 24 days after the fire. Damage to property was confined to power poles, fence posts and some water monitoring equipment located in a drainage to the east of Pond B-5 on RFS itself. The cause of the fire was described in the Cherryvale Fire Report as “arc from faulty contact, broken conductor” on the power line. Regarding radiological contamination, the area on which the fire occurred is known to be only very moderately contaminated with plutonium and americium, the concentration levels in the soil being mostly at background with some small areas of contamination nearer the old industrial area approaching several picocuries per gram (pCi/g) in the surface soil. The entire northeastern Buffer Zone was covered with accumulated litter from many years of vegetative growth that had been protected from fire by policies developed following intense participatory public discussions.

A great deal of interest in this fire can be anticipated based around the question of the hazard associated with the possible release of airborne radioactive contaminants in the smoke from the fire. The discussion that follows provides general answers to that question.

### Air Quality Modeling of a Hypothetical Grass Fire at RFS

In the summer of FY 2000, Rocky Flats environmental protection staff developed an assessment of probable exposure consequences of a grass fire to firefighters who might be called to the Site. The reason for this assessment was the recognition that a fire would inevitably occur, as had been demonstrated that summer by a small fire ignited by a lightning strike in the eastern Buffer Zone. That fire was confined to about 10 acres due to the close proximity and easy access of observers and firefighting personnel on the site. Local fire teams had been called to assist in extinguishing that fire and some interest was expressed by these firemen regarding the potential radiological hazards they might have encountered.

The modeling assessment, performed for both typical and worst case meteorological conditions, estimated the concentrations to which a firefighter might be exposed should the firefighter remain in the downwind smoke plume continuously for periods of from 1 to 5 hours, and assessed the potential inhalation dose from such an exposure. The results of the modeling assessment are reported in a “White Paper on the Radiation Dose Assessment for Firefighters During a Grass Fire” (Attachment 1).

The white paper provides strong evidence that the radiological hazards of a grass fire at RFS are negligible, based on both U.S. Department of Energy (DOE) guidelines and U.S. Environmental

Protection Agency (EPA) regulations. DOE requirements provide that no member of the public is to receive a potential dose in excess of 100 millirem (mrem) per year. EPA regulations limit emissions of airborne contaminants to a level below which any member of the public would be exposed to concentrations that could result in a potential dose of 10 mrem per year via the airborne pathway.

The modeling assessment asked two fundamental questions: what air concentrations would result at breathing height in the downwind smoke plume for a fire that occurred in an area with a 1 pCi/g uniform soil contaminant concentration; and what would be the limiting uniform soil contaminant concentrations that would result in no more than a 1 mrem dose to the firefighter who remained in the plume continuously for the varying time periods of the study? The answer to the first of these questions suggested that the average concentration of plutonium and americium in air would be 0.0004 pCi/m<sup>3</sup> per pCi/g under the worst probable conditions of meteorology and exposure time. This level would result in a potential inhalation dose of 0.00066 mrem, considerably less than the 10 mrem limit to which a member of the public could be exposed for an entire year without exceedance of the EPA's airborne radionuclide dose standards. The estimates were adjusted considering the increased breathing rate of the firefighters compared to the breathing rates used to derive the EPA standard. Modeling to a dose limit of one mrem, one tenth of the EPA standard, resulted in the conclusion that this arbitrary 1 mrem dose limit would not be exceeded for a fire burning in a uniformly contaminated area of less than 115 pCi/g plutonium and less than 102 pCi/g depleted uranium (Depleted uranium is the limiting case for uranium isotope mixtures; the limiting natural uranium concentration is higher, as is the limiting concentration of enriched uranium). Americium contribution to dose is included with the plutonium.

Using these results, the probable emissions from the grass fire of April 2006 can be evaluated. Following the cleanup of the contaminated soils at RFS where some soil concentrations initially exceeded 50 pCi/g of plutonium, there are assuredly no significant contaminated surface soil areas exceeding this concentration. In the area of the burn, where project cleanup was not required, the soil concentrations are known to be very low with the average concentration over the area being less than 1 pCi/g, with much of the area showing considerably less, approaching or achieving insignificant background levels. This information, and the results of the modeling study, lead to the conclusion that no significant air concentrations resulted from radionuclide emissions during the April 2006 fire. The model results can be extended to show that maximum air concentrations would not have exceeded about 0.0004 pCi/m<sup>3</sup>, as noted above, and concentrations further downwind would have rapidly diminished due to normal dispersion of the smoke. Firefighters with higher breathing rates than the population used to establish the ambient-based standard, would have received doses considerably less than one mrem, one-tenth of the Radionuclide NESHAP (National Emission Standards for Hazardous Air Pollutants) standard upon which the concentration limits of these analyses were based.

#### Radioactive Air Sampling of Grass Fires at RFS

Routine air monitoring has been continued at RFS even though no facility exists at the Site that houses operations that would trigger a requirement for such monitoring under EPA's Radionuclide NESHAP for DOE facilities (see 40 CFR 61, subpart H). The three monitors that remain are being used to evaluate the air quality that exists following remediation of surface contamination and the consequent natural revegetation and weathering of the surface following that remediation. During development of the final 2005 Integrated Monitoring Plan, fire

scenarios were not considered as a serious driver for monitoring. The reasons for this are several-fold. First, in a grass fire, the location and magnitude of the fire, and direction of localized smoke travel are not predictable over the short-term periods of interest. Generally, the monitoring of such fires requires the use of portable equipment and dedicated staff who can move the equipment to keep it in the plume. Second, as indicated in the modeling already discussed, there is no potential for such fires to yield a significant contribution to the radionuclide emissions of the site. Finally, at the concentrations that are estimated, the high-volume air samplers that are deployed would not be able to collect enough sample to provide a measurable estimate of the radionuclide concentrations in the plume.

Regarding this last point: prior to Site closure, the radionuclide air monitoring program at RFS was designed to quantitatively detect radionuclide air concentrations at levels equivalent to those that would yield a hypothetical dose at the receptor locations (monitoring locations) of about 1 percent of the Rad-NESHAP standard *using a 30-day sampling period*. (Evaluation for compliance against the standard is based on annual exposure to the averaged air concentration.) The site chose to continue this monitoring strategy following the completion of accelerated remedial actions. One percent of the Rad-NESHAP standard, stated as an air concentration, is about  $2 \times 10^{-5}$  pCi/g of Plutonium-239. The laboratory protocols can yield approximately this detection limit for air samples that are collected for a continuous month, about 720 hours of sampling. Shorter periods of sampling at this air concentration will not normally yield sufficient material on the filter and impaction substrates to allow a quantitative estimate of the average air concentration. At the modeled maximum air concentrations estimated for this grass fire ( $0.0004 \text{ pCi/m}^3$ , as discussed above) the air sampler would have to be immersed in that average plume concentration for more than 30 hours. Realistically, fixed samplers would likely not be immersed in the maximized grass-fire smoke plume for more than 15 minutes to half an hour at RFS. Also, as previously noted, the April 2006 fire was reported as controlled in just over 6 hours, so immersion in the plume for over 30 hours would not have been possible.

In summary, a grass fire at RFS is not expected to yield detectable air concentrations in the present fixed network of samplers, nor is the network intended for that purpose.

#### Sampling During the April 2006 Grass Fire

In the April 2006 fire, only one of the three samplers appears to have been immersed in the smoke plume. Sampler S-136 is located near Indiana Street approximately a quarter mile south of Highway 128. On the date of the fire, telemetry data from this sampler indicate that it ceased operation approximately 6 minutes after the fire had been reported. (The fire was reported at approximately 1:46 P.M., the sampler stopped operating at 1:53 P.M.) Examination of the filter substrate did not indicate any discoloration that might suggest the smoke plume had been sampled. The other two samplers, S132 (located on Highway 93, upwind of the fire), and S-138 (located approximately 1 mile south of S-136 on Indiana) showed no discoloration even though both operated continuously throughout the fire. Sampler S-138 may have been immersed incidentally in the plume but at its distant proximity from the nearest approach of the fire, the smoke would have experienced considerable dispersion and consequent reduction in concentration compared to the smoke immediately in front of the fire.

The samples from the three samplers were submitted for expedited laboratory analysis even though they were likely not impacted by the fire. Both fine samples (for particles less than about

10 micrometers aerodynamic diameter) and coarse samples (particles between about 10 and 25 micrometer aerodynamic diameter) were submitted from each location. Through laboratory technician error the fine samples were accidentally discarded during initial processing (Attachment 2); the coarse samples were processed and analyzed. None of the coarse samples showed detectable concentrations of either plutonium or americium. Uranium was detected at concentrations typically seen at these sampler locations but the concentrations were not sufficiently high to yield a reliable quantitative result. Table 1 shows the results of these measurements and compares the reported results to concentrations reported since October 2005 when the three-station air monitoring network began operation.

*Table 1. Coarse particle concentrations reported for the three air monitoring locations during the April 2006 grass fire. Samplers had been running for the previous month prior to the fire and samples were submitted for laboratory analysis immediately following the fire event. These calculated concentrations are compared to those observed in the same samplers for the reported periods to-date following physical completion at RFS.*

Sampling Location, Size	Parameter	Total Concentration (pCi/m <sup>3</sup> )	Comment	Highest Reported -- October 2005 thru Dec 2005 (pCi/m <sup>3</sup> )
S-132 Coarse	Americium 241	3.145E-07	Non-detect	1.237E-06
	Plutonium 239/40	2.752E-07	Non-detect	1.434E-06
	Uranium-234	3.616E-05		1.609E-04
	Uranium-235	-4.324E-07	Non-detect	9.468E-06
	Uranium-238	3.656E-05		1.237E-04
S-136 Coarse	Americium 241	0.000E+00	Non-detect	2.358E-06
	Plutonium 239/40	-5.611E-07	Non-detect	2.358E-06
	Uranium-234	2.485E-05		4.167E-05
	Uranium-235	2.805E-07	Non-detect	5.940E-06
	Uranium-238	1.523E-05		4.520E-05
S-138 Coarse	Americium 241	1.559E-07	Non-detect	4.962E-07
	Plutonium 239/40	2.729E-06	Non-detect	1.682E-06
	Uranium-234	2.534E-05		2.928E-05
	Uranium-235	9.355E-07	Non-detect	6.451E-06
	Uranium-238	2.339E-05		3.235E-05

Note: Negative concentrations are an artifact of sampling-medium blank correction

### Discussion of Fine Particle Concentrations versus Coarse Concentrations Reported

The modeling performed for the grass fires provides additional insight into the probable relationship between what would have been observed in the fine fraction of the air sample compared to what was observed in the coarse fraction. In the modeling assessment, estimates of partitioning between fine-fraction concentrations of smoke mass and coarse-fraction concentrations were calculated. These calculations were based on Bureau of Land Management sponsored studies of grass fires of the same type as occur at RFS (see reference to Leenhouts 1998 in Attachment 1). Those calculations suggested that as much as 75 percent of the smoke mass from a grass fire will be found in the fine fraction, with the rest going to the coarse fraction.

At RFS, the mechanism for contamination of vegetative matter has been studied in some detail. Since plutonium and americium are not expected to be absorbed into the plant matter (see Kaiser-Hill, April 2002, *Actinide Migration Evaluation Pathway Analysis Summary*, with appendices), contamination of plant matter by these isotopes is understood to occur via the mechanisms of wind-blown deposition and rain splash. Comparisons of contamination on plants with that on the underlying soil have shown that the concentrations observed in plant material are roughly 18 percent, on the average, of the concentrations observed in the soil in the vicinity of the plants. In other words, if the soil is contaminated to a level of 1 pCi/g, the plant material would be expected to yield a concentration of 0.18 pCi/g or so.

There is no evidence in airborne measurements of plutonium at RFS that there is a preferential partitioning of the material into the fine fraction. To the contrary, the routine air data show about 40 percent of the contamination resides in the fine fraction and about 60 percent resides in the coarse fraction. Mass distribution studies of plutonium in resuspended soil particles show a similar result. The explanation is that the very small plutonium and americium particles released into the environment attached very quickly to larger soil particles. The resulting distribution of airborne plutonium is determined by the size distribution of the agglomerated soil particles rather than by the distribution of the plutonium itself.

The consequence of these observations for the April 2 grass fire is that the expected distribution of radioactivity in the air samples would not be expected to differ markedly from the underlying distribution of the radioactivity in the mass itself. The rain-splashed particles adhere to the plant material and would be emitted into the smoke with the soil particles as the plant material burns. The smoldering plant material that continues to emit after the passage of the flame front would likely have much less contamination associated with it since the rain-splash contaminated leaves and sheath will have been burned away in the initial fire.

#### Probable Post-Fire Air Emissions

Another potential concern from a fire on a contaminated soil surface might be the residual effects of wind-blown erosion following the fire. The amount of increased erosion and its duration is determined in part by the condition of the soil following the fire, and by the rate at which vegetative matter recovers and grows over the burned soils. From the prescribed test burn in 2000, and from the later lightning-initiated fire that same summer, RFS personnel have gathered several bits of pertinent information. As would be predicted by consideration of the amount of combustible material, the grass fires observed at RFS have not lingered for a long period of time over any one area of the soil. The result, shown in Figure 3, is that the temperature of the soil does not become so hot as to damage the root systems of typical vegetation nor is the organic matter in the soil destroyed as might be typical of a more intense fire such as that associated with a burning forest.

Evidence verifying this concept has been found following both the CY2000 fires (and others on the site) and following the subject fire of this assessment—the plant cover over the burned surface has been observed to recover very quickly and grow in a manner that could be described as “vigorous”. The net result from an air quality perspective is that the soil does not remain unusually erodible for longer than a few weeks to a few months, depending on time of year when the fire occurs. A full discussion of these effects can be found in RAC, October 1999, *Final Report: Task 3: Input and Assumptions, Radionuclide Soil Action Level Oversight Panel*; and

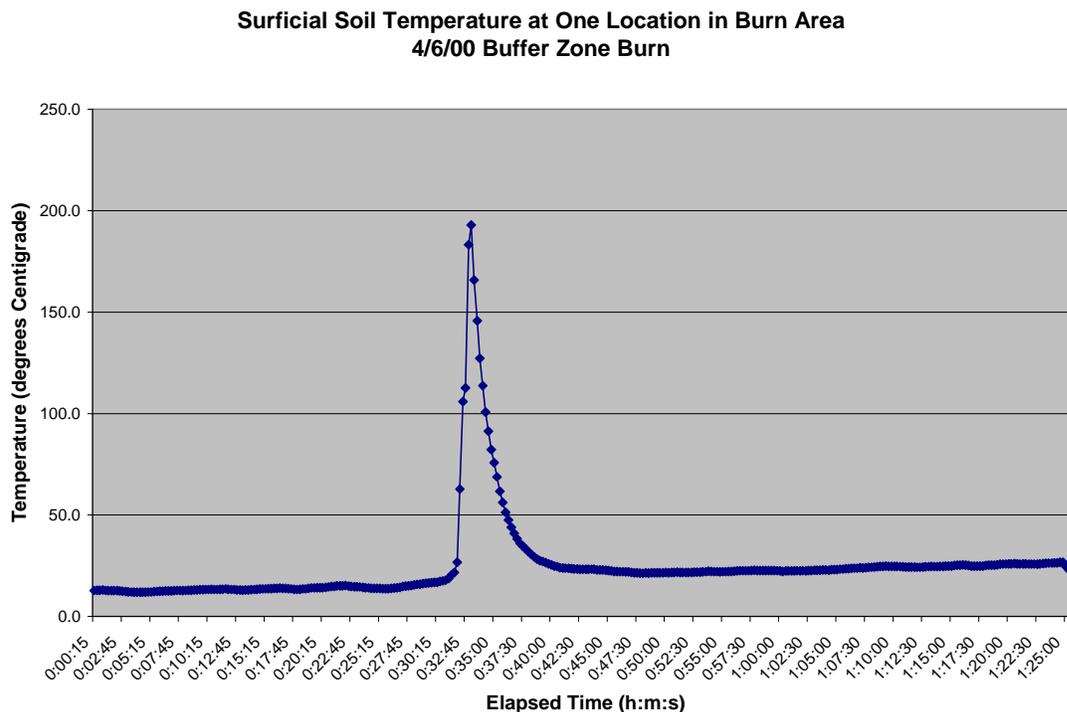


Figure 3. Soil temperature profile as a grass fire passed over a buried recording temperature sensor. Derived from data recorded during the prescribed test burn in Spring of CY 2000.

### Air Monitoring Recommendation

In consideration of the information presented above, no viable reason for air monitoring of grass fires at RFS can be justified. While such monitoring would possibly satisfy an “academic” curiosity regarding what is contained in the samples, the data and investigations already performed suggest the minor residual contamination at RFS does not have sufficient potential to produce air concentrations of plutonium and associated americium of concern, based on existing regulatory guidance.

# April 2, 2006 Wildfire at Rocky Flats

Figure 1

-  April 2, 2006 Wildfire Area
-  Lakes & ponds
-  Streams & ditches
-  Boundary Fence
-  Roads
-  Contours (20 ft. intervals)

April 2, 2006 Wildfire Area  
(Approx. 852 acres burned  
at Rocky Flats)

DATA SOURCE BASE FEATURES:  
Wetlands data surveyed, compiled, and assembled  
by the U.S. Army Corps of Engineers, 1994.  
Buildings, fences, hydrography, roads and other  
structures from 1994 aerial fly-over data  
captured by EG&G RSL, Las Vegas.  
Digitized from the orthophotographs, 1/95.



900 0 900 Feet

State Plane Coordinate Projection  
Colorado Central Zone  
Datum: NAD27

U.S. Department of Energy  
Rocky Flats Environmental Technology Site

Prepared  
by:

Professional Environmental Group, L.L.C.

MAP ID: 06-0027

April 4, 2006

C:\Projects\FY2006\06-0027\Wildfire040206.apr-April 2, 2006 Wildfire

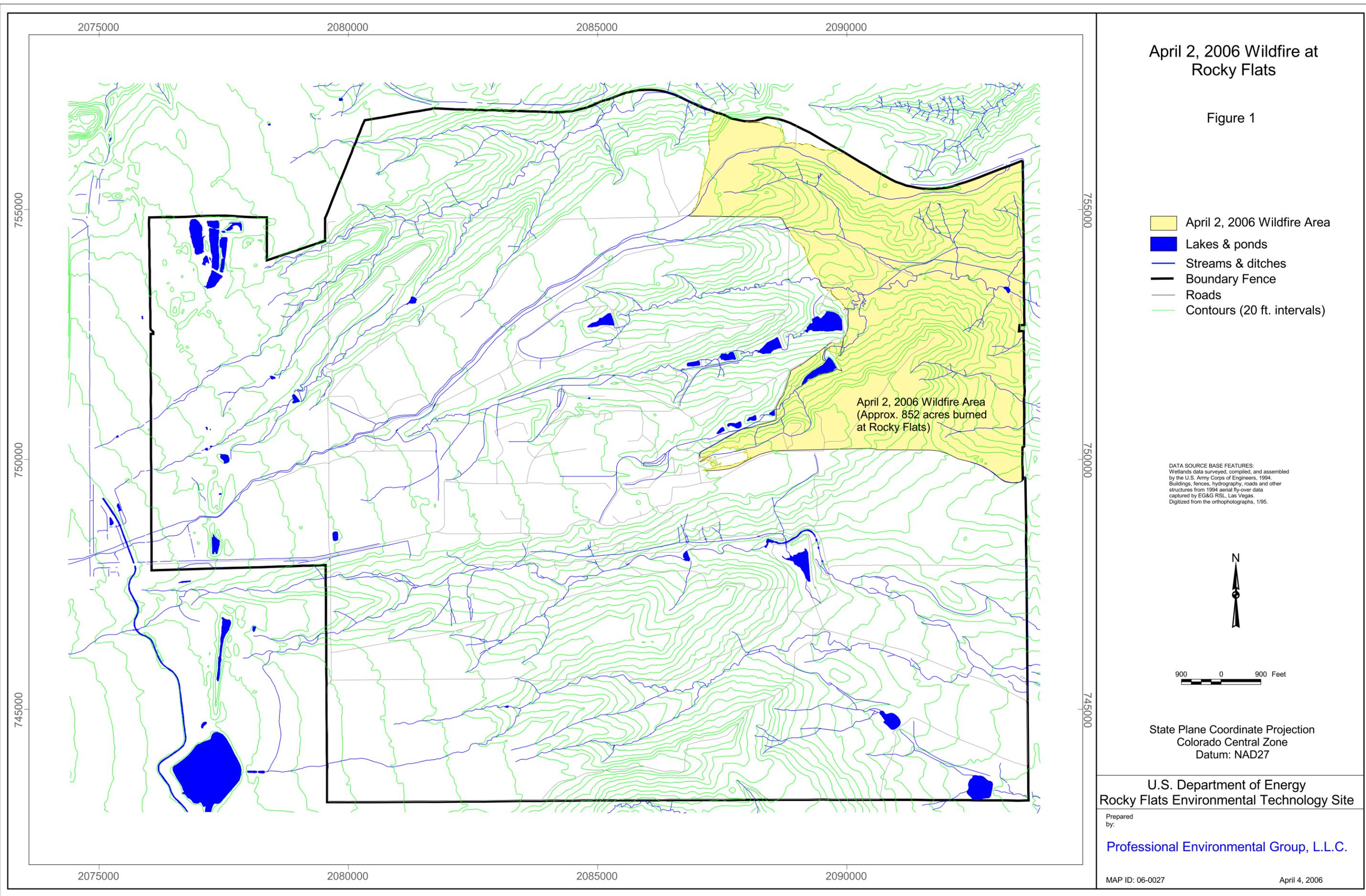


Figure 2. Photos from burned area after 1 day (April 3) and 24 days (April 26).



April 3, 2006 - Walnut Creek looking NE from A-4 dam.



April 26, 2006 - Walnut Creek looking NE from A-4 dam.



April 3, 2006 - Walnut Creek looking SE from A-4 dam.



April 26, 2006 - Walnut Creek looking SE from A-4 dam.

Figure 2. Photos from burned area after 1 day (April 3) and 24 days (April 26).



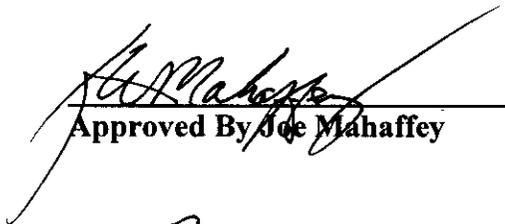
April, 3, 2006 –View NW from near surface water station GS03. April, 26, 2006 –View NW from near surface water station GS03.

## **Attachment 1**

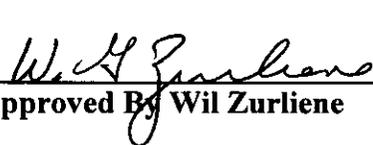
WHITE PAPER  
ON THE  
RADIATION DOSE ASSESSMENT FOR FIREFIGHTERS  
DURING A GRASS FIRE

  
Prepared By Rick Roberts Date 12/1/00

  
Reviewed By Ed Wilkés Date 1 DEC 2000

  
Approved By Joe Mahaffey Date 12-5-00

  
Approved By Bob Nininger Date 12/14/00

  
Approved By Wil Zurliene Date 01/09/01



# **RADIATION DOSE ASSESSMENT FOR FIREFIGHTERS DURING A GRASS FIRE**

## Introduction

A radiation dose assessment was performed for firefighters at the Rocky Flats Environmental Technology Site (RFETS) trying to extinguish a grass fire. This dose assessment is being performed to assure that firefighters would not exceed any radiation dose limits. This radiation dose assessment will be used to delineate areas at RFETS where firefighters would be advised to not follow a grass fire based on increased radiation dose potential.

Radiation dose could be received by the firefighter through the inhalation of resuspended radioactive material. This resuspended radioactive material augments naturally occurring radioactive material in the air. For the purposes of this study, the radiation dose to firefighters located adjacent to a grass fire will be assessed so that the maximum radiation dose to the firefighter is estimated. Conservative assumptions were made in the dose assessment to assure that radiation dose to the firefighter was overestimated in the calculations.

It is recommended that the "Soil Contamination Area" (SCA) radiological posting limits be used as the demarcation where firefighters should not follow a grass fire based on potential radiation dose. SCA posting limits for Pu-239/Am-241, enriched uranium and depleted uranium in surface soils have been set at 115 pCi Pu-239/gram soil, 188 pCi Total Enriched U/gram soil and 102 pCi Total Depleted U/gram soil, respectively, based on soil action levels prescribed presently in the Rocky Flats Cleanup Agreement (RFCA). By following this recommendation, a firefighter should not receive more than 1 mrem of radiation dose while extinguishing a grass fire at RFETS (See Table 1, "Allowable Soil Concentration Based on Radiation Dose to Firefighters From Grass Fires.").

The radiation dose assessment was performed by: 1) defining the locations where individuals could receive radiation dose, 2) calculating the amount of radioactive material in air at this location during grass fires and 3) computing the radiation dose with its associated acceptable soil concentration. Each of these steps is discussed below.

## Location of Individuals

In order to assess the radiation dose to a firefighter, the location of the firefighter must first be defined. The maximum radiation dose would be received by a firefighter directly adjacent to the grass fire and downwind since these individuals would be exposed to the highest air concentrations of radioactive material. For conservatism, it is assumed that a firefighter is located immediately downwind of the burning grass for the duration of the grass-burning episode. It is also assumed that this firefighter is not wearing any type of

respiratory protection. It should be noted that normal fire fighting methods do not place the firefighters in the path of the fire or the direct smoke plume from the fire.

### Air Concentrations at Firefighter Location

Radioactive material present in the environment is resuspended and transported downwind during a grass burning episode. By knowing the amount of radioactive material in the grass, the concentration of radioactive material in air can be calculated using resuspension factors applicable to a fire. The firefighter can subsequently inhale some fraction of this radioactive material in the air.

This dose assessment is based on a computer model of emissions from a series of hypothetical fire and atmospheric conditions (See Attachment A – “Hypothetical Wildfire Air Modeling Analysis.”). For this radiation dose assessment, the concentration of radioactive material in air is maximized. By modeling, the firefighter immediately downwind of the fire is exposed for several different time-periods and for several different wind conditions in this assessment. To capture a range of air concentrations, a grass fire duration of 1, 2 and 5 hours is assessed for average and worst-case conditions.

### Radiation Dose

To calculate radiation dose, the concentration of radioactive material in the air is initially multiplied by the firefighters breathing rate and the duration of the grass fire. This product will be the estimated amount of radioactive material inhaled. This amount inhaled is then multiplied by a dose conversion factor to calculate radiation dose. The radiation dose to the firefighters from plutonium, americium and uranium are outlined in Table 2, “Radiation Dose from Plutonium & Americium to Firefighters Due to Inhalation of Particulates During a Grass Fire,” Table 4, “Radiation Dose from Enriched Uranium to Firefighters Due to Inhalation of Particulates During a Grass Fire,” and Table 5, “Radiation Dose from Depleted Uranium to Firefighters Due to Inhalation of Particulates During a Grass Fire.”

The firefighters at the boundary of the burn site will inhale at a rate of 3.2 m<sup>3</sup>/hr. The firefighters inhalation rate is indicative of a short term, heavy activity inhalation rate. This inhalation rate was taken from EPA’s “Exposure Factors Handbook,” dated August 1997 (EPA/600/P-95/002).

The radiation Dose Conversion Factor (DCF) is used to convert the amount of radioactive material taken into the body into a radiation dose. The inhalation DCF used to calculate radiation dose for Am-241, Pu-239, U-234, U-235 and U-238 were taken from EPA’s Federal Guidance Report No. 11, “Limiting Values of Radionuclide Intake and Air Concentration and Dose Conversion Factors for Inhalation, Submersion, and Ingestion,” dated September, 1988 (EPA-520/1-88-020). The inhalation DCF used to calculate

radiation dose was the highest DCF available and corresponded to the Committed Effective Dose Equivalent.

It was assumed that the Am-241/Pu-241 activity ratio is 18%. This is consistent with the median Am-241/Pu-241 activity ratio seen in surface soils east of RFETS (Health Physics, Vol. 70, No. 4, April 1996). For assessing uranium isotope ratios, typical values for depleted and enriched uranium were taken from the "Health Physics and Radiological Health Handbook." Uranium isotope ratios are outlined in Table 3, "Uranium Isotope Characterization."

The acceptable soil concentration was then calculated by dividing a radiation dose limit by the radiation dose calculated for a unit concentration of activity. This will give the soil concentration that would give the firefighter the designated radiation dose limit for the given burn conditions (See Table 1).

### Recommendations

The results of this assessment indicate that the maximum dose will be less than 1 mrem to any individual downwind of a fire if the fire is not in an area exceeding the SCA radiological posting limit. It is therefore recommended that the SCA radiological posting limit be used as the demarcation where firefighters should not follow a grass fire. SCA posting limits for Pu-239/Am-241, enriched uranium and depleted uranium in surface soils are at 115 pCi Pu-239/gram soil, 188 pCi Total U/gram soil and 102 pCi Total U/gram soil, respectively. By following this proposal, a firefighter should not receive more than 1 mrem of radiation dose.

### Attachments

Attachment A – Hypothetical Wildfire Air Modeling Analysis

### Tables

Table 1 - Allowable Soil Concentration Based on Radiation Dose to Firefighters from Grass Fires

Table 2 - Radiation Dose from Plutonium & Americium to Firefighters Due to Inhalation of Particulates during a Grass Fire

Table 3 - Uranium Isotope Characterization

Table 4 - Radiation Dose from Enriched Uranium to Firefighters Due to Inhalation of Particulates during a Grass Fire

Table 5 - Radiation Dose from Depleted Uranium to Firefighters Due to Inhalation of Particulates during a Grass Fire

# ATTACHMENT A

## Hypothetical Wildfire Air Modeling Analysis

### Introduction

A wildfire may release radionuclides to the environment if radionuclides are present on or in the vegetation, or on soil attached to the vegetation surfaces. Airborne radionuclides may then be inhaled by fire fighters, resulting in a radiation dose to the individual.

Studies at the Rocky Flats Environmental Technology Site (RFETS or Site) and elsewhere have shown that plants do not readily uptake actinides such as plutonium (Pu) and americium (Am) from soil (Arthur and Alldredge, 1982). However, radionuclide-contaminated soil may be resuspended by wind or rain splash and become attached to vegetation surfaces. Measurements conducted at RFETS show that both standing vegetation and litter may trap radionuclide-contaminated soils, with litter showing a higher radionuclide content than the standing vegetation (Langer, 1986).

To look at radiation dose from a hypothetical wildfire, a dispersion model was used to calculate downwind concentrations of particulate matter. Assuming that airborne soil particles released from the burning plants have the same radionuclide concentrations as the surrounding contaminated surface soils allowed an estimate of airborne radionuclides that might be released during a wildfire. The dispersion modeling and subsequent radiation exposure calculations are described below.

### Fire Scenario Modeling

A series of hypothetical wildfires was modeled, based on fire durations of 1, 2, or 5 hours and a variety of wind speed/stability combinations. The 54 wind speed/stability combinations that were used for this study were taken from the U.S. Environmental Protection Agency's (EPA's) SCREEN dispersion model (EPA, 1995a) and represent the probable range of wind speed and stability that are likely to occur in nature. For each wind speed and fire duration, the U.S. Forest Service's fire behavior model BEHAVE was used to predict the area and length-to-width ratio of the burned area.

Particulate emissions (and therefore actinide emissions) from the hypothetical fires were maximized by assuming that the fire would begin in late September, when fuel loading would be at a maximum. Subsequent dispersion was assumed to occur under each of the 54 wind speed/stability combinations. Dispersion from the fire was modeled for the 1-hour case for each of the 54 meteorological combinations. Worst-case impacts were found to occur under light winds (1 meter per second [m/s]) and stable conditions (nighttime stability, F). The 2- and 5-hour fires were modeled for the worst case conditions and also under annual average wind speed and stability conditions (4 m/s and

neutral [D] stability). These meteorological conditions were assumed to persist for the full 2 or 5 hours for the longer duration fires.

Dispersion from each fire was simulated using a model developed by the EPA, the Industrial Source Complex Short-Term model (ISCST3). Each hypothetical wildfire was represented by a rectangular area with dimensions based on the total acreage and the length-to-width ratios predicted by BEHAVE. The fire was input as a ground-based area source with an initial vertical dimension based on the expected height to which a smoke plume would rise (described below). The "regulatory default" options were used, along with rural dispersion coefficients. The model essentially assumed that the entire fire area would be burning simultaneously, which would not be the case in a real fire.

Winds were assumed to blow from west to east during each fire. Receptors (points at which the model will calculate a concentration) were established in a rectangular grid pattern over the eastern half of the fire and for some distance beyond the burned area to the north, south, and east. Receptor spacing was 100 m in the north-south direction and 50 m east-west. Because each fire was represented as a ground-based source, the receptors near the eastern edge of the fire will show the maximum concentrations that would be produced anywhere by a hypothetical fire. All receptors were assumed to be located 2 m above the ground (breathing level).

#### Fire Scenario Particulate Emissions

Particulate emissions from fires have been estimated by a number of researchers. Emission factors for a grass fire similar to the hypothetical wildfires generally range from approximately 3 grams (g) of particulate matter per kilogram (kg) of grass burned to around 18 g/kg. For this study, emission factors were taken from Leenhouts (1998). These factors have been used in a recent update to the Bureau of Land Management's (BLM's) *Simple Approach Smoke Estimation Model* (SASEM) (Sestak and Riebau, 1988) and are specific to western perennial grassland fires. The particulate emissions calculated represent emissions of particles smaller than 10 micrometers aerodynamic diameter (PM<sub>10</sub>).

Equations given in the SASEM documentation (Sestak and Riebau, 1988) were used to estimate heat release and plume rise from each of the hypothetical fires. The SASEM approach assumes that a fire line will produce multiple small plumes, with horizontal dimensions governed by the depth of the fire line, rather than a single, massive plume. The expected plume rise for each individual plume is then largely a function of how hot the fire is (heat release) and the wind speed (higher winds inhibit plume rise).

The plume rise was calculated for a 1-hour fire for each of the 54 wind speed/stability combinations. Based on equations in the ISCST User's Guide (EPA, 1995b), these plume rise figures were used to estimate the initial vertical dimension of the fire plume for each meteorological condition. Once the worst-case dispersion conditions were identified by modeling each 1-hour fire with ISCST3, plume rise and initial vertical

dimension were also calculated for the 2- and 5-hours fires for the worst-case and average conditions.

### Fire Scenario Radionuclide Emissions

Measurements have been taken on Site of the amount of soil attached to vegetation and litter. An autumn maximum figure plus one standard deviation of 134 milligrams of soil per gram of plant mass (mg/g) was used for this study (Arthur and Alldredge, 1982). The attached soil was assumed to be radiologically contaminated at a level of 1 picocurie per gram of soil ( 1 pCi/g). In addition, a small amount of radioactivity was assumed to be present within the plant material itself, based on transfer coefficients from Baes, et al. (1984).

### Fire Scenario Results

The maximum and average 1-hour, 2-hour, and 5-hour particulate and radionuclide concentrations predicted by the modeling are shown in Table 1.

**Table 1. Hypothetical Wildfire Air Modeling Results**

<b>Fire Duration and Scenario</b>	<b>Maximum Particulate Concentration (<math>\mu\text{g}/\text{m}^3</math>)</b>	<b>Maximum Pu-239/240 Concentration (<math>\text{pCi}/\text{m}^3</math>)</b>	<b>Maximum Am-241 Concentration (<math>\text{pCi}/\text{m}^3</math>)</b>	<b>Maximum Uranium Concentration (<math>\text{pCi}/\text{m}^3</math>)</b>
1 hour Worst-case meteorology	2,989	$4.02 \times 10^{-4}$	$4.17 \times 10^{-4}$	$4.26 \times 10^{-4}$
1 hour Average meteorology	728	$9.79 \times 10^{-5}$	$1.02 \times 10^{-4}$	$1.04 \times 10^{-4}$
2 hour Worst-case meteorology	2,962	$3.98 \times 10^{-4}$	$4.13 \times 10^{-4}$	$4.22 \times 10^{-4}$
2 hour Average meteorology	722	$9.70 \times 10^{-5}$	$1.01 \times 10^{-4}$	$1.03 \times 10^{-4}$
5 hour Worst-case meteorology	2,883	$3.88 \times 10^{-4}$	$4.02 \times 10^{-4}$	$4.11 \times 10^{-4}$
5 hour Average meteorology	695	$9.34 \times 10^{-5}$	$9.69 \times 10^{-5}$	$9.90 \times 10^{-5}$

Notes:

$\mu\text{g}/\text{m}^3$  = micrograms per cubic meter

$\text{pCi}/\text{m}^3$  = picocuries per cubic meter

Pu-239/240 = plutonium 239/240

Am-241 = americium 241

U = uranium species

All radionuclide concentrations based on soil contamination at 1 picocurie per gram ( $\text{pCi}/\text{g}$ )

## References Cited

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**TABLE 1  
ALLOWABLE SOIL CONCENTRATION BASED ON RADIATION DOSE TO FIREFIGHTERS  
FROM GRASS FIRES**

**ALLOWABLE PLUTONIUM SOIL CONCENTRATION**

Burn Conditions	Radiation Dose (mrem)/(pCi Pu-239/gram soil)	Allowable Pu-239 Soil Concentration at Radiation Dose = 0.1 mrem (pCi Pu-239/gram soil)	Allowable Pu-239 Soil Concentration at Radiation Dose = 1 mrem (pCi Pu-239/gram soil)	Allowable Pu-239 Soil Concentration at Radiation Dose = 10 mrem (pCi Pu-239/gram soil)
Worst Case, Duration = 1 hour	6.59E-04	152	1518	15180
Average Case, Duration = 1 hour	1.61E-04	623	6229	62288
Worst Case, Duration = 2 hour	1.30E-03	77	767	7666
Average Case, Duration = 2 hour	3.18E-04	314	3144	31436
Worst Case, Duration = 5 hour	3.18E-03	31	315	3146
Average Case, Duration = 5 hour	7.65E-04	131	1307	13067

**ALLOWABLE ENRICHED URANIUM SOIL CONCENTRATION**

Burn Conditions	Radiation Dose (mrem)/(pCi Total U/gram soil)	Allowable Total Uranium Soil Concentration at Radiation Dose = 0.1 mrem (pCi Total U/gram soil)	Allowable Total Uranium Soil Concentration at Radiation Dose = 1 mrem (pCi Total U/gram soil)	Allowable Total Uranium Soil Concentration at Radiation Dose = 10 mrem (pCi Total U/gram soil)
Worst Case, Duration = 1 hour	1.77E-04	565	5653	56528
Average Case, Duration = 1 hour	4.32E-05	2315	23155	231549
Worst Case, Duration = 2 hour	3.50E-04	285	2853	28532
Average Case, Duration = 2 hour	8.56E-05	1169	11690	116898
Worst Case, Duration = 5 hour	8.53E-04	117	1172	11718
Average Case, Duration = 5 hour	2.06E-04	486	4865	48649

**ALLOWABLE DEPLETED URANIUM SOIL CONCENTRATION**

Burn Conditions	Radiation Dose (mrem)/(pCi Total U/gram soil)	Allowable Total Uranium Soil Concentration at Radiation Dose = 0.1 mrem (pCi Total U/gram soil)	Allowable Total Uranium Soil Concentration at Radiation Dose = 1 mrem (pCi Total U/gram soil)	Allowable Total Uranium Soil Concentration at Radiation Dose = 10 mrem (pCi Total U/gram soil)
Worst Case, Duration = 1 hour	1.63E-04	615	6153	61531
Average Case, Duration = 1 hour	3.97E-05	2520	25204	252039
Worst Case, Duration = 2 hour	3.22E-04	311	3106	31057
Average Case, Duration = 2 hour	7.86E-05	1272	12724	127243
Worst Case, Duration = 5 hour	7.84E-04	128	1276	12755
Average Case, Duration = 5 hour	1.89E-04	530	5295	52954

**TABLE 2  
RADIATION DOSE FROM PLUTONIUM & AMERICIUM TO FIREFIGHTERS  
DUE TO INHALATION OF PARTICULATES DURING A GRASS FIRE**

**EXPOSURE PARAMETERS**

Exposure Factors Description	Units	Parameter Value
Inhalation Rate (Burn Worker)	m <sup>3</sup> /hr	3.2
Exposure Frequency - Short	hr/day	1
Exposure Frequency - Medium	hr/day	2
Exposure Frequency - Long	hr/day	5
Exposure Duration	days	1
Am-241/Pu-239 activity ratio	unitless	0.18

**RADIATION DOSE - WORST CASE CONDITIONS, BURN DURATION = 1 HOUR**

Radionuclide	Air Concentration (pCi/m <sup>3</sup> )	Daily Intake (pCi)	Inhalation Dose Conversion Factor (mrem/uCi)	Radiation Dose (mrem)
Am-241	4.17E-04	2.40E-04	4.44E+05	1.07E-04
Pu-239/240	4.02E-04	1.29E-03	4.29E+05	5.52E-04
<b>TOTAL</b>				<b>6.59E-04</b>

**RADIATION DOSE - AVERAGE CONDITIONS, BURN DURATION = 1 HOUR**

Radionuclide	Air Concentration (pCi/m <sup>3</sup> )	Daily Intake (pCi)	Inhalation Dose Conversion Factor (mrem/uCi)	Radiation Dose (mrem)
Am-241	1.02E-04	5.88E-05	4.44E+05	2.61E-05
Pu-239/240	9.79E-05	3.13E-04	4.29E+05	1.34E-04
<b>TOTAL</b>				<b>1.61E-04</b>

**RADIATION DOSE - WORST CASE CONDITIONS, BURN DURATION = 2 HOUR**

Radionuclide	Air Concentration (pCi/m <sup>3</sup> )	Daily Intake (pCi)	Inhalation Dose Conversion Factor (mrem/uCi)	Radiation Dose (mrem)
Am-241	4.13E-04	4.76E-04	4.44E+05	2.11E-04
Pu-239/240	3.98E-04	2.55E-03	4.29E+05	1.09E-03
<b>TOTAL</b>				<b>1.30E-03</b>

**RADIATION DOSE - AVERAGE CONDITIONS, BURN DURATION = 2 HOUR**

Radionuclide	Air Concentration (pCi/m <sup>3</sup> )	Daily Intake (pCi)	Inhalation Dose Conversion Factor (mrem/uCi)	Radiation Dose (mrem)
Am-241	1.01E-04	1.16E-04	4.44E+05	5.17E-05
Pu-239/240	9.70E-05	6.21E-04	4.29E+05	2.66E-04
<b>TOTAL</b>				<b>3.18E-04</b>

**RADIATION DOSE - WORST CASE CONDITIONS, BURN DURATION = 5 HOUR**

Radionuclide	Air Concentration (pCi/m <sup>3</sup> )	Daily Intake (pCi)	Inhalation Dose Conversion Factor (mrem/uCi)	Radiation Dose (mrem)
Am-241	4.02E-04	1.16E-03	4.44E+05	5.14E-04
Pu-239/240	3.88E-04	6.21E-03	4.29E+05	2.66E-03
<b>TOTAL</b>				<b>3.18E-03</b>

**RADIATION DOSE - AVERAGE CONDITIONS, BURN DURATION = 5 HOUR**

Radionuclide	Air Concentration (pCi/m <sup>3</sup> )	Daily Intake (pCi)	Inhalation Dose Conversion Factor (mrem/uCi)	Radiation Dose (mrem)
Am-241	9.69E-05	2.79E-04	4.44E+05	1.24E-04
Pu-239/240	9.34E-05	1.49E-03	4.29E+05	6.41E-04
<b>TOTAL</b>				<b>7.65E-04</b>

**TABLE 3  
URANIUM ISOTOPE CHARACTERIZATION**

RADIONUCLIDES	URANIUM MASS FRACTION (gram)		
	NATURAL URANIUM (1)	ENRICHED URANIUM (1)	DEPLETED URANIUM (1)
Uranium-234	0.000057	0.0003	0.000005
Uranium-235	0.007204	0.0296	0.0025
Uranium-238	0.992739	0.9701	0.9975

(1) - Typical values taken from "The Health Physics and Radiological Health Handbook." Values may vary.

RADIONUCLIDES (Ci/gram of isotope)	URANIUM SPECIFIC ACTIVITY (2)
Uranium-234	6.24E-03
Uranium-235	2.16E-06
Uranium-238	3.35E-07

(2) - Taken from "The Health Physics and Radiological Health Handbook."

RADIONUCLIDES	URANIUM ACTIVITY (Ci/gram)		
	NATURAL URANIUM	ENRICHED URANIUM	DEPLETED URANIUM
Uranium-234	3.56E-07	1.87E-06	3.12E-08
Uranium-235	1.56E-08	6.39E-08	5.40E-09
Uranium-238	3.33E-07	3.25E-07	3.34E-07
TOTAL	7.04E-07	2.26E-06	3.71E-07
<b>URANIUM PERCENT</b>			
Uranium-234	50.5	82.8	8.4
Uranium-235	2.2	2.8	1.5
Uranium-238	47.3	14.4	90.1

**TABLE 4  
RADIATION DOSE FROM ENRICHED URANIUM TO FIREFIGHTERS  
DUE TO INHALATION OF PARTICULATES DURING A GRASS FIRE**

**EXPOSURE PARAMETERS**

Exposure Factors Description	Units	Parameter Value
Inhalation Rate (Burn Worker)	m <sup>3</sup> /hr	3.2
Exposure Frequency - Short	hr/day	1
Exposure Frequency - Medium	hr/day	2
Exposure Frequency - Long	hr/day	5
Exposure Duration	days	1

**RADIATION DOSE - WORST CASE CONDITIONS, BURN DURATION = 1 HOUR**

Radionuclide	Air Concentration (pCi/m <sup>3</sup> )	Daily Intake (pCi)	Inhalation Dose Conversion Factor (mrem/uCi)	Enriched Uranium Activity Ratio	Radiation Dose (mrem)
U-234	4.26E-04	1.36E-03	1.32E+05	0.83	1.49E-04
U-235	4.26E-04	1.36E-03	1.23E+05	0.03	5.03E-06
U-238	4.26E-04	1.36E-03	1.18E+05	0.14	2.25E-05
<b>TOTAL</b>					<b>1.77E-04</b>

**RADIATION DOSE - AVERAGE CONDITIONS, BURN DURATION = 1 HOUR**

Radionuclide	Air Concentration (pCi/m <sup>3</sup> )	Daily Intake (pCi)	Inhalation Dose Conversion Factor (mrem/uCi)	Enriched Uranium Activity Ratio	Radiation Dose (mrem)
U-234	1.04E-04	3.33E-04	1.32E+05	0.83	3.65E-05
U-235	1.04E-04	3.33E-04	1.23E+05	0.03	1.23E-06
U-238	1.04E-04	3.33E-04	1.18E+05	0.14	5.50E-06
<b>TOTAL</b>					<b>4.32E-05</b>

**RADIATION DOSE - WORST CASE CONDITIONS, BURN DURATION = 2 HOUR**

Radionuclide	Air Concentration (pCi/m <sup>3</sup> )	Daily Intake (pCi)	Inhalation Dose Conversion Factor (mrem/uCi)	Enriched Uranium Activity Ratio	Radiation Dose (mrem)
U-234	4.22E-04	2.70E-03	1.32E+05	0.83	2.96E-04
U-235	4.22E-04	2.70E-03	1.23E+05	0.03	9.97E-06
U-238	4.22E-04	2.70E-03	1.18E+05	0.14	4.46E-05
<b>TOTAL</b>					<b>3.50E-04</b>

**RADIATION DOSE - AVERAGE CONDITIONS, BURN DURATION = 2 HOUR**

Radionuclide	Air Concentration (pCi/m <sup>3</sup> )	Daily Intake (pCi)	Inhalation Dose Conversion Factor (mrem/uCi)	Enriched Uranium Activity Ratio	Radiation Dose (mrem)
U-234	1.03E-04	6.59E-04	1.32E+05	0.83	7.22E-05
U-235	1.03E-04	6.59E-04	1.23E+05	0.03	2.43E-06
U-238	1.03E-04	6.59E-04	1.18E+05	0.14	1.09E-05
<b>TOTAL</b>					<b>8.55E-05</b>

**RADIATION DOSE - WORST CASE CONDITIONS, BURN DURATION = 6 HOUR**

Radionuclide	Air Concentration (pCi/m <sup>3</sup> )	Daily Intake (pCi)	Inhalation Dose Conversion Factor (mrem/uCi)	Enriched Uranium Activity Ratio	Radiation Dose (mrem)
U-234	4.11E-04	6.58E-03	1.32E+05	0.83	7.20E-04
U-235	4.11E-04	6.58E-03	1.23E+05	0.03	2.43E-05
U-238	4.11E-04	6.58E-03	1.18E+05	0.14	1.09E-04
<b>TOTAL</b>					<b>8.53E-04</b>

**RADIATION DOSE - AVERAGE CONDITIONS, BURN DURATION = 6 HOUR**

Radionuclide	Air Concentration (pCi/m <sup>3</sup> )	Daily Intake (pCi)	Inhalation Dose Conversion Factor (mrem/uCi)	Enriched Uranium Activity Ratio	Radiation Dose (mrem)
U-234	9.90E-05	1.58E-03	1.32E+05	0.83	1.74E-04
U-235	9.90E-05	1.58E-03	1.23E+05	0.03	5.84E-06
U-238	9.90E-05	1.58E-03	1.18E+05	0.14	2.82E-05
<b>TOTAL</b>					<b>2.06E-04</b>

**TABLE 5  
RADIATION DOSE FROM DEPLETED URANIUM TO FIREFIGHTERS  
DUE TO INHALATION OF PARTICULATES DURING A GRASS FIRE**

**EXPOSURE PARAMETERS**

Exposure Factors Description	Units	Parameter Value
Inhalation Rate (Bum Worker)	m <sup>3</sup> /hr	3.2
Exposure Frequency - Short	hr/day	1
Exposure Frequency - Medium	hr/day	2
Exposure Frequency - Long	hr/day	5
Exposure Duration	days	1

**RADIATION DOSE - WORST CASE CONDITIONS, BURN DURATION = 1 HOUR**

Radionuclide	Air Concentration (pCi/m <sup>3</sup> )	Daily Intake (pCi)	Inhalation Dose Conversion Factor (mrem/uCi)	Depleted Uranium Activity Ratio	Radiation Dose (mrem)
U-234	4.26E-04	1.36E-03	1.32E+05	0.08	1.44E-05
U-235	4.26E-04	1.36E-03	1.23E+05	0.02	3.35E-06
U-238	4.26E-04	1.36E-03	1.18E+05	0.90	1.45E-04
<b>TOTAL</b>					<b>1.63E-04</b>

**RADIATION DOSE - AVERAGE CONDITIONS, BURN DURATION = 1 HOUR**

Radionuclide	Air Concentration (pCi/m <sup>3</sup> )	Daily Intake (pCi)	Inhalation Dose Conversion Factor (mrem/uCi)	Depleted Uranium Activity Ratio	Radiation Dose (mrem)
U-234	1.04E-04	3.33E-04	1.32E+05	0.08	3.51E-06
U-235	1.04E-04	3.33E-04	1.23E+05	0.02	8.19E-07
U-238	1.04E-04	3.33E-04	1.18E+05	0.90	3.53E-05
<b>TOTAL</b>					<b>3.97E-05</b>

**RADIATION DOSE - WORST CASE CONDITIONS, BURN DURATION = 2 HOUR**

Radionuclide	Air Concentration (pCi/m <sup>3</sup> )	Daily Intake (pCi)	Inhalation Dose Conversion Factor (mrem/uCi)	Depleted Uranium Activity Ratio	Radiation Dose (mrem)
U-234	4.22E-04	2.70E-03	1.32E+05	0.08	2.85E-05
U-235	4.22E-04	2.70E-03	1.23E+05	0.02	6.84E-06
U-238	4.22E-04	2.70E-03	1.18E+05	0.90	2.87E-04
<b>TOTAL</b>					<b>3.22E-04</b>

**RADIATION DOSE - AVERAGE CONDITIONS, BURN DURATION = 2 HOUR**

Radionuclide	Air Concentration (pCi/m <sup>3</sup> )	Daily Intake (pCi)	Inhalation Dose Conversion Factor (mrem/uCi)	Depleted Uranium Activity Ratio	Radiation Dose (mrem)
U-234	1.03E-04	6.59E-04	1.32E+05	0.08	6.98E-06
U-235	1.03E-04	6.59E-04	1.23E+05	0.02	1.62E-06
U-238	1.03E-04	6.59E-04	1.18E+05	0.90	7.00E-05
<b>TOTAL</b>					<b>7.86E-05</b>

**RADIATION DOSE - WORST CASE CONDITIONS, BURN DURATION = 5 HOUR**

Radionuclide	Air Concentration (pCi/m <sup>3</sup> )	Daily Intake (pCi)	Inhalation Dose Conversion Factor (mrem/uCi)	Depleted Uranium Activity Ratio	Radiation Dose (mrem)
U-234	4.11E-04	6.58E-03	1.32E+05	0.08	6.94E-05
U-235	4.11E-04	6.58E-03	1.23E+05	0.02	1.62E-05
U-238	4.11E-04	6.58E-03	1.18E+05	0.90	6.98E-04
<b>TOTAL</b>					<b>7.84E-04</b>

**RADIATION DOSE - AVERAGE CONDITIONS, BURN DURATION = 5 HOUR**

Radionuclide	Air Concentration (pCi/m <sup>3</sup> )	Daily Intake (pCi)	Inhalation Dose Conversion Factor (mrem/uCi)	Depleted Uranium Activity Ratio	Radiation Dose (mrem)
U-234	9.90E-05	1.58E-03	1.32E+05	0.08	1.67E-05
U-235	9.90E-05	1.58E-03	1.23E+05	0.02	3.90E-06
U-238	9.90E-05	1.58E-03	1.18E+05	0.90	1.66E-04
<b>TOTAL</b>					<b>1.89E-04</b>

## **Attachment 2**

May 12, 2006

**STL St. Louis**  
13715 Rider Trail North  
Earth City, MO 63045

Tel: 314 298 8566 Fax: 314 298 8757  
www.stl-inc.com

Steve Donovan  
The S. M. Stoller Corporation  
2597 B-3/4 Road  
Grand Junction, CO 81503

RE: STL St. Louis Loss of Filter Samples; no analytical data available: STLSTL22

Dear Mr. Donovan:

This corrective action letter is in response to STL St. Louis' loss of filter samples provided to us for analysis, and the untimely communication of this error.

Samples S-132-F, S-136-F, S-138-F were received by STL St. Louis on 4/10/06. The laboratory initiated sample preparation in accordance with analytical methods and standard operating procedures.

After initial digestion, small amounts of the original filter material remain in the digestion vessel. This is normal for this filter matrix. The white filter remnants in the digestion vessel are visually similar to water samples in digestion vessels after the precipitation step. The preparation analyst mistakenly identified the filter digestate as a water digestate and decanted/discarded the liquid portion, leaving no sample for analysis.

STL St. Louis recognizes the significance of this error. QA has conducted a surveillance and review of the procedure to identify cause and implement corrective action. To prevent the mistaking of water digestates for those of filters', a letter "F" will be added to the filter sample digestate ID. The supervisor conducted training with all department staff. This training has been documented by the QA office.

May 12, 006

Steve Donovan  
The S. M. Stoller Corporation  
Page 2 of 2

STL St. Louis acknowledges the importance of prompt client communication in the event a sample is lost or compromised. The laboratory Project Manager is responsible for contacting the client as soon as the facts are known regarding a compromised or lost sample, or other significant excursions as defined by STL or the client's project specific requirements or contract. Regrettably, you were not informed of the sample loss until after QA had completed its' initial corrective action. This is attributed to an internal lapse. SOP STL-PM-0001 has been revised to further define the client notification requirements.

Regards,

A handwritten signature in cursive script that reads "Elaine Wild".

Elaine Wild  
QA Manager  
STL St. Louis

cc: Melania Harris, STL St. Louis Project Manager

**Information for Composite Samples with Unavailable Data**

<b>Location</b>	<b>Sample Dates*</b>	<b>Status</b>
GS01	2/19 - 2/27/06	NSQ
GS03	1/5/06 - >	In Progress
GS10	3/27 - 4/24/06	Pending Analysis
SW027	5/18/05 - 4/17/06	NSQ

\* Analytical results are reported with the start date of the composite sampling period

> Composite sample end date to be determined

NSQ: non-sufficient quantity for analysis

**PRESENT LANDFILL – MONITORING AND MAINTENANCE PROGRAM**

**INSPECTION FORM**

INSPECTOR: Jeremiah McLaughlin DATE: 3/7/06

TEMPERATURE: 50° WEATHER CONDITIONS: Clear

**SUBSIDENCE / CONSOLIDATION**

REGION	EVIDENCE OF CRACKS?	EVIDENCE OF DEPRESSIONS?	EVIDENCE OF SINK HOLES?	OTHER (DESCRIBE BELOW)
TOP OF COVER – WEST	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No	N/A 
TOP OF COVER – EAST	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No	
COVER SIDESLOPE – NORTH	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No	
COVER SIDESLOPE – SOUTH	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No	
EAST FACE SLOPE - NORTH	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No	
EAST FACE SLOPE - SOUTH	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No	
EAST FACE SLOPE - CENTRAL	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No	
EAST FACE SLOPE – NORTH SEEP*	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No	

MAINTENANCE REQUIRED / COMMENTS

No maintenance required. Everything looks normal.

\* AREA OF SEEP IS OUTSIDE OF LANDFILL COVER AND EAST OF THE COVER ANCHOR TRENCH

## SLOPE STABILITY

REGION	EVIDENCE OF CRACKS?	EVIDENCE OF BLOCK OR CIRCULAR FAILURE?	OTHER (DESCRIBE BELOW)
COVER SIDESLOPE - NORTH	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No	<i>N/A</i> 
COVER SIDESLOPE - SOUTH	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No	
PERIMETER CHANNEL OUTER SLOPE - NORTH	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No	
PERIMETER CHANNEL OUTER SLOPE - SOUTH	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No	
EAST FACE SLOPE - NORTH	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No	
EAST FACE SLOPE - SOUTH	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No	
EAST FACE SLOPE - CENTRAL	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No	
EAST FACE SLOPE - NORTH SEEP*	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No	

MAINTENANCE REQUIRED / COMMENTS

*No maintenance required.*

\* AREA OF SEEP IS OUTSIDE OF LANDFILL COVER AND EAST OF THE COVER ANCHOR TRENCH

**SOIL COVER**

REGION	EVIDENCE OF SOIL DEPOSITION OR EROSION?	EVIDENCE OF EROSION RILLS/GULLIES?	EVIDENCE OF BURROWING ANIMALS?	OTHER (DESCRIBE BELOW)
TOP OF COVER - WEST	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No	N/A
TOP OF COVER - EAST	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No	
COVER SIDESLOPE - NORTH	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No	
COVER SIDESLOPE - SOUTH	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No	
EAST FACE SLOPE - NORTH	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No	
EAST FACE SLOPE - SOUTH	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No	
EAST FACE SLOPE - CENTRAL	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No	

MAINTENANCE REQUIRED / COMMENTS

No maintenance required.

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## VEGETATION

REGION	CONDITION OF GRASS	UNWANTED VEGETATION PRESENT*?	OTHER (DESCRIBE BELOW)
TOP OF COVER- WEST	<i>Early stages of growth</i>	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No	<i>~ / A</i> ↓
TOP OF COVER - EAST		<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No	
EAST FACE SLOPE - NORTH	"	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No	
EAST FACE SLOPE - SOUTH	"	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No	
EAST FACE SLOPE - CENTRAL	"	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No	
COVER SIDESLOPE - NORTH	"	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No	
COVER SIDESLOPE - SOUTH	"	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No	
VEGETATION-LINED PERIMETER CHANNEL - NORTH	"	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No	
VEGETATION-LINED PERIMETER CHANNEL - SOUTH	"	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No	

\* Unwanted vegetation includes weeds and deep-rooting trees.

MAINTENANCE REQUIRED / COMMENTS

*The grass is just starting to grow on all parts of the land!!!  
There are other types of vegetation present, but none of it is unwanted per Judy Nelson.*

**SEEP TREATMENT SYSTEM**

REGION	EVIDENCE OF PLUGGING, OBSTRUCTIONS, OR EXCESS DEBRIS?	EVIDENCE OF CRACKS OR DETERIORATION?	OTHER (DESCRIBE BELOW)
GWIS INLET PIPES	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No	N/A 
STRIP DRAIN INLET PIPE	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No	
NORTH MANHOLE OUTLET PIPE	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No	
SOUTH MANHOLE OUTLET PIPE	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No	
TREATMENT UNIT	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No	
TREATMENT UNIT OUTLET PIPE	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No	
NORTH MANHOLE	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No	
SOUTH MANHOLE	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No	
TREATMENT UNIT GRATING	NA	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No	

MAINTENANCE REQUIRED / COMMENTS

*Everything looks good.*

## STORMWATER MANAGEMENT STRUCTURES

### CHANNELS / LINING

STRUCTURE	EVIDENCE OF EXCESSIVE EROSION, GULLYING, SCOUR, OR UNDERMINING?	EVIDENCE OF SETTLEMENT/SUBSIDENCE OR DEPRESSIONS?	EVIDENCE OF BREACHING OR BANK FAILURE?	EVIDENCE OF BURROWING ANIMALS?	EVIDENCE OF SEDIMENT BUILD-UP OR OTHER BLOCKAGE?	EVIDENCE OF LINING DETERIORATION, HOLES, RIPS, OR SEPARATION?	EVIDENCE OF LINING DISPLACEMENT?
DIVERSION BERM	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No						
VEGETATION-LINED PERIMETER CHANNEL - NORTH	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No						
VEGETATION-LINED PERIMETER CHANNEL - SOUTH	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No						
RIPRAP-LINED PERIMETER CHANNEL	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No						
C350-LINED EAST FACE	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No						
EAST FACE RIPRAP CHANNEL - NORTH	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No						
EAST FACE RIPRAP CHANNEL - SOUTH	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No						

OTHER DEFICIENCIES?

*None.*

MAINTENANCE REQUIRED / COMMENTS

*No maintenance required.*

**STORMWATER MANAGEMENT STRUCTURES (CONTINUED)**

**OUTFALLS**

CHECK EACH STRUCTURE FOR EXCESSIVE EROSION AND SEDIMENT DEPTH. IF SEDIMENT DEPTH IS COMPROMISING THE DESIGN CHARACTERISTICS, REMOVE SEDIMENT.

STRUCTURE	CONDITION / SEDIMENT DEPTH
DIVERSION BERM OUTFALL - NORTH	<i>Good / No build-up of sediment</i>
DIVERSION BERM OUTFALL - SOUTH	" "
CULVERT 1 OUTFALL	" "
CULVERT 2 OUTFALL	" "
SOUTHWEST CULVERT OUTFALL	" "

**CULVERTS**

CHECK EACH STRUCTURE FOR BLOCKAGE, SURROUNDING CONDITIONS, BREACHING, SEDIMENT BUILD-UP, AND INLET/OUTLET CONDITIONS.

STRUCTURE	CONDITION
CULVERT 1	<i>Good</i>
CULVERT 2	<i>Good</i>
SOUTHWEST CULVERT	<i>Good</i>

MAINTENANCE REQUIRED

*None*

**EROSION CONTROL**

AREA			ADVERSELY AFFECTING PLF?
RUN-ON INTO PERIMETER CHANNEL – NORTH	<input type="checkbox"/> Yes	<input checked="" type="checkbox"/> No	COMMENT: <i>No</i>
RUN-ON INTO PERIMETER CHANNEL – SOUTH	<input type="checkbox"/> Yes	<input checked="" type="checkbox"/> No	COMMENT: <i>No</i>
NATURAL DRAINAGE FED BY CULVERT 1	<input type="checkbox"/> Yes	<input checked="" type="checkbox"/> No	COMMENT: <i>No</i>
NATURAL DRAINAGE FED BY NORTHEAST PERIMETER CHANNEL	<input type="checkbox"/> Yes	<input checked="" type="checkbox"/> No	COMMENT: <i>No</i>
NATURAL DRAINAGE FED BY RIPRAP	<input type="checkbox"/> Yes	<input checked="" type="checkbox"/> No	COMMENT: <i>No</i>

MAINTENANCE REQUIRED

*None required.*

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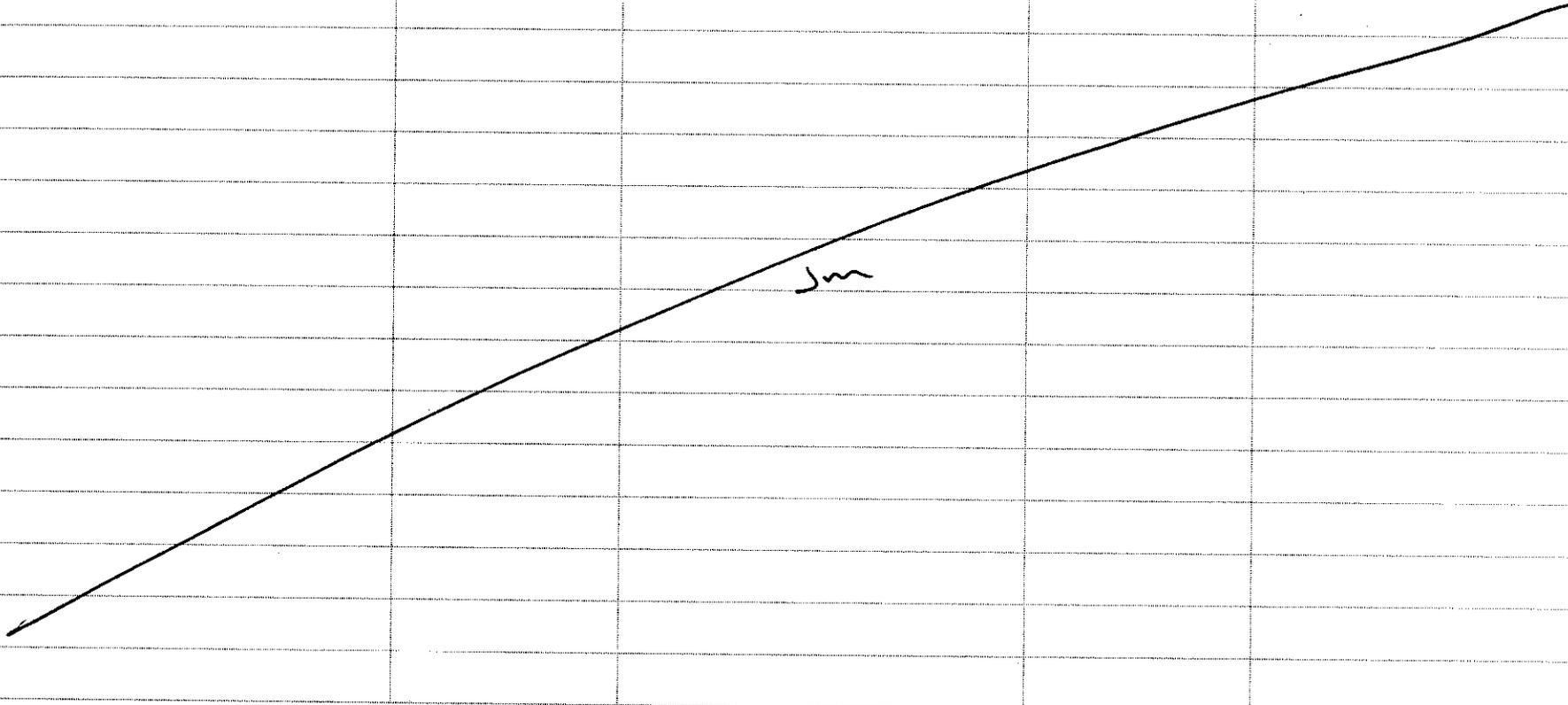
**INSTITUTIONAL CONTROLS**

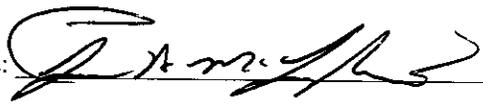
ITEM			
EVIDENCE OF EXCAVATION(S) OF COVER AND IMMEDIATE VICINITY OF COVER?	<input type="checkbox"/> Yes	<input checked="" type="checkbox"/> No	COMMENT: <i>n/a</i>
EVIDENCE OF CONSTRUCTION OF ROADS, TRAILS ON COVER OR BUILDINGS?	<input type="checkbox"/> Yes	<input checked="" type="checkbox"/> No	COMMENT: <i>n/a</i>
EVIDENCE OF DRILLING OF WELLS OR USE OF GROUNDWATER?	<input checked="" type="checkbox"/> Yes	<input type="checkbox"/> No	COMMENT: <i>GW wells sampled =&gt; 73005, 73105, + 73205</i>
DISRUPTION OR DAMAGE OF SEEP TREATMENT SYSTEM?	<input type="checkbox"/> Yes	<input checked="" type="checkbox"/> No	COMMENT: <i>n/a</i>
DAMAGE OR REMOVAL OF ANY SIGNAGE OR GROUNDWATER MONITORING WELLS?	<input type="checkbox"/> Yes	<input checked="" type="checkbox"/> No	COMMENT: <i>n/a</i>

OTHER DEFICIENCIES?

*No deficiencies.*

ACTION ITEMS

DEFICIENCY	DATE NOTED	ACTION	DATE COMPLETED	COMMENTS
				

SIGNATURE:  DATE: 3/7/06

**ORIGINAL LANDFILL – MONITORING AND MAINTENANCE PROGRAM**

**INSPECTION FORM**

INSPECTOR: Jeremial McLaughlin DATE: 3/7/06

TEMPERATURE: 50°F WEATHER CONDITIONS: Clear

**SUBSIDENCE / CONSOLIDATION**

REGION	EVIDENCE OF CRACKS?	EVIDENCE OF DEPRESSIONS?	EVIDENCE OF SINK HOLES?	OTHER (DESCRIBE BELOW)
COVER – WEST	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No	
COVER – EAST	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No	
BUTTRESS FILL	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No	
DIVERSION BERM 1	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No	
DIVERSION BERM 2	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No	
DIVERSION BERM 3	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No	Seep 7 is sinking a little
DIVERSION BERM 4	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No	
DIVERSION BERM 5	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No	
DIVERSION BERM 6	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No	Seep 7 is sinking a little "
DIVERSION BERM 7	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No	

**MAINTENANCE REQUIRED / COMMENTS**

No maintenance required at this time.

## SLOPE STABILITY

REGION	EVIDENCE OF SEEPS?	EVIDENCE OF BLOCK OR CIRCULAR FAILURE?	EVIDENCE OF BLOCK OR CIRCULAR FAILURE?
COVER - WEST	<input type="checkbox"/> Yes <input type="checkbox"/> No	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No	
COVER - EAST	<input type="checkbox"/> Yes <input type="checkbox"/> No	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No	
BUTTRESS FILL SIDESLOPE	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No	<i>no - normal drainage</i>
WEST PERIMETER CHANNEL SIDESLOPES	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No	
EAST PERIMETER CHANNEL SIDESLOPES	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No	
COVER SEEPS (IF PRESENT)	<input type="checkbox"/> Yes <input type="checkbox"/> No	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No	

MAINTENANCE REQUIRED / COMMENTS

*No maintenance required at this time.*

**SOIL COVER**

REGION	EVIDENCE OF SOIL DEPOSITION OR EROSION?	EVIDENCE OF EROSION RILLS/GULLIES?	EVIDENCE OF BURROWING ANIMALS?	OTHER (DESCRIBE BELOW)
COVER - WEST	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No	
COVER - EAST	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No	
BUTTRESS FILL	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No	
BUTTRESS FILL SIDESLOPE	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No	

MAINTENANCE REQUIRED / COMMENTS

*None*

**VEGETATION**

REGION	CONDITION OF GRASS	UNWANTED VEGETATION PRESENT*?	PERCENTAGE OF GRASS VERSUS BARE GROUND?	PERCENTAGE OF UNWANTED VEGETATION?
COVER- WEST	<i>early growth</i>	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No	<i>20% grass</i>	<i>0%</i>
COVER - EAST	↓	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No	↓	↓
DIVERSION BERM 1		<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No		
DIVERSION BERM 2		<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No		
DIVERSION BERM 3		<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No		
DIVERSION BERM 4		<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No		
DIVERSION BERM 5		<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No		
DIVERSION BERM 6		<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No		
DIVERSION BERM 7		<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No		
WEST PERIMETER CHANNEL		<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No		
EAST PERIMETER CHANNEL		<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No		
UPPER BUTTRESS FILL SIDESLOPE		<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No		
LOWER BUTTRESS FILL SIDESLPOE		<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No		

\* Unwanted vegetation includes weeds and deep-rooting trees.

MAINTENANCE REQUIRED / COMMENTS

*None*

## STORMWATER MANAGEMENT STRUCTURES

### CHANNELS / LINING

STRUCTURE	EVIDENCE OF EXCESSIVE EROSION, GULLYING, SCOUR, OR UNDERMINING?	EVIDENCE OF SETTLEMENT/ SUBSIDENCE OR DEPRESSIONS?	EVIDENCE OF BREACHING OR BANK FAILURE?	EVIDENCE OF BURROWING ANIMALS?	EVIDENCE OF SEDIMENT BUILD-UP OR OTHER BLOCKAGE?	EVIDENCE OF LINING DETERIORATION, HOLES, RIPS, OR SEPARATION?	EVIDENCE OF LINING DISPLACEMENT?
DIVERSION BERM 1	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No						
DIVERSION BERM 2	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No						
DIVERSION BERM 3	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No				
DIVERSION BERM 4	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No						
DIVERSION BERM 5	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No						
DIVERSION BERM 6	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No				
DIVERSION BERM 7	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No				
CHECK DAMS	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No						
WEST PERIMETER CHANNEL	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No						
EAST PERIMETER CHANNEL	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No						

OTHER DEFICIENCIES?

*None*

MAINTENANCE REQUIRED / COMMENTS

*None*

## STORMWATER MANAGEMENT STRUCTURES (CONTINUED)

### OUTFALLS

CHECK EACH STRUCTURE FOR EXCESSIVE EROSION AND SEDIMENT DEPTH. IF SEDIMENT DEPTH IS COMPROMISING THE DESIGN CHARACTERISTICS, REMOVE SEDIMENT.

STRUCTURE	CONDITION / SEDIMENT DEPTH	
DIVERSION BERM OUTFALL 1	<i>Good condition / No sediment</i>	
DIVERSION BERM OUTFALL 2	"	"
DIVERSION BERM OUTFALL 3	"	"
DIVERSION BERM OUTFALL 4	"	"
DIVERSION BERM OUTFALL 5	"	"
DIVERSION BERM OUTFALL 6	"	"
DIVERSION BERM OUTFALL 7	"	"
WEST PERIMETER CHANNEL OUTFALL	"	"
EAST PERIMETER CHANNEL OUTFALL	"	"
FRENCH DRAIN OUTFALL (SID)	"	"

OTHER DEFICIENCIES?

*Some straw has accumulated in the channel's, but isn't causing any problems.*

MAINTENANCE REQUIRED / COMMENTS

*None*

**EROSION CONTROL**

**AREA**

**ADVERSELY AFFECTING OLF?**

NORTH OF THE ORIGINAL LANDFILL	<input type="checkbox"/> Yes	<input checked="" type="checkbox"/> No	COMMENT: <i>No deficiencies</i>
WEST OF THE WEST PERIMETER CHANNEL	<input type="checkbox"/> Yes	<input checked="" type="checkbox"/> No	COMMENT: <i>"</i>
EAST OF THE EAST PERIMETER CHANNEL	<input type="checkbox"/> Yes	<input checked="" type="checkbox"/> No	COMMENT: <i>"</i>
NORTH OF WOMAN CREEK	<input type="checkbox"/> Yes	<input checked="" type="checkbox"/> No	COMMENT: <i>"</i>

**MAINTENANCE REQUIRED**

*No maintenance required.*

**INSTITUTIONAL CONTROLS**

ITEM			
EVIDENCE OF EXCAVATION(S) OF COVER AND IMMEDIATE VICINITY OF COVER?	<input checked="" type="checkbox"/> Yes	<input type="checkbox"/> No	COMMENT: <i>Seep 7 excavated to look for gravel drain.</i>
EVIDENCE OF CONSTRUCTION OF ROADS, TRAILS ON COVER OR BUILDINGS?	<input type="checkbox"/> Yes	<input checked="" type="checkbox"/> No	COMMENT:
EVIDENCE OF DRILLING OF WELLS OR USE OF GROUNDWATER?	<input checked="" type="checkbox"/> Yes	<input type="checkbox"/> No	COMMENT: <i>Groundwater wells sampled 2/29/06 - 3/2/06</i>
DAMAGE OR REMOVAL OF ANY SIGNAGE OR GROUNDWATER MONITORING WELLS?	<input type="checkbox"/> Yes	<input checked="" type="checkbox"/> No	COMMENT:

OTHER DEFICIENCIES?

*None*

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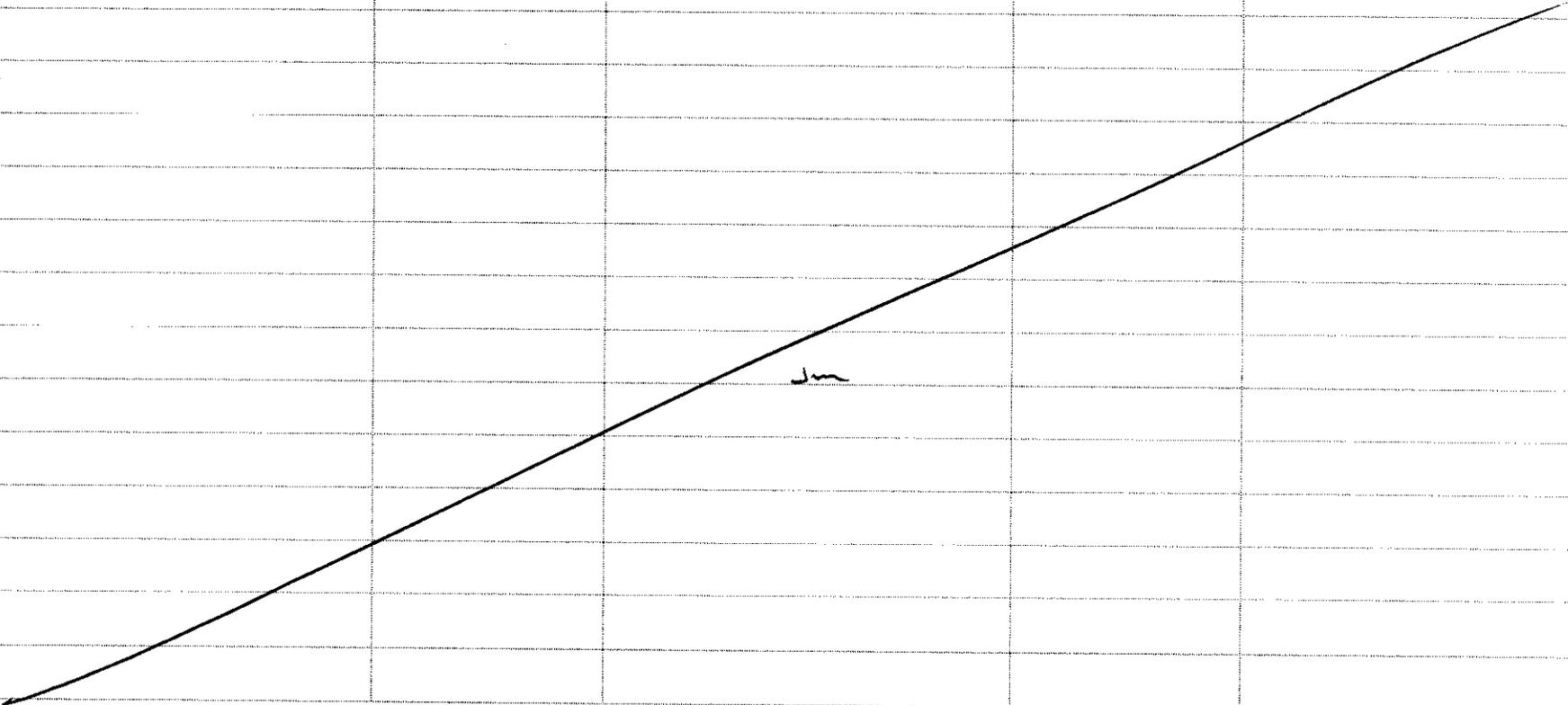


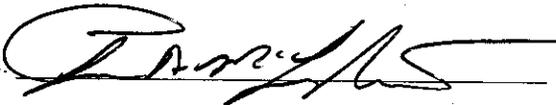
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**ACTION ITEMS**

DEFICIENCY	DATE NOTED	ACTION	DATE COMPLETED	COMMENTS
				

SIGNATURE:  DATE: 3/7/06