

5.0 INVESTIGATION SUMMARY AND CONCLUSIONS

The exhaustive review of historical data (including scientific studies, corporate records and regulatory reports), the georeferencing of historical features with the current physical disposition of the Mine Site, the physical mapping of site features such as tailings piles and surface water drainage, and the collection of surface water samples, including the comparison to historical data set, combine to paint a detailed physical picture of current Mine Site conditions. With the exception of some specific data requirements, the collection of which is outlined in the following Section 6.0, all the necessary information needed to formulate a presumptive remedial design and for the preparation of a Remedial Action Plan for the Mine Site is available.

Both historical documentation and surface water analytical data collected in 2010 support the conclusion that the majority (93% based on Slotton, 1995 Calculations) of the mercury mass loading from the Mine Tailings into the Marsh Creek Watershed originates via runoff over and through Bradley Mining Company operation derived waste rock and tailings piles that flows into the Lower Pond and then into Dunn Creek. The primary path from the mining waste is through overland flow into nearby creeks which subsequently leads into the greater Marsh Creek Watershed. The works of Slotton (Slotton, 1995) and of SGI's surface water sampling in 2010 have quantified the concentrations of mercury and other chemical constituents emanating from the various Mine Site features via overland water flow. The water from My Creek, along with the Dunn Creek water above the retention ponds, have no detectable mercury concentrations and have a chemical signature distinct from the water that had come in contact with the Bradley tailings piles. My Creek collects drainage water from the Northern Waste Dump, an area where potentially some of waste rock from Cordero operations has been deposited. The lack of detectable mercury concentrations in My Creek supports the assertion that Cordero operations in that area did not produce waste rock with significant quantities of mercury ore.

6.0 DATA GAPS AND FUTURE WORK

Information collected over the last fifty years at and around the Mine allow for development of a presumptive remedy. Based on the investigation work conducted to date, the following data gaps are indicated that should be filled prior to development of a RAWP and Preliminary Design:

- A topographic survey of the Site that represents the current land configuration;
- The character of water believed to be discharging from the Adit prior to encountering waste rock, tailings or atmosphere;
- The character and potential flow pathway of water present in the DMEA/Cordero workings; and
- Confirmation surface water sampling is needed for some sampling points that, due to variable rainfall and runoff conditions, have only been sampled once in the past.

Collection of data and information to fill these data gaps will allow for development of a RAWP and Preliminary Design for the Mine. The following sections detail the work proposed to address these data gaps.

6.1 Additional Characterization

Additional characterization planned by Sunoco includes the following additional work elements that will fill the data gaps identified above allowing development of a RAWP and Preliminary Design Document. These include:

- A detailed topographic survey of the Mine Site;
- Sampling of mine waters present in the Adit prior to mixing with the atmosphere or mine waste via installation of a monitoring well;
- Sampling of mine waters present in the former Cordero tunnels via installation of a monitoring well;
- Measuring and evaluation of gradients between Cordero mine tunnels and the Adit water via transducer monitoring of installed monitoring wells; and
- Confirmation surface water sampling when conditions allow.

The following sections provide detailed descriptions of these scope items to be conducted by Sunoco.

6.1.1 Topographic Survey

A topographic map of the Mine Site with a two-foot contour resolution will be prepared by an aerial mapping service. Significant features such as buildings, mine workings, and other property features will also be surveyed. This map will be used to aid in determining surface slope angles

and volumes of the existing tailings piles. Additionally, the topographic map will be used to confirm the georeferenced historical site features with their current locations, which will be used in the placement of two groundwater wells, and should optimize the chances for intercepting mine features at depth.

6.1.2 Confirmation Surface Water Sampling

Two confirmation surface water sampling events will be conducted between now and the first winter rains of 2010. Initial sample collection activities will be limited to the ponds and the flowing springs and creeks as practical. Additional surface water sampling events will occur during the winter of 2010-2011 following the first significant rainfall event, and will include sampling from all sixteen sampling locations as is practical based on field conditions. These sampling events will be used to confirm the data collected in April and May of 2010, and to quantify surface water runoff from the Mine Site during different times of the year, including the end of the dry season and first runoff at the beginning of the winter rainy season. The surface water samples will be collected and analyzed in an identical fashion to the samples collected in April and May of 2010 as described in Section 3.0 of this report.

6.1.3 Monitoring Wells

6.1.3.1 Adit Sampling

The Adit Spring has been so named as it has been postulated that the source of the water is from the Bradley Mining Company underground mine workings 165-foot Adit that extends more than 300-feet from the main underground complex to its outlet on the hill slope above the Lower Pond. This Adit opening has long been covered by mine tailings, but still serves as a conduit for water in the Mine to surface and then free flow into the Lower Pond.

It is proposed to install a well that will intersect the buried Adit at depth in order to obtain a representative water sample of Adit water prior to its interaction with mine waste and the atmosphere. Additionally, the well will be used to install a pressure transducer to monitor water levels/flow through the Adit. Ideally, this well will extend through to the floor of the Adit and into a sump which would allow for the collection of water samples via a small submersible pump. The exact placement of the well will be aided by the topographic survey data described in Section 6.1.1.

6.1.3.2 DMEA/Cordero Tunnel Sampling

Cordero only operated at the 360 Level of the underground mine workings, which are currently presumed to be flooded. Collecting a water sample from the 360-foot workings could help identify the quality of the water that is sourced from this level of the Mine. This data could then be compared to the data collected from the 165-foot Adit to determine the relative contribution of

mercury loading from the 360 Level, if any, emanating from the Adit Spring (it is presumed that the Cordero workings at the 360 Level are connected to the Bradley underground workings via a sloped tunnel called the 'Main Winze'). The well would be placed near the original DMEA Shaft (the entrance to the 360-foot underground workings level) to maximize the opportunity to intersect one of the former 360 Level tunnels. Once the well is complete, it will be equipped with a pressure transducer to monitor water levels and a submersible pump for the collection of groundwater samples. The exact placement of the well will be aided by the topographic survey data described in Section 6.1.1.

6.2 Development of Remedial Action Work Plan and Preliminary Remedial Design

Based on the results presented in this report, combined with data collected as outlined in Section 6.1 above, Sunoco will develop a Remedial Action Workplan and Preliminary Design Document compliant with the conditions in CRWQCB Order R5-2009-0869. This document will be of sufficient depth and detail to allow competent development of remedial action costs, and allow eventual preparation of detailed implementation plans for the parties eventually conducting the work.

Scope elements to be included are as follows:

- Capping Plan for Waste Rock and Tailings;
- Drainage and Capping Plan for Ponds;
- Storm and Spring Water Drainage Design Plan;
- Adit Water Discharge Capture and Re-routing Plan; and
- Conceptual Adit Water Discharge Treatment Preliminary Design..

7.0. REFERENCES

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FIGURES



SGI THE SOURCE GROUP, Inc.
environmental

3451 C VINCENT ROAD
 PLEASANT HILL, CA 94523

MAP SOURCE: U.S.G.S.

SCALE:



SITE LOCATION MAP

SITE:

SUNOCO
 MT. DIABLO MERCURY MINE

DATE:

12/05/08

LOCATION:




2430 MORGAN TERRITORY ROAD
 CLAYTON, CALIFORNIA

FIGURE:

1-1



LEGEND

	Mine Structure (1953)
	Spring
	Pond (2004 Outline)

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 PLEASANT HILL, CA 94523

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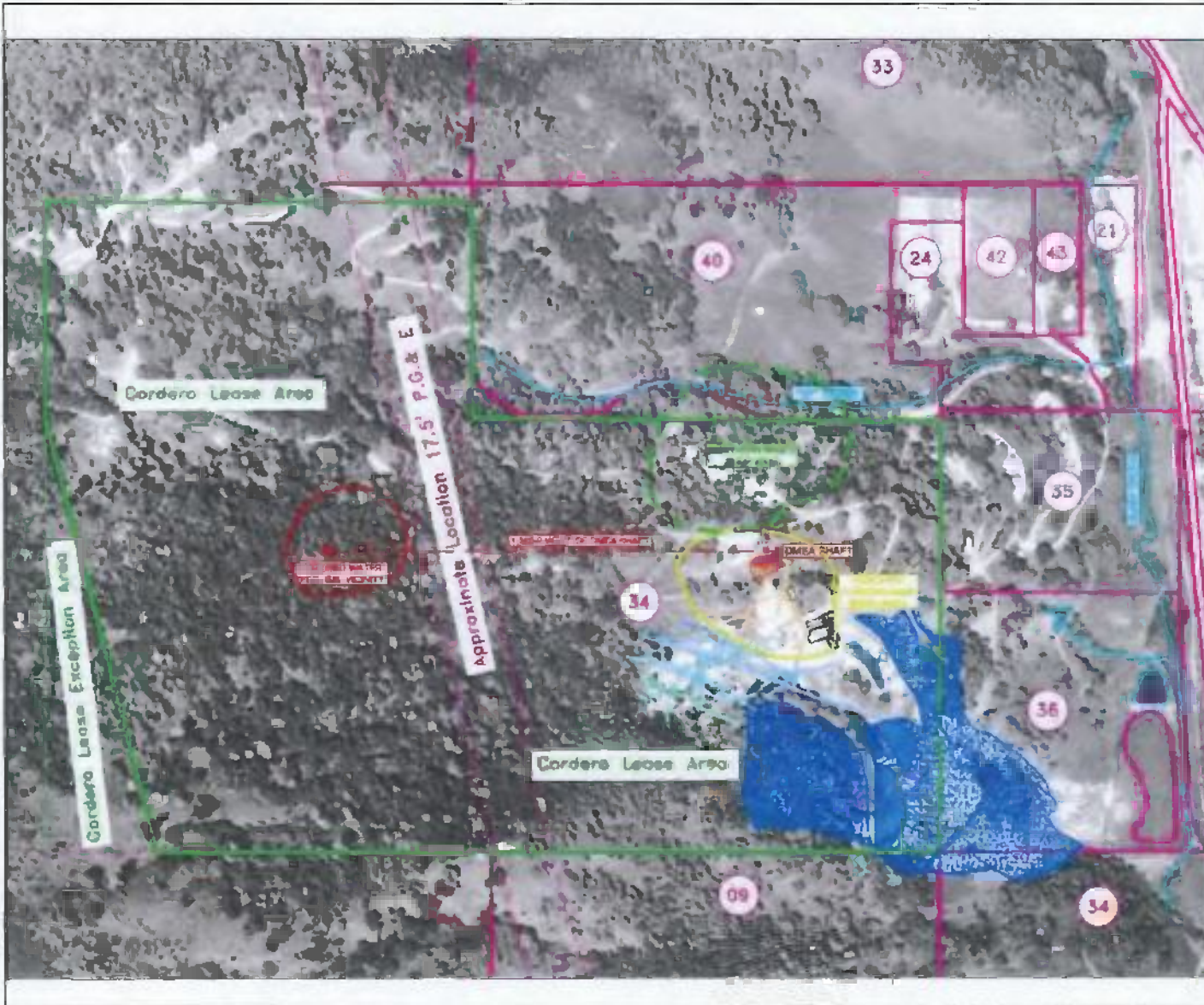
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 Mine Features Map.dwg

MT. DIABLO MERCURY MINE
 CONTRA COSTA COUNTY, CALIFORNIA
 (2004 AERIAL)









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2004 AERIAL PHOTO OF
 MT DIABLO MINE SITE

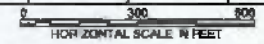
PROJECT NO.	FIGURE NO.
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LEGEND

-  Mine Structure (1953)
-  Tailings/Waste Rock (Pre Cordero)
-  Waste Rock (DMSA/Cordero)
- Underground Workings
 -  Adfll Level
 -  80-ft Level
 -  165-ft Level
 -  270-ft Level
 -  560-ft Level (Cordero)

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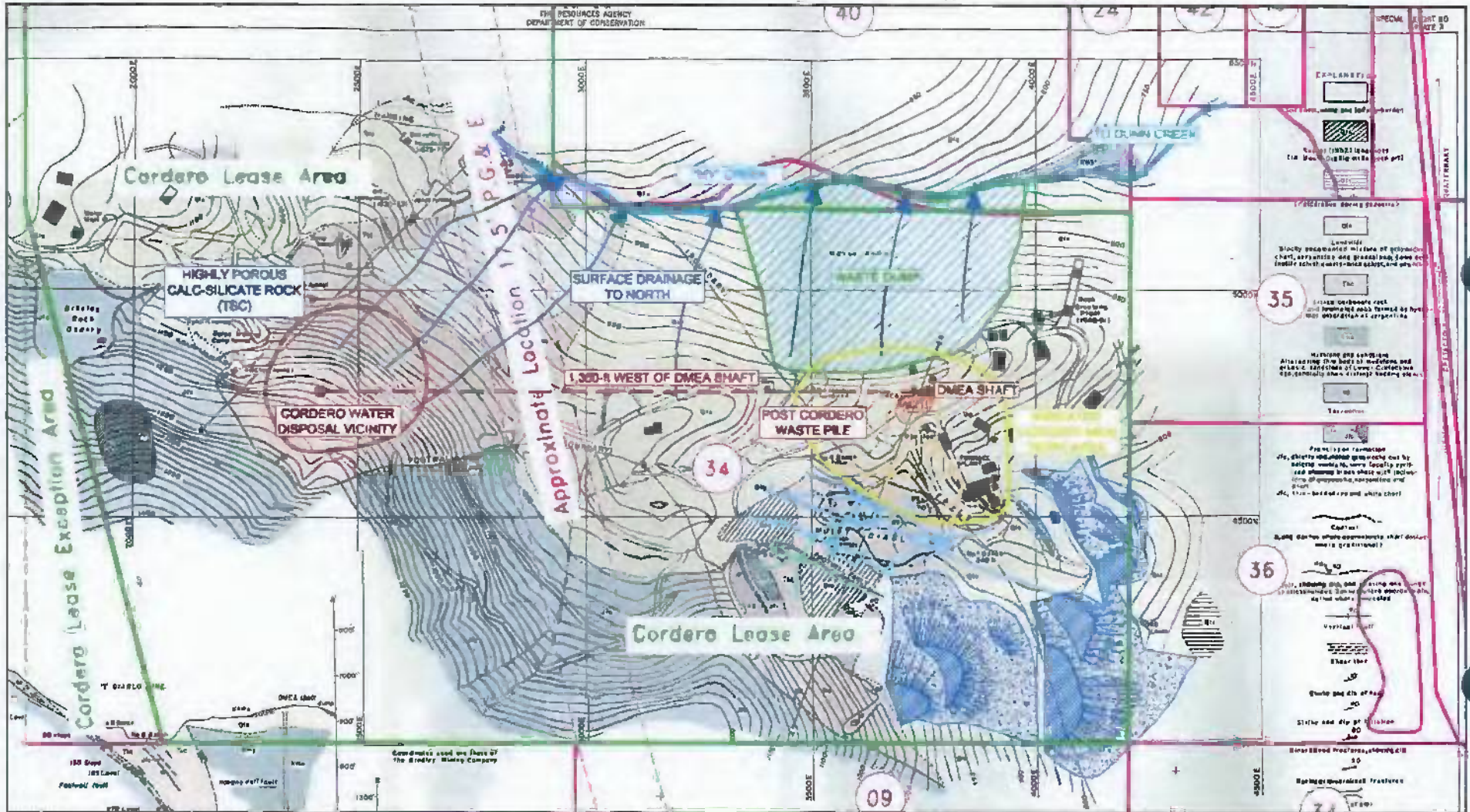


2004 AERIAL PHOTO SHOWING FEATURES
LEASE BOUNDARIES

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3451-C VINCENT ROAD
PLEASANT HILL, CA 94623



FIGURE
2-2



EXPLANATION

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LEGEND

	Mine Structure (1953)
	Fillings/Waste Rock (Pre Cordero)
	Waste Rock (DMEA/Cordero)
	Underground Workings
	80-ft Level
	185-ft Level
	270-ft Level
	360-ft Level (Cordero)

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MT. DIABLO MERCURY MINE
 CONTRA COSTA COUNTY, CALIFORNIA
 (2004 AERIAL)

DMEA MAP SHOWING PRE- AND POST- DMEA/CORDERO MINE FEATURES

FILE NAME Mine Features Map.dwg	DATE 4/14/09	DR. BY JP	APP. BY PH	PROJECT NO. 01-SUN-050	EXHIBIT 2-3
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UNITED STATES DEPARTMENT OF THE INTERIOR
GEOLOGICAL SURVEY

DMLA 2448
MERCURY I
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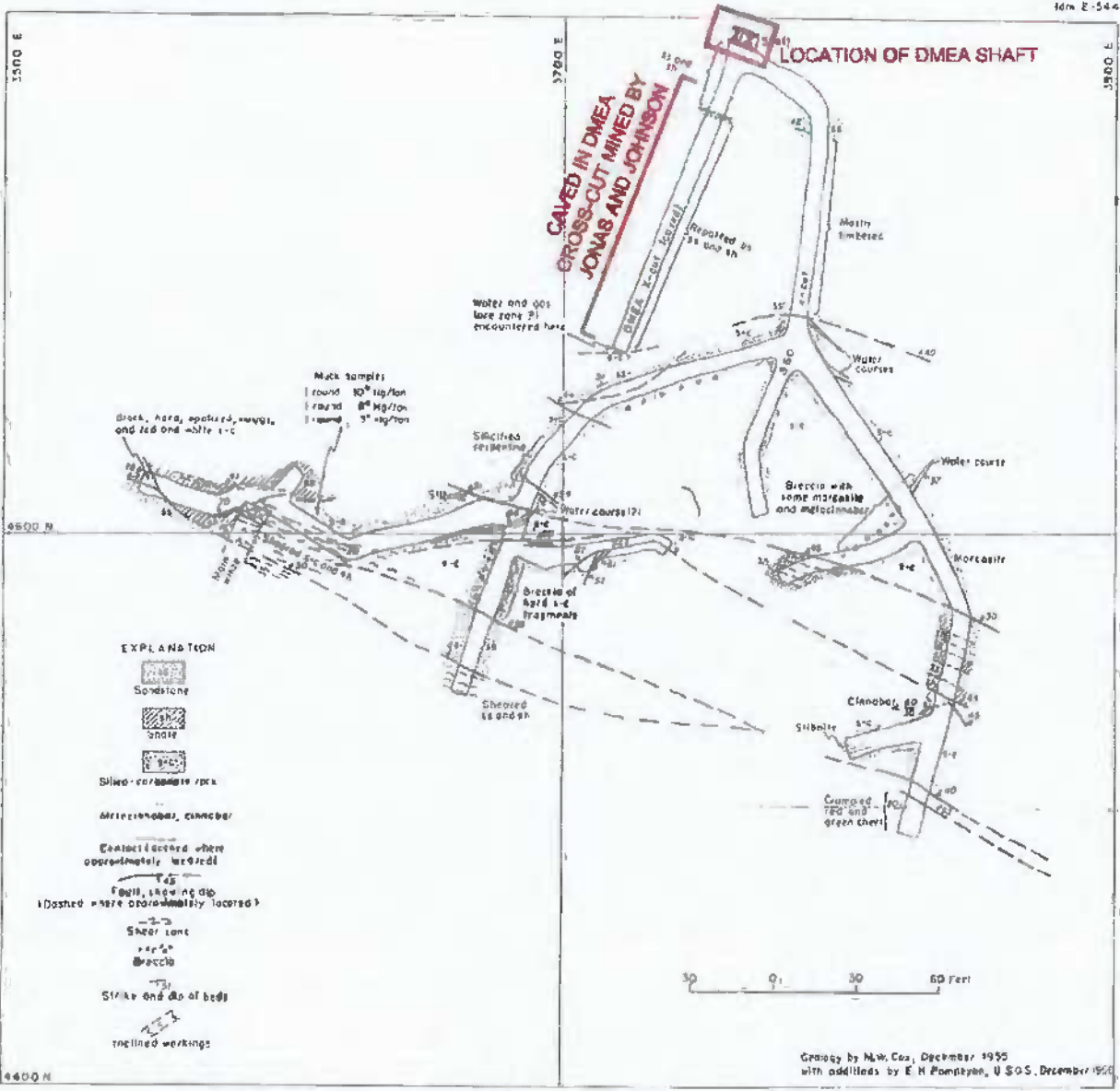


Figure 3 GEOLOGIC PLAN OF 360 LEVEL, MT DIABLO QUICKSILVER MINE
CONTRA COSTA COUNTY, CALIFORNIA

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3451-C VINCENT ROAD
PLEASANT HILL, CA 94523

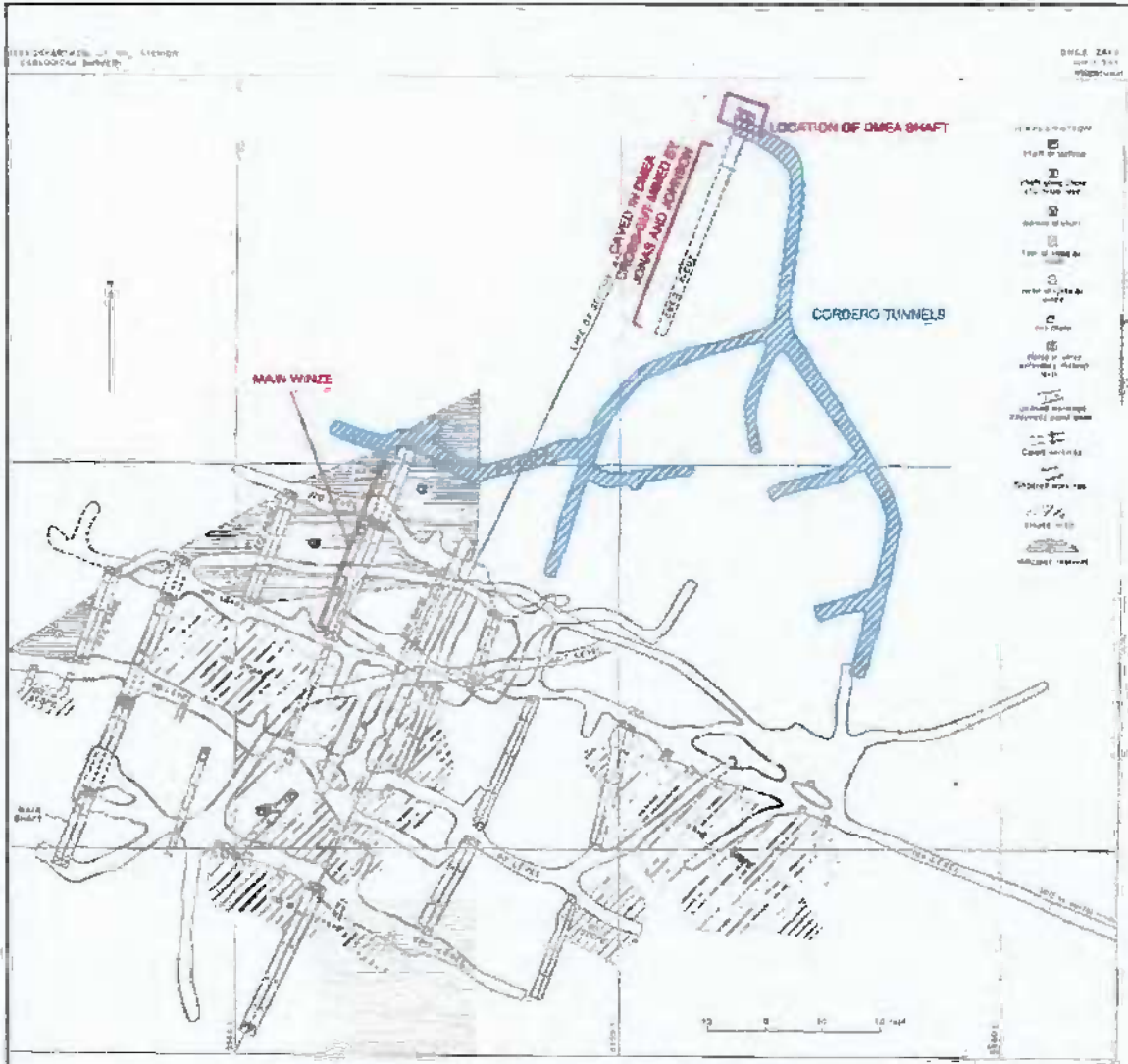
PROJECT NO: 01-SUN-050
DATE: 07/18/09
DR BY: JP
APP BY: PH

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HORIZONTAL SCALE IN FEET



**PLAN VIEW OF CORDERO
TUNNEL SYSTEM**

FIGURE:
2-4

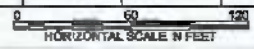


3-90/577

LEGEND

 Cordero Workings

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PLAN VIEW OF CORDERO TUNNEL SYSTEM WITH PRE-CORDERO TUNNELS

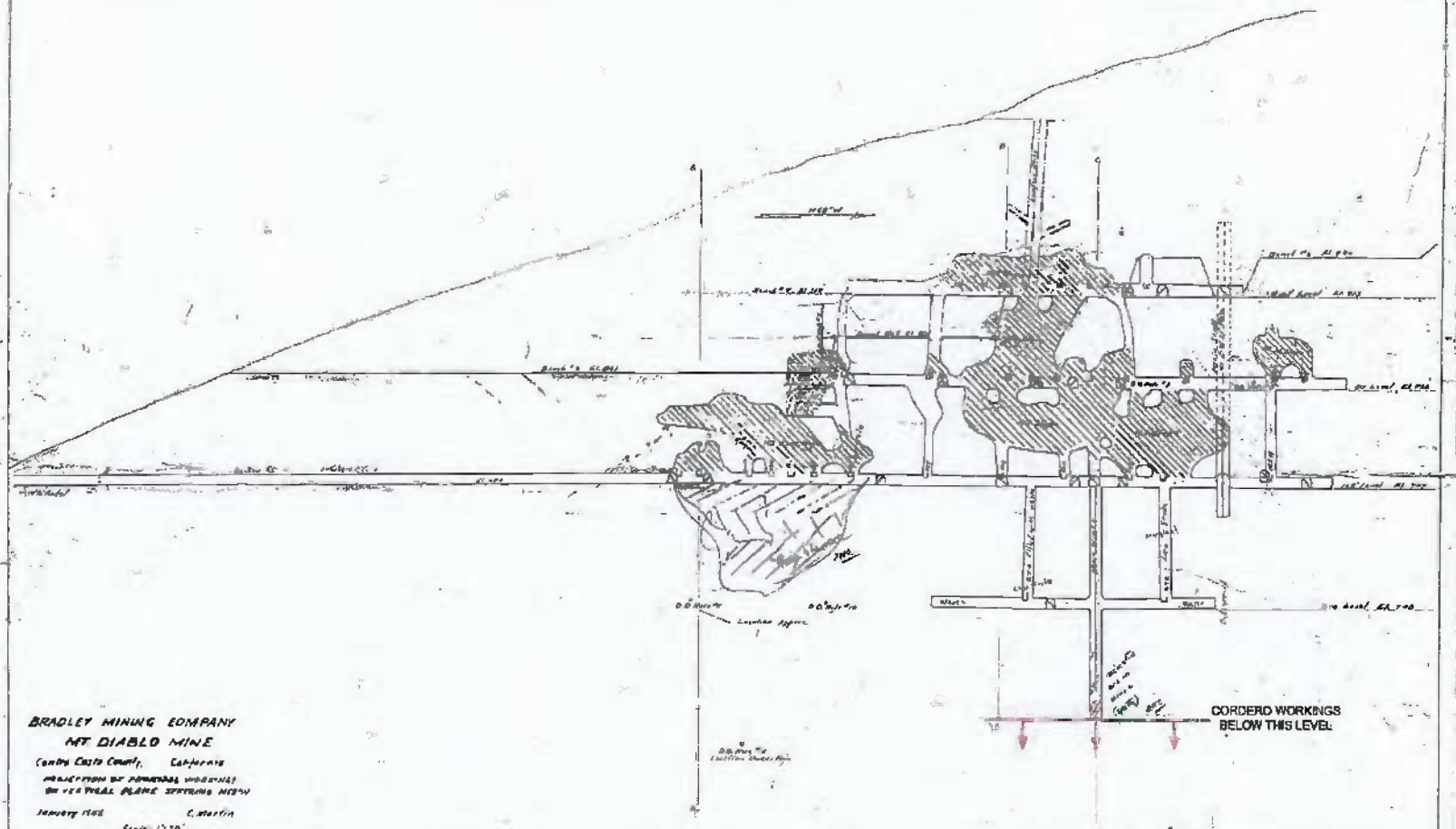
SQI THE SOURCE GROUP, Inc.
 3451 C VINCENT ROAD
 PLEASANT HILL, CA 94523



FIGURE 2-5

Figure 4 COMPOSITE MAP OF MILL WORKINGS, MT DIABLO MINE
 CONTRA COSTA COUNTY, CALIFORNIA

3-593/597







BRADLEY MINING COMPANY
 MT DIABLO MINE
 Contra Costa County, California
 PROJECTION BY HORIZONTAL WORKINGS
 ON A VERTICAL PLANE EXTENDING NORTH
 January 1908 E. Martin
 Scale 1"=30'

PROJECT NO.	DATE:	DRAWN BY:	APP. BY:	CROSS SECTION OF PRE-CORDERO TUNNEL SYSTEM
01-SUN-050	07/27/09	JP	PH	
<p>HORIZONTAL SCALE IN FEET</p>				
<p>3451-C VINCENT ROAD PLEASANT HILL, CA 94523</p>				



LEGEND

	Mine Structure (1953)
	Spring
	Pond (2004 Outline)
	ardero Waste Rock Main Winze, Sub-Vertical Connector

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 3451C VINCENT ROAD
 PLEASANT HILL, CA 94523

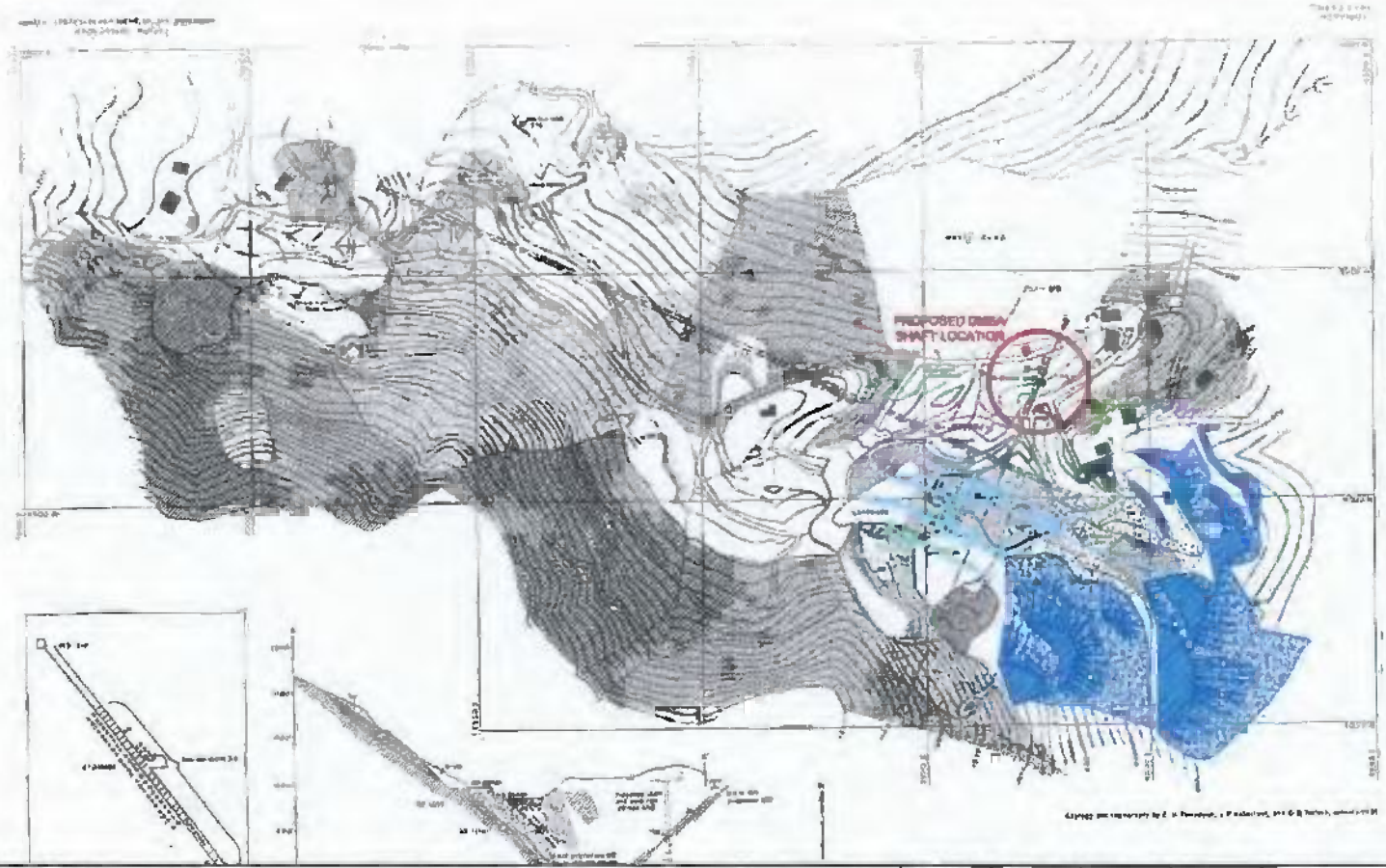
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 Mine Features Map.dwg

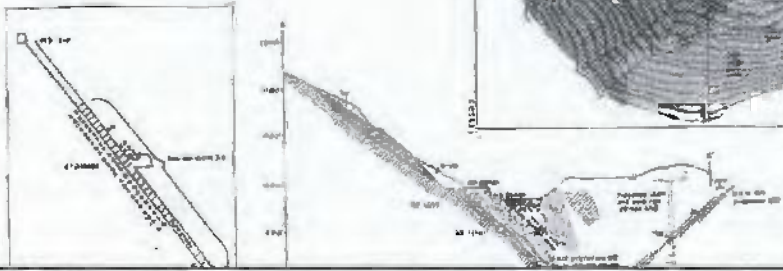
MT. DIABLO MERCURY MINE CONTRA COSTA COUNTY, CALIFORNIA (2004 AERIAL)		
DATE	DR. BY	APP. BY
5/4/09	JP	PH

2004 AERIAL PHOTO WITH PRE- AND POST-DME/CORDERO MINE FEATURES	
PROJECT NO.	FIGURE NO.
01-SUN-050	2-7

325 1511



- Mine Structure
- Pre-Cordero Tailings and Waste Rock
- Adit Level
- 80-ft Level
- 165-ft Level
- 270-ft Level



Map data and photography by E. A. Peterson, a P. Anderson, and G. B. Nelson, dated 1978

LEGEND

- Mine Structure
- Pre-Cordero Tailings and Waste Rock
- Underground Workings (Pre Cordero)**
- Adit Level
- 80-ft Level
- 165-ft Level
- 270-ft Level

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01-SUN-050	07/18/08	JP	PH

USGS DMEA MAP SHOWING PROPOSED DMEA SHAFT LOCATION

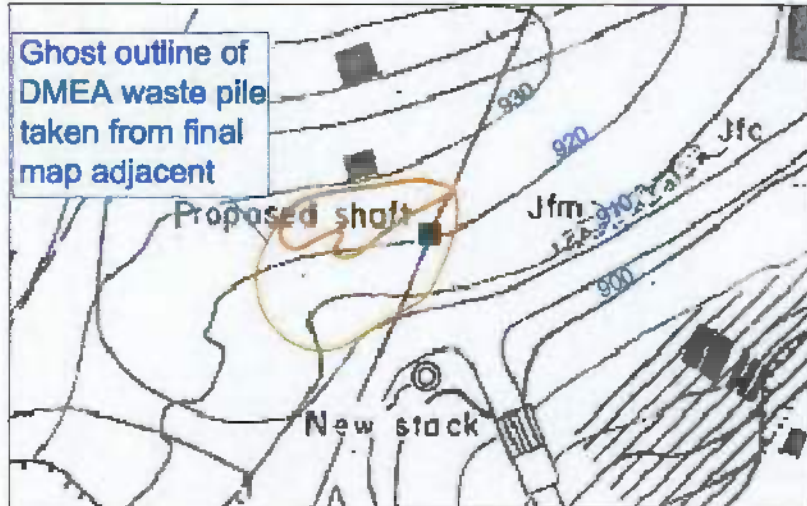


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 PLEASANT HILL, CA 94523

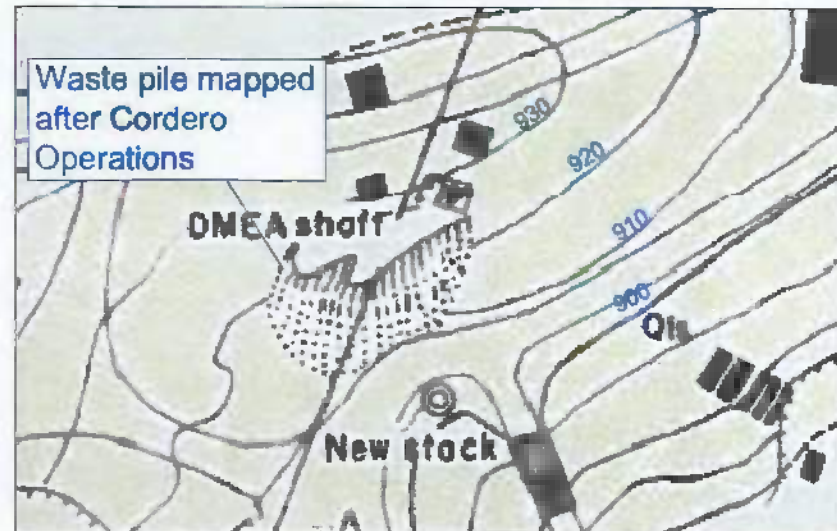


FIGURE:
2-8

Pre-DMEA Shaft



Post-DMEA Shaft



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MT. DIABLO MERCURY MINE
 CONTRA COSTA COUNTY, CALIFORNIA

DMEA WASTE PILE COMPARISON
 CLOSE UP VIEW

FILE NAME
 Mine Features Map.dwg

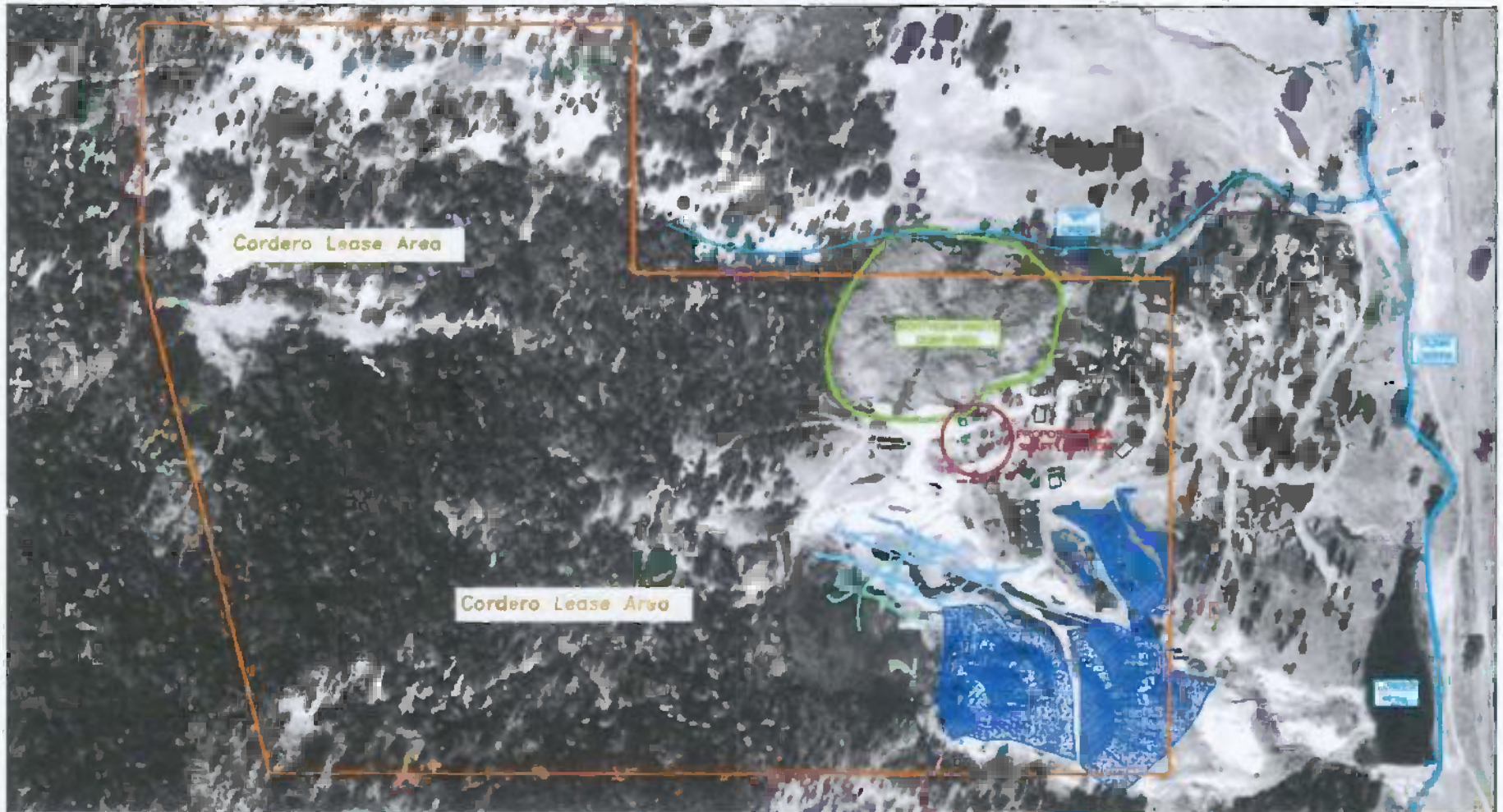
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PROJECT NO.
 01-SUN-050

EXHIBIT
 2-9



LEGEND

- | | |
|---|--|
|  Mine Structure | Underground Workings (Pre Cordero) |
|  Pre-Cordero Tailings and Waste Rock |  Adit Level |
| |  80-ft Level |
| |  185-ft Level |
| |  270-ft Level |

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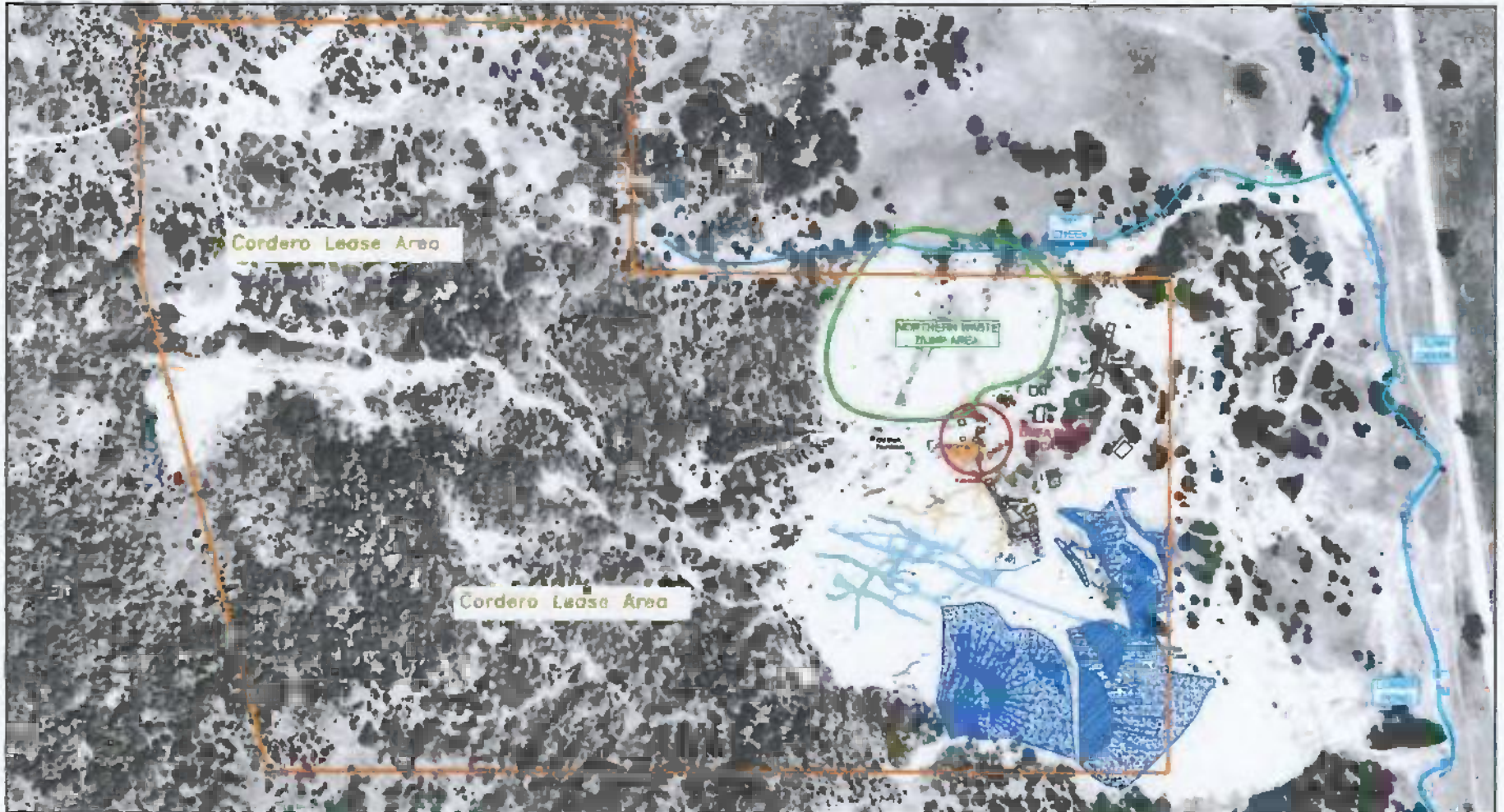
**PRE-CORDERO CONDITION
1952 AERIAL PHOTOGRAPH**



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PLEASANT HILL, CA 94523



FIGURE:
2-10

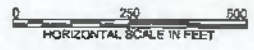


LEGEND

- | | | | |
|---|-----------------------------------|---|------------------------|
|  | Mine Structure (1953) |  | Adft Level |
|  | Tailings/Waste Rock (Pre Cordero) |  | 80-ft Level |
|  | Waste Rock (DNEA/Cordero) |  | 165-ft Level |
| | |  | 270-ft Level |
| | |  | 360-ft Level (Cordero) |

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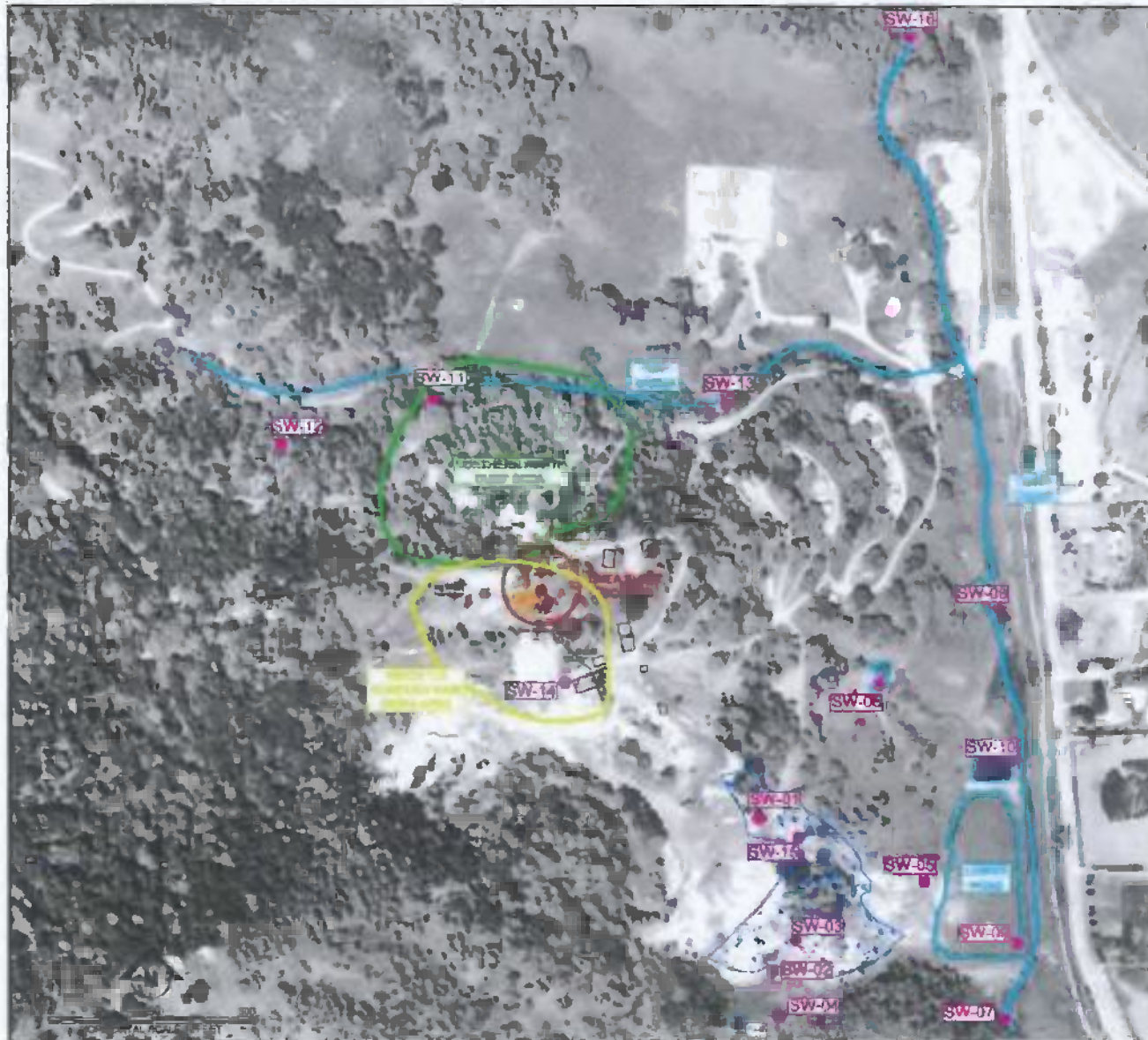
POST CORDERO CONDITION
1957 AERIAL PHOTOGRAPH







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FIGURE:
2-11



LEGEND

-  Mine Structures (1953)
-  Tailings/Waste Rock (PTE Cordero)
-  Waste Rock (DNEA/Cordero)
-  Surface Water Sample Location

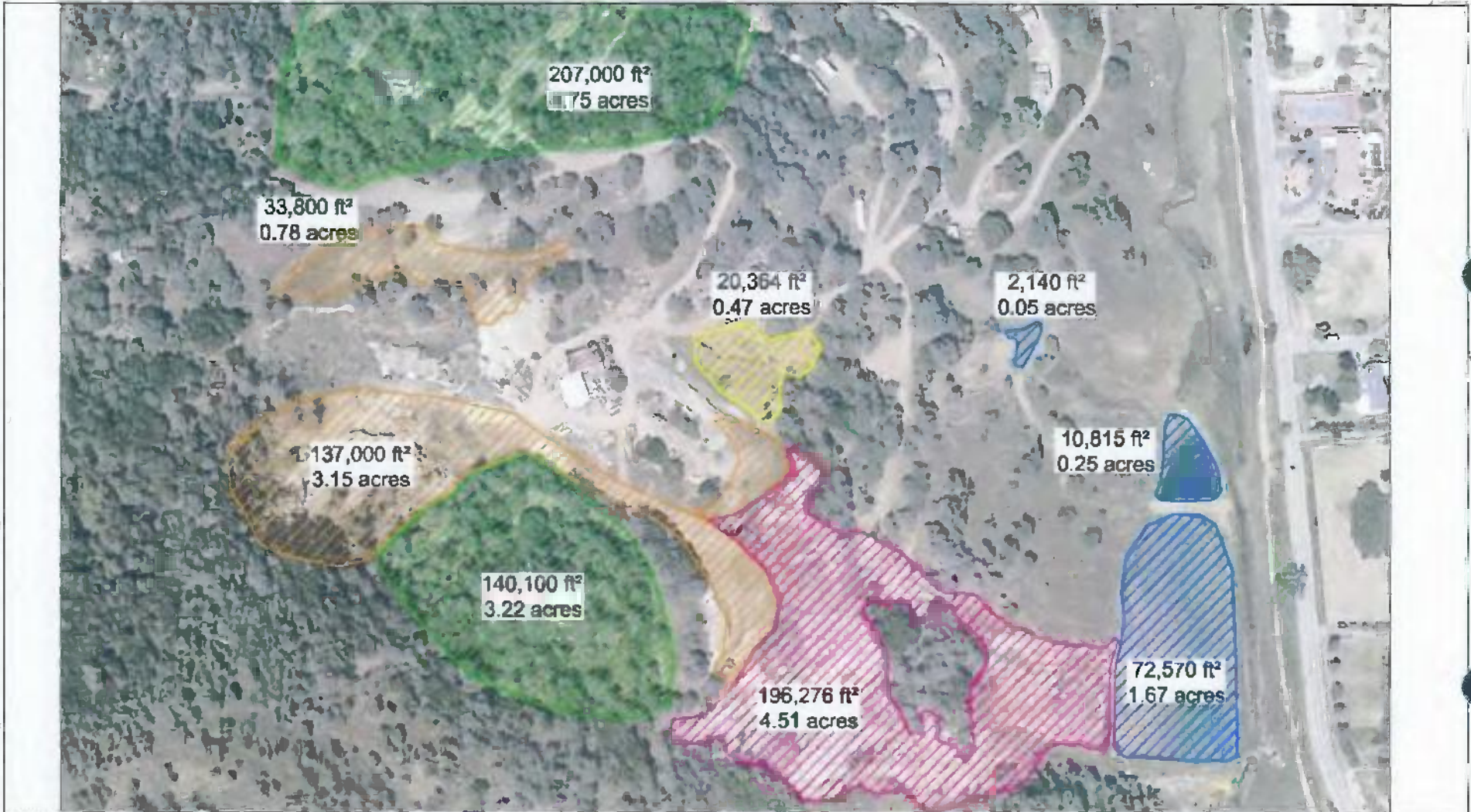
2010 SURFACE WATER SAMPLING LOCATIONS

MT. DIABLO MERCURY MINE
CONTRA COSTA COUNTY, CALIFORNIA
(2004 AERIAL)

PROJECT NO	DATE	DRAWN BY	APP. BY
01-SUN-050	5/19/10	JP	PH

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PLEASANT HILL, CA 94523

FIGURE
3-1



LEGEND

	Breaking Tailings Piles
	Capped Areas
	Colorful Tailings Piles
	Waste/Quarry Rock
	Ponds

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 345 FC VINCENT ROAD
 PLEASANT HILL, CA 94523

SCALE
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 SCALE IN FEET

FILE NAME
 Mine Features Map.dwg

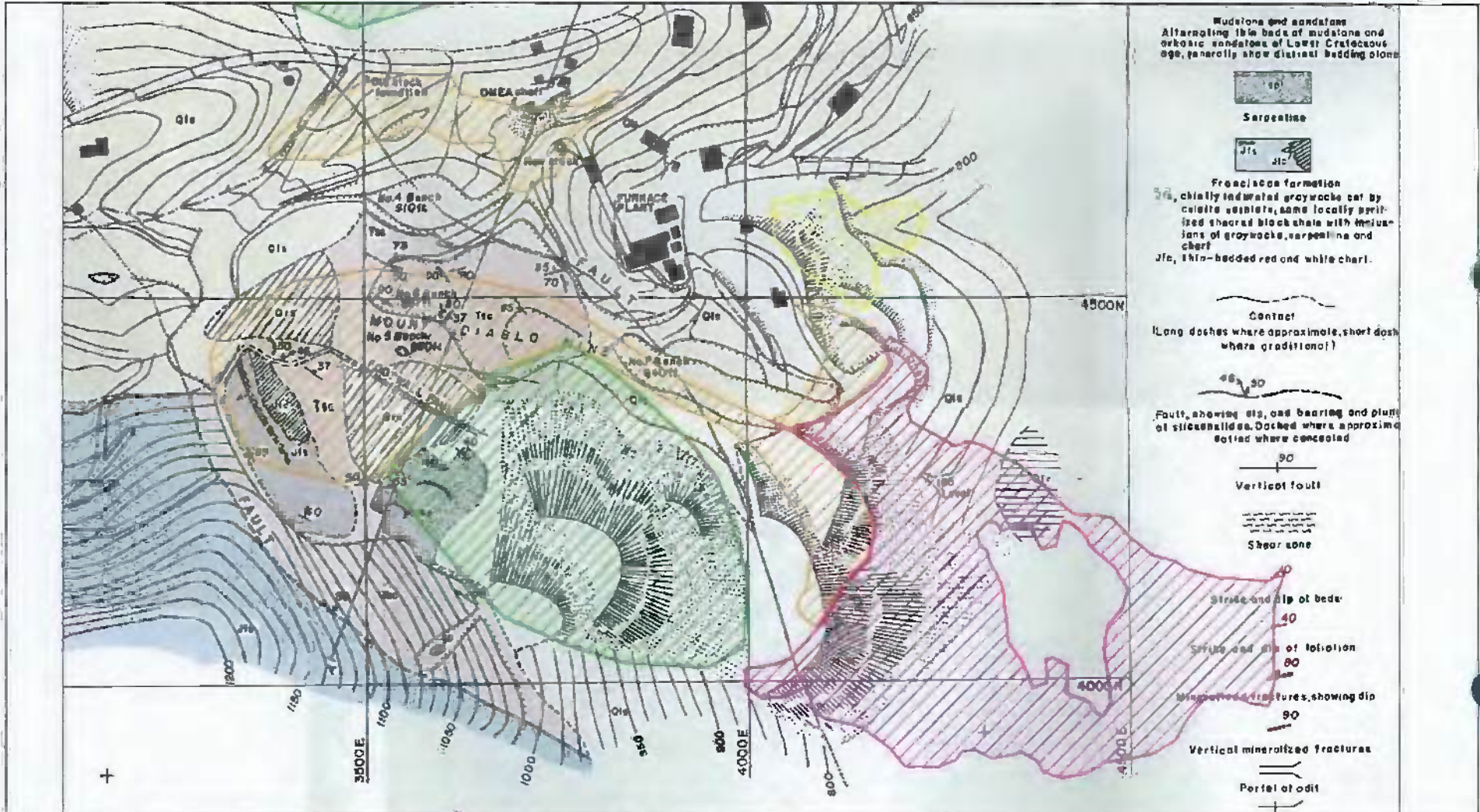
MT. DIABLO MERCURY MINE
 CONTRA COSTA COUNTY, CALIFORNIA
 (2004 AERIAL)

DATE 4/14/09 DR. BY JP APP. BY PH

MAPPED MINE WASTE MATERIALS

PROJECT NO. 01-SUN-050

FIGURE NO. 4-1



Mudstone and sandstone
Alternating thin beds of mudstone and
arkosic sandstone of Lower Cretaceous
age, generally show distinct bedding planes

Serpentine

Franciscan formation
T9c, chiefly indurated graywacke cut by
calcite veins, some locally pyrit-
ized shored block shale with inclu-
sions of graywacke, serpentine and
chert
J1c, thin-bedded red and white chert.

Contact
(Long dashes where approximate, short dash
where gradational)

Fault, showing dip, and bearing and plunge
of slickensides. Dashed where approxi-
mated where concealed

Vertical fault

Shear zone

Strike and dip of beds
40
Strike and dip of foliation
80
Dip-slip structures, showing dip
90
Vertical mineralized fractures
Portal of edit

LEGEND

	Bradley Tailings Piles
	Capped Areas
	Catcher Tailings Piles
	Waste/Quarry Rock
	Ponds

SGI THE SOURCE GROUP, INC.
3451C VINCENT ROAD
PLEASANT HILL, CA 94523

SCALE
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Mine Features Map.dwg

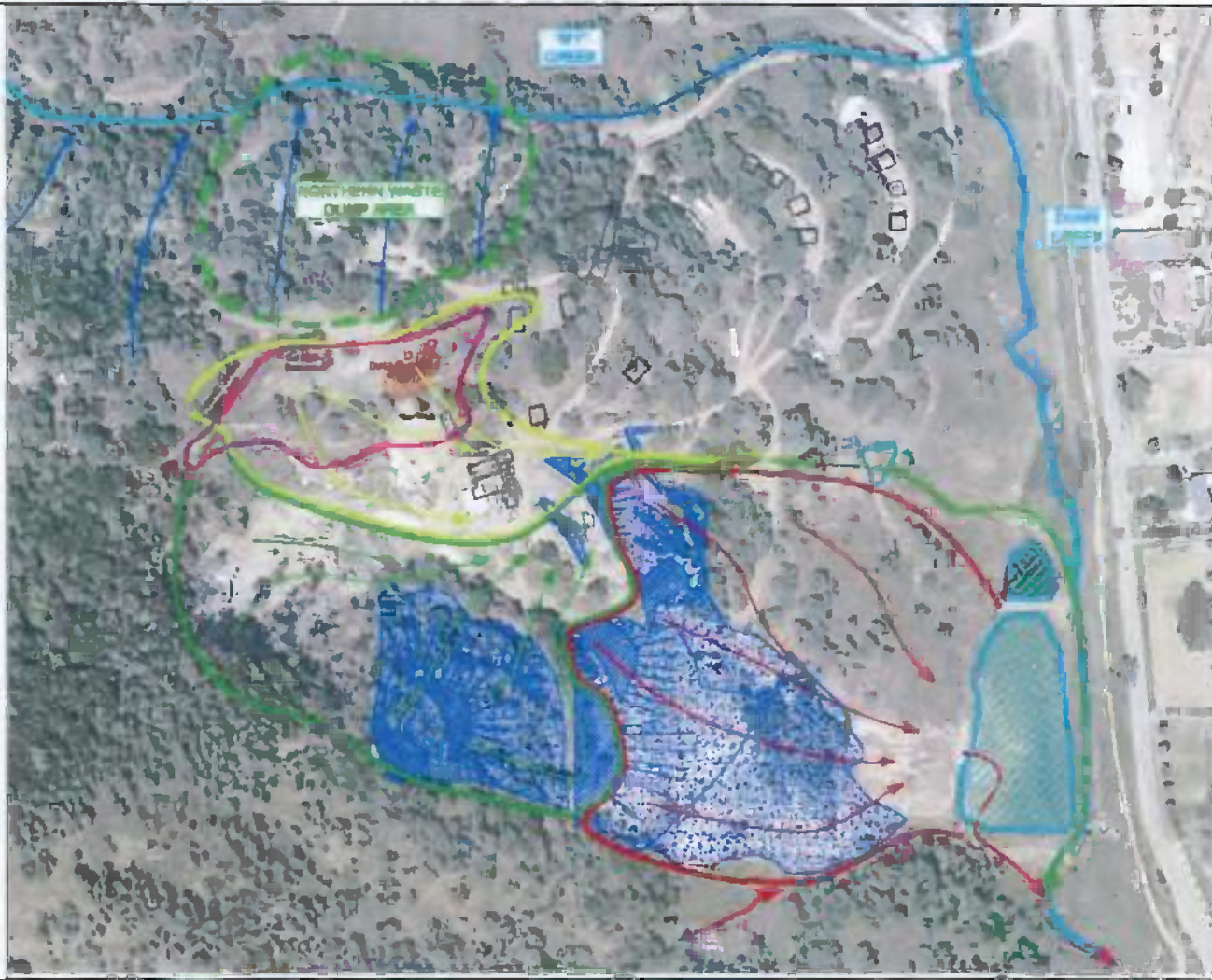
MT. DIABLO MERCURY MINE
CONTRA COSTA COUNTY, CALIFORNIA
(1952 AERIAL)

DATE 4/14/09 DR. BY JP APP. BY PH

MAPPED MINE WASTE WITH USGS
FEATURES OVERLAY

PROJECT NO. 01-SUN-050

FIGURE NO. 4-2



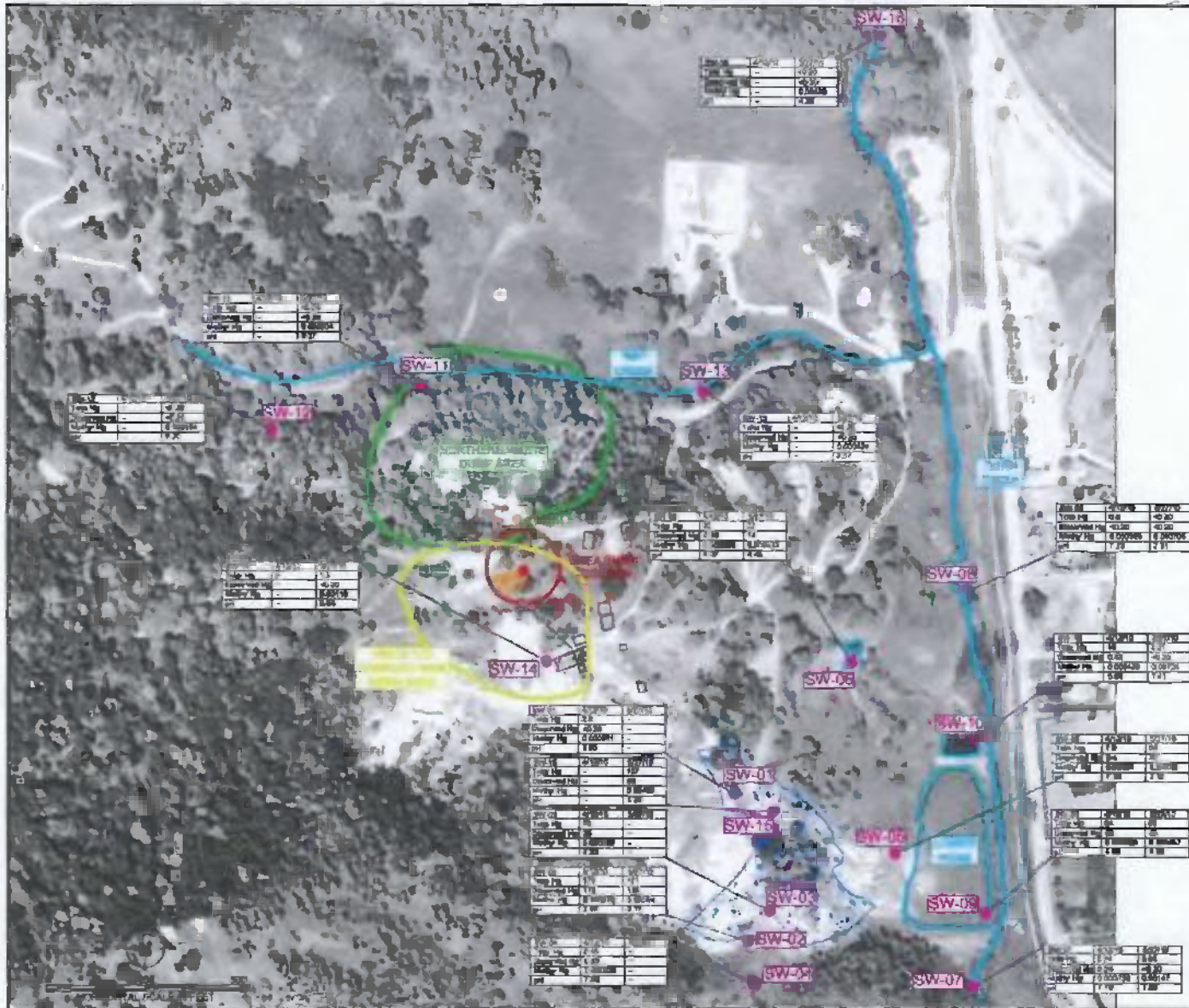
LEGEND	
	Mine Structure
	Spring
	Pond (2004 Configuration)
	Surface Flow
	Tailings/Waste Rock (Pre Cordero)
	Tailings/Waste Rock (Cordero)

SGI SOURCE GROUP, Inc.
 3451C VINCENT ROAD
 PLEASANT HILL, CA 94523

SCALE
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FILE NAME Nine Features Map.dwg

MT. DIABLO MERCURY MINE CONTRA COSTA COUNTY, CALIFORNIA (2004 AERIAL)		
DATE 5/3/09	DR. BY JP	APP. BY PH

SITE DRAINAGE AND SURFACE FLOW INTERPRETATION	
PROJECT NO. 01-SUN-050	FIGURE NO. 4-3



LEGEND

- Mine Structure (1953)
- Tailings/Waste Rock (Pia Cordero)
- Waste Rock (SME/Cordero)
- Surface Water Sample Location

Hg Mercury

<0.20 Analyte not detected at or above the laboratory reporting limit of 0.20 µg/L

NOTE

All concentrations reported in micrograms per liter (µg/L)

2010 SURFACE WATER SAMPLING RESULTS, MERCURY AND pH

MT. DIABLO MERCURY MINE
CONTRA COSTA COUNTY, CALIFORNIA
(2004 AERIAL)

PROJECT NO	DATE	DRAWN BY	APP BY
01-SJH-080	5/19/10	JP	PH

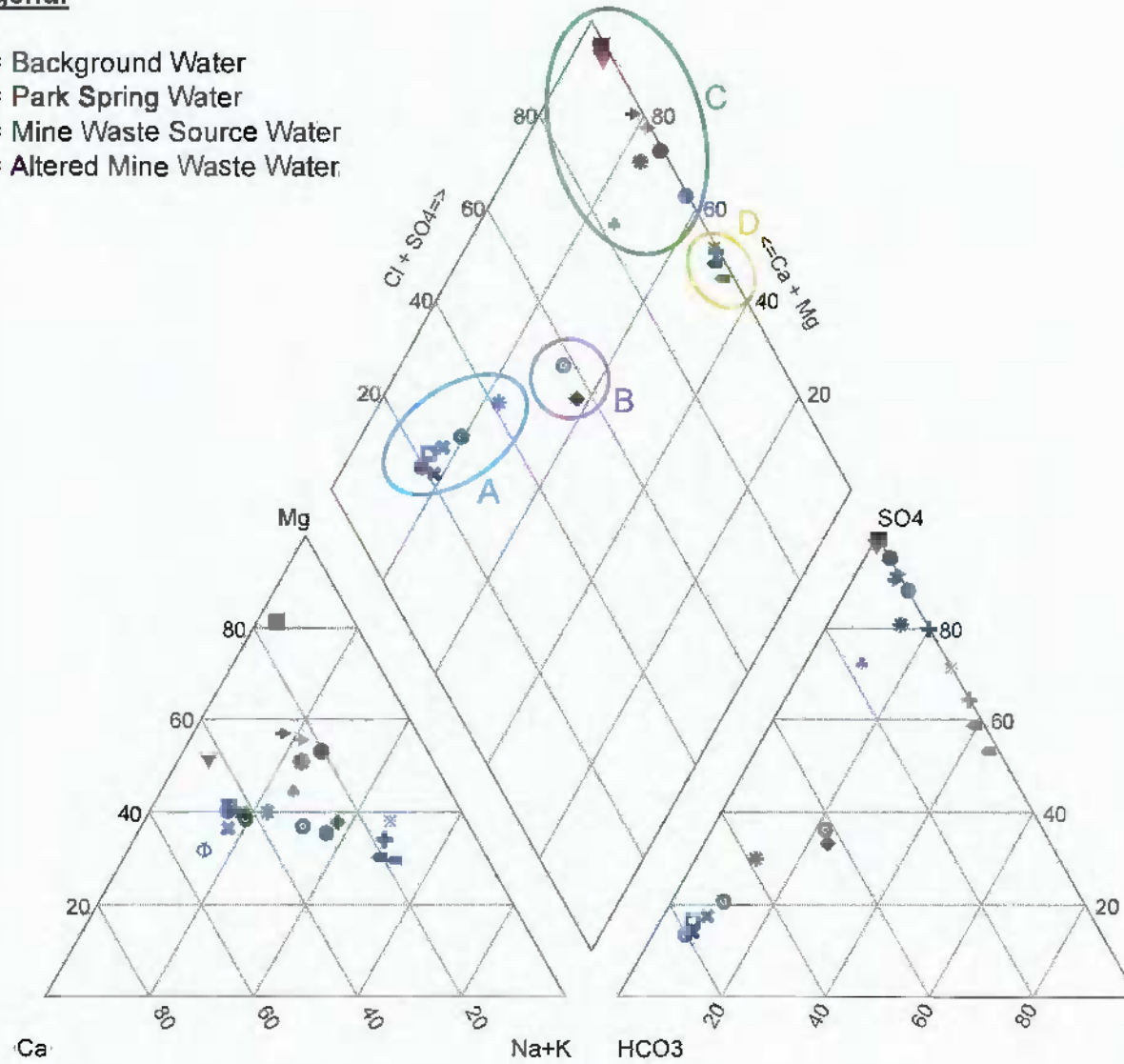
SGI SOURCE GROUP, INC.
3451-C VINCENT ROAD
PLEASANT HILL, CA 94523

FIGURE 4-4

Figure 4-5
2010 Surface Water Data Piper Diagram

Legend:

- A = Background Water
- B = Park Spring Water
- C = Mine Waste Source Water
- D = Altered Mine Waste Water

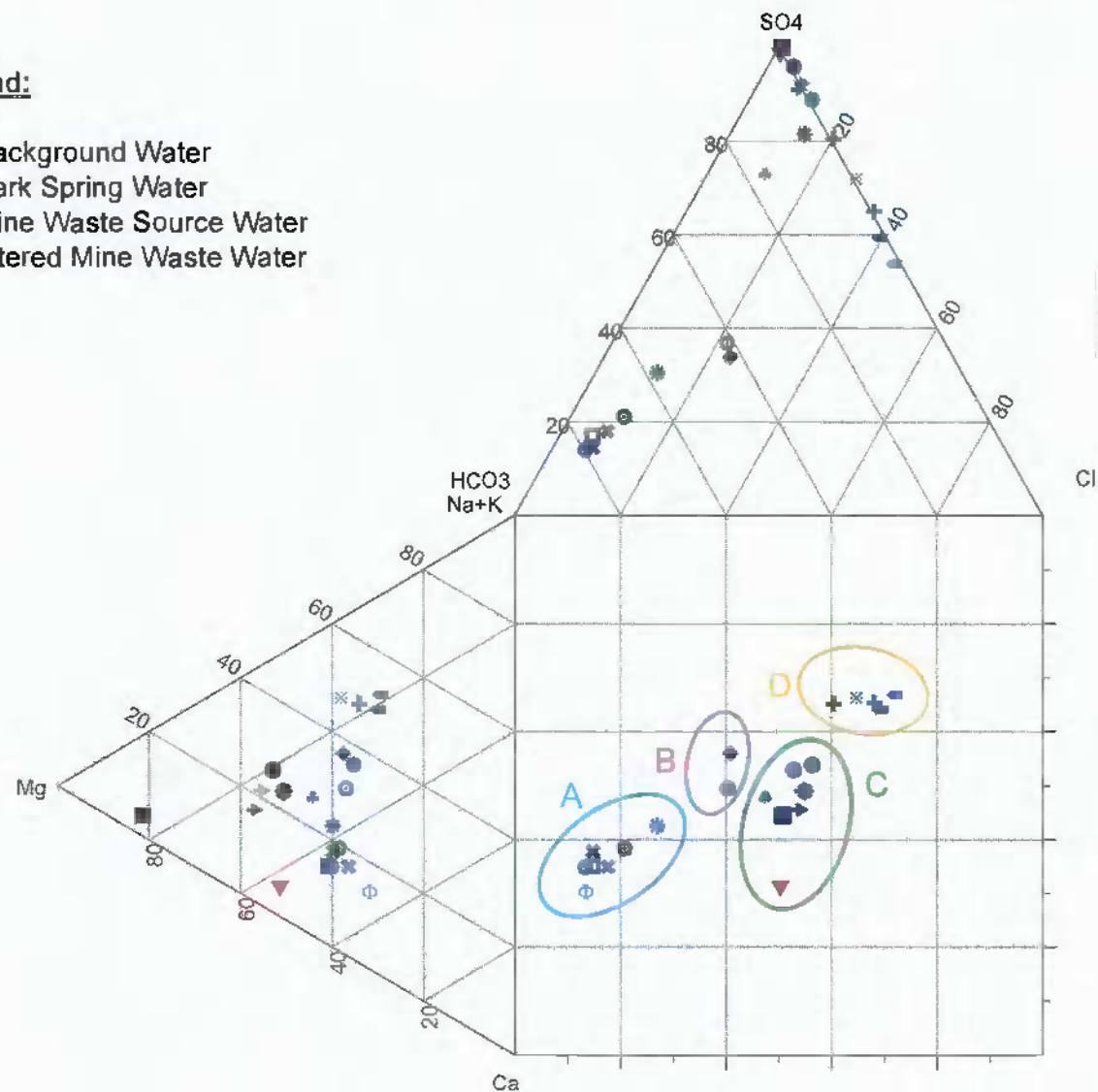


- ▼ SW-01
- * SW-10
- SW-02
- SW-03
- ◆ SW-04
- ◄ SW-05
- SW-06
- ⊙ SW-07
- × SW-08
- + SW-09
- + SW-11 (5/27/10)
- ⊙ SW-12 (5/27/10)
- SW-13 (5/27/10)
- + SW-14 (5/27/10)
- × SW-15 (5/27/10)
- ⊙ SW-16 (5/27/10)
- SW-02 (5/27/10)
- ◄ SW-05 (5/27/10)
- SW-06 (5/27/10)
- ⊙ SW-07 (5/27/10)
- × SW-08 (5/27/10)
- + SW-09 (5/27/10)
- * SW-10 (5/27/10)

Figure 4-6
2010 Surface Water Data Durov Diagram

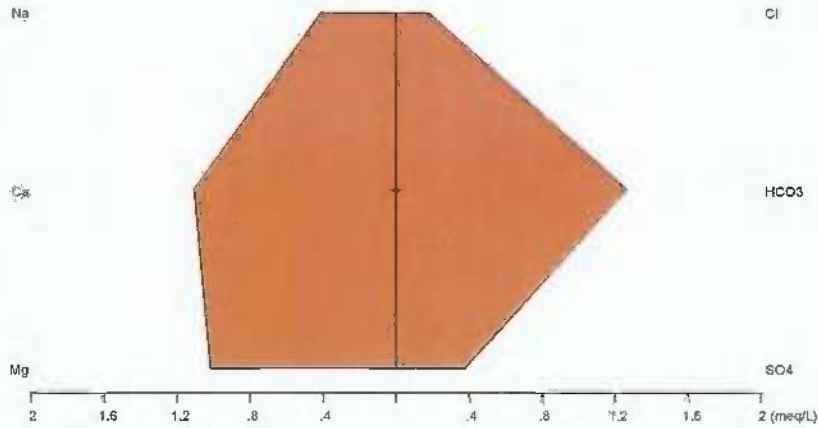
Legend:

- A = Background Water
- B = Park Spring Water
- C = Mine Waste Source Water
- D = Altered Mine Waste Water

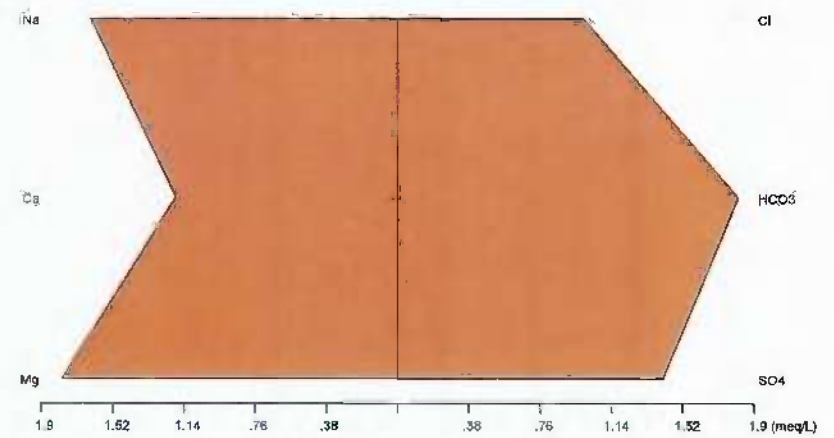


- ▼ SW-01
- * SW-10
- SW-02
- SW-03
- ◆ SW-04
- ◼ SW-05
- ⊕ SW-06
- SW-07
- × SW-08
- + SW-09
- + SW-11 (5/27/10)
- ⊕ SW-12 (5/27/10)
- SW-13 (5/27/10)
- + SW-14 (5/27/10)
- × SW-15 (5/27/10)
- ⊕ SW-16 (5/27/10)
- SW-02 (5/27/10)
- SW-05 (5/27/10)
- ⊕ SW-06 (5/27/10)
- SW-07 (5/27/10)
- × SW-08 (5/27/10)
- + SW-09 (5/27/10)
- * SW-10 (5/27/10)

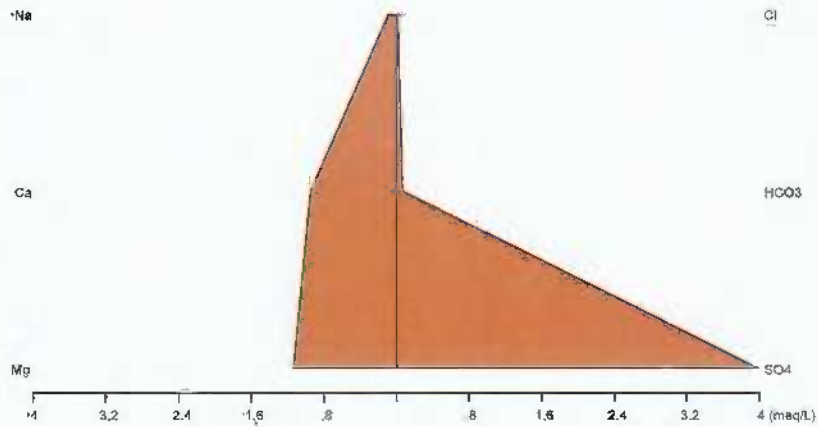
Background Water



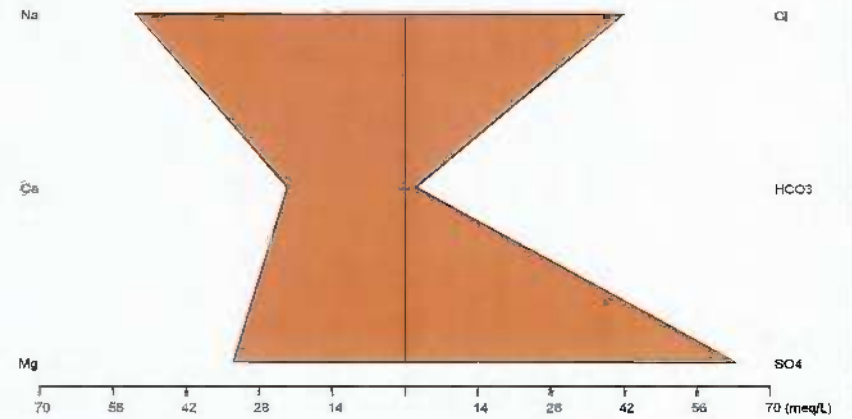
Park Spring Water



Mine Waste Source Water



Altered Mine Waste Water



*Mount Diablo Mercury Mine
Contra Costa County, California*

Characteristic Stiff Diagrams

FILE NAME
Figure 4-7 - Characteristic Stiff Diagrams.cdr

DATE
7/29/10

DR. BY
TC

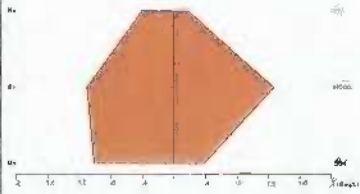
APP. BY
JP

PROJECT NO.
01-SUN-050

FIGURE 4-7

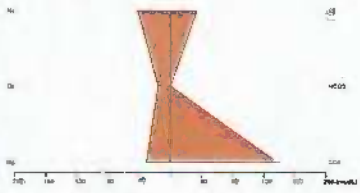
SW-07 - DUNN CREEK

April 2010



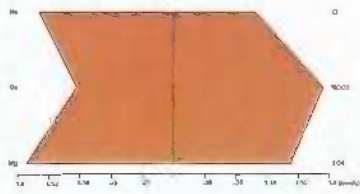
SW-09 - LOWER POND

April 2010



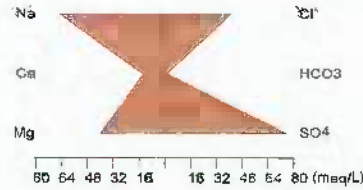
SW-04 - PARK SPRING

April 2010

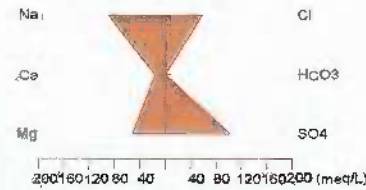


SW-07 - HISTORICAL DATA

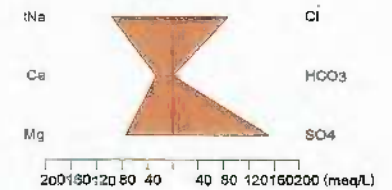
1975



1978

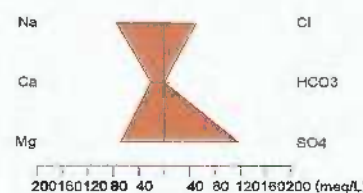


1984

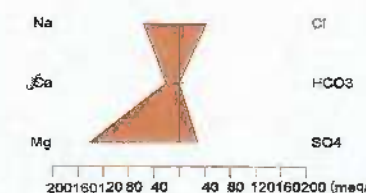


SW-09 - HISTORICAL DATA

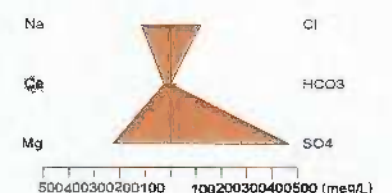
1978



1984

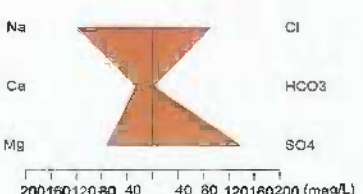


1987

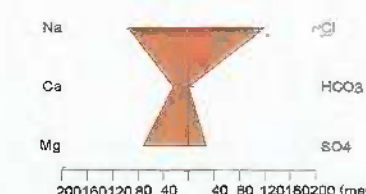


SW-04 - HISTORICAL DATA

1978



1984



LEGEND

Mount Diablo Mercury Mine
Contra Costa County, California

**Comparison of Historical Data
Stiff Diagrams**

PROJECT NO.	DATE	DRAWN BY	APP. BY
01-SUN-050	7/28/10	TC	JP

SGI THE SOURCE GROUP, Inc.
environmental
3451-C VINCENT ROAD
PLEASANT HILL, CA 94523



**FIGURE
4-8**



TABLES

**Table 2-1
Production Statistics
Mount Diablo Mercury Mine
Contra Costa County, California**

PRODUCTION STATISTICS- MOUNT DIABLO MINE "MILL WORKINGS"					
Operator	Date	Cubic Yards of Ore Milled	Waste rock from tunnels, crosscuts, raises, shafts and stopes (cubic yards)	Dewater volume (acre-feet)	Mercury Produced, flasks
Welch	1863	shaft and placer	NA	none	NA
Unknown	1875-1877	NA	NA	NA	1000
Mt. Diablo Quicksilver MC, operator Ericson	1930-1936	NA	NA	NA	739
leased to Bradley MC	1936-1951	78,188 ⁽¹⁾	24,815 ⁽²⁾	161 ⁽³⁾	10,455
leased Ronnie B. Smith	Sept 1951- June 1953	920 ⁽⁴⁾	NA	NA	125 ⁽⁵⁾
DMEA and Smith	June 1953 - Jan 1954	none	630 ⁽⁶⁾	minor	none
DMEA, Johnson and Jonas	Jan 1954 - Feb 1955	none	67 ⁽⁷⁾	NA	none
leased to Cordero MC	Feb 1955 - Dec 1956	none	1,228 ⁽⁸⁾	19.5 ⁽⁹⁾	none
leased to Nevada Scheelite Company	1956	none	none	minor	none
Total Cubic Yards of Material Taken Out			105,848 ⁽¹⁰⁾		

Notes:

- ⁽¹⁾ Table 4, Ross 1958, reported 128,664 tons of ore milled. Converted here to cubic yards above based on conversion of 1.62 tons per cubic yard (cy)
- ⁽²⁾ Total length of workings 4,570 ft (Pampeyan 1963, p 25) x 5 feet x 7 feet x bulking factor plus 20% = 7,108 cy less (2) and (3). Included 550 ft of shafts and raises (935 cy) and stopes of 19,000 cy (Pampeyan, Plate 5).
- ⁽³⁾ Estimate 10 gpm for 10 years.
- ⁽⁴⁾ Used the ratio of ore milled to flasks produced for Bradley to estimate the amount of ore milled by Smith.
- ⁽⁵⁾ DMEA internal memo dated 2/4/57 ref doc no. 2:88/384
- ⁽⁶⁾ 300-ft DMEA shaft 4.5 ft x 8.5 ft (Ross 1958) plus 77 ft of tunnel at 5 ft x 7 ft on the 360 level w/ bulking factor of 20%
- ⁽⁷⁾ 43 ft of tunnel on the 360 level x 5 feet x 7 feet w/ bulking factor of 20%
- ⁽⁸⁾ 790 ft of crosscuts and drifts on the 360 level (Pampeyan, and Sheahan 1957) x 5 feet x 7 feet w/ bulking factor of 20%.
- ⁽⁹⁾ Best guess: 90 gpm for 27 days to dewater the mine (ref. DMEA payment records to Smith for same) and 200 days at 10 gpm.
- ⁽¹⁰⁾ Sum of Ore Milled and Waste Rock

Table 2-2
Summary of 1995 Mercury Data Collected by Slotton
 Mount Diablo Mercury Mine
 Contra Costa County, California

Site	Flow (cfs)	Aqueous Total Mercury		Suspended Solids	
		Raw ($\mu\text{g/L}$)	Filtered ($\mu\text{g/L}$)	All (TSS) (mg/L)	Solids Hg (dry ppm)
Upper Dunn Creek	5.20	0.0036	0.00273	1.50	0.60
Upper Horse Creek	0.08	0.0255	0.016	1.10	8.64
"My" Creek	2.10	0.381	0.0284	10.90	32.41
OreHouse Spring	0.01	1.94	0.071	11.40	164.00
Trickle coming from tailings	0.03	58.4	54.1	77.20	56.37
South Pond outlet	0.05	59.1	59.1	26.10	0.00
Horse Creek at tailings	0.32	25	21.9	104.00	29.80
Dunn Creek below mine confluence	7.80	0.949	0.226	13.50	53.60

Notes:

Data from study and report by Slotton et.al. (2006).

cfs = cubic feet per second

$\mu\text{g/L}$ = micrograms per liter.

mg/L = milligrams per liter.

ppm = parts per million.

Table 4-1
2010 Surface Water Sample Location Key
 Mount Diablo Mercury Mine
 Contra Costa County, California

Type	Samples	Location Description
Background	SW-12	Watershed runoff upstream of My creek
Background	SW-16	Far up-gradient Dunn Creek
Springs	SW-4	Park spring
	SW-14	Ore House spring
Adit Spring	SW-1	Emanation point - April sampling
	SW-15	Emanation point - May sampling
My Creek Runoff	SW-11	My creek upstream of Northern waste dump
	SW-13	My creek downstream of Northern waste dump
Mid- Dunn Creek	SW-8	Dunn Creek upstream of ponds after confluenced with My Creek
Ponds	SW-6	Upper pond
	SW-9	Lower pond
	SW-10	Middle pond
Mine Water Runoff	SW-2	Overland flow in Bradley waste rock
	SW-3	Overland flow in Bradley waste rock
	SW-5	Overland flow just above lower pond
Downstream	SW-7	Below confluence of all wastes

Table 4-2
Summary of Chemical Analyses Results
2010 Surface Water Sampling
Mount Diablo Mercury Mine
Contra Costa County, California

Parameter	Unit	Date	Water Quality Criteria ^a			Sample Location																
			Freshwater	Human Health for Consumption of		Background		Springs				My Creek Runoff		Mid-Dunn Creek	Ponds			Mine Water Runoff			Downstream	
				Water + Organism	Organism Only	My Creek	Dunn Creek	Park	Ore House	Adit		Pond	Weir	SW-08	Upper	1	Middle	SW-02	SW-03	SW-05	Dunn Creek	
										SW-12	SW-16											SW-04
Mercury_Total (Hg)	ug/L	4/12/2010 5/27/2010	0.91	0.05	0.051	--	--	0.45	--	2.2	--	--	--	0.6	32	34	18	179	74	7.9	0.74	
Mercury_Dissolved (Hg)	ug/L	4/12/2010 5/27/2010	0.77	0.05	0.051	<0.20	<0.20	0.33	--	1.3	--	107	<0.20	<0.20	<0.20	22	88	0.21	161	--	69	0.64
Methyl Mercury	ng/L	4/12/2010 5/27/2010	3 ^b	0.3 mg/kg (fish tissue)	9.3 mg/kg (fish tissue)	<0.20	<0.20	<0.20	<0.20	56	<0.20	<0.20	<0.20	14	58	<0.20	125	--	49	<0.20	<0.20	
pH	su	4/12/2010 5/27/2010	6.5 - 9.0	5.0 - 9.0	--	8.20	7.75	7.89	--	3.85	--	4.39	8.27	8.37	7.91	8.08	4.50	5.83	2.60	2.23	7.10	7.79
Alkalinity_Bicarbonate	mg/L	4/12/2010 5/27/2010	--	--	--	223	139	111	--	<5.0	--	<5.0	227	229	169	<5.0	<5.0	12	<5.0	<5.0	127	77
Alkalinity_Carbonate (CO3)	mg/L	4/12/2010 5/27/2010	--	--	--	--	--	<5.0	--	<5.0	--	--	--	--	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0
Alkalinity_Total as CaCO3	mg/L	4/12/2010 5/27/2010	20	--	--	<5.0	<5.0	111	--	<5.0	--	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	12	<5.0	<5.0	127	77
Fluoride	mg/L	4/12/2010 5/27/2010	--	--	--	223	139	<0.10	--	<0.10	--	--	227	233	169	<5.0	<5.0	246	<5.0	--	187	179
Dissolved Organic Carbon	mg/L	4/12/2010 5/27/2010	--	--	--	<0.10	<0.10	<0.10	--	<0.10	--	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	0.12	0.39	1.2	<0.50	<0.10
Specific Conductivity	umhos/cm	4/12/2010 5/27/2010	--	--	--	494	335	468	--	341	--	11,400	494	526	212	346	8,050	422	5,180	3,710	9,220	236
Solids_Total Dissolved (TDS)	mg/L	4/12/2010 5/27/2010	290	--	--	261	180	291	--	224	--	--	--	199	242	6,120	267	4,450	10,000	6,790	210	465
Turbidity	NTU	4/12/2010 5/27/2010	--	--	--	1.5	46	49	--	13	--	--	--	190	180	14	125	7.7	84	127	178	13
Hardness_Total as CaCO3	mg/L	4/12/2010 5/27/2010	--	--	--	146	--	146	--	103	--	--	--	106	151	2,340	151	1,170	2,010	2,770	106	106
Silica_Dissolved (SiO2)	mg/L	4/12/2010 5/27/2010	--	--	--	17	17	25	--	8.8	--	--	--	36	52	76	29	64	80	25	43	43
Chloride (Cl)	mg/L	4/12/2010 5/27/2010	290	--	--	10	5.2	35	--	1.1	--	--	--	4.6	8.8	1,220	19	183	54	1,490	5.5	5.5
Bromide (Br)	mg/L	4/12/2010 5/27/2010	--	--	--	4.7	<0.20	--	--	<0.20	--	--	--	<0.20	<0.20	4.6	<0.20	0.54	<0.40	5.7	<0.20	<0.20
Nitrogen_Nitrate (NO3)	mg/L	4/12/2010 5/27/2010	--	10	--	<0.10	0.23	0.56	--	<0.10	--	--	--	0.18	0.48	1.8	<0.10	1.6	<0.20	4.2	0.26	0.26
Sulfate (SO4)	mg/L	4/12/2010 5/27/2010	--	--	--	30	19	68	--	181	--	5,340	31	39	32	1,610	4,310	101	3,450	13,400	3,040	123
Antimony (Sb)	ug/L	4/12/2010 5/27/2010	--	5.8	640	<10	<10	<10	--	10	--	--	--	<10	82	<10	35	19	112	<10	<10	<10
Arsenic (As)	ug/L	4/12/2010 5/27/2010	150	0.016	0.14	<10	<10	<10	--	<10	--	98,900	971	953	486	8,660	86,800	1,920	18,000	--	139,000	3,120
Beryllium (Be)	ug/L	4/12/2010 5/27/2010	--	--	--	<5.0	<5.0	<5.0	--	<5.0	--	--	--	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	8.3	<5.0	<5.0
Boron (B)	ug/L	4/12/2010 5/27/2010	--	--	--	<5.0	<5.0	2,880	--	72	--	--	--	226	712	73,500	1,350	15,000	2,660	88,700	384	384
Cadmium (Cd)	ug/L	4/12/2010 5/27/2010	0.25	--	--	941	171	<2.0	--	761	--	98,900	971	953	486	8,660	86,800	1,920	18,000	--	139,000	3,120
Calcium (Ca)	ug/L	4/12/2010 5/27/2010	--	--	--	<2.0	<2.0	<2.0	--	<2.0	--	<2.0	<2.0	<2.0	<2.0	<2.0	<2.0	<2.0	<2.0	<5.0	<2.0	<2.0
						47,100	38,200	23,800	--	18,700	--	367,000	48,300	48,700	41,400	133,000	409,000	35,900	170,000	124,000	449,000	22,100

Table 4-2
 Summary of Chemical Analyses Results
 2010 Surface Water Sampling
 Mount Diablo Mercury Mine
 Contra Costa County, California

Parameter	Unit	Date	Water Quality Criteria ^a			Sample Location																
			Freshwater	Human Health for Consumption of		Background		Springs				My Creek Runoff		Mid-Dunn Creek	Ponds			Mine Water Runoff			Downstream	
				Water + Organism	Organism Only	My Creek	Dunn Creek	Part	Ore House	Adit		Pond	Weir	SW-08	Upper	1	Middle	SW-02	SW-03	SW-05	Dunn Creek	
						SW-12	SW-16	SW-04	SW-14	SW-01	SW-15	SW-11	SW-13	SW-08	SW-06	SW-10	SW-02	SW-03	SW-05	SW-07		
Chromium (Cr)	µg/L	4/12/2010 5/27/2010	74	—	—	—	18	—	12	—	—	—	31	53	26	25	770	2,700	11	22		
Copper (Cu)	µg/L	4/12/2010 5/27/2010	—	1300	—	<5.0	<5.0	6.9	—	12	—	240	<5.0	<5.0	34	33	50	18	235	832	22	23
Iron (Fe)	µg/L	4/12/2010 5/27/2010	1000	—	—	—	6,540	—	2,140	—	—	—	19,800	22,800	13,400	9,830	392,000	1,609,000	16,300	13,200		
Lead (Pb)	µg/L	4/12/2010 5/27/2010	2.5	—	—	—	<5.0	—	<5.0	—	—	—	8.8	8.8	<5.0	<5.0	<10	<20	<25	<5.0		
Magnesium (Mg)	µg/L	4/12/2010 5/27/2010	—	—	—	—	21,700	—	13,700	—	—	—	12,500	25,300	374,000	24,500	205,000	414,000	400,000	12,300		
Manganese (Mn)	µg/L	4/12/2010 5/27/2010	—	—	100	—	80	—	584	—	—	—	368	648	5,830	554	5,720	13,000	6,350	280		
Nickel (Ni)	µg/L	4/12/2010 5/27/2010	52	810	4900	—	90	—	184	—	18,000	12	5.8	71	3,410	8,950	823	3,410	—	8,240	381	
Potassium (K)	µg/L	4/12/2010 5/27/2010	—	—	—	—	4,120	—	1,850	—	—	—	4,170	4,890	36,000	3,860	6,660	2,730	43,500	3,720		
Selenium (Se)	µg/L	4/12/2010 5/27/2010	5.0	170	4200	—	<20	—	<20	—	—	—	<20	<20	<20	<20	<20	<20	<40	<20	<20	
Silicon (Si)	µg/L	4/12/2010 5/27/2010	—	—	—	—	11,600	—	4,120	—	—	—	26,900	24,300	13,400	13,500	29,800	37,300	11,800	19,900		
Silver (Ag)	µg/L	4/12/2010 5/27/2010	—	—	—	—	<5.0	—	<5.0	—	—	—	<5.0	<5.0	<5.0	<5.0	<5.0	<15	<5.0	<5.0		
Sodium (Na)	µg/L	4/12/2010 5/27/2010	—	—	—	—	37,600	—	1,670	—	—	—	6,110	11,400	969,000	19,200	168,000	14,800	1,120,000	9,320		
Thallium (Tl)	µg/L	4/12/2010 5/27/2010	—	0.24	0.47	—	<20	—	<20	—	—	—	<20	<20	<20	<20	<20	<20	<20	<20		
Zinc (Zn)	µg/L	4/12/2010 5/27/2010	120	7400	26000	—	<10	—	14	—	—	—	49	78	335	52	646	2,160	295	34		

Notes:
 Bold font indicates value is above the water quality criteria for human health for consumption of "water + organism" or "organism only".
 Bold and font indicates value is above the water quality criteria for freshwater.
 µg/L = microgram per liter mg/L = milligram per liter
 SU = standard units NTU = nephelometric turbidity unit
 µg/L = microgram per liter
 mg/L = milligram per liter
^a Values represent the lesser of the water quality criteria available from CRWQCB (2008a) and USEPA (2009).
^b Values from CRWQCB - San Francisco Bay water quality criteria for methyl mercury in freshwater (CRWQCB, 2008c). Values were not available for CRWQCB (2008a) and USEPA (2009).
 References:
 CRWQCB, 2008a. Screening for Environmental Concerns of Sites with Contaminated Soil and Groundwater. Intern. File, May.
 CRWQCB, 2008b. Central Valley Regional Water Quality Control Board. A Compilation of Water Quality Goals. July.
 USEPA, 2009. National Recommended Water Quality Criteria. Office of Water, Office of Science and Technology.

**Table 4-3
Summary of Field Parameters
2010 Surface Water Sampling
Mount Diablo Mercury Mine
Contra Costa County, California**

Sample Location	Sample ID	Date	Time	Temperature (°C)	pH (su)	Dissolved Oxygen (mg/L)	Electrical Conductivity (µS/cm)	Oxidation Reduction Potential (mV)
Background	MTD-SW-12/2	5/27/2010	9:20	NA	NA	NA	NA	NA
	MTD-SW-16/2	5/27/2010	12:45	12.83	7.3	10	335	226
Springs	MTD-SW-04/2	5/27/2010	12:15	NA	NA	NA	NA	NA
	MTD-SW-14/2	5/27/2010	10:05	14.5	5.22	9.5	437	228.1
Adit Spring	MTD-SW-15/2	5/27/2010	11:15	13.5	3.59	9.5	3702	400
My Creek Runoff	MTD-SW-11/2	5/27/2010	9:20	12.75	7.61	18.7	505	265.7
	MTD-SW-13/2	5/27/2010	9:30	12.12	7.7	16	550	261.3
Mid-Dunn Creek	MTD-SW-08/2	5/27/2010	13:00	14.34	7.6	9.15	334	216
Ponds	MTD-SW-06/2	5/27/2010	10:50	15.71	3.99	9.5	2477	307.2
	MTD-SW-09/2	5/27/2010	13:15	16.43	4.09	6.0	9892	289
	MTD-SW-10/2	5/27/2010	13:50	16.08	6.58	6.2	767	56.2
Mine Water Runoff	MTD-SW-02/2	5/27/2010	12:00	NA	NA	NA	NA	NA
	MTD-SW-05/2	5/27/2010	13:10	22	7.02	6.5	13410	-46
Downstream	MTD-SW-07/2	5/27/2010	13:30	NA	NA	NA	NA	NA

Notes:

°C = degrees Celsius.
su = standard unit.
mg/L = milligram per liter.
µS/cm = microSiemen per centimeter.
mV = millivolt.

Table 4-4
Select Historical Data Matched to Current Sample Collection Location
Mount Diablo Mercury Mine
Contra Costa County, California

Constituent	Units	Date	Ref #	SW-04-EQ	SW-05-EQ	SW-07-EQ	SW-08-EQ	SW-09-EQ	SW-14-EQ
Total Mercury (Hg)	µg/L	Sep-70	125-26			50			
		Jan-75	125-1, 125-26			72	1.6		
		Apr-75	125-1			4.2			
		Jul-78	125-1, 125-26			4	2	1.8	
		Oct-84	125-1, 125-26	10		7		152	
		Mar-87	125-1					33	
		Mar-87	125-26					84	
		Jul-87	125-26					17	
		Oct-87	125-26	<0.2	120				
		Mar-88	125-26		170		<1.0	110	
		Apr-89	125-26		190		2		13
		May-89	125-26						
pH	su	Sep-70	125-26			--			
		Jan-75	125-1, 125-26			7.2	8.1		
		Apr-75	125-1			7.2			
		Jul-78	125-1, 125-26			6.9	8.3	6.7	
		Oct-84	125-1, 125-26	7.7		7.0		2.7	
		Mar-87	125-1					2.9	
		Mar-87	125-26					--	
		Jul-87	125-26					2.4	
		Oct-87	125-26	7.7	2.5				
		Mar-88	125-26		2.2		8.6	3.1	
		Apr-89	125-26		2.3		5.0		3.0
		May-89	125-26						

Notes:

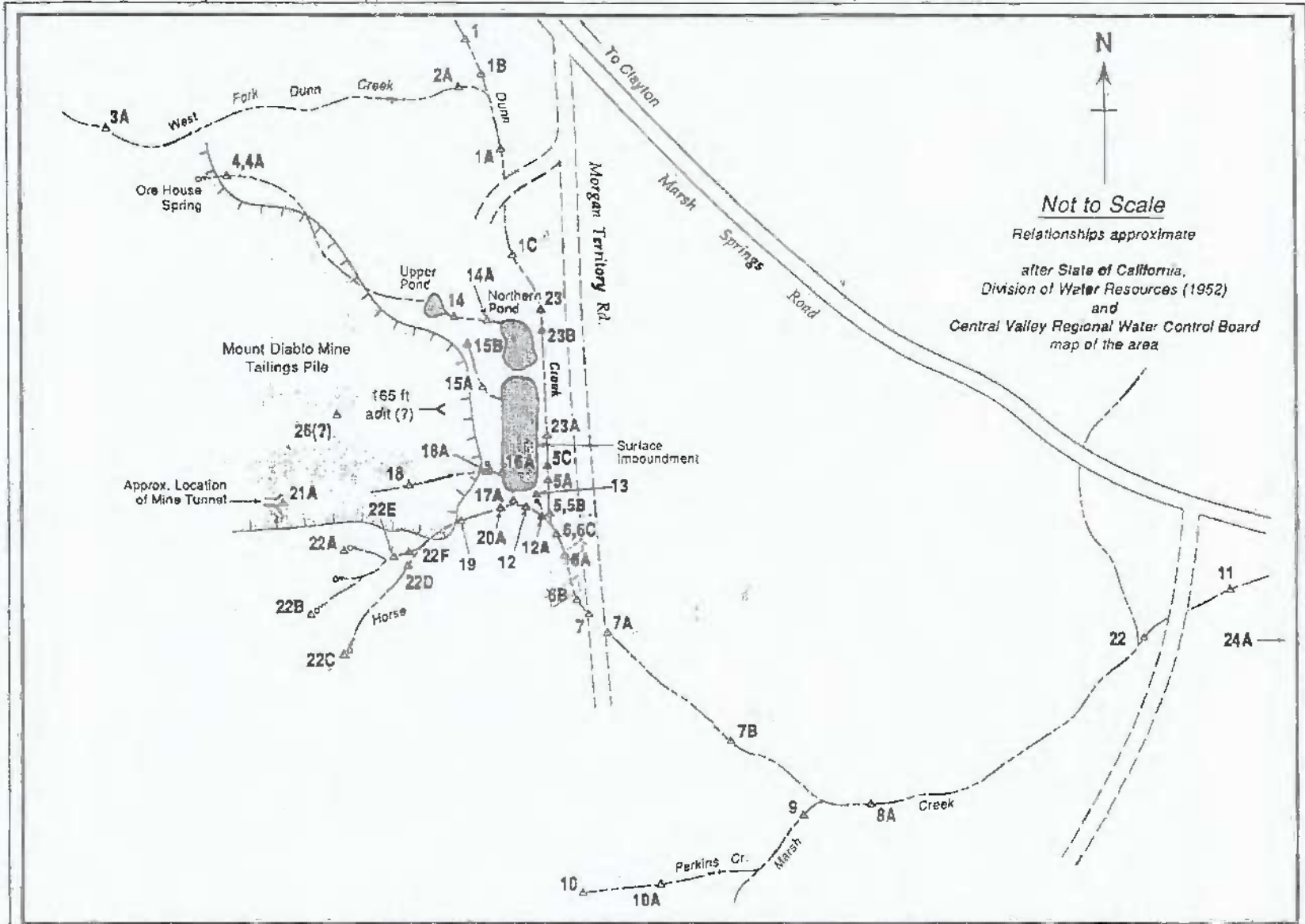
(a) pH was analyzed past the 15min hold time.

Table 4-5
Summary Comparison of Surface Water Data
 Mount Diablo Mercury Mine
 Contra Costa County, California

Historical Data from RWQCB Files		UCD Slotton Study		Sunoco-SGI	
Year	(µg/L)	Year	(µg/L)	Year	(µg/L)
OREHOUSE SPRING (SW-14)					
1989	13	1995	1.944	2010	1.3
TAILINGS RUNOFF ABOVE LOWER POND (SW-05)					
1987	120	1995	58	2010	7.9 - 66
1988	170				
1989	190				
DUNN CREEK DOWNSTREAM OF LOWER POND (SW-07)					
1970	50	1995	0.949	2010	0.64 - 0.74
1975	72				
1978	4				
1984	7				
DUNN CREEK UPSTREAM OF LOWER POND (SW-08)					
1975	1.6	1995	0.004 - 0.381	2010	<0.20 - 0.6
1978	2				
1988	<1.0				
1989	2				
LOWER POND OUTLET (SW-09)					
1978	1.8	1995	59.1	2010	88 - 94
1984	152				
1987	84				
1988	110				
PARK SPRING (HORSE CREEK) UPHILL FROM MINE TAILINGS (SW-04)					
1984	10	1995	0.026	2010	0.45
1987	<0.200				

APPENDIX A

SUMMARY OF HISTORIC WATER QUALITY DATA WITH LOCATION KEY MAP AND NOTES



Page 36

Figure 3 Location Map for Surface Water Samples Collected Near the Mount Diablo Mine Surface Impoundment

- A Dunn Creek upstr. of pond at Morgan Terr. Rd. + Marsh Cr. Rd.
- B Dunn Creek upstr. of pond outlet
- C Dunn Creek downstr. of pond outlet, after confluence w/ Horse Cr.
- ^{ci} ^{+ soil} D Dunn Creek downstr. of pond at Morgan Terr. Rd.
- E Horse Creek upstream of pond outlet
- F Perkins Creek above ~~mouth~~ confl. w/ Marsh Cr.
- G Curry Creek above ~~the~~ confl. w/ Marsh Cr.

- H Marsh Creek upstr. of Dunn Cr. (@ Morgan Terr. Rd.)
- J Marsh Creek downstr. of pond @ Prison Farm
- me { K Marsh Creek downstr. of pond below Hog Creek (5 mi. below mine)
- L Marsh Creek downstr. of pond @ gaging stn. above Marsh Cr. reservoir (10 mi. below ~~the~~ mine)
- I Marsh Creek below confl. w/ Dunn Cr. - downstr. of pond
- H Marsh Creek above Perkins Canyon - upstr. of pond
- H Marsh Creek above confl. w/ Dunn Cr. - upstr. of pond

- M Drainage from mine +/or tailings on Wessman property
- N Drainage from ponded area north of tailings
- P Springs on State Park Land
- Q Alkali spring below east of pond / dam

- R Mine pond - water
- Mine pond - sludge

- S Zuur well
- T Prison Farm well
- U Marsh Cr. Springs Resort well

APPENDIX B

SELECTED SITE PHOTOGRAPHS

REFERENCED SAMPLE LOCATIONS PHOTOGRAPHS

Client Name: Sunoco, Inc.

Photo Date: April and May 2010

Project: Sunoco Mt. Diablo, ACP



Photograph B-1: Capped area located at the top area of the Bradley tailings piles and waste rock.



Photograph B-2: Capped area overlying the historic collapsed main mine workings area.

Client Name: Sunoco, Inc.

Photo Date: April and May 2010

Project: Sunoco Mt. Diablo, ACP



Photograph B-3: Captured surface water flow directed into upper pond (sample location SW-06).



Photograph B-4: Park Spring (sample location SW-04).

Client Name: Sunoco, Inc.

Photo Date: April and May 2010

Project: Sunoco Mt. Diablo, ACP



Photograph B-5: Ore House spring (sample location SW-14).



Photograph B-6: Storm water from upper mine working routed around the lower pond (right) via Dunn Creek (left).

GENERAL SAMPLE LOCATIONS AND SITE PHOTOGRAPHS

Client Name: Sunoco, Inc.

Photo Date: April and May 2010

Project: Sunoco Mt. Diablo, ACP



Photograph B-7: My Creek retention pond (sample location SW-11).



Photograph B-8: Lower pond looking up toward Bradley tailing piles.

Client Name: Sunoco, Inc.

Photo Date: April and May 2010

Project: Sunoco Mt. Diablo, ACP



Photograph B-9: Runoff from upper Bradley mine tailings (sample location SW-02).



Photograph B-10: Runoff from upper Bradley tailing piles (sample location SW-02).

Client Name: Sunoco, Inc.

Photo Date: April and May 2010

Project: Sunoco Mt. Diablo, ACP



Photograph B-11: Upper Bradley tailing piles



Photograph B-12: Upper Bradley tailing piles

Client Name: Sunoco, Inc.

Photo Date: April and May 2010

Project: Sunoco Mt. Diablo, ACP



Photograph B-13: Sample location SW-01.



Photograph B-14: Bradley tailing piles showing sample, location SW-03.

Client Name: Sunoco, Inc.

Photo Date: April and May 2010

Project: Sunoco Mt. Diablo, ACP



Photograph B-15: Runoff from vicinity of former 165-ft adit opening (sample location SW-01).



Photograph B-16: Upper pond (sample location SW-6).

Client Name: Sunoco, Inc.

Photo Date: April and May 2010

Project: Sunoco Mt. Diablo, ACP



Photograph B-17: Looking upstream from My Creek (sample location SW-12).



Photograph B-18: Middle pond looking to lower pond.

Client Name: Sunoco, Inc.

Photo Date: April and May 2010

Project: Sunoco Mt. Diablo, ACP



Photograph B-19: Dunn Creek and middle pond outlet.



Photograph B-20: Middle pond looking toward upper pond.

Client Name: Sunoco, Inc.

Photo Date: April and May 2010

Project: Sunoco Mt. Diablo, ACP



Photograph B-21: Dunn Creek showing out flow from middle pond.



Photograph B-22: Outflow from middle pond to Dunn Creek (sample location SW-10).

Client Name: Sunoco, Inc.

Photo Date: April and May 2010

Project: Sunoco Mt. Diablo, ACP



Photograph B-23: My Creek upstream of northern waste dump area (sample location SW-12).



Photograph B-24: Surface water drainage from upper mine working area.

Client Name: Sunoco, Inc.

Photo Date: April and May 2010

Project: Sunoco Mt. Diablo, ACP



Photograph B-25: Surface water drainage from upper mine working area.



Photograph B-26: Calcine tailings above upper pond area. Drains to upper pond.

Client Name: Sunoco, Inc.

Photo Date: April and May 2010

Project: Sunoco Mt. Diablo, ACP



Photograph B-27: Drainage under road toward upper pond.



Photograph B-28: Surface water drainage from upper mine working area.

Client Name: Sunoco, Inc.

Photo Date: April and May 2010

Project: Sunoco Mt. Diablo, ACP



Photograph B-29: Mining debris in northern waste dump above My Creek.



Photograph B-30: Mining debris in northern waste dump above My Creek.

Client Name: Sunoco, Inc.

Photo Date: April and May 2010

Project: Sunoco Mt. Diablo, ACP



Photograph B-31: Northern waste dump.



Photograph B-32: Calcine tailings.

Client Name: Sunoco, Inc.

Photo Date: April and May 2010

Project: Sunoco Mt. Diablo, ACP



Photograph B-33: Bradley waste pile above lower pond.



Photograph B-34: Looking downhill from Ore House spring.

Client Name: Sunoco, Inc.

Photo Date: April and May 2010

Project: Sunoco Mt. Diablo, ACP



Photograph B-35: Ore House spring.



Photograph B-36: Weir on My Creek below retention pond (sample location SW-13).

Client Name: Sunoco, Inc.

Photo Date: April and May 2010

Project: Sunoco Mt. Diablo, ACP



Photograph B-37: Weir on My Creek below retention pond (sample location SW-13).



Photograph B-38: Storm water runoff outlet piping from upper mine workings area.

Client Name: Sunoco, Inc.

Photo Date: April and May 2010

Project: Sunoco Mt. Diablo, ACP



Photograph B-39: Storm water runoff outlet piping from upper mine workings area.



Photograph B-40: Storm water runoff outlet piping from upper mine workings area.

Client Name: Sunoco, Inc.

Photo Date: April and May 2010

Project: Sunoco Mt. Diablo, ACP



Photograph B-41: Mt. Diablo State Park spring (sample location SW-04).



Photograph B-42: Surface water runoff channel to upper pond.

Client Name: Sunoco, Inc.

Photo Date: April and May 2010

Project: Sunoco Mt. Diablo, ACP



Photograph B-43: Surface water runoff channel from upper Bradley tailings pile (sample location SW-02).



Photograph B-44: Bradley runoff waste pile.

APPENDIX C

2010 SAMPLING PROGRAM CHAIN OF CUSTODY AND LABORATORY REPORTS



Technical Report for

The Source Group

Mt. Diablo- Marsh Creek Road

01-SUN-050

Accutest Job Number: C10601

Sampling Date: 04/12/10

Report to:

The Source Group
3451C Vincent Road
Pleasant Hill, CA 94523
jphilipp@thesourcegroup.net
ATTN: Jon Philipp

Total number of pages in report: 61



Test results contained within this data package meet the requirements of the National Environmental Laboratory Accreditation Conference and/or state specific certification programs as applicable.

Laurie Glantz-Murphy
Laboratory Director

Client Service contact: Anne Kathain 408-588-0200

Certifications: CA (08258CA)

This report shall not be reproduced, except in its entirety, without the written approval of Accutest Laboratories.

Test results relate only to samples analyzed.

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Sample Summary

The Source Group

Job No: C10601

Mt. Diablo- Marsh Creek Road
Project No: 01-SUN-050

Sample Number	Collected Date	Time By	Received	Matrix Code	Type	Client Sample ID
C10601-1	04/12/10	13:55 NCJP	04/13/10	AQ	Surface Water	MTD-SW-01
C10601-1F	04/12/10	13:55 NCJP	04/13/10	AQ	Surface H2O Filtered	MTD-SW-01
C10601-2	04/12/10	14:25 NCJP	04/13/10	AQ	Surface Water	MTD-SW-02
C10601-2F	04/12/10	14:25 NCJP	04/13/10	AQ	Surface H2O Filtered	MTD-SW-02
C10601-3	04/12/10	14:15 NCJP	04/13/10	AQ	Surface Water	MTD-SW-03
C10601-3F	04/12/10	14:15 NCJP	04/13/10	AQ	Surface H2O Filtered	MTD-SW-03
C10601-4	04/12/10	14:35 NCJP	04/13/10	AQ	Surface Water	MTD-SW-04
C10601-4F	04/12/10	14:35 NCJP	04/13/10	AQ	Surface H2O Filtered	MTD-SW-04
C10601-5	04/12/10	15:10 NCJP	04/13/10	AQ	Surface Water	MTD-SW-05
C10601-5F	04/12/10	15:10 NCJP	04/13/10	AQ	Surface H2O Filtered	MTD-SW-05
C10601-6	04/12/10	13:35 NCJP	04/13/10	AQ	Surface Water	MTD-SW-06
C10601-6F	04/12/10	13:35 NCJP	04/13/10	AQ	Surface H2O Filtered	MTD-SW-06
C10601-7	04/12/10	15:30 NCJP	04/13/10	AQ	Surface Water	MTD-SW-07



Sample Summary (continued)

The Source Group

Job No: C10601

Mt. Diablo- Marsh Creek Road
Project No: 01-SUN-050

Sample Number	Collected Date	Time By	Received	Matrix Code	Type	Client Sample ID
C10601-7F	04/12/10	15:30	NCJP	04/13/10	AQ Surface H2O Filtered	MTD-SW-07
C10601-8	04/12/10	14:45	NCJP	04/13/10	AQ Surface Water	MTD-SW-08
C10601-8F	04/12/10	14:45	NCJP	04/13/10	AQ Surface H2O Filtered	MTD-SW-08
C10601-9	04/12/10	15:00	NCJP	04/13/10	AQ Surface Water	MTD-SW-09
C10601-9F	04/12/10	15:00	NCJP	04/13/10	AQ Surface H2O Filtered	MTD-SW-09
C10601-10	04/12/10	15:20	NCJP	04/13/10	AQ Surface Water	MTD-SW-10
C10601-10F	04/12/10	15:20	NCJP	04/13/10	AQ Surface H2O Filtered	MTD-SW-10



IT'S ALL IN THE CHEMISTRY

Sample Results

Report of Analysis

Report of Analysis

2.1
2

Client Sample ID: MTD-SW-01	Date Sampled: 04/12/10
Lab Sample ID: C10601-1	Date Received: 04/13/10
Matrix: AQ - Surface Water	Percent Solids: n/a
Project: Mt. Diablo- Marsh Creek Road	

Total Metals Analysis

Analyte	Result	RL	Units	DF	Prep	Analyzed By	Method	Prep Method
Antimony	10.1	10	ug/l	1	04/21/10	04/26/10 CT	SW846 6010B ²	SW3010A ⁴
Arsenic	< 10	10	ug/l	1	04/21/10	04/26/10 CT	SW846 6010B ²	SW3010A ⁴
Beryllium	< 5.0	5.0	ug/l	1	04/21/10	04/26/10 CT	SW846 6010B ²	SW3010A ⁴
Boron	72.0	50	ug/l	1	04/21/10	04/26/10 CT	SW846 6010B ²	SW3010A ⁴
Cadmium	< 2.0	2.0	ug/l	1	04/21/10	04/26/10 CT	SW846 6010B ²	SW3010A ⁴
Calcium	18700	50	ug/l	1	04/21/10	04/26/10 CT	SW846 6010B ²	SW3010A ⁴
Chromium	12.1	5.0	ug/l	1	04/21/10	04/26/10 CT	SW846 6010B ²	SW3010A ⁴
Copper	12.0	5.0	ug/l	1	04/21/10	04/26/10 CT	SW846 6010B ²	SW3010A ⁴
Iron	2140	50	ug/l	1	04/21/10	04/26/10 CT	SW846 6010B ²	SW3010A ⁴
Lead	< 5.0	5.0	ug/l	1	04/21/10	04/26/10 CT	SW846 6010B ²	SW3010A ⁴
Magnesium	13700	50	ug/l	1	04/21/10	04/26/10 CT	SW846 6010B ²	SW3010A ⁴
Manganese	584	5.0	ug/l	1	04/21/10	04/26/10 CT	SW846 6010B ²	SW3010A ⁴
Mercury	2.2	0.20	ug/l	1	04/14/10	04/14/10 RW	EPA 245.1 ¹	EPA 245.1/SW7470A ³
Nickel	1320	5.0	ug/l	1	04/21/10	04/26/10 CT	SW846 6010B ²	SW3010A ⁴
Potassium	1850	500	ug/l	1	04/21/10	04/26/10 CT	SW846 6010B ²	SW3010A ⁴
Selenium	< 20	20	ug/l	1	04/21/10	04/26/10 CT	SW846 6010B ²	SW3010A ⁴
Silicon	4120	50	ug/l	1	04/21/10	04/26/10 CT	SW846 6010B ²	SW3010A ⁴
Silver	< 5.0	5.0	ug/l	1	04/21/10	04/26/10 CT	SW846 6010B ²	SW3010A ⁴
Sodium	1670	100	ug/l	1	04/21/10	04/26/10 CT	SW846 6010B ²	SW3010A ⁴
Thallium	< 20	20	ug/l	1	04/21/10	04/26/10 CT	SW846 6010B ²	SW3010A ⁴
Zinc	28.2	10	ug/l	1	04/21/10	04/26/10 CT	SW846 6010B ²	SW3010A ⁴

- (1) Instrument QC Batch: MA1166
- (2) Instrument QC Batch: MA1183
- (3) Prep QC Batch: MP2279
- (4) Prep QC Batch: MP2300

RL = Reporting Limit

Report of Analysis

Client Sample ID: MTD-SW-01	Date Sampled: 04/12/10
Lab Sample ID: C10601-1	Date Received: 04/13/10
Matrix: AQ - Surface Water	Percent Solids: n/a
Project: MI. Diablo- Marsh Creek Road	

General Chemistry

Analyte	Result	RL	Units	DF	Analyzed	By	Method
Alkalinity, Bicarbonate	< 5.0	5.0	mg/l	1	04/26/10	PH	SM18 4500CO2D
Alkalinity, Carbonate	< 5.0	5.0	mg/l	1	04/26/10	PH	SM18 4500CO2D
Alkalinity, Total as CaCO3	< 5.0	5.0	mg/l	1	04/26/10	PH	SM18 2320n
Bromide	< 0.20	0.20	mg/l	1	04/13/10 20:03	HD	EPA 300/SW846 9056A
Chloride	1.1	0.50	mg/l	1	04/13/10 20:03	HD	EPA 300/SW846 9056A
Dissolved Organic Carbon	2.4	1.0	mg/l	1	04/15/10	MF	SM18 5310C
Fluoride	< 0.10	0.10	mg/l	1	04/13/10 20:03	HD	EPA 300/SW846 9056A
Hardness, Total as CaCO3 ^a	103	0.33	mg/l	1	04/26/10 15:58	CT	SW846 6010B/SM 2340B
Nitrogen, Nitrate	< 0.10	0.10	mg/l	1	04/13/10 20:03	HD	EPA 300/SW846 9056A
Silica, Dissolved ^b	8.8	0.11	mg/l	1	04/26/10 15:58	CT	SW846 6010B
Solids, Total Dissolved	224	10	mg/l	1	04/15/10	MF	SM18 2540C
Specific Conductivity	341	1.0	umhos/cm	1	04/14/10	MF	SM18 2510B/EPA 120.1
Sulfate	191	5.0	mg/l	10	04/15/10 20:22	HD	EPA 300/SW846 9056A
Turbidity	13.0	0.50	NTU	1	04/13/10 13:18	PH	SM18 2130B
pH ^c	3.95		su	1	04/13/10 11:40	PH	SM18 4500H- B

- (a) Calculated as: (Calcium * 2.497) + (Magnesium * 4.118)
- (b) Calculated as: (Silicon * 2.139)
- (c) pH was analyzed past the 15min hold time.

RL = Reporting Limit

Report of Analysis

Client Sample ID: MTD-SW-01	Date Sampled: 04/12/10
Lab Sample ID: C10601-1F	Date Received: 04/13/10
Matrix: AQ - Surface H2O Filtered	Percent Solids: n/a
Project: Mt. Diablo- Marsh Creek Road	

Dissolved Metals Analysis

Analyte	Result	RL	Units	DF	Prep	Analyzed By	Method	Prep Method
Mercury	< 0.20	0.20	ug/l	1	04/20/10	04/21/10 RW	EPA 245.1 ¹	EPA 245.1/SW7470A ²

(1) Instrument QC Batch: MA1177

(2) Prep QC Batch: MP2298

RL = Reporting Limit

Report of Analysis

Client Sample ID: MTD-SW-02	Date Sampled: 04/12/10
Lab Sample ID: C10601-2	Date Received: 04/13/10
Matrix: AQ - Surface Water	Percent Solids: n/a
Project: Mt. Diablo- Marsh Creek Road	

Total Metals Analysis

Analyte	Result	RL	Units	DF	Prep	Analyzed By	Method	Prep Method
Antimony	19.3	10	ug/l	1	04/21/10	04/26/10 CT	SW846 6010B ²	SW3010A ⁴
Arsenic	119	10	ug/l	1	04/21/10	04/26/10 CT	SW846 6010B ²	SW3010A ⁴
Beryllium	< 5.0	5.0	ug/l	1	04/21/10	04/26/10 CT	SW846 6010B ²	SW3010A ⁴
Boron	13900	50	ug/l	1	04/21/10	04/26/10 CT	SW846 6010B ²	SW3010A ⁴
Cadmium	< 2.0	2.0	ug/l	1	04/21/10	04/26/10 CT	SW846 6010B ²	SW3010A ⁴
Calcium	130000	50	ug/l	1	04/21/10	04/26/10 CT	SW846 6010B ²	SW3010A ⁴
Chromium	770	5.0	ug/l	1	04/21/10	04/26/10 CT	SW846 6010B ²	SW3010A ⁴
Copper	235	5.0	ug/l	1	04/21/10	04/26/10 CT	SW846 6010B ²	SW3010A ⁴
Iron	392000	50	ug/l	1	04/21/10	04/26/10 CT	SW846 6010B ²	SW3010A ⁴
Lead *	< 10	10	ug/l	2	04/21/10	04/26/10 CT	SW846 6010B ²	SW3010A ⁴
Magnesium	205000	50	ug/l	1	04/21/10	04/26/10 CT	SW846 6010B ²	SW3010A ⁴
Manganese	5720	5.0	ug/l	1	04/21/10	04/26/10 CT	SW846 6010B ²	SW3010A ⁴
Mercury	179	5.0	ug/l	25	04/14/10	04/14/10 RW	EPA 245.1 ¹	EPA 245.1/SW7470A ^{3a}
Nickel	23900	5.0	ug/l	1	04/21/10	04/26/10 CT	SW846 6010B ²	SW3010A ⁴
Potassium	8680	500	ug/l	1	04/21/10	04/26/10 CT	SW846 6010B ²	SW3010A ⁴
Selenium	< 20	20	ug/l	1	04/21/10	04/26/10 CT	SW846 6010B ²	SW3010A ⁴
Silicon	29900	50	ug/l	1	04/21/10	04/26/10 CT	SW846 6010B ²	SW3010A ⁴
Silver	< 5.0	5.0	ug/l	1	04/21/10	04/26/10 CT	SW846 6010B ²	SW3010A ⁴
Sodium	186000	100	ug/l	1	04/21/10	04/26/10 CT	SW846 6010B ²	SW3010A ⁴
Thallium	< 20	20	ug/l	1	04/21/10	04/26/10 CT	SW846 6010B ²	SW3010A ⁴
Zinc	646	10	ug/l	1	04/21/10	04/26/10 CT	SW846 6010B ²	SW3010A ⁴

- (1) Instrument QC Batch: MA1166
- (2) Instrument QC Batch: MA1183
- (3) Prep QC Batch: MP2279
- (4) Prep QC Batch: MP2300

(a) Elevated reporting limit(s) due to matrix interference.

RL = Reporting Limit

Report of Analysis

Client Sample ID: MTD-SW-02	Date Sampled: 04/12/10
Lab Sample ID: C10601-2	Date Received: 04/13/10
Matrix: AQ - Surface Water	Percent Solids: n/a
Project: Mt. Diablo- Marsh Creek Road	

General Chemistry

Analyte	Result	RL	Units	DF	Analyzed	By	Method
Alkalinity, Bicarbonate	< 5.0	5.0	mg/l	1	04/26/10	PH	SM18 4500CO2D
Alkalinity, Carbonate	< 5.0	5.0	mg/l	1	04/26/10	PH	SM18 4500CO2D
Alkalinity, Total as CaCO ₃	< 5.0	5.0	mg/l	1	04/26/10	PH	SM18 2320B
Bromide	0.54	0.20	mg/l	1	04/13/10 20:21	HD	EPA 300/SW846 9056A
Chloride	163	25	mg/l	50	04/15/10 20:39	HD	EPA 300/SW846 9056A
Dissolved Organic Carbon	4.9	1.0	mg/l	1	04/15/10	MF	SM18 5310C
Fluoride	0.39	0.10	mg/l	1	04/13/10 20:21	HD	EPA 300/SW846 9056A
Hardness, Total as CaCO ₃ ^a	1170	0.33	mg/l	1	04/26/10 16:03	CT	SW846 6010B/SM 2340B
Nitrogen, Nitrate	1.6	0.10	mg/l	1	04/13/10 20:21	HD	EPA 300/SW846 9056A
Silica, Dissolved ^b	64.0	0.11	mg/l	1	04/26/10 16:03	CT	SW846 6010B
Solids, Total Dissolved	4450	10	mg/l	1	04/15/10	MF	SM18 2540C
Specific Conductivity	5160	1.0	umhos/cm	1	04/14/10	MF	SM18 2510B/EPA 120.1
Sulfate	4570	250	mg/l	500	04/20/10 17:32	HD	EPA 300/SW846 9056A
Turbidity	7.7	0.50	NTU	1	04/13/10 13:18	PH	SM18 2130B
pH ^c	2.60		su	1	04/13/10 11:43	PH	SM18 4500H+ B

(a) Calculated as: (Calcium * 2.497) + (Magnesium * 4.118)

(b) Calculated as: (Silicon * 2.139)

(c) pH was analyzed past the 15min hold time.

RL = Reporting Limit

Report of Analysis

Client Sample ID: MTD-SW-02	Date Sampled: 04/12/10
Lab Sample ID: C10601-2F	Date Received: 04/13/10
Matrix: AQ - Surface H ₂ O, Filtered	Percent Solids: n/a
Project: Mt. Diablo- Marsh Creek Road	

Dissolved Metals Analysis

Analyte	Result	RL	Units	DF	Prep	Analyzed By	Method	Prep Method
Mercury	175	5.0	ug/l	25	04/20/10	04/21/10 RW	EPA 245.1 ¹	EPA 245.1/SW7470A ²

(1) Instrument QC Batch: MA1177

(2) Prep QC Batch: MP2298

RL = Reporting Limit

Report of Analysis

Client Sample ID: MTD-SW-03	Date Sampled: 04/12/10
Lab Sample ID: C10601-3	Date Received: 04/13/10
Matrix: AQ - Surface Water	Percent Solids: n/a
Project: Mt. Diablo- Marsh Creek Road	

Total Metals Analysis

Analyte	Result	RL	Units	DF	Prep	Analyzed By	Method	Prep Method
Antimony	112	40	ug/l	4	04/21/10	04/26/10 CT	SW846 6010B ³	SW3010A ⁵
Arsenic	530	40	ug/l	4	04/21/10	04/26/10 CT	SW846 6010B ³	SW3010A ⁵
Beryllium	8.3	5.0	ug/l	1	04/21/10	04/22/10 CT	SW846 6010B ²	SW3010A ⁵
Boron	2660	200	ug/l	4	04/21/10	04/26/10 CT	SW846 6010B ³	SW3010A ⁵
Cadmium	< 6.0	6.0	ug/l	3	04/21/10	04/26/10 CT	SW846 6010B ³	SW3010A ⁵
Calcium	124000	200	ug/l	4	04/21/10	04/26/10 CT	SW846 6010B ³	SW3010A ⁵
Chromium	2790	20	ug/l	4	04/21/10	04/26/10 CT	SW846 6010B ³	SW3010A ⁵
Copper	632	20	ug/l	4	04/21/10	04/26/10 CT	SW846 6010B ³	SW3010A ⁵
Iron	1600000	200	ug/l	4	04/21/10	04/26/10 CT	SW846 6010B ³	SW3010A ⁵
Lead	< 20	20	ug/l	4	04/21/10	04/26/10 CT	SW846 6010B ³	SW3010A ⁵
Magnesium	414000	200	ug/l	4	04/21/10	04/26/10 CT	SW846 6010B ³	SW3010A ⁵
Manganese	13000	20	ug/l	4	04/21/10	04/26/10 CT	SW846 6010B ³	SW3010A ⁵
Mercury	73.6	2.0	ug/l	10	04/14/10	04/14/10 RW	EPA 245.1 ¹	EPA 245.1/SW7470A ³
Nickel	73400	20	ug/l	4	04/21/10	04/26/10 CT	SW846 6010B ³	SW3010A ⁵
Potassium	2730	2000	ug/l	4	04/21/10	04/26/10 CT	SW846 6010B ³	SW3010A ⁵
Selenium	< 60	60	ug/l	3	04/21/10	04/26/10 CT	SW846 6010B ³	SW3010A ⁵
Silicon	37300	200	ug/l	4	04/21/10	04/26/10 CT	SW846 6010B ³	SW3010A ⁵
Silver	< 15	15	ug/l	3	04/21/10	04/26/10 CT	SW846 6010B ³	SW3010A ⁵
Sodium	34600	400	ug/l	4	04/21/10	04/26/10 CT	SW846 6010B ³	SW3010A ⁵
Thallium	< 60	60	ug/l	3	04/21/10	04/26/10 CT	SW846 6010B ³	SW3010A ⁵
Zinc	2160	40	ug/l	4	04/21/10	04/26/10 CT	SW846 6010B ³	SW3010A ⁵

- (1) Instrument QC Batch: MA1166
- (2) Instrument QC Batch: MA1179
- (3) Instrument QC Batch: MA1183
- (4) Prep QC Batch: MP2279
- (5) Prep QC Batch: MP2300

RL = Reporting Limit

Report of Analysis

Client Sample ID: MTD-SW-03	Date Sampled: 04/12/10
Lab Sample ID: C10601-3	Date Received: 04/13/10
Matrix: AQ - Surface Water	Percent Solids: n/a
Project: Mt. Diablo- Marsh Creek Road	

General Chemistry

Analyte	Result	RL	Units	DF	Analyzed	By	Method
Alkalinity, Bicarbonate	< 5.0	5.0	mg/l	1	04/26/10	PH	SM18 4500C02D
Alkalinity, Carbonate	< 5.0	5.0	mg/l	1	04/26/10	PH	SM18 4500C02D
Alkalinity, Total as CaCO ₃	< 5.0	5.0	mg/l	1	04/26/10	PH	SM18 2320B
Bromide ^a	< 0.40	0.40	mg/l	2	04/14/10 10:38	HD	EPA 300/SW846 9056A
Chloride	53.5	2.5	mg/l	5	04/15/10 21:14	HD	EPA 300/SW846 9056A
Dissolved Organic Carbon	7.6	1.0	mg/l	1	04/15/10	MF	SM18 5310C
Fluoride ^a	1.2	0.20	mg/l	2	04/14/10 10:38	HD	EPA 300/SW846 9056A
Hardness, Total as CaCO ₃ ^b	2010	1.3	mg/l	1	04/26/10 16:14	CT	SW846 6010B/SM 2340B
Nitrogen, Nitrate ^a	< 0.20	0.20	mg/l	2	04/14/10 10:38	HD	EPA 300/SW846 9056A
Silica, Dissolved ^c	79.8	0.43	mg/l	1	04/26/10 16:14	CT	SW846 6010B
Solids, Total Dissolved	16000	10	mg/l	1	04/15/10	MF	SM18 2540C
Specific Conductivity	9710	1.0	umhos/cm	1	04/14/10	MF	SM18 2510B/EPA 120.1
Sulfate	13400	500	mg/l	1000	04/20/10 17:49	HD	EPA 300/SW846 9056A
Turbidity	84.0	2.5	NTU	5	04/13/10 13:18	PH	SM18 2130B
pH ^d	2.23		su	1	04/13/10 11:44	PH	SM18 4500H+ B

(a) Elevated detection limit due to matrix interference.

(b) Calculated as: (Calcium * 2.497) + (Magnesium * 4.118)

(c) Calculated as: (Silicon * 2.139)

(d) pH was analyzed past the 15min hold time.

RL = Reporting Limit

Report of Analysis

Client Sample ID:	MTD-SW-03	Date Sampled:	04/12/10
Lab Sample ID:	C10601-3F	Date Received:	04/13/10
Matrix:	AQ - Surface H2O Filtered	Percent Solids:	n/a
Project:	Mt. Diablo- Marsh Creek Road		

Dissolved Metals Analysis

Analyte	Result	RL	Units	DF	Prep	Analyzed By	Method	Prep Method
Mercury	34.7	2.0	ug/l	10	04/20/10	04/21/10 RW	EPA 245.1 ¹	EPA 245.1/SW7470A ²

(1) Instrument QC Batch: MA1177

(2) Prep QC Batch: MP2298

RL = Reporting Limit

Report of Analysis

Client Sample ID: MTD-SW-04	Date Sampled: 04/12/10
Lab Sample ID: C10601-4	Date Received: 04/13/10
Matrix: AQ - Surface Water	Percent Solids: n/a
Project: Mt. Diablo- Marsh Creek Road	

Total Metals Analysis

Analyte	Result	RL	Units	DF	Prep	Analyzed By	Method	Prep Method
Antimony	< 10	10	ug/l	1	04/21/10	04/26/10 CT	SW846 6010B ²	SW3010A ⁴
Arsenic	< 10	10	ug/l	1	04/21/10	04/26/10 CT	SW846 6010B ²	SW3010A ⁴
Beryllium	< 5.0	5.0	ug/l	1	04/21/10	04/26/10 CT	SW846 6010B ²	SW3010A ⁴
Boron	2680	50	ug/l	1	04/21/10	04/26/10 CT	SW846 6010B ²	SW3010A ⁴
Cadmium	< 2.0	2.0	ug/l	1	04/21/10	04/26/10 CT	SW846 6010B ²	SW3010A ⁴
Calcium	23600	50	ug/l	1	04/21/10	04/26/10 CT	SW846 6010B ²	SW3010A ⁴
Chromium	18.4	5.0	ug/l	1	04/21/10	04/26/10 CT	SW846 6010B ²	SW3010A ⁴
Copper	6.9	5.0	ug/l	1	04/21/10	04/26/10 CT	SW846 6010B ²	SW3010A ⁴
Iron	6840	50	ug/l	1	04/21/10	04/26/10 CT	SW846 6010B ²	SW3010A ⁴
Lead	< 5.0	5.0	ug/l	1	04/21/10	04/26/10 CT	SW846 6010B ²	SW3010A ⁴
Magnesium	21700	50	ug/l	1	04/21/10	04/26/10 CT	SW846 6010B ²	SW3010A ⁴
Manganese	79.6	5.0	ug/l	1	04/21/10	04/26/10 CT	SW846 6010B ²	SW3010A ⁴
Mercury	0.45	0.20	ug/l	1	04/14/10	04/14/10 RW	EPA 245.1 ¹	EPA 245.1/SW7470A ³
Nickel	165	5.0	ug/l	1	04/21/10	04/26/10 CT	SW846 6010B ²	SW3010A ⁴
Potassium	4120	500	ug/l	1	04/21/10	04/26/10 CT	SW846 6010B ²	SW3010A ⁴
Selenium	< 20	20	ug/l	1	04/21/10	04/26/10 CT	SW846 6010B ²	SW3010A ⁴
Silicon	11600	50	ug/l	1	04/21/10	04/26/10 CT	SW846 6010B ²	SW3010A ⁴
Silver	< 5.0	5.0	ug/l	1	04/21/10	04/26/10 CT	SW846 6010B ²	SW3010A ⁴
Sodium	37600	100	ug/l	1	04/21/10	04/26/10 CT	SW846 6010B ²	SW3010A ⁴
Thallium	< 20	20	ug/l	1	04/21/10	04/26/10 CT	SW846 6010B ²	SW3010A ⁴
Zinc	< 10	10	ug/l	1	04/21/10	04/26/10 CT	SW846 6010B ²	SW3010A ⁴

- (1) Instrument QC Batch: MA1166
- (2) Instrument QC Batch: MA1183
- (3) Prep QC Batch: MP2279
- (4) Prep QC Batch: MP2300

RL = Reporting Limit

Report of Analysis

Client Sample ID: MTD-SW-04	Date Sampled: 04/12/10
Lab Sample ID: C10601-4	Date Received: 04/13/10
Matrix: AQ - Surface Water	Percent Solids: n/a
Project: Mt. Diablo- Marsh Creek Road	

General Chemistry

Analyte	Result	RL	Units	DF	Analyzed	By	Method
Alkalinity, Bicarbonate	111	5.0	mg/l	1	04/26/10	PH	SM18 4500CO2D
Alkalinity, Carbonate	< 5.0	5.0	mg/l	1	04/26/10	PH	SM18 4500CO2D
Alkalinity, Total as CaCO ₃	111	5.0	mg/l	1	04/26/10	PH	SM18 2320B
Bromide	< 0.20	0.20	mg/l	1	04/13/10 20:56	HD	EPA 300/SW846 9056A
Chloride	35.3	2.5	mg/l	5	04/15/10 21:49	HD	EPA 300/SW846 9056A
Dissolved Organic Carbon	8.3	1.0	mg/l	1	04/15/10	MF	SM18 5310C
Fluoride	< 0.10	0.10	mg/l	1	04/13/10 20:56	HD	EPA 300/SW846 9056A
Hardness, Total as CaCO ₃ ^a	148	0.33	mg/l	1	04/26/10 16:20	CT	SW846 6010B/SM 2340B
Nitrogen, Nitrate	0.56	0.10	mg/l	1	04/13/10 20:56	HD	EPA 300/SW846 9056A
Silica, Dissolved ^b	24.8	0.11	mg/l	1	04/26/10 16:20	CT	SW846 6010B
Solids, Total Dissolved	291	10	mg/l	1	04/15/10	MF	SM18 2540C
Specific Conductivity	468	1.0	umhos/cm	1	04/14/10	MF	SM18 2510B/EPA 120.1
Sulfate	68.3	2.5	mg/l	5	04/15/10 21:49	HD	EPA 300/SW846 9056A
Turbidity	48.8	1.0	NTU	2	04/13/10 13:18	PH	SM18 2130B
pH ^c	7.69		su	1	04/13/10 11:46	PH	SM18 4500H+ B

(a) Calculated as: (Calcium * 2.497) + (Magnesium * 4.118)

(b) Calculated as: (Silicon * 2.139)

(c) pH was analyzed past the 15min hold time.

RL = Reporting Limit

Report of Analysis

Client Sample ID: MTD-SW-04	Date Sampled: 04/12/10
Lab Sample ID: C10601-4F	Date Received: 04/13/10
Matrix: AQ - Surface H2O Filtered	Percent Solids: n/a
Project: Mt. Diablo- Marsh Creek Road	

Dissolved Metals Analysis

Analyte	Result	RL	Units	DF	Prep	Analyzed By	Method	Prep Method
Mercury	0.33	0.20	ug/l	1	04/20/10	04/21/10 RW	EPA 245.1 ¹	EPA 245.1/SW7470A ²

(1) Instrument QC Batch: MA1177

(2) Prep QC Batch: MP2298

RL = Reporting Limit

Report of Analysis

Client Sample ID: MTD-SW-05	Date Sampled: 04/12/10
Lab Sample ID: C10601-5	Date Received: 04/13/10
Matrix: AQ - Surface Water	Percent Solids: n/a
Project: Mt. Diablo- Marsh Creek Road	

Total Metals Analysis

Analyte	Result	RL	Units	DF	Prep	Analyzed By	Method	Prep Method
Antimony	< 10	10	ug/l	1	04/21/10	04/22/10 CT	SW846 6010B ²	SW3010A ⁵
Arsenic ^a	< 50	50	ug/l	5	04/21/10	04/26/10 CT	SW846 6010B ³	SW3010A ⁵
Beryllium	< 5.0	5.0	ug/l	1	04/21/10	04/22/10 CT	SW846 6010B ²	SW3010A ⁵
Boron	98700	250	ug/l	5	04/21/10	04/26/10 CT	SW846 6010B ³	SW3010A ⁵
Cadmium	< 2.0	2.0	ug/l	1	04/21/10	04/22/10 CT	SW846 6010B ²	SW3010A ⁵
Calcium	449000	250	ug/l	5	04/21/10	04/26/10 CT	SW846 6010B ³	SW3010A ⁵
Chromium	11.2	5.0	ug/l	1	04/21/10	04/22/10 CT	SW846 6010B ²	SW3010A ⁵
Copper	21.6	5.0	ug/l	1	04/21/10	04/22/10 CT	SW846 6010B ²	SW3010A ⁵
Iron	18300	250	ug/l	5	04/21/10	04/26/10 CT	SW846 6010B ³	SW3010A ⁵
Lead	< 25	25	ug/l	5	04/21/10	04/26/10 CT	SW846 6010B ³	SW3010A ⁵
Magnesium	400000	250	ug/l	5	04/21/10	04/26/10 CT	SW846 6010B ³	SW3010A ⁵
Manganese	6350	25	ug/l	5	04/21/10	04/26/10 CT	SW846 6010B ³	SW3010A ⁵
Mercury	7.9	0.20	ug/l	1	04/14/10	04/14/10 RW	EPA 245.1 ¹	EPA 245.1/SW7470A ⁴
Nickel	8760	25	ug/l	5	04/21/10	04/26/10 CT	SW846 6010B ³	SW3010A ⁵
Potassium	43500	2500	ug/l	5	04/21/10	04/26/10 CT	SW846 6010B ³	SW3010A ⁵
Selenium	< 20	20	ug/l	1	04/21/10	04/22/10 CT	SW846 6010B ²	SW3010A ⁵
Silicon	11800	250	ug/l	5	04/21/10	04/26/10 CT	SW846 6010B ³	SW3010A ⁵
Silver	< 5.0	5.0	ug/l	1	04/21/10	04/22/10 CT	SW846 6010B ²	SW3010A ⁵
Sodium	1190000	500	ug/l	5	04/21/10	04/26/10 CT	SW846 6010B ³	SW3010A ⁵
Thallium	< 20	20	ug/l	1	04/21/10	04/22/10 CT	SW846 6010B ²	SW3010A ⁵
Zinc	205	50	ug/l	5	04/21/10	04/26/10 CT	SW846 6010B ³	SW3010A ⁵

- (1) Instrument QC Batch: MA1166
- (2) Instrument QC Batch: MA1179
- (3) Instrument QC Batch: MA1183
- (4) Prep QC Batch: MP2279
- (5) Prep QC Batch: MP2300

(a) Elevated detection limit due to dilution required for high interfering element.

RL = Reporting Limit

Report of Analysis

Client Sample ID: MTD-SW-05	Date Sampled: 04/12/10
Lab Sample ID: C10601-5	Date Received: 04/13/10
Matrix: AQ - Surface Water	Percent Solids: n/a
Project: Mt. Diablo- Marsh Creek Road	

General Chemistry

Analyte	Result	RL	Units	DF	Analyzed	By	Method ^f
Alkalinity, Bicarbonate	127	5.0	mg/l	1	04/26/10	PH	SM18 4500CO2D
Alkalinity, Carbonate	< 5.0	5.0	mg/l	1	04/26/10	PH	SM18 4500CO2D
Alkalinity, Total as CaCO ₃	127	5.0	mg/l	1	04/26/10	PH	SM18 2320B
Bromide	5.7	0.20	mg/l	1	04/13/10 21:13	HD	EPA 300/SW846 9056A
Chloride	1490	250	mg/l	500	04/15/10 23:17	HD	EPA 300/SW846 9056A
Dissolved Organic Carbon	2.8	1.0	mg/l	1	04/15/10	MF	SM18 5310C
Fluoride ^a	< 0.50	0.50	mg/l	5	04/15/10 23:34	HD	EPA 300/SW846 9056A
Hardness, Total as CaCO ₃ ^b	2770	1.7	mg/l	1	04/26/10 17:03	CT	SW846 6010B/SM 2340B
Nitrogen, Nitrate	4.2	0.10	mg/l	1	04/13/10 21:13	HD	EPA 300/SW846 9056A
Silica, Dissolved ^c	25.2	0.53	mg/l	1	04/26/10 17:03	CT	SW846 6010B
Solids, Total Dissolved	6790	10	mg/l	1	04/15/10	MF	SM18 2540C
Specific Conductivity	9220	1.0	umhos/cm	1	04/14/10	MF	SM18 2510B/EPA 120.1
Sulfate	3040	250	mg/l	500	04/15/10 23:17	HD	EPA 300/SW846 9056A
Turbidity	127	2.5	NTU	5	04/13/10 13:18	PH	SM18 2130B
pH ^d	7.16		su	1	04/13/10 11:51	PH	SM18 4500H+ B

(a) Elevated detection limit due to high concentration of Chloride.

(b) Calculated as: (Calcium * 2.497) + (Magnesium * 4.118)

(c) Calculated as: (Silicon * 2.139)

(d) pH was analyzed past the 15min hold time.

RL = Reporting Limit

Report of Analysis

Client Sample ID:	MTD-SW-05	Date Sampled:	04/12/10
Lab Sample ID:	C10601-5F	Date Received:	04/13/10
Matrix:	AQ - Surface H2O Filtered	Percent Solids:	n/a
Project:	Mt. Diablo- Marsh Creek Road		

Dissolved Metals Analysis

Analyte	Result	RL	Units	DF	Prep	Analyzed By	Method ¹	Prep Method
Mercury	9.4	0.20	ug/l	1	04/20/10	04/21/10 RW	EPA 245.1 ¹	EPA 245.1/SW7470A ²

(1) Instrument QC Batch: MA1177
 (2) Prep QC Batch: MP2298

RL = Reporting Limit

Report of Analysis

Client Sample ID: MTD-SW-06	Date Sampled: 04/12/10
Lab Sample ID: C10601-6	Date Received: 04/13/10
Matrix: AQ - Surface Water	Percent Solids: n/a
Project: Mt. Diablo- Marsh Creek Road	

Total Metals Analysis

Analyte	Result	RL	Units	DF	Prep	Analyzed By ^a	Method	Ref Method
Antimony	61.5	10	ug/l	1	04/21/10	04/26/10 CT	SW846 6010B ²	SW3010A ⁴
Arsenic	53.2	10	ug/l	1	04/21/10	04/26/10 CT	SW846 6010B ²	SW3010A ⁴
Beryllium	< 5.0	5.0	ug/l	1	04/21/10	04/26/10 CT	SW846 6010B ²	SW3010A ⁴
Boron	712	50	ug/l	1	04/21/10	04/26/10 CT	SW846 6010B ²	SW3010A ⁴
Cadmium	< 2.0	2.0	ug/l	1	04/21/10	04/26/10 CT	SW846 6010B ²	SW3010A ⁴
Calcium	18800	50	ug/l	1	04/21/10	04/26/10 CT	SW846 6010B ²	SW3010A ⁴
Chromium	52.5	5.0	ug/l	1	04/21/10	04/26/10 CT	SW846 6010B ²	SW3010A ⁴
Copper	33.0	5.0	ug/l	1	04/21/10	04/26/10 CT	SW846 6010B ²	SW3010A ⁴
Iron	22800	50	ug/l	1	04/21/10	04/26/10 CT	SW846 6010B ²	SW3010A ⁴
Lead	6.8	5.0	ug/l	1	04/21/10	04/26/10 CT	SW846 6010B ²	SW3010A ⁴
Magnesium	25300	50	ug/l	1	04/21/10	04/26/10 CT	SW846 6010B ²	SW3010A ⁴
Manganese	648	5.0	ug/l	1	04/21/10	04/26/10 CT	SW846 6010B ²	SW3010A ⁴
Mercury	31.9	1.2	ug/l	6	04/14/10	04/14/10 RW	EPA 245.1 ¹	EPA 245.1/SW7470A ³
Nickel	1590	5.0	ug/l	1	04/21/10	04/26/10 CT	SW846 6010B ²	SW3010A ⁴
Potassium	4890	500	ug/l	1	04/21/10	04/26/10 CT	SW846 6010B ²	SW3010A ⁴
Selenium	< 20	20	ug/l	1	04/21/10	04/26/10 CT	SW846 6010B ²	SW3010A ⁴
Silicon	24300	50	ug/l	1	04/21/10	04/26/10 CT	SW846 6010B ²	SW3010A ⁴
Silver	< 5.0	5.0	ug/l	1	04/21/10	04/26/10 CT	SW846 6010B ²	SW3010A ⁴
Sodium	11400	100	ug/l	1	04/21/10	04/26/10 CT	SW846 6010B ²	SW3010A ⁴
Thallium	< 20	20	ug/l	1	04/21/10	04/26/10 CT	SW846 6010B ²	SW3010A ⁴
Zinc	78.1	10	ug/l	1	04/21/10	04/26/10 CT	SW846 6010B ²	SW3010A ⁴

- (1) Instrument QC Batch: MA1166
- (2) Instrument QC Batch: MA1183
- (3) Prep QC Batch: MP2279
- (4) Prep QC Batch: MP2300

RL = Reporting Limit

Report of Analysis

Client Sample ID: MTD-SW-06	Date Sampled: 04/12/10
Lab Sample ID: C10601-6	Date Received: 04/13/10
Matrix: AQ - Surface Water	Percent Solids: n/a
Project: Mt. Diablo- Marsh Creek Road	

General Chemistry

Analyte	Result	RL	Units	DF	Analyzed	By	Method
Alkalinity, Bicarbonate	< 5.0	5.0	mg/l	1	04/26/10	PH	SM18 4500CO2D
Alkalinity, Carbonate	< 5.0	5.0	mg/l	1	04/26/10	PH	SM18 4500CO2D
Alkalinity, Total as CaCO3	< 5.0	5.0	mg/l	1	04/26/10	PH	SM18 2320B
Bromide	< 0.20	0.20	mg/l	1	04/13/10 21:31	HD	EPA 300/SW846 9056A
Chloride	8.8	1.3	mg/l	2.5	04/15/10 23:52	HD	EPA 300/SW846 9056A
Dissolved Organic Carbon	4.5	1.0	mg/l	1	04/15/10	MF	SM18 5310C
Fluoride	< 0.10	0.10	mg/l	1	04/13/10 21:31	HD	EPA 300/SW846 9056A
Hardness, Total as CaCO3 ^a	151	0.33	mg/l	1	04/26/10 16:25	CT	SW846 6010B/SM 2340B
Nitrogen, Nitrate	0.48	0.10	mg/l	1	04/13/10 21:31	HD	EPA 300/SW846 9056A
Silica, Dissolved ^b	52.0	0.11	mg/l	1	04/26/10 16:25	CT	SW846 6010B
Solids, Total Dissolved	242	10	mg/l	1	04/15/10	MF	SM18 2540C
Specific Conductivity	346	1.0	umhos/cm	1	04/14/10	MF	SM18 2510B/EPA 120.11
Sulfate	134	5.0	mg/l	10	04/16/10 00:09	HD	EPA 300/SW846 9056A
Turbidity	180	2.5	NTU	5	04/13/10 13:18	PH	SM18 2130B
pH ^c	6.08		su	1	04/13/10 11:55	PH	SM18 4500H+ B

- (a) Calculated as: (Calcium * 2.497) + (Magnesium * 4.118)
- (b) Calculated as: (Silicon * 2.139)
- (c) pH was analyzed past the 15min hold time.

RL = Reporting Limit

Report of Analysis

Client Sample ID: MTD-SW-06	Date Sampled: 04/12/10
Lab Sample ID: C10601-6F	Date Received: 04/13/10
Matrix: AQ - Surface H2O Filtered	Percent Solids: n/a
Project: Mt. Diablo- Marsh Creek Road	

Dissolved Metals Analysis

Analyte	Result	RL	Units	DF	Prep	Analyzed By	Method	Prep Method
Mercury	0.30	0.20	ug/l	1	04/20/10	04/21/10 RW	EPA 245.1 ¹	EPA 245.1/SW7470A ²

(1) Instrument QC Batch: MA1177
 (2) Prep QC Batch: MP2298

RL = Reporting Limit

Report of Analysis

Client Sample ID: MTD-SW-07	Date Sampled: 04/12/10
Lab Sample ID: C10601-7	Date Received: 04/13/10
Matrix: AQ - Surface Water	Percent Solids: n/a
Project: Mt. Diablo- Marsh Creek Road	

Total Metals Analysis

Analyte	Result	RL	Units	DF	Prep	Analyzed By	Method	Prep Method
Antimony	< 10	10	ug/l	1	04/21/10	04/26/10 CT	SW846 6010B ²	SW3010A ⁴
Arsenic	< 10	10	ug/l	1	04/21/10	04/26/10 CT	SW846 6010B ²	SW3010A ⁴
Beryllium	< 5.0	5.0	ug/l	1	04/21/10	04/26/10 CT	SW846 6010B ²	SW3010A ⁴
Boron	304	50	ug/l	1	04/21/10	04/26/10 CT	SW846 6010B ²	SW3010A ⁴
Cadmium	< 2.0	2.0	ug/l	1	04/21/10	04/26/10 CT	SW846 6010B ²	SW3010A ⁴
Calcium	22100	50	ug/l	1	04/21/10	04/26/10 CT	SW846 6010B ²	SW3010A ⁴
Chromium	21.6	5.0	ug/l	1	04/21/10	04/26/10 CT	SW846 6010B ²	SW3010A ⁴
Copper	22.8	5.0	ug/l	1	04/21/10	04/26/10 CT	SW846 6010B ²	SW3010A ⁴
Iron	13200	50	ug/l	1	04/21/10	04/26/10 CT	SW846 6010B ²	SW3010A ⁴
Lead	< 5.0	5.0	ug/l	1	04/21/10	04/26/10 CT	SW846 6010B ²	SW3010A ⁴
Magnesium	12300	50	ug/l	1	04/21/10	04/26/10 CT	SW846 6010B ²	SW3010A ⁴
Manganese	280	5.0	ug/l	1	04/21/10	04/26/10 CT	SW846 6010B ²	SW3010A ⁴
Mercury	0.74	0.20	ug/l	1	04/14/10	04/14/10 RW	EPA 245.1 ¹	EPA 245.1/SW7470A ³
Nickel	81.8	5.0	ug/l	1	04/21/10	04/26/10 CT	SW846 6010B ²	SW3010A ⁴
Potassium	3720	500	ug/l	1	04/21/10	04/26/10 CT	SW846 6010B ²	SW3010A ⁴
Selenium	< 20	20	ug/l	1	04/21/10	04/26/10 CT	SW846 6010B ²	SW3010A ⁴
Silicon	19900	50	ug/l	1	04/21/10	04/26/10 CT	SW846 6010B ²	SW3010A ⁴
Silver	< 5.0	5.0	ug/l	1	04/21/10	04/26/10 CT	SW846 6010B ²	SW3010A ⁴
Sodium	9320	100	ug/l	1	04/21/10	04/26/10 CT	SW846 6010B ²	SW3010A ⁴
Thallium	< 20	20	ug/l	1	04/21/10	04/26/10 CT	SW846 6010B ²	SW3010A ⁴
Zinc	33.9	10	ug/l	1	04/21/10	04/26/10 CT	SW846 6010B ²	SW3010A ⁴

- (1) Instrument QC Batch: MA1166
- (2) Instrument QC Batch: MA1183
- (3) Prep QC Batch: MP2279
- (4) Prep QC Batch: MP2300

RI = Reporting Limit

Report of Analysis

Client Sample ID: MTD-SW-07	Date Sampled: 04/12/10
Lab Sample ID: C10601-7	Date Received: 04/13/10
Matrix: AQ - Surface Water	Percent Solids: n/a
Project: Mt. Diablo- Marsh Creek Road	

General Chemistry

Analyte	Result	RL	Units	DF	Analyzed	By	Method
Alkalinity, Bicarbonate	77.4	5.0	mg/l	1	04/26/10	PH	SM18 4500CO2D
Alkalinity, Carbonate	< 5.0	5.0	mg/l	1	04/26/10	PH	SM18 4500CO2D
Alkalinity, Total as CaCO ₃	77.4	5.0	mg/l	1	04/26/10	PH	SM18 2320B
Bromide	< 0.20	0.20	mg/l	1	04/13/10 21:49	HD	EPA 300/SW846 9056A
Chloride	6.5	0.50	mg/l	1	04/13/10 21:49	HD	EPA 300/SW846 9056A
Dissolved Organic Carbon	8.3	1.0	mg/l	1	04/15/10	MF	SM18 5310C
Fluoride	< 0.10	0.10	mg/l	1	04/13/10 21:49	HD	EPA 300/SW846 9056A
Hardness, Total as CaCO ₃ ^a	106	0.33	mg/l	1	04/26/10 16:30	CT	SW846 6010IV/SM 2340B
Nitrogen, Nitrate	0.26	0.10	mg/l	1	04/13/10 21:49	HD	EPA 300/SW846 9056A
Silica, Dissolved ^b	42.6	0.11	mg/l	1	04/26/10 16:30	CT	SW846 6010B
Solids, Total Dissolved	210	10	mg/l	1	04/15/10	MF	SM18 2548C
Specific Conductivity	236	1.0	umhos/cm	1	04/14/10	MF	SM18 2510B/EPA 120.1
Sulfate	18.4	1.3	mg/l	2.5	04/16/10 00:27	HD	EPA 300/SW846 9056A
Turbidity	178	2.5	NTU	5	04/13/10 13:18	PH	SM18 2130B
pH ^c	7.79		su	1	04/13/10 12:00	PH	SM18 4500IIF B

(a) Calculated as: (Calcium * 2.497) + (Magnesium * 4.118)

(b) Calculated as: (Silicon * 2.139)

(c) pH was analyzed past the 15min hold time.

RL = Reporting Limit

Report of Analysis

Client Sample ID: MTD-SW-07	Date Sampled: 04/12/10
Lab Sample ID: C10601-7F	Date Received: 04/13/10
Matrix: AQ - Surface H2O Filtered	Percent Solids: n/a
Project: Mt. Diablo- Marsh Creek Road	

Dissolved Metals Analysis

Analyte	Result	RL	Units	DF	Prep	Analyzed By	Method	Prep Method
Mercury	0.24	0.20	ug/l	1	04/20/10	04/21/10 RW	EPA 245.1 ¹	EPA 245.1/SW7470A ²

(1) Instrument QC Batch: MA1177

(2) Prep QC Batch: MP2298

RL = Reporting Limit

Report of Analysis

Client Sample ID: MTD-SW-08	Date Sampled: 04/12/10
Lab Sample ID: C10601-8	Date Received: 04/13/10
Matrix: AQ - Surface Water	Percent Solids: n/a
Project: Mt. Diablo- Marsh Creek Road	

Total Metals Analysis

Analyte	Result	RL	Units	DF	Prep	Analyzed By	Method	Prep Method
Antimony	< 10	10	ug/l	1	04/21/10	04/26/10 CT	SW846 6010B ²	SW3010A ⁴
Arsenic	< 10	10	ug/l	1	04/21/10	04/26/10 CT	SW846 6010B ²	SW3010A ⁴
Beryllium	< 5.0	5.0	ug/l	1	04/21/10	04/26/10 CT	SW846 6010B ²	SW3010A ⁴
Boron	226	50	ug/l	1	04/21/10	04/26/10 CT	SW846 6010B ²	SW3010A ⁴
Cadmium	< 2.0	2.0	ug/l	1	04/21/10	04/26/10 CT	SW846 6010B ²	SW3010A ⁴
Calcium	21700	50	ug/l	1	04/21/10	04/26/10 CT	SW846 6010B ²	SW3010A ⁴
Chromium	31.0	5.0	ug/l	1	04/21/10	04/26/10 CT	SW846 6010B ²	SW3010A ⁴
Copper	33.6	5.0	ug/l	1	04/21/10	04/26/10 CT	SW846 6010B ²	SW3010A ⁴
Iron	19500	50	ug/l	1	04/21/10	04/26/10 CT	SW846 6010B ²	SW3010A ⁴
Lead	5.8	5.0	ug/l	1	04/21/10	04/26/10 CT	SW846 6010B ²	SW3010A ⁴
Magnesium	12500	50	ug/l	1	04/21/10	04/26/10 CT	SW846 6010B ²	SW3010A ⁴
Manganese	388	5.0	ug/l	1	04/21/10	04/26/10 CT	SW846 6010B ²	SW3010A ⁴
Mercury	0.61	0.20	ug/l	1	04/14/10	04/14/10 RW	EPA 245.1 ¹	EPA 245.1/SW7470A ³
Nickel	44.7	5.0	ug/l	1	04/21/10	04/26/10 CT	SW846 6010B ²	SW3010A ⁴
Potassium	4170	500	ug/l	1	04/21/10	04/26/10 CT	SW846 6010B ²	SW3010A ⁴
Selenium	< 20	20	ug/l	1	04/21/10	04/26/10 CT	SW846 6010B ²	SW3010A ⁴
Silicon	26300	50	ug/l	1	04/21/10	04/26/10 CT	SW846 6010B ²	SW3010A ⁴
Silver	< 5.0	5.0	ug/l	1	04/21/10	04/26/10 CT	SW846 6010B ²	SW3010A ⁴
Sodium	8110	100	ug/l	1	04/21/10	04/26/10 CT	SW846 6010B ²	SW3010A ⁴
Thallium	< 20	20	ug/l	1	04/21/10	04/26/10 CT	SW846 6010B ²	SW3010A ⁴
Zinc	48.7	10	ug/l	1	04/21/10	04/26/10 CT	SW846 6010B ²	SW3010A ⁴

(1) Instrument QC Batch: MA1166

(2) Instrument QC Batch: MA1183

(3) Prep QC Batch: MP2279

(4) Prep QC Batch: MP2300

RL = Reporting Limit

Report of Analysis

Client Sample ID: MTD-SW-08	Date Sampled: 04/12/10
Lab Sample ID: C10601-8	Date Received: 04/13/10
Matrix: AQ - Surface Water	Percent Solids: n/a
Project: Mt. Diablo- Marsh Creek Road	

General Chemistry

Analyte	Result	RL	Units	DF	Analyzed	By	Method
Alkalinity, Bicarbonate	83.2	5.0	mg/l	1	04/26/10	PH	SM18 4500CO2D
Alkalinity, Carbonate	< 5.0	5.0	mg/l	1	04/26/10	PH	SM18 4500CO2D
Alkalinity, Total as CaCO ₃	83.2	5.0	mg/l	1	04/26/10	PH	SM18 2320B
Bromide	< 0.20	0.20	mg/l	1	04/13/10 22:41	HD	EPA 300/SW846 9056A
Chloride	4.5	0.50	mg/l	1	04/13/10 22:41	HD	EPA 300/SW846 9056A
Dissolved Organic Carbon	8.9	1.0	mg/l	1	04/15/10	MF	SM18 5310C
Fluoride	< 0.10	0.10	mg/l	1	04/13/10 22:41	HD	EPA 300/SW846 9056A
Hardness, Total as CaCO ₃ ^a	106	0.33	mg/l	1	04/26/10 16:35	CT	SW846 6010B/SM 2340B
Nitrogen, Nitrate	0.18	0.10	mg/l	1	04/13/10 22:41	HD	EPA 300/SW846 9056A
Silica, Dissolved ^b	56.3	0.11	mg/l	1	04/26/10 16:35	CT	SW846 6010B
Solids, Total Dissolved	199	10	mg/l	1	04/15/10	MF	SM18 2540C
Specific Conductivity	212	1.0	umhos/cm	1	04/14/10	MF	SM18 2510B/EPA 120.1
Sulfate	11.9	0.50	mg/l	1	04/13/10 22:41	HD	EPA 300/SW846 9056A
Turbidity	190	5.0	NTU	10	04/13/10 13:18	PH	SM18 2130B
pH ^c	7.73		su	1	04/13/10 12:12	PH	SM18 45001+ B

(a) Calculated as: (Calcium * 2.497) + (Magnesium * 4.118)

(b) Calculated as: (Silicon * 2.139)

(c) pH was analyzed past the 15min hold time.

RL = Reporting Limit

Report of Analysis

Client Sample ID: MTD-SW-08	Date Sampled: 04/12/10
Lab Sample ID: C10601-8F	Date Received: 04/13/10
Matrix: AQ - Surface H2O Filtered	Percent Solids: n/a
Project: Mt. Diablo- Marsh Creek Road	

Dissolved Metals Analysis

Analyte	Result	RL	Units	DF	Prep	Analyzed By	Method	Prep Method
Mercury	< 0.20	0.20	ug/l	1	04/20/10	04/21/10 RW	EPA 245.1 ¹	EPA 245.1/SW7470A ²

(1) Instrument QC Batch: MA1177
 (2) Prep QC Batch: MP2298

RL = Reporting Limit

Report of Analysis

Client Sample ID: MTD-SW-09	Date Sampled: 04/12/10
Lab Sample ID: C10601-9	Date Received: 04/13/10
Matrix: AQ - Surface Water	Percent Solids: n/a
Project: Mt. Diablo- Marsh Creek Road	

Total Metals Analysis

Analyte	Result	RL	Units	DF	Prep	Analyzed By	Method	Prep Method
Antimony	< 10	10	ug/l	1	04/21/10	04/22/10 CT	SW846 6010B ²	SW3010A ⁵
Arsenic	< 10	10	ug/l	1	04/21/10	04/22/10 CT	SW846 6010B ²	SW3010A ⁵
Beryllium	< 5.0	5.0	ug/l	1	04/21/10	04/22/10 CT	SW846 6010B ²	SW3010A ⁵
Boron	73500	250	ug/l	5	04/21/10	04/26/10 CT	SW846 6010B ³	SW3010A ⁵
Cadmium	< 2.0	2.0	ug/l	1	04/21/10	04/22/10 CT	SW846 6010B ²	SW3010A ⁵
Calcium	319000	250	ug/l	5	04/21/10	04/26/10 CT	SW846 6010B ³	SW3010A ⁵
Chromium	26.3	5.0	ug/l	1	04/21/10	04/22/10 CT	SW846 6010B ²	SW3010A ⁵
Copper	50.0	5.0	ug/l	1	04/21/10	04/22/10 CT	SW846 6010B ²	SW3010A ⁵
Iron	13400	250	ug/l	5	04/21/10	04/26/10 CT	SW846 6010B ³	SW3010A ⁵
Lead	< 5.0	5.0	ug/l	1	04/21/10	04/22/10 CT	SW846 6010B ²	SW3010A ⁵
Magnesium	374000	250	ug/l	5	04/21/10	04/26/10 CT	SW846 6010B ³	SW3010A ⁵
Manganese	5930	5.0	ug/l	1	04/21/10	04/22/10 CT	SW846 6010B ²	SW3010A ⁵
Mercury	93.6	2.0	ug/l	10	04/14/10	04/14/10 RW	EPA 245.1 ¹	EPA 245.1/SW7470A ⁴
Nickel	11800	5.0	ug/l	1	04/21/10	04/22/10 CT	SW846 6010B ²	SW3010A ⁵
Potassium	36000	500	ug/l	1	04/21/10	04/22/10 CT	SW846 6010B ²	SW3010A ⁵
Selenium	< 20	20	ug/l	1	04/21/10	04/22/10 CT	SW846 6010B ²	SW3010A ⁵
Silicon	13100	250	ug/l	5	04/21/10	04/26/10 CT	SW846 6010B ³	SW3010A ⁵
Silver	< 5.0	5.0	ug/l	1	04/21/10	04/22/10 CT	SW846 6010B ²	SW3010A ⁵
Sodium	969000	500	ug/l	5	04/21/10	04/26/10 CT	SW846 6010B ³	SW3010A ⁵
Thallium	< 20	20	ug/l	1	04/21/10	04/22/10 CT	SW846 6010B ²	SW3010A ⁵
Zinc	335	10	ug/l	1	04/21/10	04/22/10 CT	SW846 6010B ²	SW3010A ⁵

(1) Instrument QC Batch: MA1166

(2) Instrument QC Batch: MA1179

(3) Instrument QC Batch: MA1183

(4) Prep QC Batch: MP2279

(5) Prep QC Batch: MP2300

RL = Reporting Limit

Report of Analysis

Client Sample ID: MTD-SW-09	Date Sampled: 04/12/10
Lab Sample ID: C10601-9	Date Received: 04/13/10
Matrix: AQ - Surface Water	Percent Solids: n/a
Project: Mt. Diablo- Marsh Creek Road	

General Chemistry

Analyte	Result	RL	Units	DF	Analyzed	By	Method
Alkalinity, Bicarbonate	< 5.0	5.0	mg/l	1	04/26/10	PH	SM18 4500CO2D
Alkalinity, Carbonate	< 5.0	5.0	mg/l	1	04/26/10	PH	SM18 4500CO2D
Alkalinity, Total as CaCO ₃	< 5.0	5.0	mg/l	1	04/26/10	PH	SM18 2320B
Bromide	4.6	0.20	mg/l	1	04/13/10 22:59	HD	EPA 300/SWR46 9056A
Chloride	1220	250	mg/l	500	04/16/10 01:02	HD	EPA 300/SWR46 9056A
Dissolved Organic Carbon	25.7	1.0	mg/l	1	04/15/10	MF	SM18 5310C
Fluoride ^a	< 0.50	0.50	mg/l	5	04/16/10 00:44	HD	EPA 300/SWR46 9056A
Hardness, Total as CaCO ₃ ^b	2340	1.7	mg/l	1	04/26/10 17:08	CT	SW846 6010B/SM 2340B
Nitrogen, Nitrate	1.8	0.10	mg/l	1	04/13/10 22:59	HD	EPA 300/SWR46 4056A
Silica, Dissolved ^c	28.0	0.53	mg/l	1	04/26/10 17:08	CT	SW846 6010B
Solids, Total Dissolved	6120	10	mg/l	1	04/15/10	MF	SM18 2540C
Specific Conductivity	8050	1.0	umhos/cm	1	04/14/10	MF	SM18 2510B EPA 120.1
Sulfate	6620	250	mg/l	500	04/16/10 01:02	HD	EPA 300/SWR46 9056A
Turbidity	13.8	0.50	NTU	1	04/13/10 13:18	PH	SM18 2130B
pH ^d	4.50		su	1	04/13/10 12:14	PH	SM18 4500H+ B

(a) Elevated detection limit due to high concentration of Chloride.

(b) Calculated as: (Calcium * 2.497) + (Magnesium * 4.118)

(c) Calculated as: (Silicon * 2.139)

(d) pH was analyzed past the 15min hold time.

RL = Reporting Limit

Report of Analysis

Client Sample ID: MTD-SW-09	Date Sampled: 04/12/10
Lab Sample ID: C10601-9F	Date Received: 04/13/10
Matrix: AQ - Surface H2O Filtered	Percent Solids: n/a
Project: Mt. Diablo- Marsh Creek Road	

Dissolved Metals Analysis

Analyte	Result	RL	Units	DF	Prep	Analyzed By	Method	Prep Method
Mercury	85.3	2.0	ug/l	10	04/20/10	04/21/10 RW	EPA 245.1 ¹	EPA 245.1/SW7470A ²

(1) Instrument QC Batch: MA1177

(2) Prep QC Batch: MP2298

RL = Reporting Limit

Report of Analysis

Client Sample ID: MTD-SW-10	Date Sampled: 04/12/10
Lab Sample ID: C10601-10	Date Received: 04/13/10
Matrix: AQ - Surface Water	Percent Solids: n/a
Project: Mt. Diablo- Marsh Creek Road	

Total Metals Analysis

Analyte	Result	RL	Units	DF	Prep	Analyzed By	Method	Prep Method
Antimony	35.4	10	ug/l	1	04/21/10	04/26/10 CT	SW846 6010B ²	SW3010A ⁴
Arsenic	23.8	10	ug/l	1	04/21/10	04/26/10 CT	SW846 6010B ²	SW3010A ⁴
Beryllium	< 5.0	5.0	ug/l	1	04/21/10	04/26/10 CT	SW846 6010B ²	SW3010A ⁴
Boron	1350	50	ug/l	1	04/21/10	04/26/10 CT	SW846 6010B ²	SW3010A ⁴
Cadmium	< 2.0	2.0	ug/l	1	04/21/10	04/26/10 CT	SW846 6010B ²	SW3010A ⁴
Calcium	20200	50	ug/l	1	04/21/10	04/26/10 CT	SW846 6010B ²	SW3010A ⁴
Chromium	25.4	5.0	ug/l	1	04/21/10	04/26/10 CT	SW846 6010B ²	SW3010A ⁴
Copper	15.6	5.0	ug/l	1	04/21/10	04/26/10 CT	SW846 6010B ²	SW3010A ⁴
Iron	9830	50	ug/l	1	04/21/10	04/26/10 CT	SW846 6010B ²	SW3010A ⁴
Lead	< 5.0	5.0	ug/l	1	04/21/10	04/26/10 CT	SW846 6010B ²	SW3010A ⁴
Magnesium	24500	50	ug/l	1	04/21/10	04/26/10 CT	SW846 6010B ²	SW3010A ⁴
Manganese	554	5.0	ug/l	1	04/21/10	04/26/10 CT	SW846 6010B ²	SW3010A ⁴
Mercury	18.0	0.80	ug/l	4	04/14/10	04/14/10 RW	EPA 245.1 ¹	EPA 245.1/SW7470A ³
Nickel	1460	5.0	ug/l	1	04/21/10	04/26/10 CT	SW846 6010B ²	SW3010A ⁴
Potassium	3860	500	ug/l	1	04/21/10	04/26/10 CT	SW846 6010B ²	SW3010A ⁴
Selenium	< 20	20	ug/l	1	04/21/10	04/26/10 CT	SW846 6010B ²	SW3010A ⁴
Silicon	13500	50	ug/l	1	04/21/10	04/26/10 CT	SW846 6010B ²	SW3010A ⁴
Silver	< 5.0	5.0	ug/l	1	04/21/10	04/26/10 CT	SW846 6010B ²	SW3010A ⁴
Sodium	19200	100	ug/l	1	04/21/10	04/26/10 CT	SW846 6010B ²	SW3010A ⁴
Thallium	< 20	20	ug/l	1	04/21/10	04/26/10 CT	SW846 6010B ²	SW3010A ⁴
Zinc	52.1	10	ug/l	1	04/21/10	04/26/10 CT	SW846 6010B ²	SW3010A ⁴

(1) Instrument QC Batch: MA1166

(2) Instrument QC Batch: MA1183

(3) Prep QC Batch: MP2279

(4) Prep QC Batch: MP2300

RL = Reporting Limit

Report of Analysis

Client Sample ID: MTD-SW-10	Date Sampled: 04/12/10
Lab Sample ID: C10601-10	Date Received: 04/13/10
Matrix: AQ - Surface Water	Percent Solids: n/a
Project: Mt. Diablo- Marsh Creek Road	

General Chemistry

Analyte	Result	RL	Units	DF	Analyzed	By	Method
Alkalinity, Bicarbonate	11.9	5.0	mg/l	1	04/26/10	PH	SM18 4500C02D
Alkalinity, Carbonate	< 5.0	5.0	mg/l	1	04/26/10	PH	SM18 4500C02D
Alkalinity, Total as CaCO ₃	11.9	5.0	mg/l	1	04/26/10	PH	SM18 2320B
Bromide	< 0.20	0.20	mg/l	1	04/13/10 23:51	HD	EPA 300/SW846 9056A
Chloride	18.7	2.5	mg/l	5	04/16/10 01:37	HD	EPA 300/SW846 9056A
Dissolved Organic Carbon	4.8	1.0	mg/l	1	04/15/10	MF	SM18 5310C
Fluoride	0.12	0.10	mg/l	1	04/13/10 23:51	HD	EPA 300/SW846 9056A
Hardness, Total as CaCO ₃ ^a	151	0.33	mg/l	1	04/26/10 16:40	CT	SW846 6010B/SM 2340B
Nitrogen, Nitrate	< 0.10	0.10	mg/l	1	04/13/10 23:51	HD	EPA 300/SW846 9056A
Silica, Dissolved ^b	28.9	0.11	mg/l	1	04/26/10 16:40	CT	SW846 6010B
Solids, Total Dissolved	267	10	mg/l	1	04/15/10	MF	SM18 2540C
Specific Conductivity	422	1.0	umhos/cm	1	04/14/10	MF	SM18 2510B/EPA 120.1
Sulfate	148	13	mg/l	25	04/16/10 01:54	HD	EPA 300/SW846 9056A
Turbidity	125	2.5	NTU	5	04/13/10 13:18	PH	SM18 2130B
pH ^c	6.83		su	1	04/13/10 12:17	PH	SM18 4500H+ B

(a) Calculated as: (Calcium * 2.497) + (Magnesium * 4.118)

(b) Calculated as: (Silicon * 2.139)

(c) pH was analyzed past the 15min hold time.

RL = Reporting Limit

Report of Analysis

Client Sample ID: MTD-SW-10	Date Sampled: 04/12/10
Lab Sample ID: C10601-10F	Date Received: 04/13/10
Matrix: AQ - Surface H2O Filtered	Percent Solids: n/a
Project: Mt. Diablo- Marsh Creek Road	

Dissolved Metals Analysis

Analyte	Result	RL	Units	DF	Prep	Analyzed By	Method	Prep Method
Mercury	0.42	0.20	ug/l	1	04/20/10	04/21/10 RW	EPA 245.1 ¹	EPA 245.1/SW7470A ²

(1) Instrument QC Batch: MA1177

(2) Prep QC Batch: MP2298

RL = Reporting Limit



Misc. Forms

Custody Documents and Other Forms

Includes the following where applicable:

- Chain of Custody



CHAIN OF CUSTODY

2235 Route 130, Dayton, NJ 08810
732-329-0200 FAX: 732-329-3499/3480

SGKPCAPALTA

Client / Reporting Information		Project Information		FED-EX Tracking #		Bottle Order Control #												
Company Name: The Source Group		Project Name: Mt. Diablo		Accutest Order #		Accutest Job # C10601												
Address: 24810 Whiskey Road		Street: Marsh Creek Road		FED-EX Tracking #		Bottle Order Control #												
City: Pleasant Hill, State: California, Zip: 94523		City: Clayton, State: CA		FED-EX Tracking #		Bottle Order Control #												
Project Contact: Jon Phillips, E-mail: jphillips@thesourcegroup.net		Project # 01-SUN-050		FED-EX Tracking #		Bottle Order Control #												
Phone # 925-944-3334 x318		Fax # 925-944-3888		FED-EX Tracking #		Bottle Order Control #												
Receiver's Name: NCJ/P		Client Purchase Order # C1-SUN-050		FED-EX Tracking #		Bottle Order Control #												
Sample #	Field ID / Point of Collection	SUMMARY	Collection	Number of preserved bottles												Matrix Codes		
		MECH Vial #	Date, Time, Sampled by, Matrix	# of bottles	1	2	3	4	5	6	7	8	9	10	11	12	13	14
1	MTD-SW-01		12-Apr 13:55 NCJ/P sw	3	1	1												Dist. Drinking Water
2	MTD-SW-02		12-Apr 14:25 NCJ/P sw	3	1	1												Dist. Ground Water
3	MTD-SW-03		12-Apr 14:18 NCJ/P sw	3	1	1												Dist. Water
4	MTD-SW-04		12-Apr 14:35 NCJ/P sw	3	1	1												Dist. Surface Water
5	MTD-SW-05		12-Apr 15:10 NCJ/P sw	3	1	1												Dist. Sewer
6	MTD-SW-06		12-Apr 13:35 NCJ/P sw	3	1	1												Dist. Sludge
7	MTD-SW-07		12-Apr 16:30 NCJ/P sw	3	1	1												Dist. Other Liquid
8	MTD-SW-08		12-Apr 14:45 NCJ/P sw	3	1	1												Dist. Air
9	MTD-SW-09		12-Apr 15:00 NCJ/P sw	3	1	1												Dist. Other Solid
10	MTD-SW-10		12-Apr 15:20 NCJ/P sw	3	1	1												Dist. W-10
Turnaround Time (Business days)		Data Deliverable Information		Comments / Remarks														
<input checked="" type="checkbox"/> 1-2 Business Days <input type="checkbox"/> 1-3 Day RUSH <input type="checkbox"/> 1 Day RUSH <input type="checkbox"/> 2 Day EMERGENCY <input type="checkbox"/> 3 Day EMERGENCY <input type="checkbox"/> 1 Day EMERGENCY <input type="checkbox"/> Other		Approved By / Date: _____ <input checked="" type="checkbox"/> Commercial / <input type="checkbox"/> Full GUP <input checked="" type="checkbox"/> Commercial "B" / <input type="checkbox"/> NYSDP Category A <input type="checkbox"/> NJ Reduced / <input type="checkbox"/> NYSDP Category B <input type="checkbox"/> NJ Full / <input type="checkbox"/> State Police <input type="checkbox"/> Other / <input type="checkbox"/> EDD Payroll Commercial "B" = Results Only		samples not filtered Cooler #1: 4.5 + 0.3 = 4.8°C Cooler #2: 3.1 + 0.3 = 3.4°C														
Emergency TIA data available VIA LabLink																		
Sample Custody must be documented below each time sample changes possession, including courier delivery.																		
Received by:	Date/Time:	Received by:	Date/Time:	Received by:	Date/Time:	Received by:	Date/Time:											
1	9:00 4/15/10	2	9:57 4/15/10	3		4												
5		6		7		8												
Custody Seal #				Preserved where applicable		On Ice												
						Cooler Temp. 2-cooler Rec'd												

3:1
3



Metals Analysis

QC Data Summaries

Includes the following where applicable:

- Method Blank Summaries
- Matrix Spike and Duplicate Summaries
- Blank Spike and Lab Control Sample Summaries
- Serial Dilution Summaries

BLANK RESULTS SUMMARY
Part 2 - Method Blanks

Login Number: C10601
Account: SGRPCAPH - The Source Group
Project: Mt. Diablo- Marsh Creek Road

QC Batch ID: MP2279
Matrix Type: AQUEOUS

Methods: EPA 245.1
Units: ug/l

Prep Date: 04/14/10

Metal	RL	IDL	MDL	MB raw	final
Mercury	0.20	.02	.02	-0.020	<0.20

Associated samples MP2279: C10601-1, C10601-2, C10601-3, C10601-4, C10601-5, C10601-6, C10601-7, C10601-8, C10601-9, C10601-10

Results < IDL are shown as zero for calculation purposes
(*): Outside of QC limits
(anr): Analyte not requested

4.1.1

4

MATRIX SPIKE AND DUPLICATE RESULTS SUMMARY

Login Number: C10601
 Account: SGRPCAPR - The Source Group
 Project: Mt. Diablo- Marsh Creek Road

QC Batch ID: ~~MF2279~~
 Matrix Type: AQUEOUS

Methods: EPA 245.1
 Units: ug/l

Prep Date: 04/14/10

Metal	C10601-1		SpikeLot		QC
	Original MS		HGPWS1	% Rec	Limits
Mercury	2.2	6.0	4	95.0	70-130

Associated samples MF2279: C10601-1, C10601-2, C10601-3, C10601-4, C10601-5, C10601-6, C10601-7, C10601-8, C10601-9, C10601-10

Results < IDL are shown as zero for calculation purposes
 (*) Outside of QC limits
 (N) Matrix Spike Rec. outside of QC limits
 (anr) Analyte not requested

4.1.2
4

MATRIX SPIKE AND DUPLICATE RESULTS SUMMARY

Login Number: C10601
 Account: SGRPCAPH - The Source Group
 Project: Mt. Diablo- Marsh Creek Road

QC Batch ID: MP2279
 Matrix Type: AQUEOUS

Methods: EPA 245.1
 Units: ug/l

Prep Date: 04/14/10

Metal	C10601-1 Original MSD	Spikelot HGPWS1	% Rec	MSD RPD	QC Limit
Mercury	2.2	5.9	4	92.5	1.7

Associated samples MP2279: C10601-1, C10601-2, C10601-3, C10601-4, C10601-5, C10601-6, C10601-7, C10601-8, C10601-9, C10601-10

Results < IDL are shown as zero for calculation purposes:
 (*) Outside of QC limits
 (N) Matrix Spike Rec. outside of QC limits
 (anr) Analyte not requested

4.1.2
 4

SPIKE BLANK AND LAB CONTROL SAMPLE SUMMARY

Login Number: C10601
 Account: SGRPCAPH - The Source Group
 Project: Mt. Diablo- Marsh Creek Road

QC Batch ID: MP2279
 Matrix Type: AQUEOUS

Methods: EPA 245.1
 Units: ug/l

Prep Date: 04/14/10 04/14/10

Metal	BSP Result	Spikelot HGFWSI	% Rec	QC Limits	BSD Result	Spikelot HGFWSI	% Rec	BSD RPD	QC Limit
Mercury	2.0	2	100.0	85-115	2.0	2	100.0	0.0	

Associated samples MP2279: C10601-1, C10601-2, C10601-3, C10601-4, C10601-5, C10601-6, C10601-7, C10601-8, C10601-9, C10601-10

Results < IDL are shown as zero for calculation purposes
 (*) Outside of QC limits
 (anr) Analyte not requested

4.1.3
4

BLANK RESULTS SUMMARY
Part 2 - Method Blanks

Login Number: C10601
Account: SGRPCAPH - The Source Group
Project: Mt. Diablo- Marsh Creek Road

QC Batch ID: MP2298
Matrix Type: AQUEOUS

Methods: EPA 245.1
Units: ug/l

Prep Date: 04/20/10

Metal	RL	IDL	MDL	MB	
				raw	final
Mercury	0.20	.02	.02	0.058	<0.20

Associated samples MP2298: C10601-1F, C10601-2F, C10601-3F, C10601-4F, C10601-5F, C10601-6F, C10601-7F, C10601-8F, C10601-9F, C10601-10F

Results < IDL are shown as zero for calculation purposes
(*) Outside of QC limits
(anr) Analyte not requested

4.2.1

4

MATRIX SPIKE AND DUPLICATE RESULTS SUMMARY

Login Number: C10601
 Account: SGRPCAPH - The Source Group
 Project: Mt. Diablo- Marsh Creek Road

QC Batch ID: MP2298
 Matrix Type: AQUEOUS

Methods: EPA 245.1
 Units: ug/l

Prep Date: 04/20/10

Metal	C10601-9F Original MS	SpikeLot HGM481	% Rec	QC Limits
Mercury	85.3 92.5	*	180.0(a)	70-130

Associated samples MP2298: C10601-1F, C10601-2F, C10601-3F, C10601-4F, C10601-5F, C10601-6F, C10601-7F, C10601-8F, C10601-9F, C10601-10F

Results < IDL are shown as zero for calculation purposes

(*) Outside of QC limits

(N) Matrix Spike Rec. outside of QC limits

(anr) Analyte not requested

(a) Spike amount low relative to the sample amount. Refer to lab control or spike blank for recovery information.

4.2.2
4

MATRIX SPIKE AND DUPLICATE RESULTS SUMMARY

Login Number: C10601
 Account: SGRPCAPH - The Source Group
 Project: Mt. Diablo- Marsh Creek Road

QC Batch ID: MP2298
 Matrix Type: AQUEOUS

Methods: EPA 245.1
 Units: ug/l

Prep Date: 04/20/10

Metal	C10601-9F		SpikeLot		MSD	QC
	Original	MSD	HGPWS1	% Rec	RPD	Limit
Mercury	85.3	97.6	4	307.8(a)	5.4	20

Associated samples MP2298: C10601-1F, C10601-2F, C10601-3F, C10601-4F, C10601-5F, C10601-6F, C10601-7F, C10601-8F, C10601-9F, C10601-10F

Results < IDL are shown as zero for calculation purposes

(*) Outside of QC limits

(N) Matrix Spike Rec. outside of QC limits

(anr) Analyte not requested

(a) Spike amount low relative to the sample amount. Refer to lab control or spike blank for recovery information.

4.2.2
4

SPIKE BLANK AND LAB CONTROL SAMPLE SUMMARY

Login Number: C10601
 Account: SGRPCAPH - The Source Group
 Project: Mt. Diablo- Marsh Creek Road

QC Batch ID: MP2298
 Matrix Type: AQUEOUS

Methods: EPA 245.1
 Units: ug/l

Prep Date: 04/20/10 04/20/10

Metal	BSP Result	SpikeLot HGPWS1	% Rec	QC Limits	BSD Result	SpikeLot HGPWS1	% Rec	BSD RPD	QC Limit
Mercury	2.0	2	100.0	85-115	2.0	2	100.0	0.0	

Associated samples MP2298: C10601-1F, C10601-2F, C10601-3F, C10601-4F, C10601-5F, C10601-6F, C10601-7F, C10601-8F, C10601-9F, C10601-10F

Results < IDL are shown as zero for calculation purposes
 (*) Outside of QC limits
 (anr) Analyte not requested

4.2.3

4

BLANK RESULTS SUMMARY
Part 2 - Method Blanks

Login Number: C10601
Account: SGRPCAPB - The Source Group
Project: Mt. Diablo- Marsh Creek Road

QC Batch ID: MP2300
Matrix Type: AQUEOUS

Methods: SW846 6010B
Units: ug/l

Prep Date: 04/21/10

Metal	RL	IDL	MDL	MB raw	final
Aluminum	50	14	21		
Antimony	10	6.9	5.3	6.2	<10
Arsenic	10	4.4	3.1	-2.7	<10
Barium	5.0	.6	.7		
Beryllium	5.0	.1	.2	0.0	<5.0
Boron	50	8.6	11	3.0	<50
Cadmium	2.0	.3	.3	0.10	<2.0
Calcium	50	29	12	16.9	<50
Chromium	5.0	.7	.6	0.20	<5.0
Cobalt	5.0	.4	.4		
Copper	5.0	.8	1.1	-0.10	<5.0
Iron	50	3.5	18	2.3	<50
Lead	5.0	3.3	1.3	10.50	<5.0
Lithium	10	2.2	2.5		
Magnesium	50	9.6	13	24.3	<50
Manganese	5.0	.2	.2	0.10	<5.0
Molybdenum	5.0	1.3	1		
Nickel	5.0	.5	.5	-0.10	<5.0
Potassium	500	68	60	24.8	<500
Selenium	20	1.1	1.2	3.1	<20
Silicon	50	3.2	5.3	-0.60	<50
Silver	5.0	.9	.7	0.60	<5.0
Sodium	100	15	13	6.8	<100
Strontium	10	.3	2.4		
Thallium	20	6.5	6.4	2.6	<20
Tin	50	2.3	2		
Titanium	2.0	.2	.2		
Vanadium	5.0	.7	.5		
Zinc	10	.9	1.1	-0.10	<10

Associated samples MP2300: C10601-1, C10601-2, C10601-3, C10601-4, C10601-5, C10601-6, C10601-7, C10601-8, C10601-9, C10601-10

Results < IDL are shown as zero for calculation purposes
(*) Outside of QC limits
(anr) Analyte not requested

MATRIX SPIKE AND DUPLICATE RESULTS SUMMARY

Login Number: C10601
 Account: SGRPCAPR - The Source Group
 Project: Mt. Diablo- Marsh Creek Road

QC Batch ID: MP2300
 Matrix Type: AQUEOUS

Methods: SW846 6010B
 Units: ug/l

Prep Date: 04/21/10

Metal	C10601-1 Original MS	Spikelot MPIK1	% Rec	QC Limits
Aluminum	anr			
Antimony	15.9	522	500	101.2 80-120
Arsenic	0.0	508	500	103.2 80-120
Barium				
Beryllium	0.0	515	500	103.0 80-120
Boron	117	642	500	105.0 80-120
Cadmium	11.3	517	500	101.1 80-120
Calcium	22900	23600	500	140.0(a) 80-120
Chromium	16.5	508	500	98.3 80-120
Cobalt				
Copper	57.9	595	500	105.4 80-120
Iron	1650	2130	500	96.0 80-120
Lead	12.1	517	500	101.0 80-120
Lithium				
Magnesium	13900	14500	500	120.0 80-120
Manganese	305	816	500	102.2 80-120
Molybdenum				
Nickel	31.9	526	500	98.8 80-120
Potassium	3520	3580	5000	101.2 80-120
Selenium	0.0	493	500	98.6 80-120
Silicon	4050	4390	250	136.0(a) 80-120
Silver	2.7	526	500	105.1 80-120
Sodium	112000	116000	500	600.0(a) 80-120
Strontium				
Thallium	0.0	470	500	94.0 80-120
Tin				
Titanium				
Vanadium				
Zinc	128	639	500	102.2 80-120

Associated samples MP2300: C10601-1, C10601-2, C10601-3, C10601-4, C10601-5, C10601-6, C10601-7, C10601-8, C10601-9, C10601-10

Results < IDL are shown as zero for calculation purposes

(*) Outside of QC limits

(N) Matrix Spike Rec. outside of QC limits

(anr) Analyte not requested

(a) Spike amount low relative to the sample amount. Refer to lab control or spike blank for recovery

4.3.2
4

MATRIX SPIKE AND DUPLICATE RESULTS SUMMARY

Login Number: C10601
Account: SGRPCAPH - The Source Group
Project: Mt. Diablo- Marsh Creek Road

QC Batch ID: MP2300
Matrix Type: AQUEOUS

Methods: SW846 6010B
Units: ug/l

Prep Date:

Metal

information.

4.3.2

4

MATRIX SPIKE AND DUPLICATE RESULTS SUMMARY

Login Number: C10601
 Account: SGRPCAPH - The Source Group
 Project: ML Diablo- Marsh Creek Road

QC Batch ID: MP2300
 Matrix Type: AQUEOUS

Methods: SW846 6010B
 Units: ug/l

Prep Date: 04/21/10

Metal	C10601-1 Original	MSD	SpikeLot MP1R1	% Rec	MSD RPD	QC Limit
Aluminum	anr					
Antimony	15.9	523	500	101.4	0.2	20
Arsenic	0.0	519	500	103.8	0.5	20
Barium						
Beryllium	0.0	514	500	103.8	0.8	20
Boron	117	649	500	106.4	1.1	20
Cadmium	11.3	519	500	101.5	0.4	20
Calcium	22900	22900	500	0.0 (a)	3.0	20
Chromium	16.5	514	500	99.5	1.2	20
Cobalt						
Copper	67.9	605	500	107.4	1.7	20
Iron	1650	2300	500	130.0N(b)	7.7	20
Lead	12.4	520	500	101.6	0.6	20
Lithium						
Magnesium	13900	14400	500	100.0	0.7	20
Manganese	305	816	500	102.2	0.0	20
Molybdenum						
Nickel	31.9	533	500	100.2	1.3	20
Potassium	3520	8620	5000	102.0	0.5	20
Selenium	0.0	491	500	98.2	0.4	20
Silicon	4050	4450	250	160.0(a)	1.4	20
Silver	2.7	534	500	106.3	1.1	20
Sodium	113000	112000	500	-200.0(a)	3.5	20
Strontium						
Thallium	0.0	467	500	93.4	0.6	20
Tin						
Titanium						
Vanadium						
Zinc	128	647	500	103.8	1.2	20

Associated samples MP2300: C10601-1, C10601-2, C10601-3, C10601-4, C10601-5, C10601-6, C10601-7, C10601-8, C10601-9, C10601-10

Results < IDL are shown as zero for calculation purposes

(*) Outside of QC limits

(N) Matrix Spike Rec. outside of QC limits

(anr) Analyte not requested

(a) Spike amount low relative to the sample amount. Refer to lab control or spike blank for recovery

4.3.2
 4

MATRIX SPIKE AND DUPLICATE RESULTS SUMMARY

Login Number: C10601
Account: SGRPCAPR - The Source Group
Project: Mt. Diablo- Marsh Creek Road

QC Batch ID: MF2300
Matrix Type: AQUEOUS

Methods: SM846 6010B
Units: ug/l

Prep Date:

Metal

information.
(b) Spike recovery indicates possible matrix interference and/or sample nonhomogeneity.

4.3.2
4

SPIKE BLANK AND LAB CONTROL SAMPLE SUMMARY

Login Number: C10601
 Account: SGRPCAPI - The Source Group
 Project: Mt. Diablo- Marsh Creek Road

QC Batch ID: MP2300
 Matrix Type: AQUEOUS

Methods: SW846 6010B
 Units: ug/l

Prep Date: 04/21/10 04/21/10

MerAl	BSP Result	Spikelet MPIR1	% Rec	QC Limits	BSD Result	Spikelet MPIR1	% Rec	BSD RPD	QC Limit
Aluminum	anr								
Antimony	496	500	99.2	80-120	500	500	100.0	0.8	
Arsenic	493	500	98.6	80-120	494	500	98.8	0.2	
Barium									
Beryllium	496	500	99.2	80-120	494	500	98.8	0.4	
Boron	518	500	103.6	80-120	515	500	103.0	0.6	
Cadmium	502	500	100.4	80-120	498	500	99.6	0.8	
Calcium	524	500	104.8	80-120	505	500	101.0	3.7	
Chromium	493	500	98.6	80-120	490	500	98.0	0.6	
Cobalt									
Copper	476	500	95.2	80-120	478	500	95.6	0.4	
Iron	525	500	105.0	80-120	515	500	103.0	1.9	
Lead	519	500	103.8	80-120	513	500	102.6	1.2	
Lithium									
Magnesium	524	500	104.8	80-120	511	500	102.2	2.5	
Manganese	501	500	100.2	80-120	501	500	100.2	0.0	
Molybdenum									
Nickel	503	500	100.6	80-120	499	500	99.8	0.8	
Potassium	5010	5000	100.2	80-120	4970	5000	99.4	0.8	
Selenium	500	500	100.0	80-120	498	500	99.6	0.4	
Silicon	266	250	106.4	80-120	265	250	106.0	0.4	
Silver	521	500	104.2	80-120	521	500	104.2	0.0	
Sodium	514	500	102.8	80-120	502	500	100.4	2.4	
Strontium									
Thallium	476	500	95.2	80-120	473	500	94.6	0.6	
Tin									
Titanium									
Vanadium									
Zinc	490	500	98.0	80-120	487	500	97.4	0.6	

Associated samples MP2300: C10601-1, C10601-2, C10601-3, C10601-4, C10601-5, C10601-6, C10601-7, C10601-8, C10601-9, C10601-10

Results < IDL are shown as zero for calculation purposes
 (*) Outside of QC limits
 (anr) Analyte not requested

4.3.3
 4

SERIAL DILUTION RESULTS SUMMARY

Login Number: C10601
 Account: SGRPCAPH - The Source Group
 Project: Mt. Diablo- Marsh Creek Road

QC Batch ID: MP2300
 Matrix Type: AQUEOUS

Methods: SW846 6010B
 Units: ug/l

Prep Date: 04/21/10

Merai	C10680-1 Original	SDL 1.5	%DIF	QC Limits
Aluminum	anr			
Antimony	15.9	36.0	126.4 (a)	0-10
Arsenic	0.00	0.00	NC	0-10
Barium				
Beryllium	0.00	0.00	NC	0-10
Boron	117	136	15.8 (a)	0-10
Cadmium	11.3	13.0	15.0 (a)	0-10
Calcium	22900	22800	0.2	0-10
Chromium	16.5	17.5	5.1	0-10
Cobalt				
Copper	67.9	68.0	0.1	0-10
Iron	1650	1630	1.2	0-10
Lead	12.1	0.00	100.0 (a)	0-10
Lithium				
Magnesium	13800	13800	0.2	0-10
Manganese	305	304	0.6	0-10
Molybdenum				
Nickel	31.9	34.5	8.2	0-10
Potassium	1520	3570	1.2	0-10
Selenium	0.00	0.00	NC	0-10
Silicon	1050	3970	2.1	0-10
Silver	2.70	0.00	100.0 (a)	0-10
Sodium	113000	113000	0.6	0-10
Strontium				
Thallium	0.00	0.00	NC	0-10
Tin				
Titanium				
Vanadium				
Zinc	128	131	2.2	0-10

Associated samples MP2300: C10601-1, C10601-2, C10601-3, C10601-4, C10601-5, C10601-6, C10601-7, C10601-8, C10601-9, C10601-10

Results < IDL are shown as zero for calculation purposes

(*) Outside of QC limits

(anr) Analyte not requested

(a) Percent difference acceptable due to low initial sample concentration (< 50 times IDL).

POST DIGESTATE SPIKE SUMMARY

Login Number: C10601
 Account: SGRPCAPI - The Source Group
 Project: Mt. Diablo- Marsh Creek Road

QC Batch ID: MF2300
 Matrix Type: AQUEOUS

Methods: SW846 6010B
 Units: ug/l

Prep Date:

04/21/10

Metal	Sample ml	Final ml	C10680-1 Raw	Corr.**	PS ug/l	Spike ml	Spike ug/ml	Spike ug/l	% Rec	QC Limits
Aluminum										
Antimony										
Arsenic										
Barium										
Beryllium										
Boron										
Cadmium										
Calcium										
Chromium										
Cobalt										
Copper										
Iron	10	10.1	1652.4	1636.04	2120.7	0.05	100	495.0425	97.9	-
Lead										
Lithium										
Magnesium										
Manganese										
Molybdenum										
Nickel										
Potassium										
Selenium										
Silicon										
Silver										
Sodium										
Strontium										
Thallium										
Tin										
Titanium										
Vanadium										
Zinc										

Associated samples MF2300: C10601-1, C10601-2, C10601-3, C10601-4, C10601-5, C10601-6, C10601-7, C10601-8, C10601-9, C10601-10

Results < IDL are shown as zero for calculation purposes
 (*) Outside of QC limits
 (**) Corr. sample result = Raw * (sample volume / final volume)
 (anr) Analyte not requested

4.3.5
 4



General Chemistry

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QC Data Summaries

Includes the following where applicable:

- Method Blank and Blank Spike Summaries
- Duplicate Summaries
- Matrix Spike Summaries

METHOD BLANK AND SPIKE RESULTS SUMMARY
GENERAL CHEMISTRY

Login Number: C10601
Account: SGRPCAPH - The Source Group
Project: Mt. Diablo- Marsh Creek Road

Analyte	Batch ID	RL	ME Result	Units	Spike Amount	BSP Result	BSP %Recov	QC Limits
Alkalinity, Total as CaCO3	GN3656	5.0	0.0	mg/l	250	351	100.6	75-125%
Bromide	GP1649/GN3604	0.20	0.0	mg/l	5	4.95	99.0	90-110%
Chloride	GP1649/GN3604	0.50	0.0	mg/l	5	4.87	97.4	90-110%
Chloride	GP1654/GN3615	0.50	0.0	mg/l	5	4.58	91.6	90-110%
Dissolved Organic Carbon	GP1656/GN3621	1.0	0.72	mg/l	25	24.3	97.2	75-125%
Fluoride	GP1649/GN3604	0.10	0.028	mg/l	5	4.85	97.0	90-110%
Fluoride	GP1654/GN3615	0.10	0.035	mg/l	5	5.03	100.6	90-110%
Nitrogen, Nitrate	GP1649/GN3604	0.10	0.9	mg/l	5	4.76	95.2	90-110%
Nitrogen, Nitrate	GP1654/GN3615	0.10	0.0	mg/l	5	4.97	99.4	90-110%
Solids, Total Dissolved	GN3610	10	0.0	mg/l				
Specific Conductivity	GN3608	1.0	0.0	umhos/cm				
Sulfate	GP1649/GN3604	0.50	0.0	mg/l	5	4.72	94.4	90-110%
Sulfate	GP1654/GN3615	0.50	0.0	mg/l	5	4.89	97.8	90-110%
Turbidity	GN3596	0.50	0.045	NTU	10	10.9	102.2	75-125%

Associated Samples:

Batch GN3596: C10601-1, C10601-10, C10601-2, C10601-3, C10601-4, C10601-5, C10601-6, C10601-7, C10601-8, C10601-9
 Batch GN3608: C10601-1, C10601-10, C10601-2, C10601-3, C10601-4, C10601-5, C10601-6, C10601-7, C10601-8, C10601-9
 Batch GN3610: C10601-1, C10601-10, C10601-2, C10601-3, C10601-4, C10601-5, C10601-6, C10601-7, C10601-8, C10601-9
 Batch GN3656: C10601-1, C10601-10, C10601-2, C10601-3, C10601-4, C10601-5, C10601-6, C10601-7, C10601-8, C10601-9
 Batch GP1649: C10601-1, C10601-10, C10601-2, C10601-3, C10601-4, C10601-5, C10601-6, C10601-7, C10601-8, C10601-9
 Batch GP1654: C10601-1, C10601-10, C10601-2, C10601-3, C10601-4, C10601-5, C10601-6, C10601-7, C10601-8, C10601-9
 Batch GP1656: C10601-1, C10601-10, C10601-2, C10601-3, C10601-4, C10601-5, C10601-6, C10601-7, C10601-8, C10601-9

(*) Outside of QC limits

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5

BLANK SPIKE DUPLICATE RESULTS SUMMARY
GENERAL CHEMISTRY

Login Number: C10601

Account: SGRPCAPH - The Source Group

Project: Mt. Diablo - Marsh Creek Road

Analyte	Batch ID	Units	Spike Amount	BSD Result	RPD	QC Limit
Alkalinity, Total as CaCO3	GN3656	mg/l	250	251	0.0	
Bromide	GP1649/GN3604	mg/l	5	4.94	0.2	25%
Chloride	GP1649/GN3604	mg/l	5	4.78	1.9	25%
Chloride	GP1654/GN3615	mg/l	5	5.11	10.9	25%
Dissolved Organic Carbon	GP1656/GN3621	mg/l	25	24.7	1.6	
Fluoride	GP1649/GN3604	mg/l	5	4.63	4.6	25%
Fluoride	GP1654/GN3615	mg/l	5	5.04	0.2	25%
Nitrogen, Nitrate	GP1649/GN3604	mg/l	5	4.77	0.2	25%
Nitrogen, Nitrate	GP1654/GN3615	mg/l	5	4.94	0.6	25%
Sulfate	GP1649/GN3604	mg/l	5	4.71	0.2	25%
Sulfate	GP1654/GN3615	mg/l	5	4.84	1.0	25%
Turbidity	GN3596	NTU	40	40.9	0.0	

Associated Samples:

Batch GN3596: C10601-1, C10601-10, C10601-2, C10601-3, C10601-4, C10601-5, C10601-6, C10601-7, C10601-8, C10601-9

Batch GN3656: C10601-1, C10601-10, C10601-2, C10601-3, C10601-4, C10601-5, C10601-6, C10601-7, C10601-8, C10601-9

Batch GP1649: C10601-1, C10601-10, C10601-2, C10601-3, C10601-4, C10601-5, C10601-6, C10601-7, C10601-8, C10601-9

Batch GP1654: C10601-1, C10601-10, C10601-2, C10601-3, C10601-4, C10601-5, C10601-6, C10601-7, C10601-9

Batch GP1656: C10601-1, C10601-10, C10601-2, C10601-3, C10601-4, C10601-5, C10601-6, C10601-7, C10601-8, C10601-9

(*) Outside of QC limits

5.2
5

DUPLICATE RESULTS SUMMARY
GENERAL CHEMISTRY

Login Number: C10601
Account: SGRPCAPH - The Source Group
Project: Mt. Diablo- Marsh Creek Road

Analyte	Batch ID	QC Sample	Units	Original Result	DUP Result	RPD	QC Limits
Solids, Total Dissolved	GN3610	C10601-8	mg/l	199	195	2.0	0-%
Specific Conductivity	GN3608	C10601-1	umhos/cm	341	340	0.3	0-25%
Turbidity	GN3596	C10601-9	NTU	13.8	13.9	0.7	0-25%
pH	GN3593	C10600-2	su	7.37	7.30	1.0	0-25%

Associated Samples:

Batch GN3593: C10601-1, C10601-10, C10601-2, C10601-3, C10601-4, C10601-5, C10601-6, C10601-7, C10601-8, C10601-9

Batch GN3596: C10601-1, C10601-10, C10601-2, C10601-3, C10601-4, C10601-5, C10601-6, C10601-7, C10601-8, C10601-9

Batch GN3608: C10601-1, C10601-10, C10601-2, C10601-3, C10601-4, C10601-5, C10601-6, C10601-7, C10601-8, C10601-9

Batch GN3610: C10601-1, C10601-10, C10601-2, C10601-3, C10601-4, C10601-5, C10601-6, C10601-7, C10601-8, C10601-9

(* Outside of QC limits

53
5

MATRIX SPIKE RESULTS SUMMARY
GENERAL CHEMISTRY

Login Number: C10601
Account: SGRPCAPH - The Source Group
Project: Mt. Diablo- Marsh Creek Road

Analyte	Batch ID	QC Sample	Units	Original Result	Spike Amount	MS Result	%Rec	QC Limits
Bromide	GP1649/GN3604	C10601-9	mg/l	4.6	4	8.9	107.5	80-120%
Chloride	GP1649/GN3604	C10601-9	mg/l	0.0	4	0.0	0.0N(a)	80-120%
Chloride	GP1654/GN3615	C10601-4	mg/l	35.3	20	59.6	121.5N(b)	80-120%
Dissolved Organic Carbon	GP1656/GN3621	C10601-9	mg/l	25.7	25	46.7	84.2	75-125%
Fluoride	GP1649/GN3604	C10601-9	mg/l	0.045	4	0.0	-1.1N(a)	80-120%
Fluoride	GP1654/GN3615	C10601-4	mg/l	0.19	20	18.2	90.1	80-120%
Nitrogen, Nitrate	GP1649/GN3604	C10601-9	mg/l	1.8	4	5.9	102.5	80-120%
Nitrogen, Nitrate	GP1654/GN3615	C10601-4	mg/l	0.52	20	20.5	99.9	80-120%
Sulfate	GP1649/GN3604	C10601-9	mg/l	0.0	4	0.0	0.0N(c)	80-120%
Sulfate	GP1654/GN3615	C10601-4	mg/l	68.3	20	81.1	64.0N(b)	80-120%

Associated Samples:

Batch GP1649: C10601-1, C10601-10, C10601-2, C10601-3, C10601-4, C10601-5, C10601-6, C10601-7, C10601-8, C10601-9

Batch GP1654: C10601-1, C10601-10, C10601-2, C10601-3, C10601-4, C10601-5, C10601-6, C10601-7, C10601-9

Batch GP1656: C10601-1, C10601-10, C10601-2, C10601-3, C10601-4, C10601-5, C10601-6, C10601-7, C10601-8, C10601-9

(*) Outside of QC limits

(N) Matrix Spike Rec. outside of QC limits

(a) Spike recovery shows interference from high chloride concentration.

(b) Spike recovery indicates possible matrix interference.

(c) Spike recovery shows interference from high sulfate concentration.

5.4
5

MATRIX SPIKE DUPLICATE RESULTS SUMMARY
GENERAL CHEMISTRY

Login Number: C10601
Account: SGRPCAPH - The Source Group
Project: Mt. Diablo- Marsh Creek Road

Analyte	Batch ID	QC Sample	Units	Original Result	Spike Amount	MSD Result	RPD	QC Limit
Bromide	GP1649/GN3604	C10601-9	mg/l	4.6	4	8.8	1.1	
Chloride	GP1649/GN3604	C10601-9	mg/l	0.0	4	0.0	0.0N(a)	
Chloride	GP1654/GN3615	C10601-4	mg/l	35.3	20	59.5	0.2N(b)	
Dissolved Organic Carbon	GP1656/GN3621	C10601-9	mg/l	25.7	25	48.7	4.2	
Fluoride	GP1649/GN3604	C10601-9	mg/l	0.045	4	0.4	0.0N(a)	
Fluoride	GP1654/GN3615	C10601-4	mg/l	0.19	20	18.3	0.5	
Nitrogen, Nitrate	GP1649/GN3604	C10601-9	mg/l	1.8	4	5.9	0.0	
Nitrogen, Nitrate	GP1654/GN3615	C10601-4	mg/l	0.52	20	20.5	0.0	
Sulfate	GP1649/GN3604	C10601-9	mg/l	0.0	4	0.0	0.0N(c)	
Sulfate	GP1654/GN3615	C10601-4	mg/l	68.3	20	80.7	0.5N(b)	

Associated Samples:

Batch GP1649: C10601-1, C10601-10, C10601-2, C10601-3, C10601-4, C10601-5, C10601-6, C10601-7, C10601-8, C10601-9

Batch GP1654: C10601-1, C10601-10, C10601-2, C10601-3, C10601-4, C10601-5, C10601-6, C10601-7, C10601-9

Batch GP1656: C10601-1, C10601-10, C10601-2, C10601-3, C10601-4, C10601-5, C10601-6, C10601-7, C10601-8, C10601-9

(*) Outside of QC limits

(N) Matrix Spike Rec. outside of QC limits

(a) Spike recovery shows interference from high chloride concentration.

(b) Spike recovery indicates possible matrix interference.

(c) Spike recovery shows interference from high sulfate concentration.

5.5
5

Technical Report for

The Source Group

Mt. Diablo- Marsh Creek Road

01-SUN-050

Accutest Job Number: C10601X

Sampling Date: 04/12/10


Report to:

The Source Group
3451C Vincent Road
Pleasant Hill, CA 94523
jphilipp@thesourcegroup.net
ATTN: Jon Philipp

Total number of pages in report:



Test results contained within this data package meet the requirements of the National Environmental Laboratory Accreditation Conference and/or state specific certification programs as applicable.


Laurie Glantz-Murphy
Laboratory Director

Client Service contact: Anne Kathain 408-588-0200

Certifications: CA (08258CA)

This report shall not be reproduced, except in its entirety, without the written approval of Accutest Laboratories.
Test results relate only to samples analyzed.

Sample Summary

The Source Group

Job No: C10601X

Mt. Diablo- Marsh Creek Road
 Project No: 01-SUN-050

Sample Number	Collected		Received	Matrix		Client Sample ID
	Date	Time By		Code	Type	
C10601-1X	04/12/10	13:55 NCJP	04/13/10	AQ	Surface Water	MTD-SW-01
C10601-2X	04/12/10	14:25 NCJP	04/13/10	AQ	Surface Water	MTD-SW-02
C10601-3X	04/12/10	14:15 NCJP	04/13/10	AQ	Surface Water	MTD-SW-03
C10601-4X	04/12/10	14:35 NCJP	04/13/10	AQ	Surface Water	MTD-SW-04
C10601-5X	04/12/10	15:10 NCJP	04/13/10	AQ	Surface Water	MTD-SW-05
C10601-6X	04/12/10	13:35 NCJP	04/13/10	AQ	Surface Water	MTD-SW-06
C10601-7X	04/12/10	15:30 NCJP	04/13/10	AQ	Surface Water	MTD-SW-07
C10601-8X	04/12/10	14:45 NCJP	04/13/10	AQ	Surface Water	MTD-SW-08
C10601-9X	04/12/10	15:00 NCJP	04/13/10	AQ	Surface Water	MTD-SW-09
C10601-10X	04/12/10	15:20 NCJP	04/13/10	AQ	Surface Water	MTD-SW-10



CHAIN OF CUSTODY

2235 Route 130, Dayton, NJ 08810
732-329-0200 FAX: 732-329-3499/3480

FED-EX Tracking #	Bottle Order Control #
Accutest Quote #	Accutest Job # G1060

"SGRPCAPHA67A"

Client / Reporting Information		Project Information		Requested Analysis			Matrix Codes	
Company Name The Source Group		Project Name Mt. Diablo		<input type="checkbox"/> 824 <input type="checkbox"/> 8021 <input type="checkbox"/> 802 <input type="checkbox"/> 8260 <input type="checkbox"/> BTBX <input type="checkbox"/> MTBE <input type="checkbox"/> TBAO <input type="checkbox"/> NAP <input type="checkbox"/> 8260 <input type="checkbox"/> 824 <input type="checkbox"/> 821 <input type="checkbox"/> TCL <input type="checkbox"/> PPL <input type="checkbox"/> STARS <input type="checkbox"/> NTBB <input type="checkbox"/> TBAO <input type="checkbox"/> NAPP <input type="checkbox"/> +10 <input type="checkbox"/> +15 <input type="checkbox"/> 8270 <input type="checkbox"/> 829 <input type="checkbox"/> TCL <input type="checkbox"/> PPL <input type="checkbox"/> STARBO <input type="checkbox"/> ABNO <input type="checkbox"/> AEO <input type="checkbox"/> BNC <input type="checkbox"/> PAHO <input type="checkbox"/> +10 <input type="checkbox"/> +15 <input type="checkbox"/> 8270 <input type="checkbox"/> 829 <input type="checkbox"/> TCL <input type="checkbox"/> PPL <input type="checkbox"/> STARBO Mercury (dissolved/total) <i>Lab - Filter from 1st pol</i> Priority Pollutant Metals Methyl Mercury General Chem: turbidity, alkalinity, TDS, EC, pH, <u>BC, CA</u> General Chemistry: <u>(cations/anions)</u> <u>Bi, K, Fe, Mn, Mg, Ca, Na, Si</u> <u>* hardness (Ca, Mg)</u> <u>CHL, F, SO4, Ba, CO, NO30 (anions)</u> <i>Lab - Filter from 1st pol</i>			DW - Drinking Water GW - Ground Water WW - Water SW - Surface Water SO - Soil SL - Sludge Oi - Oil LUQ - Other Liquid AIR - Air BOL - Other Bottle WP - Wipe LAB USE ONLY	
Address 3451C Vincent Road		Street Marsh Creek Road						
City Pleasant Hill		City Clayton						
State California		State CA						
Zip 94523		Zip 94523						
Project Contact: Jon Phillip jphillipp@thesourcegroup.net		Project # 01-SUN-050		Client Purchase Order # 01-SUN-050				
Phone # 925-944-2856 x316		Fax # 925-944-2859						
Sampler's Name NCJP		Client Purchase Order # 01-SUN-050						

Accutest Sample #	Field ID / Point of Collection	SUMMA #	MEOH Vial #	Collection			Matrix	# of bottles	Number of preserved Bottles										LAB USE ONLY																						
				Date	Time	Sampled by			824	8021	802	8260	BTBX	MTBE	TBAO	NAP	824	821		TCL	PPL	STARS	NTBB	TBAO	NAPP	+10	+15	8270	829	TCL	PPL	STARBO	ABNO	AEO	BNC	PAHO	+10	+15			
1	MTD-SW-01			12-Apr	13:55	NCJP	sw	3	1	1																															250ml poly
2	MTD-SW-02			12-Apr	14:25	NCJP	sw	3	1	1																													each (with tag)		
3	MTD-SW-03			12-Apr	14:15	NCJP	sw	3	1	1																												PH27 (X10)			
4	MTD-SW-04			12-Apr	14:35	NCJP	sw	3	1	1																												1 x 1L poly			
5	MTD-SW-05			12-Apr	15:10	NCJP	sw	3	1	1																												each NP (X10)			
6	MTD-SW-06			12-Apr	13:35	NCJP	sw	3	1	1																												500ml Amber			
7	MTD-SW-07			12-Apr	15:30	NCJP	sw	3	1	1																												glass (with tag)			
8	MTD-SW-08			12-Apr	14:45	NCJP	sw	3	1	1																												to collect			
9	MTD-SW-09			12-Apr	15:00	NCJP	sw	3	1	1																															
10	MTD-SW-10			12-Apr	15:20	NCJP	sw	3	1	1																															

<input checked="" type="checkbox"/> Std. 14 Business Days <input type="checkbox"/> 10 Day RUSH <input type="checkbox"/> 5 Day RUSH <input type="checkbox"/> 3 Day EMERGENCY <input type="checkbox"/> 2 Day EMERGENCY <input type="checkbox"/> 1 Day EMERGENCY <input type="checkbox"/> Other	Approved By/ Date:	<input checked="" type="checkbox"/> Commercial "A" <input checked="" type="checkbox"/> Commercial "B" <input type="checkbox"/> NJ Reduced <input type="checkbox"/> NJ Full <input type="checkbox"/> Other	<input type="checkbox"/> FULL CLP <input type="checkbox"/> NYASP Category A <input type="checkbox"/> NYASP Category B <input type="checkbox"/> State Forms <input type="checkbox"/> DD Format Commercial "A" = Results Only	Comments / Remarks <p>samples not filtered</p> <p>Cooler #1: 4.5 + 0.3 = 4.8 °C</p> <p>Cooler #2: 3.1 + 0.3 = 3.4 °C</p>
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Sample Custody must be documented below each time samples change possession, including courier delivery.

Relinquished by: <i>[Signature]</i>	Date/Time: 9:00 4/13/10	Received By: <i>[Signature]</i>	Date/Time: 9:57 4/13/10
Relinquished by: 3	Date/Time:	Received By: 4	Date/Time:
Relinquished by: 5	Date/Time:	Received By: 6	Date/Time:

Custody Seal # Preserved where applicable On Ice Cooler Temp. 2-coolers Rec'd

Accutest Laboratories Northern California
 Sample Receiving Check List

Job# : C10601
 Sample Control Rep. Initial: EK

S&R PCAPH 2674

Review Chain of Custody Chain of Custody is to be complete and legible.

- Are these regulatory (NPDES) samples? GWA Yes / No
- Is pH requested? Yes / No
- Was Client informed that hold time is 15 min? Yes / No Continue Yes / No
- Was ortho-Phosphate filtered within 15 min? Yes / No Continue Yes / No
- Are sample within hold time? Yes / No
- Are sample in danger of exceeding hold-time Yes / No
- Existing Client? Yes / No ^{new client} Existing Project? New Project Yes / No
- If No: Is Report to info complete and legible, including; Setup by the pm
- deliverable Name Address phone e-mail
- Is Bill to info complete and legible, including;
- PO# Credit card Contact address phone e-mail
- Is Contact and/or Project Manager identified, including;
- phone e-mail

- Project name / number Special requirements? Yes / No
- Sample IDs / date & time of collection provided? Yes / No
- Is Matrix listed and correct? Yes / No
- Analyses listed we do or client has authorized a subcontract? Yes / No
- Chain is signed and dated by both client and sample custodian? Yes / No
- TAT requested available? Yes / No Approved by pm

Review Coolers: 2 coolers Rev'd.

- Were Coolers temperatures measured at ≤6°C? Cooler # Temp °C
- If cooler is outside the ≤6°C; note down below the affected bottles in that cooler
- Note that ANC does NOT accept evidentiary samples. (We do not lock refrigerators)

Shipment Received Method AC(W)

Custody Seals: Present: Yes / No If Yes; Unbroken: Yes / No

Review of Sample Bottles: If you answer no, explain to the side

- Chain matches bottle labels? Yes / No Sample bottle intact? Yes / No
- Is there enough sample volume in proper bottle for requested analyses? Yes / No
- Proper Preservatives? Yes / No Check pH on preserved samples except 1664, 625, 8270 and VOAs.

Headspace-VOAs? Greater than 6mm in diameter Yes / No
 List sample ID and affected container
N/A

Client Sample ID	pH Check	Other Comments/Issues
-1	pH 6.2	250ml poly (4/21/20) metals
	↓	↓
-10	↓	↓
		<u>* main/mercury</u>
		<u>-> submit to call test.</u>

Subcontract Data



Thursday, April 29, 2010

Ann Kathain
Accutest Laboratories
2105 Lundy Avenue
San Jose, CA 95131

RE: Lab Order: K040531
Project ID: MT. DIABLO

Collected By: CLIENT
PO/Contract #: C10601

Dear Ann Kathain:

Enclosed are the analytical results for sample(s) received by the laboratory on Tuesday, April 13, 2010. Results reported herein conform to the most current NELAC standards, where applicable, unless otherwise narrated in the body of the report.

If you have any questions concerning this report, please feel free to contact me.

Enclosures

Project Manager: Mike Hamilton





ENVIRONMENTAL ANALYSES

SAMPLE SUMMARY

Lab Order: K040531
Project ID: MT. DIABLO

Lab ID	Sample ID	Matrix	Date Collected	Date Received
K040531001	C10601-1 MTD-SW-01	Water	4/12/2010 13:55	4/13/2010 14:51
K040531002	C10601-2 MTD-SW-02	Water	4/12/2010 14:25	4/13/2010 14:51
K040531003	C10601-3 MTD-SW-03	Water	4/12/2010 14:15	4/13/2010 14:51
K040531004	C10601-4 MTD-SW-04	Water	4/12/2010 14:35	4/13/2010 14:51
K040531005	C10601-5 MTD-SW-05	Water	4/12/2010 15:10	4/13/2010 14:51
K040531006	C10601-6 MTD-SW-06	Water	4/12/2010 13:35	4/13/2010 14:51
K040531007	C10601-7 MTD-SW-07	Water	4/12/2010 15:30	4/13/2010 14:51
K040531008	C10601-8 MTD-SW-08	Water	4/12/2010 14:45	4/13/2010 14:51
K040531009	C10601-9 MTD-SW-09	Water	4/12/2010 15:00	4/13/2010 14:51
K040531010	C10601-10 MTD-SW-10	Water	4/12/2010 15:20	4/13/2010 14:51

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ENVIRONMENTAL ANALYSES

NARRATIVE

Lab Order: K040531
Project ID: MT. DIABLO

General Qualifiers and Notes

Caltest authorizes this report to be reproduced only in its entirety. Results are specific to the sample(s) as submitted and only to the parameter(s) reported.

Caltest certifies that all test results for wastewater and hazardous waste analyses meet all applicable NELAC requirements; all microbiology and drinking water testing meet applicable ELAP requirements, unless stated otherwise.

All analyses performed by EPA Methods or Standard Methods (SM) 18th Ed. except where noted.

Caltest collects samples in compliance with 40 CFR, EPA Methods, Cal. Title 22, and Standard Methods.

Dilution Factors (DF) reported greater than '1' have been used to adjust the result, Reporting Limit (RL), and Method Detection Limit (MDL).

All Solid, sludge, and/or biosolids data is reported in Wet Weight, unless otherwise specified.

Laboratory filtration for dissolved metals (excluding mercury) and/or pH analysis was not performed within the 15 minute holding time as specified by 40CFR 136.3 table II.

Results Qualifiers: Report fields may contain codes and non-numeric data correlating to one or more of the following definitions:

ND - Non Detect - indicates analytical result has not been detected.

RL - Reporting Limit is the quantitation limit at which the laboratory is able to detect an analyte. An analyte not detected at or above the RL is reported as ND unless otherwise noted or qualified. For analyses pertaining to the State Implementation Plan of the California Toxics Rule, the Caltest Reporting Limit (RL) is equivalent to the Minimum Level (ML). A standard is always run at or below the ML. Where Reporting Limits are elevated due to dilution, the ML calibration criteria has been met.

J - reflects estimated analytical result value detected below the Reporting Limit (RL) and above the Method Detection Limit (MDL). The 'J' flag is equivalent to the DNQ Estimated Concentration flag.

E - indicates an estimated analytical result value.

B - indicates the analyte has been detected in the blank associated with the sample.

NC - means not able to be calculated for RPD or Spike Recoveries.

SS - compound is a Surrogate Spike used per laboratory quality assurance manual.

NOTE: This document represents a complete Analytical Report for the samples referenced herein and should be retained as a permanent record thereof.





ENVIRONMENTAL ANALYSIS

ANALYTICAL RESULTS

Lab Order: K040531
 Project ID MT. DIABLO

Lab ID:	K040531001	Date Collected:	4/12/2010 13:55	Matrix:	Water			
Sample ID:	C10601-1 MTD-SW-01	Date Received:	4/13/2010 14:51					
Parameters	Result Units	R. L.	MDL	DF Prepared	Batch	Analyzed	Batch	Qual
Methyl Mercury Analysis								
		Prep Method:	Draft EPA 1630	Prep by:	ECV			
		Analytical Method:	Draft EPA 1630	Analyzed by:	ECV			
Methyl Mercury	0.0607 ng/L	0.05	0.02	1 04/21/10 00:00	MPR 8689	04/23/10 00:00	MHG 3113	

Lab ID:	K040531002	Date Collected:	4/12/2010 14:25	Matrix:	Water			
Sample ID:	C10601-2 MTD-SW-02	Date Received:	4/13/2010 14:51					
Parameters	Result Units	R. L.	MDL	DF Prepared	Batch	Analyzed	Batch	Qual
Methyl Mercury Analysis								
		Prep Method:	Draft EPA 1630	Prep by:	ECV			
		Analytical Method:	Draft EPA 1630	Analyzed by:	ECV			
Methyl Mercury	0.976 ng/L	0.2	0.1	1 04/21/10 00:00	MPR 8689	04/23/10 00:00	MHG 3113	

Lab ID:	K040531003	Date Collected:	4/12/2010 14:15	Matrix:	Water			
Sample ID:	C10601-3 MTD-SW-03	Date Received:	4/13/2010 14:51					
Parameters	Result Units	R. L.	MDL	DF Prepared	Batch	Analyzed	Batch	Qual
Methyl Mercury Analysis								
		Prep Method:	Draft EPA 1630	Prep by:	ECV			
		Analytical Method:	Draft EPA 1630	Analyzed by:	ECV			
Methyl Mercury	0.398 ng/L	0.2	0.1	1 04/21/10 00:00	MPR 8689	04/23/10 00:00	MHG 3113	

Lab ID:	K040531004	Date Collected:	4/12/2010 14:35	Matrix:	Water			
Sample ID:	C10601-4 MTD-SW-04	Date Received:	4/13/2010 14:51					
Parameters	Result Units	R. L.	MDL	DF Prepared	Batch	Analyzed	Batch	Qual
Methyl Mercury Analysis								
		Prep Method:	Draft EPA 1630	Prep by:	ECV			
		Analytical Method:	Draft EPA 1630	Analyzed by:	ECV			
Methyl Mercury	0.328 ng/L	0.05	0.02	1 04/21/10 00:00	MPR 8689	04/23/10 00:00	MHG 3113	

Lab ID:	K040531005	Date Collected:	4/12/2010 15:10	Matrix:	Water			
Sample ID:	C10601-5 MTD-SW-05	Date Received:	4/13/2010 14:51					
Parameters	Result Units	R. L.	MDL	DF Prepared	Batch	Analyzed	Batch	Qual
Methyl Mercury Analysis								
		Prep Method:	Draft EPA 1630	Prep by:	ECV			





ENVIRONMENTAL ANALYSIS

ANALYTICAL RESULTS

Lab Order: K040531
Project ID: MT. DIABLO

Lab ID:	K040531005	Date Collected:	4/12/2010 15:10	Matrix:	Water			
Sample ID:	C10601-5 MTD-SW-05	Date Received:	4/13/2010 14:51					
Parameters	Result Units	R. L.	MDL	DF Prepared	Batch	Analyzed	Batch	Qual
	Analytical Method:		Draft EPA 1630		Analyzed by:		ECV	
Methyl Mercury	1.04 ng/L	0.2	0.1	1	04/21/10 00:00	MPR 8689	04/23/10 00:00	MHG 3113

Lab ID:	K040531006	Date Collected:	4/12/2010 13:35	Matrix:	Water			
Sample ID:	C10601-6 MTD-SW-06	Date Received:	4/13/2010 14:51					
Parameters	Result Units	R. L.	MDL	DF Prepared	Batch	Analyzed	Batch	Qual
	Prep Method:		Draft EPA 1630		Prep by:		ECV	
	Analytical Method:		Draft EPA 1630		Analyzed by:		ECV	
Methyl Mercury	0.350 ng/L	0.2	0.1	1	04/21/10 00:00	MPR 8689	04/23/10 00:00	MHG 3113

Lab ID:	K040531007	Date Collected:	4/12/2010 15:30	Matrix:	Water			
Sample ID:	C10601-7 MTD-SW-07	Date Received:	4/13/2010 14:51					
Parameters	Result Units	R. L.	MDL	DF Prepared	Batch	Analyzed	Batch	Qual
	Prep Method:		Draft EPA 1630		Prep by:		ECV	
	Analytical Method:		Draft EPA 1630		Analyzed by:		ECV	
Methyl Mercury	0.736 ng/L	0.05	0.02	1	04/21/10 00:00	MPR 8689	04/23/10 00:00	MHG 3113

Lab ID:	K040531008	Date Collected:	4/12/2010 14:45	Matrix:	Water			
Sample ID:	C10601-8 MTD-SW-08	Date Received:	4/13/2010 14:51					
Parameters	Result Units	R. L.	MDL	DF Prepared	Batch	Analyzed	Batch	Qual
	Prep Method:		Draft EPA 1630		Prep by:		ECV	
	Analytical Method:		Draft EPA 1630		Analyzed by:		ECV	
Methyl Mercury	0.389 ng/L	0.05	0.02	1	04/21/10 00:00	MPR 8689	04/23/10 00:00	MHG 3113

Lab ID:	K040531009	Date Collected:	4/12/2010 15:00	Matrix:	Water			
Sample ID:	C10601-9 MTD-SW-09	Date Received:	4/13/2010 14:51					
Parameters	Result Units	R. L.	MDL	DF Prepared	Batch	Analyzed	Batch	Qual
	Prep Method:		Draft EPA 1630		Prep by:		ECV	
	Analytical Method:		Draft EPA 1630		Analyzed by:		ECV	





ENVIRONMENTAL ANALYSIS

ANALYTICAL RESULTS

Lab Order: K040531
 Project ID MT. DIABLO

Lab ID:	K040531009	Date Collected:	4/12/2010 15:00	Matrix:	Water			
Sample ID:	C10601-9 MTD-SW-09	Date Received:	4/13/2010 14:51					
Parameters	Result Units	R. L.	MDL	DF Prepared	Batch	Analyzed	Batch	Qual
Methyl Mercury	0.523 ng/L	0.2	0.1	1	04/21/10 00:00	MPR 8689	04/23/10 00:00	MHG 3113

Lab ID:	K040531010	Date Collected:	4/12/2010 15:20	Matrix:	Water			
Sample ID:	C10601-10 MTD-SW-10	Date Received:	4/13/2010 14:51					
Parameters	Result Units	R. L.	MDL	DF Prepared	Batch	Analyzed	Batch	Qual
Methyl Mercury Analysis								
	Prep Method:	Draft EPA 1630		Prep by:		ECV		
	Analytical Method:	Draft EPA 1630				Analyzed by: ECV		
Methyl Mercury	0.480 ng/L	0.2	0.1	1	04/21/10 00:00	MPR 8689	04/23/10 00:00	MHG 3113

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ENVIRONMENTAL ANALYSES

QUALITY CONTROL DATA

Lab Order: K040531
 Project ID: MT. DIABLO

Analysis Description: Methyl Mercury Analysis	QC Batch: MPR/8689
Analysis Method: Draft EPA 1630	QC Batch Method: Draft EPA 1630

METHOD BLANK: 327433

Parameter	Blank Result	Reporting Limit	MDL	Units	Qualifiers
Methyl Mercury	ND	0.05	0.02	ng/L	

LABORATORY CONTROL SAMPLE: 327434

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
Methyl Mercury	ng/L	1.11	0.966	87	67-133	

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 327435 327436

Parameter	Units	K040637001 Result	Spike Conc.	MS Result	MSD Result	MS % Rec	MSD % Rec	% Rec Limit	RPD	Max RPD	Qualifiers
Methyl Mercury	ng/L	0.0233	1.11	1.02	1.02	90	90	65-135	0	35	





ENVIRONMENTAL ANALYSES

QUALITY CONTROL DATA QUALIFIERS

Lab Order: K040531

Project ID: MT. DIABLO

QUALITY CONTROL PARAMETER QUALIFIERS

Results **Qualifiers**: Report fields may contain codes and non-numeric data correlating to one or more of the following definitions.

NS - means not spiked and will not have recoveries reported for Analyte Spike Amounts

NC - means not able to be calculated for RPD or Spike Recoveries.

QC Codes Keys: These descriptors are used to help identify the specific QC samples and clarify the report.

MB - Method Blank

Method Blanks are reported to the same Method Detection Limits (MDLs) or Reporting Limits (RLs) as the analytical samples in the corresponding QC batch.

LCS/LCSD - Laboratory Control Spike / Laboratory Control Spike Duplicate

DUP - Duplicate of Original Sample Matrix

MS/MSD - Matrix Spike / Matrix Spike Duplicate

RPD - Relative Percent Difference

%Recovery - Spike Recovery stated as a percentage



ENVIRONMENTAL ANALYSES

QUALITY CONTROL DATA CROSS REFERENCE TABLE

Lab Order: K040531

Project ID: MT. DIABLO

Lab ID	Sample ID	QC Batch Method	QC Batch	Analytical Method	Analytical Batch
K040531001	C10601-1 MTD-SW-01	Draft EPA 1630	MPR/8689	Draft EPA 1630	MHG/3113
K040531002	C10601-2 MTD-SW-02	Draft EPA 1630	MPR/8689	Draft EPA 1630	MHG/3113
K040531003	C10601-3 MTD-SW-03	Draft EPA 1630	MPR/8689	Draft EPA 1630	MHG/3113
K040531004	C10601-4 MTD-SW-04	Draft EPA 1630	MPR/8689	Draft EPA 1630	MHG/3113
K040531005	C10601-5 MTD-SW-05	Draft EPA 1630	MPR/8689	Draft EPA 1630	MHG/3113
K040531006	C10601-6 MTD-SW-06	Draft EPA 1630	MPR/8689	Draft EPA 1630	MHG/3113
K040531007	C10601-7 MTD-SW-07	Draft EPA 1630	MPR/8689	Draft EPA 1630	MHG/3113
K040531008	C10601-8 MTD-SW-08	Draft EPA 1630	MPR/8689	Draft EPA 1630	MHG/3113
K040531009	C10601-9 MTD-SW-09	Draft EPA 1630	MPR/8689	Draft EPA 1630	MHG/3113
K040531010	C10601-10 MTD-SW-10	Draft EPA 1630	MPR/8689	Draft EPA 1630	MHG/3113

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K040531

Accutest ID and PO#: C10601

2105 Lundy Avenue, San Jose, CA 95131 Phone : (408)588-0200 Fax: (408)588-0201

Subcontract Chain of Custody

Subcontract Lab: Caltest Analytical Laboratory

Date Sent: 04/13/10

Date Due: 10 Day TAT

10 Day TAT

Project Name: Mt. Diablo

Project Location: Clayton, CA

Accutest Lab Number	Customer Sample Name/Field Point ID	Matrix	Method	Collect Date	Collect Time
C10601-1	MTD-SW-01	SW	Methyl Mercury	04/12/10	13:55
C10601-2	MTD-SW-02	SW	Methyl Mercury	04/12/10	14:25
C10601-3	MTD-SW-03	SW	Methyl Mercury	04/12/10	14:15
C10601-4	MTD-SW-04	SW	Methyl Mercury	04/12/10	14:35
C10601-5	MTD-SW-05	SW	Methyl Mercury	04/12/10	15:10
C10601-6	MTD-SW-06	SW	Methyl Mercury	04/12/10	13:35
C10601-7	MTD-SW-07	SW	Methyl Mercury	04/12/10	15:30
C10601-8	MTD-SW-08	SW	Methyl Mercury	04/12/10	14:45
C10601-9	MTD-SW-09	SW	Methyl Mercury	04/12/10	15:00
C10601-10	MTD-SW-10	SW	Methyl Mercury	04/12/10	15:20

Comments:

Relinquished By: ekumar	Received By:	Date: 4/13/10	Time: 1220
Relinquished By:	Received By:	Date: 4/13/10	Time: 1451
Relinquished By:	Received By:	Date:	Time:

Send the Report to: dianet@accutest.com



Technical Report for

The Source Group

Mt. Diablo- Marsh Creek Road, Clayton, CA

SUNOCO

Accutest Job Number: C11216

Sampling Date: 05/27/10

Report to:

The Source Group
3451C Vincent Road
Pleasant Hill, CA 94523
jphilipp@thesourcegroup.net
ATTN: Jon Philipp

Total number of pages in report: 50



Test results contained within this data package meet the requirements of the National Environmental Laboratory Accreditation Conference and/or state specific certification programs as applicable.

Laurie Glantz-Murphy
Laboratory Director

Client Service contact: Anne Kathain 408-588-0200

Certifications: CA (08258CA) DoD/ISO/IEC 17025:2005 (L2242)

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Test results relate only to samples analyzed.

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Sample Summary

The Source Group

Job No: C11216

Mt. Diablo- Marsh Creek Road, Clayton, CA

Project No: SUNOCO

Sample Number	Collected Date	Time By	Received	Matrix Code	Type	Client Sample ID
C11216-1	05/27/10	13:00 JP	05/28/10	AQ	Surface Water	MTD-SW-08/2
C11216-1F	05/27/10	13:00 JP	05/28/10	AQ	Surface H2O Filtered	MTD-SW-08/2
C11216-2	05/27/10	13:30 JP	05/28/10	AQ	Surface Water	MTD-SW-07/2
C11216-2F	05/27/10	13:30 JP	05/28/10	AQ	Surface H2O Filtered	MTD-SW-07/2
C11216-3	05/27/10	13:15 JP	05/28/10	AQ	Surface Water	MTD-SW-09/2
C11216-3F	05/27/10	13:15 JP	05/28/10	AQ	Surface H2O Filtered	MTD-SW-09/2
C11216-4	05/27/10	13:50 JP	05/28/10	AQ	Surface Water	MTD-SW-10/2
C11216-4F	05/27/10	13:50 JP	05/28/10	AQ	Surface H2O Filtered	MTD-SW-10/2
C11216-5	05/27/10	10:50 JP	05/28/10	AQ	Surface Water	MTD-SW-06/2
C11216-5F	05/27/10	10:50 JP	05/28/10	AQ	Surface H2O Filtered	MTD-SW-06/2
C11216-6	05/27/10	09:20 JP	05/28/10	AQ	Surface Water	MTD-SW-11/2
C11216-6F	05/27/10	09:20 JP	05/28/10	AQ	Surface H2O Filtered	MTD-SW-11/2
C11216-7	05/27/10	12:45 JP	05/28/10	AQ	Surface Water	MTD-SW-16/2



Sample Summary

(continued)

The Source Group

Job No: C11216

Mt. Diablo- Marsh Creek Road, Clayton, CA

Project No: SUNOCO

Sample Number	Collected Date	Time By	Received	Matrix Code Type	Client Sample ID
C11216-7F	05/27/10	12:45 JP	05/28/10	AQ Surface H2O Filtered	MTD-SW-16/2



IT'S ALL IN THE CHEMISTRY

Sample Results

Report of Analysis
