CITY OF LOS ANGELES
DEPARTMENT OF WATER AND POWER
INTRADEPARTMENTAL CORRESPONDENCE

Date: June 9, 2008

To: Douglas K. Sunshine

From: Josephine A. Gonzalez

Subject: Transmittal of Report of Findings, Limited Phase II Environmental Site Assessment (ESA) Chatsworth Reservoir

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As requested, Environmental Services (ES) has had the attached Report of Findings Limited Phase II ESA prepared for the Chatsworth Reservoir property intended to be transferred to the Los Angeles City Recreation and Parks Department for development of a wetland.

This report included subsurface soil sampling for the following constituents:

- Total petroleum hydrocarbons
- Volatile organic compounds
- Semi-volatile organic compounds
- Polychlorinated biphenyls
- Title 22 metals
- Hexavalent chromium
- Soil salinity
- Boron content

Review of the sampling results indicate one chemical of potential concern; Arsenic with a recommendation to conduct additional sampling to establish a background concentration baseline. An alternative to additional sampling to establish a background concentration baseline for Arsenic would be to have the information reviewed and evaluated, to determine if the source rock is naturally high in Arsenic, by a registered geologist. Additionally, the Department has received inquiries for information on sampling for radionuclides in the project area. Analysis for radionuclides was not included in this report, but could be incorporated into any future sampling if requested.

Please advise if you would like to proceed with additional sampling for Arsenic and/or radionuclides. If you have questions regarding this report, or require further details or clarifications contact Kelvin Lew at extension 70202.

JAG:sc
Attachment
c/att: Steven R. Cole
Mark J. Sedlacek
Josephine A. Gonzalez
Kelvin Lew
George Faeustle

LOS ANGELES DEPARTMENT OF WATER AND POWER
WATER ENGINEERING AND TECHNICAL SERVICES BUSINESS UNIT
SOILS AND MATERIALS TESTING SQUAD

LOS ANGELES RESERVOIR DIVISION DAM PROJECT (LARDDP) - CHATSWORTH BORROW SITE
BULK BAG SAMPLES
SOIL CLASSIFICATION (ASTM D2487-00).

VER.: 07-14-

Hole No.	Depth (ft.)	Classification of Soils for Engineering Purposes (Unified Soil Classification System)								
		Sieve Analysis-Percent Passing (%) (US Standard Sieve Size)				Coefficients[1]		Atterberg Limits		Soil Classification[3]
		No. 4	No. 10	No. 40	No. 200	Uniformity (Cu)	Curvature (Cc)	Liquid Limit (LL)	Plasticity Index (PI)[2]	
T03-2	12.5' ("A" CLAY)	99.6	99.1	95.9	71.9	ND	ND	39	17	CL, LEAN CLAY W/SAND
T03-2	12.5' ("B" BLEND)	97.1	96.1	90.1	29.8	ND	ND	-----	NP	SM, SILTY SAND
T03-4	7.5-8.0' (1/2)	99.8	99.5	98.2	73.4	ND	ND	31	10	CL, LEAN CLAY W/SAND
T03-4	13.0-14.0' (1/2)	99.7	99.3	95.9	68.5	ND	ND	34	15	CL, SANDY LEAN CLAY
T03-5	6.5 - 7.5' (1/2)	100.0	100.0	99.7	75.8	ND	ND	48	28	CL, LEAN CLAY W/SAND
T03-5	9.0' (1/2)	100.0	100.0	99.7	94.5	ND	ND	70	47	CH, FAT CLAY
T03-5	15.5' (1/2)	100.0	100.0	99.7	96.8	ND	ND	60	33	CH, FAT CLAY
T03-6	3.5' (1/2)	100.0	99.4	96.1	70.4	ND	ND	35	13	CL, LEAN CLAY W/SAND
T03-8	8.5' (1/4)	100.0	99.3	83.5	45.1	ND	ND	23	7	SC-SM, SILTY CLAYEY SAND
T03-9	6.0' (1/2)	100.0	99.8	99.0	77.6	ND	ND	37	14	CL, LEAN CLAY W/SAND
T03-9	8.5' (4/4)	99.9	99.8	98.9	71.7	ND	ND	34	11	CL/ML, LEAN CLAY W/SAND
T03-9	14.0-15.0' (1/2)	100.0	99.5	96.3	40.4	ND	ND	24	4	SC-SM, SILTY CLAYEY SAND

NOTES:

1/7/2004

1.) ND = NOT DETERMINED. COEFFICIENTS DO NOT HAVE TO BE DETERMINED WHEN MORE THAN 12% OF THE TEST SPECIMEN PASSES THE NO. 200 SIEVE.

2.) NP = NON-PLASTIC

3.) GROUP SYMBOLS SEPARATED BY A DASH (-) ARE DUAL SYMBOLS. GROUP SYMBOLS SEPARATED BY A BACK SLASH (/) ARE BORDERLINE SYMBOLS, IN WHICH THE ASSIGNED GROUP SYMBOL IS ON THE LEFT AND THE ADJACENT OR BORDERING SYMBOL IS ON THE RIGHT.

HISTORY AND STATUS OF CHATSWORTH RESERVOIR

FACT SHEET

1919 - Placed in Service

Chatsworth Reservoir was placed in service in 1919 at a time when the San Fernando Valley was a sparsely populated agricultural area. The reservoir has two earthfill dams which provided an initial capacity of 7,400 acre-feet and a high water elevation of 884.3 feet. The dams were built using the then-accepted hydraulic-fill method which was similar to many dams throughout the United States. Under this method, the soil material forming the dam was washed or sluiced into place, and no mechanical compaction equipment was used to densify the material. Because this material was placed with little or no compaction, it typically has a low density and, correspondingly, a low strength or ability to resist earthquake loading.

1920-1950 - Agricultural Irrigation

For many years Chatsworth Reservoir served as the principal water storage facility in the western San Fernando Valley, serving the irrigation needs of agriculture. At various times during this period, improvements to the reservoir were constructed to increase its capability to provide the required water supply. The most significant improvement occurred during 1930 and 1931 when the dams were partially reconstructed to increase the high water level of the reservoir 5 feet to elevation 889.3 feet and the capacity to 9,840 acre-feet.

1950-1969 - Domestic Supply

As the area served by Chatsworth Reservoir was subdivided and developed to meet the demands for increased housing, the character of the West San Fernando Valley changed from an agriculture to urban setting. This transition gradually changed the requirements for Chatsworth Reservoir and its storage was increasingly used to supply residential, domestic, and emergency requirements instead of agriculture.

Reservoir Operation and Maintenance Problems

The transition from agriculture to domestic service resulted in a number of problems relating to operation of the Chatsworth Reservoir. The principal problem was maintaining water quality. Chatsworth Reservoir is located in a gently sloping natural valley which formed a number of shallow bays. These shallow bays created a condition which, in warm weather, encouraged the growth of algae and aquatic plants. During winter rainy periods, storm water runoff from the reservoir watershed would flow into the reservoir. In addition, wave action caused by wind would stir up mud in the shallow bays and along the shoreline. These problems degraded the water quality and caused the reservoir to be removed from service each summer.

1969 Reservoir Improvements

In the spring of 1969, Chatsworth Reservoir was drained and construction began on a project to improve water quality and increase storage. The improvements included deepening and shaping the shallow areas of the reservoir, constructing a bypass system to convey storm flows around the reservoir, and constructing an experimental ecology pond on the northerly side of the reservoir. The experimental ecology pond was subject to removal if water quality, nuisance, or health and sanitary problems should occur.

San Fernando Earthquake - New Earthquake Design Requirements

On February 9, 1971, a major earthquake occurred in the Sylmar-San Fernando area. This earthquake severely damaged the dams at Upper and Lower Van Norman Reservoirs, which had also been constructed using the hydraulic-fill technique. Because of the damage to these dams, the State Department of Water Resources (DWR), Division of Safety of Dams, directed a thorough stability investigation of all hydraulic-fill dams in California. These studies were required to determine the effects on hydraulic-fill dams resulting from severe earthquakes.

As a result of this directive from the DWR, an extensive analysis and study of the Chatsworth Dams was conducted by the Department and its consultant. The analysis, which was completed in September 1972, showed that the Chatsworth Dams would not perform in a satisfactory manner if subjected to a major earthquake, either a local or San Andreas event. As a result of this analysis and discussions with the DWR, Division of Safety of Dams, it was determined that the two dams forming Chatsworth Reservoir would have to be completely rebuilt, and that no water could be stored in Chatsworth Reservoir.

Current Status

During the period while the reservoir is out of service, the Department of Water and Power has initiated or participated in a number of programs to enhance the environment of the area surrounding the reservoir. For example, the Board of Water and Power Commissioners has agreed to allow the use of approximately 150 acres of Department property for recreational purposes administered by the City's Department of Recreation and Parks. This property is located to the north and northwest of the reservoir, with Valley Circle Boulevard providing a buffer between these parcels and the reservoir property.

Another program was initiated in response to community interest in wildlife enhancement in the Chatsworth area. A dike has been constructed which will allow storm water runoff to be collected in the bottom of the reservoir to create an additional temporary ecology pond of approximately 30 acres. This pond will be maintained during the winter months each year while the reservoir is out of service, and will provide an attractive habitat for migratory birds.

In addition to the construction of the experimental and temporary ecology ponds, selected areas of the reservoir property have been seeded with barley to provide both cover and feed for wildfowl inhabiting the area.

Future Status of Reservoir

At the present time, a schedule for the reconstruction of Chatsworth Reservoir has not been established. The Water System has completed construction of high priority facilities, including Los Angeles, Silver Lake, Fairmont, and Lower Franklin Reservoirs. The replacement facilities for Sawtelle Reservoir are scheduled for 1984.

In addition to replacement of seismically unsafe dams, the Water System is also involved in other high priority capital projects including the Los Angeles Aqueduct Water Filtration Plant and the Los Angeles Water System - Data Acquisition and Control (LAWS-DAC) facilities. The filtration plant is needed to reduce turbidity in Los Angeles Aqueduct water to meet Federal and State safe drinking water standards. The LAWS-DAC system will greatly facilitate optimum operation of the water system by enabling remote operation and computer gathering of operation data.

Construction and financing of the filtration plant, LAWS-DAC system, and other capital expenditure programs, affect the timing of reconstructing the dams at Chatsworth Reservoir. The decision to rebuild Chatsworth Dams will be evaluated after completing these other high priority projects.

MMK:it
4/11/83

CHATSWORTH RESERVOIR ECOLOGICAL ENHANCEMENT
FACT SHEET

Temporary Experimental Ecology Pond (Detention Basin No. 2)

Detention Basin No. 2 was constructed to detain storm flow from the watershed north of Chatsworth Reservoir. For ecological enhancement, the basin was deepened and contoured to give the appearance of a natural water body and to sustain a year-round pond. The banks of the pond were planted to attract birds for feeding and for cover. Ducks, coots, heron, and bittern are permanent residents at the pond. Canadian geese use the pond for refuge during their annual migration.

The pond is experimental and its future status will depend on the level of mosquito control required and future Water System needs.

Detention Basin No. 1

Detention Basin No. 1 is located at the western end of Chatsworth Reservoir. The graded basin detains storm water flows from the watershed located in the western part of the reservoir property. This area is prime grazing land for Canadian geese.

Intermittent Ecological Pond

Storm water runoff within Chatsworth Reservoir is temporarily impounded below the level of the outflow structure for wildlife enhancement. The water level is restricted from rising above the ungated outflow structure under an agreement with the Department of Water Resources, Division of Safety of Dams. The impoundment is seasonal to avoid mosquito nuisance and wildlife disease caused by stagnant water. The floor of the reservoir has been seeded for grazing and will continue to reseed naturally.

As part of the Water Quality Improvement Program, the sides of Chatsworth Reservoir were paved to prevent wave erosion. The asphalt pavement was sprayed with material to reduce glare until weathering exposed the neutral granular texture of the asphalt.

Storm Channels

Where channelization of storm water runoff is necessary, the channels are designed to minimize visibility. Channels on the western end of the reservoir are lined with natural rock to blend with the background. The service road on the eastern end of the reservoir is shaped to carry storm waters. The U-shaped roadway is designed to allow vegetation to overgrow the asphalt edge and is, therefore, not visible from a distance.

Tunnel

To divert storm flow around the rough terrain at the southern end of the reservoir, a tunnel was constructed as an alternative to excavating the reservoir "overlook". The tunnel is 14 feet high and 1400 feet long.

Desert Community

Gently sloping contours were incorporated in the desert community landscape at the eastern end of the reservoir. This area is a habitat for desert species of flora and fauna including cactus wren and prickly pear cactus.

Planting

Young trees have been planted to augment the natural reseeding process of the California Oak trees. Plantings were primarily on the northeastern corner of the reservoir site.

MMK:it
4/11/83

D. Sunshine

March 29, 1996

Ms. Melissa Gossell
Groundwater Technology, Inc.
4820 McGrath Street, Suite 100
Ventura, CA 93003

Dear Ms. Gossell:

Access to Chatsworth Property

This is in response to your letter to Ms. Kathie E. Hirata of our Operations Engineering Section (OES) dated February 7, 1996, requesting access to Chatsworth Reservoir property to monitor three groundwater wells adjacent to the former Hughes Missile Systems property.

You indicated that the subcontractor who will perform the field work, BBC Environmental, Inc., had spoken to Mr. Douglas Sunshine of OES to assertain our property access policy. Since you have completed and returned the required Department of Water and Power "Hold Harmless" form (used for site access), we are granting permission for your subcontractor to perform the monthly gauging and quarterly sampling of the monitoring wells. In addition, we are granting you permission to place a padlock on our chained gate at the end of Valley Circle Boulevard . Prior to entering the property, please provide three days advance notice by telephoning our Ripple Street Headquarters at (213) 367-8180. We, however, reserve the right to revoke this permission at any time.

If additional information is needed, please contact Ms. Hirata at (213) 367-1057, or Mr. Douglas K. Sunshine at (213) 367-1162.

SCOTT J. MUNSON
Senior Operations Engineer

DKS:sp

c: Ms. Kathie Hirata
Mr. Douglas K. Sunshine ✓

bc: Scott J. Munson
Ernie Wong

Water System Facilities - Reservoirs - Chatsworth

GROUNDWATER TECHNOLOGY ®

Groundwater Technology, Inc.
4820 McGrath Street, Suite 100, Ventura, CA 93003 USA
Tel: (805) 644-9811 Fax: (805) 644-3260

February 7, 1996

Los Angeles Department
of Water and Power
111 N. Hope Street
Los Angeles, California 90012

Attention: Kathie Hirata

RE: LADWP Harmless Agreement - Encroachment Access for Property Adjacent to the Former Hughes Missile Systems Company, 8433 Fallbrook Avenue, Canoga Park, CA

Dear Ms. Hirata:

Groundwater Technology, Inc., the consultant for Hughes Missile Systems Company (HMSC), is monitoring groundwater conditions at the referenced site and in the vicinity of the site. Groundwater Technology is requesting permission for annual encroachment upon the LADWP property, near the Chatsworth Reservoir, in order to access three HMSC groundwater monitoring wells (CM-14, CM-19 and MW-17). Figure 1 illustrates the locations of the monitoring wells on the LADWP property.

All three monitoring wells will be gauged monthly, which involves measuring the depth to groundwater with an interface probe. Monitoring wells CM-14 and CM-19 will be sampled quarterly, which involves purging the wells using a vacuum truck and sampling the wells using a disposable bailer. The field work will be performed by BBC Environmental, Inc., a subcontractor for Groundwater Technology. On January 25, 1996, a representative of BBC discussed this matter with Mr. Douglas Sunshine of the LADWP, who indicated that access to the property could be procured using the Harmless Agreement. Mr. Sunshine also indicated that a lock could be placed on the chain gate at the end of Valley Circle Boulevard, in order to access the road that traverses the property.

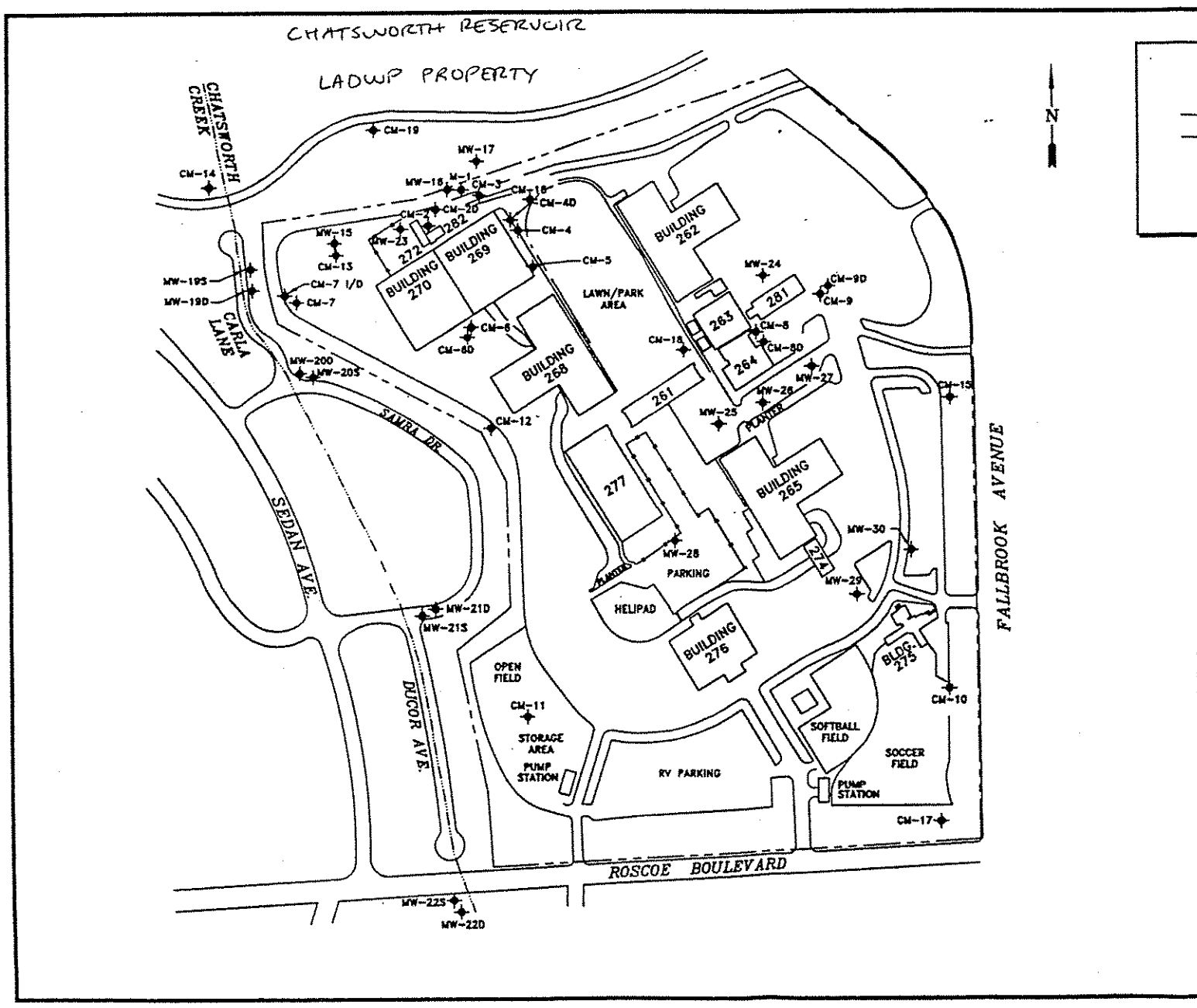
Attached you will find a signed copy of the Harmless Agreement. Thank you for your cooperation and assistance in this matter. If you have any questions or comments, please contact me at (805) 644-9811.

Sincerely,
GROUNDWATER TECHNOLOGY, INC.

Melissa Gossell
Lead Hydrogeologist

c: J. Wallace/W. Craig, BBC Environmental
file

L4489/163


CHATSWORTH RESERVOIR
LADWP PROPERTY
CHATSWORTH CREEK
CARLA LANE
SAMRA DR.
SEDAN AVE.
DUCOR AVE.
ROSCOE BOULEVARD
FALLBROOK AVENUE
N
LEGEND
PROPERTY LINE
FORMER CREEK TREND
FENCE
MONITORING WELL
BUILDING 262
BUILDING 269
BUILDING 270
BUILDING 268
BUILDING 265
BUILDING 276
BLDG. 275
LAWN/PARK AREA
PARKING
HELIPAD
OPEN FIELD
STORAGE AREA
PUMP STATION
RV PARKING
SOFTBALL FIELD
SOCCER FIELD
PLANTER
CM-19
MW-17
CM-14
MW-16
M-1
CM-3
CM-18
CM-4D
CM-2
CM-2D
MW-23
272
282
CM-4
MW-15
CM-13
CM-5
MW-19S
MW-19D
CM-7 I/D
CM-7
CM-6
CM-6D
MW-20D
MW-20S
CM-12
MW-24
CM-9D
CM-9
281
263
CM-8
CM-8D
CM-18
264
MW-27
MW-26
MW-25
261
CM-15
277
MW-28
274
MW-30
MW-29
MW-21D
MW-21S
CM-11
CM-10
CM-17
MW-22S
MW-22D
GROUNDWATER TECHNOLOGY
0 FEET 300
SCALE
SITE MAP
CLIENT: HUGHES MISSILE SYSTEMS CO.
LOCATION: 8433 FALLBROOK AVENUE CANOGA PARK, CALIFORNIA
FILE: 1035SMB2 (1:3600)
PROJECT NO.: 04250-1035
REV.:
DES.: SAC
DET.: SWL
DATE: 1/17/96
FIGURE: 1
PM:
PE/RG:

S. Munson

January 23, 1997

DWP File W-68454

Mr. M. K. Esposito
Director of Real Estate
Hughes Aircraft Company
7200 Hughes Terrace
Los Angeles, California 90045-0066

Dear Mr. Esposito:

Executed License - Five Monitoring Wells
Department's Chatsworth Reservoir
Northwest of Fallbrook Avenue and
Roscoe Boulevard, West Hills

Enclosed for your records is a fully executed License Agreement giving Hughes Aircraft Company permission to use a portion of the above-captioned Department property to operate and maintain five monitoring wells. The first year's consideration is $2,500. Please submit this amount to this office as soon as possible.

Please acknowledge receipt of the License Agreement by signing and returning the enclosed copy of this letter.

Sincerely,

Venest L. Henry-Evans

VENEST L. HENRY-EVANS
Real Estate Officer

VLH-E:gr

Enclosures

c: Possessory Interest Section w/License
Office of the Assessor

CERTIFIED MAIL
Return Receipt Requested

bc: Bruce W. Kuebler
C. Fujiwara w/License

1/27/97 o circ: BWK, File W.S. Fac-Reservoirs
db
c: SJM

RECEIVED
JAN 2 7 1997
WATER QUALITY AND
DISTRIBUTION DIVISION

TRENCH LOG T03-1

Date: October 9, 2003 **Project:** Proposed LA Res. Division Dam – Chatsworth Reservoir – Clay Borrow Site Exploration

Geologist: Cliff Plumb/K. Mahr **Location:** Approx. 600' n/o east portion of Dam No. 2

Equipment: Backhoe with 30" Bucket **Coordinates:**

Contractor: IContract Backhoe – K-E Curtis Corp **G.S. Elevation:** Approx. 860'

Mike Hickey, Operator

Depth		Description
From	To	

0' - 2.5' Reservoir Deposits

0' 2.5' Lt, brown silty moist, interlayered, F-M sand & sandy gravel – gravel ranges 1/8" – ½".

2.5' - 8.0' Alluvium

2.5' 8.0' Brown, sandy-silt/silty-sand, sand is F-M Moist

No samples.

No G.W.

Total Depth: 8.0'

The trench was backfilled with same material excavated; bucket tamped & wheel rolled at surface.

TRENCH LOG T03-2

Date: October 9, 2003 **Project:** Proposed LA Res. Division Dam – Chatsworth Reservoir – Clay Borrow Site Exploration

Geologist: Cliff Plumb/K.Mahr **Location:** Approx. 600' n/o east portion of Dam No. 2

Equipment: Backhoe with 30" Bucket **Coordinates:**

Contractor: IContract Backhoe – K-E Curtis Corp **G.S. Elevation:** Approx. 860'

Mike Hickey, Operator

Depth From	Depth To	Description

0' - 13.5' Reservoir Deposits

0'	13.5'	Brown clayey-silt to clayey-silt-sand, moist
		Pockets of silty-clay
		2 samples @ 12.5': A – clay, B – blend
		No G.W.
		Total depth: 13.5'
		The trench was backfilled with same material excavated; bucket tamped & wheel rolled at surface.

TRENCH LOG T03-3

Date: October 9, 2003 **Project:** Proposed LA Res. Division Dam – Chatsworth Reservoir – Clay Borrow Site Exploration

Geologist: Cliff Plumb/K.Mahr **Location:** Approx. 600' n/o east portion of Dam No. 2

Equipment: Backhoe with 30" Bucket **Coordinates:**

Contractor: IContract Backhoe – K-E Curtis Corp **G.S. Elevation:** Approx. 860'
Mike Hickey, Operator

Depth		Description
From	To	

0' - 2.0' Reservoir Deposits

0'	2.0'	Dark-brown silty-clay, dry

2.0' - 11.5' Alluvium

2'	10.5'	Brn sandy-silt/silt w/ traces of clayey-silt, dry/slighty moist.
10.5'	11.5'	Brn clayey-silt w/ sand, moist

No samples.

No G./W. observed.

Total depth: 11.5'

The trench was backfilled with same material excavated; bucket tamped and wheel rolled at surface.

TRENCH LOG T03-4

Date: October 9, 2003 **Project:** Proposed LA Res. Division Dam – Chatsworth Reservoir – Clay Borrow Site Exploration

Geologist: Cliff Plumb **Location:** Approx. 600' n/o east portion of Dam No. 2

Equipment: Backhoe with 30" Bucket **Coordinates:**

Contractor: IContract Backhoe – K-E Curtis Corp **G.S. Elevation:** Approx. 860'

Mike Hickey, Operator

Depth		Description
From	To	

		0' - 1.0' Reservoir Deposits
0'	1.0'	Dk gray sandy-silty- clay/clayey-silt, dry.
		1.0' - 16.0' Alluvium
1.0'	3.0'	Lt. brown sandy-silt, moist.
3.0'	7.5'	Lt. brown sandy-silt/silty-sand, moist.
7.5'	14.5'	Brown silty-clay w/ some sand , moist to very moist @ 4.5'
		Bag samples @ 7.5' & 14.5'.
		Bag sample @ 9.0'
14.5'	16.0'	Lt. Brown sandy-clayey-silt, very moist to wet.
		No standing G.W.
		Total Depth: 16.0'
		The trench was backfilled with the same material excavated; bucket tamped and wheel rolled.

TRENCH LOG T03-5

Date: October 9, 2003 **Project:** Proposed LA Res. Division Dam – Chatsworth Reservoir – Clay Borrow Site Exploration

Geologist: Cliff Plumb **Location:** Approx. 600' n/o east portion of Dam No. 2

Equipment: Backhoe with 30" Bucket **Coordinates:**

Contractor: IContract Backhoe – K-E Curtis Corp **G.S. Elevation:** Approx. 860'

Mike Hickey, Operator

Depth From	Depth To	Description
		0' - 3.0' Reservoir Deposits
0'	3.0'	Res. Deposits
		3.0' - 16.0' Alluvium
3.0'	6.0'	Lt. brown, sandy-silt w/ some clay, moist.
6.0'	8.0'	Lt. brown clay, moist.
		Bag samples @ 6.5' – 7.5'.
8.0'	12.0'	Dk. Brown clay, moist.
		Bag sample @ 9.0'
12.0'	16.0'	Lt. Brown clay, moist.
		Bag sample @ 15.5'.
		G.W. @ 14.0'
		Total Depth: 16.0'
		The trench was backfilled with the same material excavated; bucket tamped and wheel rolled.

TRENCH LOG T03-6

Date: October 10, 2003 **Project:** Proposed LA Res. Division Dam – Chatsworth Reservoir – Clay Borrow Site Exploration

Geologist: Cliff Plumb **Location:** Approx. 600' n/o east portion of Dam No. 2

Equipment: Backhoe with 30" Bucket **Coordinates:**

Contractor: IContract Backhoe – K-E Curtis Corp **G.S. Elevation:** Approx. 860'

Mike Hickey, Operator

Depth		Description
From	To	

		0' - 5.0 Reservoir Deposits
0'	5.0'	Colluvium/alluvium, dark brown, sandy-silty-clay, dry top 1'
		increasing moisture w/ depth.
		Bag sample @ 3.5'.
		5.0' - 9.5' Alluvium
5.0'	6.0'	Lt. brown, clayey –sandy (F-VG)- silt, moist.
6.0'	7.5'	Grades to Lt. brown, sandy (F-VF)-silt, moist.
7.5'	9.5'	Brown, silty-sand, moist.
9.5'	12.0'	Brown, sandy-clayey-silt/silty-clay, moist.
12.0'	13.0'	Grey-brown, silty-clayey-silty-sand (F-M), wet.
		G.W. @ 13.0' ~12.5'.
		Total Depth: 13.0'
		The trench was backfilled with same material excavated; bucket tamped and surface wheel rolled.

TRENCH LOG T03-7

Date: October 10, 2003 **Project:** Proposed LA Res. Division Dam – Chatsworth Reservoir – Clay Borrow Site Exploration

Geologist: Cliff Plumb **Location:** Approx. 600' n/o east portion of Dam No. 2

Equipment: Backhoe with 30" Bucket **Coordinates:**

Contractor: IContract Backhoe – K-E Curtis Corp **G.S. Elevation:** Approx. 860'

Mike Hickey, Operator

Depth		Description
From	To	

		0' - 1.0' Reservoir Deposits
0'	1.0'	Brown gray reservoir deposits, dry.
		1.0' - 9.5' Alluvium
1.0'	4.0'	Brown, silty-sand w/ MSG-moist
4.0'	9.5'	Brown, clayey-silty-sand, moist.

No samples.

G.W. @ 9.0'.

Hole filling 1/3 GPM.

Total Depth: 9.5'

The trench was backfilled with same material excavated; bucket tamped and surface wheel rolled.

TRENCH LOG T03-8

Date: October 10, 2003

Project: Proposed LA Res. Division Dam – Chatsworth Reservoir – Clay Borrow Site Exploration

Geologist: Cliff Plumb

Location: Approx. 600' n/o east portion of Dam No. 2

Equipment: Backhoe with 30" Bucket

Coordinates:

Contractor: IContract Backhoe – K-E Curtis Corp
Mike Hickey, Operator

G.S. Elevation: Approx. 860'

Depth From	Depth To	Description

0' - 7.5' Reservoir Deposits

0' 7.5' Red-brown, silty F-C sand, moist.

7.5' - 10.0' Reservoir Deposits

7.5' 10.0' Brown, clayey-silty-sand/sandy-silt, moist.

Bag sample @ 9.0' (8.5').

No G.W.

Total Depth: 9.0'

The trench was backfilled with same material excavated; bucket tamped and surface wheel rolled.

TRENCH LOG T03-9

Date: October 10, 2003 **Project:** Proposed LA Res. Division Dam – Chatsworth Reservoir – Clay Borrow Site Exploration

Geologist: Cliff Plumb **Location:** Approx. 600' n/o east portion of Dam No. 2

Equipment: Backhoe with 30" Bucket **Coordinates:**

Contractor: IContract Backhoe – K-E Curtis Corp **G.S. Elevation:** Approx. 860'

Mike Hickey, Operator

Depth From	Depth To	Description
		0' - 1.5' Reservoir Deposits
0'	1.5'	Res. deposits.
		1.5' - 15.0' Alluvium
1.5'	6.0'	Lt. brown, sandy (F)- silt, moist.
6.0'	8.0'	Lt. brown, clay/sandy-silty-clay, moist.
		Bag sample @ 6'.
8.0'	15.0'	Increasing clay.
		Bag sample @ 8.5'.
		Clay becomes wet to saturated @ 12'.
		Bag sample @ 14-15'.
		G.W. @ 12.0'.
		Total Depth: 15.0'
		The trench was backfilled with same material excavated; bucket tamped and surface wheel rolled.

TRENCH LOG T03-10

Date: October 22, 2003

Project: Proposed LA Res. Division Dam – Chatsworth Reservoir – Clay Borrow Site Exploration

Geologist: Cliff Plumb/K. Mahr

Location: Northern portion of Detention Basin No. 1

Equipment: Backhoe with 30" Bucket

Coordinates:

Contractor: Russell Backhoe Operator: Danny Mike Hickey, Operator

G.S. Elevation: Approx. 860'

Depth From	Depth To	Description
		0' - 9.0' Reservoir Deposits
0'	2.0'	Dark brown, sandy-clayey silt, moist
2.0'	2.5'	Blue-green gray, clayey-sandy silt
2.5'	3.5'	Blue/gray, clay, red and green mottling, moist
3.5'	5.5'	Light gray, clay, moist, sewage odor
5.5'	9.0'	Blue clay, light- gray clay with orange and yellow crystals (possible sulfur compounds, moist, sewage odor

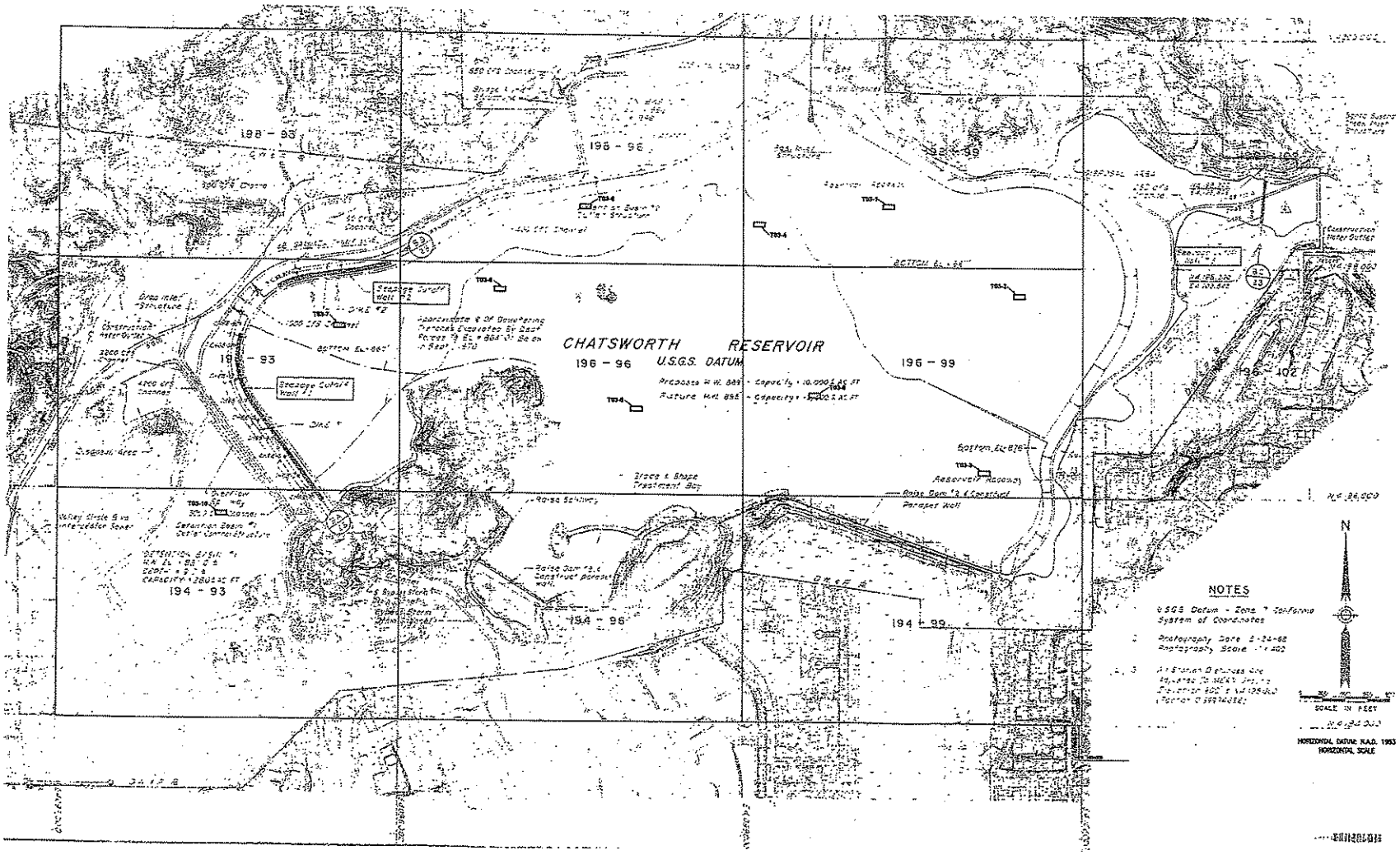
No samples.

No groundwater.

Discontinued hole due to concern for potential contamination.

Backfilled trench with loose material. No compactive effort.

Total depth: 9.0 feet.



PRELIMINARY

REVISIONS	REFERENCES	AS BUILT	APPROVED
	LOCATION MAP, D0070-G-22		

LAWQIP – LOS ANGELES RESERVOIR DIVISION DAM
CHATSWORTH RESERVOIR
BORROW SITE EXPLORATION

DEPARTMENT OF WATER AND POWER
WATER SERVICES ORGANIZATION CITY OF LOS ANGELES

D0000-G-001

INTAKE (April 1962): 4-5, 20.

• Purity and safety of public drinking water supplies are so basically necessary to the life and health of all the people that they preclude any use of the city's drinking water reservoirs for recreational activities . . .

Chatsworth Reservoir To Remain Closed

ONE OF THE MOST IMPORTANT FACILITIES IN THE FAR-flung Water System of the Department of Water and Power is the Chatsworth Reservoir, located in the western end of the San Fernando Valley. As in the past, a number of sportsmen and other recreational seekers again this year have renewed their requests for the recreational use of the reservoir. Since Department employees are frequently asked questions about the possibility of such use, it will help them to know and understand the facts and policies governing the reservoir's operation, and the Department's plans for its use, now and in the future.

Following an extensive study and report made by the Department's Water System under the direction of Chief Engineer of Water Works Max K. Socha, the long-standing policy of not allowing Chatsworth Reservoir to be used for recreational purposes was reaffirmed on March 16 by the Board of Water and Power Commissioners upon the recommendation of General Manager and Chief Engineer Samuel B. Nelson. The decision to continue protecting the reservoir from public use as a recreational area includes the surrounding reservoir land as well as the water surface.

Built in 1918, Chatsworth Reservoir is the third largest within the city limits. The reservoir property consists of approximately 1,300 acres. The reservoir itself has a capacity of about 10,000 acre feet, or three and one-quarter billion gallons, and covers a water surface of more than 600 acres when filled to capacity.

Water drain from the reservoir goes directly into the pipe lines which serve 8,000 acres of predominantly residential area lying westerly of Balboa between Roscoe and Ventura Boulevards. Originally its water was used almost entirely for irrigation, but as its service area changed from farm lands to urban development more and more of the water was used for domestic purposes.

Under normal conditions, Chatsworth Reservoir is filled in the winter with fresh water delivered from the snow fields in the Eastern High Sierra by the Los Angeles-Owens River Aqueduct System and is used as a direct service drinking water reservoir.

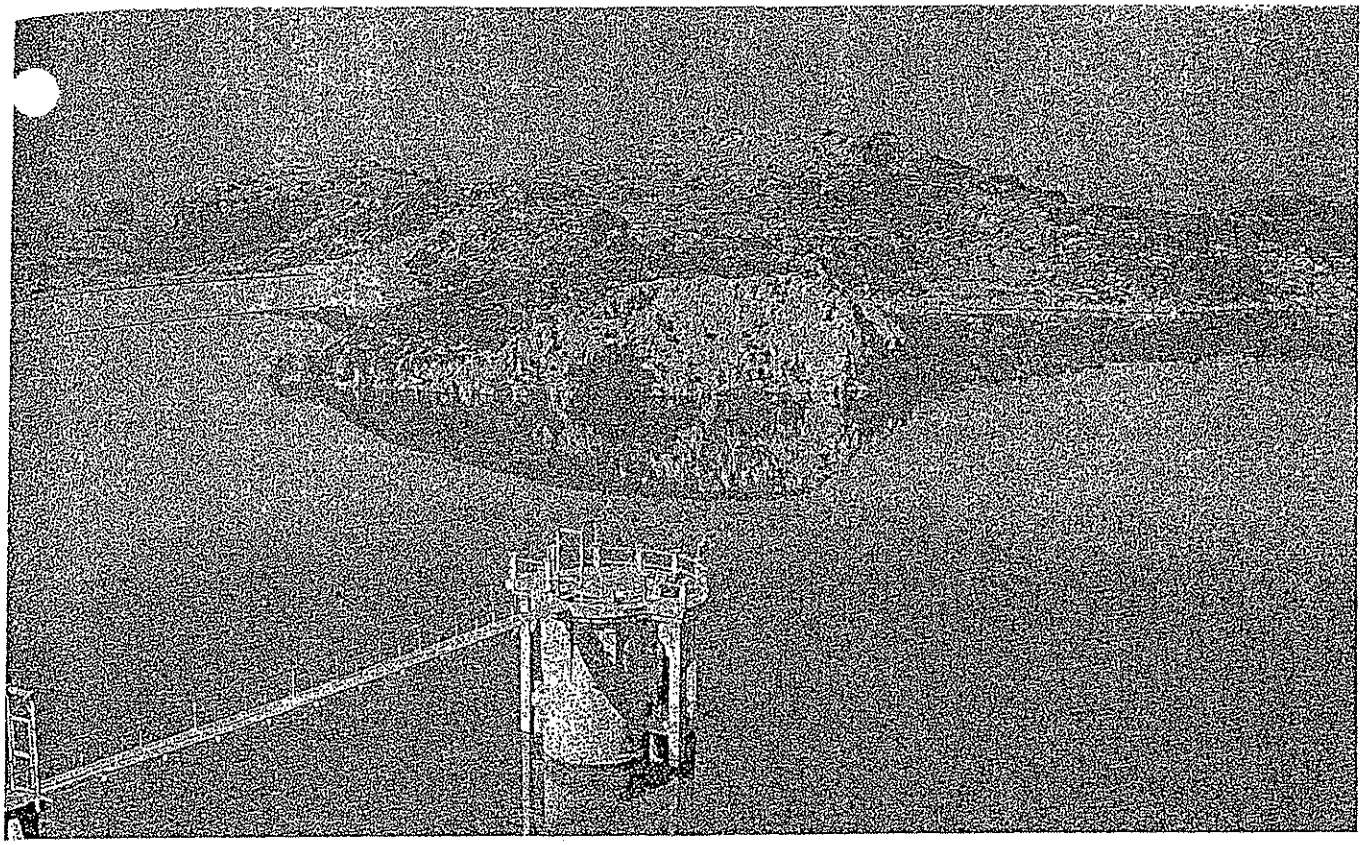
Because of its shallow depth, taste and odor problems sometimes develop in warmer weather when the water is at lower stages. Under such conditions, the reservoir is taken out of direct service and the remainder of the stored water is released in controlled amounts into the Los Angeles River. From the river, the water is diverted into spreading grounds where it percolates into the underground water basin for future withdrawal by pumping.

During several years of drought, it was difficult to fill all of the Los Angeles Water System reservoirs because of high winter demands for water, and therefore there were periods when the Chatsworth Reservoir was not in direct service. With the end of the drought early in 1962 the reservoir is again in direct service and is expected to so continue.

Plans have existed for a long time to enlarge Chatsworth Reservoir for additional storage when it should be needed, and that need is now foreseen. Future storage requirements and the advent of Feather River Aqueduct water will require the Department to go ahead with this enlargement. When the reservoir is enlarged for this project, the water will cover most of the existing land included in the reservoir property.

The Water System report called attention to two basic kinds of water: "Raw water"—meaning water that has been exposed to contamination and which will have to be purified by filtration or other means before it is safe for human consumption. "Finished water"—meaning water which is already in pure enough condition so that with normal protection by chlorination it is safe to use as drinking water.

Public health authorities prefer a domestic water supply



tsworth Reservoir, located in the western end of the San Fernando Valley, is the third largest within the city limits and has a storage capacity
acres. Water from Chatsworth goes directly into the pipe lines which serve some 8,000 acres of predominantly residential area in the San Fernando Valley.

o be fully protected from human contact rather than depending upon filtration and treatment methods to overcome pollution after it has occurred. Los Angeles can be proud of its record of never having had a case of water-borne disease traceable to its municipal water system.

Some cities have no choice, as, for example, many cities on large rivers like the Ohio River. Their sources of water are polluted, and these cities install filtration and treatment systems at great expense in their effort to purify the water to the extent required for domestic use.

Some of the outlying reservoirs of San Diego are subject to contamination from their surrounding watersheds. Since their water must be filtered and treated anyway to make safe for use, and since the problem exists with or without recreational use, San Diego permits recreational use of such reservoirs. But there are no domestic water agencies, within the knowledge of the Department of Water and Power, that allow recreational activity on their "finished water" reservoirs or on the grounds adjacent to the water area. Any such use would put the water back in the "raw water" classification and require its subsequent complete treatment.

Chatsworth Reservoir, as shown in the report, is a distribution and "finished water" reservoir. Health considerations dictate that no recreational use be allowed of the water or adjacent land unless the water is subsequently given complete treatment. This would require a large filtration system to be installed, extensive storage of the filtered water to be provided for fluctuating demand, and pumps to be installed and operated to regain water pressure lost as a result of treatment.

These additions would invlove huge costs for installation and operation. It is financially impossible to cover such treatment, storage, and pumping costs with recreational income. The burden of heavy costs would be placed on the people of Los Angeles through increased water rates or other means.

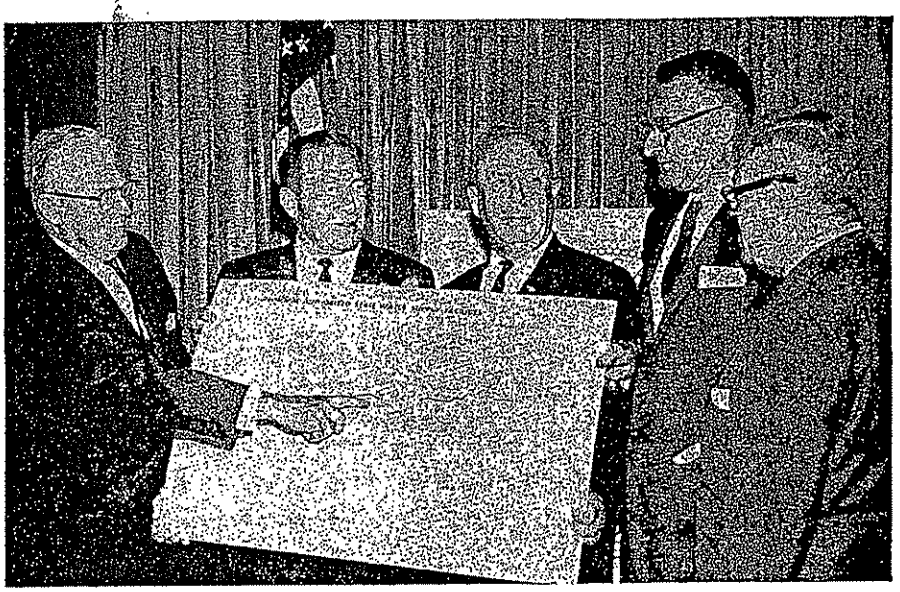
The problem is increased by the fact that Chatsworth is only one of the many distribution or "finished water" reservoirs in the Department system. Any policy to open it to recreation would in all fairness have to apply uniformly to all similar reservoirs of the Department, and the resulting cost for filtration and repumping would be astronomical.

The Department of Water and Power permits recreational use, including boating and fishing on its Crowley Lake, Grant Lake, and Pleasant Valley reservoirs in the High Sierra watershed. It does not object to recreational use of the numerous natural lakes and streams which form part of the city's water supply derived from the eastern slope of the High Sierra.

In addition, the DWP cooperates with recreation seekers by requiring the lessees of some 200,000 acres of DWP lands in the High Sierra region to keep at least 75 per cent of this acreage open to the public for recreational enjoyment. The DWP has provided land and water and other kinds of cooperation to the State Fish and Game Department for large fish hatcheries and rearing facilities.

All this is consistent with the policy of keeping Los Angeles' "finished water" or distribution reservoirs closed to recreation. Water from High Sierra lakes and streams eventually flows down to Haiwee Reservoir, which is used as a "purifying reservoir." "Raw water" goes into storage at Haiwee for approximately two or three months, there is no recreational contact with it, and environmental condi-

(Continued on Page 20)



• A new four-color map of the $1.75 billion Feather River Project showing proposed aqueduct routes, mileage, heights of pump lifts, tunnels and reservoirs was presented to city and county officials recently. The map was accepted by Mayor Samuel Wm. Yorty and County Supervisor Ernest E. Debs. Shown during the presentation are (L-R) DWP General Manager Samuel B. Nelson, Mayor Yorty, Supervisor Debs, DWP attorney Rex B. Goodcell, Jr., and Board of Water and Power Commissioner Nathan O. Freedman.

L.A. Fire Department Sets Annual Open House May 5

■ DWP EMPLOYEES ARE INVITED BY THE Los Angeles Fire Department to attend open house at their local fire stations on May 5, Fire Service Day, when fire trucks and other equipment will be on display. Hours of the open house have been set for 10 a.m. to 5 p.m., according to the Fire Department.

Demonstrations will include inspection of the city's most modern firefighting equipment, station house, and demonstrations of firefighting methods, along with some valuable tips on fire safety.

William L. Miller, chief engineer for the Los Angeles Fire Department said children must be accompanied by adults for safety reasons; and if they bring cameras, many exciting opportunities for pictures with fire engines will be offered.

The Los Angeles Junior Chamber of Commerce and a number of other civic organizations this year are assisting the Fire Department in the annual fire education program. ■

Rifle-Revolver Teams Capture Expert Titles

■ TEAM AND INDIVIDUAL HONORS WERE captured by members of the Water and Power Rifle and Revolver Club Mar. 17 and 18 when they competed in the South Pacific sectional match of the National Rifle Association held at LERC Rifle Range in Burbank.

The club entered two teams in the matches this year and the Water and Power sharpshooters captured second and fifth in the expert class.

Individual shooting awards were won by Robert McClintic, Darrow Gingher, Quinton Wood and Charles Miller.

At the annual dinner at the Moose Lodge, Glendale, Mar. 22, where the club entered the 22 caliber rifle matches, the Water and Power club was presented with an NRA award for second place and individual award to G. A. Wyss for second highest average.

Monthly shoots scheduled by the club for the summer and fall at Bee Canyon 30 caliber range are as follows:

April 8 and August 19, 22 caliber Dewar; April 29 Barlow (45 pistol); June 17, 30 caliber International; July 1, October 28 and December 16, National match course; July 29 and September 9, Deer Rifle shoot; and October 7, 30 caliber qualification.

Indoor gallery matches for 22 caliber rifle and pistols are held each Thursday at 7:00 p.m. at Occidental College range, 22 pistols only on the last Thursday of the month.

Chatsworth Reservoir . . .

(Continued from Page 5)

tions effectively eliminate pollution. Water leaves Haiwee Reservoir as "finished water", flows south to the city in a closed and protected aqueduct, and is stored enroute and on its arrival in reservoirs protected against human contact. It is pure and safe when delivered to Los Angeles domestic consumers.

Through efficient operation and close sanitary protection of Chatsworth Reservoir the people of the Valley in the reservoir's service area are assured of ample safe drinking water to meet their regular needs, and emergencies which may arise. Because of the public's dependence on this water supply, the reservoir must be protected at all times from pollution which can result from public access to the area.

The public health, for which a pure drinking water supply is a basic necessity, must come before public sports. The Department of Water and Power sincerely believes that the best interests of the people will be served by the continuation of its present water safety practices which assure the delivery of pure, safe drinking water whenever it is required to the people who need it.

DEPARTMENT DEATHS

Intake regrets to announce the passing of the following Department employees. On behalf of all water and power people, it expresses sincere sympathy to the bereaved families.

VERNON W. VALANTINE

Vernon W. Valantine (Commercial) died April 29. Born in Beaver, Utah, on May 6, 1893, he had continuous service from 1923.

SAMUEL W. DURHAM

Samuel W. Durham (Water Plant Operating) was born on Nov. 21, 1900 in Cumby, Tex., and died on April 28. Mr. Durham's Department service dated from 1930.

LIONEL R. MATTHEWS

Lionel R. Mathews (Design and Construction) was employed continuously with the Department from 1938 until his death on April 26. He was a native of Binghamton, N. Y., where he was born on Mar. 9, 1900.

CHARLES B. SMITH

Charles B. Smith (Operating) was born in Ripley, Miss., on July 23, 1893, and died on April 25. His continuous service dated from 1922.

SHERMAN CANDLAND

Sherman Candland (Commercial) died on April 21. He was born on Feb. 3, 1903, in Chester, Utah, and he was employed continuously from 1925.

LAWRENCE B. SUGAR

Lawrence B. Suger (Operating) was employed by the Department continuously from 1936 until his death on April 21. Mr. Sugar was a native of Detroit, Mich., where he was born on Aug. 5, 1911.

NORTON WIENER

Norton Wiener (Design and Construction) was born on Aug. 30, 1914, in St. Paul, Minn., and his continuous service dated from 1946. He died on April 21.

ALEXANDER C. FABER

Alexander C. Faber (Operating) died on April 15, with continuous service dating back to 1926. A native of Pittsburg, Penn., Mr. Faber was born on July 13, 1903.

THANNIE E. HARRIS

Thannie E. Harris (Operating) had continuous service with the Department from 1943 until he died on April 14.

(Continued on Page 13)

Reasons Why Ch Is Closed To Fi

FISHERMAN AND OTHER SEEKERS OF recreation frequently ask, "Why not open Chatsworth Reservoir for public recreational purposes?" Many ask the question because they think that the reservoir is no longer in use, which is incorrect. Chatsworth continues to be one of the city's major storage and distribution reservoirs serving a large number of homes, businesses, schools, and other locations where the water is used for drinking purposes.

Since Department of Water and Power employees sometimes are asked about Chatsworth Reservoir, it will be useful for them to know the facts about its operation.

One point should be made clear at the start: Chatsworth reservoir is a storage basin from which water is distributed through the domestic water system of Los Angeles to thousands of people. It is a "drinking water" reservoir and, as such, must be protected from possible pollution through sports or other recreational uses, or any uses which involve public access to the water.

A second point is that the Department of Water and Power is not against fishing and other forms of public recreation, in areas where pollution of the city's drinking water supply is not a threat. In fact, the Department has shown its friendly interest in fishing and public recreation by encouraging the recreational use and enjoyment of its two big reservoirs in the High Sierra region at Crowley Lake and Grant Lake. The Department also requires the lessees of about 200,000 acres of its lands in the popular Inyo-Mono area of the High Sierra to keep at least 75 per cent of these lands open to fishing, hunting and other recreational uses by the public.

In addition, the Department has cooperated with the State Department of Fish and Game in the opening and development of major fish hatcheries and rearing facilities, providing the use of the Department's lands and water facilities for this purpose.

Chatsworth Reservoir is located in the western end of the San Fernando Valley and, as the only large drinking water reservoir in that fast-growing section of the Valley, it is an essential water distribution facility upon which thousands of persons depend for their domestic supply.

The reservoir was built in 1918, and ever since then has been depended upon as a major storage and distribution reservoir of the City's Water System. It should be remembered that water for people to drink is stored in Chatsworth and that it is different from flood control and other types of reservoirs, from which there is no flow of surface water into the domestic system.

Chatsworth is the third largest drinking water reservoir within the city limits of Los Angeles, with a capacity of about three and one-quarter billion gallons. It covers an area of 607 acres when filled to capacity.

In the normal operation of Chatsworth Reservoir, it is filled early in the spring with pure, fresh water delivered from the snow fields of the Eastern High Sierra by the Los Angeles Aqueduct System. The water is used for domestic, irrigation and other purposes during the spring and early summer. The reservoir remains in regular service until warm weather and the rapid growth of plant life causes the water to acquire the taste of vegetation, although the water is still good, safe for drinking.

Beginning at that time, the water in the reservoir is not drawn on regularly, but is held in readiness for use to meet peak water demands or emergency purposes as they may occur. By the middle of autumn, the reservoir is drained and is not refilled again until the following spring.

The water drained from Chatsworth is allowed to flow into the Los Angeles River channel and is recaptured downstream in the Water System's headworks, to become available again for use to meet the city's water requirements.

During the time when water in Chatsworth Reservoir is kept in reserve for emergency and peak demands, the water needs in West San Fernando Valley are met by the direct flow through pipelines

...worth Reservoir ...ing, Recreation

from Van Norman Reservoir, about 12 miles from Chatsworth. However, to meet heavy domestic demand occasioned by peak consumption of water during hot weather, or in case of a large fire or other emergency, the water from Chatsworth Reservoir might be drawn upon at any time during this period. As the hot weather and demand for water begin to diminish, the process of draining Chatsworth moves ahead, under a schedule which allows the water to be recaptured downstream to best advantage.

Through this system of operation, the people of the west end of the Valley are assured of an ample water supply to meet regular needs and to provide for emergencies. Because the people depend upon Chatsworth as a source of domestic water supply, the reservoir must be protected at all times against the threat of pollution through sports, recreation, or any uses which involve public access to the water.

A question which has been asked is "Why is it necessary to protect Chatsworth against public access if the reservoir is not in continuous use all the time?" The answer is simple! If the water in the reservoir should become polluted or contaminated, it could no longer be used for the purposes for which it was stored in the first place. Therefore, the water must be kept pure and fit for human consumption whenever it may be needed.

Some misunderstanding also has arisen because it has been incorrectly assumed that the water in Chatsworth Reservoir is used only, or almost entirely, for irrigation purposes. The actual fact is that water flowing into the distribution system from Chatsworth is used for domestic consumption in the homes of West San Fernando Valley as well as for irrigation, fire fighting and other purposes. *The water for all these purposes flows through the same system of pipelines and street mains.* With the exception of just one single-purpose irrigation pipeline in the area, there is no separation of irrigation water from domestic water. To build entirely separate distribution systems for the different purposes would require such an enormous expense to water users as to make the scheme entirely impractical. Therefore, if the water in Chatsworth Reservoir should become polluted and unsafe to drink because of public recreational use of the reservoir, it could not be drawn into the distribution mains to meet emergency needs without affecting the drinking water supply of thousands of people in West San Fernando Valley.

It is possible, of course, to filter and treat polluted or contaminated water to the point where it becomes resonably safe to drink, although it may not be possible to restore the original degree of cleanliness and purity. But filtration and treatment of water after pollution is not a good solution to the problem.

Filtration of Chatsworth Reservoir water would call for the installation of a system which would cost millions of dollars, and would require re-pumping of water which means additional high costs for operation. Funds are not available for this purpose, so the money would have to come from the users of water through increased rates, or from the citizens generally through increased taxes, or through some other means of imposing the costs on the entire community.

Since there is no infiltration and purification system for Chatsworth, the water stored in the reservoir must continue to be protected against the possibility of pollution or contamination by public recreational use.

The people of Los Angeles need a continuous supply of pure, safe drinking water, and the necessity to guard their health against the danger of water-borne disease is of paramount importance, more vital, than recreational service.

To meet the needs of the people, the Department of Water and Power must continue to operate Chatsworth Reservoir as a distribution reservoir which can deliver pure, safe drinking water whenever it is required by the people who depend on it. ■

Dress-Up Stole

• To add glamor to the simplest of dresses, crochet a lacy, graceful stole. The one shown is easy to make, and you'll enjoy wearing it during many months to come. It will be a versatile addition to your wardrobe. For free direction leaflets, contact Marcella Sormanti on Ext. 2922..

Department Deaths

(Continued from Page 12)

Mr. Harris was born on April 11, 1893, in Los Angeles.

LYLE C. SPENCER

Lyle C. Spencer (Operating) was a native of Denver, Colo., where he was born on April 23, 1900. He died on April 11, with continuous service from 1937.

WILLIAM B. MOLL

William B. Moll (Design and Construction) died on April 7. Born in Chicago, Ill., on April 2, 1895, he had continuous service which began in 1954.

RETIRED EMPLOYEES

Roy E. Flick (Operating) had continuous service with the Department from 1929 to the date of his retirement in 1950. Mr. Flick was born in Pawnee City, Neb. on April 10, 1885, and died on April 16.

INTAKE (NOVEMBER 1962): 4

DWP Seeks Firm Low Cost Gas Supply

To obtain a firm supply of gas to operate the Department's steam power plants at a favorable stabilized cost for fuel over a long term of years, two important actions have been taken recently by the Board of Water and Power Commissioners.

Studies that may result in fuel cost savings to the Department and to electric rate payers amounting to more than $40,000,000 during the next 20 years were initiated under a contract approved by the Board on October 11 with the Amata Gas Corporation of Houston, Texas.

Purpose of the contract is to obtain for the Department an assured supply of low cost gas for operation of DWP steam plants and to provide protection against increases in the cost of gas such as have occurred during the past 12 years when gas rates paid by the DWP rose about 77%. The Amata study may lead to purchase by the Department of more than $700,000,000 in gas supplies over the next 20 years.

The contract does not restrict the Department from accepting bids from other potental gas suppliers, and the Board in a second action on October 31 authorized General Manager Samuel B. Nelson to proceed with the necessary steps to obtain such bids in the widest possible competition to provide a supply of gas to DWP steam plants. The bids are to be returnable before January 12, 1963.

The Amata organization under its contract is making the necessary feasibility, engineering and financial studies of supplying gas to the Department from various possible sources. Delivery might be made to the Department at the California border near Blythe, or directly to Department steam plants. If the gas is delivered at the state line, the Department would provide the connecting pipeline to Los Angeles.

The Amata firm may submit a proposal in accord with the Department's specifications to deliver gas at the California border for 34.5¢ or less, per 1000 cubic feet of gas, or at the Department's steam plants at 35.45¢ or less, with the Department having provided the connecting pipeline from the state border to DWP steam plants, and with Amata carrying the operation and maintenance costs.

If such an offer is made but not accepted by DWP and the City, reimbursement would be required of Amata's out-of-pocket costs in making the studies and arrangements, but not in excess of $100,000. For example, a lower bid might result in even a greater saving than $40 million indicated under the Amata rates mentioned above, making it a better choice even with the reimbursement to Amata, it was pointed out.

The Department's action follows unsatisfactory bids received last March for a long term gas supply, which bids were rejected by the Department. Although the bids were widely announced and advertised, only two proposals were received. One was from the local gas companies and offered to supply only about one-half of the DWP fuel requirements for a ten year period instead of twenty years, and on an unsatisfactory price basis. The offer was for gas on an interruptible rather than a firm basis. The other bid, also at an unsatisfactory price, offered an even lesser amount of gas.

The Department's purchases of gas and oil during 1961-62 totaled $27,500,000. Following the trend of fuel prices, the annual expense for fuel is expected to reach about $44,000,000 by 1970. Cost for gas alone in 1961-62 amounted to more than $20,000,000. During the period from 1950 to 1962, gas rates paid by the Department increased approximately 7 per cent per year, aggregating about 77 per cent. The Department's gas bill in 1961-62 was about $9,000,000 more than the same quantity of gas would have cost at 1950 rates.

As pointed out by General Manager Nelson, these factors demonstrate the need for the Department to obtain a firm supply of gas at stabilized prices in order to keep electric rates low to Department customers.

At present, the DWP buys gas for its steam plants from the local gas companies, but the supply can be cut off at any time because gas companies can only provide it on an interruptible rather than a firm basis.

CHATSWORTH RESERVOIR PROJECT PLANNED

A project affecting water movement in the Chatsworth Reservoir in the San Fernando Valley and which will help to maintain good water quality and usefulness for longer periods of time has been proposed for construction, according to E. S. Mamrelli, engineer in charge of the Water Engineering Design Division.

Proposed improvements, estimated at a cost of $175,000, will increase the beneficial use of the reservoir by providing additional water supply to domestic consumers, Mr. Mamrelli said.

Dikes will be constructed in the bay area adjacent to the outlet tower as an aid in controlling the movement of water, which because of the shallow depth of the reservoir may develop a taste of vegetation, especially in warmer weather when the water is at lower stages.

These dikes will channel the flow, preventing the less desirable water from going directly into the tower, and will allow the sanitary engineers to take steps more readily to improve water quality when it is necessary.

Sanitary Engineer Ray L. Derby explained that a combination of vegetation growth in the reservoir in warm weather and turbidity are the major causes affecting the taste and other water qualities. The proposed facilities will aid in controlling the growth of vegetation and in preventing turbidity of the water caused by winds sweeping across the water surface.

Vegetation growth in the form of tiny aquatic plants called algae is stimulated in bodies of water exposed to sunshine. Such vegetation is harmless, but may impart a slight taste to the water.

Turbidity results when a reservoir is muddied by storm water or high winds, but steps can be taken chemically to cause the particles in suspension to sink to the bottom of the reservoir.

CLIFFORD A. PENNY
NOV 16 2004

DRAFT

Chatsworth Reservoir Environmental Site Investigation

Background

In order to determine the suitability of the soil at Chatsworth reservoir for potential reuse as borrow material, LADWP completed an environmental site assessment at the site in July 2004. The site, which was used as a reservoir from 1919 to 1969, has remained dry and undeveloped since then.

DONE BY ESSENTIA MANAGEMENT SVCS.
7-22-04
"FINAL SITE INVESTIGATION REPORT - SOIL SUITABILITY EVALUATION CHATSWORTH RES. CHATS. CH.

Investigation Methodology

Soil and groundwater were sampled and analyzed in areas selected by an LADWP geologist based on the suitability of the soil as borrow material. Surface and subsurface soil samples were collected at six locations at a maximum depth of 20 feet below ground surface (bgs). Shallow groundwater samples were collected at four of the six soil sample locations at depths greater than 20 feet bgs. The soil and/or groundwater were analyzed for metals, organic compounds, combustion byproducts, and certain radionuclides. The analyses were selected based on input from California Department of Health Services and Department of Toxic Substances Control. In the absence of standards specifically established for soil in natural setting, levels of identified chemicals in soil were compared with existing guidelines including the EPA's Preliminary Remedial Goals (PRGs) for residential soil.

Investigation Results

Soil:

- Trace amounts of combustion byproducts were detected well below their PRGs for residential soil.
- Metals were detected and their concentrations were within background ranges commonly found in the soil in southern California. In addition, all metals except arsenic were below their residential PRGs. Arsenic, a naturally occurring metal in the southwestern US was detected above its PRG for residential soil but is within its background range. Hexavalent Chromium was detected at levels below its PRG for residential soil.
- Several radionuclides were detected. However, there are no PRGs for these radionuclides in residential soil.
- Organic compounds including rocket fuel constituents were not detected.

Groundwater:

- Metals, trace amounts of combustion byproducts, and four organic compounds were detected. These identified organic compounds were common laboratory chemicals and they may have been introduced during sample preparation and analysis. However, there are no standards for these compounds in untreated natural groundwater.
- Total coliforms were detected but are within the acceptable range.
- Hexavalent chromium, radionuclides, and other organic compounds including rocket fuel constituents were not detected.

Conclusions

The investigation results indicated that soil underlying the reservoir bottom could be used as borrow material for future LADWP construction projects.

194-096

No board mtg on the [illegible] ~ June 18 - July 22

): BOARD OF WATER AND POWER COMMISSIONERS DATE: June 30, 1987

IBMITTED BY: ORIGINAL SIGNED BY D. L. GEORGE[illegible] ORIGINAL SIGNED PAUL H. LANE	SUBJECT: Chatsworth Reservoir Property
sistant General Manager - Water General Manager and Chief Engineer	FOR COMMISSION OFFICE USE: FILE COPY WATER SYSTEM OPERATING DIVISION
R: APPROVAL ☐ INFORMATION ☒	
GENDA: CONSENT ☐ REGULAR ☐ COMMITTEE APPROVAL:	

Attached is a Report on the History of Chatsworth Reservoir and the Status of the Reservoir Property. Water System Management has authorized Department staff to take the necessary steps to declare Parcel 4, consisting of 69 acres north of Valley Circle Boulevard and Woolsey Canyon Road, surplus. Disposal of this parcel will reduce the Water System's maintenance expenses due to trespassing, illegal dumping, and brushing. This parcel was leased to the City Department of Recreation and Parks (DRP) from March 1974 to July 1981. DRP requested that the lease be terminated in 1981 because they could no longer maintain the property. DRP has not expressed any further interest in this parcel.

Brief Background

Chatsworth Reservoir was placed in service in 1919 and removed from service in 1969 to make water quality improvements. The reservoir was not returned to service after completion of those improvements due to the San Fernando earthquake. As a result of the earthquake, a dynamic analysis of the Chatsworth dams was performed. That analysis showed the dams would not perform in a satisfactory manner if subjected to a major earthquake.

The Department has participated in a number of programs to reduce its maintenance expense and/or to enhance the environment of the Chatsworth Reservoir property beginning in the early 1970's. Environmental enhancement measures have provided some benefit to the community but have not reduced the Water System's maintenance expense. Parcels 1, 4, and 5, consisting of 156 acres northerly of Valley Circle Boulevard, were leased to the City Department of Recreation and Parks until July 1981 when DRP returned all

except 5 acres of Parcel 5 to the Department because they could no longer maintain them. DRP was reconsidering the leasing of Parcel 1 in 1985 but has not expressed any interest in Parcel 4 since they returned the property to the Department in 1981. Most Water System maintenance expense on those three parcels was eliminated while the parcels were leased to DRP.

Future Status of Reservoir

The Water System deferred a decision on replacing Chatsworth Reservoir because of the need to construct and finance other high priority replacement projects (Los Angeles, Silver Lake, Fairmont and Lower Franklin Reservoirs and Sawtelle Tank). The Los Angeles Aqueduct Water Filtration Plant and the Los Angeles Water System -- Data Acquisition and Control (LAWS-DAC) facilities were also considered higher priority projects. Today, the construction and financing of other needed water improvements and the cement mortar lining or replacement of unlined distribution mains continues to defer a decision on replacing Chatsworth Reservoir for an indefinite period into the future.

In addition to disposing of Parcel 4, Management plans to authorize staff to dispose of Parcels 1 and 5 by lease or sale to DRP or in some other manner if DRP is not interested or able to purchase the property or assume maintenance responsibilities.

Attachment

WEK:oe

bc w/Attachments:
Mayor Tom Bradley
Councilman Hal Bernson

Paul H. Lane
Daniel W. Waters
Michael T. Moore
Arnold R. Cordova
Duane L. Georgeson
Laurent McReynolds
Walter W. Hoye
Ronald A. McCoy
Raul Sosa
Le Val Lund

Lee Moussafir
B. W. Kuebler
W. J. Burns
G. A. Candelaria
W. E. Kruse
B. Weinstein
T. L. Ellis
G. A. Gewe
H. Hamanaka

Chatsworth Reservoir
194-096
Board of Water and
Power Commissioners

REPORT ON THE HISTORY OF CHATSWORTH RESERVOIR AND THE STATUS OF THE RESERVOIR PROPERTY

1919 - Placed in Service

Chatsworth Reservoir was placed in service in 1919 at a time when the San Fernando Valley was a sparsely populated agricultural area. The reservoir has two earthfill dams which provided an initial capacity of 7,400 acre-feet and a high water elevation of 884.3 feet. The dams were built using the then-accepted hydraulic-fill method which was similar to many dams throughout the United States. Under this method, the soil material forming the dam was washed or sluiced into place, and no mechanical compaction equipment was used to densify the material. Because this material was placed with little or no compaction, it typically has a low density and, correspondingly, a low strength or ability to resist earthquake loading.

1920-1950 - Agricultural Irrigation

For many years Chatsworth Reservoir served as the principal water storage facility in the western San Fernando Valley, serving the irrigation needs of agriculture. At various times during this period, improvements to the reservoir were constructed to increase its capability to provide the required water supply. The most significant improvement occurred during 1930 and 1931 when the dams were partially reconstructed to increase the high water level of the reservoir 5 feet to elevation 889.3 feet and the capacity to 9,840 acre-feet.

1950-1969 - Domestic Supply

As the area served by Chatsworth Reservoir was subdivided and developed to meet the demands for increased housing, the character of the West San Fernando Valley changed from an agriculture to urban setting. This transition gradually changed the requirements for Chatsworth Reservoir and its storage was increasingly used to supply residential, domestic, and emergency requirements instead of agriculture.

Reservoir Operation and Maintenance Problems

The transition from agriculture to domestic service resulted in a number of problems relating to operation of the Chatsworth Reservoir. The principal problem was maintaining water quality. Chatsworth Reservoir is located in a gently sloping natural valley which formed a number of shallow bays.

These shallow bays created a condition which, in warm weather, encouraged the growth of algae and aquatic plants. During winter rainy periods, storm water runoff from the reservoir watershed would flow into the reservoir. In addition, wave action caused by wind would stir up mud in the shallow bays and along the shoreline. These problems degraded the water quality and caused the reservoir to be removed from service each summer.

1969 Reservoir Improvements

In the spring of 1969, Chatsworth Reservoir was drained and construction began on a project to improve water quality and increase storage. The improvements included deepening and shaping the shallow areas of the reservoir, constructing a bypass system to convey storm flows around the reservoir, and constructing an experimental ecology pond on the northerly side of the reservoir. The experimental ecology pond was subject to removal if water quality, nuisance, or health and sanitary problems occurred. No significant problems have occurred to date.

San Fernando Earthquake -- New Earthquake Design Requirements

On February 9, 1971, a major earthquake occurred in the Sylmar-San Fernando area. This earthquake severely damaged the dams at Upper and Lower Van Norman Reservoirs, which had also been constructed using the hydraulic-fill technique. Because of the damage to these dams, the State Department of Water Resources (DWR), Division of Safety of Dams, directed a thorough stability investigation of all hydraulic-fill dams in California. These studies were required to determine the effects on hydraulic-fill dams resulting from severe earthquakes.

As a result of this directive from the DWR, an extensive analysis and study of the Chatsworth Dams was conducted by the Department and its consultant. The analysis, which was completed in September 1972, showed that the Chatsworth Dams would not perform in a satisfactory manner if subjected to a major earthquake, either a local or San Andreas event. As a result of this analysis and discussions with the DWR, Division of Safety of Dams, it was determined that the two dams forming Chatsworth Reservoir would have to be completely rebuilt, and that no water could be stored in Chatsworth Reservoir.

Current Status

The Department has initiated or participated in a number of programs to reduce maintenance expense and/or enhance the environment of the Chatsworth Reservoir property. For example, the Board of Water and Power Commissioners agreed to allow the use of three parcels (1, 4 and 5) (see attachment) of Department property totaling approximately 156 acres for recreational purposes.

This property, located north and northwest of Valley Circle Boulevard, was under license to the City's Department of Recreation and Parks (DRP) from the early 1970's until July 1981. Only 5 acres in Parcel 5, known as the Chatsworth Oaks Park, are currently maintained by DRP. The balance of the property, approximately 151 acres, is now being maintained by this Department.

Another program was initiated in response to community interest in wildlife enhancement in the Chatsworth area. A dike was constructed to allow storm water runoff to collect in the bottom of the reservoir to create an additional temporary ecology pond of approximately 30 acres. This pond is maintained during the winter months each year while the reservoir is out of service, and provides an attractive habitat for migratory birds. In addition to the construction of the experimental and temporary ecology ponds, selected areas of the reservoir property have been seeded with barley to provide both cover and feed for the bird life habitat.

DWP has also cooperated with the Save Orcutt Community by allowing young oak trees (seedlings) to be planted on the northeastern corner of the reservoir site to augment the natural reseeding process of the California Oak trees.

Future Status of Reservoir

A schedule for the reconstruction of Chatsworth Reservoir has not been established. The Water System over the last several years has directed its efforts on the construction of high priority replacement facilities, including Los Angeles, Silver Lake, Fairmont, Lower Franklin Reservoirs, and Sawtelle Tank.

In addition to replacement of seismically unsafe dams, the Water System's involvement in other high priority capital projects including the Los Angeles Aqueduct Water Filtration Plant and the Los Angeles Water System - Data Acquisition and Control (LAWS-DAC) facilities has precluded any serious consideration of the future of Chatsworth Reservoir.

The construction and financing of other needed water quality improvement facilities at our in-City reservoirs and the cement mortar lining or replacement of unlined distribution mains will continue to defer a decision on Chatsworth Reservoir for an indefinite period into the future.

Parcels 1, 4, and 5

Parcels 1, 4, and 5 previously licensed to DRP are surplus to the Department's needs. These parcels are not needed either for the operation of existing Water System facilities or for reconstruction and operation of a replacement reservoir project. A brief discussion of each parcel follows:

Parcel 1 -- 36 acres west of Valley Circle Boulevard and south of Woolsey Canyon Road. This parcel was made available to the Department of Recreation and Parks (DRP) by Permit W-19226 dated October 8, 1971 for park purposes in exchange for the use of a portion of the Knapp Ranch Park property for construction and permanent maintenance of the Kittridge Tanks and its pipelines and appurtenances. By letter dated July 23, 1981, DRP requested that Permit W-19226 be suspended until they were able to exercise rights granted under it because they were unable to continue operating the property for park purposes as of July 1, 1981. DRP also requested that documentation necessary to formalize the proposed action be prepared. The necessary documentation was not completed because DRP had hopes of continuing to operate under the existing license and, by letter dated October 25, 1985, indicated they were in the process of reconsidering this matter. DWP has maintained this property since July 1, 1981.

Parcel 4 -- 69 acres north of Valley Circle Boulevard and north of Woolsey Canyon Road. This parcel (and Parcel 5) was made available to DRP by License Agreement W-19500 dated March 28, 1974 for authorized recreational activities and park uses at DRP's request. DWP consented to the agreement in order to reduce its operation and maintenance costs pending completion of the reconstruction of Chatsworth Reservoir. DRP requested that the license agreement be terminated in 1981 after DRP ceased operation and maintenance, removed improvements, and locked the gates. DWP Real Estate terminated the agreement in 1983. DRP has not expressed any further interest in this parcel. DWP has maintained this property since July 1, 1981.

Parcel 5 - 51 acres north of Valley Circle Boulevard and west of the Los Angeles County/City boundary. This parcel (and Parcel 4) was made available to DRP by License Agreement W-19500 dated March 28, 1974 at DRP's request. Agreement W-19843, dated December 7, 1978, superseded W-19500 for Parcel 5 only. Agreement W-19843 granted DRP the right to purchase Parcel 5 from DWP at any time within the 25-year term of the agreement to enable DRP to qualify for grant money to develop the property as a park. By letter dated July 23, 1981, DRP requested that Permit W-19843 be amended to include only 5 acres known as the Chatsworth Oaks Park located at 9301 Valley Circle Boulevard because they were unable to continue operating the entire parcel for park purposes as of July 1, 1981. Terms for an amended permit were never finalized. However, DRP has continued to operate and maintain the 5 acres above, and DWP ha maintained the remaining 46 acres since July 1, 1981.

By letter dated October 25, 1985, DRP indicated they were in the process of reconsidering possible continuation under the existing licenses (permits) for Parcels 1 and 5. The existing permits are invalid since DRP has failed to operate and maintain Parcels 1 and 5 and are subject to renegotiation. DWP staff plans to complete negotiations with DRP regarding the continuing use of Parcels 1 and 5. Parcel 4 will be disposed of at public auction if no public agency expresses interest in acquiring it. The Water System plans to take advantage of opportunities to reduce its maintenance costs at Chatsworth Reservoir by disposing of property surplus to its needs or by leasing out property it may need in the future.

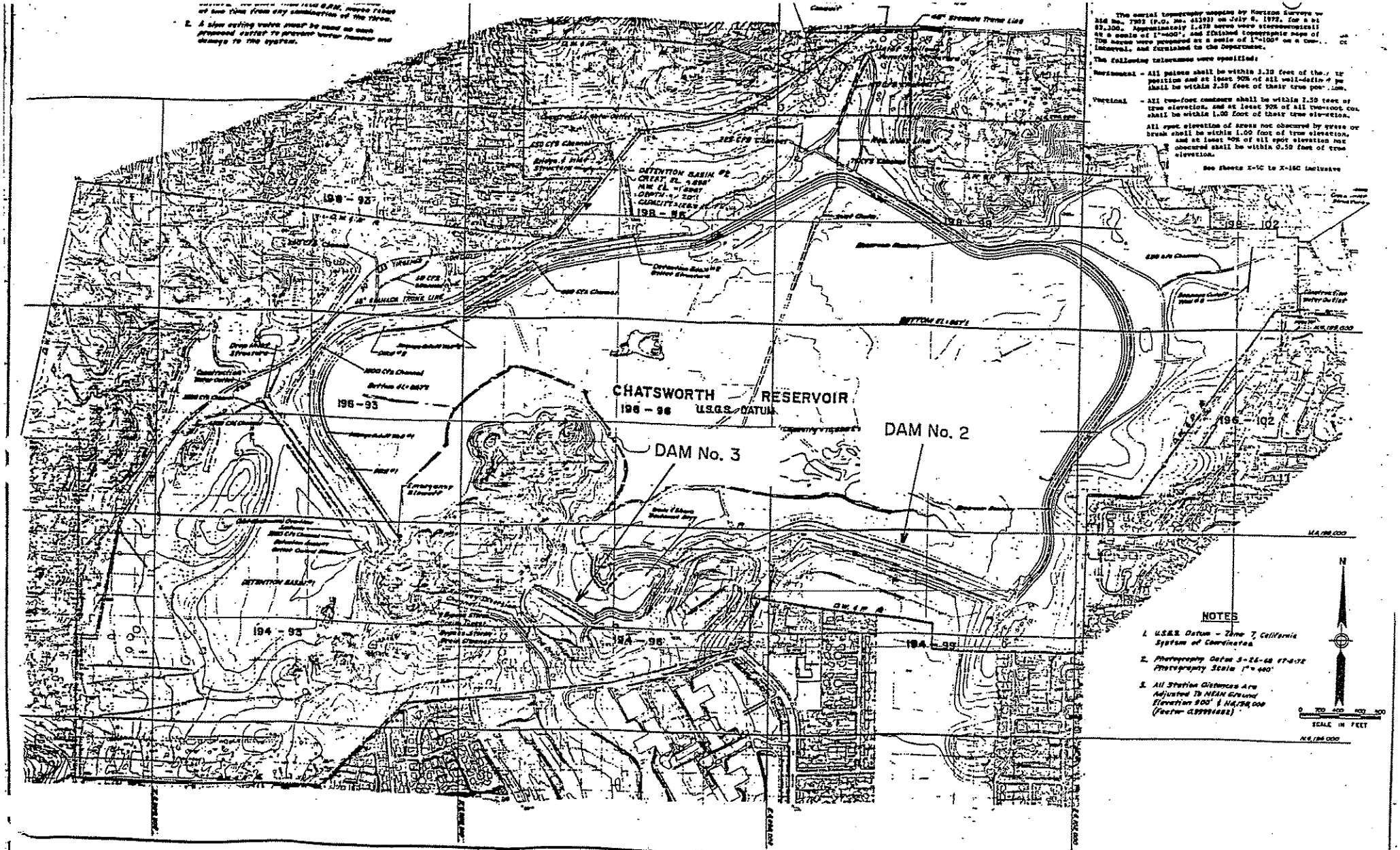
The three parcels above can be sold at public auction if we can clear up the above issues. The parcels are not necessary for operation of existing Water System facilities or for reconstruction and operation of a replacement reservoir project. The current market value of these parcels is believed to be about $4 to $5 million.

We have had significant problems with trespassing and illegal dumping on the property. Brushing has not been a major problem to date but will become more of a problem as adjoining properties develop. We also have had numerous problems with motorcycles and off-road vehicles prior to these parcels being partially fenced by DRP. Occasionally, those types of problems occur today and will increase in frequency as more developments occur in the area.

The Real Estate Division will be requested to 1) initiate the disposition of Parcel 4 and, 2) resolve the concerns of DRP about Parcels 1 and 5. We can anticipate some concern from the residents in the area. The residents in the area are concerned about maintaining the reservoir property, particularly the area within the enclosed fence containing the empty reservoir, as open space and a wildlife refuge. There may also be some concern over potential development of Parcels 1, 4, and 5 which are outside this fenced area.

Attachment

WEK:oe



The aerial topography mapping by Horizon Surveys w... Bid No. 7902 (P.O. No. 41393) on July 6, 1972, for a bi... $3,300. Approximately 1,678 acres were stereoscopically at a scale of 1"=400', and finished topographic maps of 700 acres were prepared at a scale of 1"=100' on a two-... interval, and furnished to the Department.

The following tolerances were specified:

Horizontal - All points shall be within 3.30 feet of their ... position and at least 90% of all well-defined ... shall be within 2.50 feet of their true position.

Vertical - All two-foot contours shall be within 1.50 feet of true elevation, and at least 90% of all two-foot con... shall be within 1.00 foot of their true elevation.

All spot elevation of areas not obscured by grass or brush shall be within 1.00 foot of true elevation, and at least 90% of all spot elevation not obscured shall be within 0.50 foot of true elevation.

See Sheets X-5C to X-16C inclusive

NOTES

1. U.S.G.S. Datum - Zone 7, California System of Coordinates
2. Photography Dates 5-26-68 47-8-72 Photography Scale 1" = 400'
3. All Station Distances Are Adjusted To MEAN Ground Elevation 900' & N4,158,000 (Factor 0.99994882)

AS CONSTRUCTED 1973

FEET REVISION

REVISIONS				REFERENCES			APPROVED	

CHATSWORTH RESERVOIR

FIGURE 1 - PLAN VIEW

Code 8701147
Rev. 9-91

MEMORANDUM

FILE COPY
WATER SYSTEM
ENGINEERING DESIGN DIVISION

WATER ENGINEERING DESIGN DIVISION

MEMO BY Mitchell M. Sakado TO Duane D. Buchholz DATE May 14, 1992

FILE TITLE Feasibility of Returing Chatsworth Reservoir to Service for the Storage of Storm Water

Attached is a brief report on the feasibility of returning Chatsworth Reservoir to service. The feasibility study was requested by the City Council during a meeting held on February 25, 1992. The report outlines the improvements necessary to return the reservoir to service and includes preliminary cost estimates for the project.

DSK:db

Attachment

c w/attachment:
Mitchell M. Sakado
Craig A. Davis
Dennis S. Kuo

Chatsworth Reservoir

610-DKCHAT

CRAIG A. DAVIS
MAY 14 1992

MITCHELL M. SAKADO
MAY 14 1992

DENNIS S. KUO
MAY 14 1992

FEASIBILITY OF RETURNING CHATSWORTH RESERVOIR TO SERVICE FOR THE STORAGE OF STORM WATER

INTRODUCTION

In a recent City Council meeting (February 25, 1992), a motion was made for the City to place a priority on collecting and storing storm water for future use and the Department of Water and Power to investigate the feasibility of preparing Chatsworth Reservoir for this purpose.

Chatsworth Reservoir has been out of service since 1971. The two dams that form Chatsworth Reservoir were constructed in 1918 using the hydraulic fill method. Figure 1, attached, shows a plan view of the reservoir. Various improvements have been made over the years including an extensive reservoir improvement program beginning in 1968. After the February 9, 1971, San Fernando Valley earthquake, the State of California Division of Safety of Dams (DSOD), directed all owners of hydraulic fill dams in California to analyze their facilities with regard to the capability to withstand a major earthquake. The analysis of Chatsworth Dams No. 2 and 3 indicated that the dams would not perform satisfactorily if subjected to a large earthquake. Consequently, the reservoir was removed from service and remains empty.

Before Chatsworth Reservoir can be placed back into service, various improvements will have to be completed. Storing water in Chatsworth Reservoir will involve analyzing, designing, and reconstructing Dams No. 2 and 3 to withstand the Maximum Credible Earthquake(MCE) for that site, and obtaining approval from the DSOD. In addition, a water treatment facility and a pumping station will have to be constructed if the water is to be used for domestic purposes. Also, an extensive study will be required to determine how the storm water will be collected from the immediate hydrological area and other hydrological areas and transferred to Chatsworth Reservoir.

RESERVOIR IMPROVEMENTS

Chatsworth Dams No. 2 and 3 will have to be analyzed, designed, and reconstructed to withstand the MCE for the site. Additional improvements include clearing the reservoir interior and any necessary site work. Existing structures including canals, detention basins, catch basins, and tunnels currently route runoff away from the reservoir. This system of storm water routing must be reversed to detour water into the reservoir. In addition, storm water facilities must be designed and constructed to route storm water from other nearby hydrological areas to Chatsworth Reservoir.

Prior to the Reservoir Improvement Project beginning in 1968, poor water quality was a primary problem with Chatsworth Reservoir. Treating the water will be required if the water is to be used for potable consumption.

In the early years, nearly all the water in Chatsworth Reservoir was used for irrigation. As land use changed from agricultural to residential and commercial, more of the reservoir supply was delivered for domestic consumption which requires higher water pressure. In order to use water stored in Chatsworth Reservoir for domestic consumption, a pumping station will be required.

A Certificate of Approval must be obtained from the DSOD prior to impounding water in Chatsworth Reservoir. Currently, the reservoir remains empty.

A preliminary cost estimate to place Chatsworth Reservoir back into service is detailed in the attached Table 1 and is based on an estimate prepared in 1973 updated to today's costs.

CONCLUSION

In order to place Chatsworth Reservoir back in service to impound storm water, extensive reconstruction work will be required. From about 1968 to 1971 extensive reconstruction work was performed at Chatsworth Reservoir to bypass storm water around the reservoir. Facilities must now be constructed to collect storm water and route it into the reservoir. Repairs to Chatsworth Dams No. 2 and 3 must be made and approval from DSOD must be obtained. To use collected storm water for domestic potable use, a water treatment plant and a pumping station will be required. The total preliminary costs are shown in Table 1.

Further investigation will be required to determine possible sources of rain water which can be stored in the reservoir. Also, it will have to be determined if the amount of water that can be collected will justify the cost of such a project. Furthermore, additional analysis for end use of any collected water is recommended. For example, treating and placing water directly into the distribution system was assumed for purposes of completing this report; however, other alternatives may exist such as finding nearby locations that can be used to spread the water and recharge ground water supplies. Investigation of water source and end use alternatives are beyond the scope of this report.

Attachments

TABLE 1-PRELIMINARY COST ESTIMATES FOR CHATSWORTH RES. IMPROVEMENTS

	CHATSWORTH DAM No. 2	
item no.	description	cost
1	demolition of upstream face	$165,888
2	demolition of wood sheet piling	$110,592
3	excavate and transport material	$4,039,373
	to stockpile	
4	excavate, condition and transport	$5,613,926
	material to embankment	
5	compact embankment	$1,684,178
6	pave upstream face of dam	$252,564
7	graded vertical filter	$2,089,083
8	subdrain system	$207,360
9	miscellaneous work and cleanup	$207,360
10	foundation excavation	$2,000,000
	CHATSWORTH DAM No. 3	
item no.	description	cost
1	demolition of upstream face	$55,300
2	demolition of cutoff wall	$27,650
3	excavate and transport material	$463,483
	to stockpile	
4	excavate, condition and transport	$663,600
	material to embankment	
5	compact embankment	$199,080
6	pave upstream face of dam	$66,360
7	spillway	$82,950
8	graded vertical filter	$398,160
9	subdrain system	$69,125
10	miscellaneous work and cleanup	$138,250

TABLE 1-PRELIMINARY COST ESTIMATES FOR CHATSWORTH RES. IMPROVEMENTS

	SUBTOTAL 1 FOR DAM No. 2 AND 3	$18,534,283
	DSOD application	$500,000
	SUBTOTAL FOR DAM No. 2 AND 3	**$19,034,283**
	ADDITIONAL COSTS	
item no.	**description**	**cost**
1	clearing	$270,000
2	site work	$3,000,000
3	water treatment plant	$28,000,000
4	pumping station	$2,000,000
	SUBTOTAL FOR ADDITIONAL COSTS	**$33,270,000**
	SUBTOTAL FOR WORK	**$52,304,283**
	ENGINEERING (15%)	$7,845,642
	CONTINGENCIES(25%)	$13,076,071
	TOTAL COST FOR PROJECT	**$73,225,996**

CITY OF LOS ANGELES
CALIFORNIA

ELIAS MARTINEZ
City Clerk

J. Michael Carey
Executive Officer

When making inquiries relative to this matter refer to File No.

92-0305

CD 12

DEPT. OF WATER & POWER
RECEIVED
MAR 24 1992
EXECUTIVE OFFICES
WATER SYSTEM

TOM BRADLEY
MAYOR

JAMES F. WICKSER

MAR 24 1992

Office of
CITY CLERK
Council and Public Services
Room 395, City Hall
Los Angeles, CA 90012
Council File Information - 485-5703
General Information - 485-5705

Pat Letcher
Chief Legislative Assistant

RECEIVED
MAR 24 1992
WATER ENGINEERING
DESIGN DIVISION

March 3, 1992

Commerce, Energy & Natural Resources Committee Clerk
Councilman Bernson
Councilman Bernardi
City Attorney

Water and Power Commission
Attn: Judith Davison
City Administrative Officer

RE: FEASIBILITY OF REPAIRING CHATSWORTH RESERVOIR DAM FOR THE STORAGE OF STORM WATER

At the meeting of the Council held February 25, 1992, the attached Motion was adopted with the understanding that the Department of Water and Power will submit it's report through the Commerce, Energy & Natural Resources Committee.

Elias Martinez

City Clerk
bs

3/24/92 - Duane Buchholz for preparation of report to CE&NR Committee - GM's signature
km (coordinate response with Government Affairs and Water Operating)
c: Daniel W. Waters
Frank Salas
Laurent McReynolds

3/25/92 - c: D. Buchholz
H. Venegas
M. Sakado (attn)

Chatsworth Reservoir

M O T I O N

The City has just experience torrential rains which have caused the worst flooding and damage in many years.

Although the rains may have appeared to bring the City up to normal rainfall amounts, the City is still in a state of emergency in regard to insufficient water supplies due to drought conditions.

Unfortunately, the City has no means to capture and use most of the rainwater which falls over Los Angeles. We normally import most of our water from hundreds of miles away.

The Department of Water and Power currently maintains a facility at the Chatsworth Reservoir which essentially remains empty due to earthquake damage sustained in 1971.

This facility should be repaired as soon as possible.

I THEREFORE MOVE that the Department of Water and Power be requested to report on the feasibility of repairing Chatsworth Reservoir Dam, that the City declare a priority for filling the Reservoir with storm water, and that the Army Corps of Engineers be requested to financially participate in the repair to the maximum extent possible.

PRESENTED BY: Hal Bernson
Hal Bernson
Councilman, 12th District

SECONDED BY: Ernani Bernardi

MO.
ADOPTED

FEB 25 1992

LOS ANGELES CITY COUNCIL

TO CITY CLERK FOR PLACEMENT ON NEXT REGULAR COUNCIL AGENDA TO BE POSTED

#52

FEB 19 1992

with the understanding that DWP will submit its Report through the CENR Comt.

FEASIBILITY OF RETURNING CHATSWORTH RESERVOIR TO SERVICE FOR THE STORAGE OF STORM WATER

INTRODUCTION

At a City Council meeting on February 25, 1992, a motion was made for the City to place a priority on collecting and storing storm water for future use and for the Los Angeles Department of Water and Power (LADWP) to investigate the feasibility of preparing Chatsworth Reservoir (Reservoir) for this purpose.

The two dams that form the Reservoir were constructed using the hydraulic-fill method in 1918. Figure 1, attached, shows a plan view of the Reservoir. As land use in the San Fernando Valley changed from agricultural to residential and commercial, more of the Reservoir supply was delivered for domestic consumption. This change required higher pressure and better quality water than the Reservoir could supply resulting in frequent out-of-service status. At the time of the February 9, 1971 San Fernando earthquake, the Reservoir had been drained as part of an extensive reservoir improvement program that began in early 1968.

After the earthquake and because of the heavy damage experienced by the San Fernando (hydraulic fill) Dam, the State of California Department of Water Resources, Division of Safety of Dams (DSOD), directed all owners of hydraulic-fill dams in California to analyze their facilities with regard to the capability to withstand a major earthquake. The analysis of Chatsworth Dams Nos. 2 and 3 indicated that the dams would not perform satisfactorily if subjected to a large earthquake. Consequently, the Reservoir was not returned to service.

Before the Reservoir can be placed back into service, various improvements would have to be completed. Storing water in the Reservoir would involve analyzing, designing, and reconstructing Dams Nos. 2 and 3 to withstand the Maximum Credible Earthquake (MCE) for that site, and obtaining approval from the DSOD. In addition, a water treatment facility (approximately $60 million), a pumping station (approximately $3 million), and a clearwell (approximately $4 million) would have to be constructed if the water were to be used for domestic purposes. Any water collected would be subject to the regulations and stipulations of the Surface Water Treatment Rule.

RESERVOIR IMPROVEMENTS

Placing Dams Nos. 2 and 3 back into service would require excavating the existing hydraulic fill, stockpiling the excavated material, importing fill, preparing the foundations, and reconstructing compacted earth-fill dams capable of withstanding the MCE (approximately $19 million). A Certificate of Approval would need to be obtained from DSOD to impound water.

It is unlikely that collected storm water can be used as groundwater recharge at the Reservoir due to poor local geology. The Los Angeles County Flood Control District performed a study on using the Reservoir as a groundwater recharge basin and determined it to be unfeasible.

A treatment plant would be required if collected storm water were to be used for potable consumption. There are no level sites on LADWP property adjacent to the Reservoir large enough to accommodate such facilities; therefore, alternate sites must be considered. Also, gravity flow from the Reservoir to the treatment plant and into the distribution system is not possible. A pumping station would be required in order to meet the water pressure requirements in the Reservoir's water service area. This is a result of the land use changes from predominately agricultural to domestic since the Reservoir was originally constructed. A clearwell is needed due to fluctuation in demand. Extensive trunk line work would also be required (possibly including tunneling) due to the location of the possible treatment plant and pumping station sites.

Based on a preliminary analysis, the Reservoir watershed will not produce enough surface runoff to fill the Reservoir basin. The average annual rainfall is about 15 inches in the Chatsworth area. This will provide an average annual volume of 5,700 acre-feet, which is about half of the Reservoir's storage capacity. The majority of the runoff will be collected from November to April. Existing structures including channels, detention basins, catch basins, and tunnels currently route runoff away from the Reservoir. This system of storm water routing must be reversed to divert water into the Reservoir. The cost of these improvements and modifications are unknown. Other surface runoff from nearby watersheds could be considered. Costs to transport runoff from other watersheds are not available but would involve pipelines, channels, hydraulic structures, and pumping stations.

CONCLUSION

In order to place the Reservoir back into service to impound storm water, extensive reconstruction work will be required:

- Chatsworth Dams Nos. 2 and 3 must be reconstructed to meet the MCE that may occur in the area.
- Existing structures that were constructed to bypass storm water around the Reservoir will need to be reversed to route storm water into the basin.
- Construction of a treatment plant, pumping station, and clearwell to be able to supply water for domestic purposes are needed.

To adequately investigate the unknown costs associated with this project, the following studies that are beyond the scope of this report should be conducted:

- A detailed study of other watersheds to transfer runoff to the Reservoir.
- Investigate various treatment processes and alternate sites for the treatment plant and associated facilities.

The total estimated project cost is $135 million, not including costs to collect and transport storm runoff from other watersheds.

RECOMMENDATION

Returning the Reservoir to service for the purpose of collecting and storing storm runoff is not feasible. The average cost of treated potable water from the Reservoir would be approximately $2,000 per acre-foot. In comparison, the current average cost for treated potable water is approximately $300 per acre-foot and approximately $600 per acre-foot for reclaimed water. On the basis of this preliminary estimate, returning the Reservoir to service for the purpose of collecting storm water for domestic use is not cost effective, and thus not feasible.

CRAIG A. DAVIS

JAN 20 1993

MITCHELL M. SAKADO

JAN 26 1993

JBM
Mitch

DUANE D. BUCHHOLZ

1993

Craig, Dennis
return →

J. B. McDANIEL

JAN 26 1993

Woodland Hills, CA
(Los Angeles Co.)
Daily News
(Clr. D. 148,133)
(Clr. S. 161,142)

JAN 13 1993

Allen's P. C. B. Est. 1888

Reservoir repairs deemed too costly

By Patrick McGreevy
Daily News Staff Writer

Citing the costs, a Los Angeles City Council panel recommended Tuesday that the city shelve a proposal to repair the dry Chatsworth Reservoir so that it could hold rainstorm water for use by Los Angeles residents.

The council's Commerce, Energy and Natural Resources Committee voted to receive and file a study by the city Department of Water estimating that it would cost $135 million to do the work required, including restoration of two dams and construction of a treatment plant to turn rainwater into potable water for public consumption.

"With the economic situation the city is in, it (repair) is one of those things we'd like to do but it doesn't seem practical at this time," said Councilwoman Joan Milke Flores, the committee's chairwoman. "We're cutting back on other kinds of services."

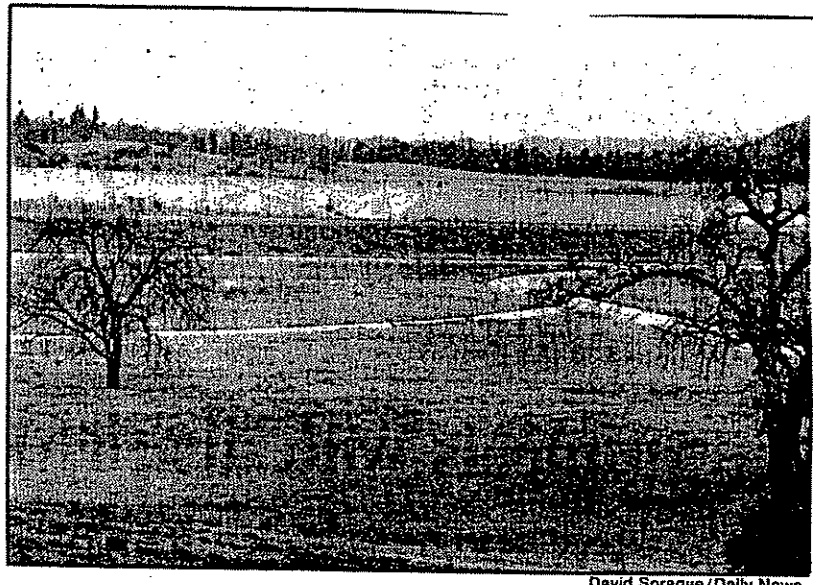
The full council will consider the committee's proposal to file the report and take no further action.

In saying that the repair project is not cost-effective or feasible, the DWP said extensive repair work would be needed because the existing dams at the reservoir have been determined by city engineers to be inadequate to withstand a major earthquake.

In addition, the DWP estimated that rainfall in the Chatsworth area is only enough to provide 5,700 acre-feet of water annually, or about half of the reservoir's capacity.

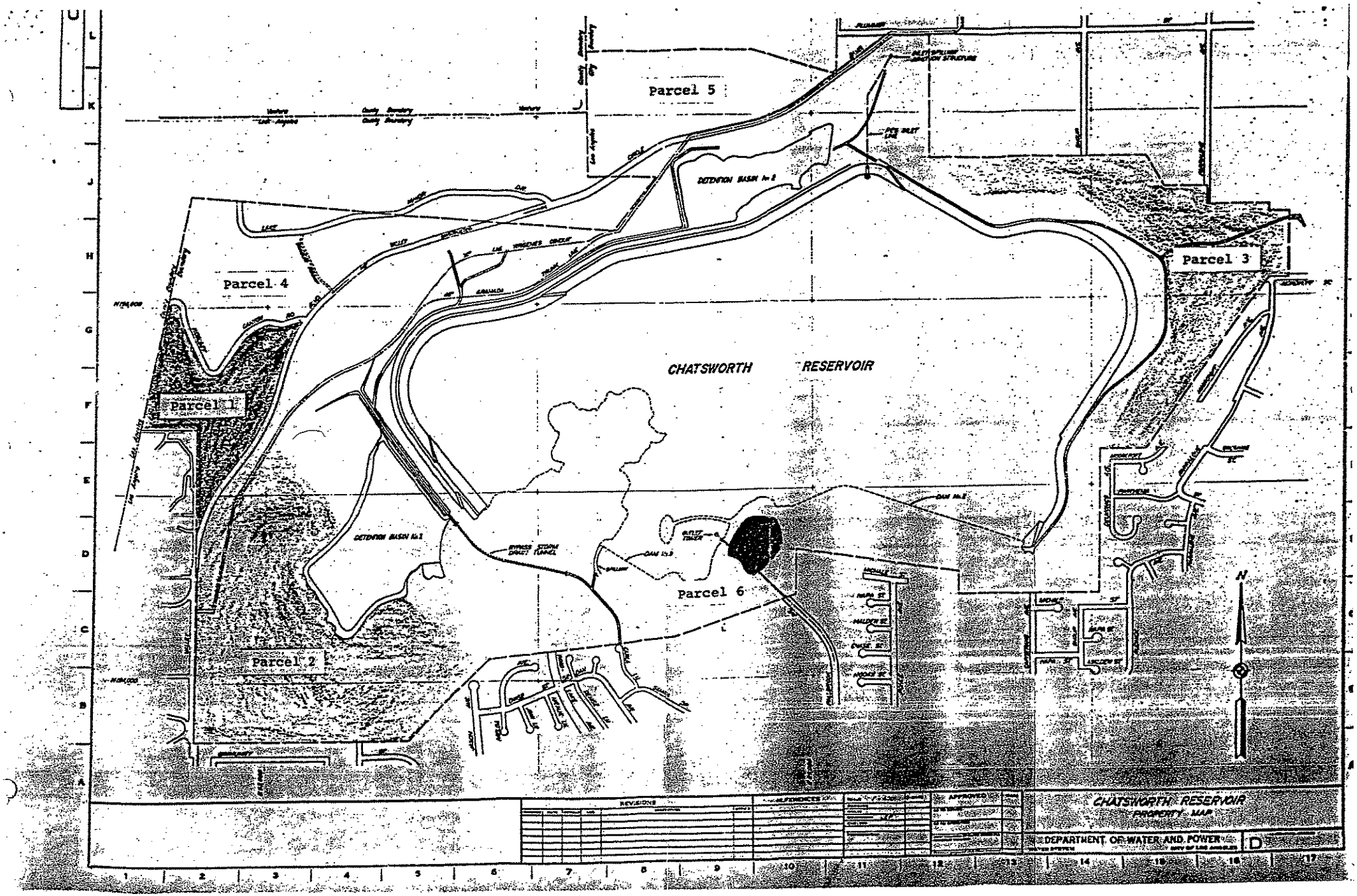
Flores predicted that the proposal could be revived in the future if the city's budget situation improves and water situation worsens.

"I'm sure it will be revisited," she said.



David Sprague/Daily News

A Los Angeles panel recommends against repairing Chatsworth dam.



Parcel 1
Parcel 2
Parcel 3
Parcel 4
Parcel 5
Parcel 6
CHATSWORTH RESERVOIR
DETENTION BASIN No 1
DETENTION BASIN No 2
N
REVISIONS
REFERENCES
APPROVED
CHATSWORTH RESERVOIR
PROPERTY MAP
DEPARTMENT OF WATER AND POWER
D

RETURN TO WATER
ENGINEERING DESIGN DIVISION
FILE COPY
ENTER SYSTEM
ENGINEERING DESIGN DIV.

bc w/enclosure:
Daniel W. Waters
Michael T. Moore
Frank Salas
Eric J. Tharp
James F. Wickser
Norman L. Buehring
Bruce W. Kuebler
Laurent McReynolds
Duane D. Buchholz
Wayne E. Kruse
James B. McDaniel
Mitchell M. Sakado
Craig A. Davis
Dennis S. Kuo

Chatsworth Reservoir
LA - City Council

October 20, 1992
File No. 92-0305

The Honorable Joan Milke Flores
Chairwoman, Commerce, Energy
and Natural Resources Committee
City of Los Angeles
Room 230, City Hall
Los Angeles, California 90012

Dear Councilwoman Flores:

Feasibility of Repairing Chatsworth Reservoir (Reservoir) and Dam for the Storage of Storm Water

This is in reference to the communication from the Commerce, Energy and Natural Resources Committee dated March 3, 1992, and a Motion adopted at the City Council meeting held on February 25, 1992.

Enclosed is a report on the feasibility of returning the Reservoir to service for the storage of storm water. The report outlines the improvements necessary to return the Reservoir to service and includes conclusions and recommendations.

Should additional information be required, please contact me or have a member of your staff contact Ms. Sandra S. Tanaka at (213) 481-6321.

Sincerely,

ORIGINAL SIGNED
DANIEL W. WATERS
10/21/92
DENNIS S. KUO
OCT 15 1992

DANIEL W. WATERS
General Manager and Chief Engineer

DUANE D. BUCHHOLZ
OCT 19 1992

DSK:db

Enclosure

c w/enclosure:
Councilman John Ferraro
Councilwoman Ruth Galanter
Mr. Konrad Carter
Legislative Assistant
Mr. William R. McCarley
Chief Legislative Analyst
Ms. Sandra S. Tanaka

610-DKSTRMWT

J. B. McDANIEL
OCT 15 1992

CRAIG A. DAVIS
OCT 15 1992

MITCHELL M. SAKADO
OCT 15 1992

CODE 01488

DEPARTMENT OF WATER AND POWER

FOR INTRA-DEPARTMENTAL USE ONLY

August 27, 1987

Mr. Norman J. Powers
Chief Financial Officer
455 General Office Building

Chatsworth Reservoir

Please write off the costs related to the Chatsworth Reservoir as of June 30, 1987. This capital asset of the Water System, which had been out of service since August 1969, has been formally abandoned as a reservoir as of June 30, 1987.

More stringent water quality standards are being imposed by the EPA and the California Department of Health Services as a result of new Safe Drinking Water Act legislation. Water quality degrades in large, open reservoirs like Chatsworth and it is becoming increasingly difficult and costly to maintain the new standards in these reservoirs. During 1987 the Water System completed various studies and concluded that the additional costs of upgrading and replacing of the dams and complying with increased water quality standards precluded refilling the reservoir. For these reasons, the Water System is abandoning the Chatsworth Reservoir and has no current plans to dispose of the 1,100-acre site.

I understand that the $10,674,695 write-off represents costs incurred from 1969 to 1972 to renovate the reservoir and that the original value of the reservoir has been fully depreciated.

If you have any questions, please contact Mr. Carlos V. Solorza of my staff on extension 5938.

ORIGINAL SIGNED
DUANE L. GEORGESON
BY L. M.

DUANE L. GEORGESON
Assistant General Manager - Water

slr

APPROVED:

ORIGINAL SIGNED
PAUL H. LANE

PAUL H. LANE
General Manager and Chief Engineer

JN:jt
cc: O. M. Falkenhagen, Price Waterhouse
B. C. Simpson, Simpson & Simpson
William G. Williams
J. M. Spratt
Laurent McReynolds
Ronald A. McCoy
M. Indermill
C. V. Solorza
J. Nipper

B. WEINSTEIN
OCT 3 1 1987

RECEIVED
SEP 1 1 1987
WATER OPERATING
DIVISION

RES. SURVEILLANCE GROUP

WATER SYSTEM DAMS AND RESERVOIRS

STATUS REPORT

AX 413-1

STATUS REPORT OF DAMS AND RESERVOIRS

Since the February 9, 1971, San Fernando Earthquake the Dams Analysis Group has been engaged in the seismic stability evaluation of Department of Water and Power dams using static and dynamic finite element analysis techniques. At the present time the Department owns and operates thirty-eight reservoirs that are under the jurisdiction of the State Department of Water Resources, Division of Safety of Dams. The Dams, Geology, and Materials Section has prepared a list of these reservoirs for the purpose of reviewing the historical background and the current status of each facility from the standpoint of seismic stability.

The dams are presented in alphabetical order without regard to the size or the method of construction. Elevations are based on USGS datum, and the locations are referenced by air distances.

CHATSWORTH DAMS

Chatsworth Reservoir is located in the west end of the San Fernando Valley, in the City of Los Angeles, approximately 25 miles northwest of the Los Angeles Civic Center.

Chatsworth Reservoir was originally planned to include five dams and dikes. However, only two (Dams No. 2 and No. 3) were actually constructed. Both dams were completed in 1918 by the hydraulic fill method.

The earthquake of August 30, 1930, originating in the Santa Monica Bay (20 miles from the reservoir), caused extensive visible damage to Dam No. 2 and possible damage to Dam No. 3.

Extensive reconstruction, completed in December 1931, resulted in a reservoir with a capacity of about 10,650 acre feet at the spillway elevation of 889.3 feet. The upstream face and crest of Dams Nos. 2 and 3 were removed and replaced with rolled earth fill, and coarse pervious material was placed on the downstream slopes of both dams. However, the hydraulic cores of both dams were essentially left unchanged. Dam No. 2 was raised from elevation 892.4 feet to elevation 901.1 feet (45 feet maximum above the original streambed elevation), and the maximum height of Dam No. 3 was increased from elevation 892.4 feet to elevation 900.4 feet, 48 feet above the original streambed elevation.

In 1948 the construction of earth dikes to cut off the north bay and to prevent contamination by oil and gas seeps reduced the capacity of the reservoir to 9,886 acre feet.

In early 1968 the reservoir was partially drained for a short time to begin work on proposed reservoir improvements. The improvements included: deepening and shaping portions of

the reservoir, constructing earthfill dikes, blanketing cut slopes, constructing storm channels and a tunnel to bypass storm water, and performing other work to improve the water quality and enable maximum use of the reservoir on a year-round basis.

The reservoir was placed in service for the 1968-69 winter, then completely drained in the spring of 1969. In June 1969 improvement work was resumed and continued until October 1972 when most of the planned improvements had been completed. However, due to the heavy damage experienced at the San Fernando Dams (hydraulic fill construction) in the February 1971 San Fernando Earthquake, Chatsworth Reservoir was not returned to service. The reservoir remains empty at the present time.

In May-June 1971 bucket auger holes were drilled in Dam No. 2 and Dam No. 3 to obtain samples and determine in-place soil densities and other material properties. During the period December 1971 to February 1972 additional subsurface investigations were made using a rotary drill rig equipped with a Pitcher sampler. Field data obtained during the drilling and sampling program have been compiled in Report No. AX 185-30, dated March 1972.

Static testing of soils taken from Chatsworth Dam No. 2 were performed by the Water System's Materials Testing Laboratory. Dynamic testing of soils and the analysis of Dam No. 2 were performed by the consulting firm of Woodward, McNeill and Associates. In Report No. AX 185-33, dated September 1972, Woodward-McNeill concluded that "The existing dam and alluvium in their present conditions are not safe against liquefaction due to a large earthquake".

KLEINFELDER
An employee owned company

May 2, 2008
Project No. 92287

Ms. Josephine Gonzalez
Los Angeles Department of Water and Power
111 No. Hope Street, Room 1044
Los Angeles, CA 90012

Subject: **Report of Findings**
Limited Phase II Environmental Site Assessment
Agreement No. 47698 Environmental Investigation and Remediation
Chatsworth Reservoir – Sampling Plan and Investigation
Los Angeles, California

Dear Ms. Gonzalez:

Kleinfelder West, Inc. (Kleinfelder) is pleased to present this Limited Phase II Environmental Site Assessment (ESA) performed at the Chatsworth Reservoir located in the City of Los Angeles, California. The purpose of this ESA is to conduct an investigation in the area that will be transferred to the Los Angeles Department of Recreation and Parks (LADRP) for development as a wetland. Kleinfelder's services were performed pursuant to the Scope of Work dated January 7, 2008 (Revised January 23, 2008). The Site location and vicinity are shown on Plate 1 – Site Location Map.

Our understanding of the project and scope of services is based on our proposal for the Los Angeles Department of Water and Power (LADWP) Task Assignment Proposal (TAP) No. 8, dated January 7, 2008 (Revised January 23, 2008). This proposal presented the scope of work for investigation and constituted the work plan for the project. The following sections of this report contain a brief project description, a summary of field activities performed, laboratory analytical test results, and a discussion of findings.

PROJECT OBJECTIVE

The objective of this ESA is to assess possible soil contaminants that may be present in the 40-acre area immediately west of the Chatsworth Reservoir that the LADWP is planning to transfer to the LADRP for development as a wetland.

PROJECT BACKGROUND

The Chatsworth Reservoir is located in the City of Los Angeles, California, in the Chatsworth community. It was used as a potable water reservoir from 1919 to 1969, and has remained undeveloped since. The Site is bounded on the north by Valley Circle Boulevard, on the east by residential areas west of Highway 27, on the south by

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residential areas north of Roscoe Boulevard, and on the west by Valley Circle Boulevard. LADWP is planning to transfer 40 acres immediately west of the reservoir to the LADRP for development as a wetland. An aerial photograph of the Site is shown on Plate 2 – Site Map.

Kleinfelder reviewed the information provided by LADWP in TAP No. 8, a letter "Response to Questions" from the LADWP dated December 26, 2007, and a portion of a prior report provided by LADWP and prepared by Essential entitled "Site Investigation Report – Final Soil Suitability Evaluation, Chatsworth Reservoir, Chatsworth, California." The date of the report was not provided. According to this report, two nearby sites pose a potential for environmental concern: (1) the former Hughes Aircraft Company (currently Los Angeles County Boeing) located at 8433 Fallbrook Avenue; and (2) Fire Station No. 075 located at 23310 Lake Manor Drive. Based upon Kleinfelder's review of the information, and recommendations in the prior report, Kleinfelder performed a limited Phase II ESA to asses the presence of Total Petroleum Hydrocarbons (TPH), SVOCs, VOCs, PCBs, Pesticides, Herbicides, California Title 22 Metals, Hexavalent Chromium, Arsenic, Thallium, Soil Salinity, and Boron content in soils that may be encountered in the area to be developed as a wetland.

FIELD INVESTIGATION

Health and Safety

Prior to initiation of field activities, a Site-specific Health and Safety Plan (HSP) that addressed safety procedures and work site conditions were discussed with field personnel. Modified Level D safety equipment (steel-toed boots, nitrile gloves, protective work gloves, safety vest, and safety eyewear) was required. Field sampling activities were completed without incident. A copy of the HSP is attached in Appendix A.

Utility Clearance

Prior to beginning work at the Site, Kleinfelder marked soil boring locations and contacted Underground Services Alert (Dig Alert) to provide notification to utility companies of the work to be performed, so that they could locate major utility lines in the vicinity of the proposed boring locations. Dig Alert Number A80580525 was issued to Kleinfelder on February 22, 2008. Kleinfelder also retained the services of a geophysical subcontractor, Geovision, to perform a subsurface geophysical clearance survey at each probe location. No boring locations were moved due to the subsurface geophysical survey.

Subsurface Soil Sampling

The sampling and analysis program included collecting soil samples at 2, 5, 7, and 10 foot bgs at each of the 18 soil test boring locations (KA-1 and KA-18), collected with a direct-push drill rig. All boring locations were covered with exposed soil. The hand-augered borings were advanced to a depth of 5 feet bgs and Geoprobe® borings were advanced to a depth of 10 feet bgs. Upon completion of sampling, borings were backfilled with hydrated granular bentonite.

On Monday, March 10, 2008, Kleinfelder and Coreprobe International arrived on-site with a truck mounted Geoprobe® 4420 direct-push boring rig. At boring locations KA-6, KA-11, and KA-14 through KA-18, the Geoprobe® soil sampling system was attached to deployment rods, advanced to 2, 5, 7, and 10 feet bgs to acquire the desired soil

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samples. The Geoprobe® soil sampling system included a 2-foot long piston-type soil sampler lined with a 2-foot long by 1-inch diameter acetate tube. Kleinfelder collected samples at 2, 5, 7, and 10 feet bgs from borings KA-6, KA-11, and KA-14 through KA-18 with a Geoprobe® soil sampler. For each sample, a portion of the soil core sample, approximately 6-inches long, was cut-off and capped with Teflon® sheeting followed by tight fitting plastic caps. The soil samples were labeled with a soil sample identification number, project number, and date, and placed in an ice-filled chest until delivered for analyses under chain-of-custody record to LADWP's Lab Services.

Boring locations KA-1 through KA-5, KA-7 through KA-10, KA-12, and KA-13 were hand-augered to two feet bgs, and subsequently driven 3 more feet to acquire the desired soil sample. Samples were collected using a manual slide hammer. The slide hammer is equipped with a sampling receptacle that houses a 6-inch long by 2-inch wide brass sampling ring. These boring locations were then advanced to a total depth of 10 feet bgs with the truck mounted Geoprobe® 4420 direct-push boring rig. Kleinfelder collected samples at 7 and 10 feet bgs from these borings with a Geoprobe® soil sampler. Each sample was capped with Teflon® sheeting followed by tight fitting plastic caps. The soil samples were labeled with a soil sample identification number, project number, and date, and placed in an ice-filled chest until delivered for analyses under chain-of-custody record to LADWP Environmental Laboratory.

A portion of the soil sample was processed for Volatile Organic Compound (VOC) analysis per U.S. EPA Method 5035 protocol. Kleinfelder utilized the disposable syringe method to collect the required weight (approximately 5 grams) of soil from the sample sleeve or ring during sampling. The extracted soil sample was then extruded into a laboratory pre-preserved and weighed 40-milliter (ml) vial. Soil samples extruded into 40-ml vials were placed in an ice-chilled, insulated sample container for transportation within 24 hours to the designated analytical laboratory for analysis under chain-of-custody protocol.

Soil samples were screened in the field using a photo-ionization detector (PID) equipped with a 10.6 electron volt detector lamp and calibrated to a 100 parts per million (ppm) isobutylene standard. The PID had a detection limit of 0.1 ppm. Soil from each sample was placed in a clean plastic bag that was subsequently ziplock sealed. The bag remained sealed at ambient air temperature for approximately 20 minutes, to allow possible VOC vapor to volatize in the bag headspace. Then, the probe tip of the PID was placed into the bag and the VOC vapor reading was recorded on the boring logs.

Equipment Decontamination Procedures

Reusable drilling and sampling equipment was decontaminated prior to use to reduce the potential for cross contamination. Geoprobe® core sample barrels, rods, and other downhole implements used during drilling were decontaminated prior to use at each boring location. Sampling equipment was cleaned prior to collecting each soil sample as follows:

- The sample equipment was washed in a non-phosphate detergent (Liquinox) and tap water wash, using a brush to dislodge soil, dirt, or other encrusted materials; and
- Following the detergent wash, the sampling equipment was rinsed in tap water followed by a final rinse in tap water.

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LABORATORY ANALYSES

Each soil sample was promptly labeled, placed in a chilled ice chest, and subsequently transported by a Kleinfelder representative to LADWP Environmental Laboratory for chemical analysis under chain-of-custody protocol.

Each soil sample was analyzed for the following constituents:

- Total petroleum hydrocarbons (TPH), using United States Environmental Protection Agency (US EPA) Method 8015M, for gasoline, diesel, and heavy oil hydrocarbon ranges.
- Volatile organic compounds (VOCs), using US EPA Method 8260B.
- Polychlorinated biphenyls (PCBs), using US EPA Method 8082.
- Semi-volatile organic compounds (SVOCs), using US EPA Method 8270C.
- Title 22 Metals, using US EPA Method 6010B/7470A.
- Hexavalent chromium, using US EPA Method 7199.
- Soil Salinity
- Boron content

Analytical results for the soil samples are summarized in Tables 1 and 2. Copies of the laboratory reports for the analyses are provided in Appendix C.

SOIL FIELD SCREENING RESULTS

Soils encountered in the Geoprobe® borings consisted predominately of silty sand and sandy silt. Soil color ranged from light brown to dark brown. Soils encountered in the hand-augered borings soils range from light brown to dark brown. Groundwater was encountered at 10 feet bgs in borings KA-1, KA-2, and KA-13, and at 8 feet bgs in boring KA-3. All borings were advanced to a total depth of 10 feet bgs.

Hydrocarbon odor and soil staining were not observed in any of the soil samples collected during the subsurface assessment. Organic odor were detected in the boring KA-8 soil sample at 10 feet bgs and in the boring KA-14 soil sample at 7 feet bgs. None of the soil samples had detectable PID field screening readings. Boring logs are included in Appendix B.

LABORATORY ANALYTICAL RESULTS

The laboratory analytical data for TPH, PCBs, VOCs, and SVOCs are tabulated in Table 1. The laboratory analytical data for Metals, Boron content, and Salinity are tabulated in Table 2. The laboratory analytical reports are provided in Appendix C. Laboratory results are summarized as follows:

TPH

Results of the petroleum hydrocarbon analyses are summarized in Table 1. The practical quantitation limit (PQL) for Total Extractable Petroleum Hydrocarbons (TEPH) (C_9-C_{36}) is 25 milligrams per kilogram (mg/kg). TEPH was detected in the sample collected from Boring KA-4 at 2 feet bgs at a concentration of 29.1 mg/kg. In the other

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71 samples analyzed from Boring KA-1 to KA-18, TEPH was not detected above the PQL.

PCBs

A total of 72 soil samples were analyzed for PCBs and the results are summarized in Table 1. No PCBs were detected above the reported PQL which ranged from 0.025 mg/kg to 0.085 mg/kg.

VOCs

A total of 72 soil samples were analyzed for VOCs and the results are summarized in Table 1. No VOCs were detected above the reported PQL which ranged from 9.5 mg/kg to 108.0 mg/kg.

SVOCs

A total of 72 soil samples were analyzed for SVOCs and the results are summarized in Table 1. Bis(2-ethylhexyl)phthalate was detected in seven of the 72 samples analyzed. The maximum concentration detected was 9.240 mg/kg in Boring KA-17 at 7 feet bgs.

METALS

The results of the metals analysis is summarized in Table 2. A total of 72 soil samples were analyzed for CCR Title 22 Metals and Hexavalent Chromium. A total of 12 of the 17 Title 22 metals and Hexavalent Chromium were detected above the respective PQL in one or more of the analyzed samples. The detected metals and maximum concentration of each (with boring/depth where collected) are summarized below:

Antimony – 9.0 mg/kg (KA-11 at 7 feet bgs)

Arsenic – 23.3 mg/kg (KA-13 at 5 feet bgs)

Barium – 194.9 mg/kg (KA-17 at 10 feet bgs)

Beryllium – 1.9 mg/kg (KA-8 at 10 feet bgs)

Chromium (total) – 25.7 mg/kg (KA-17 at 10 feet bgs)

Cobalt – 50.6 mg/kg (KA-8 at 10 feet bgs)

Copper – 148.0 mg/kg (KA-5 at 5 feet bgs)

Hexavalent Chromium – 0.624 (KA-5 at 5 feet bgs)

Lead – 26.8 mg/kg (KA-9 at 7 feet bgs)

Molybdenum – 1.6 mg/kg (KA-5 at 5 feet bgs)

Nickel – 23.1 mg/kg (KA-9 at 5 feet bgs)

Vanadium – 51.4 mg/kg (KA-17 at 10 feet bgs)

Zinc – 85.2 mg/kg (KA-17 at 10 feet bgs)

Cadmium, mercury, selenium, silver and thallium were not detected above their respective PQLs in the 72 samples analyzed.

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Boron

A total of 72 soil samples were analyzed for Boron and the results are summarized in Table 2. The maximum concentration detected was 20.1 mg/kg in Boring KA-16 at 2 feet bgs.

Salinity

A total of 72 soil samples were analyzed for Salinity and the results are summarized in Table 2. The maximum concentration detected was 2.3 grams per liter (g/L) in Boring KA-16 at 2 feet bgs.

CHEMICALS OF POTENTIAL CONCERN (COPC)

Based on our review of the analytical results of this limited Phase II ESA, the COPCs identified in soil at the Site, which may warrant further evaluation, include the following:

Arsenic

SELECTION OF TIER I RISK ASSESSMENT SCREENING LEVELS

Kleinfelder utilized the following screening levels for use in comparing with the soil analytical data generated by the Phase II ESA (i.e., in a Tier I Risk Assessment):

- *US EPA Region 9 2004 Preliminary Remediation Goals (PRGs) for residential and industrial (/commercial) scenarios.* The PRGs are tools for evaluating and cleaning up contaminated sites, and are available on US EPA Region 9's World Wide Web site at http://www.epa.gov/region09/waste/sfund/prg/index.htm. The PRGs are human health risk-based concentrations that are intended to assist risk assessors and others in performing initial screening-level evaluations of environmental measurements. The residential PRGs are lower and therefore more health protective values than the corresponding values for industrial sites. US EPA notes that a chemical concentration exceeding the PRGs does not mean a site is "dirty" or requires a response action, but rather exceeding the PRG suggests that further evaluation of the potential risks that could be posed by site contaminants may be appropriate. The respective residential PRGs for each of the detected metals are included in Table 2.
- *Cal/EPA 2005 California Human Health Screening Levels (CHHSLs) for residential and industrial (/commercial) scenarios.* The CHHSLs are tools for evaluating and cleaning up contaminated sites. The CHHSLs are human health risk-based concentrations that are intended to assist risk assessors and others in performing initial screening-level evaluations of environmental measurements. The residential CHHSLs are lower and therefore more health protective values than the corresponding values for industrial sites. Cal/EPA notes that a chemical concentration exceeding the CHHSLs does not mean that a site is "dirty" or requires a response action, but rather exceeding the CHHSL suggests that further evaluation of the potential risks that could be posed by site contaminants may be appropriate. The respective residential CHHSLs for the detected metals are included in Table 2.

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RESULT OF COMPARISON WITH SCREENING LEVELS

Comparison of Sample Results

The results of our comparison of the detected COPC concentrations in Site soil with the screening values is summarized as follows:

- *US EPA Region 9 2004 Preliminary Remediation Goals (PRGs) for residential soils.*
  - Arsenic was detected in all 72 soil samples at concentrations above the corresponding residential soil PRGs. The detected metal concentrations are less than the corresponding residential and industrial soil PRGs.
- *Cal/EPA CHHSLs for residential scenarios.*
  - Arsenic was detected in all 72 soil samples at concentrations above the corresponding residential and industrial soil CHHSLs. Other metals were detected at concentrations less than the corresponding residential and industrial soil CHHSLs.

Evaluation of COPCs on Site-Wide Basis

The maximum detected concentration of TPH is less than the Los Angeles Regional Waster Quality Control Board (LARWQCB) Maximum Soil Screening Level for TPH at 100 mg/kg, so TPH is eliminated as a COPC. PCBs and VOCs were not detected above the reported PQLs. The maximum detected concentration of Bis(2-ethylhexyl)phthalate is less than the corresponding PRG of 35 mg/kg.

All soil samples contained detected concentrations of Arsenic at levels higher than the corresponding residential and industrial PRG and the residential and industrial CHHSL levels. As a point of comparison to assess the environmental context of the encountered arsenic concentrations, a statistical analysis of background soil samples performed by Cal/EPA revealed that the 95 percent Upper Confidence Limit of the 99th Percentile concentration for arsenic in the Los Angeles Unified School District (LAUSD) is 6 mg/kg (Cal/EPA, *"Final Report, Background Metals at Los Angeles Unified School Sites – ARSENIC,"* June 6, 2005). Only four of the 72 analyzed soil samples contained detected concentrations of Arsenic at levels below 6.0 mg/kg. Therefore, Arsenic is considered a COPC.

DISCUSSION

Based on Kleinfelder's experience and the above findings, Arsenic is a COPC. At this time Kleinfelder recommends additional soil sampling to establish a background concentration baseline to accurately assess whether the arsenic concentrations observed in the soil samples reflect native background levels, or are the result of Site activity that caused a release of arsenic.

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LIMITATIONS

This report was prepared in accordance with the generally accepted standard of care practiced by environmental consultants, which existed in southern California at the time of investigation. The soil sampling discussed herein was intended to characterize the shallow subsurface at the locations sampled. The assessment is based on field observations, field monitoring, and laboratory analytical results obtained from samples collected at the subject Site. This assessment did not include sampling for other types of contaminants, or sampling at locations other than those indicated. Kleinfelder should be notified for additional consultation if the client wishes to reduce the uncertainties beyond the level associated with this report.

Regulations and professional standards applicable to Kleinfelder's services are continually evolving. Techniques are, by necessity, often new and relatively untried. Different professionals may reasonably adopt different approaches to similar problems. Therefore, no warranty or guarantee, expressed or implied, will be included in Kleinfelder's scope of service.

This document may be used only by the client and only for the purposes stated, within a reasonable time from its issuance, but in no event later than 1 year from the date of the report. Land use, site conditions (both on site and off site) or other factors may change over time, and additional work may be required with the passage of time. Based on the intended use of the report, Kleinfelder may require that additional work be performed and that an updated report be issued. Non-compliance with any of these requirements by the client or anyone else will release Kleinfelder from any liability resulting from the use of this document by any unauthorized party.

REFERENCES

California Environmental Protection Agency (Cal/EPA), 2005a, *Use of California Human Health Screening Levels (CHHSLs) in Evaluation of Contaminated Properties*, January.

Department of Toxic Substance Control, 2005, *Final Report, Background Metals at Los Angeles Unified School Sites – Arsenic,* June 6.

Los Angeles Regional Water Quality Control Board (LARWQCB), 1996, *Interim Site Assessment & Cleanup Guidebook*, May.

Department of Toxic Substance Control, 2005, *Final Report, Background Metals at Los Angeles Unified School Sites – Arsenic,* June 6.

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We trust you find the enclosed information helpful and in keeping with your expectations. We thank you for the opportunity to provide Kleinfelder's professional environmental services and look forward to working with LADWP on other projects. Please call the undersigned should you have any questions.

Sincerely,

KLEINFELDER WEST, INC.

Lindia Liu
Staff Engineer

David M. Johnson
Manager, Environmental and
Water Resources

Attachments:

Tables:

Table 1 Soil Analytical Data – TPH, PCBs, VOCs, and SVOCs
Table 2 Soil Analytical Data – CCR Title 22 Metals, Boron, and Salinity

Plates:

Plate 1 Site Location Map
Plate 2 Site Map with Boring Locations

Appendices:

Appendix A: Site-specific Health and Safety Plan
Appendix B: Boring Logs
Appendix C: Laboratory Analytical Report and Chain-of-Custody Form

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TABLES

TABLE 1
SOIL ANALYTICAL DATA - TPH, PCBs, VOCs, and SVOCs.
CHATSWORTH RESERVOIR LOS ANGELES, CALIFORNIA

Boring	Sample Number	Sample Depth	Sample Date	TPH (Total)	PCBs	VOCs	SVOCs	
							8270D (mg/kg)	
		(feet)		8015M (mg/kg)	8082A (mg/kg)	8260B (mg/kg)	Di-n-Butylphthalate	Bis(2-ethylhexyl)phthalate
KA 1	KA 1-2'	2	3/10/2008	ND (25)	ND (0.025 - 0.085)	ND (9.5 - 108.0)	ND (0.830)	ND (1.729)
KA 1	KA 1-5'	5	3/10/2008	ND (25)	ND (0.025 - 0.085)	ND (9.5 - 108.0)	ND (0.830)	ND (1.729)
KA 1	KA 1-7'	7	3/10/2008	ND (25)	ND (0.025 - 0.085)	ND (9.5 - 108.0)	ND (0.830)	ND (1.729)
KA 1	KA 1-10'	10	3/10/2008	ND (25)	ND (0.025 - 0.085)	ND (9.5 - 108.0)	ND (0.830)	ND (1.729)
KA 2	KA 2-2'	2	3/10/2008	ND (25)	ND (0.025 - 0.085)	ND (9.5 - 108.0)	ND (0.830)	ND (1.729)
KA 2	KA 2-5'	5	3/10/2008	ND (25)	ND (0.025 - 0.085)	ND (9.5 - 108.0)	ND (0.830)	ND (1.729)
KA 2	KA 2-7'	7	3/10/2008	ND (25)	ND (0.025 - 0.085)	ND (9.5 - 108.0)	ND (0.830)	ND (1.729)
KA 2	KA 2-10'	10	3/10/2008	ND (25)	ND (0.025 - 0.085)	ND (9.5 - 108.0)	ND (0.830)	ND (1.729)
KA 3	KA 3-2'	2	3/10/2008	ND (25)	ND (0.025 - 0.085)	ND (9.5 - 108.0)	ND (0.830)	ND (1.729)
KA 3	KA 3-5'	5	3/10/2008	ND (25)	ND (0.025 - 0.085)	ND (9.5 - 108.0)	ND (0.830)	ND (1.729)
KA 3	KA 3-7'	7	3/10/2008	ND (25)	ND (0.025 - 0.085)	ND (9.5 - 108.0)	ND (0.830)	ND (1.729)
KA 3	KA 3-10'	10	3/10/2008	ND (25)	ND (0.025 - 0.085)	ND (9.5 - 108.0)	ND (0.830)	ND (1.729)
KA 4	KA 4-2'	2	3/10/2008	29.1	ND (0.025 - 0.085)	ND (9.5 - 108.0)	ND (0.830)	ND (1.729)
KA 4	KA 4-5'	5	3/10/2008	ND (25)	ND (0.025 - 0.085)	ND (9.5 - 108.0)	ND (0.830)	ND (1.729)
KA 4	KA 4-7'	7	3/10/2008	ND (25)	ND (0.025 - 0.085)	ND (9.5 - 108.0)	ND (0.830)	ND (1.729)
KA 4	KA 4-10'	10	3/10/2008	ND (25)	ND (0.025 - 0.085)	ND (9.5 - 108.0)	ND (0.830)	ND (1.729)
KA 5	KA 5-2'	2	3/10/2008	ND (25)	ND (0.025 - 0.085)	ND (9.5 - 108.0)	ND (0.830)	ND (1.729)
KA 5	KA 5-5'	5	3/10/2008	ND (25)	ND (0.025 - 0.085)	ND (9.5 - 108.0)	ND (0.830)	ND (1.729)
KA 5	KA 5-7'	7	3/10/2008	ND (25)	ND (0.025 - 0.085)	ND (9.5 - 108.0)	0.781 J	ND (1.729)
KA 5	KA 5-10'	10	3/10/2008	ND (25)	ND (0.025 - 0.085)	ND (9.5 - 108.0)	ND (0.830)	1.660 J
KA 6	KA 6-2'	2	3/10/2008	ND (25)	ND (0.025 - 0.085)	ND (9.5 - 108.0)	ND (0.830)	0.616 J
KA 6	KA 6-5'	5	3/10/2008	ND (25)	ND (0.025 - 0.085)	ND (9.5 - 108.0)	ND (0.830)	ND (1.729)
KA 6	KA 6-7'	7	3/10/2008	ND (25)	ND (0.025 - 0.085)	ND (9.5 - 108.0)	ND (0.830)	0.528 J
KA 6	KA 6-10'	10	3/10/2008	ND (25)	ND (0.025 - 0.085)	ND (9.5 - 108.0)	ND (0.830)	0.400 J
KA 7	KA 7-2'	2	3/10/2008	ND (25)	ND (0.025 - 0.085)	ND (9.5 - 108.0)	ND (0.830)	0.985 J
KA 7	KA 7-5'	5	3/10/2008	ND (25)	ND (0.025 - 0.085)	ND (9.5 - 108.0)	ND (0.830)	ND (1.729)
KA 7	KA 7-7'	7	3/10/2008	ND (25)	ND (0.025 - 0.085)	ND (9.5 - 108.0)	ND (0.830)	ND (1.729)
KA 7	KA 7-10'	10	3/10/2008	ND (25)	ND (0.025 - 0.085)	ND (9.5 - 108.0)	ND (0.830)	ND (1.729)
KA 8	KA 8-2'	2	3/10/2008	ND (25)	ND (0.025 - 0.085)	ND (9.5 - 108.0)	ND (0.830)	4.620
KA 8	KA 8-5'	5	3/10/2008	ND (25)	ND (0.025 - 0.085)	ND (9.5 - 108.0)	ND (0.830)	0.495 J
KA 8	KA 8-7'	7	3/10/2008	ND (25)	ND (0.025 - 0.085)	ND (9.5 - 108.0)	ND (0.830)	ND (1.729)
KA 8	KA 8-10'	10	3/10/2008	ND (25)	ND (0.025 - 0.085)	ND (9.5 - 108.0)	ND (0.830)	ND (1.729)

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TABLE 1
SOIL ANALYTICAL DATA - TPH, PCBs, VOCs, and SVOCs.
CHATSWORTH RESERVOIR LOS ANGELES, CALIFORNIA

Boring	Sample Number	Sample Depth	Sample Date	TPH (Total)	PCBs	VOCs	SVOCs	
							8270D (mg/kg)	
		(feet)		8015M (mg/kg)	8082A (mg/kg)	8260B (mg/kg)	Di-n-Butylphthalate	Bis(2-ethylhexyl)phthalate
KA 9	KA 9-2'	2	3/10/2008	ND (25)	ND (0.025 - 0.085)	ND (9.5 - 108.0)	ND (0.830)	ND (1.729)
KA 9	KA 9-5'	5	3/10/2008	ND (25)	ND (0.025 - 0.085)	ND (9.5 - 108.0)	ND (0.830)	ND (1.729)
KA 9	KA 9-7'	7	3/10/2008	ND (25)	ND (0.025 - 0.085)	ND (9.5 - 108.0)	ND (0.830)	1.680 J
KA 9	KA 9-10'	10	3/10/2008	ND (25)	ND (0.025 - 0.085)	ND (9.5 - 108.0)	ND (0.830)	ND (1.729)
KA 10	KA 10-2'	2	3/10/2008	ND (25)	ND (0.025 - 0.085)	ND (9.5 - 108.0)	ND (0.830)	ND (1.729)
KA 10	KA 10-5'	5	3/10/2008	ND (25)	ND (0.025 - 0.085)	ND (9.5 - 108.0)	ND (0.830)	ND (1.729)
KA 10	KA 10-7'	7	3/10/2008	ND (25)	ND (0.025 - 0.085)	ND (9.5 - 108.0)	ND (0.830)	ND (1.729)
KA 10	KA 10-10'	10	3/10/2008	ND (25)	ND (0.025 - 0.085)	ND (9.5 - 108.0)	ND (0.830)	1.290 J
KA 11	KA 11-2'	2	3/10/2008	ND (25)	ND (0.025 - 0.085)	ND (9.5 - 108.0)	ND (0.830)	ND (1.729)
KA 11	KA 11-5'	5	3/10/2008	ND (25)	ND (0.025 - 0.085)	ND (9.5 - 108.0)	ND (0.830)	1.640 J
KA 11	KA 11-7'	7	3/10/2008	ND (25)	ND (0.025 - 0.085)	ND (9.5 - 108.0)	ND (0.830)	0.592 J
KA 11	KA 11-10'	10	3/10/2008	ND (25)	ND (0.025 - 0.085)	ND (9.5 - 108.0)	ND (0.830)	ND (1.729)
KA 12	KA 12-2'	2	3/10/2008	ND (25)	ND (0.025 - 0.085)	ND (9.5 - 108.0)	ND (0.830)	0.558 J
KA 12	KA 12-5'	5	3/10/2008	ND (25)	ND (0.025 - 0.085)	ND (9.5 - 108.0)	ND (0.830)	ND (1.729)
KA 12	KA 12-7'	7	3/10/2008	ND (25)	ND (0.025 - 0.085)	ND (9.5 - 108.0)	0.254 J	1.840
KA 12	KA 12-10'	10	3/10/2008	ND (25)	ND (0.025 - 0.085)	ND (9.5 - 108.0)	ND (0.830)	ND (1.729)
KA 13	KA 13-2'	2	3/10/2008	ND (25)	ND (0.025 - 0.085)	ND (9.5 - 108.0)	ND (0.830)	0.541 J
KA 13	KA 13-5'	5	3/10/2008	ND (25)	ND (0.025 - 0.085)	ND (9.5 - 108.0)	ND (0.830)	ND (1.729)
KA 13	KA 13-7'	7	3/10/2008	ND (25)	ND (0.025 - 0.085)	ND (9.5 - 108.0)	ND (0.830)	1.190 J
KA 13	KA 13-10'	10	3/10/2008	ND (25)	ND (0.025 - 0.085)	ND (9.5 - 108.0)	ND (0.830)	1.600 J
KA 14	KA 14-2'	2	3/10/2008	ND (25)	ND (0.025 - 0.085)	ND (9.5 - 108.0)	ND (0.830)	0.359 J
KA 14	KA 14-5'	5	3/10/2008	ND (25)	ND (0.025 - 0.085)	ND (9.5 - 108.0)	ND (0.830)	ND (1.729)
KA 14	KA 14-7'	7	3/10/2008	ND (25)	ND (0.025 - 0.085)	ND (9.5 - 108.0)	ND (0.830)	ND (1.729)
KA 14	KA 14-10'	10	3/10/2008	ND (25)	ND (0.025 - 0.085)	ND (9.5 - 108.0)	ND (0.830)	0.949 J
KA 15	KA 15-2'	2	3/10/2008	ND (25)	ND (0.025 - 0.085)	ND (9.5 - 108.0)	ND (0.830)	ND (1.729)
KA 15	KA 15-5'	5	3/10/2008	ND (25)	ND (0.025 - 0.085)	ND (9.5 - 108.0)	ND (0.830)	2.350
KA 15	KA 15-7'	7	3/10/2008	ND (25)	ND (0.025 - 0.085)	ND (9.5 - 108.0)	ND (0.830)	ND (1.729)
KA 15	KA 15-10'	10	3/10/2008	ND (25)	ND (0.025 - 0.085)	ND (9.5 - 108.0)	ND (0.830)	0.420 J
KA 16	KA 16-2'	2	3/10/2008	ND (25)	ND (0.025 - 0.085)	ND (9.5 - 108.0)	ND (0.830)	0.738 J
KA 16	KA 16-5'	5	3/10/2008	ND (25)	ND (0.025 - 0.085)	ND (9.5 - 108.0)	ND (0.830)	ND (1.729)
KA 16	KA 16-7'	7	3/10/2008	ND (25)	ND (0.025 - 0.085)	ND (9.5 - 108.0)	ND (0.830)	ND (1.729)
KA 16	KA 16-10'	10	3/10/2008	ND (25)	ND (0.025 - 0.085)	ND (9.5 - 108.0)	ND (0.830)	ND (1.729)

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TABLE 1
SOIL ANALYTICAL DATA - TPH, PCBs, VOCs, and SVOCs.
CHATSWORTH RESERVOIR LOS ANGELES, CALIFORNIA

Boring	Sample Number	Sample Depth	Sample Date	TPH (Total)	PCBs	VOCs	SVOCs	
							8270D (mg/kg)	
		(feet)		8015M (mg/kg)	8082A (mg/kg)	8260B (mg/kg)	Di-n-Butylphthalate	Bis(2-ethylhexyl)phthalate
KA 17	KA 17-2'	2	3/10/2008	ND (25)	ND (0.025 - 0.085)	ND (9.5 - 108.0)	ND (0.830)	1.870
KA 17	KA 17-5'	5	3/10/2008	ND (25)	ND (0.025 - 0.085)	ND (9.5 - 108.0)	ND (0.830)	0.730 J
KA 17	KA 17-7'	7	3/10/2008	ND (25)	ND (0.025 - 0.085)	ND (9.5 - 108.0)	ND (0.830)	9.240
KA 17	KA 17-10'	10	3/10/2008	ND (25)	ND (0.025 - 0.085)	ND (9.5 - 108.0)	ND (0.830)	1.000 J
KA 18	KA 18-2'	2	3/10/2008	ND (25)	ND (0.025 - 0.085)	ND (9.5 - 108.0)	ND (0.830)	1.380 J
KA 18	KA 18-5'	5	3/10/2008	ND (25)	ND (0.025 - 0.085)	ND (9.5 - 108.0)	ND (0.830)	ND (1.729)
KA 18	KA 18-7'	7	3/10/2008	ND (25)	ND (0.025 - 0.085)	ND (9.5 - 108.0)	ND (0.830)	2.600
KA 18	KA 18-10'	10	3/10/2008	ND (25)	ND (0.025 - 0.085)	ND (9.5 - 108.0)	ND (0.830)	4.290

ND (10) Not detected above the reporting limit, which is shown in parentheses
8015M United States Environmental Protection Agency analytical method number
mg/kg Concentration in milligrams per kilogram
TPH Total petroleum hydrcarbons
VOCs Volatile organic compounds

SVOCs Semi-volatile organic compounds

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TABLE 2
SOIL ANALYTICAL DATA - CCR TITLE 22 METALS, BORON, AND SALINITY
CHATSWORTH RESERVOIR
LOS ANGELES, CALIFORNIA

Sample Number	Antimony	Arsenic	Barium	Beryllium	Cadmium	Hexavalent Chromium	Total Chromium	Cobalt	Copper	Lead	Mercury	Molybdenum	Nickel	Selenium	Silver	Thallium	Vanadium	Zinc	Boron	Salinity
	6010B (mg/kg)	6010B (mg/kg)	6010B (mg/kg)	6010B (mg/kg)	6010B (mg/kg)	7199 (mg/kg)	6010B (mg/kg)	6010B (mg/kg)	6010B (mg/kg)	6010B (mg/kg)	7471A (mg/kg)	6010B (mg/kg)	6010B (mg/kg)	6010B (mg/kg)	6010B (mg/kg)	6010B (mg/kg)	6010B (mg/kg)	6010B (mg/kg)	6010B (mg/kg)	2520B (g/L)
KA 1-2'	ND (4.0)	10.7	130.3	0.5 J	1.1 J	0.574	12.6	20.8	7.2	16.0	ND (0.17)	0.2 J	15.0	ND (3.5)	ND (12.5)	ND (12.5)	30.4	47.5	5.2	< 0.1
KA 1-5'	ND (4.0)	6.9	94.4	0.6 J	0.8 J	0.562	17.1	13.6	12.1	7.9	ND (0.17)	ND (1.0)	12.4	ND (3.5)	ND (12.5)	ND (12.5)	30.0	52.7	5.9	0.1
KA 1-7'	ND (4.0)	10.1	70.4	0.5 J	1.3 J	0.250 J	15.3	11.7	11.6	8.4	ND (0.17)	ND (1.0)	10.3	ND (3.5)	ND (12.5)	ND (12.5)	29.3	47.8	7.5	0.4
KA 1-10'	ND (4.0)	6.6	68.2	0.4 J	1.4 J	0.228 J	13.6	9.6	8.7	8.5	ND (0.17)	ND (1.0)	10.2	ND (3.5)	ND (12.5)	ND (12.5)	22.9	41.8	5.6	0.3
KA 2-2'	ND (4.0)	9.0	95.8	0.6 J	1.4 J	0.378 J	17.6	13.8	11.9	10.3	ND (0.17)	ND (1.0)	12.8	ND (3.5)	ND (12.5)	ND (12.5)	29.8	52.9	5.6	<0.1
KA 2-5'	ND (4.0)	8.0	74.3	0.5 J	1.7 J	0.568	17.7	11.5	12.5	17.0	ND (0.17)	1.3	11.0	ND (3.5)	ND (12.5)	ND (12.5)	24.8	53.2	6.1	0.4
KA 2-7'	ND (4.0)	11.1	94.6	0.6 J	1.7 J	0.283 J	16.3	12.8	11.4	15.2	ND (0.17)	ND (1.0)	13.0	ND (3.5)	ND (12.5)	ND (12.5)	30.1	53.5	7.0	0.4
KA 2-10'	1.2 J	8.5	115.3	0.6 J	1.0 J	0.235 J	16.2	13.9	10.7	6.6	ND (0.17)	ND (1.0)	11.4	ND (3.5)	ND (12.5)	ND (12.5)	32.6	50.2	6.4	0.4
KA 3-2'	ND (4.0)	7.6	102.3	0.5 J	1.6 J	0.348 J	16.6	11.8	13.0	14.1	ND (0.17)	0.9 J	14.4	ND (3.5)	ND (12.5)	ND (12.5)	24.6	48.9	4.8	<0.1
KA 3-5'	ND (4.0)	8.6	87.0	0.6 J	1.5 J	0.278 J	18.1	13.5	10.9	10.7	ND (0.17)	0.6 J	11.8	ND (3.5)	ND (12.5)	ND (12.5)	26.7	47.2	5.4	0.1
KA 3-7'	1.0 J	8.7	81.2	0.6 J	1.1 J	0.514	15.2	11.7	11.2	8.4	ND (0.17)	ND (1.0)	11.2	ND (3.5)	ND (12.5)	ND (12.5)	26.4	44.8	4.5	0.1
KA 3-10'	1.0 J	9.4	103.5	0.6 J	1.6 J	0.289 J	14.9	12.8	10.6	11.4	ND (0.17)	0.2 J	12.5	ND (3.5)	ND (12.5)	ND (12.5)	27.9	46.6	4.7	0.1
KA 4-2'	ND (4.0)	8.6	95.8	0.5 J	1.3 J	0.290 J	16.1	12.5	14.0	15.1	ND (0.17)	ND (1.0)	11.8	ND (3.5)	ND (12.5)	ND (12.5)	26.5	52.6	6.2	0.1
KA 4-5'	ND (4.0)	6.8	77.5	0.6 J	1.5 J	0.397 J	17.7	14.2	12.3	9.5	ND (0.17)	0.4 J	13.5	ND (3.5)	ND (12.5)	ND (12.5)	28.9	47.4	5.9	0.1
KA 4-7'	ND (4.0)	7.0	80.7	0.6 J	1.2 J	0.288 J	17.0	13.7	10.7	7.9	ND (0.17)	0.4 J	12.8	ND (3.5)	ND (12.5)	ND (12.5)	29.6	48.0	6.1	0.1
KA 4-10'	ND (4.0)	6.4	78.9	0.5 J	1.0 J	0.279 J	12.9	11.6	9.6	8.7	ND (0.17)	ND (1.0)	10.7	ND (3.5)	ND (12.5)	ND (12.5)	24.5	45.0	5.9	0.2
KA 5-2'	ND (4.0)	8.1	63.9	0.4 J	1.2 J	0.370 J	12.1	9.8	61.0	11.8	ND (0.17)	ND (1.0)	8.6	ND (3.5)	ND (12.5)	ND (12.5)	20.7	40.1	4.6	0.1
KA 5-5'	ND (4.0)	11.7	89.4	0.6 J	1.5 J	0.624	20.4	12.0	148.0	16.2	ND (0.17)	1.6	12.8	ND (3.5)	ND (12.5)	ND (12.5)	26.1	53.7	5.9	0.1
KA 5-7'	ND (4.0)	7.2	60.7	0.4 J	1.3 J	0.432 J	11.5	9.1	13.2	9.4	ND (0.17)	0.5 J	7.9	ND (3.5)	ND (12.5)	ND (12.5)	21.4	37.8	4.0	0.1
KA 5-10'	8.7	8.7	76.1	0.8 J	1.3 J	0.254 J	18.0	16.7	12.2	13.3	ND (0.17)	0.9 J	11.1	ND (3.5)	ND (12.5)	ND (12.5)	34.8	51.7	5.2	0.1
KA 6-2'	1.7 J	8.3	93.2	0.6 J	0.8 J	0.336 J	19.3	13.5	20.7	9.5	ND (0.17)	0.4 J	13.1	ND (3.5)	ND (12.5)	ND (12.5)	30.5	49.6	6.4	0.1
KA 6-5'	ND (4.0)	10.2	93.4	0.7 J	1.0 J	0.275 J	18.2	13.7	30.7	12.0	ND (0.17)	0.3 J	11.6	ND (3.5)	ND (12.5)	ND (12.5)	30.8	51.3	7.6	0.4
KA 6-7'	ND (4.0)	7.4	72.4	0.5 J	0.9 J	0.365 J	14.1	10.2	80.4	11.1	ND (0.17)	ND (1.0)	9.2	ND (3.5)	ND (12.5)	ND (12.5)	22.1	43.0	6.3	0.4
KA 6-10'	2.8 J	8.5	83.2	0.7 J	1.0 J	0.235 J	16.9	12.5	10.4	7.0	ND (0.17)	ND (1.0)	10.7	ND (3.5)	ND (12.5)	ND (12.5)	29.5	49.8	6.7	0.3
KA 7-2'	ND (4.0)	8.5	89.0	0.6 J	0.8 J	0.341 J	15.3	12.7	11.1	6.6	ND (0.17)	ND (1.0)	11.1	ND (3.5)	ND (12.5)	ND (12.5)	26.2	47.6	5.1	0.1
KA 7-5'	2.2 J	12.0	107.6	0.8 J	1.2 J	0.354 J	20.1	14.8	12.5	9.7	ND (0.17)	ND (1.0)	13.7	ND (3.5)	ND (12.5)	ND (12.5)	35.1	58.4	11.5	0.5
KA 7-7'	ND (4.0)	7.4	93.9	0.7 J	ND (3.0)	0.326 J	17.0	13.3	10.8	7.6	ND (0.17)	ND (1.0)	11.6	ND (3.5)	ND (12.5)	ND (12.5)	29.3	52.4	7.4	0.3
KA 7-10'	ND (4.0)	7.0	50.8	0.5 J	0.9 J	0.205 J	12.7	8.7	6.2	8.5	ND (0.17)	0.3 J	8.0	ND (3.5)	ND (12.5)	ND (12.5)	21.6	37.6	4.6	0.1

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TABLE 2
SOIL ANALYTICAL DATA - CCR TITLE 22 METALS, BORON, AND SALINITY
CHATSWORTH RESERVOIR
LOS ANGELES, CALIFORNIA

Sample Number	Antimony	Arsenic	Barium	Beryllium	Cadmium	Hexavalent Chromium	Total Chromium	Cobalt	Copper	Lead	Mercury	Molybdenum	Nickel	Selenium	Silver	Thallium	Vanadium	Zinc	Boron	Salinity
	6010B (mg/kg)	6010B (mg/kg)	6010B (mg/kg)	6010B (mg/kg)	6010B (mg/kg)	7199 (mg/kg)	6010B (mg/kg)	6010B (mg/kg)	6010B (mg/kg)	6010B (mg/kg)	7471A (mg/kg)	6010B (mg/kg)	6010B (mg/kg)	6010B (mg/kg)	6010B (mg/kg)	6010B (mg/kg)	6010B (mg/kg)	6010B (mg/kg)	6010B (mg/kg)	2520B (g/L)
KA 8-2'	ND (4.0)	6.0	40.5	0.3 J	0.7 J	0.263 J	10.0	7.8	4.9	7.4	ND (0.17)	ND (1.0)	5.7	ND (3.5)	ND (12.5)	ND (12.5)	15.6	27.4	2.6	<0.1
KA 8-5'	1.3 J	11.2	160.4	0.9 J	0.8 J	0.229 J	16.1	13.5	15.9	12.6	ND (0.17)	0.3 J	8.7	ND (3.5)	ND (12.5)	ND (12.5)	32.4	49.3	6.3	0.2
KA 8-7'	ND (4.0)	10.6	97.4	0.8 J	1.4 J	0.250 J	14.5	10.4	14.1	15.5	ND (0.17)	0.5 J	6.3	ND (3.5)	ND (12.5)	ND (12.5)	22.1	45.1	4.2	0.3
KA 8-10'	ND (4.0)	19.6	132.5	1.9	0.9 J	0.239 J	16.9	50.6	28.9	16.5	ND (0.17)	0.3 J	21.8	ND (3.5)	ND (12.5)	ND (12.5)	28.5	84.8	5.5	0.2
KA 9-2'	5.8	7.7	148.2	0.8 J	1.0 J	0.250 J	18.3	15.6	13.6	10.9	ND (0.17)	ND (1.0)	12.6	ND (3.5)	ND (12.5)	ND (12.5)	33.8	50.4	5.7	0.8
KA 9-5'	ND (4.0)	13.8	182.5	1.3 J	2.0 J	0.301 J	25.6	25.4	19.5	18.9	ND (0.17)	ND (1.0)	23.1	ND (3.5)	ND (12.5)	ND (12.5)	45.6	69.6	6.9	0.2
KA 9-7'	4.0 J	13.0	122.1	1.1 J	1.8 J	0.273 J	23.8	32.2	21.0	26.8	ND (0.17)	0.4 J	20.0	ND (3.5)	ND (12.5)	ND (12.5)	42.3	77.8	6.6	0.1
KA 9-10'	ND (4.0)	14.6	99.3	1.2 J	1.8 J	0.254 J	25.1	28.6	21.6	20.2	ND (0.17)	ND (1.0)	19.7	ND (3.5)	ND (12.5)	ND (12.5)	45.5	82.8	6.4	0.1
KA 10-2'	1.6 J	10.2	79.5	0.5 J	ND (3.0)	0.198 J	12.7	10.2	8.5	7.3	ND (0.17)	ND (1.0)	9.5	ND (3.5)	ND (12.5)	ND (12.5)	24.9	44.1	6.2	1.5
KA 10-5'	ND (4.0)	6.0	66.6	0.5 J	1.0 J	0.255 J	11.7	9.5	7.9	6.2	ND (0.17)	0.4 J	8.3	ND (3.5)	ND (12.5)	ND (12.5)	21.9	32.3	4.0	0.2
KA 10-7'	7.7	9.5	89.7	0.7 J	0.8 J	0.242 J	16.0	11.0	9.2	7.9	ND (0.17)	ND (1.0)	10.9	ND (3.5)	ND (12.5)	ND (12.5)	30.1	41.5	5.9	0.2
KA 10-10'	3.4 J	12.5	104.3	0.8 J	0.9 J	0.239 J	19.2	13.1	12.2	12.9	ND (0.17)	0.3 J	12.9	ND (3.5)	ND (12.5)	ND (12.5)	33.9	49.1	6.7	0.2
KA 11-2'	2.8 J	6.7	86.5	0.6 J	0.9 J	0.490 J	15.6	16.4	13.5	7.8	ND (0.17)	0.3 J	11.5	ND (3.5)	ND (12.5)	ND (12.5)	29.2	41.5	7.1	0.9
KA 11-5'	4.8	14.6	92.9	1.1 J	1.7 J	0.400 J	23.4	15.8	15.4	18.7	ND (0.17)	0.3 J	17.5	ND (3.5)	ND (12.5)	ND (12.5)	43.9	61.2	10.4	0.4
KA 11-7'	9.0	11.9	95	0.9 J	1.4 J	0.256 J	20.4	14.2	12.5	14.1	ND (0.17)	ND (1.0)	12.5	ND (3.5)	ND (12.5)	ND (12.5)	35.2	50.8	6.7	0.2
KA 11-10'	8.1	10.1	54.5	0.8 J	0.7 J	0.311 J	17.9	12.2	10.4	11.4	ND (0.17)	ND (1.0)	11.8	ND (3.5)	ND (12.5)	ND (12.5)	29.8	44.4	6.3	0.2
KA 12-2'	ND (4.0)	10.2	91.3	0.7 J	1.1 J	0.488 J	16.7	13.8	14.0	12.0	ND (0.17)	ND (1.0)	11.4	ND (3.5)	ND (12.5)	ND (12.5)	32.0	55.7	7.2	0.4
KA 12-5'	6.4	7.7	46.7	0.6 J	0.8 J	0.274 J	19.5	11.4	7.5	9.3	ND (0.17)	ND (1.0)	7.4	ND (3.5)	ND (12.5)	ND (12.5)	31.3	40	3.9	<0.1
KA 12-7'	6.5	7.9	39.5	0.5 J	0.8 J	0.299 J	20.4	12.6	9.6	10.4	ND (0.17)	0.2 J	10.3	ND (3.5)	ND (12.5)	ND (12.5)	37.2	53.9	4.5	<0.1
KA 12-10'	1.9 J	10.0	59.1	0.6 J	0.9 J	0.250 J	23.0	14.8	10.4	8.9	ND (0.17)	ND (1.0)	13.1	ND (3.5)	ND (12.5)	ND (12.5)	43.4	56.7	4.5	<0.1
KA 13-2'	ND (4.0)	7.0	124.3	0.7 J	1.2 J	0.214 J	16.5	9.9	8.4	13.0	ND (0.17)	ND (1.0)	10.5	ND (3.5)	ND (12.5)	ND (12.5)	21.2	41.5	4.7	0.3
KA 13-5'	ND (4.0)	12.3	54.4	0.7 J	1.0 J	0.195 J	15.8	9.1	9.9	11.0	ND (0.17)	ND (1.0)	9.6	ND (3.5)	ND (12.5)	ND (12.5)	22.3	33.4	4.1	0.1
KA 13-7'	2.2 J	23.3	43.7	0.6 J	1.0 J	0.217 J	11.0	10.1	7.0	13.3	ND (0.17)	ND (1.0)	8.3	ND (3.5)	ND (12.5)	ND (12.5)	24.8	22.8	2.7	<0.1
KA 13-10'	ND (4.0)	9.1	18.2	ND (1.5)	ND (3.0)	0.282 J	7.6	4.1	4.7	6.5	ND (0.17)	0.7 J	5.2	ND (3.5)	ND (12.5)	ND (12.5)	11.4	16.5	1.5	0.1
KA 14-2'	ND (4.0)	2.8 J	30.0	0.7 J	0.8 J	0.197 J	12.3	9.2	7.6	8.1	ND (0.17)	ND (1.0)	7.7	ND (3.5)	ND (12.5)	ND (12.5)	15.2	30.9	3.3	0.7
KA 14-5'	ND (4.0)	6.1	105.6	0.9 J	1.0 J	0.334 J	15.9	12.5	12.3	13.4	ND (0.17)	0.4 J	12.6	ND (3.5)	ND (12.5)	ND (12.5)	24.3	51.6	3.2	0.4
KA 14-7'	ND (4.0)	5.5	70.5	0.7 J	1.0 J	0.397 J	13.4	10.0	9.8	13.0	ND (0.17)	ND (1.0)	9.7	ND (3.5)	ND (12.5)	ND (12.5)	23.0	40.9	3.1	0.4
KA 14-10'	4.6	5.9	82.3	0.7 J	0.7 J	0.128 J	13.2	13.0	9.7	9.4	ND (0.17)	ND (1.0)	11.3	ND (3.5)	ND (12.5)	ND (12.5)	21.9	43.3	4.1	0.4
KA 15-2'	ND (4.0)	9.3	54.2	0.5 J	1.0 J	0.259 J	10.1	8.6	7.6	9.1	ND (0.17)	0.3 J	7.2	ND (3.5)	ND (12.5)	ND (12.5)	19.6	35.1	3.7	0.4
KA 15-5'	ND (4.0)	5.8	54.6	0.4 J	0.8 J	0.249 J	9.0	6.8	7.2	7.1	ND (0.17)	ND (1.0)	6.4	ND (3.5)	ND (12.5)	ND (12.5)	15.8	28.4	2.4	0.1
KA 15-7'	ND (4.0)	13.3	57.9	0.6 J	1.3 J	0.306 J	13.3	11.4	9.2	10.8	ND (0.17)	0.5 J	7.7	ND (3.5)	ND (12.5)	ND (12.5)	26.2	39.9	3.8	<0.1
KA 15-10'	3.6 J	14.7	65.1	0.8 J	1.1 J	0.282 J	14.9	11.4	9.5	11.1	ND (0.17)	0.8 J	8.0	ND (3.5)	ND (12.5)	ND (12.5)	31.2	44.5	4.9	<0.1

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TABLE 2
SOIL ANALYTICAL DATA - CCR TITLE 22 METALS, BORON, AND SALINITY
CHATSWORTH RESERVOIR
LOS ANGELES, CALIFORNIA

Sample Number	Antimony	Arsenic	Barium	Beryllium	Cadmium	Hexavalent Chromium	Total Chromium	Cobalt	Copper	Lead	Mercury	Molybdenum	Nickel	Selenium	Silver	Thallium	Vanadium	Zinc	Boron	Salinity
	6010B (mg/kg)	6010B (mg/kg)	6010B (mg/kg)	6010B (mg/kg)	6010B (mg/kg)	7199 (mg/kg)	6010B (mg/kg)	6010B (mg/kg)	6010B (mg/kg)	6010B (mg/kg)	7471A (mg/kg)	6010B (mg/kg)	6010B (mg/kg)	6010B (mg/kg)	6010B (mg/kg)	6010B (mg/kg)	6010B (mg/kg)	6010B (mg/kg)	6010B (mg/kg)	2520B (g/L)
KA 16-2'	ND (4.0)	8.4	78.2	0.7 J	1.1 J	0.253 J	19.5	12.5	13.9	8.6	ND (0.17)	0.4 J	12.3	ND (3.5)	ND (12.5)	ND (12.5)	30.0	53.2	20.1	2.3
KA 16-5'	ND (4.0)	12.0	96.6	0.7 J	0.6 J	0.279 J	17.2	13.2	14.3	10.3	ND (0.17)	ND (1.0)	12.7	ND (3.5)	ND (12.5)	ND (12.5)	36.1	56.4	19.1	1.9
KA 16-7'	ND (4.0)	6.7	117.1	0.7 J	0.7 J	0.306 J	16.3	12.2	13.8	8.0	ND (0.17)	ND (1.0)	11.8	ND (3.5)	ND (12.5)	ND (12.5)	29.3	52.1	13.4	1.1
KA 16-10'	ND (4.0)	9.5	82.7	0.6 J	ND (3.0)	0.278 J	13.8	9.4	10.9	7.3	ND (0.17)	ND (1.0)	8.9	ND (3.5)	ND (12.5)	ND (12.5)	23.8	41.8	10.3	0.6
KA 17-2'	2.3 J	9.3	100.3	0.7 J	0.8 J	0.204 J	17.6	13.3	21.4	10.2	ND (0.17)	ND (1.0)	12.8	ND (3.5)	ND (12.5)	ND (12.5)	33.2	56.7	13.4	1.0
KA 17-5'	ND (4.0)	9.8	110.0	0.8 J	1.0 J	0.247 J	20.3	13.7	24.3	10.3	ND (0.17)	ND (1.0)	13.5	ND (3.5)	ND (12.5)	ND (12.5)	35.3	60.4	15.2	0.7
KA 17-7'	2.9 J	9.6	90.8	0.7 J	0.9 J	0.330 J	16.5	11.8	30.9	10.2	ND (0.17)	ND (0.17)	11.4	ND (3.5)	ND (12.5)	ND (12.5)	29.8	53.5	10.4	0.4
KA 17-10'	ND (4.0)	13.3	194.9	1.1 J	2.0 J	0.322 J	25.7	20.8	23.7	15.9	ND (0.17)	ND (0.17)	21.3	ND (3.5)	ND (12.5)	ND (12.5)	51.4	85.2	17.4	0.3
KA 18-2'	ND (4.0)	6.7	98.6	0.6 J	0.7 J	0.503 J	13.6	11.8	15.2	10.6	ND (0.17)	0.4 J	10.3	ND (3.5)	ND (12.5)	ND (12.5)	26.1	42.0	6.2	0.9
KA 18-5'	ND (4.0)	8.9	146.1	0.9 J	1.2 J	0.230 J	23.9	14.1	12.1	12.3	ND (0.17)	ND (0.17)	13.4	ND (3.5)	ND (12.5)	ND (12.5)	33.2	63.9	8.2	0.7
KA 18-7'	0.9 J	8.7	185.3	0.7 J	1.0 J	0.359 J	17.3	12.9	11.2	10.6	ND (0.17)	ND (0.17)	11.8	ND (3.5)	ND (12.5)	ND (12.5)	30.5	48.2	6.5	0.2
KA 18-10'	ND (4.0)	10.6	157.0	0.8 J	1.1 J	0.382 J	18.0	14.9	14.2	10.5	ND (0.17)	0.3 J	13.5	ND (3.5)	ND (12.5)	ND (12.5)	ND (1.5)	49.6	7.3	0.4
Maximum Detected Concentration	9.0	23.3	194.9	1.9	2.0 J	0.624	25.7	50.6	148.0	26.8	ND	1.6	23.1	ND	ND	ND	51.4	85.2	20.1	2.3
CHHSL - Residential	30	0.07	5,200	150	1.7	17	100,000*	660	3,000	150	18	380	1,600	380	380	5	530	23,000	-	-
PRG - Residential	31	0.062**	5,400	150	37	30	210*	900	3,100	150**	23	390	1,600	390	390	5.2	78	23,000	16,000	-
MCL (mg/L)	0.006	0.01	2	0.004	0.005	-	0.1	-	1.3	0.015	0.002	-	-	0.05	-	0.002	-	-	-	-

Notes

ND (1.0) Not detected above the reporting limit, which is shown in parentheses
6010B United States Environmental Protection Agency analytical method number
mg/kg Concentration in milligrams per kilogram
mg/L Concentration in milligrams per liter
g/L Concentration in grams per liter

Preliminary Remediation Goal for soil (updated October 2004)
California Human Health Screening Level
** California modified PRG
* Total chromium
J Concentration above MDL and below RL

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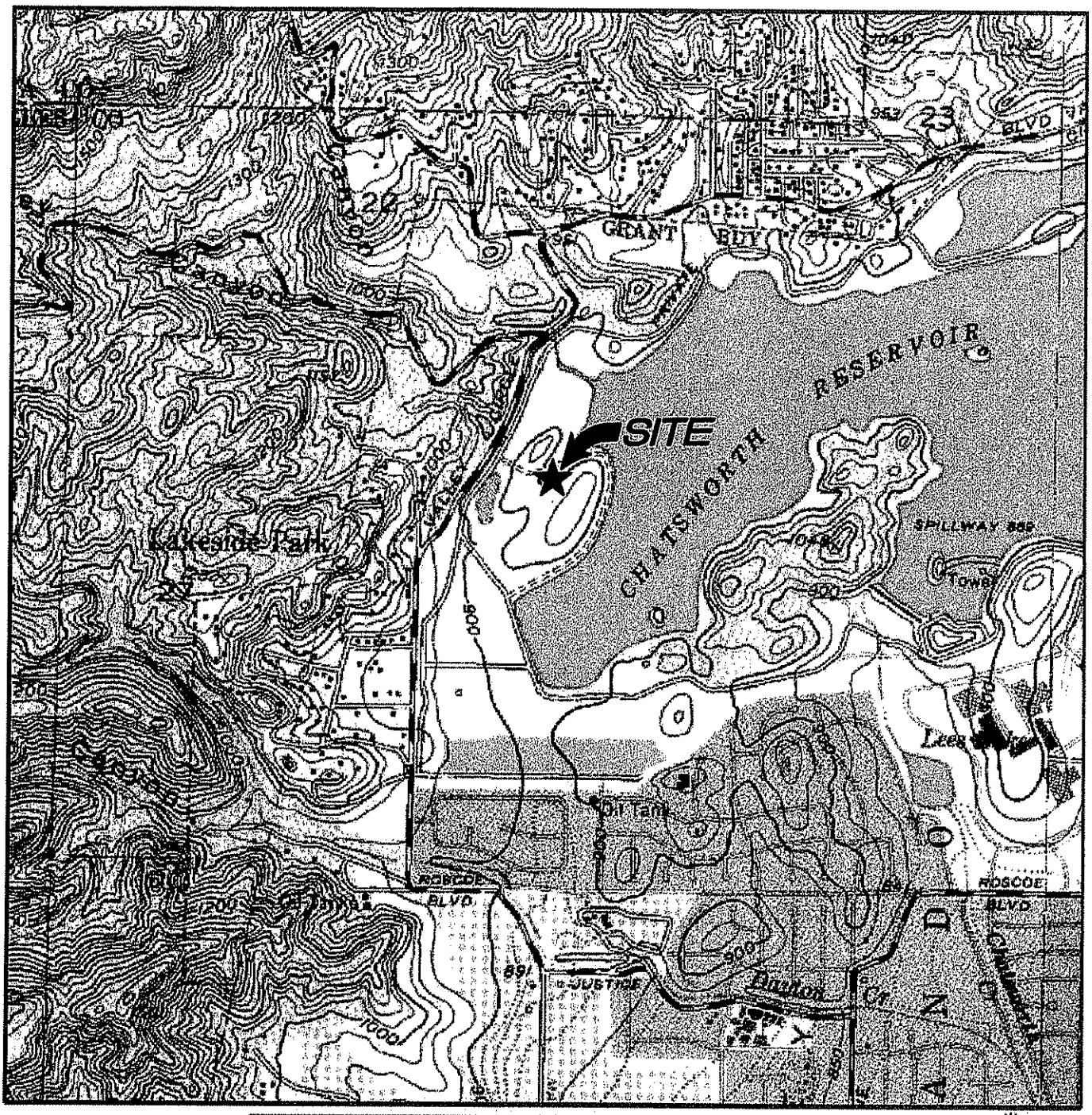
PLATES



UTM 11 348728E 3788937N (NAD83/WGS84)

Woolsey Canyon, USGS CALABASAS (CA) Quadrangle

Projection is UTM Zone 11 NAD83 Datum

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G=-0.924

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K L E I N F E L D E R

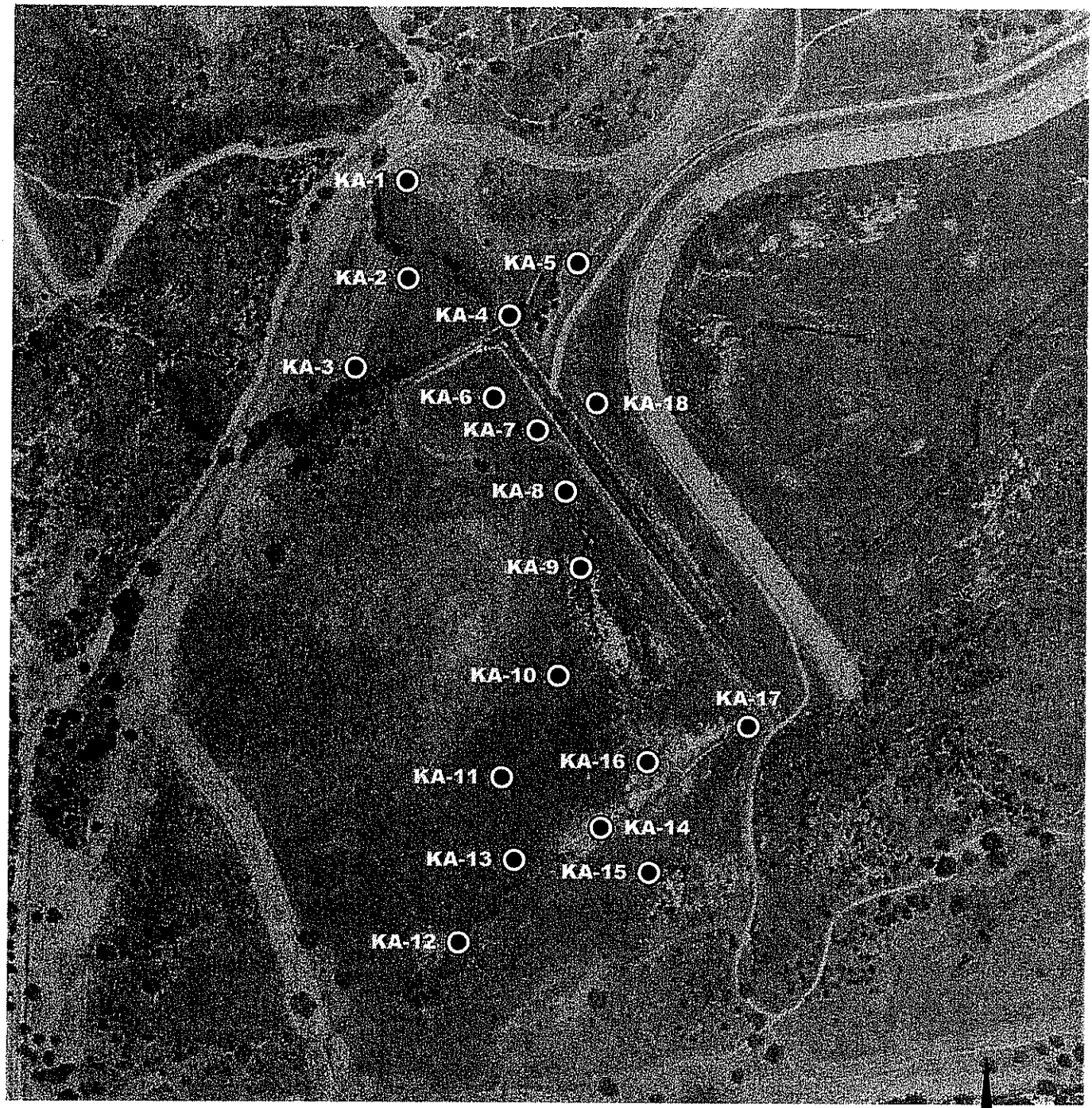
1370 Valley Vista Drive, Suite 150
Diamond Bar, CA 91765
PH. (909) 396-6601 FAX. (909) 396-1324
www.kleinfelder.com

SITE VICINITY MAP

SAMPLING PLAN AND INVESTIGATION
LADWP CHATSWORTH RESERVOIR
VALLEY CIRCLE BLVD. AND WOOLSEY CYN. RD.
LOS ANGELES, CALIFORNIA

DRAWN BY:	M. GRIFFIN
REVISED BY:	M. GRIFFIN
CHECKED BY:	MC
PLATE	1

DRAWN: 03/28/08	APPROVED BY:	PROJECT NO. 92287	FILE NAME: 92287p1.dwg	



EXPLANATION

KA–17 ◉ APPROXIMATE SOIL BORING LOCATIONS

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BORING LOCATION MAP

SAMPLING PLAN AND INVESTIGATION
LADWP CHATSWORTH RESERVOIR
VALLEY CIRCLE BLVD. AND WOOLSEY CYN. RD.
LOS ANGELES, CALIFORNIA

DRAWN BY:	M. GRIFFIN
REVISED BY:	M. GRIFFIN
CHECKED BY:	MC
PLATE	2

DRAWN: 03/28/08	APPROVED BY:	PROJECT NO. 92287	FILE NAME: 92287p2.dwg

APPENDIX A

SITE-SPECIFIC HEALTH AND SAFETY PLAN

KLEINFELDER, INC.
HEALTH & SAFETY PLAN

Los Angeles Department of Water and Power: Chatsworth Reservoir
Chatsworth, CA 91311

APPROVALS:

_____
Program Manager Date

_____
Project Manager Date

KLEINFELDER WEST

SITE-SPECIFIC HEALTH AND SAFETY PLAN

(Refer to Kleinfelder Program Health and Safety Plan for Specific Information)

Project No.:	TBD	**Date:**	2/25/08

PROJECT DESCRIPTION	
Project Site:	Chatsworth Reservoir
Project Address:	Chatsworth, CA 91311

CLIENT INFORMATION			
Client:	LADWP		
Client Contact:	Ms. Josephine Gonzalez	**Client Phone No.:**	
Site Contact:	Ms. Josephine Gonzalez	**Site Contact Phone No.:**	

KLEINFELDER KEY PERSONNEL			
Project Manager:	David Johnson	**Phone No.:**	(909) 396- 0335
Site Safety Officer:	Raymond Montero	**Phone No.:**	(818) 226-6900
Reviewer/Approver:	David Johnson		

TRAINING REQUIREMENTS			
40-hour HAZWOPER	X	Loss Prevention System (LPS)	X
8-hour HAZWOPER Refresher	X		
>>>>>>>>>>> Check Certification Cards <<<<<<<<<<<			

SCOPE OF WORK			
UST Excavation		Operation & Maintenance	
Utility Location		System Construction	
Soil Borings	X	System Startup	
Monitoring Well Installation		Other: Soil Sampling	X
Monitoring Well Sampling			
Aquifer Testing			

EMERGENCY INFORMATION	
Hospital/Clinic:	Simi Valley Hospital
Phone No:	(805) 955-6100
Address:	6001 Peppertree Lane, Simi Valley, CA 93063
Paramedic: *911*	Fire Dept: *911* Police Dept: *911*
Emergency/Contingency Plans:	Sound Alarm; notify emergency services and Project Manager. Provide site control as required.
>>>>>>>>>>> Hospital Route Map Attached <<<<<<<<<<<	

PHYSICAL HAZARDS (Section 6.3, 64, 6.5)			
Noise	X	Manual Lifting Techniques	X
Energized and Rotating Equipment		Possible Extreme Heat and Heat Stress	
Vehicle and Heavy Equipment Operation	X	Work over or Near Water	
Subcontractor-Furnished Equipment	X	Solar Radiation	X
Steam-Cleaning Equipment		Other:	
Falling, Slipping, Tripping	X		

INDUSTRIAL HAZARDS (Section 6.6)			
Overhead Electrical/Cables		High-Pressure Hose	X
Oxygen Deficiency		Suspended Loads	
Low-Lying Areas		Static Electricity	
Chemical Handling		Unstable or Steep Terrain	X
Drum Excavation/Sampling		Work Near or In Roadways	X
Soil Excavation/Trenching		Welding or Torch Cutting	
Confined Space Entry		Work from Elevated Platforms	
Fire and Explosion Hazards		Other:	
Pipelines			

CHEMICAL HAZARDS (Section 6.7)		
Chemical Name	Expected Soil/Water Concentration	Health Hazards
No previous analytical data is available for the Site, however the current soil samples taken will be analyzed in by the LADWP lab in accordance with the minimum sampling frequencies specified in proposal number WHI8P001.		

BIOLOGICAL HAZARDS (Section 6.8)			
Rattlesnakes		Hantavirus	
Insects	X	Wild Dogs	X
Valley Fever		Viral, Bacterial, and Other Diseases	
Poisonous Plants		Histoplasmosis	
Vermin	X	Other:	

WEATHER RELATED HAZARDS			
Rain	X	Fog	X
Heat	X	Cold	
Lightening	X	Wind	X
Other:			

PERSONAL PROTECTIVE EQUIPMENT (Section 11)			
Hard Hat	X	5-Minute Escape Respirator	
Safety Boots	X	Safety Eyewear: ANSI Approved	X
Safety Vest	X	Respirator: As required	
Hearing Protection	X	Respirator Filter: Carbon	
Tyvek Overalls		Gloves: Leather, Mechanic and Nitrile	X
		Other:	

MONITORING EQUIPMENT (Section 10)			
Organic Vapor Analyzer (FID)		PID with lamp of: 10.6 eV	X
Oxygen Meter		Draeger Tube:	
Combustible Gas Meter		Passive Dosimeter	
H_2S Meter		Air Sampling Pump	
		Filter Media:	

SITE CONTROL MEASURES (Section 7)			
Utility Locations (map)		Traffic Control Equipment:	
UST Locations (map)		Cones (min. 24")/Delineators	
Service Station Manager Notified		Barricades	
Traffic Control Plans		Snow Fencing	
Access Agreements		Caution Tape	
Fire Extinguisher	X	Other:	
Visitors Requirements	X		
>>>>>>>>>>>>>>> See Traffic Control Plan <<<<<<<<<<<			

DECONTAMINATION (Section 8)			
Personnel Decontamination		Waste Minimization	X
Vehicle Decontamination		Testing for Decontamination	
Apparel Decontamination		Eyewash	X
Decontamination Area		First Aid Kit	X
Waste Storage			

ONSITE SAFETY MEETING ATTENDEES

All attendees will read and understand the Health and Safety Plan and sign the attached sign-in sheet. The sign-in sheet will be attached to the field notes and included in the report package.

Signature	Name (Printed)/Company	Date

APPENDIX B

BORING LOGS

Comments	Chemical Analyses: Lab.	Chemical Analyses: Field PID (ppm)	Depth (feet)	Sample Type	Sample Number	Lithology Symbol	U.S.C.S. Designation	SOIL DESCRIPTION AND CLASSIFICATION
					KA1-2		SM	**Silty Sand (SM):** brown, moist, fine to medium grained, no odor, no staining.
			5		KA1-5			
					KA1-7			
			▼10		KA1-10			-- wet.
								Total depth: 10 feet bgs.

SURFACE ELEVATION (feet):
TOTAL DEPTH (feet): 10.0
DATE DRILLED: 3-10-08

LOGGED BY: R. Montero
DIAMETER OF BORING (inches): 2.25 inches
DEPTH TO STATIC WATER (feet): 10.0 3/10/2008

KLEINFELDER

PROJECT NO. 92287-1

Chatsworth Reservoir
Los Angeles Department of Water and Power

LOG OF BORING KA-1

PLATE
A-2

ENVIRONMENTAL 92287-1 CHATSWORTH RESERVOIR.GPJ KA_RDLND.GDT 3/18/08

Note: The boundaries between soil types shown on the logs are approximate as the transition between different soil layers may be gradual.

Comments	Chemical Analyses: Lab.	Chemical Analyses: Field PID (ppm)	Depth (feet)	Sample Type	Sample Number	Lithology Symbol	U.S.C.S. Designation	SOIL DESCRIPTION AND CLASSIFICATION
			0					**Silty Sand (SM):** brown, moist, fine to coarse grained, no odor, no staining.
				K	A10-2'		SM	
			5	K	A10-5'			-- increasing silt.
				K	A10-7'			
			10	K	A10-10'			Total depth: 10 feet bgs.

SURFACE ELEVATION (feet):
TOTAL DEPTH (feet): 10.0
DATE DRILLED: 3-10-08

LOGGED BY: R. Montero
DIAMETER OF BORING (inches): 2.25 inches
DEPTH TO STATIC WATER (feet):

KLEINFELDER

PROJECT NO. 92287-1

Chatsworth Reservoir
Los Angeles Department of Water and Power

LOG OF BORING KA-10

PLATE
A-11

ENVIRONMENTAL 92287-1 CHATSWORTH RESERVOIR.GPJ KA_RDLND.GDT 3/18/08

Note: The boundaries between soil types shown on the logs are approximate as the transition between different soil layers may be gradual.

Comments	Chemical Analyses: Lab.	Chemical Analyses: Field PID (ppm)	Depth (feet)	Sample Type	Sample Number	Lithology Symbol	U.S.C.S. Designation	SOIL DESCRIPTION AND CLASSIFICATION
				K	A11-2'		SM	**Silty Sand (SM):** brown, moist, fine to medium grained, no odor, no staining.
			5	K	A11-5'		ML	**Sandy Clay (ML):** light brown, moist, fine to medium sand.
				K	A11-7'			
			10	K	A11-10'			Total depth: 10 feet bgs.

SURFACE ELEVATION (feet):
TOTAL DEPTH (feet): 10.0
DATE DRILLED: 3-10-08

LOGGED BY: R. Montero
DIAMETER OF BORING (inches): 2.25 inches
DEPTH TO STATIC WATER (feet):

KLEINFELDER

PROJECT NO. 92287-1

Chatsworth Reservoir
Los Angeles Department of Water and Power

LOG OF BORING KA-11

PLATE
A-12

ENVIRONMENTAL 92287-1 CHATSWORTH RESERVOIR.GPJ KA_RDLND.GDT 3/18/08

Note: The boundaries between soil types shown on the logs are approximate as the transition between different soil layers may be gradual.

Comments	Chemical Analyses: Lab.	Chemical Analyses: Field PID (ppm)	Depth (feet)	Sample Type	Sample Number	Lithology Symbol	U.S.C.S. Designation	SOIL DESCRIPTION AND CLASSIFICATION
					KA12-2'		SM	**Silty Sand (SM):** dark brown, moist, fine to coarse grained, no odor, no staining.
			5		KA12-5'		SP	**Sand (SP):** yellow brown, moist, medium coarse grained, no odor, no staining.
					KA12-7'			-- fine to medium grained.
			10		KA12-10'			Total depth: 10 feet bgs.

SURFACE ELEVATION (feet):
TOTAL DEPTH (feet): 10.0
DATE DRILLED: 3-10-08

LOGGED BY: R. Montero
DIAMETER OF BORING (inches): 2.25 inches
DEPTH TO STATIC WATER (feet):

KLEINFELDER

PROJECT NO. 92287-1

Chatsworth Reservoir
Los Angeles Department of Water and Power

LOG OF BORING KA-12

PLATE
A-13

ENVIRONMENTAL 92287-1 CHATSWORTH RESERVOIR.GPJ KA RDLND.GDT 3/18/08

Note: The boundaries between soil types shown on the logs are approximate as the transition between different soil layers may be gradual.

Comments	Chemical Analyses: Lab.	Chemical Analyses: Field PID (ppm)	Depth (feet)	Sample Type	Sample Number	Lithology Symbol	U.S.C.S. Designation	SOIL DESCRIPTION AND CLASSIFICATION
				K	A13-2'		CL	**Clay (CL):** yellow brown, moist, trace fine grained sand, no odor, no staining.
			5	K	A13-5'		SM	**Silty Sand (SM):** light brown, moist, medium to coarse grained, no odor, no staining.
				K	A13-7'		SP	**Sand (SP):** yellow brown, very moist, medium to coarse grained, no odor, no staining.
			10	K	A13-10'			-- wet.
								Total depth: 10 feet bgs.

SURFACE ELEVATION (feet):
TOTAL DEPTH (feet): 10.0
DATE DRILLED: 3-10-08

LOGGED BY: R. Montero
DIAMETER OF BORING (inches): 2.25 inches
DEPTH TO STATIC WATER (feet):

KLEINFELDER

Chatsworth Reservoir
Los Angeles Department of Water and Power

PLATE
A-14

PROJECT NO. 92287-1

LOG OF BORING KA-13

ENVIRONMENTAL 92287-1 CHATSWORTH RESERVOIR.GPJ KA_RDLND.GDT 3/18/08

Note: The boundaries between soil types shown on the logs are approximate as the transition between different soil layers may be gradual.

Comments	Chemical Analyses: Lab.	Chemical Analyses: Field PID (ppm)	Depth (feet)	Sample Type	Sample Number	Lithology Symbol	U.S.C.S. Designation	SOIL DESCRIPTION AND CLASSIFICATION
				K	A14-2'		ML	**Sandy Silt (ML):** brown, moist, fine to medium grained, no odor, no staining.
			5	K	A14-5'		SM	**Silty Sand (SM):** gray, moist, fine to medium grained, no odor, no staining.
				K	A14-7'			-- slight organic odor.
			10	K	A14-10'			-- no odor.
								Total depth: 10 feet bgs.

SURFACE ELEVATION (feet):
TOTAL DEPTH (feet): 10.0
DATE DRILLED: 3-10-08

LOGGED BY: R. Montero
DIAMETER OF BORING (inches): 2.25 inches
DEPTH TO STATIC WATER (feet):

KLEINFELDER

Chatsworth Reservoir
Los Angeles Department of Water and Power

PLATE
A-15

PROJECT NO. 92287-1

LOG OF BORING KA-14

ENVIRONMENTAL 92287-1 CHATSWORTH RESERVOIR.GPJ KA_RDLND.GDT 3/18/08

Note: The boundaries between soil types shown on the logs are approximate as the transition between different soil layers may be gradual.

Comments	Chemical Analyses: Lab.	Chemical Analyses: Field PID (ppm)	Depth (feet)	Sample Type	Sample Number	Lithology Symbol	U.S.C.S. Designation	SOIL DESCRIPTION AND CLASSIFICATION
					KA15-2		SM	**Silty Sand (SM):** yellow brown, moist, fine to coarse grained, no odor, no staining.
			5		KA15-5			-- fine to medium grained.
					KA15-7			
			10		KA15-10			Total depth: 10 feet bgs.

SURFACE ELEVATION (feet):
TOTAL DEPTH (feet): 10.0
DATE DRILLED: 3-10-08

LOGGED BY: R. Montero
DIAMETER OF BORING (inches): 2.25 inches
DEPTH TO STATIC WATER (feet):

KLEINFELDER

PROJECT NO. 92287-1

Chatsworth Reservoir
Los Angeles Department of Water and Power

LOG OF BORING KA-15

PLATE
A-16

ENVIRONMENTAL 92287-1 CHATSWORTH RESERVOIR.GPJ KA_RDLND.GDT 3/18/08

Note: The boundaries between soil types shown on the logs are approximate as the transition between different soil layers may be gradual.

Comments	Chemical Analyses: Lab.	Chemical Analyses: Field PID (ppm)	Depth (feet)	Sample Type	Sample Number	Lithology Symbol	U.S.C.S. Designation	SOIL DESCRIPTION AND CLASSIFICATION
				K	KA16-2'		ML	**Sandy Silt (ML):** dark brown, moist, fine to medium grained, no odor, no staining.
			5	K	KA16-5'			
				K	KA16-7'			-- increasing sand.
			10	K	KA16-10'			
								Total depth: 10 feet bgs.

SURFACE ELEVATION (feet):
TOTAL DEPTH (feet): 10.0
DATE DRILLED: 3-10-08

LOGGED BY: R. Montero
DIAMETER OF BORING (inches): 2.25 inches
DEPTH TO STATIC WATER (feet):

KLEINFELDER

Chatsworth Reservoir
Los Angeles Department of Water and Power

PLATE
A-17

PROJECT NO. 92287-1

LOG OF BORING KA-16

ENVIRONMENTAL 92287-1 CHATSWORTH RESERVOIR.GPJ KA_RDLND.GDT 3/18/08

Note: The boundaries between soil types shown on the logs are approximate as the transition between different soil layers may be gradual.

Comments	Chemical Analyses: Lab.	Chemical Analyses: Field PID (ppm)	Depth (feet)	Sample Type	Sample Number	Lithology Symbol	U.S.C.S. Designation	SOIL DESCRIPTION AND CLASSIFICATION
					KA17-2'		SM	**Silty Sand (SM):** brown, moist, fine to coarse grained, no odor, no staining.
			5		KA17-5'			
					KA17-7'			
			10		KA17-10'		ML	**Sandy Silt (ML):** brown, moist, fine grained, no odor, no staining.
								Total depth: 10 feet bgs.

SURFACE ELEVATION (feet):
TOTAL DEPTH (feet): 10.0
DATE DRILLED: 3-10-08

LOGGED BY: R. Montero
DIAMETER OF BORING (inches): 2.25 inches
DEPTH TO STATIC WATER (feet):

KLEINFELDER

PROJECT NO. 92287-1

Chatsworth Reservoir
Los Angeles Department of Water and Power

LOG OF BORING KA-17

PLATE
A-18

ENVIRONMENTAL 92287-1 CHATSWORTH RESERVOIR.GPJ KA_RDLND.GDT 3/18/08

Note: The boundaries between soil types shown on the logs are approximate as the transition between different soil layers may be gradual.

Comments	Chemical Analyses: Lab.	Chemical Analyses: Field PID (ppm)	Depth (feet)	Sample Type	Sample Number	Lithology Symbol	U.S.C.S. Designation	SOIL DESCRIPTION AND CLASSIFICATION
				K	A18-2		SM	**Sandy Silt (SM):** dark brown, moist, medium coarse grained, no odor, no staining.
			5	K	A18-4			
				K	A18-7		SP	**Sand (SP):** yellowish brown, moist, medium coarse grained, no odor, no staining.
			10	K	A18-10		SM	**Silty Sand (SM):** yellowish brown, moist, fine to medium grained, no odor, no staining.
								Total depth: 10 feet bgs.

SURFACE ELEVATION (feet):
TOTAL DEPTH (feet): 10.0
DATE DRILLED: 3-10-08

LOGGED BY: R. Montero
DIAMETER OF BORING (inches): 2.25 inches
DEPTH TO STATIC WATER (feet):

KLEINFELDER

PROJECT NO. 92287-1

Chatsworth Reservoir
Los Angeles Department of Water and Power

LOG OF BORING KA-18

PLATE
A-19

ENVIRONMENTAL 92287-1 CHATSWORTH RESERVOIR.GPJ KA_RDLND.GDT 3/18/08

Note: The boundaries between soil types shown on the logs are approximate as the transition between different soil layers may be gradual.

Comments	Chemical Analyses: Lab.	Chemical Analyses: Field PID (ppm)	Depth (feet)	Sample Type	Sample Number	Lithology Symbol	U.S.C.S. Designation	SOIL DESCRIPTION AND CLASSIFICATION
					KA2-2		SM	**Silty Sand (SM):** brown, moist, fine to coarse grained, no odor, no staining.
			5		KA2-5			-- increase sand.
					KA2-7			
			10		KA2-10			-- wet.
								Total depth: 10 feet bgs.

SURFACE ELEVATION (feet):
TOTAL DEPTH (feet): 10.0
DATE DRILLED: 3-10-08

LOGGED BY: R. Montero
DIAMETER OF BORING (inches): 2.25 inches
DEPTH TO STATIC WATER (feet):

KLEINFELDER

PROJECT NO. 92287-1

Chatsworth Reservoir
Los Angeles Department of Water and Power

LOG OF BORING KA-2

PLATE A-3

ENVIRONMENTAL 92287-1 CHATSWORTH RESERVOIR.GPJ KA_RDLND.GDT 3/18/08

Note: The boundaries between soil types shown on the logs are approximate as the transition between different soil layers may be gradual.

Comments	Chemical Analyses: Lab.	Chemical Analyses: Field PID (ppm)	Depth (feet)	Sample Type	Sample Number	Lithology Symbol	U.S.C.S. Designation	SOIL DESCRIPTION AND CLASSIFICATION
			0	K	KA3-2		SM	**Silty Sand (SM):** brown, moist, fine to coarse grained, no odor, no staining.
			5	K	KA3-5			
				K	KA3-7			-- wet.
			10	K	KA3-10			Total depth: 10 feet bgs.

SURFACE ELEVATION (feet):
TOTAL DEPTH (feet): 10.0
DATE DRILLED: 3-10-08

LOGGED BY: R. Montero
DIAMETER OF BORING (inches): 2.25 inches
DEPTH TO STATIC WATER (feet): 8.0 3/10/2008

KLEINFELDER

PROJECT NO. 92287-1

Chatsworth Reservoir
Los Angeles Department of Water and Power

LOG OF BORING KA-3

PLATE
A-4

ENVIRONMENTAL 92287-1 CHATSWORTH RESERVOIR.GPJ KA_RDLND.GDT 3/18/08

Note: The boundaries between soil types shown on the logs are approximate as the transition between different soil layers may be gradual.

Comments	Chemical Analyses: Lab.	Chemical Analyses: Field PID (ppm)	Depth (feet)	Sample Type	Sample Number	Lithology Symbol	U.S.C.S. Designation	SOIL DESCRIPTION AND CLASSIFICATION
					KA4-2		SM	**Silty Sand (SM):** light brown, fine to coarse grained, no odor, no staining.
			5		KA4-5			-- increasing sand.
					KA4-7		SP	**Sand (SP):** brown, moist, fine to coarse grained, no odor, no staining.
			10		KA4-10		SM	**Silty Sand (SM):** brown, moist, fine to coarse grained, no odor, no staining.
								Total depth: 10 feet bgs.

SURFACE ELEVATION (feet):
TOTAL DEPTH (feet): 10.0
DATE DRILLED: 3-10-08

LOGGED BY: R. Montero
DIAMETER OF BORING (inches): 2.25 inches
DEPTH TO STATIC WATER (feet):

KLEINFELDER

PROJECT NO. 92287-1

Chatsworth Reservoir
Los Angeles Department of Water and Power

LOG OF BORING KA-4

PLATE A-5

ENVIRONMENTAL 92287-1 CHATSWORTH RESERVOIR.GPJ KA_RDLND.GDT 3/18/08

Note: The boundaries between soil types shown on the logs are approximate as the transition between different soil layers may be gradual.

Comments	Chemical Analyses: Lab.	Chemical Analyses: Field PID (ppm)	Depth (feet)	Sample Type	Sample Number	Lithology Symbol	U.S.C.S. Designation	SOIL DESCRIPTION AND CLASSIFICATION
				K	A5-2		SM	**Silty Sand (SM):** light brown, moist, fine to coarse grained, no odor, no staining.
			5	K	A5-5			-- increasing sand.
				K	A5-7			-- reddish brown.
			10	K	A5-10			Total depth: 10 feet bgs.

SURFACE ELEVATION (feet):
TOTAL DEPTH (feet): 10.0
DATE DRILLED: 3-10-08

LOGGED BY: R. Montero
DIAMETER OF BORING (inches): 2.25 inches
DEPTH TO STATIC WATER (feet):

KLEINFELDER

PROJECT NO. 92287-1

Chatsworth Reservoir
Los Angeles Department of Water and Power

LOG OF BORING KA-5

PLATE
A-6

ENVIRONMENTAL 92287-1 CHATSWORTH RESERVOIR.GPJ KA_RDLND.GDT 3/18/08

Note: The boundaries between soil types shown on the logs are approximate as the transition between different soil layers may be gradual.

Comments	Chemical Analyses: Lab.	Chemical Analyses: Field PID (ppm)	Depth (feet)	Sample Type	Sample Number	Lithology Symbol	U.S.C.S. Designation	SOIL DESCRIPTION AND CLASSIFICATION
				K	A6-2'		SP	**Sand (SP):** yellow brown, moist, fine to coarse grained, no odor, no staining.
			5	K	A6-5'			
				K	A6-7'		SM	**Silty Sand (SM):** brown, moist, fine to coarse grained, no odor, no staining.
			10	K	A6-10'			Total depth: 10 feet bgs.

SURFACE ELEVATION (feet):
TOTAL DEPTH (feet): 10.0
DATE DRILLED: 3-10-08

LOGGED BY: R. Montero
DIAMETER OF BORING (inches): 2.25 inches
DEPTH TO STATIC WATER (feet):

KLEINFELDER

Chatsworth Reservoir
Los Angeles Department of Water and Power

PLATE
A-7

PROJECT NO. 92287-1

LOG OF BORING KA-6

Note: The boundaries between soil types shown on the logs are approximate as the transition between different soil layers may be gradual.

ENVIRONMENTAL 92287-1 CHATSWORTH RESERVOIR.GPJ KA_RDLND.GDT 3/18/08

Comments	Chemical Analyses: Lab.	Chemical Analyses: Field PID (ppm)	Depth (feet)	Sample Type	Sample Number	Lithology Symbol	U.S.C.S. Designation	SOIL DESCRIPTION AND CLASSIFICATION
				K	KA7-3		SM	**Silty Sand (SM):** dark brown, moist, fine to medium grained, no odor, no staining.
			5	K	KA7-5			-- brown.
				K	KA7-7			
			10	K	KA7-10			Total depth: 10 feet bgs.

SURFACE ELEVATION (feet):
TOTAL DEPTH (feet): 10.0
DATE DRILLED: 3-10-08

LOGGED BY: R. Montero
DIAMETER OF BORING (inches): 2.25 inches
DEPTH TO STATIC WATER (feet):

KLEINFELDER

Chatsworth Reservoir
Los Angeles Department of Water and Power

PLATE
A-8

PROJECT NO. 92287-1

LOG OF BORING KA-7

ENVIRONMENTAL 92287-1 CHATSWORTH RESERVOIR.GPJ KA_RDLND.GDT 3/18/08

Note: The boundaries between soil types shown on the logs are approximate as the transition between different soil layers may be gradual.

Comments	Chemical Analyses: Lab.	Chemical Analyses: Field PID (ppm)	Depth (feet)	Sample Type	Sample Number	Lithology Symbol	U.S.C.S. Designation	SOIL DESCRIPTION AND CLASSIFICATION
				K	A8-2'		SP	**Sand (SP):** reddish brown, moist, fine to coarse grained, no odor, no staining.
			5	K	A8-5'		CL	**Sandy Clay (CL):** light brown, moist, fine grained, no odor, no staining.
				K	A8-7'			
			10	K	A8-10'			-- gray, organic odor.
								Total depth: 10 feet bgs.

SURFACE ELEVATION (feet):
TOTAL DEPTH (feet): 10.0
DATE DRILLED: 3-10-08

LOGGED BY: R. Montero
DIAMETER OF BORING (inches): 2.25 inches
DEPTH TO STATIC WATER (feet):

KLEINFELDER

Chatsworth Reservoir
Los Angeles Department of Water and Power

PLATE
A-9

PROJECT NO. 92287-1

LOG OF BORING KA-8

ENVIRONMENTAL 92287-1 CHATSWORTH RESERVOIR.GPJ KA_RDLND.GDT 3/18/08

Note: The boundaries between soil types shown on the logs are approximate as the transition between different soil layers may be gradual.

Comments	Chemical Analyses: Lab.	Chemical Analyses: Field PID (ppm)	Depth (feet)	Sample Type	Sample Number	Lithology Symbol	U.S.C.S. Designation	SOIL DESCRIPTION AND CLASSIFICATION
					KA9-2'		SM	**Silty Sand (SM):** light brown, moist, fine to coarse grained, no odor, no staining.
			5		KA9-5'		CL	**Clay (CL):** yellow brown, moist, soft.
					KA9-7'			-- some fine grained sand.
			10		KA9-10'			Total depth: 10 feet bgs.

SURFACE ELEVATION (feet):
TOTAL DEPTH (feet): 10.0
DATE DRILLED: 3-10-08

LOGGED BY: R. Montero
DIAMETER OF BORING (inches): 2.25 inches
DEPTH TO STATIC WATER (feet):

KLEINFELDER

PROJECT NO. 92287-1

Chatsworth Reservoir
Los Angeles Department of Water and Power

PLATE A-10

LOG OF BORING KA-9

ENVIRONMENTAL 92287-1 CHATSWORTH RESERVOIR.GPJ KA_RDLND.GDT 3/18/08

Note: The boundaries between soil types shown on the logs are approximate as the transition between different soil layers may be gradual.

APPENDIX C

LABORATORY ANALYTICAL REPORT AND CHAIN-OF-CUSTODY FORM

Environmental Laboratory Report

LADWP Chatsworth Reservoir Soil Samples

By

EPA Methods 8015M, 8082A, 6010B/7471, 8260B, 8270C, 3060A/7199, and SM 2520B

Environmental Laboratory
Water Quality and Operations
LADWP City of Los Angeles

DEPARTMENT OF WATER AND POWER
OF THE CITY OF LOS ANGELES
WATER QUALITY AND OPERATIONS

ENVIRONMENTAL LABORATORY DATA REPORT

Chatsworth Reservoir

Soil samples from Chatsworth Reservoir were delivered to the Environmental Laboratory on March 10, 2008 for total extractable petroleum hydrocarbons (TEPH), polychlorinated biphenyls (PCBs), volatile organic compounds (VOC), semi volatile organic compounds (SVOC), arsenic, thallium, soil salinity, hexavalent chromium and metals / mercury analyses. The samples and their corresponding analytes, methods, results and related quality assurance data are listed below.

The samples were identified as follows:

Environmental Lab COC	Environmental Lab Sample ID	Sample Received Date	Sample Description
08-0683	LI03306 – LI03377	03/10/08	See Page 2

The analyses and results were as follows :

Analysis	Environmental Lab Sample ID	Method No.	Analysis Date	Results	Analyzed by
TEPH	LI03306 – LI03377	EPA 8015M	03/20/08 – 03/22/08	**Attachment #1**	Environmental Laboratory
PCBs		EPA 8082A	03/25/08	**Attachment #2**	
Metals/Mercury/Boron		EPA 6010B/7471	03/21/08	**Attachment #3**	
VOC		EPA 8260B	03/11/08 –0 3/18/08	**Attachment #4**	
SVOC		EPA 8270D	03/13/08 – 03/19/08	**Attachment #5**	
Hexavalent Chromium		EPA 3060A/7199	03/13/08	**Attachment #6**	
Salinity		SM 2520B	03/26/2008	**Attachment #7**	

If there are any questions, or if further information is needed, please contact Mr. Bryan Tiu at (213) 367-7265 or Mr. Stanley Kung at 213-367-7270.

Date Completed: 04/14/08
Work Order: AGS25
Job Card #: J96416
Copies To: Kelvin Lew
Stanley Kung
FileNet

Test made by: Environmental Lab
Report by: BT
Checked by: 4/16/08

Approved by: Stanley Kung 4/16/08
Stanley M. Kung / Date
MANAGER
ENVIRONMENTAL LABORATORY

TABLE OF CONTENTS

CLIENT: KELVIN LEW

PROJECT: LADWP CHATSWORTH RESERVOIR

REPORT NO: C11144

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PCBs	EPA METHOD 8082A	200001-200016
METALS/ MERCURY/BORON	EPA METHOD 6010B/7471	300001-300030
VOCs	EPA METHOD 8260B	400001-400032
SVOCs	EPA METHOD 8270D	500001-500035
HEXAVALENT CHROMIUM	EPA METHOD 3060A/7199	600001-600005
SALINITY	SM 2520 B	700001-700002

DEPARTMENT OF WATER AND POWER
OF THE CITY OF LOS ANGELES
WATER QUALITY AND OPERATIONS

ENVIRONMENTAL LABORATORY DATA REPORT

Chatsworth Reservoir

COC 08-0683

LA DWP Sample ID	Location	LA DWP Sample ID	Location	LA DWP Sample ID	Location
LI03306	KA1-2 ft	LI03331	KA7-5 ft	LI03356	KA13-7 ft
LI03307	KA1-5 ft	LI03332	KA7-7 ft	LI03357	KA13-10 ft
LI03308	KA1-7 ft	LI03333	KA7-10 ft	LI03358	KA14-2 ft
LI03309	KA1-10 ft	LI03334	KA8-2 ft	LI03359	KA14-5 ft
LI03310	KA2-2 ft	LI03335	KA8-5 ft	LI03360	KA14-7 ft
LI03311	KA2-5 ft	LI03336	KA8 7 ft	LI03361	KA14-10 ft
LI03312	KA2-7 ft	LI03337	KA8-10 ft	LI03362	KA15-2 ft
LI03313	KA2-10 ft	LI03338	KA9-2 ft	LI03363	KA15-5 ft
LI03314	KA3-2 ft	LI03339	KA9-5 ft	LI03364	KA15-7 ft
LI03315	KA3-5 ft	LI03340	KA9-7 ft	LI03365	KA15-10 ft
LI03316	KA3-7 ft	LI03341	KA9-10 ft	LI03366	KA16-2 ft
LI03317	KA3-10 ft	LI03342	KA10-2 ft	LI03367	KA16-5 ft
LI03318	KA4-2 ft	LI03343	KA10-5 ft	LI03368	KA16-7 ft
LI03319	KA4-5 ft	LI03344	KA10-7 ft	LI03369	KA16-10 ft
LI03320	KA4-7 ft	LI03345	KA10-10 ft	LI03370	KA17-2 ft
LI03321	KA4-10 ft	LI03346	KA11-2 ft	LI03371	KA17-5 ft
LI03322	KA5-2 ft	LI03347	KA11-5 ft	LI03372	KA17-7 ft
LI03323	KA5-5 ft	LI03348	KA11-7 ft	LI03373	KA17-10 ft
LI03324	KA5-7 ft	LI03349	KA11-10 ft	LI03374	KA18-2 ft
LI03325	KA5-10 ft	LI03350	KA12-2 ft	LI03375	KA18-5 ft
LI03326	KA6-2 ft	LI03351	KA12-5 ft	LI03376	KA18-7 ft
LI03327	KA6-5 ft	LI03352	KA12-7 ft	LI03377	KA18-10 ft
LI03328	KA6-7 ft	LI03353	KA12-10 ft		
LI03329	KA6-10 ft	LI03354	KA13-2 ft		
LI03330	KA7-2 ft	LI03355	KA13-5 ft		

100003

LEINFELDER

COC# 08-0683

PROJECT NO.	PROJECT NAME	RECEIVING LAB:
92287/1	CHATSWORTH TAP-8 LADWP	LADWP RIS7 RISG soil

L.P. NO. (P.O. NO.) | SAMPLERS: (Signature/Number)

INSTRUCTIONS/REMARKS: TAT = 2 weeks 1 of 4

	DATE MM/DD/YY	SAMPLE I.D. TIME HH-MM-SS	SAMPLE I.D.	MATRIX	NO. OF CONTAINERS	TYPE OF CONTAINERS	TPH 8015M	VOC 8260B	PCB's 8082	SVOC 8270C	Title 22 Metals (with Hex Chromium 7196)	Asbestos (Starting Level)	Gel Sulfur	Boron			
1	3-10-08	0805	KA1-2'	Soil	4	1 brass	X	X	X	X	X	X	X	X	X		LI 03306
2		0812	KA1-5'				X	X	X	X	X	X	X	X	X		03307
3		0814	KA1-7'				X	X	X	X	X	X	X	X	X		03308
4		0820	KA1-10'				X	X	X	X	X	X	X	X	X		03309
5		0840	KA2-2'				X	X	X	X	X	X	X	X	X		03310
6		0845	KA2-5'				X	X	X	X	X	X	X	X	X		03311
7		0847	KA2-7'				X	X	X	X	X	X	X	X	X		03312
8		0849	KA2-10'				X	X	X	X	X	X	X	X	X		03313
9		0859	KA3-2'				X	X	X	X	X	X	X	X	X		03314
10		0900	KA3-5'				X	X	X	X	X	X	X	X	X		03315
11		0907	KA3-7'				X	X	X	X	X	X	X	X	X		03316
12		0910	KA3-10'				X	X	X	X	X	X	X	X	X		03317
13		0937	KA4-2'				X	X	X	X	X	X	X	X	X		03318
14		0940	KA4-5'				X	X	X	X	X	X	X	X	X		03319
15		0948	KA4-7'				X	X	X	X	X	X	X	X	X		03320
16		0952	KA4-10'				X	X	X	X	X	X	X	X	X		03321
17		1005	KA5-2'				X	X	X	X	X	X	X	X	X		03322
18		1009	KA5-5'				X	X	X	X	X	X	X	X	X		03323
		1014	KA5-7'				X	X	X	X	X	X	X	X	X		03324
		1017	KA5-10'				X	X	X	X	X	X	X	X	X		03325

Not Required by LW

Relinquished by: (Signature)	Date/Time	Received by: (Signature)
	3-11-08 0948	N. Manila
Relinquished by: (Signature)	Date/Time	Received by: (Signature)
Relinquished by: (Signature)	Date/Time	Received for Laboratory by: (Signature)

Instructions/Remarks:

LW BE
RG NM
JY EC
BT CH
RP RR QM

Send Results To:

KLEINFELDER
16 TECHNOLOGY DRIVE, SUITE 150
IRVINE, CA 92618
(949) 727-4466

Attn:

M-60

White – Sampler | Canary – Return Copy To Shipper | Pink – Lab Copy

LW, JY, BP, KS RO, NE NM,

CHAIN OF CUSTODY

№ 0014

COC08-0683

100004

LEINFELDER

COC # -0683

PROJECT NO.	PROJECT NAME	NO. OF CONTAINERS	TYPE OF CONTAINERS	ANALYSIS	RECEIVING LAB:
			3 Brass Sleeves		LADWP
L.P. NO. (P.O. NO.)	SAMPLERS: (Signature/Number)				INSTRUCTIONS/REMARKS
					2 of 4

	DATE MM/DD/YY	SAMPLE I.D. TIME HH-MM-SS	SAMPLE I.D.	MATRIX	NO. OF CONTAINERS	TYPE OF CONTAINERS	8015M	VOC 8260B	PCBs 8082	SVOC 8270C	Title 22 Metals (unfiltered)	Hex. Chromium 7199	Methane, Ethane, Ethene	Gas Sensitive Range	LAB #
1	3-10-08	1042	KA6-2'	Soil	4	1 Sleeve	X	X	X	X	X	X	X	X	LI03326
2		1045	KA6-5'												03327
3		1047	KA6-7'												03328
4		1053	KA6-10'												~~03329~~ 03329
5		1116	KA7-2'												03330
6		1119	KA7-5'												03331
7		1121	KA7-7'												03332
8		1127	KA7-10'												03333
9		1159	KA8-2'												03334
10		1204	KA8-5'												03335
11		1209	KA8-7'												03336
12		1212	KA8-10'												03337
13		1232	KA9-2'												03338
14		1237	KA9-5'												03339
15		1239	KA9-7'												03340
16		1246	KA9-10'												03341
17		1301	KA10-2'												03342
18		1312	KA10-5'												03343
19		1317	KA10-7'												03344
20		1320	KA10-10'												03345

Relinquished by: (Signature)	Date/Time	Received by: (Signature)
	3-11-08 0945	
Relinquished by: (Signature)	Date/Time	Received by: (Signature)
Relinquished by: (Signature)	Date/Time	Received for Laboratory by: (Signature)

Instructions/Remarks:

Send Results To:

KLEINFELDER
16 TECHNOLOGY DRIVE, SUITE 150
IRVINE, CA 92618
(949) 727-4466

Attn:

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CHAIN OF CUSTODY

№ 0016

LEINFELDER

100005

CO 08-0683

PROJECT NO. 922871.1 | PROJECT NAME JAP-8 | L.P. NO. (P.O. NO.) | SAMPLERS: (Signature/Number)

RECEIVING LAB: LADWP

	DATE MM/DD/YY	SAMPLE I.D. TIME HH-MM-SS	SAMPLE I.D.	MATRIX	NO. OF CONTAINERS	TYPE OF CONTAINERS	ANALYSIS: TPH 8015M	VOC 8260B	PCB 8082	SVOC 8270C	CAM 17 Metals (Cr+6 by 7196A)	Hex. Chromium 7199	Asbestos - Bulk Hi-Vol Filters	Cal Soluble	Perchlorate	INSTRUCTIONS/REMARKS: 3 of 4
1	3-10-08	KA1-1321	KA1-2'	Soil	4	1 Sleeve	X	X	X	X	X	X	X	X	X	LI 03346
2		1326	KA1-5'													03347
3		1329	KA1-7'													03348
4		1332	KA1-10'													03349
5		1350	KA2-2'													03350
6		1355	KA2-5'													03351
7		1359	KA2-7'													03352
8		1402	KA2-10'													03353
9		1421	KA3-2'													03354
10		1426	KA3-5'													03355
11		1429	KA3-7'													03356
12		1434	KA3-10'													03357
13		1441	KA4-2'													03358
14		1445	KA4-5'													03359
15		1447	KA4-7'													03360
16		1450	KA4-10'													03361
17		1500	KA5-2'													03362
18		1506	KA5-5'													03363
19		1512	KA5-7'													03364
20		1515	KA5-10'													03365

Relinquished by: (Signature)	Date/Time	Received by: (Signature)
	3-11-08 0945	
Relinquished by: (Signature)	Date/Time	Received by: (Signature)
Relinquished by: (Signature)	Date/Time	Received for Laboratory by: (Signature)

Instructions/Remarks:

Send Results To:

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16 TECHNOLOGY DRIVE, SUITE 150
IRVINE, CA 92618
(949) 727-4466

Attn:

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CHAIN OF CUSTODY

№ 0017

LEINFELDER

COC 08-0683

100006

PROJECT NO. 92287.1 | PROJECT NAME TAP-8 | L.P. NO. (P.O. NO.) | SAMPLERS: (Signature/Number)

RECEIVING LAB: LADWP

INSTRUCTIONS/REMARKS: 4 of 4

	DATE MM/DD/YY	SAMPLE I.D. TIME HH-MM-SS	SAMPLE I.D.	MATRIX	NO. OF CONTAINERS	TYPE OF CONTAINERS 3 Brass 1 Steel	ANALYSIS: TPH 8015M; VOC 8260B; OPC 8082; SVOC 8270C; TTLC Metals (CAM17) 6010B/7470A; WET Chemistry - Hexavalent Chromium 3060A/7196A; Total Cyanide 9010B; Soil Solubility (WET) STLC 6010B	RECEIVING LAB / INSTRUCTIONS/REMARKS
1	3/6-08	1520	KA16-2'	Soil	4	1 Steel	X X X X X X X X X	LT 03366
2		1524	KA16-5'					03367
3		1530	KA16-7'					03368
4		1532	KA16-10'					03369
5		1548	KA17-2'					03370
6		1552	KA17-5'					03371
7		1556	KA17-7'					03372
8		1602	KA17-10'					03373
9		1620	KA18-2'					03374
10		1626	KA18-5'					03375
11		1632	KA18-7'					03376
12		1651	KA18-10'					03377
13								
14								
15								
16								
17								
18								
19								
20								

Relinquished by: (Signature)	Date/Time	Received by: (Signature)
Relinquished by: (Signature)	Date/Time	Received by: (Signature)
Relinquished by: (Signature)	Date/Time	Received for Laboratory by: (Signature)

Instructions/Remarks:

Send Results To:

KLEINFELDER
16 TECHNOLOGY DRIVE, SUITE 150
IRVINE, CA 92618
(949) 727-4466

Attn:

M-60

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CHAIN OF CUSTODY

No. 0018

ATTACHMENT # 1

TOTAL EXTRACTABLE PETROLEUM HYDROCARBONS
TEPH - EPA METHOD 8015M

CITY OF LOS ANGELES, DEPARTMENT OF WATER & POWER
ENVIRONMENTAL LABORATORY

Case Narrative

Total Extractable Petroleum Hydrocarbons (C_9-C_{36}) by EPA Method 8015M

Client:Kelvin Lew

Project: Chatsworth Reservoir

COC No.: 08-0683

Data Review Criteria	Yes	No	N/A
Holding time			
1. Samples were extracted and analyzed within holding time limit.	X		
Comments:			
Calibration			
1. Initial calibration was performed at five different calibrations.	X		
2. Percent Relative Standard Deviation (% RSD) are within 15%.	X		
3. Calibration check standards were within QC limits.	X		
Comments:			
Method Blank, Blank Spikes, Blank Spike Duplicate			
1. Blank recoveries met QC criteria.	X		
2. Blanks were free of contamination at the reporting level.	X		
Comments:			
Lab Control Samples (LCSs)			
1. A local contaminant-free soil sample is used as a blank matrix.	X		
2. Recoveries of LCSs met QC criteria.	X		
Comments:			
Surrogate Recovery			
1. Surrogate recoveries met acceptable QC criteria.	X		
Comments:			
Matrix Spike (MS) and Matrix Spike Duplicate (MSD)			
1. MS and MSD samples were analyzed per batch .	X		
2. Recoveries of MS and MSD met QC criteria.	X		
Comments:			
Sample Analysis			
1. Samples were analyzed according to the prescribed QC procedures.	X		
2. All QC criteria were met.	X		
Comments:			

N/A: Not Applicable

Sample Results

100002

COC No. 08-0683

ENVIRONMENTAL LABORATORY

ANALYTICAL TEST RESULT FOR EPA 8015M
TEPH (Total Extractable Petroleum Hydrocarbons, C9 - C36)

Sample Matrix: SOIL

Project: CHATSWORTH RESERVOIR

SAMPLE LOG NO.	DATE SAMPLED	DATE RECEIVED	DATE EXTRACTED	DATE ANALYZED	SAMPLE DESCRIPTION	INST. ID	BATCH
LI03306	03/10/08	03/11/08	03/13/08	03/20/08	KA 1-2'	GC Agilent	031908
LI03307	03/10/08	03/11/08	03/13/08	03/20/08	KA 1-5'	GC Agilent	031908
LI03308	03/10/08	03/11/08	03/13/08	03/20/08	KA 1-7'	GC Agilent	031908
LI03309	03/10/08	03/11/08	03/13/08	03/20/08	KA 1-10'	GC Agilent	031908
LI03310	03/10/08	03/11/08	03/13/08	03/20/08	KA 2-2'	GC Agilent	031908
LI03311	03/10/08	03/11/08	03/13/08	03/20/08	KA 2-5'	GC Agilent	031908
LI03312	03/10/08	03/11/08	03/13/08	03/20/08	KA 2-7'	GC Agilent	031908

	MDL / PQL mg/kg	MB mg/kg	LI03306 mg/kg	LI03307 mg/kg	LI03308 mg/kg	LI03309 mg/kg	LI03310 mg/kg	LI03311 mg/kg	LI03312 mg/kg
Dilution Factor		1	1	1	1	1	1	1	1
TEPH (C9 - C36)	5 / 25	ND	ND	ND	ND	ND	ND	ND	ND
Quality Control Data		MB							
Surrogate/Internal Std.	% ACP	% RC	% RC	% RC	% RC	% RC	% RC	% RC	% RC
1-Chlorooctadecane	(60 - 140)	85.0%	97.5%	82.5%	68.0%	86.5%	86.0%	98.5%	87.0%

ND - Not Detected; below method detection limit

MDL - Method Detection Limit

PQL - Practical Quantitation Limit (5 x MDL)

J - above MDL but below PQL

ACP % = Acceptable Range of Percent

% RC = % Recovery

MB - Method Blank

COC No. 08-0683

ENVIRONMENTAL LABORATORY

ANALYTICAL TEST RESULT FOR EPA 8015M
TEPH (Total Extractable Petroleum Hydrocarbons, C9 - C36)

Sample Matrix: SOIL

Project: CHATSWORTH RESERVOIR

SAMPLE LOG NO.	DATE SAMPLED	DATE RECEIVED	DATE EXTRACTED	DATE ANALYZED	SAMPLE DESCRIPTION	INST. ID	BATCH
LI03313	03/10/08	03/11/08	03/13/08	03/20/08	KA 2-10'	GC Agilent	031908
LI03314	03/10/08	03/11/08	03/13/08	03/20/08	KA 3-2'	GC Agilent	031908
LI03315	03/10/08	03/11/08	03/13/08	03/20/08	KA 3-5'	GC Agilent	031908
LI03316	03/10/08	03/11/08	03/13/08	03/20/08	KA 3-7'	GC Agilent	031908
LI03317	03/10/08	03/11/08	03/13/08	03/20/08	KA 3-10'	GC Agilent	031908
LI03318	03/10/08	03/11/08	03/13/08	03/20/08	KA 4-2'	GC Agilent	031908
LI03319	03/10/08	03/11/08	03/13/08	03/20/08	KA 4-5'	GC Agilent	031908

	MDL / PQL mg/kg		LI03313 mg/kg	LI03314 mg/kg	LI03315 mg/kg	LI03316 mg/kg	LI03317 mg/kg	LI03318 mg/kg	LI03319 mg/kg
Dilution Factor			1	1	1	1	1	1	1
TEPH (C9 - C36)	5 / 25		ND	ND	ND	ND	ND	29.1	ND
Quality Control Data									
Surrogate/Internal Std.	% ACP		% RC	% RC	% RC	% RC	% RC	% RC	% RC
1-Chlorooctadecane	(60 - 140)		87.0%	89.5%	89.0%	98.5%	87.5%	92.5%	85.5%

ND - Not Detected; below method detection limit
MDL - Method Detection Limit
PQL - Practical Quantitation Limit (5 x MDL)
J - above MDL but below PQL

ACP % = Acceptable Range of Percent
% RC = % Recovery
MB - Method Blank

COC No. 08-0683

ENVIRONMENTAL LABORATORY

ANALYTICAL TEST RESULT FOR EPA 8015M
TEPH (Total Extractable Petroleum Hydrocarbons, C9 - C36)

Sample Matrix: SOIL

Project: CHATSWORTH RESERVOIR

SAMPLE LOG NO.	DATE SAMPLED	DATE RECEIVED	DATE EXTRACTED	DATE ANALYZED	SAMPLE DESCRIPTION	INST. ID	BATCH
LI03320	03/10/08	03/11/08	03/13/08	03/20/08	KA 4-7'	GC Agilent	031908
LI03321	03/10/08	03/11/08	03/13/08	03/21/08	KA 4-10'	GC Agilent	031908
LI03322	03/10/08	03/11/08	03/13/08	03/21/08	KA 5-2'	GC Agilent	031908
LI03323	03/10/08	03/11/08	03/13/08	03/21/08	KA 5-5'	GC Agilent	031908
LI03324	03/10/08	03/11/08	03/13/08	03/21/08	KA 5-7'	GC Agilent	031908
LI03325	03/10/08	03/11/08	03/13/08	03/21/08	KA 5-10'	GC Agilent	031908
LI03326	03/10/08	03/11/08	03/18/08	03/21/08	KA 6-2'	GC Agilent	032108

	MDL / PQL mg/kg	MB mg/kg	LI03320 mg/kg	LI03321 mg/kg	LI03322 mg/kg	LI03323 mg/kg	LI03324 mg/kg	LI03325 mg/kg	LI03326 mg/kg
Dilution Factor		1	1	1	1	1	1	1	1
TEPH (C9 - C36)	5 / 25	ND	ND	ND	ND	ND	ND	ND	ND
Quality Control Data		MB							
Surrogate/Internal Std.	% ACP	% RC	% RC	% RC	% RC	% RC	% RC	% RC	% RC
1-Chlorooctadecane	(60 - 140)	84.5%	85.0%	87.0%	95.0%	89.5%	83.5%	80.5%	84.5%

ND - Not Detected; below method detection limit
MDL - Method Detection Limit
PQL - Practical Quantitation Limit (5 x MDL)
J - above MDL but below PQL

ACP % = Acceptable Range of Percent
% RC = % Recovery
MB - Method Blank

100005

COC No. 08-0683

ENVIRONMENTAL LABORATORY

ANALYTICAL TEST RESULT FOR EPA 8015M
TEPH (Total Extractable Petroleum Hydrocarbons, C9 - C36)

Sample Matrix: SOIL

Project: CHATSWORTH RESERVOIR

SAMPLE LOG NO.	DATE SAMPLED	DATE RECEIVED	DATE EXTRACTED	DATE ANALYZED	SAMPLE DESCRIPTION	INST. ID	BATCH
LI03327	03/10/08	03/11/08	03/18/08	03/21/08	KA 6-5'	GC Agilent	032108
LI03328	03/10/08	03/11/08	03/18/08	03/21/08	KA 6-7'	GC Agilent	032108
LI03329	03/10/08	03/11/08	03/18/08	03/21/08	KA 6-10'	GC Agilent	032108
LI03330	03/10/08	03/11/08	03/18/08	03/21/08	KA 7-2'	GC Agilent	032108
LI03331	03/10/08	03/11/08	03/18/08	03/21/08	KA 7-5'	GC Agilent	032108
LI03332	03/10/08	03/11/08	03/18/08	03/21/08	KA 7-7'	GC Agilent	032108
LI03333	03/10/08	03/11/08	03/18/08	03/21/08	KA 7-10'	GC Agilent	032108

	MDL / PQL mg/kg		LI03327 mg/kg	LI03328 mg/kg	LI03329 mg/kg	LI03330 mg/kg	LI03331 mg/kg	LI03332 mg/kg	LI03333 mg/kg
Dilution Factor			1	1	1	1	1	1	1
TEPH (C9 - C36)	5 / 25		ND	ND	ND	ND	ND	ND	ND
Quality Control Data									
Surrogate/Internal Std.	% ACP		% RC	% RC	% RC	% RC	% RC	% RC	% RC
1-Chlorooctadecane	(60 - 140)		81.0%	69.5%	80.5%	77.5%	84.5%	83.0%	81.5%

ND - Not Detected; below method detection limit

MDL - Method Detection Limit

PQL - Practical Quantitation Limit (5 x MDL)

J - above MDL but below PQL

ACP % = Acceptable Range of Percent

% RC = % Recovery

MB - Method Blank

100006

COC No. 08-0683

ENVIRONMENTAL LABORATORY

ANALYTICAL TEST RESULT FOR EPA 8015M
TEPH (Total Extractable Petroleum Hydrocarbons, C9 - C36)

Sample Matrix: SOIL

Project: CHATSWORTH RESERVOIR

SAMPLE LOG NO.	DATE SAMPLED	DATE RECEIVED	DATE EXTRACTED	DATE ANALYZED	SAMPLE DESCRIPTION	INST. ID	BATCH
LI03334	03/10/08	03/11/08	03/18/08	03/21/08	KA 8-2'	GC Agilent	032108
LI03335	03/10/08	03/11/08	03/18/08	03/21/08	KA 8-5'	GC Agilent	032108
LI03336	03/10/08	03/11/08	03/18/08	03/21/08	KA 8-7'	GC Agilent	032108
LI03337	03/10/08	03/11/08	03/18/08	03/21/08	KA 8-10'	GC Agilent	032108
LI03338	03/10/08	03/11/08	03/18/08	03/21/08	KA 9-2'	GC Agilent	032108
LI03339	03/10/08	03/11/08	03/18/08	03/21/08	KA 9-5'	GC Agilent	032108
LI03340	03/10/08	03/11/08	03/18/08	03/21/08	KA 9-7'	GC Agilent	032108

	MDL / PQL mg/kg		LI03334 mg/kg	LI03335 mg/kg	LI03336 mg/kg	LI03337 mg/kg	LI03338 mg/kg	LI03339 mg/kg	LI03340 mg/kg
Dilution Factor			1	1	1	1	1	1	1
TEPH (C9 - C36)	5 / 25		ND	ND	ND	ND	ND	ND	ND
Quality Control Data.									
Surrogate/Internal Std.	% ACP		% RC	% RC	% RC	% RC	% RC	% RC	% RC
1-Chlorooctadecane	(60 - 140)		76.0%	75.5%	79.5%	81.0%	80.5%	79.0%	85.0%

ND - Not Detected; below method detection limit

MDL - Method Detection Limit

PQL - Practical Quantitation Limit (5 x MDL)

J - above MDL but below PQL

ACP % = Acceptable Range of Percent

% RC = % Recovery

MB - Method Blank

100007
COC No. 08-0683

ENVIRONMENTAL LABORATORY

ANALYTICAL TEST RESULT FOR EPA 8015M
TEPH (Total Extractable Petroleum Hydrocarbons, C9 - C36)

Sample Matrix: SOIL

Project: CHATSWORTH RESERVOIR

SAMPLE LOG NO.	DATE SAMPLED	DATE RECEIVED	DATE EXTRACTED	DATE ANALYZED	SAMPLE DESCRIPTION	INST. ID	BATCH
LI03341	03/10/08	03/11/08	03/18/08	03/21/08	KA 9-10'	GC Agilent	032108
LI03342	03/10/08	03/11/08	03/18/08	03/21/08	KA 10-2'	GC Agilent	032108
LI03343	03/10/08	03/11/08	03/18/08	03/21/08	KA 10-5'	GC Agilent	032108
LI03344	03/10/08	03/11/08	03/18/08	03/21/08	KA 10-7'	GC Agilent	032108
LI03345	03/10/08	03/11/08	03/18/08	03/21/08	KA 10-10'	GC Agilent	032108
LI03346	03/10/08	03/11/08	03/19/08	03/22/08	KA 11-2'	GC Agilent	032108
LI03347	03/10/08	03/11/08	03/19/08	03/22/08	KA 11-5'	GC Agilent	032108

	MDL / PQL mg/kg	MB mg/kg	LI03341 mg/kg	LI03342 mg/kg	LI03343 mg/kg	LI03344 mg/kg	LI03345 mg/kg	LI03346 mg/kg	LI03347 mg/kg
Dilution Factor		1	1	1	1	1	1	1	1
TEPH (C9 - C36)	5 / 25	ND	ND	ND	ND	ND	ND	ND	ND
Quality Control Data		MB							
Surrogate/Internal Std.	% ACP	% RC	% RC	% RC	% RC	% RC	% RC	% RC	% RC
1-Chlorooctadecane	(60 - 140)	81.0%	82.5%	75.5%	77.5%	84.5%	81.5%	84.0%	90.0%

ND - Not Detected; below method detection limit
MDL - Method Detection Limit
PQL - Practical Quantitation Limit (5 x MDL)
J - above MDL but below PQL

ACP % = Acceptable Range of Percent
% RC = % Recovery
MB - Method Blank

100008

COC No. 08-0683

ENVIRONMENTAL LABORATORY

ANALYTICAL TEST RESULT FOR EPA 8015M
TEPH (Total Extractable Petroleum Hydrocarbons, C9 - C36)

Sample Matrix: SOIL

Project: CHATSWORTH RESERVOIR

SAMPLE LOG NO.	DATE SAMPLED	DATE RECEIVED	DATE EXTRACTED	DATE ANALYZED	SAMPLE DESCRIPTION	INST ID	BATCH
LI03348	03/10/08	03/11/08	03/19/08	03/22/08	KA 11-7'	GC Agilent	032108
LI03349	03/10/08	03/11/08	03/19/08	03/22/08	KA 11-10'	GC Agilent	032108
LI03350	03/10/08	03/11/08	03/19/08	03/22/08	KA 12-2'	GC Agilent	032108
LI03351	03/10/08	03/11/08	03/19/08	03/22/08	KA 12-5'	GC Agilent	032108
LI03352	03/10/08	03/11/08	03/19/08	03/22/08	KA 12-7'	GC Agilent	032108
LI03353	03/10/08	03/11/08	03/19/08	03/22/08	KA 12-10'	GC Agilent	032108
LI03354	03/10/08	03/11/08	03/19/08	03/22/08	KA 13-2'	GC Agilent	032108

	MDL / PQL mg/kg		LI03348 mg/kg	LI03349 mg/kg	LI03350 mg/kg	LI03351 mg/kg	LI03352 mg/kg	LI03353 mg/kg	LI03354 mg/kg
Dilution Factor			1	1	1	1	1	1	1
TEPH (C9 - C36)	5 / 25		ND	ND	ND	ND	ND	ND	ND
Quality Control Data									
Surrogate/Internal Std.	% ACP		% RC	% RC	% RC	% RC	% RC	% RC	% RC
1-Chlorooctadecane	(60 - 140)		86.0%	83.5%	87.5%	92.0%	78.5%	89.0%	91.5%

ND - Not Detected; below method detection limit

MDL - Method Detection Limit

PQL - Practical Quantitation Limit (5 x MDL)

J - above MDL but below PQL

ACP % = Acceptable Range of Percent

% RC = % Recovery

MB - Method Blank

100009

COC No. 08-0683

ENVIRONMENTAL LABORATORY

ANALYTICAL TEST RESULT FOR EPA 8015M
TEPH (Total Extractable Petroleum Hydrocarbons, C9 - C36)

Sample Matrix: SOIL

Project: CHATSWORTH RESERVOIR

SAMPLE LOG NO.	DATE SAMPLED	DATE RECEIVED	DATE EXTRACTED	DATE ANALYZED	SAMPLE DESCRIPTION	INST. ID	BATCH
LI03355	03/10/08	03/11/08	03/19/08	03/22/08	KA 13-5'	GC Agilent	032108
LI03356	03/10/08	03/11/08	03/19/08	03/22/08	KA 13-7'	GC Agilent	032108
LI03357	03/10/08	03/11/08	03/19/08	03/22/08	KA 13-10'	GC Agilent	032108
LI03358	03/10/08	03/11/08	03/19/08	03/22/08	KA 14-2'	GC Agilent	032108
LI03359	03/10/08	03/11/08	03/19/08	03/22/08	KA 14-5'	GC Agilent	032108
LI03360	03/10/08	03/11/08	03/19/08	03/22/08	KA 14-7'	GC Agilent	032108
LI03361	03/10/08	03/11/08	03/19/08	03/22/08	KA 14-10'	GC Agilent	032108

	MDL / PQL mg/kg		LI03355 mg/kg	LI03356 mg/kg	LI03357 mg/kg	LI03358 mg/kg	LI03359 mg/kg	LI03360 mg/kg	LI03361 mg/kg
Dilution Factor			1	1	1	1	1	1	1
TEPH (C9 - C36)	5 / 25		ND	ND	ND	ND	ND	ND	ND
Quality Control Data									
Surrogate/Internal Std.	% ACP		% RC	% RC	% RC	% RC	% RC	% RC	% RC
1-Chlorooctadecane	(60 - 140)		88.5%	90.0%	84.5%	82.5%	91.5%	84.5%	84.0%

ND - Not Detected; below method detection limit

MDL - Method Detection Limit

PQL - Practical Quantitation Limit (5 x MDL)

J - above MDL but below PQL

ACP % = Acceptable Range of Percent

% RC = % Recovery

MB - Method Blank

100010

COC No. 08-0683

ENVIRONMENTAL LABORATORY

ANALYTICAL TEST RESULT FOR EPA 8015M
TEPH (Total Extractable Petroleum Hydrocarbons, C9 - C36)

Sample Matrix: SOIL

Project: CHATSWORTH RESERVOIR

SAMPLE LOG NO.	DATE SAMPLED	DATE RECEIVED	DATE EXTRACTED	DATE ANALYZED	SAMPLE DESCRIPTION	INST ID	BATCH
LI03362	03/10/08	03/11/08	03/19/08	03/22/08	KA 15-2'	GC Agilent	032108
LI03363	03/10/08	03/11/08	03/19/08	03/22/08	KA 15-5'	GC Agilent	032108
LI03364	03/10/08	03/11/08	03/19/08	03/22/08	KA 15-7'	GC Agilent	032108
LI03365	03/10/08	03/11/08	03/19/08	03/22/08	KA 15-10'	GC Agilent	032108
LI03366	03/10/08	03/11/08	03/20/08	03/22/08	KA 16-2'	GC Agilent	032108
LI03367	03/10/08	03/11/08	03/20/08	03/22/08	KA 16-5'	GC Agilent	032108
LI03368	03/10/08	03/11/08	03/20/08	03/22/08	KA 16-7'	GC Agilent	032108

	MDL / PQL mg/kg	MB mg/kg	LI03362 mg/kg	LI03363 mg/kg	LI03364 mg/kg	LI03365 mg/kg	LI03366 mg/kg	LI03367 mg/kg	LI03368 mg/kg
Dilution Factor		1	1	1	1	1	1	1	1
TEPH (C9 - C36)	5 / 25	ND	ND	ND	ND	ND	ND	ND	ND
Quality Control Data		MB							
Surrogate/Internal Std.	% ACP	% RC	% RC	% RC	% RC	% RC	% RC	% RC	% RC
1-Chlorooctadecane	(60 - 140)	81.0%	84.0%	80.0%	79.0%	85.0%	84.0%	82.5%	80.0%

ND - Not Detected; below method detection limit

MDL - Method Detection Limit

PQL - Practical Quantitation Limit (5 x MDL)

J - above MDL but below PQL

ACP % = Acceptable Range of Percent

% RC = % Recovery

MB - Method Blank

100011
COC No. 08-0683

ENVIRONMENTAL LABORATORY

ANALYTICAL TEST RESULT FOR EPA 8015M
TEPH (Total Extractable Petroleum Hydrocarbons, C9 - C36)

Sample Matrix: SOIL

Project: CHATSWORTH RESERVOIR

SAMPLE LOG NO.	DATE SAMPLED	DATE RECEIVED	DATE EXTRACTED	DATE ANALYZED	SAMPLE DESCRIPTION	INST ID	BATCH
LI03369	03/10/08	03/11/08	03/20/08	03/22/08	KA 16-10'	GC Agilent	032108
LI03370	03/10/08	03/11/08	03/20/08	03/22/08	KA 17-2'	GC Agilent	032108
LI03371	03/10/08	03/11/08	03/20/08	03/22/08	KA 17-5'	GC Agilent	032108
LI03372	03/10/08	03/11/08	03/20/08	03/22/08	KA 17-7'	GC Agilent	032108
LI03373	03/10/08	03/11/08	03/20/08	03/22/08	KA 17-10'	GC Agilent	032108
LI03374	03/10/08	03/11/08	03/20/08	03/22/08	KA 18-2'	GC Agilent	032108
LI03375	03/10/08	03/11/08	03/20/08	03/22/08	KA 18-5'	GC Agilent	032108

	MDL / PQL mg/kg		LI03369 mg/kg	LI03370 mg/kg	LI03371 mg/kg	LI03372 mg/kg	LI03373 mg/kg	LI03374 mg/kg	LI03375 mg/kg
Dilution Factor			1	1	1	1	1	1	1
TEPH (C9 - C36)	5 / 25		ND	ND	ND	ND	ND	ND	ND
Quality Control Data									
Surrogate/Internal Std.	% ACP		% RC	% RC	% RC	% RC	% RC	% RC	% RC
1-Chlorooctadecane	(60 - 140)		80.0%	84.5%	85.5%	87.5%	77.5%	81.0%	80.5%

ND - Not Detected; below method detection limit
MDL - Method Detection Limit
PQL - Practical Quantitation Limit (5 x MDL)
J - above MDL but below PQL

ACP % = Acceptable Range of Percent
% RC = % Recovery
MB - Method Blank

100012
COC No. 08-0683

ENVIRONMENTAL LABORATORY

ANALYTICAL TEST RESULT FOR EPA 8015M
TEPH (Total Extractable Petroleum Hydrocarbons, C9 - C36)

Sample Matrix: SOIL

Project: CHATSWORTH RESERVOIR

SAMPLE LOG NO.	DATE SAMPLED	DATE RECEIVED	DATE EXTRACTED	DATE ANALYZED	SAMPLE DESCRIPTION	INST. ID	BATCH
LI03376	03/10/08	03/11/08	03/20/08	03/22/08	KA 18-7'	GC Agilent	032108
LI03377	03/10/08	03/11/08	03/20/08	03/22/08	KA 18-10'	GC Agilent	032108

	MDL / PQL mg/kg		LI03376 mg/kg	LI03377 mg/kg					
Dilution Factor			1	1					
TEPH (C9 - C36)	5 / 25		ND	ND					
Quality Control Data									
Surrogate/Internal Std.	% ACP		% RC	% RC					
1-Chlorooctadecane	(60 - 140)		86.5%	80.0%					

ND - Not Detected; below method detection limit
MDL - Method Detection Limit
PQL - Practical Quantitation Limit (5 x MDL)
J - above MDL but below PQL

ACP % = Acceptable Range of Percent
% RC = % Recovery
MB - Method Blank

QC SUMMARIES

ENVIRONMENTAL LABORATORY

QA/QC REPORT

TEPH (Total Extractable Petroleum Hydrocarbon, C9 - C36)

Sample Matrix: SOIL

Project: CHATSWORTH RESERVOIR

I. Matrix Spike (MS) / Matrix Spike Duplicate (MSD)

Reporting Unit: mg/kg

SAMPLE LOG NO.	BATCH QC	RUN LOG	SAMPLE CONC	SPIKE CONC	MS	% MS	MSD	% MSD	RPD	MS/MSD % ACP	RPD ACP
LI03320	031908	031908-59,60	ND	280	232	82.9%	237	84.6%	2.1%	70 - 130	30
LI03336	032108	032108-20,21	ND	280	232	82.9%	231	82.5%	0.4%	70 - 130	30
LI03353	032108	032108-48,49	ND	280	258	92.1%	254	90.7%	1.6%	70 - 130	30
LI03372	032108	032108-80,81	ND	280	224	80.0%	244	87.1%	8.5%	70 - 130	30

SPIKE CONC = Spiking Concentration;
MS = Matrix Spike
MSD = Matrix Spike Duplicate
% MS = Percent Recovery of MS
% MSD = Percent Recovery of MSD
RPD = Relative Percent Difference
ACP = Acceptable Range of Percent

ENVIRONMENTAL LABORATORY

QA/QC REPORT

TEPH (Total Extractable Petroleum Hydrocarbon, C9 - C36)

Sample Matrix: SOIL
Project: CHATSWORTH RESERVOIR

II. Laboratory Quality Control Check Sample (LCS)

LCS Log No.: Q6512

ANALYTE	BATCH QC	RUN LOG	DATE ANALYZED	SPIKE CONC.	RESULT	%REC.	Acceptable Range
TEPH	031908	031908-66	3/13/2008	280	269	96.1	70 - 130
TEPH	032108	032108-31	3/18/2008	280	222	79.3	70 - 130
TEPH	032108	032108-62	3/19/2008	280	231	82.5	70 - 130
TEPH	032108	032108-87	3/20/2008	280	223	79.6	70 - 130

Analysts J. Yi

Reviewed by R. Gentallan 4/14/08

ATTACHMENT # 2

POLYCHLORINATED BIPHENYLS
PCBs - EPA METHOD 8082

200001

CITY OF LOS ANGELES, DEPARTMENT OF WATER & POWER
ENVIRONMENTAL LABORATORY

Case Narrative

Polychlorinated Biphenyls (PCBs) by EPA Method 8082A

Client: Kelvin Lew

Project: Chatsworth Reservoir

COC No.:08-0683

Data Review Criteria	Yes	No	N/A
Holding time			
1. Samples were extracted and anlayzed within holding time limit.	X		
Comments:			
Calibration			
1. Initial Calibration was performed at five different concentrations for PCB-1221, PCB-1232, PCB-1242, PCB-1248, PCB-1254, and PCB-1260.	X		
2. Percent Relative Stadard Deviation (% RSD) are wtihin 15%.	X		
Comments:			
Method Blank, Blank Spikes, Blank Spike Duplicate			
1. Laboratory blank soil was used as method blank.	X		
2. Blank recoveries met QC criteria.	X		
3. Blanks were free of contamination at the reporting level.	X		
Comments:			
Lab Control Samples (LCSs)			
1. LCS (certified QC soil sample) was analyzed per batch.	X		
2. Recoveries of LCSs met QC criteria.	X		
Comments:			
Surrogate Recovery			
1. Surrogate recoveries met acceptable QC criteria.	X		
Comments:			
Matrix Spike (MS) and Matrix Spike Duplicate (MSD)			
1. MS and MSD samples were analyzed per batch .	X		
2. Recoveries of MS and MSD met QC criteria.	X		
Comments:			
Sample Analysis			
1. Samples were analyzed according to the prescribed QC procedures.	X		
2. All QC criteria were met.	X		
Comments:			

N/A: Not Applicable

Sample Results

ENVIRONMENTAL LABORATORY DATA REPORT

ANALYTICAL RESULT FOR PCBs
by USEPA Method 300/SR-94/112 & 8082A
(Polychlorinated Biphenyls)
Sample Matrix: Soil

Project: CHATSWORTH RESERVOIR

LABORATORY LOG NO.	DATE SAMPLED	DATE RECEIVED	DATE EXTRACTECD	DATE ANALYZED	SAMPLE DESCRIPTION	INSTR ID	BATCH QC
LI03306	3/10/2008	3/11/2008	9/8/2008	3/25/2008	KA 1-2'	H. P. GC 2	20080312
LI03307	3/10/2008	3/11/2008	3/11/2009	3/25/2008	KA 1-5'	H. P. GC 2	20080312
LI03308	3/10/2008	3/11/2008	3/11/2009	3/25/2008	KA 1-7'	H. P. GC 2	20080312
LI03309	3/10/2008	3/11/2008	3/11/2009	3/25/2008	KA 1-10'	H. P. GC 2	20080312
LI03310	3/10/2008	3/11/2008	3/11/2009	3/25/2008	KA 2-2'	H. P. GC 2	20080312
LI03311	3/10/2008	3/11/2008	3/11/2009	3/25/2008	KA 2-5'	H. P. GC 2	20080312
LI03312	3/10/2008	3/11/2008	3/11/2009	3/25/2008	KA 2-7'	H. P. GC 2	20080312

PARAMETERS	MDL (mg/kg)	RL (mg/kg)	LI03306 mg/kg	LI03307 mg/kg	LI03308 mg/kg	LI03309 mg/kg	LI03310 mg/kg	LI03311 mg/kg	LI03312 mg/kg
PCB - 1221	0.006	0.030	ND	ND	ND	ND	ND	ND	ND
PCB - 1232	0.008	0.040	ND	ND	ND	ND	ND	ND	ND
PCB - 1242	0.017	0.085	ND	ND	ND	ND	ND	ND	ND
PCB - 1248	0.005	0.025	ND	ND	ND	ND	ND	ND	ND
PCB - 1254	0.010	0.050	ND	ND	ND	ND	ND	ND	ND
PCB - 1260	0.013	0.065	ND	ND	ND	ND	ND	ND	ND
SURROGATE PARAMETERS	QC LIMIT	% Recovery	% Recovery	% Recovery	% Recovery	% Recovery	% Recovery	% Recovery	% Recovery
	D.F	1	1	1	1	1	1	1	1
DECACHLOROBIPHENYL	70% - 130%	98%	97%	104%	103%	97%	103%	103%	

LABORATORY LOG NO.	DATE SAMPLED	DATE RECEIVED	DATE EXTRACTECD	DATE ANALYZED	SAMPLE DESCRIPTION	INSTR ID	RUN LOG / BATCH QC
LI03313	3/10/2008	3/11/2008	3/11/2009	3/25/2008	KA 2-10'	H. P. GC 2	20080312
LI03314	3/10/2008	3/11/2008	3/11/2009	3/25/2008	KA 3-2'	H. P. GC 2	20080312
LI03315	3/10/2008	3/11/2008	3/11/2009	3/25/2008	KA 3-5'	H. P. GC 2	20080312
LI03316	3/10/2008	3/11/2008	3/11/2009	3/25/2008	KA 3-7'	H. P. GC 2	20080312
LI03317	3/10/2008	3/11/2008	3/11/2009	3/25/2008	KA 3-10'	H. P. GC 2	20080312
LI03318	3/10/2008	3/11/2008	3/11/2009	3/25/2008	KA 4-2'	H. P. GC 2	20080312
LI03319	3/10/2008	3/11/2008	3/11/2009	3/25/2008	KA 4-5'	H. P. GC 2	20080312

PARAMETERS	MDL (mg/kg)	RL (mg/kg)	LI03313 mg/kg	LI03314 mg/kg	LI03315 mg/kg	LI03316 mg/kg	LI03317 mg/kg	LI03318 mg/kg	LI03319 mg/kg
PCB - 1221	0.006	0.030	ND	ND	ND	ND	ND	ND	ND
PCB - 1232	0.008	0.040	ND	ND	ND	ND	ND	ND	ND
PCB - 1242	0.017	0.085	ND	ND	ND	ND	ND	ND	ND
PCB - 1248	0.005	0.025	ND	ND	ND	ND	ND	ND	ND
PCB - 1254	0.010	0.050	ND	ND	ND	ND	ND	ND	ND
PCB - 1260	0.013	0.065	ND	ND	ND	ND	ND	ND	ND
SURROGATE PARAMETERS	QC LIMIT	% Recovery	% Recovery	% Recovery	% Recovery	% Recovery	% Recovery	% Recovery	% Recovery
	D.F	1	1	1	1	1	1	1	1
DECACHLOROBIPHENYL	70% - 130%	101%	105%	96%	105%	101%	107%	103%	

MDL - Method Detection Limit *ND - Not Detected at indicated RL* *D.F - Dilution Factor*
RL - Reporting Limit (5xMDL) *j : above MDL but below RL*
RUN LOG / BATCH QC - Line Number of Sequence Filename / Batch Identification

Analyst: R. Petersen / Bryan Tiu

ENVIRONMENTAL LABORATORY DATA REPORT

ANALYTICAL RESULT FOR PCBs
by USEPA Method 300/SR-94/112 & 8082A
(Polychlorinated Biphenyls)
Sample Matrix: Soil

Project: CHATSWORTH RESERVOIR

LABORATORY LOG NO	DATE SAMPLED	DATE RECEIVED	DATE EXTRACTECD	DATE ANALYZED	SAMPLE DESCRIPTION	INSTR ID	RUN LOG / BATCH QC
LI03320	3/10/2008	3/11/2008	3/11/2009	3/25/2008	KA 4-7'	H. P. GC 2	20080312
LI03321	3/10/2008	3/11/2008	3/11/2009	3/25/2008	KA 4-10'	H. P. GC 2	20080312
LI03322	3/10/2008	3/11/2008	3/11/2009	3/25/2008	KA 5-2'	H. P. GC 2	20080312
LI03323	3/10/2008	3/11/2008	3/11/2009	3/25/2008	KA 5-5'	H. P. GC 2	20080312
LI03324	3/10/2008	3/11/2008	3/11/2009	3/25/2008	KA 5-7'	H. P. GC 2	20080312
LI03325	3/10/2008	3/11/2008	3/11/2009	3/25/2008	KA 5-10'	H. P. GC 2	20080312
LI03326	3/10/2008	3/11/2008	3/11/2009	3/25/2008	KA 6-2'	H. P. GC 2	20080312

PARAMETERS	MDL (mg/kg)	RL (mg/kg)	LI03320 mg/kg	LI03321 mg/kg	LI03322 mg/kg	LI03323 mg/kg	LI03324 mg/kg	LI03325 mg/kg	LI03326 mg/kg
PCB - 1221	0.006	0.030	ND	ND	ND	ND	ND	ND	ND
PCB - 1232	0.008	0.040	ND	ND	ND	ND	ND	ND	ND
PCB - 1242	0.017	0.085	ND	ND	ND	ND	ND	ND	ND
PCB - 1248	0.005	0.025	ND	ND	ND	ND	ND	ND	ND
PCB - 1254	0.010	0.050	ND	ND	ND	ND	ND	ND	ND
PCB - 1260	0.013	0.065	ND	ND	ND	ND	ND	ND	ND

SURROGATE PARAMETERS	QC LIMIT	% Recovery	% Recovery	% Recovery	% Recovery	% Recovery	% Recovery	% Recovery
	D.F	1	1	1	1	1	1	1
DECACHLOROBIPHENYL	70% - 130%	100%	106%	100%	100%	83%	92%	95%

LABORATORY LOG NO	DATE SAMPLED	DATE RECEIVED	DATE EXTRACTECD	DATE ANALYZED	SAMPLE DESCRIPTION	INSTR ID	RUN LOG / BATCH QC
LI03327	3/10/2008	3/11/2008	3/11/2009	3/25/2008	KA 6-5'	H. P. GC 2	20080312
LI03328	3/10/2008	3/11/2008	3/11/2009	3/25/2008	KA 6-7'	H. P. GC 2	20080312
LI03329	3/10/2008	3/11/2008	3/11/2009	3/25/2008	KA 6-10'	H. P. GC 2	20080312
LI03330	3/10/2008	3/11/2008	3/11/2009	3/25/2008	KA 7-2'	H. P. GC 2	20080312
LI03331	3/10/2008	3/11/2008	3/11/2009	3/25/2008	KA 7-5'	H. P. GC 2	20080312
LI03332	3/10/2008	3/11/2008	3/11/2009	3/25/2008	KA 7-7'	H. P. GC 2	20080312
LI03333	3/10/2008	3/11/2008	3/11/2009	3/25/2008	KA 7-10'	H. P. GC 2	20080312

PARAMETERS	MDL (mg/kg)	RL (mg/kg)	LI03327 mg/kg	LI03328 mg/kg	LI03329 mg/kg	LI03330 mg/kg	LI03331 mg/kg	LI03332 mg/kg	LI03333 mg/kg
PCB - 1221	0.006	0.030	ND	ND	ND	ND	ND	ND	ND
PCB - 1232	0.008	0.040	ND	ND	ND	ND	ND	ND	ND
PCB - 1242	0.017	0.085	ND	ND	ND	ND	ND	ND	ND
PCB - 1248	0.005	0.025	ND	ND	ND	ND	ND	ND	ND
PCB - 1254	0.010	0.050	ND	ND	ND	ND	ND	ND	ND
PCB - 1260	0.013	0.065	ND	ND	ND	ND	ND	ND	ND

SURROGATE PARAMETERS	QC LIMIT	% Recovery	% Recovery	% Recovery	% Recovery	% Recovery	% Recovery	% Recovery
	D.F	1	1	1	1	1	1	1
DECACHLOROBIPHENYL	70% - 130%	89%	91%	87%	95%	103%	98%	105%

MDL - Method Detection Limit *ND - Not Detected at indicated RL* *D.F - Dilution Factor*
RL - Reporting Limit (5xMDL) *J : above MDL but below RL*
RUN LOG / BATCH QC - Line Number of Sequence Filename / Batch Identification

Analyst: R. Petersen / Bryan Tiu

ENVIRONMENTAL LABORATORY DATA REPORT

ANALYTICAL RESULT FOR PCBs
by USEPA Method 300/SR-94/112 & 8082A
(Polychlorinated Biphenyls)
Sample Matrix: Soil

Project: CHATSWORTH RESERVOIR

LABORATORY LOG NO.	DATE SAMPLED	DATE RECEIVED	DATE EXTRACTECD	DATE ANALYZED	SAMPLE DESCRIPTION	INSTR ID	RUN LOG / BATCH QC
LI03334	3/10/2008	3/11/2008	3/11/2009	3/25/2008	KA 8-2'	H. P. GC 2	20080312
LI03335	3/10/2008	3/11/2008	3/11/2009	3/25/2008	KA 8-5'	H. P. GC 2	20080312
LI03336	3/10/2008	3/11/2008	3/15/2008	3/31/2008	KA 8-7'	H. P. GC 2	20080315
LI03337	3/10/2008	3/11/2008	3/15/2008	3/31/2008	KA 8-10'	H. P. GC 2	20080315
LI03338	3/10/2008	3/11/2008	3/15/2008	3/31/2008	KA 9-2'	H. P. GC 2	20080315
LI03339	3/10/2008	3/11/2008	3/15/2008	3/31/2008	KA 9-5'	H. P. GC 2	20080315
LI03340	3/10/2008	3/11/2008	3/15/2008	3/31/2008	KA 9-7'	H. P. GC 2	20080315

PARAMETERS	MDL (mg/kg)	RL (mg/kg)	LI03334 mg/kg	LI03335 mg/kg	LI03336 mg/kg	LI03337 mg/kg	LI03338 mg/kg	LI03339 mg/kg	LI03340 mg/kg
PCB - 1221	0.006	0.030	ND	ND	ND	ND	ND	ND	ND
PCB - 1232	0.008	0.040	ND	ND	ND	ND	ND	ND	ND
PCB - 1242	0.017	0.085	ND	ND	ND	ND	ND	ND	ND
PCB - 1248	0.005	0.025	ND	ND	ND	ND	ND	ND	ND
PCB - 1254	0.010	0.050	ND	ND	ND	ND	ND	ND	ND
PCB - 1260	0.013	0.065	ND	ND	ND	ND	ND	ND	ND
SURROGATE PARAMETERS	QC LIMIT	% Recovery	% Recovery	% Recovery	% Recovery	% Recovery	% Recovery	% Recovery	% Recovery
	D.F	1	1	1	1	1	1	1	1
DECACHLOROBIPHENYL	70% - 130%	103%	96%	106%	103%	105%	107%	106%	

LABORATORY LOG NO.	DATE SAMPLED	DATE RECEIVED	DATE EXTRACTECD	DATE ANALYZED	SAMPLE DESCRIPTION	INSTR ID	RUN LOG / BATCH QC
LI03341	3/10/2008	3/11/2008	3/15/2008	3/31/2008	KA 9-10'	H. P. GC 2	20080315
LI03342	3/10/2008	3/11/2008	3/15/2008	3/31/2008	KA 10-2'	H. P. GC 2	20080315
LI03343	3/10/2008	3/11/2008	3/15/2008	3/31/2008	KA 10-5'	H. P. GC 2	20080315
LI03344	3/10/2008	3/11/2008	3/15/2008	3/31/2008	KA 10-7'	H. P. GC 2	20080315
LI03345	3/10/2008	3/11/2008	3/15/2008	3/31/2008	KA 10-10'	H. P. GC 2	20080315
LI03346	3/10/2008	3/11/2008	3/15/2008	3/31/2008	KA 11-2'	H. P. GC 2	20080315
LI03347	3/10/2008	3/11/2008	3/15/2008	3/31/2008	KA 11-5'	H. P. GC 2	20080315

PARAMETERS	MDL (mg/kg)	RL (mg/kg)	LI03341 mg/kg	LI03342 mg/kg	LI03343 mg/kg	LI03344 mg/kg	LI03345 mg/kg	LI03346 mg/kg	LI03347 mg/kg
PCB - 1221	0.006	0.030	ND	ND	ND	ND	ND	ND	ND
PCB - 1232	0.008	0.040	ND	ND	ND	ND	ND	ND	ND
PCB - 1242	0.017	0.085	ND	ND	ND	ND	ND	ND	ND
PCB - 1248	0.005	0.025	ND	ND	ND	ND	ND	ND	ND
PCB - 1254	0.010	0.050	ND	ND	ND	ND	ND	ND	ND
PCB - 1260	0.013	0.065	ND	ND	ND	ND	ND	ND	ND
SURROGATE PARAMETERS	QC LIMIT	% Recovery	% Recovery	% Recovery	% Recovery	% Recovery	% Recovery	% Recovery	% Recovery
	D.F	1	1	1	1	1	1	1	1
DECACHLOROBIPHENYL	70% - 130%	104%	100%	106%	101%	106%	103%	104%	

MDL - Method Detection Limit *ND - Not Detected at indicated RL* *D.F - Dilution Factor*
RL - Reporting Limit (5xMDL) *J : above MDL but below RL*
RUN LOG / BATCH QC - Line Number of Sequence Filename / Batch Identification

Analyst: R. Petersen / Bryan Tiu

ENVIRONMENTAL LABORATORY DATA REPORT

ANALYTICAL RESULT FOR PCBs
by USEPA Method 300/SR-94/112 & 8082A
(Polychlorinated Biphenyls)
Sample Matrix: Soil

Project: CHATSWORTH RESERVOIR

LABORATORY LOG NO	DATE SAMPLED	DATE RECEIVED	DATE EXTRACTECD	DATE ANALYZED	SAMPLE DESCRIPTION	INSTR ID	RUN LOG / BATCH QC
LI03348	3/10/2008	3/11/2008	3/15/2008	3/31/2008	KA 11-7'	H. P. GC 2	20080315
LI03349	3/10/2008	3/11/2008	3/15/2008	3/31/2008	KA 11-10'	H. P. GC 2	20080315
LI03350	3/10/2008	3/11/2008	3/15/2008	3/31/2008	KA 12-2'	H. P. GC 2	20080315
LI03351	3/10/2008	3/11/2008	3/15/2008	3/31/2008	KA 12-5'	H. P. GC 2	20080315
LI03352	3/10/2008	3/11/2008	3/15/2008	3/31/2008	KA 12-7'	H. P. GC 2	20080315
LI03353	3/10/2008	3/11/2008	3/15/2008	3/31/2008	KA 12-10'	H. P. GC 2	20080315
LI03354	3/10/2008	3/11/2008	3/15/2008	3/31/2008	KA 13-2'	H. P. GC 2	20080315

PARAMETERS	MDL (mg/kg)	RL (mg/kg)	LI03348 mg/kg	LI03349 mg/kg	LI03350 mg/kg	LI03351 mg/kg	LI03352 mg/kg	LI03353 mg/kg	LI03354 mg/kg
PCB - 1221	0.006	0.030	ND	ND	ND	ND	ND	ND	ND
PCB - 1232	0.008	0.040	ND	ND	ND	ND	ND	ND	ND
PCB - 1242	0.017	0.085	ND	ND	ND	ND	ND	ND	ND
PCB - 1248	0.005	0.025	ND	ND	ND	ND	ND	ND	ND
PCB - 1254	0.010	0.050	ND	ND	ND	ND	ND	ND	ND
PCB - 1260	0.013	0.065	ND	ND	ND	ND	ND	ND	ND

SURROGATE PARAMETERS	QC LIMIT	% Recovery	% Recovery	% Recovery	% Recovery	% Recovery	% Recovery	% Recovery
	D.F	1	1	1	1	1	1	1
DECACHLOROBIPHENYL	70% - 130%	103%	103%	101%	105%	103%	105%	105%

LABORATORY LOG NO	DATE SAMPLED	DATE RECEIVED	DATE EXTRACTECD	DATE ANALYZED	SAMPLE DESCRIPTION	INSTR ID	RUN LOG / BATCH QC
LI03355	3/10/2008	3/11/2008	3/15/2008	3/31/2008	KA 13-5'	H. P. GC 2	20080315
LI03356	3/10/2008	3/11/2008	3/15/2008	3/31/2008	KA 13-7'	H. P. GC 2	20080315
LI03357	3/10/2008	3/11/2008	3/15/2008	3/31/2008	KA 13-10'	H. P. GC 2	20080315
LI03358	3/10/2008	3/11/2008	3/15/2008	3/31/2008	KA 14-2'	H. P. GC 2	20080315
LI03359	3/10/2008	3/11/2008	3/15/2008	3/31/2008	KA 14-5'	H. P. GC 2	20080315
LI03360	3/10/2008	3/11/2008	3/15/2008	3/31/2008	KA 14-7'	H. P. GC 2	20080315
LI03361	3/10/2008	3/11/2008	3/15/2008	3/31/2008	KA 14-10'	H. P. GC 2	20080315

PARAMETERS	MDL (mg/kg)	RL (mg/kg)	LI03355 mg/kg	LI03356 mg/kg	LI03357 mg/kg	LI03358 mg/kg	LI03359 mg/kg	LI03360 mg/kg	LI03361 mg/kg
PCB - 1221	0.006	0.030	ND	ND	ND	ND	ND	ND	ND
PCB - 1232	0.008	0.040	ND	ND	ND	ND	ND	ND	ND
PCB - 1242	0.017	0.085	ND	ND	ND	ND	ND	ND	ND
PCB - 1248	0.005	0.025	ND	ND	ND	ND	ND	ND	ND
PCB - 1254	0.010	0.050	ND	ND	ND	ND	ND	ND	ND
PCB - 1260	0.013	0.065	ND	ND	ND	ND	ND	ND	ND

SURROGATE PARAMETERS	QC LIMIT	% Recovery	% Recovery	% Recovery	% Recovery	% Recovery	% Recovery	% Recovery
	D.F	1	1	1	1	1	1	1
DECACHLOROBIPHENYL	70% - 130%	105%	101%	96%	100%	101%	106%	104%

MDL - Method Detection Limit *ND - Not Detected at indicated RL* *D.F - Dilution Factor*
RL - Reporting Limit (5xMDL) *j : above MDL but below RL*
RUN LOG / BATCH QC - Line Number of Sequence Filename / Batch Identification

Analyst: R. Petersen / Bryan Tiu

ENVIRONMENTAL LABORATORY DATA REPORT

ANALYTICAL RESULT FOR PCBs
by USEPA Method 300/SR-94/112 & 8082A
(Polychlorinated Biphenyls)
Sample Matrix: Soil

Project: CHATSWORTH RESERVOIR

LABORATORY LOG NO.	DATE SAMPLED	DATE RECEIVED	DATE EXTRACTECD	DATE ANALYZED	SAMPLE DESCRIPTION	INSTR. ID	RUN LOG / BATCH QC
LI03362	3/10/2008	3/11/2008	3/15/2008	3/31/2008	KA 15-2'	H. P. GC 2	20080315
LI03363	3/10/2008	3/11/2008	3/15/2008	3/31/2008	KA 15-5'	H. P. GC 2	20080315
LI03364	3/10/2008	3/11/2008	3/15/2008	3/31/2008	KA 15-7'	H. P. GC 2	20080315
LI03365	3/10/2008	3/11/2008	3/15/2008	3/31/2008	KA 15-10'	H. P. GC 2	20080315
LI03366	3/10/2008	3/11/2008	3/15/2008	3/31/2008	KA 16-2'	H. P. GC 2	20080315
LI03367	3/10/2008	3/11/2008	3/15/2008	3/31/2008	KA 16-5'	H. P. GC 2	20080315
LI03368	3/10/2008	3/11/2008	3/15/2008	3/31/2008	KA 16-7'	H. P. GC 2	20080315

PARAMETERS	MDL (mg/kg)	RL (mg/kg)	LI03362 mg/kg	LI03363 mg/kg	LI03364 mg/kg	LI03365 mg/kg	LI03366 mg/kg	LI03367 mg/kg	LI03368 mg/kg
PCB - 1221	0.006	0.030	ND	ND	ND	ND	ND	ND	ND
PCB - 1232	0.008	0.040	ND	ND	ND	ND	ND	ND	ND
PCB - 1242	0.017	0.085	ND	ND	ND	ND	ND	ND	ND
PCB - 1248	0.005	0.025	ND	ND	ND	ND	ND	ND	ND
PCB - 1254	0.010	0.050	ND	ND	ND	ND	ND	ND	ND
PCB - 1260	0.013	0.065	ND	ND	ND	ND	ND	ND	ND

SURROGATE PARAMETERS	QC LIMIT	% Recovery	% Recovery	% Recovery	% Recovery	% Recovery	% Recovery	% Recovery
	D.F	1	1	1	1	1	1	1
DECACHLOROBIPHENYL	70% - 130%	105%	110%	110%	99%	102%	106%	104%

LABORATORY LOG NO.	DATE SAMPLED	DATE RECEIVED	DATE EXTRACTECD	DATE ANALYZED	SAMPLE DESCRIPTION	INSTR. ID	RUN LOG / BATCH QC
LI03369	3/10/2008	3/11/2008	3/15/2008	3/31/2008	KA 16-10'	H. P. GC 2	20080315
LI03370	3/10/2008	3/11/2008	3/15/2008	3/31/2008	KA 17-2'	H. P. GC 2	20080315
LI03371	3/10/2008	3/11/2008	3/15/2008	3/31/2008	KA 17-5'	H. P. GC 2	20080315
LI03372	3/10/2008	3/11/2008	3/15/2008	3/31/2008	KA 17-7'	H. P. GC 2	20080315
LI03373	3/10/2008	3/11/2008	3/15/2008	3/31/2008	KA 17-10'	H. P. GC 2	20080315
LI03374	3/10/2008	3/11/2008	3/15/2008	3/31/2008	KA 18-2'	H. P. GC 2	20080315
LI03375	3/10/2008	3/11/2008	3/15/2008	3/31/2008	KA 18-5'	H. P. GC 2	20080315

PARAMETERS	MDL (mg/kg)	RL (mg/kg)	LI03369 mg/kg	LI03370 mg/kg	LI03371 mg/kg	LI03372 mg/kg	LI03373 mg/kg	LI03374 mg/kg	LI03375 mg/kg
PCB - 1221	0.006	0.030	ND	ND	ND	ND	ND	ND	ND
PCB - 1232	0.008	0.040	ND	ND	ND	ND	ND	ND	ND
PCB - 1242	0.017	0.085	ND	ND	ND	ND	ND	ND	ND
PCB - 1248	0.005	0.025	ND	ND	ND	ND	ND	ND	ND
PCB - 1254	0.010	0.050	ND	ND	ND	ND	ND	ND	ND
PCB - 1260	0.013	0.065	ND	ND	ND	ND	ND	ND	ND

SURROGATE PARAMETERS	QC LIMIT	% Recovery	% Recovery	% Recovery	% Recovery	% Recovery	% Recovery	% Recovery
	D.F	1	1	1	1	1	1	1
DECACHLOROBIPHENYL	70% - 130%	102%	104%	100%	108%	107%	104%	96%

MDL - Method Detection Limit *ND - Not Detected at indicated RL* *D.F - Dilution Factor*
RL - Reporting Limit (5xMDL) *j : above MDL but below RL*
RUN LOG / BATCH QC - Line Number of Sequence Filename / Batch Identification

Analyst: R. Petersen / Bryan Tiu

ENVIRONMENTAL LABORATORY DATA REPORT

ANALYTICAL RESULT FOR PCBs
by USEPA Method 300/SR-94/112 & 8082A
(Polychlorinated Biphenyls)
Sample Matrix: Soil

Project:

LABORATORY LOG NO.	DATE SAMPLED	DATE RECEIVED	DATE EXTRACTECD	DATE ANALYZED	SAMPLE DESCRIPTION	INSTR ID	RUN LOG / BATCH QC
LI03376	3/10/2008	3/11/2008	3/15/2008	3/31/2008	KA 18-7'	H. P. GC 2	20080315
LI03377	3/10/2008	3/11/2008	3/15/2008	3/31/2008	KA 18-10'	H. P. GC 2	20080315

PARAMETERS	MDL (mg/kg)	RL (mg/kg)	LI03376 mg/kg	LI03377 mg/kg					
PCB - 1221	0.006	0.030	ND	ND					
PCB - 1232	0.008	0.040	ND	ND					
PCB - 1242	0.017	0.085	ND	ND					
PCB - 1248	0.005	0.025	ND	ND					
PCB - 1254	0.010	0.050	ND	ND					
PCB - 1260	0.013	0.065	ND	ND					

SURROGATE PARAMETERS	QC LIMIT	% Recovery	% Recovery	% Recovery	% Recovery	% Recovery	% Recovery	% Recovery
	D.F	1	1	1	1	1	1	1
DECACHLOROBIPHENYL	70% - 130%	90%	101%					

LABORATORY LOG NO.	DATE SAMPLED	DATE RECEIVED	DATE EXTRACTECD	DATE ANALYZED	SAMPLE DESCRIPTION	INSTR ID	RUN LOG / BATCH QC

PARAMETERS	MDL (mg/kg)	RL (mg/kg)							
PCB - 1221	0.006	0.030							
PCB - 1232	0.008	0.040							
PCB - 1242	0.017	0.085							
PCB - 1248	0.005	0.025							
PCB - 1254	0.010	0.050							
PCB - 1260	0.013	0.065							

SURROGATE PARAMETERS	QC LIMIT	% Recovery	% Recovery	% Recovery	% Recovery	% Recovery	% Recovery	% Recovery
	D.F	1	1	1	1	1	1	1
DECACHLOROBIPHENYL	70% - 130%							

MDL - Method Detection Limit *ND - Not Detected at indicated RL* *D.F - Dilution Factor*
RL - Reporting Limit (5xMDL) *j : above MDL but below RL*
RUN LOG / BATCH QC - Line Number of Sequence Filename / Batch Identification

Analyst: R. Petersen / Bryan Tiu

QC SUMMARIES

Project Name : CHATSWORTH RESERVOIR

QA/QC Report for Method Blank

I. Method Blank, Method Blank Spike (MBS), & Method Blank Spike Duplicate (MBSD)

DATE ANALYZED: 0.3/12/2008 USEPA Method /600/SR-94/112 & 8082A
BATCH QC: 20080312 Instrument I.D. H. P. GC 2 UNIT: mg/kg
LAB SAMPLE I.D.: Method Blank Spike (MBS) & Method Blank Spike Dup (MBSD)

BATCH QC	B		B		(DUP)	B			MS/MSD	%
PARAMETERS	METHOD BLANK	SPIKE CONC	MBS	%MS	SPIKE CONC	MBSD	%MSD	RPD	% REC. LIMIT	RPD LIMIT
PCB-1221	ND	0.0			0.0					
PCB-1232	ND	0.0			0.0					
PCB-1242	ND	0.0			0.0					
PCB-1248	ND	0.0			0.0					
PCB-1254	ND	0.0			0.0					
PCB-1260	ND	19.0	22.3	117	19.0	22.8	120	2.2%	70 - 130	30

MS - Matrix Spike MSD - Matrix Spike Dupplicate RPD - Relative Percent Difference
%MS - Percent Recovery of Matrix Spike %MSD - Percent Recovery of Matrix Spike Duplicate
ND - Not Detected
RUN LOG / BATCH QC - Line Number of Sequence Filename / Batch Identification

Analyst: R. Petersen / Bryan Tiu

Checked by: Rose Gentallan 4/14/08

Project Name : CHATSWORTH RESERVIOR

QA/QC Report for Method Blank

I. Method Blank, Method Blank Spike (MBS), & Method Blank Spike Duplicate (MBSD)

DATE ANALYZED: 03/13/08 USEPA Method /600/SR-94/112 & 8082A
BATCH QC: 20080315 Instrument I.D. H. P. GC 2 UNIT: mg/kg
LAB SAMPLE I.D.: Method Blank Spike (MBS) & Method Blank Spike Dup (MBSD)

BATCH QC	B		B		(DUP)	B			MS/MSD	%
PARAMETERS	METHOD BLANK	SPIKE CONC	MBS	%MS	SPIKE CONC	MBSD	%MSD	RPD	% REC. LIMIT	RPD LIMIT
PCB-1221	ND	0.0			0.0					
PCB-1232	ND	0.0			0.0					
PCB-1242	ND	0.0			0.0					
PCB-1248	ND	0.0			0.0					
PCB-1254	ND	0.0			0.0					
PCB-1260	ND	19.0	21.3	112	19.0	22.1	116	4%	70 - 130	30

MS - Matrix Spike MSD - Matrix Spike Dupplicate RPD - Relative Percent Difference
%MS - Percent Recovery of Matrix Spike %MSD - Percent Recovery of Matrix Spike Duplicate
ND - Not Detected
RUN LOG / BATCH QC - Line Number of Sequence Filename / Batch Identification
** soil inteference peaks*

Analyst: R. Petersen / Bryan Tiu

Checked by: Rose Gentallan 4/14/08

Project Name : CHATSWORTH RESERVOIR

QA/QC Report for Sample

II. Matrix Spike (MS)/Matrix Spike Duplicate (MSD)

DATE ANALYZED: 03/12/08
BATCH QC: 20080312
LAB SAMPLE I.D.: Li03306 Spike & Spike Duplicate

USEPA Method /600/SR-94/112 & 8082A
Instrument I.D. H. P. GC 2 UNIT: mg/kg

BATCH QC	A		A		(DUP)	A			MS/MSD	%
PARAMETERS	SAMPLE RESULT	SPIKE CONC	MS	%MS	SPIKE CONC	MSD	%MSD	RPD	% REC. LIMIT	RPD LIMIT
PCB-1221	ND	0.0			0.0					
PCB-1232	ND	0.0			0.0					
PCB-1242	ND	0.0			0.0					
PCB-1248	ND	0.0			0.0					
PCB-1254	ND	0.0			0.0					
PCB-1260	ND	25.0	20.1	80	25.0	22.2	89	10%	70 - 130	30

DATE ANALYZED: 03/12/08
BATCH QC: 20080312
LAB SAMPLE I.D.: Li03316 Spike & Spike Duplicate

USEPA Method /600/SR-94/112 & 8082A
Instrument I.D. H. P. GC 2 UNIT: mg/kg

BATCH QC	B		B		(DUP)	B			MS/MSD	%
PARAMETERS	SAMPLE RESULT	SPIKE CONC	MS	%MS	SPIKE CONC	MSD	%MSD	RPD	% REC. LIMIT	RPD LIMIT
PCB-1221	ND	0.0			0.0					
PCB-1232	ND	0.0			0.0					
PCB-1242	ND	0.0			0.0					
PCB-1248	ND	0.0			0.0					
PCB-1254	ND	0.0			0.0					
PCB-1260	ND	25.0	20.8	83	25.0	21.0	84	1%	70 - 130	30

MS - Matrix Spike MSD - Matrix Spike Dupplicate RPD - Relative Percent Difference
%MS - Percent Recovery of Matrix Spike %MSD - Percent Recovery of Matrix Spike Duplicate
ND - Not Detected
RUN LOG / BATCH QC - Line Number of Sequence Filename / Batch Identification

Analyst: R. Petersen / Bryan Tiu

Checked by: Rose Gentallan 4/14/08

Project Name : CHATSWORTH RESERVOIR

QA/QC Report for Sample

II. Matrix Spike (MS)/Matrix Spike Duplicate (MSD)

DATE ANALYZED: 03/12/08
BATCH QC: 20080312
LAB SAMPLE I.D.: Li03326 Spike & Spike Duplicate

USEPA Method /600/SR-94/112 & 8082A
Instrument I.D. H. P. GC 2 UNIT: mg/kg

BATCH QC	C		C		(DUP)	C			MS/MSD	%
PARAMETERS	SAMPLE RESULT	SPIKE CONC	MS	%MS	SPIKE CONC	MSD	%MSD	RPD	% REC LIMIT	RPD LIMIT
PCB-1221	ND	0.0			0.0					
PCB-1232	ND	0.0			0.0					
PCB-1242	ND	0.0			0.0					
PCB-1248	ND	0.0			0.0					
PCB-1254	ND	0.0			0.0					
PCB-1260	ND	25.0	20.5	82	25.0	22.0	88	7%	70 - 130	30

DATE ANALYZED: 03/12/08
BATCH QC: 20080315
LAB SAMPLE I.D.: LI03336 Spike & Spike Duplicate

USEPA Method /600/SR-94/112 & 8082A
Instrument I.D. H. P. GC 2 UNIT: mg/kg

BATCH QC	C		C		(DUP)	C			MS/MSD	%
PARAMETERS	SAMPLE RESULT	SPIKE CONC	MS	%MS	SPIKE CONC	MSD	%MSD	RPD	% REC LIMIT	RPD LIMIT
PCB-1221	ND	0.0			0.0					
PCB-1232	ND	0.0			0.0					
PCB-1242	ND	0.0			0.0					
PCB-1248	ND	0.0			0.0					
PCB-1254	ND	0.0			0.0					
PCB-1260	ND	25.0	20.1	80	25.0	21.7	87	8%	70 - 130	30

MS - Matrix Spike MSD - Matrix Spike Dupplicate RPD - Relative Percent Difference
%MS - Percent Recovery of Matrix Spike %MSD - Percent Recovery of Matrix Spike Duplicate
ND - Not Detected
RUN LOG / BATCH QC - Line Number of Sequence Filename / Batch Identification

Analyst: R. Petersen / Bryan Tiu

Checked by: Rose Gentallan 4/14/08

Project Name : CHATSWORTH RESERVOIR

QA/QC Report for Sample

II. Matrix Spike (MS)/Matrix Spike Duplicate (MSD)

DATE ANALYZED: 03/12/08
BATCH QC: 20080315
LAB SAMPLE I.D.: LI03346 Spike & Spike Duplicate

USEPA Method /600/SR-94/112 & 8082A
Instrument I.D. H. P. GC 2 UNIT: mg/kg

BATCH QC	A		A		(DUP)	A			MS/MSD	%
PARAMETERS	SAMPLE RESULT	SPIKE CONC	MS	%MS	SPIKE CONC	MSD	%MSD	RPD	% REC. LIMIT	RPD LIMIT
PCB-1221	ND	0.0			0.0					
PCB-1232	ND	0.0			0.0					
PCB-1242	ND	0.0			0.0					
PCB-1248	ND	0.0			0.0					
PCB-1254	ND	0.0			0.0					
PCB-1260	ND	25.0	21.9	88	25.0	22.9	92	4%	70 - 130	30

DATE ANALYZED: 03/12/08
BATCH QC: 20080315
LAB SAMPLE I.D.: LI03356 Spike & Spike Duplicate

USEPA Method /600/SR-94/112 & 8082A
Instrument I.D. H. P. GC 2 UNIT: mg/kg

BATCH QC	B		B		(DUP)	B			MS/MSD	%
PARAMETERS	SAMPLE RESULT	SPIKE CONC	MS	%MS	SPIKE CONC	MSD	%MSD	RPD	% REC. LIMIT	RPD LIMIT
PCB-1221	ND	0.0			0.0					
PCB-1232	ND	0.0			0.0					
PCB-1242	ND	0.0			0.0					
PCB-1248	ND	0.0			0.0					
PCB-1254	ND	0.0			0.0					
PCB-1260	ND	25.0	22.7	91	25.0	20.5	82	10%	70 - 130	30

MS - Matrix Spike MSD - Matrix Spike Dupplicate RPD - Relative Percent Difference
%MS - Percent Recovery of Matrix Spike %MSD - Percent Recovery of Matrix Spike Duplicate
ND - Not Detected
RUN LOG / BATCH QC - Line Number of Sequence Filename / Batch Identification
**soil interference peaks*

Analyst: R. Petersen / Bryan Tiu

Checked by: Rose Gentallan RG 4/14/08

Project Name : CHATSWORTH RESERVOIR

QA/QC Report for Sample

II. Matrix Spike (MS)/Matrix Spike Duplicate (MSD)

DATE ANALYZED: 03/12/08
BATCH QC: 20080315
LAB SAMPLE I.D.: LI03366 Spike & Spike Duplicate

USEPA Method /600/SR-94/112 & 8082A
Instrument I.D. H. P. GC 2 UNIT: mg/kg

BATCH QC	C		C		(DUP)	C			MS/MSD	%
PARAMETERS	SAMPLE RESULT	SPIKE CONC	MS	%MS	SPIKE CONC	MSD	%MSD	RPD	% REC. LIMIT	RPD LIMIT
PCB-1221	ND	0.0			0.0					
PCB-1232	ND	0.0			0.0					
PCB-1242	ND	0.0			0.0					
PCB-1248	ND	0.0			0.0					
PCB-1254	ND	0.0			0.0					
PCB-1260	ND	25.0	19.8	79.2	25.0	20.6	82.4	4%	70 - 130	30

DATE ANALYZED:
RUN LOG / BATCH QC:
LAB SAMPLE I.D.:

USEPA Method /600/SR-94/112 & 8082A
Instrument I.D. H. P. GC 2 UNIT: mg/kg

BATCH QC	C		C		(DUP)	C			MS/MSD	%
PARAMETERS	SAMPLE RESULT	SPIKE CONC	MS	%MS	SPIKE CONC	MSD	%MSD	RPD	% REC. LIMIT	RPD LIMIT
PCB-1221										
PCB-1232										
PCB-1242										
PCB-1248										
PCB-1254										
PCB-1260										

MS - Matrix Spike MSD - Matrix Spike Dupplicate RPD - Relative Percent Difference
%MS - Percent Recovery of Matrix Spike %MSD - Percent Recovery of Matrix Spike Duplicate
ND - Not Detected
RUN LOG / BATCH QC - Line Number of Sequence Filename / Batch Identification
**soil interference peaks*

Analyst: R. Petersen / Bryan Tiu

Checked by: Rose Gentallan 4/14/08

Project Name : CHATSWORTH RESERVOIR

III. Calibration Check Standard

DATE ANALYZED: 3/12/2008
LAB ID.: Q3357,2589,2583,2588,3438
BATCH QC: 20080312

USEPA Method /600/SR-94/112 & 8082A
Instrument I.D. H. P. GC 2 UNIT: mg/kg

	BATCH QC		A		A		B		B		
PARAMETERS	LAB ID	TRUE CONC	RESULT	% RC	RESULT	% RC	RESULT	% RC	RESULT	% RC	ACCEPTANCE LIMITS (%)
PCB - 1221	Q2583	50.0	56.3	113	NA		NA		54.6	109	70 - 130
PCB - 1232	Q2588	50.0	54.4	109	NA		NA		55.8	112	70 - 130
PCB - 1242	Q3460	50.0	52.8	106	55.6	111	56.0	112	57.7	115	70 - 130
PCB - 1248	Q3438	50.0	50.6	101	NA		NA		53.2	106	70 - 130
PCB - 1254	Q2589	50.0	53.0	106	NA		NA		56.2	112	70 - 130
PCB - 1260	Q3460	50.0	52.7	105	56.2	112	57.1	114	59.1	118	70 - 130

IV. Laboratory Control Check Sample (LCS)

DATE ANALYZED: 3/12/2008
LCS I.D.: Q5079
BATCH QC: 20080312

USEPA Method /600/SR-94/112 & 8082A
Instrument I.D. H. P. GC 2 UNIT: mg/kg

	BATCH QC		B		C						
PARAMETERS	LAB ID	TRUE CONC	RESULT	% RC	RESULT	% RC	RESULT	% RC	RESULT	% RC	ACCEPTANCE LIMITS (%)
PCB - 1221		0.0	ND		ND						70 - 130
PCB - 1232		0.0	ND		ND						70 - 130
PCB - 1242		0.0	ND		ND						70 - 130
PCB - 1248		4.3	5.7	133	ND						70 - 130
PCB - 1254		0.0	ND		ND						70 - 130
PCB - 1260		0.0	ND		ND						70 - 130

%RC - Percent Recovery
NA - Not Analyzed
ND - Not Detected

RUN LOG / BATCH QC - Line Number of Sequence Filename / Batch Identification

Analyst: R. Petersen / Bryan Tiu

Checked by: Rose Gentallan RG 4/14/08

Project Name : CHATSWORTH RESERVOIR

III. Calibration Check Standard

DATE ANALYZED: 3/15/2008
LAB ID.: Q3357,2589,2583,2588,3438
BATCH QC: 20080315

USEPA Method /600/SR-94/112 & 8082A
Instrument I.D. H. P. GC 2 UNIT: mg/kg

	BATCH QC		A		A		B		B		
PARAMETERS	LAB ID	TRUE CONC	RESULT	% RC	RESULT	% RC	RESULT	% RC	RESULT	% RC	ACCEPTANCE LIMITS (%)
PCB - 1221	Q2583	50.0	54.5	109	NA		NA		52.6	105	70 - 130
PCB - 1232	Q2588	50.0	51.7	103	NA		NA		53.1	106	70 - 130
PCB - 1242	Q3460	50.0	54.1	108	55.1	110	53.4	107	52.4	105	70 - 130
PCB - 1248	Q3438	50.0	50.5	101	NA		NA		53.2	106	70 - 130
PCB - 1254	Q2589	50.0	49.4	99	NA		NA		50.5	101	70 - 130
PCB - 1260	Q3460	50.0	52.8	106	54.3	109	52.0	104	51.0	102	70 - 130

IV. Laboratory Control Check Sample (LCS)

DATE ANALYZED: 3/15/2008
LCS I.D.: Q5079
BATCH QC: 20080315

USEPA Method /600/SR-94/112 & 8082A
Instrument I.D. H. P. GC 2 UNIT: mg/kg

	BATCH QC		B		C						
PARAMETERS	LAB ID	TRUE CONC	RESULT	% RC	RESULT	% RC	RESULT	% RC	RESULT	% RC	ACCEPTANCE LIMITS (%)
PCB - 1221		0.0	ND		ND						70 - 130
PCB - 1232		0.0	ND		ND						70 - 130
PCB - 1242		0.0	ND		ND						70 - 130
PCB - 1248		0.0	ND		ND						70 - 130
PCB - 1254	Q5079	4.3	5.2	120	5.4	125					70 - 130
PCB - 1260		0.0	ND		ND						70 - 130

%RC - Percent Recovery
NA - Not Analyzed
ND - Not Detected

RUN LOG / BATCH QC - Line Number of Sequence Filename / Batch Identification

Analyst: R. Petersen / Bryan Tiu

Checked by: Rose Gentallan 4/10/08

Project Name : CHATSWORTH RESERVOIR

III. Initial Calibration: 09034260-10312003 Instrument I.D. H. P. GC 2

IV. Calibration Check Standard

DATE ANALYZED: 11/1/2003 USEPA Method /600/SR-94/112 & 8082A
LAB ID.: Q2583,2588,3460,3438,2589 Instrument I.D. H. P. GC 2 UNIT: mg/kg
RUN LOG / BATCH QC: 20031101-53/C,65/C,76/D,77/D,78/D,79/D,80/D

	BATCH QC		C		C		D				
PARAMETERS	LAB ID	TRUE CONC	RESULT	% RC	RESULT	% RC	RESULT	% RC	RESULT	% RC	ACCEPTANCE LIMITS (%)
PCB - 1221	Q2583	50.0	NA		NA		52.6	105			70 - 130
PCB - 1232	Q2588	50.0	NA		NA		43.8	88			70 - 130
PCB - 1242	Q3460	50.0	53.4	107	54.9	110	54.7	109			70 - 130
PCB - 1248	Q3438	50.0	NA		NA		51.5	103			70 - 130
PCB - 1254	Q2589	50.0	NA		NA		51.4	103			70 - 130
PCB - 1260	Q3460	50.0	51.6	103	51.9	104	51.9	104			70 - 130

%RC - Percent Recovery
NA - Not Analyzed
ND - Not Detected

RUN LOG / BATCH QC - Line Number of Sequence Filename / Batch Identification

Analyst: R. Petersen / Bryan Tiu

Checked by: Rose Gentallan 11/14/03

ATTACHMENT # 3

METALS / MERCURY/BORON
METALS / MERCURY - EPA METHOD 6010B / 7471

CITY OF LOS ANGELES, DEPARTMENT OF WATER & POWER
ENVIRONMENTAL LABORATORY

Case Narrative

Metals by EPA Method 6010B

Client:Kelvin Lew			
Project: Chatsworth Reservoir			
COC No.:08-0683			
Data Review Criteria	**Yes**	**No**	**N/A**
Holding time			
1. Analysis met holding time criteria.	X		
Comments:			
Calibration			
1. Calibration check standards were analyzed per batch.	X		
2. Standards recoveries met QC criteria.	X		
Comments:			
Method Blank, Blank Spikes, Blank Spike Duplicate			
1. Distilled water was used as a method blank in the analysis of soil samples.	X		
2. Blank recoveries met QC criteria.	X		
Comments:			
Lab Control Samples (LCSs)			
1. LCS (certified QC soil sample) was analyzed per batch.	X		
2. Recoveries of LCSs met QC criteria.	X		
Comments:			
Matrix Spike (MS) and Matrix Spike Duplicate (MSD)			
1. MS and MSD samples were analyzed per batch .	X		
2. Recoveries of MS and MSD met QC criteria.	X		
Comments:			
Sample Analysis			
1. Samples were analyzed according to the prescribed QC procedures.	X		
2. Sample concentrations exceeding limit were further analyzed for Soluble Threshold Limit Cocentration (STLC).			X
3. Sample concentrations exceeding limit were further analyzed for Toxic Characteristic Leaching Procedure (TCLP).			X
Comments:			

N/A: Not Applicable

Sample Results

ENVIRONMENTAL LABORATORY DATA REPORT

COC 08-0683

ANALYTICAL RESULT FOR METALS

TTLC (Total Threshold Limit Concentration)

EPA Method 6010B

Sample Matrix: SOIL

PROJECT: CHATSWORTH RESERVOIR

LABORATORY LOG NO.	DATE SAMPLED	DATE RECEIVED	DATE ANALYZED	SAMPLE DESCRIPTION
LI03306	3/10/08	3/11/08	3/20/08	KA 1-2'
LI03307	3/10/08	3/11/08	3/20/08	KA 1-5'
LI03308	3/10/08	3/11/08	3/20/08	KA 1-7'
LI03309	3/10/08	3/11/08	3/20/08	KA 1-10'
LI03310	3/10/08	3/11/08	3/20/08	KA 2-2'
LI03311	3/10/08	3/11/08	3/20/08	KA 2-5'

METAL	LIMIT TTLC (mg/kg)	LIMIT STLC (mg/l)	METHOD	MDL	RL	D. F.	LI03306 mg/kg	LI03307 mg/kg	LI03308 mg/kg	LI03309 mg/kg	LI03310 mg/kg	LI03311 mg/kg
Antimony	500	15	6010	0.8	4.0	1	ND	ND	ND	ND	ND	ND
Arsenic	500	5	6010	1.0	5.0	1	10.7	6.9	10.1	6.6	9.0	8.0
Barium	10000	100	6010	0.5	2.5	1	130.3	94.4	70.4	68.2	95.8	74.3
Beryllium	75	0.75	6010	0.3	1.5	1	0.5J	0.6J	0.5J	0.4J	0.6J	0.5J
Cadmium	100	1	6010	0.6	3.0	1	1.1J	0.8J	1.3J	1.4J	1.4J	1.7J
Chromium (T)	500	5	6010	0.3	1.5	1	12.6	17.1	15.3	13.6	17.6	17.7
Cobalt	8000	80	6010	0.2	1.0	1	20.8	13.6	11.7	9.6	13.8	11.5
Copper	2500	25	6010	0.2	1.0	1	7.2	12.1	11.6	8.7	11.9	12.5
Lead	1000	5	6010	0.9	4.5	1	16.0	7.9	8.4	8.5	10.3	17.0
Molybdenum	3500	350	6010	0.2	1.0	1	0.2J	ND	ND	ND	ND	1.3
Nickel	2000	20	6010	0.4	2.0	1	15.0	12.4	10.3	10.2	12.8	11.0
Selenium	100	1	6010	0.7	3.5	1	ND	ND	ND	ND	ND	ND
Silver	500	5	6010	2.5	12.5	1	ND	ND	ND	ND	ND	ND
Thallium	700	7	6010	2.5	12.5	1	ND	ND	ND	ND	ND	ND
Vanadium	2400	24	6010	0.3	1.50	1	30.4	30.0	29.3	22.9	29.8	24.8
Zinc	5000	250	6010	0.3	1.50	1	47.5	52.7	47.8	41.8	52.9	53.2
Mercury	20	0.2	7471	0.03	0.17	1	ND	ND	ND	ND	ND	ND

ND - Not Detected; below method detection limit

MDL - Method Detection Limit

R.L. - Report Limit

D. F. - Dilution Factor

** - exceed TTLC limit

* - exceed 10x STLC limit

J - concentration above MDL and below RL

Analyst: KC/JS

300003

ENVIRONMENTAL LABORATORY DATA REPORT

COC 08-0683

ANALYTICAL RESULT FOR METALS

TTLC (Total Threshold Limit Concentration)

EPA Method 6010B

Sample Matrix: SOIL

PROJECT: CHATSWORTH RESERVOIR

LABORATORY LOG NO.	DATE SAMPLED	DATE RECEIVED	DATE ANALYZED	SAMPLE DESCRIPTION
LI03312	3/10/08	3/11/08	3/20/08	KA 2-7'
LI03313	3/10/08	3/11/08	3/20/08	KA 2-10'
LI03314	3/10/08	3/11/08	3/20/08	KA 3-2'
LI03315	3/10/08	3/11/08	3/20/08	KA 3-5'
LI03316	3/10/08	3/11/08	3/20/08	KA 3-7'
LI03317	3/10/08	3/11/08	3/20/08	KA 3-10'

METAL	LIMIT TTLC (mg/kg)	LIMIT STLC (mg/l)	METHOD	MDL	RL	D. F.	LI03312 mg/kg	LI03313 mg/kg	LI03314 mg/kg	LI03315 mg/kg	LI03316 mg/kg	LI03317 mg/kg
Antimony	500	15	6010	0.8	4.0	1	ND	1.2J	ND	ND	1.0J	1.0J
Arsenic	500	5	6010	1.0	5.0	1	11.1	8.5	7.6	8.6	8.7	9.4
Barium	10000	100	6010	0.5	2.5	1	94.6	115.3	102.3	87.0	81.2	103.5
Beryllium	75	0.75	6010	0.3	1.5	1	0.6J	0.6J	0.5J	0.6J	0.6J	0.6J
Cadmium	100	1	6010	0.6	3.0	1	1.7J	1.0J	1.6J	1.5J	1.1J	1.6J
Chromium (T)	500	5	6010	0.3	1.5	1	16.3	16.2	16.6	18.1	15.2	14.9
Cobalt	8000	80	6010	0.2	1.0	1	12.8	13.9	11.8	13.5	11.7	12.8
Copper	2500	25	6010	0.2	1.0	1	11.4	10.7	13.0	10.9	11.2	10.6
Lead	1000	5	6010	0.9	4.5	1	15.2	6.6	14.1	10.7	8.4	11.4
Molybdenum	3500	350	6010	0.2	1.0	1	ND	ND	0.9J	0.6J	ND	0.2J
Nickel	2000	20	6010	0.4	2.0	1	13.0	11.4	14.4	11.8	11.2	12.5
Selenium	100	1	6010	0.7	3.5	1	ND	ND	ND	ND	ND	ND
Silver	500	5	6010	2.5	12.5	1	ND	ND	ND	ND	ND	ND
Thallium	700	7	6010	2.5	12.5	1	ND	ND	ND	ND	ND	ND
Vanadium	2400	24	6010	0.3	1.5	1	30.1	32.6	24.6	26.7	26.4	27.9
Zinc	5000	250	6010	0.3	1.5	1	53.5	50.2	48.9	47.2	44.8	46.6
Mercury	20	0.2	7471	0.03	0.17	1	ND	ND	ND	ND	ND	ND

ND - Not Detected; below method detection limit

MDL - Method Detection Limit

R.L. - Report Limit

D. F. - Dilution Factor

** - exceed TTLC limit

* - exceed 10x STLC limit

J - concentration above MDL and below RL

Analyst: KC/JS

300004

ENVIRONMENTAL LABORATORY DATA REPORT

COC 08-0683

ANALYTICAL RESULT FOR METALS

TTLC (Total Threshold Limit Concentration)

EPA Method 6010B

Sample Matrix: SOIL

PROJECT: CHATSWORTH RESERVOIR

LABORATORY LOG NO.	DATE SAMPLED	DATE RECEIVED	DATE ANALYZED	SAMPLE DESCRIPTION
LI03318	3/10/08	3/11/08	3/20/08	KA 4-2'
LI03319	3/10/08	3/11/08	3/20/08	KA 4-5'
LI03320	3/10/08	3/11/08	3/20/08	KA 4-7'
LI03321	3/10/08	3/11/08	3/20/08	KA 4-10'
LI03322	3/10/08	3/11/08	3/20/08	KA 5-2'
LI03323	3/10/08	3/11/08	3/20/08	KA 5-5'

METAL	LIMIT TTLC (mg/kg)	LIMIT STLC (mg/l)	METHOD	MDL	RL	D. F.	LI03318 mg/kg	LI03319 mg/kg	LI03320 mg/kg	LI03321 mg/kg	LI03322 mg/kg	LI03323 mg/kg
Antimony	500	15	6010	0.8	4.0	1	ND	ND	ND	ND	ND	ND
Arsenic	500	5	6010	1.0	5.0	1	8.6	6.8	7.0	6.4	8.1	11.7
Barium	10000	100	6010	0.5	2.5	1	95.8	77.5	80.7	78.9	63.9	89.4
Beryllium	75	0.75	6010	0.3	1.5	1	0.5J	0.6J	0.6J	0.5J	0.4J	0.6J
Cadmium	100	1	6010	0.6	3.0	1	1.3J	1.5J	1.2J	1.0J	1.2J	1.5J
Chromium (T)	500	5	6010	0.3	1.5	1	16.1	17.7	17.0	12.9	12.1	20.4
Cobalt	8000	80	6010	0.2	1.0	1	12.5	14.2	13.7	11.6	9.8	12.0
Copper	2500	25	6010	0.2	1.0	1	14.0	12.3	10.7	9.6	61.0	148.0
Lead	1000	5	6010	0.9	4.5	1	15.1	9.5	7.9	8.7	11.8	16.2
Molybdenum	3500	350	6010	0.2	1.0	1	ND	0.4J	0.4J	ND	ND	1.6
Nickel	2000	20	6010	0.4	2.0	1	11.8	13.5	12.8	10.7	8.6	12.8
Selenium	100	1	6010	0.7	3.5	1	ND	ND	ND	ND	ND	ND
Silver	500	5	6010	2.5	12.5	1	ND	ND	ND	ND	ND	ND
Thallium	700	7	6010	2.5	12.5	1	ND	ND	ND	ND	ND	ND
Vanadium	2400	24	6010	0.3	1.5	1	26.5	28.9	29.6	24.5	20.7	26.1
Zinc	5000	250	6010	0.3	1.5	1	52.6	47.4	48.0	45.0	40.1	53.7
Mercury	20	0.2	7471	0.03	0.17	1	ND	ND	ND	ND	ND	ND

ND - Not Detected; below method detection limit

MDL - Method Detection Limit

R.L. - Report Limit

D. F. - Dilution Factor

** - exceed TTLC limit

* - exceed 10x STLC limit

J - concentration above MDL and below RL

Analyst: KC/JS

300005

ENVIRONMENTAL LABORATORY DATA REPORT

COC 08-0683

ANALYTICAL RESULT FOR METALS

TTLC (Total Threshold Limit Concentration)

EPA Method 6010B

Sample Matrix: SOIL

PROJECT: CHATSWORTH RESERVOIR

LABORATORY LOG NO.	DATE SAMPLED	DATE RECEIVED	DATE ANALYZED	SAMPLE DESCRIPTION
LI03324	3/10/08	3/11/08	3/20/08	KA 5-7'
LI03325	3/10/08	3/11/08	3/20/08	KA 5-10'
LI03326	3/10/08	3/11/08	3/20/08	KA 6-2'
LI03327	3/10/08	3/11/08	3/20/08	KA 6-5'
LI03328	3/10/08	3/11/08	3/20/08	KA 6-7'
LI03329	3/10/08	3/11/08	3/20/08	KA 6-10'

METAL	LIMIT TTLC (mg/kg)	LIMIT STLC (mg/l)	METHOD	MDL	RL	D. F.	LI03324 mg/kg	LI03325 mg/kg	LI03326 mg/kg	LI03327 mg/kg	LI03328 mg/kg	LI03329 mg/kg
Antimony	500	15	6010	0.8	4.0	1	ND	8.7	1.7J	ND	ND	2.8J
Arsenic	500	5	6010	1.0	5.0	1	7.2	8.7	8.3	10.2	7.4	8.5
Barium	10000	100	6010	0.5	2.5	1	60.7	76.1	93.2	93.4	72.4	83.2
Beryllium	75	0.75	6010	0.3	1.5	1	0.4J	0.8J	0.6J	0.7J	0.5J	0.7J
Cadmium	100	1	6010	0.6	3.0	1	1.3J	1.3J	0.8J	1.0J	0.9J	1.0J
Chromium (T)	500	5	6010	0.3	1.5	1	11.5	18.0	19.3	18.2	14.1	16.9
Cobalt	8000	80	6010	0.2	1.0	1	9.1	16.7	13.5	13.7	10.2	12.5
Copper	2500	25	6010	0.2	1.0	1	13.2	12.2	20.7	30.7	80.4	10.4
Lead	1000	5	6010	0.9	4.5	1	9.4	13.3	9.5	12.0	11.1	7.0
Molybdenum	3500	350	6010	0.2	1.0	1	0.5J	0.9J	0.4J	0.3J	ND	ND
Nickel	2000	20	6010	0.4	2.0	1	7.9	11.1	13.1	11.6	9.2	10.7
Selenium	100	1	6010	0.7	3.5	1	ND	ND	ND	ND	ND	ND
Silver	500	5	6010	2.5	12.5	1	ND	ND	ND	ND	ND	ND
Thallium	700	7	6010	2.5	12.5	1	ND	ND	ND	ND	ND	ND
Vanadium	2400	24	6010	0.3	1.5	1	21.4	34.8	30.5	30.8	22.1	29.5
Zinc	5000	250	6010	0.3	1.5	1	37.8	51.7	49.6	51.3	43.0	49.8
Mercury	20	0.2	7471	0.03	0.17	1	ND	ND	ND	ND	ND	ND

ND - Not Detected; below method detection limit

MDL - Method Detection Limit

R.L. - Report Limit

D. F. - Dilution Factor

** - exceed TTLC limit

* - exceed 10x STLC limit

J - concentration above MDL and below RL

Analyst: KC/JS

300006

ENVIRONMENTAL LABORATORY DATA REPORT

COC 08-0683

ANALYTICAL RESULT FOR METALS

TTLC (Total Threshold Limit Concentration)

EPA Method 6010B

Sample Matrix: SOIL

PROJECT: CHATSWORTH RESERVOIR

LABORATORY LOG NO	DATE SAMPLED	DATE RECEIVED	DATE ANALYZED	SAMPLE DESCRIPTION
LI03330	3/10/08	3/11/08	3/20/08	KA 7-2'
LI03331	3/10/08	3/11/08	3/20/08	KA 7-5'
LI03332	3/10/08	3/11/08	3/20/08	KA 7-7'
LI03333	3/10/08	3/11/08	3/20/08	KA 7-10'
LI03334	3/10/08	3/11/08	3/20/08	KA 8-2'
LI03335	3/10/08	3/11/08	3/20/08	KA 8-5'

METAL	LIMIT TTLC (mg/kg)	LIMIT STLC (mg/l)	METHOD	MDL	RL	D. F.	LI03330 mg/kg	LI03331 mg/kg	LI03332 mg/kg	LI03333 mg/kg	LI03334 mg/kg	LI03335 mg/kg
Antimony	500	15	6010	0.8	4.0	1	ND	2.2J	ND	ND	ND	1.3J
Arsenic	500	5	6010	1.0	5.0	1	8.5	12.0	7.4	7.0	6.0	11.2
Barium	10000	100	6010	0.5	2.5	1	89.0	107.6	93.9	50.8	40.5	160.4
Beryllium	75	0.75	6010	0.3	1.5	1	0.6J	0.8J	0.7J	0.5J	0.3J	0.9J
Cadmium	100	1	6010	0.6	3.0	1	0.8J	1.2J	ND	0.9J	0.7J	0.8J
Chromium (T)	500	5	6010	0.3	1.5	1	15.3	20.1	17.0	12.7	10.0	16.1
Cobalt	8000	80	6010	0.2	1.0	1	12.7	14.8	13.3	8.7	7.8	13.5
Copper	2500	25	6010	0.2	1.0	1	11.1	12.5	10.8	6.2	4.9	15.9
Lead	1000	5	6010	0.9	4.5	1	6.6	9.7	7.6	8.5	7.4	12.6
Molybdenum	3500	350	6010	0.2	1.0	1	ND	ND	ND	0.3J	ND	0.3J
Nickel	2000	20	6010	0.4	2.0	1	11.1	13.7	11.6	8.0	5.7	8.7
Selenium	100	1	6010	0.7	3.5	1	ND	ND	ND	ND	ND	ND
Silver	500	5	6010	2.5	12.5	1	ND	ND	ND	ND	ND	ND
Thallium	700	7	6010	2.5	12.5	1	ND	ND	ND	ND	ND	ND
Vanadium	2400	24	6010	0.3	1.5	1	26.2	35.1	29.3	21.6	15.6	32.4
Zinc	5000	250	6010	0.3	1.5	1	47.6	58.4	52.4	37.6	27.4	49.3
Mercury	20	0.2	7471	0.03	0.17	1	ND	ND	ND	ND	ND	ND

ND - Not Detected; below method detection limit

MDL - Method Detection Limit

R.L. - Report Limit

D. F. - Dilution Factor

** - exceed TTLC limit

* - exceed 10x STLC limit

J - concentration above MDL and below RL

Analyst: KC/JS

300007

ENVIRONMENTAL LABORATORY DATA REPORT

COC 08-0683

ANALYTICAL RESULT FOR METALS

TTLC (Total Threshold Limit Concentration)

EPA Method 6010B

Sample Matrix: SOIL

PROJECT: CHATSWORTH RESERVOIR

LABORATORY LOG NO.	DATE SAMPLED	DATE RECEIVED	DATE ANALYZED	SAMPLE DESCRIPTION
LI03336	3/10/08	3/11/08	3/20/08	KA 8-7'
LI03337	3/10/08	3/11/08	3/20/08	KA 8-10'
LI03338	3/10/08	3/11/08	3/20/08	KA 9-2'
LI03339	3/10/08	3/11/08	3/20/08	KA 9-5'
LI03340	3/10/08	3/11/08	3/20/08	KA 9-7'
LI03341	3/10/08	3/11/08	3/20/08	KA 9-10'

METAL	LIMIT TTLC (mg/kg)	LIMIT STLC (mg/l)	METHOD	MDL	RL	D. F.	LI03336 mg/kg	LI03337 mg/kg	LI03338 mg/kg	LI03339 mg/kg	LI03340 mg/kg	LI03341 mg/kg
Antimony	500	15	6010	0.8	4.0	1	ND	ND	5.8	ND	4.0J	ND
Arsenic	500	5	6010	1.0	5.0	1	10.6	19.6	7.7	13.8	13.0	14.6
Barium	10000	100	6010	0.5	2.5	1	97.4	132.5	148.2	182.5	122.1	99.3
Beryllium	75	0.75	6010	0.3	1.5	1	0.8J	1.9	0.8J	1.3J	1.1J	1.2J
Cadmium	100	1	6010	0.6	3.0	1	1.4J	0.9J	1.0J	2.0J	1.8J	1.8J
Chromium (T)	500	5	6010	0.3	1.5	1	14.5	16.9	18.3	25.6	23.8	25.1
Cobalt	8000	80	6010	0.2	1.0	1	10.4	50.6	15.6	25.4	32.2	28.6
Copper	2500	25	6010	0.2	1.0	1	14.1	28.9	13.6	19.5	21.0	21.6
Lead	1000	5	6010	0.9	4.5	1	15.5	16.5	10.9	18.9	26.8	20.2
Molybdenum	3500	350	6010	0.2	1.0	1	0.5J	0.3J	ND	ND	0.4J	ND
Nickel	2000	20	6010	0.4	2.0	1	6.3	21.8	12.6	23.1	20.0	19.7
Selenium	100	1	6010	0.7	3.5	1	ND	ND	ND	ND	ND	ND
Silver	500	5	6010	2.5	12.5	1	ND	ND	ND	ND	ND	ND
Thallium	700	7	6010	2.5	12.5	1	ND	ND	ND	ND	ND	ND
Vanadium	2400	24	6010	0.3	1.5	1	22.1	28.5	33.8	45.6	42.3	45.5
Zinc	5000	250	6010	0.3	1.5	1	45.1	84.8	50.4	69.6	77.8	82.8
Mercury	20	0.2	7471	0.03	0.17	1	ND	ND	ND	ND	ND	ND

ND - Not Detected; below method detection limit

MDL - Method Detection Limit

R.L. - Report Limit

D. F. - Dilution Factor

** - exceed TTLC limit

* - exceed 10x STLC limit

J - concentration above MDL and below RL

Analyst: KC/JS

300008

ENVIRONMENTAL LABORATORY DATA REPORT

COC 08-0683

ANALYTICAL RESULT FOR METALS

TTLC (Total Threshold Limit Concentration)

EPA Method 6010B

Sample Matrix: SOIL

PROJECT: CHATSWORTH RESERVOIR

LABORATORY LOG NO.	DATE SAMPLED	DATE RECEIVED	DATE ANALYZED	SAMPLE DESCRIPTION
LI03342	3/10/08	3/11/08	3/20/08	KA 10-2'
LI03343	3/10/08	3/11/08	3/20/08	KA 10-5'
LI03344	3/10/08	3/11/08	3/21/08	KA 10-7'
LI03345	3/10/08	3/11/08	3/21/08	KA 10-10'
LI03346	3/10/08	3/11/08	3/21/08	KA 11-2'
LI03347	3/10/08	3/11/08	3/21/08	KA 11-5'

METAL	LIMIT TTLC (mg/kg)	LIMIT STLC (mg/l)	METHOD	MDL	RL	D. F.	LI03342 mg/kg	LI03343 mg/kg	LI03344 mg/kg	LI03345 mg/kg	LI03346 mg/kg	LI03347 mg/kg
Antimony	500	15	6010	0.8	4.0	1	1.6J	ND	7.7	3.4J	2.8J	4.8
Arsenic	500	5	6010	1.0	5.0	1	10.2	6.0	9.5	12.5	6.7	14.6
Barium	10000	100	6010	0.5	2.5	1	79.5	66.6	89.7	104.3	86.5	92.9
Beryllium	75	0.75	6010	0.3	1.5	1	0.5J	0.5J	0.7J	0.8J	0.6J	1.1J
Cadmium	100	1	6010	0.6	3.0	1	ND	1.0J	0.8J	0.9J	0.9J	1.7J
Chromium (T)	500	5	6010	0.3	1.5	1	12.7	11.7	16.0	19.2	15.6	23.4
Cobalt	8000	80	6010	0.2	1.0	1	10.2	9.5	11.0	13.1	16.4	15.8
Copper	2500	25	6010	0.2	1.0	1	8.5	7.9	9.2	12.2	13.5	15.4
Lead	1000	5	6010	0.9	4.5	1	7.3	6.2	7.9	12.9	7.8	18.7
Molybdenum	3500	350	6010	0.2	1.0	1	ND	0.4J	ND	0.3J	0.3J	0.3J
Nickel	2000	20	6010	0.4	2.0	1	9.5	8.3	10.9	12.9	11.5	17.5
Selenium	100	1	6010	0.7	3.5	1	ND	ND	ND	ND	ND	ND
Silver	500	5	6010	2.5	12.5	1	ND	ND	ND	ND	ND	ND
Thallium	700	7	6010	2.5	12.5	1	ND	ND	ND	ND	ND	ND
Vanadium	2400	24	6010	0.3	1.5	1	24.9	21.9	30.1	33.9	29.2	43.9
Zinc	5000	250	6010	0.3	1.5	1	44.1	32.3	41.5	49.1	41.5	61.2
Mercury	20	0.2	7471	0.03	0.17	1	ND	ND	ND	ND	ND	ND

ND - Not Detected; below method detection limit

MDL - Method Detection Limit

R.L. - Report Limit

D. F. - Dilution Factor

** - exceed TTLC limit

* - exceed 10x STLC limit

J - concentration above MDL and below RL

Analyst: KC/JS

300009

ENVIRONMENTAL LABORATORY DATA REPORT

COC 08-0683

ANALYTICAL RESULT FOR METALS

TTLC (Total Threshold Limit Concentration)

EPA Method 6010B

Sample Matrix: SOIL

PROJECT: CHATSWORTH RESERVOIR

LABORATORY LOG NO.	DATE SAMPLED	DATE RECEIVED	DATE ANALYZED	SAMPLE DESCRIPTION
LI03348	3/10/08	3/11/08	3/21/08	KA 11-7'
LI03349	3/10/08	3/11/08	3/21/08	KA 11-10'
LI03350	3/10/08	3/11/08	3/21/08	KA 12-2'
LI03351	3/10/08	3/11/08	3/21/08	KA 12-5'
LI03352	3/10/08	3/11/08	3/21/08	KA 12-7'
LI03353	3/10/08	3/11/08	3/21/08	KA 12-10'

METAL	LIMIT TTLC (mg/kg)	LIMIT STLC (mg/l)	METHOD	MDL	RL	D. F.	LI03348 mg/kg	LI03349 mg/kg	LI03350 mg/kg	LI03351 mg/kg	LI03352 mg/kg	LI03353 mg/kg
Antimony	500	15	6010	0.8	4.0	1	9.0	8.1	ND	6.4	6.5	1.9J
Arsenic	500	5	6010	1.0	5.0	1	11.9	10.1	10.2	7.7	7.9	10.0
Barium	10000	100	6010	0.5	2.5	1	95.0	54.5	91.3	46.7	39.5	59.1
Beryllium	75	0.75	6010	0.3	1.5	1	0.9J	0.8J	0.7J	0.6J	0.5J	0.6J
Cadmium	100	1	6010	0.6	3.0	1	1.4J	0.7J	1.1J	0.8J	0.8J	0.9J
Chromium (T)	500	5	6010	0.3	1.5	1	20.4	17.9	16.7	19.5	20.4	23.0
Cobalt	8000	80	6010	0.2	1.0	1	14.2	12.2	13.8	11.4	12.6	14.8
Copper	2500	25	6010	0.2	1.0	1	12.5	10.4	14.0	7.5	9.6	10.4
Lead	1000	5	6010	0.9	4.5	1	14.1	11.4	12.0	9.3	10.4	8.9
Molybdenum	3500	350	6010	0.2	1.0	1	ND	ND	ND	ND	0.2J	ND
Nickel	2000	20	6010	0.4	2.0	1	12.5	11.8	11.4	7.4	10.3	13.1
Selenium	100	1	6010	0.7	3.5	1	ND	ND	ND	ND	ND	ND
Silver	500	5	6010	2.5	12.5	1	ND	ND	ND	ND	ND	ND
Thallium	700	7	6010	2.5	12.5	1	ND	ND	ND	ND	ND	ND
Vanadium	2400	24	6010	0.3	1.5	1	35.2	29.8	32.0	31.3	37.2	43.4
Zinc	5000	250	6010	0.3	1.5	1	50.8	44.4	55.7	40.0	53.9	56.7
Mercury	20	0.2	7471	0.03	0.17	1	ND	ND	ND	ND	ND	ND

ND - Not Detected; below method detection limit

MDL - Method Detection Limit

R.L. - Report Limit

D. F. - Dilution Factor

** - exceed TTLC limit

* - exceed 10x STLC limit

J - concentration above MDL and below RL

Analyst: KC/JS

300010

ENVIRONMENTAL LABORATORY DATA REPORT

COC 08-0683

ANALYTICAL RESULT FOR METALS

TTLC (Total Threshold Limit Concentration)

EPA Method 6010B

Sample Matrix: SOIL

PROJECT: CHATSWORTH RESERVOIR

LABORATORY LOG NO.	DATE SAMPLED	DATE RECEIVED	DATE ANALYZED	SAMPLE DESCRIPTION
LI03354	3/10/08	3/11/08	3/21/08	KA 13-2'
LI03355	3/10/08	3/11/08	3/21/08	KA 13-5'
LI03356	3/10/08	3/11/08	3/21/08	KA 13-7'
LI03357	3/10/08	3/11/08	3/21/08	KA 13-10'
LI03358	3/10/08	3/11/08	3/21/08	KA 14-2'
LI03359	3/10/08	3/11/08	3/21/08	KA 14-5'

METAL	LIMIT TTLC (mg/kg)	LIMIT STLC (mg/l)	METHOD	MDL	RL	D. F.	LI03354 mg/kg	LI03355 mg/kg	LI03356 mg/kg	LI03357 mg/kg	LI03358 mg/kg	LI03359 mg/kg
Antimony	500	15	6010	0.8	4.0	1	ND	ND	2.2J	ND	ND	ND
Arsenic	500	5	6010	1.0	5.0	1	7.0	12.3	23.3	9.1	2.8J	6.1
Barium	10000	100	6010	0.5	2.5	1	124.3	54.4	43.7	18.2	30.0	105.6
Beryllium	75	0.75	6010	0.3	1.5	1	0.7J	0.7J	0.6J	ND	0.7J	0.9J
Cadmium	100	1	6010	0.6	3.0	1	1.2J	1.0J	1.0J	ND	0.8J	1.0J
Chromium (T)	500	5	6010	0.3	1.5	1	16.5	15.8	11.0	7.6	12.3	15.9
Cobalt	8000	80	6010	0.2	1.0	1	9.9	9.1	10.1	4.1	9.2	12.5
Copper	2500	25	6010	0.2	1.0	1	8.4	9.9	7.0	4.7	7.6	12.3
Lead	1000	5	6010	0.9	4.5	1	13.0	11.0	13.3	6.5	8.1	13.4
Molybdenum	3500	350	6010	0.2	1.0	1	ND	ND	ND	0.7J	ND	0.4J
Nickel	2000	20	6010	0.4	2.0	1	10.5	9.6	8.3	5.2	7.7	12.6
Selenium	100	1	6010	0.7	3.5	1	ND	ND	ND	ND	ND	ND
Silver	500	5	6010	2.5	12.5	1	ND	ND	ND	ND	ND	ND
Thallium	700	7	6010	2.5	12.5	1	ND	ND	ND	ND	ND	ND
Vanadium	2400	24	6010	0.3	1.5	1	21.2	22.3	24.8	11.4	15.2	24.3
Zinc	5000	250	6010	0.3	1.5	1	41.5	33.4	22.8	16.5	30.9	51.6
Mercury	20	0.2	7471	0.03	0.17	1	ND	ND	ND	ND	ND	ND

ND - Not Detected; below method detection limit

MDL - Method Detection Limit

R.L. - Report Limit

D. F. - Dilution Factor

** - exceed TTLC limit

* - exceed 10x STLC limit

J - concentration above MDL and below RL

Analyst: KC/JS

300011

ENVIRONMENTAL LABORATORY DATA REPORT

COC 08-0683

ANALYTICAL RESULT FOR METALS

TTLC (Total Threshold Limit Concentration)

EPA Method 6010B

Sample Matrix: SOIL

PROJECT: CHATSWORTH RESERVOIR

LABORATORY LOG NO.	DATE SAMPLED	DATE RECEIVED	DATE ANALYZED	SAMPLE DESCRIPTION
LI03360	3/10/08	3/11/08	3/21/08	KA 14-7'
LI03361	3/10/08	3/11/08	3/21/08	KA 14-10'
LI03362	3/10/08	3/11/08	3/21/08	KA 15-2'
LI03363	3/10/08	3/11/08	3/21/08	KA 15-5'
LI03364	3/10/08	3/11/08	3/21/08	KA 15-7'
LI03365	3/10/08	3/11/08	3/21/08	KA 15-10'

METAL	LIMIT TTLC (mg/kg)	LIMIT STLC (mg/l)	METHOD	MDL	RL	D. F.	LI03360 mg/kg	LI03361 mg/kg	LI03362 mg/kg	LI03363 mg/kg	LI03364 mg/kg	LI03365 mg/kg
Antimony	500	15	6010	0.8	4.0	1	ND	4.6	ND	ND	ND	3.6J
Arsenic	500	5	6010	1.0	5.0	1	5.5	5.9	9.3	5.8	13.3	14.7
Barium	10000	100	6010	0.5	2.5	1	70.5	82.3	54.2	54.6	57.9	65.1
Beryllium	75	0.75	6010	0.3	1.5	1	0.7J	0.7J	0.5J	0.4J	0.6J	0.8J
Cadmium	100	1	6010	0.6	3.0	1	1.0J	0.7J	1.0J	0.8J	1.3J	1.1J
Chromium (T)	500	5	6010	0.3	1.5	1	13.4	13.2	10.1	9.0	13.3	14.9
Cobalt	8000	80	6010	0.2	1.0	1	10.0	13.0	8.6	6.8	11.4	11.4
Copper	2500	25	6010	0.2	1.0	1	9.8	9.7	7.6	7.2	9.2	9.5
Lead	1000	5	6010	0.9	4.5	1	13.0	9.4	9.1	7.1	10.8	11.1
Molybdenum	3500	350	6010	0.2	1.0	1	ND	ND	0.3J	ND	0.5J	0.8J
Nickel	2000	20	6010	0.4	2.0	1	9.7	11.3	7.2	6.4	7.7	8.0
Selenium	100	1	6010	0.7	3.5	1	ND	ND	ND	ND	ND	ND
Silver	500	5	6010	2.5	12.5	1	ND	ND	ND	ND	ND	ND
Thallium	700	7	6010	2.5	12.5	1	ND	ND	ND	ND	ND	ND
Vanadium	2400	24	6010	0.3	1.5	1	23.0	21.9	19.6	15.8	26.2	31.2
Zinc	5000	250	6010	0.3	1.5	1	40.9	43.3	35.1	28.4	39.9	44.5
Mercury	20	0.2	7471	0.03	0.17	1	ND	ND	ND	ND	ND	ND

ND - Not Detected; below method detection limit

MDL - Method Detection Limit

R.L. - Report Limit

D. F. - Dilution Factor

** - exceed TTLC limit

* - exceed 10x STLC limit

J - concentration above MDL and below RL

Analyst: KC/JS

300012

ENVIRONMENTAL LABORATORY DATA REPORT

COC 08-0683

ANALYTICAL RESULT FOR METALS

TTLC (Total Threshold Limit Concentration)

EPA Method 6010B

Sample Matrix: SOIL

PROJECT: CHATSWORTH RESERVOIR

LABORATORY LOG NO.	DATE SAMPLED	DATE RECEIVED	DATE ANALYZED	SAMPLE DESCRIPTION
LI03366	3/10/08	3/11/08	3/21/08	KA 16-2'
LI03367	3/10/08	3/11/08	3/21/08	KA 16-5'
LI03368	3/10/08	3/11/08	3/21/08	KA 16-7'
LI03369	3/10/08	3/11/08	3/21/08	KA 16-10'
LI03370	3/10/08	3/11/08	3/21/08	KA 17-2'
LI03371	3/10/08	3/11/08	3/21/08	KA 17-5'

METAL	LIMIT TTLC (mg/kg)	LIMIT STLC (mg/l)	METHOD	MDL	RL	D. F.	LI03366 mg/kg	LI03367 mg/kg	LI03368 mg/kg	LI03369 mg/kg	LI03370 mg/kg	LI03371 mg/kg
Antimony	500	15	6010	0.8	4.0	1	ND	ND	ND	ND	2.3J	ND
Arsenic	500	5	6010	1.0	5.0	1	8.4	12.0	6.7	9.5	9.3	9.8
Barium	10000	100	6010	0.5	2.5	1	78.2	96.6	117.1	82.7	100.3	110.0
Beryllium	75	0.75	6010	0.3	1.5	1	0.7J	0.7J	0.7J	0.6J	0.7J	0.8J
Cadmium	100	1	6010	0.6	3.0	1	1.1J	0.6J	0.7J	ND	0.8J	1.0J
Chromium (T)	500	5	6010	0.3	1.5	1	19.5	17.2	16.3	13.8	17.6	20.3
Cobalt	8000	80	6010	0.2	1.0	1	12.5	13.2	12.2	9.4	13.3	13.7
Copper	2500	25	6010	0.2	1.0	1	13.9	14.3	13.8	10.9	21.4	24.3
Lead	1000	5	6010	0.9	4.5	1	8.6	10.3	8.0	7.3	10.2	10.3
Molybdenum	3500	350	6010	0.2	1.0	1	0.4J	ND	ND	ND	ND	ND
Nickel	2000	20	6010	0.4	2.0	1	12.3	12.7	11.8	8.9	12.8	13.5
Selenium	100	1	6010	0.7	3.5	1	ND	ND	ND	ND	ND	ND
Silver	500	5	6010	2.5	12.5	1	ND	ND	ND	ND	ND	ND
Thallium	700	7	6010	2.5	12.5	1	ND	ND	ND	ND	ND	ND
Vanadium	2400	24	6010	0.3	1.5	1	30.0	36.1	29.3	23.8	33.2	35.3
Zinc	5000	250	6010	0.3	1.5	1	53.2	56.4	52.1	41.8	56.7	60.4
Mercury	20	0.2	7471	0.03	0.17	1	ND	ND	ND	ND	ND	ND

ND - Not Detected; below method detection limit

MDL - Method Detection Limit

R.L. - Report Limit

D. F. - Dilution Factor

** - exceed TTLC limit

* - exceed 10x STLC limit

J - concentration above MDL and below RL

Analyst: KC/JS

300013

ENVIRONMENTAL LABORATORY DATA REPORT

COC 08-0683

ANALYTICAL RESULT FOR METALS

TTLC (Total Threshold Limit Concentration)

EPA Method 6010B

Sample Matrix: SOIL

PROJECT: CHATSWORTH RESERVOIR

LABORATORY LOG NO.	DATE SAMPLED	DATE RECEIVED	DATE ANALYZED	SAMPLE DESCRIPTION
LI03372	3/10/08	3/11/08	3/21/08	KA 17-7'
LI03373	3/10/08	3/11/08	3/21/08	KA 17-10'
LI03374	3/10/08	3/11/08	3/21/08	KA 18-2'
LI03375	3/10/08	3/11/08	3/21/08	KA 18-5'
LI03376	3/10/08	3/11/08	3/21/08	KA 18-7'
LI03377	3/10/08	3/11/08	3/21/08	KA 18-10'

METAL	LIMIT TTLC (mg/kg)	LIMIT STLC (mg/l)	METHOD	MDL	RL	D. F.	LI03372 mg/kg	LI03373 mg/kg	LI03374 mg/kg	LI03375 mg/kg	LI03376 mg/kg	LI03377 mg/kg
Antimony	500	15	6010	0.8	4.0	1	2.9J	ND	ND	ND	0.9J	ND
Arsenic	500	5	6010	1.0	5.0	1	9.6	13.3	6.7	8.9	8.7	10.6
Barium	10000	100	6010	0.5	2.5	1	90.8	194.9	98.6	146.1	185.3	157.0
Beryllium	75	0.75	6010	0.3	1.5	1	0.7J	1.1J	0.6J	0.9J	0.7J	0.8J
Cadmium	100	1	6010	0.6	3.0	1	0.9J	2.0J	0.7J	1.2J	1.0J	1.1J
Chromium (T)	500	5	6010	0.3	1.5	1	16.5	25.7	13.6	23.9	17.3	18.0
Cobalt	8000	80	6010	0.2	1.0	1	11.8	20.8	11.8	14.1	12.9	14.9
Copper	2500	25	6010	0.2	1.0	1	30.9	23.7	15.2	12.1	11.2	14.2
Lead	1000	5	6010	0.9	4.5	1	10.2	15.9	10.6	12.3	10.6	10.5
Molybdenum	3500	350	6010	0.2	1.0	1	ND	ND	0.4J	ND	ND	0.3J
Nickel	2000	20	6010	0.4	2.0	1	11.4	21.3	10.3	13.4	11.8	13.5
Selenium	100	1	6010	0.7	3.5	1	ND	ND	ND	ND	ND	ND
Silver	500	5	6010	2.5	12.5	1	ND	ND	ND	ND	ND	ND
Thallium	700	7	6010	2.5	12.5	1	ND	ND	ND	ND	ND	ND
Vanadium	2400	24	6010	0.3	1.5	1	29.8	51.4	26.1	33.2	30.5	ND
Zinc	5000	250	6010	0.3	1.5	1	53.5	85.2	42.0	63.9	48.2	49.6
Mercury	20	0.2	7471	0.03	0.17	1	ND	ND	ND	ND	ND	ND

ND - Not Detected; below method detection limit

MDL - Method Detection Limit

R.L. - Report Limit

D. F. - Dilution Factor

** - exceed TTLC limit

* - exceed 10x STLC limit

J - concentration above MDL and below RL

Analyst: KC/JS

300014

ENVIRONMENTAL LABORATORY DATA REPORT

COC 08-0683

ANALYTICAL RESULT FOR METALS

TTLC (Total Threshold Limit Concentration)

EPA Method 6010B

Sample Matrix: SOIL

LABORATORY LOG NO.	DATE SAMPLED	DATE RECEIVED	DATE ANALYZED	SAMPLE DESCRIPTION
LI03306 Dup	03/10/08	3/11/08	3/20/08	KA 1-2'
LI03316 Dup	3/10/08	3/11/08	3/20/08	KA 3-7'
LI03326 Dup	3/10/08	3/11/08	3/20/08	KA 6-2'
LI03336 Dup	3/10/08	3/11/08	3/20/08	KA 8-7'
LI03344 Dup	3/10/08	3/11/08	3/21/08	KA 10-7'
LI03354 Dup	3/10/08	3/11/08	3/21/08	KA 13-2'

METAL	LIMIT TTLC (mg/kg)	LIMIT STLC (mg/l)	METHOD	MDL	RL	D. F.	Dup LI03306 (mg/kg)	Dup LI03316 (mg/kg)	Dup LI03326 (mg/kg)	Dup LI03336 (mg/kg)	Dup LI03344 (mg/kg)	Dup LI03354 (mg/kg)
Antimony	500	15	6010	0.8	4.0	1	ND	ND	ND	1.2J	4.6	2.9J
Arsenic	500	5	6010	1.0	5.0	1	5.5	6.7	6.4	9.0	8.5	8.4
Barium	10000	100	6010	0.5	2.5	1	49	82	84	110	86	130
Beryllium	75	0.75	6010	0.3	1.5	1	0.35J	0.6J	0.55J	0.84J	0.71J	0.71J
Cadmium	100	1	6010	0.6	3.0	1	1.0J	1.5J	0.61J	1.2J	0.79J	ND
Chromium (T)	2500	5	6010	0.3	1.5	1	12	16	16	17	17	18
Cobalt	8000	80	6010	0.2	1.0	1	9.1	13	12	13	12	13
Copper	2500	25	6010	0.2	1.0	1	7.0	12	18	16	7.7	9.5
Lead	1000	5	6010	0.9	4.5	1	11	11	7.0	15	9.1	13
Molybdenum	3500	350	6010	0.2	1.0	1	0.49J	ND	ND	0.94J	ND	ND
Nickel	2000	20	6010	0.4	2.0	1	8.0	11	11	7.6	11	11
Selenium	100	1	6010	0.7	3.5	1	ND	ND	ND	ND	ND	ND
Silver	500	5	6010	2.5	12.5	1	ND	ND	ND	ND	ND	ND
Thallium	700	7	6010	2.5	12.5	1	ND	ND	ND	ND	ND	ND
Vanadium	2400	24	6010	0.3	1.5	1	19	29	27	23	31	26
Zinc	5000	250	6010	0.3	1.5	1	44	48	46	50	41	45
Mercury												

ND - Not Detected; below method detection limit

MDL - Method Detection Limit

R.L. - Report Limit

D. F. - Dilution Factor

** - exceed TTLC limit

* - exceed 10x STLC limit

J - concentration above MDL and below RL

Analyst: KC/JS

300015

ENVIRONMENTAL LABORATORY DATA REPORT

COC 08-0683

ANALYTICAL RESULT FOR METALS

TTLC (Total Threshold Limit Concentration)

EPA Method 6010B

Sample Matrix: SOIL

LABORATORY LOG NO	DATE SAMPLED	DATE RECEIVED	DATE ANALYZED	SAMPLE DESCRIPTION
LI03364 Dup	3/10/08	3/11/08	3/21/08	KA 15-7'
LI03374 Dup	3/10/08	3/11/08	3/21/08	KA 18-2'

METAL	LIMIT TTLC (mg/kg)	METHOD	MDL	RL	D. F.	Dup LI03364 (mg/kg)	Dup LI03374 (mg/kg)
Antimony	500	6010	0.8	4.0	1	ND	4.2
Arsenic	500	6010	1.0	5.0	1	11	7.0
Barium	10000	6010	0.5	2.5	1	62	100
Beryllium	75	6010	0.3	1.5	1	0.64	0.65
Cadmium	100	6010	0.6	3.0	1	1.1	0.74
Chromium (T)	2500	6010	0.3	1.5	1	14	16
Cobalt	8000	6010	0.2	1.0	1	12	13
Copper	2500	6010	0.2	1.0	1	8.4	17
Lead	1000	6010	0.9	4.5	1	11	7.9
Molybdenum	3500	6010	0.2	1.0	1	ND	0.62
Nickel	2000	6010	0.4	2.0	1	7.2	11
Selenium	100	6010	0.7	3.5	1	ND	ND
Silver	500	6010	2.5	12.5	1	ND	ND
Thallium	700	6010	2.5	12.5	1	ND	ND
Vanadium	2400	6010	0.3	1.5	1	27	28
Zinc	5000	6010	0.3	1.5	1	41	43

ND - Not Detected; below method detection limit

MDL - Method Detection Limit

R.L. - Report Limit

D. F. - Dilution Factor

** - exceed TTLC limit

* - exceed 10x STLC limit

J - concentration above MDL and below RL

Analyst: KC/JS

Environmental Laboratory

Data Sheet

Project: Chatsworth Reservoir

Sample ID	Sample Description	COC	Sample Date	Analysis Date	Boron (mg/kg)
LI03306	KA 1-2'	08-0683	3/11/2008	3/24/2008	5.2
LI03307	KA 1-5'	08-0683	3/11/2008	3/24/2008	5.9
LI03308	KA 1-7'	08-0683	3/11/2008	3/24/2008	7.5
LI03309	KA 1-10'	08-0683	3/11/2008	3/24/2008	5.6
LI03310	KA 2-2'	08-0683	3/11/2008	3/24/2008	5.6
LI03311	KA 2-5'	08-0683	3/11/2008	3/24/2008	6.1
LI03312	KA 2-7'	08-0683	3/11/2008	3/24/2008	7.0
LI03313	KA 2-10'	08-0683	3/11/2008	3/24/2008	6.4
LI03314	KA 3-2'	08-0683	3/11/2008	3/24/2008	4.8
LI03315	KA 3-5'	08-0683	3/11/2008	3/24/2008	5.4
LI03316	KA 3-7'	08-0683	3/11/2008	3/24/2008	4.5
LI03317	KA 3-10'	08-0683	3/11/2008	3/24/2008	4.7
LI03318	KA 4-2'	08-0683	3/11/2008	3/24/2008	6.2
LI03319	KA 4-5'	08-0683	3/11/2008	3/24/2008	5.9
LI03320	KA 4-7'	08-0683	3/11/2008	3/24/2008	6.1
LI03321	KA 4-10'	08-0683	3/11/2008	3/24/2008	5.9
LI03322	KA 5-2'	08-0683	3/11/2008	3/24/2008	4.6
LI03323	KA 5-5'	08-0683	3/11/2008	3/24/2008	5.9
LI03324	KA 5-7'	08-0683	3/11/2008	3/24/2008	4.0
LI03325	KA 5-10'	08-0683	3/11/2008	3/24/2008	5.2
LI03326	KA 6-2'	08-0683	3/11/2008	3/24/2008	6.4
LI03327	KA 6-5'	08-0683	3/11/2008	3/24/2008	7.6
LI03328	KA 6-7'	08-0683	3/11/2008	3/24/2008	6.3
LI03329	KA 6-10'	08-0683	3/11/2008	3/24/2008	6.7
LI03330	KA 7-2'	08-0683	3/11/2008	3/24/2008	5.1
LI03331	KA 7-5'	08-0683	3/11/2008	3/24/2008	11.5
LI03332	KA 7-7'	08-0683	3/11/2008	3/24/2008	7.4
LI03333	KA 7-10'	08-0683	3/11/2008	3/24/2008	4.6

Environmental Laboratory

Data Sheet

Project: Chatsworth Reservoir

Sample ID	Sample Description	COC	Sample Date	Analysis Date	Boron (mg/kg)
LI03334	KA 8-2'	08-0683	3/11/2008	3/24/2008	2.6
LI03335	KA 8-5'	08-0683	3/11/2008	3/24/2008	6.3
LI03336	KA 8-7'	08-0683	3/11/2008	3/24/2008	4.2
LI03337	KA 8-10'	08-0683	3/11/2008	3/24/2008	5.5
LI03338	KA 9-2'	08-0683	3/11/2008	3/24/2008	5.7
LI03339	KA 9-5'	08-0683	3/11/2008	3/24/2008	6.9
LI03340	KA 9-7'	08-0683	3/11/2008	3/24/2008	6.6
LI03341	KA 9-10'	08-0683	3/11/2008	3/24/2008	6.4
LI03342	KA 10-2'	08-0683	3/11/2008	3/24/2008	6.2
LI03343	KA 10-5'	08-0683	3/11/2008	3/24/2008	4.0
LI03344	KA 10-7'	08-0683	3/11/2008	3/24/2008	5.9
LI03345	KA 10-10'	08-0683	3/11/2008	3/24/2008	6.7
LI03346	KA 11-2'	08-0683	3/11/2008	3/24/2008	7.1
LI03347	KA 11-5'	08-0683	3/11/2008	3/24/2008	10.4
LI03348	KA 11-7'	08-0683	3/11/2008	3/24/2008	6.7
LI03349	KA 11-10'	08-0683	3/11/2008	3/24/2008	6.3
LI03350	KA 12-2'	08-0683	3/11/2008	3/24/2008	7.2
LI03351	KA 12-5'	08-0683	3/11/2008	3/24/2008	3.9
LI03352	KA 12-7'	08-0683	3/11/2008	3/24/2008	4.5
LI03353	KA 12-10'	08-0683	3/11/2008	3/24/2008	4.5
LI03354	KA 13-2'	08-0683	3/11/2008	3/24/2008	4.7
LI03355	KA 13-5'	08-0683	3/11/2008	3/24/2008	4.1
LI03356	KA 13-7'	08-0683	3/11/2008	3/24/2008	2.7
LI03357	KA 13-10'	08-0683	3/11/2008	3/24/2008	1.5
LI03358	KA 14-2'	08-0683	3/11/2008	3/24/2008	3.3
LI03359	KA 14-5'	08-0683	3/11/2008	3/24/2008	3.2
LI03360	KA 14-7'	08-0683	3/11/2008	3/24/2008	3.1
LI03361	KA 14-10'	08-0683	3/11/2008	3/24/2008	4.1

Environmental Laboratory

Data Sheet

Project: Chatsworth Reservoir

Sample ID	Sample Description	COC	Sample Date	Analysis Date	Boron (mg/kg)
LI03362	KA 15-2'	08-0683	3/11/2008	3/24/2008	3.7
LI03363	KA 15-5'	08-0683	3/11/2008	3/24/2008	2.4
LI03364	KA 15-7'	08-0683	3/11/2008	3/24/2008	3.8
LI03365	KA 15-10'	08-0683	3/11/2008	3/24/2008	4.9
LI03366	KA 16-2'	08-0683	3/11/2008	3/24/2008	20.1
LI03367	KA 16-5'	08-0683	3/11/2008	3/24/2008	19.1
LI03368	KA 16-7'	08-0683	3/11/2008	3/24/2008	13.4
LI03369	KA 16-10'	08-0683	3/11/2008	3/24/2008	10.3
LI03370	KA 17-2'	08-0683	3/11/2008	3/24/2008	13.4
LI03371	KA 17-5'	08-0683	3/11/2008	3/24/2008	15.2
LI03372	KA 17-7'	08-0683	3/11/2008	3/24/2008	10.4
LI03373	KA 17-10'	08-0683	3/11/2008	3/24/2008	17.4
LI03374	KA 18-2'	08-0683	3/11/2008	3/24/2008	6.2
LI03375	KA 18-5'	08-0683	3/11/2008	3/24/2008	8.2
LI03376	KA 18-7'	08-0683	3/11/2008	3/24/2008	6.5
LI03377	KA 18-10'	08-0683	3/11/2008	3/24/2008	7.3

QC SUMMARIES

300019

Project No: CHATSWORTH RESERVOIR

COC 08-0683

QA/QC Report

I. Blank Spike (BS) / Blank Spike Duplicate (BSD)

DATE ANALYZED: 03/20/08

ANALYTICAL METHOD USEPA 6010/7000

BATCH #: $TTLCS-3621

LAB SAMPLE I.D.:

UNIT: (Circle One) (mg/kg) mg/L

METAL	SAMPLE RESULT	SPIKE CONC	BS	%BS	(DUP) SPIKE CONC	BSD	%BSD	RPD	BS/BSD % REC. LIMIT	RPD LIMIT
Antimony	ND	200	146	73.1	200	145	73	0.6%	70 - 130	< 30
Arsenic	1.9	200	205	102	200	200	99	2.9%	70 - 130	< 30
Barium	7.8	---	---	---	---	---	---	---	---	---
Beryllium	ND	200	207	104	200	205	103	1.0%	70 - 130	< 30
Cadmium	ND	200	207	104	200	202	101	2.4%	70 - 130	< 30
Chromium (T)	1.1	200	210	105	200	204	101	3.1%	70 - 130	< 30
Cobalt	0.89	200	215	107	200	209	104	2.5%	70 - 130	< 30
Copper	1.1	200	234	117	200	220	110	6.3%	70 - 130	< 30
Lead	ND	200	211	105	200	203	102	3.7%	70 - 130	< 30
Molybdenum	0.4	200	202	101	200	201	100	0.5%	70 - 130	< 30
Nickel	0.77	200	210	104	200	204	102	2.8%	70 - 130	< 30
Selenium	2.2	200	208	103	200	206	102	0.7%	70 - 130	< 30
Silver	ND	---	---	---	---	---	---	---	---	---
Thallium	ND	200	152	76	200	149	75	1.5%	70 - 130	< 30
Vanadium	1.7	200	188	93	200	184	91	2.1%	70 - 130	< 30
Zinc	1.2	200	207	103	200	201	100	3.2%	70 - 130	< 30

BS = Blank Spike BSD = Blank Spike Duplicate RPD = Relative Percent Difference

%BS = Percent Recovery of Blank Spike %BSD = Percent Recovery of Blank Spike Duplicate

Analyst: KC/JS

300020

Project No: CHATSWORTH RESERVOIR

COC 08-0683

QA/QC Report

I. Blank Spike (BS) / Blank Spike Duplicate (BSD)

DATE ANALYZED: 03/21/08

ANALYTICAL METHOD USEPA 6010/7000

BATCH #: STTLCS-3625

LAB SAMPLE I.D.:

UNIT: (Circle One) (mg/kg) mg/L

METAL	SAMPLE RESULT	SPIKE CONC	BS	%BS	(DUP) SPIKE CONC	BSD	%BSD	RPD	BS/BSD % REC. LIMIT	RPD LIMIT
Antimony	ND	200	159	80	200	146	73	8.6%	70 - 130	< 30
Arsenic	1.3	200	190	94	200	187	93	1.3%	70 - 130	< 30
Barium	15.0	---	---	---	---	---	---	---	---	---
Beryllium	ND	200	194	97	200	193	97	0.4%	70 - 130	< 30
Cadmium	ND	200	193	96	200	188	94	2.5%	70 - 130	< 30
Chromium (T)	2.4	200	191	94	200	185	91	3.6%	70 - 130	< 30
Cobalt	2.4	200	198	98	200	191	94	3.5%	70 - 130	< 30
Copper	3.3	200	201	99	200	185	91	8.4%	70 - 130	< 30
Lead	1.2	200	195	97	200	188	94	3.7%	70 - 130	< 30
Molybdenum	ND	200	196	98	200	194	97	0.8%	70 - 130	< 30
Nickel	2.4	200	193	95	200	187	92	3.2%	70 - 130	< 30
Selenium	ND	200	189	95	200	188	94	0.9%	70 - 130	< 30
Silver	ND	---	---	---	---	---	---	---	---	---
Thallium	ND	200	130	65	200	124	62	5.4%	70 - 130	< 30
Vanadium	4.0	200	175	86	200	171	84	2.6%	70 - 130	< 30
Zinc	3.5	200	196	96	200	190	93	3.1%	70 - 130	< 30

BS = Blank Spike BSD = Blank Spike Duplicate RPD = Relative Percent Difference

%BS = Percent Recovery of Blank Spike %BSD = Percent Recovery of Blank Spike Duplicate

Analyst: KC/JS

300021

Project No: CHATSWORTH RESERVOIR

COC 08-0683

QA/QC Report

II. Matrix Spike (MS)/Matrix Spike Duplicate (MSD)

DATE ANALYZED: 03/20/08 ANALYTICAL METHOD USEPA 6010/7000

BATCH #: $TTLCS-3621 (LI03306 LI03307 LI03308 LI03309 LI03310 LI03311 LI03312 LI03313 LI03314)

LAB SAMPLE I.D.: LI03306 UNIT: (Circle One) (mg/kg) mg/L

METAL	SAMPLE RESULT	SPIKE CONC	MS	%MS	(DUP) SPIKE CONC	MSD	%MSD	RPD	MS/MSD % REC LIMIT	RPD LIMIT
Antimony	ND	244	182	74.6	244	144	59.0	23.4%	70 - 130	< 30
Arsenic	10.7	244	252	98.9	244	242	94.8	4.2%	70 - 130	< 30
Barium	130.3	---	---	---	---	---	---	---	---	---
Beryllium	0.5	244	246	101	244	236	96.5	4.6%	70 - 130	< 30
Cadmium	1.1	244	250	102	244	240	97.9	4.1%	70 - 130	< 30
Chromium (T)	12.6	244	270	105	244	248	96.5	8.4%	70 - 130	< 30
Cobalt	20.8	244	269	102	244	255	96.0	6.1%	70 - 130	< 30
Copper	7.2	244	291	116	244	269	107	8.1%	70 - 130	< 30
Lead	16.0	244	272	105	244	259	99.6	5.3%	70 - 130	< 30
Molybdenum	0.2	244	246	101	244	234	95.8	5.3%	70 - 130	< 30
Nickel	15.0	244	261	101	244	248	95.5	5.6%	70 - 130	< 30
Selenium	ND	244	252	103	244	243	99.6	3.4%	70 - 130	< 30
Silver	ND	---	---	---	---	---	---	---	---	---
Thallium	ND	244	169	69.3	244.0	153	62.7	9.9%	70 - 130	< 30
Vanadium	30.4	244	241	86.3	244	225	79.8	7.8%	70 - 130	< 30
Zinc	47.5	244	286	97.7	244	274	92.8	5.1%	70 - 130	< 30

MS = Matrix Spike MSD = Matrix Spike Duplicate RPD = Relative Percent Difference

%MS = Percent Recovery of Matrix Spike %MSD = Percent Recovery of Matrix Spike Duplicate

Analyst: KC/JS

300022

Project No: CHATSWORTH RESERVOIR

COC 08-0683

QA/QC Report

II. Matrix Spike (MS)/Matrix Spike Duplicate (MSD)

DATE ANALYZED: 03/20/08 ANALYTICAL METHOD USEPA 6010/7000

BATCH #: $TTLCS-3622 (LI03315 LI03316 LI03317 LI03318 LI03319 LI03320 LI03321 LI03322 LI03323)

LAB SAMPLE I.D.: LI03316 UNIT: (Circle One) (mg/kg) mg/L

METAL	SAMPLE RESULT	SPIKE CONC	MS	%MS	(DUP) SPIKE CONC	MSD	%MSD	RPD	MS/MSD % REC LIMIT	RPD LIMIT
Antimony	1.0	236	161	68.2	236	175	74.2	8.4%	70 - 130	< 30
Arsenic	8.7	236	253	104	236	243	99.3	4.6%	70 - 130	< 30
Barium	81.2	---	---	---	---	---	---	---	---	---
Beryllium	0.6	236	241	102	236	233	98.5	3.5%	70 - 130	< 30
Cadmium	1.1	236	244	103	236	231	97.4	5.6%	70 - 130	< 30
Chromium (T)	15.2	236	258	103	236	246	97.8	5.2%	70 - 130	< 30
Cobalt	11.7	236	264	107	236	247	99.7	7.1%	70 - 130	< 30
Copper	11.2	236	289	118	236	255	103	13.6%	70 - 130	< 30
Lead	8.4	236	258	106	236	245	100	5.8%	70 - 130	< 30
Molybdenum	ND	236	228	96.6	236	221	93.6	3.2%	70 - 130	< 30
Nickel	11.2	236	256	104	236	242	97.8	6.1%	70 - 130	< 30
Selenium	ND	236	247	105	236	235	99.6	5.3%	70 - 130	< 30
Silver	ND	---	---	---	---	---	---	---	---	---
Thallium	ND	236	147	62.3	236	106	44.9	32.4%	70 - 130	< 30
Vanadium	26.4	236	242	91.4	236	236	88.8	2.9%	70 - 130	< 30
Zinc	44.8	236	294	106	236	278	98.8	7.0%	70 - 130	< 30

MS = Matrix Spike MSD = Matrix Spike Duplicate RPD = Relative Percent Difference

%MS = Percent Recovery of Matrix Spike %MSD = Percent Recovery of Matrix Spike Duplicate

Analyst: KC/JS

300023

Project No: CHATSWORTH RESERVOIR

COC 08-0683

QA/QC Report

II. Matrix Spike (MS)/Matrix Spike Duplicate (MSD)

DATE ANALYZED: 03/20/08 ANALYTICAL METHOD USEPA 6010/7000

BATCH #: $TTLCS-3623 (LI03324 LI03325 LI03326 LI03327 LI03328 LI03329 LI03330 LI03331 LI03332)

LAB SAMPLE I.D.: LI03326 UNIT: (Circle One) (mg/kg) mg/L

METAL	SAMPLE RESULT	SPIKE CONC	MS	%MS	(DUP) SPIKE CONC	MSD	%MSD	RPD	MS/MSD % REC. LIMIT	RPD LIMIT
Antimony	1.7	224	176	77.8	224	184	81.4	5.0%	70 - 130	< 30
Arsenic	8.3	224	219	94.1	224	246	106	0.6%	70 - 130	< 30
Barium	93.2	---	---	---	---	---	---	---	---	---
Beryllium	0.6	224	221	98.4	224	234	104	0.9%	70 - 130	< 30
Cadmium	0.8	224	212	94.3	224	234	104	1.6%	70 - 130	< 30
Chromium (T)	19.3	224	236	96.7	224	265	110	1.1%	70 - 130	< 30
Cobalt	13.5	224	221	92.6	224	255	108	1.1%	70 - 130	< 30
Copper	20.7	224	241	98.3	224	283	117	1.0%	70 - 130	< 30
Lead	9.5	224	219	93.5	224	249	107	3.0%	70 - 130	< 30
Molybdenum	0.4	224	210	93.6	224	224	99.8	0.9%	70 - 130	< 30
Nickel	13.1	224	218	91.5	224	247	104	1.2%	70 - 130	< 30
Selenium	ND	224	213	95.1	224	238	106	3.6%	70 - 130	< 30
Silver	ND	---	---	---	---	---	---	---	---	---
Thallium	ND	224	110	49.1	224	126	56.3	13.6%	70 - 130	< 30
Vanadium	30.5	224	227	87.7	224	249	97.5	1.1%	70 - 130	< 30
Zinc	49.6	224	258	93.0	224	288	106	0.0%	70 - 130	< 30

MS = Matrix Spike MSD = Matrix Spike Duplicate RPD = Relative Percent Difference

%MS = Percent Recovery of Matrix Spike %MSD = Percent Recovery of Matrix Spike Duplicate

Analyst: KC/JS

300024

Project No: CHATSWORTH RESERVOIR

COC 08-0683

QA/QC Report

II. Matrix Spike (MS)/Matrix Spike Duplicate (MSD)

DATE ANALYZED: 03/20/08 ANALYTICAL METHOD USEPA 6010/7000

BATCH #: STTLCS-3624 (LI03333 LI03334 LI03335 LI03336 LI03337 LI03338 LI03339 LI03340 LI03341)

LAB SAMPLE I.D.: LI03336 UNIT: (Circle One) (mg/kg) mg/L

METAL	SAMPLE RESULT	SPIKE CONC	MS	%MS	(DUP) SPIKE CONC	MSD	%MSD	RPD	MS/MSD % REC LIMIT	RPD LIMIT
Antimony	ND	244	164	67.2	244	156	63.9	5.0%	70 - 130	< 30
Arsenic	10.6	244	254	99.8	244	246	96.5	3.4%	70 - 130	< 30
Barium	97.4	---	---	---	---	---	---	---	---	---
Beryllium	0.8	244	245	100	244	244	99.7	0.3%	70 - 130	< 30
Cadmium	1.4	244	244	99.4	244	243	99.0	0.4%	70 - 130	< 30
Chromium (T)	14.5	244	277	108	244	262	101	6.7%	70 - 130	< 30
Cobalt	10.4	244	264	104	244	257	101	2.9%	70 - 130	< 30
Copper	14.1	244	293	114	244	282	110	3.6%	70 - 130	< 30
Lead	15.5	244	269	104	244	262	101	2.9%	70 - 130	< 30
Molybdenum	0.5	244	228	93.2	244	222	90.8	2.6%	70 - 130	< 30
Nickel	6.3	244	253	101	244	247	98.6	2.4%	70 - 130	< 30
Selenium	ND	244	248	102	244	243	99.6	2.4%	70 - 130	< 30
Silver	ND	---	---	---	---	---	---	---	---	---
Thallium	ND	244	145	59.4	244	141	57.8	2.8%	70 - 130	< 30
Vanadium	22.1	244	250	93.4	244	242	90.1	3.6%	70 - 130	< 30
Zinc	45.1	244	296	103	244	292	101	2.0%	70 - 130	< 30

MS = Matrix Spike MSD = Matrix Spike Duplicate RPD = Relative Percent Difference

%MS = Percent Recovery of Matrix Spike %MSD = Percent Recovery of Matrix Spike Duplicate

Analyst: KC/JS

300025

Project No: CHATSWORTH RESERVOIR

COC 08-0683

QA/QC Report

II. Matrix Spike (MS)/Matrix Spike Duplicate (MSD)

DATE ANALYZED: 03/21/08 ANALYTICAL METHOD USEPA 6010/7000

BATCH #: $TTLCS-3625 (LI03342 LI03343 LI03344 LI03345 LI03346 LI03347 LI03348 LI03349 LI03350)

LAB SAMPLE I.D.: LI03344 UNIT: (Circle One) (mg/kg) mg/L

METAL	SAMPLE RESULT	SPIKE CONC	MS	%MS	(DUP) SPIKE CONC	MSD	%MSD	RPD	MS/MSD % REC. LIMIT	RPD LIMIT
Antimony	7.7	200	158	75.2	200	138	65.2	14%	70 - 130	< 30
Arsenic	9.5	200	228	109	200	231	111	2%	70 - 130	< 30
Barium	89.7	---	---	---	---	---	---	---	---	---
Beryllium	0.7	200	233	116	200	229	114	2%	70 - 130	< 30
Cadmium	0.8	200	217	108	200	220	110	2%	70 - 130	< 30
Chromium (T)	16.0	200	257	120	200	258	121	1%	70 - 130	< 30
Cobalt	11.0	200	225	107	200	231	110	3%	70 - 130	< 30
Copper	9.2	200	243	117	200	256	123	5%	70 - 130	< 30
Lead	7.9	200	228	110	200	236	114	4%	70 - 130	< 30
Molybdenum	ND	200	233	116	200	230	115	1%	70 - 130	< 30
Nickel	10.9	200	222	106	200	226	108	2%	70 - 130	< 30
Selenium	ND	200	219	110	200	223	112	2%	70 - 130	< 30
Silver	ND	---	---	---	---	---	---	---	---	---
Thallium	ND	200	136	68.0	200	146	73.0	7.1%	70 - 130	< 30
Vanadium	30.1	200	246	108	200	244	107	1%	70 - 130	< 30
Zinc	41.5	200	253	106	200	262	110	4%	70 - 130	< 30

MS = Matrix Spike MSD = Matrix Spike Duplicate RPD = Relative Percent Difference

%MS = Percent Recovery of Matrix Spike %MSD = Percent Recovery of Matrix Spike Duplicate

Analyst: KC/JS

300026

Project No: CHATSWORTH RESERVOIR

COC 08-0683

QA/QC Report

II. Matrix Spike (MS)/Matrix Spike Duplicate (MSD)

DATE ANALYZED: 03/21/08 ANALYTICAL METHOD USEPA 6010/7000

BATCH #: $TTLCS-3626 (LI03351 LI03352 LI03353 LI03354 LI03355 LI03356 LI03357 LI03358 LI03359)

LAB SAMPLE I.D.: LI03354 UNIT: (Circle One) (mg/kg) mg/L

METAL	SAMPLE RESULT	SPIKE CONC	MS	%MS	(DUP) SPIKE CONC	MSD	%MSD	RPD	MS/MSD % REC. LIMIT	RPD LIMIT
Antimony	ND	234	179	76.5	234	196	83.8	9%	70 - 130	< 30
Arsenic	7.0	234	216	89.3	234	214	88.5	1%	70 - 130	< 30
Barium	124.3	---	---	---	---	---	---	---	---	---
Beryllium	0.7	234	222	94.6	234	226	96.3	2%	70 - 130	< 30
Cadmium	1.2	234	205	87.1	234	204	86.7	0%	70 - 130	< 30
Chromium (T)	16.5	234	215	84.8	234	226	89.5	5%	70 - 130	< 30
Cobalt	9.9	234	211	85.9	234	207	84.2	2%	70 - 130	< 30
Copper	8.4	234	231	95.1	234	228	93.8	1%	70 - 130	< 30
Lead	13.0	234	212	85.0	234	210	84.2	1%	70 - 130	< 30
Molybdenum	ND	234	212	90.6	234	216	92.3	2%	70 - 130	< 30
Nickel	10.5	234	206	83.5	234	204	82.7	1%	70 - 130	< 30
Selenium	ND	234	210	89.7	234	209	89.3	0%	70 - 130	< 30
Silver	ND	---	---	---	---	---	---	---	---	---
Thallium	ND	234	127	54.3	234	131	56.0	3.1%	70 - 130	< 30
Vanadium	21.2	234	218	84.1	234	223	86.2	2%	70 - 130	< 30
Zinc	41.5	234	253	90.4	234	248	88.2	2%	70 - 130	< 30

MS = Matrix Spike MSD = Matrix Spike Duplicate RPD = Relative Percent Difference

%MS = Percent Recovery of Matrix Spike %MSD = Percent Recovery of Matrix Spike Duplicate

Analyst: KC/JS

300027

Project No: CHATSWORTH RESERVOIR

COC 08-0683

QA/QC Report

II. Matrix Spike (MS)/Matrix Spike Duplicate (MSD)

DATE ANALYZED: 03/21/08 ANALYTICAL METHOD USEPA 6010/7000

BATCH #: STTLCS-3627 (LI03360 LI03361 LI03362 LI03363 LI03364 LI03365 LI03366 LI03367 LI03368)

LAB SAMPLE I.D.: LI03364 UNIT: (Circle One) (mg/kg) mg/L

METAL	SAMPLE RESULT	SPIKE CONC	MS	%MS	(DUP) SPIKE CONC	MSD	%MSD	RPD	MS/MSD % REC. LIMIT	RPD LIMIT
Antimony	ND	230	157	68.3	230	142	61.7	10%	70 - 130	< 30
Arsenic	13.3	230	231	94.7	230	237	97.3	3%	70 - 130	< 30
Barium	57.9	---	---	---	---	---	---	---	---	---
Beryllium	0.6	230	228	98.9	230	232	101	2%	70 - 130	< 30
Cadmium	1.3	230	220	95.1	230	225	97.3	2%	70 - 130	< 30
Chromium (T)	13.3	230	252	104	230	254	105	1%	70 - 130	< 30
Cobalt	11.4	230	232	95.9	230	238	98.5	3%	70 - 130	< 30
Copper	9.2	230	254	106	230	265	111	5%	70 - 130	< 30
Lead	10.8	230	233	96.6	230	242	101	4%	70 - 130	< 30
Molybdenum	0.5	230	231	100	230	234	102	2%	70 - 130	< 30
Nickel	7.7	230	225	94.5	230	230	96.7	2%	70 - 130	< 30
Selenium	ND	230	224	97.4	230	230	100	3%	70 - 130	< 30
Silver	ND	---	---	---	---	---	---	---	---	---
Thallium	ND	230	149	64.8	230	152	66.1	2.0%	70 - 130	< 30
Vanadium	26.2	230	235	90.8	230	237	91.7	1%	70 - 130	< 30
Zinc	39.9	230	252	92.2	230	260	95.7	4%	70 - 130	< 30

MS = Matrix Spike MSD = Matrix Spike Duplicate RPD = Relative Percent Difference
%MS = Percent Recovery of Matrix Spike %MSD = Percent Recovery of Matrix Spike Duplicate

Analyst: KC/JS

300028

Project No: CHATSWORTH RESERVOIR

COC 08-0683

QA/QC Report

II. Matrix Spike (MS)/Matrix Spike Duplicate (MSD)

DATE ANALYZED: 03/21/08 ANALYTICAL METHOD USEPA 6010/7000

BATCH #: $TTLCS-3628 (LI03369 LI03370 LI03371 LI03372 LI03373 LI03374 LI03375 LI03376 LI03377)

LAB SAMPLE I.D.: LI03374 UNIT: (Circle One) (mg/kg) mg/L

METAL	SAMPLE RESULT	SPIKE CONC	MS	%MS	(DUP) SPIKE CONC	MSD	%MSD	RPD	MS/MSD % REC. LIMIT	RPD LIMIT
Antimony	ND	220	135	61.4	220	149	67.7	10%	70 - 130	< 30
Arsenic	6.7	220	214	94.2	220	218	96.0	2%	70 - 130	< 30
Barium	98.6	---	---	---	---	---	---	---	---	---
Beryllium	0.6	220	223	101	220	226	102	1%	70 - 130	< 30
Cadmium	0.7	220	210	95.1	220	211	95.6	1%	70 - 130	< 30
Chromium (T)	13.6	220	234	100	220	246	106	6%	70 - 130	< 30
Cobalt	11.8	220	218	93.7	220	223	96.0	2%	70 - 130	< 30
Copper	15.2	220	232	98.5	220	254	109	10%	70 - 130	< 30
Lead	10.6	220	216	93.4	220	220	95.2	2%	70 - 130	< 30
Molybdenum	0.4	220	222	101	220	223	101	0%	70 - 130	< 30
Nickel	10.3	220	212	91.7	220	218	94.4	3%	70 - 130	< 30
Selenium	ND	220	211	95.9	220	216	98.2	2%	70 - 130	< 30
Silver	ND	---	---	---	---	---	---	---	---	---
Thallium	ND	220	96.9	44.0	220	106	48.2	9.0%	70 - 130	< 30
Vanadium	26.1	220	227	91.3	220	232	93.6	2%	70 - 130	< 30
Zinc	42.0	220	247	93.2	220	250	94.5	1%	70 - 130	< 30

MS = Matrix Spike MSD = Matrix Spike Duplicate RPD = Relative Percent Difference

%MS = Percent Recovery of Matrix Spike %MSD = Percent Recovery of Matrix Spike Duplicate

Analyst: KC/JS

300029

Project No: CHATSWORTH RESERVOIR COC 08-0683

III. Calibration and Laboratory Quality Control Check Sample (LCS)

DATE ANALYZED: 3/21/2008 ANALYTICAL USEPA 6010/7000

SUPPLY SOURCE: CPI LAB LCS I.D.: Q7147

LOT NUMBER: 07J042 UNIT: (Circle One) (mg/kg) ug/L

METAL	MINIMUM LEVEL	LCS RESULTS mg/kg	TRUE VALUE mg/kg	% Recovery	Acceptable Range
Antimony		87.0	100	87%	70 - 130 %
Arsenic		332.0	400	83%	70 - 130 %
Barium		388.0	400	97%	70 - 130 %
Beryllium		9.8	10	98%	70 - 130 %
Cadmium		8.6	10	86%	70 - 130 %
Chromium (T)		37.3	40	93%	70 - 130 %
Cobalt		86.9	100	87%	70 - 130 %
Copper		44.1	50	88%	70 - 130 %
Lead		81.3	100	81%	70 - 130 %
Molybdenum		---	---	---	---
Nickel		83.6	100	84%	70 - 130 %
Selenium		318	400	80%	70 - 130 %
Silver		6.1	10	61%	70 - 130 %
Thallium		310	400	78%	70 - 130 %
Vanadium		92.0	100	92%	70 - 130 %
Zinc		85.8	100	86%	70 - 130 %

Analyst: KC/JS

Reviewed by: 4/14/08

300030

Project No: CHATSWORTH RESERVOIR COC 08-0683

III. Calibration and Laboratory Quality Control Check Sample (LCS)

DATE ANALYZED: 3/20/2008 ANALYTICAL USEPA 6010/7000

SUPPLY SOURCE: CPI LAB LCS I.D.: Q7147

LOT NUMBER: 07J042 UNIT: (Circle One) (mg/kg) ug/L

METAL	MINIMUM LEVEL	LCS RESULTS mg/kg	TRUE VALUE mg/kg	% Recovery	Acceptable Range
Antimony		62.6	100	63%	70 - 130 %
Arsenic		385	400	96%	70 - 130 %
Barium		409	400	102%	70 - 130 %
Beryllium		10.6	10	106%	70 - 130 %
Cadmium		9.87	10	99%	70 - 130 %
Chromium (T)		43.6	40	109%	70 - 130 %
Cobalt		105	100	105%	70 - 130 %
Copper		55.5	50	111%	70 - 130 %
Lead		97.1	100	97%	70 - 130 %
Molybdenum		---	---	---	---
Nickel		101	100	101%	70 - 130 %
Selenium		370	400	93%	70 - 130 %
Silver		5.87	10	59%	70 - 130 %
Thallium		369	400	92%	70 - 130 %
Vanadium		99.8	100	100%	70 - 130 %
Zinc		96.3	100	96%	70 - 130 %

Analyst: KC/JS

Reviewed by: 4/19/08

ATTACHMENT # 4

EPA Method 8260B
Volatile Organic Compounds (VOC)

400001

CITY OF LOS ANGELES, DEPARTMENT OF WATER & POWER
ENVIRONMENTAL LABORATORY

Case Narrative

Volatile Organic Compounds (VOC) by EPA Method 8260B

Client: Kelvin Lew			
Project: Chatsworth Reservoir			
COC No.:08-0683			
Data Review Criteria	**Yes**	**No**	**N/A**
Holding time			
1. Analysis met holding time criteria.	X		
Comments:			
Calibration			
1. Initial calibration was performed at five different concentrations.	X		
2. Calibration check standards were analyzed per batch.	X		
3. Tuning and calibration met QC requirements.	X		
Comments:			
Method Blank, Blank Spikes, Blank Spike Duplicate			
1. Blank recoveries met QC criteria.	X		
2. Blanks were free of contamination at the reporting level.	X		
Comments:			
Lab Control Samples (LCSs)			
1. LCS (certified QC soil sample) was analyzed per batch.	X		
2. Recoveries of LCSs met QC criteria.	X		
Comments:			
Surrogate Recovery			
1. Surrogate recoveries met acceptable QC criteria.	X		
Comments:			
Matrix Spike (MS) and Matrix Spike Duplicate (MSD)			
1. MS and MSD samples were analyzed per batch .	X		
2. Recoveries of MS and MSD met QC criteria.	X		
Comments:			
Sample Analysis			
1. Samples were analyzed according to the prescribed QC procedures.	X		
2. All QC criteria were met.	X		
Comments:			

N/A: Not Applicable

Sample Results

400002

COC 08-0683

ENVIRONMENTAL LABORATORY DATA REPORT

Report of GC/MS Analysis for Purgeable Volatile Organics
EPA SW-846 Method 8260

PROJECT: CHATSWORTH RESERVOIR Sample Matrix: Soil

Chemistry Log No.	Date Sampled	Date Received	Date Analyzed	Sample Description
LI03306	3/10/2008	3/11/2008	3/11/2008	KA 1-2'
LI03307	3/10/2008	3/11/2008	3/11/2008	KA 1-5'
LI03308	3/10/2008	3/11/2008	3/11/2008	KA 1-7'
LI03309	3/10/2008	3/11/2008	3/11/2008	KA 1-10'
LI03310	3/10/2008	3/11/2008	3/11/2008	KA 2-2'
LI03311	3/10/2008	3/11/2008	3/11/2008	KA 2-5'
LI03312	3/10/2008	3/11/2008	3/11/2008	KA 2-7'

Compounds	MDL ug/kg	PQL ug/kg	LI03306 Amount ug/kg	LI03307 Amount ug/kg	LI03308 Amount ug/kg	LI03309 Amount ug/kg	LI03310 Amount ug/kg	LI03311 Amount ug/kg	LI03312 Amount ug/kg
Acetone	8.5	42.5	nd	nd	nd	nd	nd	nd	nd
tert-Amyl methyl ether (TAME)	2.7	13.5	nd	nd	nd	nd	nd	nd	nd
Benzene	2.6	13.0	nd	nd	nd	nd	nd	nd	nd
Bromobenzene	2.9	14.5	nd	nd	nd	nd	nd	nd	nd
Bromochloromethane	2.4	12.0	nd	nd	nd	nd	nd	nd	nd
Bromodichloromethane	3.9	19.5	nd	nd	nd	nd	nd	nd	nd
Bromoform	3.6	18.0	nd	nd	nd	nd	nd	nd	nd
Bromomethane	2.2	11.0	nd	nd	nd	nd	nd	nd	nd
Methyl ethyl ketone (MEK)	3.4	17.0	nd	nd	nd	nd	nd	nd	nd
tert-Butyl alcohol (TBA)	21.6	108.0	nd	nd	nd	nd	nd	nd	nd
Butylbenzene	2.5	12.5	nd	nd	nd	nd	nd	nd	nd
sec-Butylbenzene	3.4	17.0	nd	nd	nd	nd	nd	nd	nd
tert-Butylbenzene	3.1	15.5	nd	nd	nd	nd	nd	nd	nd
tert-Butyl ethyl ether (ETBE)	2.7	13.5	nd	nd	nd	nd	nd	nd	nd
Carbon disulfide	5.3	26.5	nd	nd	nd	nd	nd	nd	nd
Carbon Tetrachloride	3.3	16.5	nd	nd	nd	nd	nd	nd	nd
Chlorobenzene	2.4	12.0	nd	nd	nd	nd	nd	nd	nd
Chloroethane	4.8	24.0	nd	nd	nd	nd	nd	nd	nd
2-Chloroethyl vinyl ether	2	10.0	nd	nd	nd	nd	nd	nd	nd
Chloroform	2.3	11.5	nd	nd	nd	nd	nd	nd	nd
Chloromethane	4.7	23.5	nd	nd	nd	nd	nd	nd	nd
2-Chlorotoluene	4.7	23.5	nd	nd	nd	nd	nd	nd	nd
4-Chlorotoluene	4.3	21.5	nd	nd	nd	nd	nd	nd	nd
Dibromochloromethane	4.2	21.0	nd	nd	nd	nd	nd	nd	nd
1,2-Dibromo-3-chloropropane	3.1	15.5	nd	nd	nd	nd	nd	nd	nd
1,2-Dibromoethane	3.6	18.0	nd	nd	nd	nd	nd	nd	nd
Dibromomethane	3.8	19.0	nd	nd	nd	nd	nd	nd	nd
1,2-Dichlorobenzene	4.7	23.5	nd	nd	nd	nd	nd	nd	nd
1,3-Dichlorobenzene	4.9	24.5	nd	nd	nd	nd	nd	nd	nd
1,4-Dichlorobenzene	5	25.0	nd	nd	nd	nd	nd	nd	nd
Dichlorodifluoromethane	5.2	26.0	nd	nd	nd	nd	nd	nd	nd
1,1-Dichloroethane	2.4	12.0	nd	nd	nd	nd	nd	nd	nd
1,2-Dichloroethane	2.8	14.0	nd	nd	nd	nd	nd	nd	nd
1,1-Dichloroethene	4.5	22.5	nd	nd	nd	nd	nd	nd	nd
cis-1,2-Dichloroethene	4.7	23.5	nd	nd	nd	nd	nd	nd	nd
trans-1,2-Dichloroethene	2.3	11.5	nd	nd	nd	nd	nd	nd	nd
1,2-Dichloropropane	2.7	13.5	nd	nd	nd	nd	nd	nd	nd
1,3-Dichloropropane	3.2	16.0	nd	nd	nd	nd	nd	nd	nd
2,2-Dichloropropane	2.9	14.5	nd	nd	nd	nd	nd	nd	nd
1,1-Dichloropropene	2.1	10.5	nd	nd	nd	nd	nd	nd	nd
cis-1,3-Dichloropropene	2.2	11.0	nd	nd	nd	nd	nd	nd	nd
trans-1,3-Dichloropropene	2.8	14.0	nd	nd	nd	nd	nd	nd	nd
Diisopropyl ether (DIPE)	3.2	16.0	nd	nd	nd	nd	nd	nd	nd
Ethylbenzene	3.1	15.5	nd	nd	nd	nd	nd	nd	nd
Hexachlorobutadiene	4.6	23.0	nd	nd	nd	nd	nd	nd	nd

400003

COC 08-0683

ENVIRONMENTAL LABORATORY DATA REPORT

Report of GC/MS Analysis for Purgeable Volatile Organics
EPA SW-846 Method 8260

PROJECT: CHATSWORTH RESERVOIR Sample Matrix: Soil

Chemistry Log No.	Date Sampled	Date Received	Date Analyzed	Sample Description
LI03306	3/10/2008	3/11/2008	3/11/2008	KA 1-2'
LI03307	3/10/2008	3/11/2008	3/11/2008	KA 1-5'
LI03308	3/10/2008	3/11/2008	3/11/2008	KA 1-7'
LI03309	3/10/2008	3/11/2008	3/11/2008	KA 1-10'
LI03310	3/10/2008	3/11/2008	3/11/2008	KA 2-2'
LI03311	3/10/2008	3/11/2008	3/11/2008	KA 2-5'
LI03312	3/10/2008	3/11/2008	3/11/2008	KA 2-7'

Compounds	MDL ug/kg	PQL ug/kg	LI03306 Amount ug/kg	LI03307 Amount ug/kg	LI03308 Amount ug/kg	LI03309 Amount ug/kg	LI03310 Amount ug/kg	LI03311 Amount ug/kg	LI03312 Amount ug/kg
2-Hexanone	2.2	11.0	nd	nd	nd	nd	nd	nd	nd
Isopropylbenzene	1.9	9.5	nd	nd	nd	nd	nd	nd	nd
p-Isopropyltoluene	2.5	12.5	nd	nd	nd	nd	nd	nd	nd
Methyl-t-butyl ether (MTBE)	3.1	15.5	nd	nd	nd	nd	nd	nd	nd
Methylene chloride	3.9	19.5	nd	nd	nd	nd	nd	nd	nd
Iodomethane	4.9	24.5	nd	nd	nd	nd	nd	nd	nd
Methyl isobutyl ketone (MIBK)	2.3	11.5	nd	nd	nd	nd	nd	nd	nd
Naphthalene	2.7	13.5	nd	nd	nd	nd	nd	nd	nd
Propylbenzene	4.3	21.5	nd	nd	nd	nd	nd	nd	nd
Styrene	2.9	14.5	nd	nd	nd	nd	nd	nd	nd
1,1,1,2-Tetrachloroethane	2.2	11.0	nd	nd	nd	nd	nd	nd	nd
1,1,2,2-Tetrachloroethane	4.4	22.0	nd	nd	nd	nd	nd	nd	nd
Tetrachloroethylene	3.4	17.0	nd	nd	nd	nd	nd	nd	nd
Toluene	2	10.0	nd	nd	nd	nd	nd	nd	nd
1,2,3-Trichlorobenzene	3.3	16.5	nd	nd	nd	nd	nd	nd	nd
1,2,4-Trichlorobenzene	2.8	14.0	nd	nd	nd	nd	nd	nd	nd
1,1,1-Trichloroethane	2.9	14.5	nd	nd	nd	nd	nd	nd	nd
1,1,2-Trichloroethane	4.3	21.5	nd	nd	nd	nd	nd	nd	nd
Trichloroethylene	1.4	7.0	nd	nd	nd	nd	nd	nd	nd
Trichlorofluoromethane	3.5	17.5	nd	nd	nd	nd	nd	nd	nd
1,2,3-Trichloropropane	2.8	14.0	nd	nd	nd	nd	nd	nd	nd
1,2,4-Trimethylbenzene	2.5	12.5	nd	nd	nd	nd	nd	nd	nd
1,3,5-Trimethylbenzene	2.3	11.5	nd	nd	nd	nd	nd	nd	nd
Vinyl acetate	2.4	12.0	nd	nd	nd	nd	nd	nd	nd
Vinyl Chloride (Chloroethene)	3.6	18.0	nd	nd	nd	nd	nd	nd	nd
m & p-Xylene	6.7	33.5	nd	nd	nd	nd	nd	nd	nd
o-Xylene	2.2	11.0	nd	nd	nd	nd	nd	nd	nd

MDL - Method Detection Limit
PQL - Practical Quantitation Limit (5xMDL)

J - Concentration above MDL below PQL
nd - Not Detected; below detection limit

Quality Control Data

Surrogates 30 (ug/L each)	QC Limits % Recovery Lower-Upper							
SURR: Bromofluorobenzene	74 - 121	95.7%	96.7%	96.7%	97.0%	93.7%	92.7%	93.0%
SURR: Dibromofluoromethane	80 - 120	89.0%	86.3%	85.7%	85.7%	84.3%	85.0%	84.3%
SURR: Toluene-d8	81 - 117	98.7%	98.3%	98.0%	98.7%	98.7%	97.7%	98.7%

Comment:

Analyst: Bryan Tiu

Reviewed by: Rose Gentallan

400004

COC 08-0683

ENVIRONMENTAL LABORATORY DATA REPORT

Report of GC/MS Analysis for Purgeable Volatile Organics
EPA SW-846 Method 8260

PROJECT: CHATSWORTH RESERVOIR Sample Matrix: Soil

Chemistry Log No.	Date Sampled	Date Received	Date Analyzed	Sample Description
LI03313	3/10/2008	3/11/2008	3/11/2008	KA 2-10'
LI03314	3/10/2008	3/11/2008	3/11/2008	KA 3-2'
LI03315	3/10/2008	3/11/2008	3/11/2008	KA 3-5'
LI03316	3/10/2008	3/11/2008	3/12/2008	KA 3-7'
LI03317	3/10/2008	3/11/2008	3/12/2008	KA 3-10'
LI03318	3/10/2008	3/11/2008	3/12/2008	KA 4-2'
LI03319	3/10/2008	3/11/2008	3/12/2008	KA 4-5'

Compounds	MDL (ug/kg)	PQL (ug/kg)	LI03313 Amount (ug/kg)	LI03314 Amount (ug/kg)	LI03315 Amount (ug/kg)	LI03316 Amount (ug/kg)	LI03317 Amount (ug/kg)	LI03318 Amount (ug/kg)	LI03319 Amount (ug/kg)
Acetone	8.5	42.5	nd	nd	nd	nd	nd	nd	nd
tert-Amyl methyl ether (TAME)	2.7	13.5	nd	nd	nd	nd	nd	nd	nd
Benzene	2.6	13.0	nd	nd	nd	nd	nd	nd	nd
Bromobenzene	2.9	14.5	nd	nd	nd	nd	nd	nd	nd
Bromochloromethane	2.4	12.0	nd	nd	nd	nd	nd	nd	nd
Bromodichloromethane	3.9	19.5	nd	nd	nd	nd	nd	nd	nd
Bromoform	3.6	18.0	nd	nd	nd	nd	nd	nd	nd
Bromomethane	2.2	11.0	nd	nd	nd	nd	nd	nd	nd
2-Butanone (MEK)	3.4	17.0	nd	nd	nd	nd	nd	nd	nd
tert-Butyl alcohol (TBA)	21.6	108.0	nd	nd	nd	nd	nd	nd	nd
n-Butylbenzene	2.5	12.5	nd	nd	nd	nd	nd	nd	nd
sec-Butylbenzene	3.4	17.0	nd	nd	nd	nd	nd	nd	nd
tert-Butylbenzene	3.1	15.5	nd	nd	nd	nd	nd	nd	nd
tert-Butyl ethyl ether (ETBE)	2.7	13.5	nd	nd	nd	nd	nd	nd	nd
Carbon disulfide	5.3	26.5	nd	nd	nd	nd	nd	nd	nd
Carbon Tetrachloride	3.3	16.5	nd	nd	nd	nd	nd	nd	nd
Chlorobenzene	2.4	12.0	nd	nd	nd	nd	nd	nd	nd
Chloroethane	4.8	24.0	nd	nd	nd	nd	nd	nd	nd
2-Chloroethyl vinyl ether	2	10.0	nd	nd	nd	nd	nd	nd	nd
Chloroform	2.3	11.5	nd	nd	nd	nd	nd	nd	nd
Chloromethane	4.7	23.5	nd	nd	nd	nd	nd	nd	nd
2-Chlorotoluene	4.7	23.5	nd	nd	nd	nd	nd	nd	nd
4-Chlorotoluene	4.3	21.5	nd	nd	nd	nd	nd	nd	nd
Dibromochloromethane	4.2	21.0	nd	nd	nd	nd	nd	nd	nd
1,2-Dibromo-3-chloropropane	3.1	15.5	nd	nd	nd	nd	nd	nd	nd
1,2-Dibromoethane (EDB)	3.6	18.0	nd	nd	nd	nd	nd	nd	nd
Dibromomethane	3.8	19.0	nd	nd	nd	nd	nd	nd	nd
1,2-Dichlorobenzene	4.7	23.5	nd	nd	nd	nd	nd	nd	nd
1,3-Dichlorobenzene	4.9	24.5	nd	nd	nd	nd	nd	nd	nd
1,4-Dichlorobenzene	5	25.0	nd	nd	nd	nd	nd	nd	nd
Dichlorodifluoromethane	5.2	26.0	nd	nd	nd	nd	nd	nd	nd
1,1-Dichloroethane	2.4	12.0	nd	nd	nd	nd	nd	nd	nd
1,2-Dichloroethane	2.8	14.0	nd	nd	nd	nd	nd	nd	nd
1,1-Dichloroethene	4.5	22.5	nd	nd	nd	nd	nd	nd	nd
cis-1,2-Dichloroethene	4.7	23.5	nd	nd	nd	nd	nd	nd	nd
trans-1,2-Dichloroethene	2.3	11.5	nd	nd	nd	nd	nd	nd	nd
1,2-Dichloropropane	2.7	13.5	nd	nd	nd	nd	nd	nd	nd
1,3-Dichloropropane	3.2	16.0	nd	nd	nd	nd	nd	nd	nd
2,2-Dichloropropane	2.9	14.5	nd	nd	nd	nd	nd	nd	nd
1,1-Dichloropropene	2.1	10.5	nd	nd	nd	nd	nd	nd	nd
cis-1,3-Dichloropropene	2.2	11.0	nd	nd	nd	nd	nd	nd	nd
trans-1,3-Dichloropropene	2.8	14.0	nd	nd	nd	nd	nd	nd	nd
Diisopropyl ether (DIPE)	3.2	16.0	nd	nd	nd	nd	nd	nd	nd
Ethylbenzene	3.1	15.5	nd	nd	nd	nd	nd	nd	nd
Hexachlorobutadiene	4.6	23.0	nd	nd	nd	nd	nd	nd	nd

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COC 08-0683

ENVIRONMENTAL LABORATORY DATA REPORT

Report of GC/MS Analysis for Purgeable Volatile Organics
EPA SW-846 Method 8260

PROJECT: CHATSWORTH RESERVOIR Sample Matrix: Soil

Chemistry Log No.	Date Sampled	Date Received	Date Analyzed	Sample Description
LI03313	3/10/2008	3/11/2008	3/11/2008	KA 2-10'
LI03314	3/10/2008	3/11/2008	3/11/2008	KA 3-2'
LI03315	3/10/2008	3/11/2008	3/11/2008	KA 3-5'
LI03316	3/10/2008	3/11/2008	3/12/2008	KA 3-7'
LI03317	3/10/2008	3/11/2008	3/12/2008	KA 3-10'
LI03318	3/10/2008	3/11/2008	3/12/2008	KA 4-2'
LI03319	3/10/2008	3/11/2008	3/12/2008	KA 4-5'

Compounds	MDL (ug/kg)	PQL (ug/kg)	LI03313 Amount (ug/kg)	LI03314 Amount (ug/kg)	LI03315 Amount (ug/kg)	LI03316 Amount (ug/kg)	LI03317 Amount (ug/kg)	LI03318 Amount (ug/kg)	LI03319 Amount (ug/kg)
2-Hexanone	2.2	11.0	nd	nd	nd	nd	nd	nd	nd
Isopropylbenzene	1.9	9.5	nd	nd	nd	nd	nd	nd	nd
p-Isopropyltoluene	2.5	12.5	nd	nd	nd	nd	nd	nd	nd
Methyl-t-butyl ether (MTBE)	3.1	15.5	nd	nd	nd	nd	nd	nd	nd
Methylene chloride	3.9	19.5	nd	nd	nd	nd	nd	nd	nd
Methyl Iodide (Iodomethane)	4.9	24.5	nd	nd	nd	nd	nd	nd	nd
4-Methyl-2-pentanone (MIBK)	2.3	11.5	nd	nd	nd	nd	nd	nd	nd
Naphthalene	2.7	13.5	nd	nd	nd	nd	nd	nd	nd
Propylbenzene	4.3	21.5	nd	nd	nd	nd	nd	nd	nd
Styrene (Phenylethylene)	2.9	14.5	nd	nd	nd	nd	nd	nd	nd
1,1,1,2-Tetrachloroethane	2.2	11.0	nd	nd	nd	nd	nd	nd	nd
1,1,2,2-Tetrachloroethane	4.4	22.0	nd	nd	nd	nd	nd	nd	nd
Tetrachloroethylene (PCE)	3.4	17.0	nd	nd	nd	nd	nd	nd	nd
Toluene	2	10.0	nd	nd	nd	nd	nd	nd	nd
1,2,3-Trichlorobenzene	3.3	16.5	nd	nd	nd	nd	nd	nd	nd
1,2,4-Trichlorobenzene	2.8	14.0	nd	nd	nd	nd	nd	nd	nd
1,1,1-Trichloroethane	2.9	14.5	nd	nd	nd	nd	nd	nd	nd
1,1,2-Trichloroethane	4.3	21.5	nd	nd	nd	nd	nd	nd	nd
Trichloroethylene (TCE)	1.4	7.0	nd	nd	nd	nd	nd	nd	nd
Trichlorofluoromethane	3.5	17.5	nd	nd	nd	nd	nd	nd	nd
1,2,3-Trichloropropane	2.8	14.0	nd	nd	nd	nd	nd	nd	nd
1,2,4-Trimethylbenzene	2.5	12.5	nd	nd	nd	nd	nd	nd	nd
1,3,5-Trimethylbenzene	2.3	11.5	nd	nd	nd	nd	nd	nd	nd
Vinyl acetate	2.4	12.0	nd	nd	nd	nd	nd	nd	nd
Vinyl Chloride	3.6	18.0	nd	nd	nd	nd	nd	nd	nd
m & p-Xylene	6.7	33.5	nd	nd	nd	nd	nd	nd	nd
o-Xylene	2.2	11.0	nd	nd	nd	nd	nd	nd	nd

MDL - Method Detection Limit
PQL - Practical Quantitation Limit (5xMDL)

J - Concentration above MDL below PQL
nd - Not Detected; below detection limit

Quality Control Data

Surrogates 30 (ug/L each)	QC Limits % Recovery Lower-Upper						
SURR: Bromofluorobenzene	74 - 121	94.0%	95.3%	94.0%	90.3%	96.3%	91.7%	94.3%
SURR: Dibromofluoromethane	80 - 120	85.7%	85.7%	84.3%	86.3%	90.0%	87.7%	87.3%
SURR: Toluene-d8	81 - 117	98.0%	98.3%	98.0%	97.0%	99.0%	99.0%	98.7%

Comment:

Analyst: Bryan Tiu

Reviewed by: Rose Gentallan

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COC 08-0683

ENVIRONMENTAL LABORATORY DATA REPORT

Report of GC/MS Analysis for Purgeable Volatile Organics
EPA SW-846 Method 8260

PROJECT: CHATSWORTH RESERVOIR Sample Matrix: Soil

Chemistry Log No.	Date Sampled	Date Received	Date Analyzed	Sample Description
LI03320	3/10/2008	3/11/2008	3/12/2008	KA 4-7'
LI03321	3/10/2008	3/11/2008	3/12/2008	KA 4-10'
LI03322	3/10/2008	3/11/2008	3/12/2008	KA 5-2'
LI03323	3/10/2008	3/11/2008	3/12/2008	KA 5-5'
LI03324	3/10/2008	3/11/2008	3/12/2008	KA 5-7'
LI03325	3/10/2008	3/11/2008	3/12/2008	KA 5-10'
LI03326	3/10/2008	3/11/2008	3/12/2008	KA 6-2'

Compounds	MDL (ug/kg)	PQL (ug/kg)	LI03320 Amount (ug/kg)	LI03321 Amount (ug/kg)	LI03322 Amount (ug/kg)	LI03323 Amount (ug/kg)	LI03324 Amount (ug/kg)	LI03325 Amount (ug/kg)	LI03326 Amount (ug/kg)
Acetone	8.5	42.5	nd	nd	nd	nd	nd	nd	nd
tert-Amyl methyl ether (TAME)	2.7	13.5	nd	nd	nd	nd	nd	nd	nd
Benzene	2.6	13.0	nd	nd	nd	nd	nd	nd	nd
Bromobenzene	2.9	14.5	nd	nd	nd	nd	nd	nd	nd
Bromochloromethane	2.4	12.0	nd	nd	nd	nd	nd	nd	nd
Bromodichloromethane	3.9	19.5	nd	nd	nd	nd	nd	nd	nd
Bromoform	3.6	18.0	nd	nd	nd	nd	nd	nd	nd
Bromomethane	2.2	11.0	nd	nd	nd	nd	nd	nd	nd
2-Butanone (MEK)	3.4	17.0	nd	nd	nd	nd	nd	nd	nd
tert-Butyl alcohol (TBA)	21.6	108.0	nd	nd	nd	nd	nd	nd	nd
n-Butylbenzene	2.5	12.5	nd	nd	nd	nd	nd	nd	nd
sec-Butylbenzene	3.4	17.0	nd	nd	nd	nd	nd	nd	nd
tert-Butylbenzene	3.1	15.5	nd	nd	nd	nd	nd	nd	nd
tert-Butyl ethyl ether (ETBE)	2.7	13.5	nd	nd	nd	nd	nd	nd	nd
Carbon disulfide	5.3	26.5	nd	nd	nd	nd	nd	nd	nd
Carbon Tetrachloride	3.3	16.5	nd	nd	nd	nd	nd	nd	nd
Chlorobenzene	2.4	12.0	nd	nd	nd	nd	nd	nd	nd
Chloroethane	4.8	24.0	nd	nd	nd	nd	nd	nd	nd
2-Chloroethyl vinyl ether	2	10.0	nd	nd	nd	nd	nd	nd	nd
Chloroform	2.3	11.5	nd	nd	nd	nd	nd	nd	nd
Chloromethane	4.7	23.5	nd	nd	nd	nd	nd	nd	nd
2-Chlorotoluene	4.7	23.5	nd	nd	nd	nd	nd	nd	nd
4-Chlorotoluene	4.3	21.5	nd	nd	nd	nd	nd	nd	nd
Dibromochloromethane	4.2	21.0	nd	nd	nd	nd	nd	nd	nd
1,2-Dibromo-3-chloropropane	3.1	15.5	nd	nd	nd	nd	nd	nd	nd
1,2-Dibromoethane (EDB)	3.6	18.0	nd	nd	nd	nd	nd	nd	nd
Dibromomethane	3.8	19.0	nd	nd	nd	nd	nd	nd	nd
1,2-Dichlorobenzene	4.7	23.5	nd	nd	nd	nd	nd	nd	nd
1,3-Dichlorobenzene	4.9	24.5	nd	nd	nd	nd	nd	nd	nd
1,4-Dichlorobenzene	5	25.0	nd	nd	nd	nd	nd	nd	nd
Dichlorodifluoromethane	5.2	26.0	nd	nd	nd	nd	nd	nd	nd
1,1-Dichloroethane	2.4	12.0	nd	nd	nd	nd	nd	nd	nd
1,2-Dichloroethane	2.8	14.0	nd	nd	nd	nd	nd	nd	nd
1,1-Dichloroethene	4.5	22.5	nd	nd	nd	nd	nd	nd	nd
cis-1,2-Dichloroethene	4.7	23.5	nd	nd	nd	nd	nd	nd	nd
trans-1,2-Dichloroethene	2.3	11.5	nd	nd	nd	nd	nd	nd	nd
1,2-Dichloropropane	2.7	13.5	nd	nd	nd	nd	nd	nd	nd
1,3-Dichloropropane	3.2	16.0	nd	nd	nd	nd	nd	nd	nd
2,2-Dichloropropane	2.9	14.5	nd	nd	nd	nd	nd	nd	nd
1,1-Dichloropropene	2.1	10.5	nd	nd	nd	nd	nd	nd	nd
cis-1,3-Dichloropropene	2.2	11.0	nd	nd	nd	nd	nd	nd	nd
trans-1,3-Dichloropropene	2.8	14.0	nd	nd	nd	nd	nd	nd	nd
Diisopropyl ether (DIPE)	3.2	16.0	nd	nd	nd	nd	nd	nd	nd
Ethylbenzene	3.1	15.5	nd	nd	nd	nd	nd	nd	nd
Hexachlorobutadiene	4.6	23.0	nd	nd	nd	nd	nd	nd	nd

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COC 08-0683

ENVIRONMENTAL LABORATORY DATA REPORT

Report of GC/MS Analysis for Purgeable Volatile Organics
EPA SW-846 Method 8260

PROJECT: CHATSWORTH RESERVOIR Sample Matrix: Soil

Chemistry Log No.	Date Sampled	Date Received	Date Analyzed	Sample Description
LI03320	3/10/2008	3/11/2008	3/12/2008	KA 4-7'
LI03321	3/10/2008	3/11/2008	3/12/2008	KA 4-10'
LI03322	3/10/2008	3/11/2008	3/12/2008	KA 5-2'
LI03323	3/10/2008	3/11/2008	3/12/2008	KA 5-5'
LI03324	3/10/2008	3/11/2008	3/12/2008	KA 5-7'
LI03325	3/10/2008	3/11/2008	3/12/2008	KA 5-10'
LI03326	3/10/2008	3/11/2008	3/12/2008	KA 6-2'

Compounds	MDL (ug/kg)	PQL (ug/kg)	LI03320 Amount (ug/kg)	LI03321 Amount (ug/kg)	LI03322 Amount (ug/kg)	LI03323 Amount (ug/kg)	LI03324 Amount (ug/kg)	LI03325 Amount (ug/kg)	LI03326 Amount (ug/kg)
2-Hexanone	2.2	11.0	nd	nd	nd	nd	nd	nd	nd
Isopropylbenzene	1.9	9.5	nd	nd	nd	nd	nd	nd	nd
p-Isopropyltoluene	2.5	12.5	nd	nd	nd	nd	nd	nd	nd
Methyl-t-butyl ether (MTBE)	3.1	15.5	nd	nd	nd	nd	nd	nd	nd
Methylene chloride	3.9	19.5	nd	nd	nd	nd	nd	nd	nd
Methyl iodide (Iodomethane)	4.9	24.5	nd	nd	nd	nd	nd	nd	nd
4-Methyl-2-pentanone (MIBK)	2.3	11.5	nd	nd	nd	nd	nd	nd	nd
Naphthalene	2.7	13.5	nd	nd	nd	nd	nd	nd	nd
Propylbenzene	4.3	21.5	nd	nd	nd	nd	nd	nd	nd
Styrene (Phenylethylene)	2.9	14.5	nd	nd	nd	nd	nd	nd	nd
1,1,1,2-Tetrachloroethane	2.2	11.0	nd	nd	nd	nd	nd	nd	nd
1,1,2,2-Tetrachloroethane	4.4	22.0	nd	nd	nd	nd	nd	nd	nd
Tetrachloroethylene (PCE)	3.4	17.0	nd	nd	nd	nd	nd	nd	nd
Toluene	2	10.0	nd	nd	nd	nd	nd	nd	nd
1,2,3-Trichlorobenzene	3.3	16.5	nd	nd	nd	nd	nd	nd	nd
1,2,4-Trichlorobenzene	2.8	14.0	nd	nd	nd	nd	nd	nd	nd
1,1,1-Trichloroethane	2.9	14.5	nd	nd	nd	nd	nd	nd	nd
1,1,2-Trichloroethane	4.3	21.5	nd	nd	nd	nd	nd	nd	nd
Trichloroethylene (TCE)	1.4	7.0	nd	nd	nd	nd	nd	nd	nd
Trichlorofluoromethane	3.5	17.5	nd	nd	nd	nd	nd	nd	nd
1,2,3-Trichloropropane	2.8	14.0	nd	nd	nd	nd	nd	nd	nd
1,2,4-Trimethylbenzene	2.5	12.5	nd	nd	nd	nd	nd	nd	nd
1,3,5-Trimethylbenzene	2.3	11.5	nd	nd	nd	nd	nd	nd	nd
Vinyl acetate	2.4	12.0	nd	nd	nd	nd	nd	nd	nd
Vinyl Chloride	3.6	18.0	nd	nd	nd	nd	nd	nd	nd
m & p-Xylene	6.7	33.5	nd	nd	nd	nd	nd	nd	nd
o-Xylene	2.2	11.0	nd	nd	nd	nd	nd	nd	nd

MDL - Method Detection Limit
PQL - Practical Quantitation Limit (5xMDL)

J - Concentration above MDL below PQL
nd - Not Detected; below detection limit

Quality Control Data

Surrogates 30 (ug/L each)	QC Limits % Recovery Lower-Upper							
SURR: Bromofluorobenzene	74 - 121	94.7%	90.7%	95.7%	91.7%	92.0%	90.0%	93.7%
SURR: Dibromofluoromethane	80 - 120	87.0%	86.3%	85.3%	85.0%	85.0%	85.3%	87.7%
SURR: Toluene-d8	81 - 117	98.7%	98.7%	99.7%	99.0%	99.7%	99.0%	98.3%

Comment:

Analyst: Bryan Tiu

Reviewed by: Rose Gentallan

400008

COC 08-0683

ENVIRONMENTAL LABORATORY DATA REPORT

Report of GC/MS Analysis for Purgeable Volatile Organics
EPA SW-846 Method 8260

PROJECT: CHATSWORTH RESERVOIR Sample Matrix: Soil

Chemistry Log No.	Date Sampled	Date Received	Date Analyzed	Sample Description
LI03327	3/10/2008	3/11/2008	3/12/2008	KA 6-5'
LI03328	3/10/2008	3/11/2008	3/12/2008	KA 6-7'
LI03329	3/10/2008	3/11/2008	3/12/2008	KA 6-10'
LI03330	3/10/2008	3/11/2008	3/12/2008	KA 7-2'
LI03331	3/10/2008	3/11/2008	3/12/2008	KA 7-5'
LI03332	3/10/2008	3/11/2008	3/12/2008	KA 7-7'
LI03333	3/10/2008	3/11/2008	3/12/2008	KA 7-10'

Compounds	MDL (ug/kg)	PQL (ug/kg)	LI03327 Amount (ug/kg)	LI03328 Amount (ug/kg)	LI03329 Amount (ug/kg)	LI03330 Amount (ug/kg)	LI03331 Amount (ug/kg)	LI03332 Amount (ug/kg)	LI03333 Amount (ug/kg)
Acetone	8.5	42.5	nd	nd	nd	nd	nd	nd	nd
tert-Amyl methyl ether (TAME)	2.7	13.5	nd	nd	nd	nd	nd	nd	nd
Benzene	2.6	13.0	nd	nd	nd	nd	nd	nd	nd
Bromobenzene	2.9	14.5	nd	nd	nd	nd	nd	nd	nd
Bromochloromethane	2.4	12.0	nd	nd	nd	nd	nd	nd	nd
Bromodichloromethane	3.9	19.5	nd	nd	nd	nd	nd	nd	nd
Bromoform	3.6	18.0	nd	nd	nd	nd	nd	nd	nd
Bromomethane	2.2	11.0	nd	nd	nd	nd	nd	nd	nd
2-Butanone (MEK)	3.4	17.0	nd	nd	nd	nd	nd	nd	nd
tert-Butyl alcohol (TBA)	21.6	108.0	nd	nd	nd	nd	nd	nd	nd
n-Butylbenzene	2.5	12.5	nd	nd	nd	nd	nd	nd	nd
sec-Butylbenzene	3.4	17.0	nd	nd	nd	nd	nd	nd	nd
tert-Butylbenzene	3.1	15.5	nd	nd	nd	nd	nd	nd	nd
tert-Butyl ethyl ether (ETBE)	2.7	13.5	nd	nd	nd	nd	nd	nd	nd
Carbon disulfide	5.3	26.5	nd	nd	nd	nd	nd	nd	nd
Carbon Tetrachloride	3.3	16.5	nd	nd	nd	nd	nd	nd	nd
Chlorobenzene	2.4	12.0	nd	nd	nd	nd	nd	nd	nd
Chloroethane	4.8	24.0	nd	nd	nd	nd	nd	nd	nd
2-Chloroethyl vinyl ether	2	10.0	nd	nd	nd	nd	nd	nd	nd
Chloroform	2.3	11.5	nd	nd	nd	nd	nd	nd	nd
Chloromethane	4.7	23.5	nd	nd	nd	nd	nd	nd	nd
2-Chlorotoluene	4.7	23.5	nd	nd	nd	nd	nd	nd	nd
4-Chlorotoluene	4.3	21.5	nd	nd	nd	nd	nd	nd	nd
Dibromochloromethane	4.2	21.0	nd	nd	nd	nd	nd	nd	nd
1,2-Dibromo-3-chloropropane	3.1	15.5	nd	nd	nd	nd	nd	nd	nd
1,2-Dibromoethane (EDB)	3.6	18.0	nd	nd	nd	nd	nd	nd	nd
Dibromomethane	3.8	19.0	nd	nd	nd	nd	nd	nd	nd
1,2-Dichlorobenzene	4.7	23.5	nd	nd	nd	nd	nd	nd	nd
1,3-Dichlorobenzene	4.9	24.5	nd	nd	nd	nd	nd	nd	nd
1,4-Dichlorobenzene	5	25.0	nd	nd	nd	nd	nd	nd	nd
Dichlorodifluoromethane	5.2	26.0	nd	nd	nd	nd	nd	nd	nd
1,1-Dichloroethane	2.4	12.0	nd	nd	nd	nd	nd	nd	nd
1,2-Dichloroethane	2.8	14.0	nd	nd	nd	nd	nd	nd	nd
1,1-Dichloroethene	4.5	22.5	nd	nd	nd	nd	nd	nd	nd
cis-1,2-Dichloroethene	4.7	23.5	nd	nd	nd	nd	nd	nd	nd
trans-1,2-Dichloroethene	2.3	11.5	nd	nd	nd	nd	nd	nd	nd
1,2-Dichloropropane	2.7	13.5	nd	nd	nd	nd	nd	nd	nd
1,3-Dichloropropane	3.2	16.0	nd	nd	nd	nd	nd	nd	nd
2,2-Dichloropropane	2.9	14.5	nd	nd	nd	nd	nd	nd	nd
1,1-Dichloropropene	2.1	10.5	nd	nd	nd	nd	nd	nd	nd
cis-1,3-Dichloropropene	2.2	11.0	nd	nd	nd	nd	nd	nd	nd
trans-1,3-Dichloropropene	2.8	14.0	nd	nd	nd	nd	nd	nd	nd
Diisopropyl ether (DIPE)	3.2	16.0	nd	nd	nd	nd	nd	nd	nd
Ethylbenzene	3.1	15.5	nd	nd	nd	nd	nd	nd	nd
Hexachlorobutadiene	4.6	23.0	nd	nd	nd	nd	nd	nd	nd

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COC 08-0683

ENVIRONMENTAL LABORATORY DATA REPORT

Report of GC/MS Analysis for Purgeable Volatile Organics
EPA SW-846 Method 8260

PROJECT: CHATSWORTH RESERVOIR Sample Matrix: Soil

Chemistry Log No.	Date Sampled	Date Received	Date Analyzed	Sample Description
LI03327	3/10/2008	3/11/2008	3/12/2008	KA 6-5'
LI03328	3/10/2008	3/11/2008	3/12/2008	KA 6-7'
LI03329	3/10/2008	3/11/2008	3/12/2008	KA 6-10'
LI03330	3/10/2008	3/11/2008	3/12/2008	KA 7-2'
LI03331	3/10/2008	3/11/2008	3/12/2008	KA 7-5'
LI03332	3/10/2008	3/11/2008	3/12/2008	KA 7-7'
LI03333	3/10/2008	3/11/2008	3/12/2008	KA 7-10'

Compounds	MDL (ug/kg)	PQL (ug/kg)	LI03327 Amount (ug/kg)	LI03328 Amount (ug/kg)	LI03329 Amount (ug/kg)	LI03330 Amount (ug/kg)	LI03331 Amount (ug/kg)	LI03332 Amount (ug/kg)	LI03333 Amount (ug/kg)
2-Hexanone	2.2	11.0	nd	nd	nd	nd	nd	nd	nd
Isopropylbenzene	1.9	9.5	nd	nd	nd	nd	nd	nd	nd
p-Isopropyltoluene	2.5	12.5	nd	nd	nd	nd	nd	nd	nd
Methyl-t-butyl ether (MTBE)	3.1	15.5	nd	nd	nd	nd	nd	nd	nd
Methylene chloride	3.9	19.5	nd	nd	nd	nd	nd	nd	nd
Methyl iodide (Iodomethane)	4.9	24.5	nd	nd	nd	nd	nd	nd	nd
4-Methyl-2-pentanone (MIBK)	2.3	11.5	nd	nd	nd	nd	nd	nd	nd
Naphthalene	2.7	13.5	nd	nd	nd	nd	nd	nd	nd
Propylbenzene	4.3	21.5	nd	nd	nd	nd	nd	nd	nd
Styrene (Phenylethylene)	2.9	14.5	nd	nd	nd	nd	nd	nd	nd
1,1,1,2-Tetrachloroethane	2.2	11.0	nd	nd	nd	nd	nd	nd	nd
1,1,2,2-Tetrachloroethane	4.4	22.0	nd	nd	nd	nd	nd	nd	nd
Tetrachloroethylene (PCE)	3.4	17.0	nd	nd	nd	nd	nd	nd	nd
Toluene	2	10.0	nd	nd	nd	nd	nd	nd	nd
1,2,3-Trichlorobenzene	3.3	16.5	nd	nd	nd	nd	nd	nd	nd
1,2,4-Trichlorobenzene	2.8	14.0	nd	nd	nd	nd	nd	nd	nd
1,1,1-Trichloroethane	2.9	14.5	nd	nd	nd	nd	nd	nd	nd
1,1,2-Trichloroethane	4.3	21.5	nd	nd	nd	nd	nd	nd	nd
Trichloroethylene (TCE)	1.4	7.0	nd	nd	nd	nd	nd	nd	nd
Trichlorofluoromethane	3.5	17.5	nd	nd	nd	nd	nd	nd	nd
1,2,3-Trichloropropane	2.8	14.0	nd	nd	nd	nd	nd	nd	nd
1,2,4-Trimethylbenzene	2.5	12.5	nd	nd	nd	nd	nd	nd	nd
1,3,5-Trimethylbenzene	2.3	11.5	nd	nd	nd	nd	nd	nd	nd
Vinyl acetate	2.4	12.0	nd	nd	nd	nd	nd	nd	nd
Vinyl Chloride	3.6	18.0	nd	nd	nd	nd	nd	nd	nd
m & p-Xylene	6.7	33.5	nd	nd	nd	nd	nd	nd	nd
o-Xylene	2.2	11.0	nd	nd	nd	nd	nd	nd	nd

MDL - Method Detection Limit
PQL - Practical Quantitation Limit (5xMDL)
J - Concentration above MDL below PQL
nd - Not Detected; below detection limit

Quality Control Data

Surrogates 30 (ug/L each)	QC Limits % Recovery Lower-Upper							
SURR: Bromofluorobenzene	74 - 121	93.7%	92.0%	92.3%	91.7%	92.3%	92.7%	91.3%
SURR: Dibromofluoromethane	80 - 120	85.3%	86.0%	84.7%	84.0%	84.7%	83.7%	83.3%
SURR: Toluene-d8	81 - 117	98.3%	97.7%	97.7%	97.0%	99.0%	97.3%	98.0%

Comment:

Analyst: Bryan Tiu

Reviewed by: Rose Gentalian

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COC 08-0683

ENVIRONMENTAL LABORATORY DATA REPORT

Report of GC/MS Analysis for Purgeable Volatile Organics
EPA SW-846 Method 8260

PROJECT: CHATSWORTH RESERVOIR Sample Matrix: Soil

Chemistry Log No.	Date Sampled	Date Received	Date Analyzed	Sample Description
LI03334	3/10/2008	3/11/2008	3/12/2008	KA 8-2'
LI03335	3/10/2008	3/11/2008	3/12/2008	KA 8-5'
LI03336	3/10/2008	3/11/2008	3/12/2008	KA 8-7'
LI03337	3/10/2008	3/11/2008	3/13/2008	KA 8-10'
LI03338	3/10/2008	3/11/2008	3/13/2008	KA 9-2'
LI03339	3/10/2008	3/11/2008	3/13/2008	KA 9-5'
LI03340	3/10/2008	3/11/2008	3/13/2008	KA 9-7'

Compounds	MDL (ug/kg)	PQL (ug/kg)	LI03334 Amount (ug/kg)	LI03335 Amount (ug/kg)	LI03336 Amount (ug/kg)	LI03337 Amount (ug/kg)	LI03338 Amount (ug/kg)	LI03339 Amount (ug/kg)	LI03340 Amount (ug/kg)
Acetone	8.5	42.5	nd	nd	nd	nd	nd	nd	nd
tert-Amyl methyl ether (TAME)	2.7	13.5	nd	nd	nd	nd	nd	nd	nd
Benzene	2.6	13.0	nd	nd	nd	nd	nd	nd	nd
Bromobenzene	2.9	14.5	nd	nd	nd	nd	nd	nd	nd
Bromochloromethane	2.4	12.0	nd	nd	nd	nd	nd	nd	nd
Bromodichloromethane	3.9	19.5	nd	nd	nd	nd	nd	nd	nd
Bromoform	3.6	18.0	nd	nd	nd	nd	nd	nd	nd
Bromomethane	2.2	11.0	nd	nd	nd	nd	nd	nd	nd
2-Butanone (MEK)	3.4	17.0	nd	nd	nd	nd	nd	nd	nd
tert-Butyl alcohol (TBA)	21.6	108.0	nd	nd	nd	nd	nd	nd	nd
n-Butylbenzene	2.5	12.5	nd	nd	nd	nd	nd	nd	nd
sec-Butylbenzene	3.4	17.0	nd	nd	nd	nd	nd	nd	nd
tert-Butylbenzene	3.1	15.5	nd	nd	nd	nd	nd	nd	nd
tert-Butyl ethyl ether (ETBE)	2.7	13.5	nd	nd	nd	nd	nd	nd	nd
Carbon disulfide	5.3	26.5	nd	nd	nd	nd	nd	nd	nd
Carbon Tetrachloride	3.3	16.5	nd	nd	nd	nd	nd	nd	nd
Chlorobenzene	2.4	12.0	nd	nd	nd	nd	nd	nd	nd
Chloroethane	4.8	24.0	nd	nd	nd	nd	nd	nd	nd
2-Chloroethyl vinyl ether	2	10.0	nd	nd	nd	nd	nd	nd	nd
Chloroform	2.3	11.5	nd	nd	nd	nd	nd	nd	nd
Chloromethane	4.7	23.5	nd	nd	nd	nd	nd	nd	nd
2-Chlorotoluene	4.7	23.5	nd	nd	nd	nd	nd	nd	nd
4-Chlorotoluene	4.3	21.5	nd	nd	nd	nd	nd	nd	nd
Dibromochloromethane	4.2	21.0	nd	nd	nd	nd	nd	nd	nd
1,2-Dibromo-3-chloropropane	3.1	15.5	nd	nd	nd	nd	nd	nd	nd
1,2-Dibromoethane (EDB)	3.6	18.0	nd	nd	nd	nd	nd	nd	nd
Dibromomethane	3.8	19.0	nd	nd	nd	nd	nd	nd	nd
1,2-Dichlorobenzene	4.7	23.5	nd	nd	nd	nd	nd	nd	nd
1,3-Dichlorobenzene	4.9	24.5	nd	nd	nd	nd	nd	nd	nd
1,4-Dichlorobenzene	5	25.0	nd	nd	nd	nd	nd	nd	nd
Dichlorodifluoromethane	5.2	26.0	nd	nd	nd	nd	nd	nd	nd
1,1-Dichloroethane	2.4	12.0	nd	nd	nd	nd	nd	nd	nd
1,2-Dichloroethane	2.8	14.0	nd	nd	nd	nd	nd	nd	nd
1,1-Dichloroethene	4.5	22.5	nd	nd	nd	nd	nd	nd	nd
cis-1,2-Dichloroethene	4.7	23.5	nd	nd	nd	nd	nd	nd	nd
trans-1,2-Dichloroethene	2.3	11.5	nd	nd	nd	nd	nd	nd	nd
1,2-Dichloropropane	2.7	13.5	nd	nd	nd	nd	nd	nd	nd
1,3-Dichloropropane	3.2	16.0	nd	nd	nd	nd	nd	nd	nd
2,2-Dichloropropane	2.9	14.5	nd	nd	nd	nd	nd	nd	nd
1,1-Dichloropropene	2.1	10.5	nd	nd	nd	nd	nd	nd	nd
cis-1,3-Dichloropropene	2.2	11.0	nd	nd	nd	nd	nd	nd	nd
trans-1,3-Dichloropropene	2.8	14.0	nd	nd	nd	nd	nd	nd	nd
Diisopropyl ether (DIPE)	3.2	16.0	nd	nd	nd	nd	nd	nd	nd
Ethylbenzene	3.1	15.5	nd	nd	nd	nd	nd	nd	nd
Hexachlorobutadiene	4.6	23.0	nd	nd	nd	nd	nd	nd	nd

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COC 08-0683

ENVIRONMENTAL LABORATORY DATA REPORT

Report of GC/MS Analysis for Purgeable Volatile Organics
EPA SW-846 Method 8260

PROJECT: CHATSWORTH RESERVOIR Sample Matrix: Soil

Chemistry Log No.	Date Sampled	Date Received	Date Analyzed	Sample Description
LI03334	3/10/2008	3/11/2008	3/12/2008	KA 8-2'
LI03335	3/10/2008	3/11/2008	3/12/2008	KA 8-5'
LI03336	3/10/2008	3/11/2008	3/12/2008	KA 8-7'
LI03337	3/10/2008	3/11/2008	3/13/2008	KA 8-10'
LI03338	3/10/2008	3/11/2008	3/13/2008	KA 9-2'
LI03339	3/10/2008	3/11/2008	3/13/2008	KA 9-5'
LI03340	3/10/2008	3/11/2008	3/13/2008	KA 9-7'

Compounds	MDL (ug/kg)	PQL (ug/kg)	LI03334 Amount (ug/kg)	LI03335 Amount (ug/kg)	LI03336 Amount (ug/kg)	LI03337 Amount (ug/kg)	LI03338 Amount (ug/kg)	LI03339 Amount (ug/kg)	LI03340 Amount (ug/kg)
2-Hexanone	2.2	11.0	nd	nd	nd	nd	nd	nd	nd
Isopropylbenzene	1.9	9.5	nd	nd	nd	nd	nd	nd	nd
p-Isopropyltoluene	2.5	12.5	nd	nd	nd	nd	nd	nd	nd
Methyl-t-butyl ether (MTBE)	3.1	15.5	nd	nd	nd	nd	nd	nd	nd
Methylene chloride	3.9	19.5	nd	nd	nd	nd	nd	nd	nd
Methyl iodide (Iodomethane)	4.9	24.5	nd	nd	nd	nd	nd	nd	nd
4-Methyl-2-pentanone (MIBK)	2.3	11.5	nd	nd	nd	nd	nd	nd	nd
Naphthalene	2.7	13.5	nd	nd	nd	nd	nd	nd	nd
Propylbenzene	4.3	21.5	nd	nd	nd	nd	nd	nd	nd
Styrene (Phenylethylene)	2.9	14.5	nd	nd	nd	nd	nd	nd	nd
1,1,1,2-Tetrachloroethane	2.2	11.0	nd	nd	nd	nd	nd	nd	nd
1,1,2,2-Tetrachloroethane	4.4	22.0	nd	nd	nd	nd	nd	nd	nd
Tetrachloroethylene (PCE)	3.4	17.0	nd	nd	nd	nd	nd	nd	nd
Toluene	2	10.0	nd	nd	nd	nd	nd	nd	nd
1,2,3-Trichlorobenzene	3.3	16.5	nd	nd	nd	nd	nd	nd	nd
1,2,4-Trichlorobenzene	2.8	14.0	nd	nd	nd	nd	nd	nd	nd
1,1,1-Trichloroethane	2.9	14.5	nd	nd	nd	nd	nd	nd	nd
1,1,2-Trichloroethane	4.3	21.5	nd	nd	nd	nd	nd	nd	nd
Trichloroethylene (TCE)	1.4	7.0	nd	nd	nd	nd	nd	nd	nd
Trichlorofluoromethane	3.5	17.5	nd	nd	nd	nd	nd	nd	nd
1,2,3-Trichloropropane	2.8	14.0	nd	nd	nd	nd	nd	nd	nd
1,2,4-Trimethylbenzene	2.5	12.5	nd	nd	nd	nd	nd	nd	nd
1,3,5-Trimethylbenzene	2.3	11.5	nd	nd	nd	nd	nd	nd	nd
Vinyl acetate	2.4	12.0	nd	nd	nd	nd	nd	nd	nd
Vinyl Chloride	3.6	18.0	nd	nd	nd	nd	nd	nd	nd
m & p-Xylene	6.7	33.5	nd	nd	nd	nd	nd	nd	nd
o-Xylene	2.2	11.0	nd	nd	nd	nd	nd	nd	nd

MDL - Method Detection Limit
PQL - Practical Quantitation Limit (5xMDL)

J - Concentration above MDL below PQL
nd - Not Detected; below detection limit

Quality Control Data

Surrogates 30 (ug/L each)	QC Limits % Recovery Lower-Upper							
SURR: Bromofluorobenzene	74 - 121	92.0%	92.7%	91.0%	88.7%	90.0%	91.0%	89.0%
SURR: Dibromofluoromethane	80 - 120	84.0%	84.0%	84.0%	83.7%	84.0%	83.7%	82.0%
SURR: Toluene-d8	81 - 117	98.0%	96.7%	97.3%	97.7%	97.3%	99.0%	98.3%

Comment:

Analyst: Bryan Tiu

Reviewed by: Rose Gentallan

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COC 08-0683

ENVIRONMENTAL LABORATORY DATA REPORT

Report of GC/MS Analysis for Purgeable Volatile Organics
EPA SW-846 Method 8260

PROJECT: CHATSWORTH RESERVOIR Sample Matrix: Soil

Chemistry Log No.	Date Sampled	Date Received	Date Analyzed	Sample Description
LI03341	3/10/2008	3/11/2008	3/13/2008	KA 9-10'
LI03342	3/10/2008	3/11/2008	3/13/2008	KA 10-2'
LI03343	3/10/2008	3/11/2008	3/13/2008	KA 10-5'
LI03344	3/10/2008	3/11/2008	3/13/2008	KA 10-7'
LI03345	3/10/2008	3/11/2008	3/13/2008	KA 10-10'
LI03346	3/10/2008	3/11/2008	3/13/2008	KA 11-2'
LI03347	3/10/2008	3/11/2008	3/13/2008	KA 11-5'

Compounds	MDL ug/kg	PQL ug/kg	LI03341 Amount ug/kg	LI03342 Amount ug/kg	LI03343 Amount ug/kg	LI03344 Amount ug/kg	LI03345 Amount ug/kg	LI03346 Amount ug/kg	LI03347 Amount ug/kg
Acetone	8.5	42.5	nd	nd	nd	nd	nd	nd	nd
tert-Amyl methyl ether (TAME)	2.7	13.5	nd	nd	nd	nd	nd	nd	nd
Benzene	2.6	13.0	nd	nd	nd	nd	nd	nd	nd
Bromobenzene	2.9	14.5	nd	nd	nd	nd	nd	nd	nd
Bromochloromethane	2.4	12.0	nd	nd	nd	nd	nd	nd	nd
Bromodichloromethane	3.9	19.5	nd	nd	nd	nd	nd	nd	nd
Bromoform	3.6	18.0	nd	nd	nd	nd	nd	nd	nd
Bromomethane	2.2	11.0	nd	nd	nd	nd	nd	nd	nd
Methyl ethyl ketone (MEK)	3.4	17.0	nd	nd	nd	nd	nd	nd	nd
tert-Butyl alcohol (TBA)	21.6	108.0	nd	nd	nd	nd	nd	nd	nd
Butylbenzene	2.5	12.5	nd	nd	nd	nd	nd	nd	nd
sec-Butylbenzene	3.4	17.0	nd	nd	nd	nd	nd	nd	nd
tert-Butylbenzene	3.1	15.5	nd	nd	nd	nd	nd	nd	nd
tert-Butyl ethyl ether (ETBE)	2.7	13.5	nd	nd	nd	nd	nd	nd	nd
Carbon disulfide	5.3	26.5	nd	nd	nd	nd	nd	nd	nd
Carbon Tetrachloride	3.3	16.5	nd	nd	nd	nd	nd	nd	nd
Chlorobenzene	2.4	12.0	nd	nd	nd	nd	nd	nd	nd
Chloroethane	4.8	24.0	nd	nd	nd	nd	nd	nd	nd
2-Chloroethyl vinyl ether	2	10.0	nd	nd	nd	nd	nd	nd	nd
Chloroform	2.3	11.5	nd	nd	nd	nd	nd	nd	nd
Chloromethane	4.7	23.5	nd	nd	nd	nd	nd	nd	nd
2-Chlorotoluene	4.7	23.5	nd	nd	nd	nd	nd	nd	nd
4-Chlorotoluene	4.3	21.5	nd	nd	nd	nd	nd	nd	nd
Dibromochloromethane	4.2	21.0	nd	nd	nd	nd	nd	nd	nd
1,2-Dibromo-3-chloropropane	3.1	15.5	nd	nd	nd	nd	nd	nd	nd
1,2-Dibromoethane	3.6	18.0	nd	nd	nd	nd	nd	nd	nd
Dibromomethane	3.8	19.0	nd	nd	nd	nd	nd	nd	nd
1,2-Dichlorobenzene	4.7	23.5	nd	nd	nd	nd	nd	nd	nd
1,3-Dichlorobenzene	4.9	24.5	nd	nd	nd	nd	nd	nd	nd
1,4-Dichlorobenzene	5	25.0	nd	nd	nd	nd	nd	nd	nd
Dichlorodifluoromethane	5.2	26.0	nd	nd	nd	nd	nd	nd	nd
1,1-Dichloroethane	2.4	12.0	nd	nd	nd	nd	nd	nd	nd
1,2-Dichloroethane	2.8	14.0	nd	nd	nd	nd	nd	nd	nd
1,1-Dichloroethene	4.5	22.5	nd	nd	nd	nd	nd	nd	nd
cis-1,2-Dichloroethene	4.7	23.5	nd	nd	nd	nd	nd	nd	nd
trans-1,2-Dichloroethene	2.3	11.5	nd	nd	nd	nd	nd	nd	nd
1,2-Dichloropropane	2.7	13.5	nd	nd	nd	nd	nd	nd	nd
1,3-Dichloropropane	3.2	16.0	nd	nd	nd	nd	nd	nd	nd
2,2-Dichloropropane	2.9	14.5	nd	nd	nd	nd	nd	nd	nd
1,1-Dichloropropene	2.1	10.5	nd	nd	nd	nd	nd	nd	nd
cis-1,3-Dichloropropene	2.2	11.0	nd	nd	nd	nd	nd	nd	nd
trans-1,3-Dichloropropene	2.8	14.0	nd	nd	nd	nd	nd	nd	nd
Diisopropyl ether (DIPE)	3.2	16.0	nd	nd	nd	nd	nd	nd	nd
Ethylbenzene	3.1	15.5	nd	nd	nd	nd	nd	nd	nd
Hexachlorobutadiene	4.6	23.0	nd	nd	nd	nd	nd	nd	nd

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COC 08-0683

ENVIRONMENTAL LABORATORY DATA REPORT

Report of GC/MS Analysis for Purgeable Volatile Organics
EPA SW-846 Method 8260

PROJECT: CHATSWORTH RESERVOIR Sample Matrix: Soil

Chemistry Log No.	Date Sampled	Date Received	Date Analyzed	Sample Description
LI03341	3/10/2008	3/11/2008	3/13/2008	KA 9-10'
LI03342	3/10/2008	3/11/2008	3/13/2008	KA 10-2'
LI03343	3/10/2008	3/11/2008	3/13/2008	KA 10-5'
LI03344	3/10/2008	3/11/2008	3/13/2008	KA 10-7'
LI03345	3/10/2008	3/11/2008	3/13/2008	KA 10-10'
LI03346	3/10/2008	3/11/2008	3/13/2008	KA 11-2'
LI03347	3/10/2008	3/11/2008	3/13/2008	KA 11-5'

Compounds	MDL ug/kg	PQL ug/kg	LI03341 Amount ug/kg	LI03342 Amount ug/kg	LI03343 Amount ug/kg	LI03344 Amount ug/kg	LI03345 Amount ug/kg	LI03346 Amount ug/kg	LI03347 Amount ug/kg
2-Hexanone	2.2	11.0	nd	nd	nd	nd	nd	nd	nd
Isopropylbenzene	1.9	9.5	nd	nd	nd	nd	nd	nd	nd
p-Isopropyltoluene	2.5	12.5	nd	nd	nd	nd	nd	nd	nd
Methyl-t-butyl ether (MTBE)	3.1	15.5	nd	nd	nd	nd	nd	nd	nd
Methylene chloride	3.9	19.5	nd	nd	nd	nd	nd	nd	nd
Iodomethane	4.9	24.5	nd	nd	nd	nd	nd	nd	nd
Methyl isobutyl ketone (MIBK)	2.3	11.5	nd	nd	nd	nd	nd	nd	nd
Naphthalene	2.7	13.5	nd	nd	nd	nd	nd	nd	nd
Propylbenzene	4.3	21.5	nd	nd	nd	nd	nd	nd	nd
Styrene	2.9	14.5	nd	nd	nd	nd	nd	nd	nd
1,1,1,2-Tetrachloroethane	2.2	11.0	nd	nd	nd	nd	nd	nd	nd
1,1,2,2-Tetrachloroethane	4.4	22.0	nd	nd	nd	nd	nd	nd	nd
Tetrachloroethylene	3.4	17.0	nd	nd	nd	nd	nd	nd	nd
Toluene	2	10.0	nd	nd	nd	nd	nd	nd	nd
1,2,3-Trichlorobenzene	3.3	16.5	nd	nd	nd	nd	nd	nd	nd
1,2,4-Trichlorobenzene	2.8	14.0	nd	nd	nd	nd	nd	nd	nd
1,1,1-Trichloroethane	2.9	14.5	nd	nd	nd	nd	nd	nd	nd
1,1,2-Trichloroethane	4.3	21.5	nd	nd	nd	nd	nd	nd	nd
Trichloroethylene	1.4	7.0	nd	nd	nd	nd	nd	nd	nd
Trichlorofluoromethane	3.5	17.5	nd	nd	nd	nd	nd	nd	nd
1,2,3-Trichloropropane	2.8	14.0	nd	nd	nd	nd	nd	nd	nd
1,2,4-Trimethylbenzene	2.5	12.5	nd	nd	nd	nd	nd	nd	nd
1,3,5-Trimethylbenzene	2.3	11.5	nd	nd	nd	nd	nd	nd	nd
Vinyl acetate	2.4	12.0	nd	nd	nd	nd	nd	nd	nd
Vinyl Chloride (Chloroethene)	3.6	18.0	nd	nd	nd	nd	nd	nd	nd
m & p-Xylene	6.7	33.5	nd	nd	nd	nd	nd	nd	nd
o-Xylene	2.2	11.0	nd	nd	nd	nd	nd	nd	nd

MDL - Method Detection Limit
PQL - Practical Quantitation Limit (5xMDL)
J - Concentration above MDL below PQL
nd - Not Detected; below detection limit

Quality Control Data

Surrogates 30 (ug/L each)	QC Limits % Recovery Lower-Upper							
SURR: Bromofluorobenzene	74 - 121	88.0%	91.0%	88.7%	89.7%	88.7%	87.7%	92.0%
SURR: Dibromofluoromethane	80 - 120	83.3%	83.3%	83.7%	84.0%	83.3%	83.7%	83.7%
SURR: Toluene-d8	81 - 117	97.7%	97.3%	97.3%	97.3%	97.3%	96.7%	98.0%

Comment:

Analyst: Bryan Tiu

Reviewed by: Rose Gentallan

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COC 08-0683

ENVIRONMENTAL LABORATORY DATA REPORT

Report of GC/MS Analysis for Purgeable Volatile Organics
EPA SW-846 Method 8260

PROJECT: CHATSWORTH RESERVOIR Sample Matrix: Soil

Chemistry Log No.	Date Sampled	Date Received	Date Analyzed	Sample Description
LI03348	3/10/2008	3/11/2008	3/13/2008	KA 11-7'
LI03349	3/10/2008	3/11/2008	3/13/2008	KA 11-10'
LI03350	3/10/2008	3/11/2008	3/13/2008	KA 12-2'
LI03351	3/10/2008	3/11/2008	3/13/2008	KA 12-5'
LI03352	3/10/2008	3/11/2008	3/13/2008	KA 12-7'
LI03353	3/10/2008	3/11/2008	3/13/2008	KA 12-10'
LI03354	3/10/2008	3/11/2008	3/13/2008	KA 13-2'

Compounds	MDL (ug/kg)	PQL (ug/kg)	LI03348 Amount (ug/kg)	LI03349 Amount (ug/kg)	LI03350 Amount (ug/kg)	LI03351 Amount (ug/kg)	LI03352 Amount (ug/kg)	LI03353 Amount (ug/kg)	LI03354 Amount (ug/kg)
Acetone	8.5	42.5	nd	nd	nd	nd	nd	nd	nd
tert-Amyl methyl ether (TAME)	2.7	13.5	nd	nd	nd	nd	nd	nd	nd
Benzene	2.6	13.0	nd	nd	nd	nd	nd	nd	nd
Bromobenzene	2.9	14.5	nd	nd	nd	nd	nd	nd	nd
Bromochloromethane	2.4	12.0	nd	nd	nd	nd	nd	nd	nd
Bromodichloromethane	3.9	19.5	nd	nd	nd	nd	nd	nd	nd
Bromoform	3.6	18.0	nd	nd	nd	nd	nd	nd	nd
Bromomethane	2.2	11.0	nd	nd	nd	nd	nd	nd	nd
2-Butanone (MEK)	3.4	17.0	nd	nd	nd	nd	nd	nd	nd
tert-Butyl alcohol (TBA)	21.6	108.0	nd	nd	nd	nd	nd	nd	nd
n-Butylbenzene	2.5	12.5	nd	nd	nd	nd	nd	nd	nd
sec-Butylbenzene	3.4	17.0	nd	nd	nd	nd	nd	nd	nd
tert-Butylbenzene	3.1	15.5	nd	nd	nd	nd	nd	nd	nd
tert-Butyl ethyl ether (ETBE)	2.7	13.5	nd	nd	nd	nd	nd	nd	nd
Carbon disulfide	5.3	26.5	nd	nd	nd	nd	nd	nd	nd
Carbon Tetrachloride	3.3	16.5	nd	nd	nd	nd	nd	nd	nd
Chlorobenzene	2.4	12.0	nd	nd	nd	nd	nd	nd	nd
Chloroethane	4.8	24.0	nd	nd	nd	nd	nd	nd	nd
2-Chloroethyl vinyl ether	2	10.0	nd	nd	nd	nd	nd	nd	nd
Chloroform	2.3	11.5	nd	nd	nd	nd	nd	nd	nd
Chloromethane	4.7	23.5	nd	nd	nd	nd	nd	nd	nd
2-Chlorotoluene	4.7	23.5	nd	nd	nd	nd	nd	nd	nd
4-Chlorotoluene	4.3	21.5	nd	nd	nd	nd	nd	nd	nd
Dibromochloromethane	4.2	21.0	nd	nd	nd	nd	nd	nd	nd
1,2-Dibromo-3-chloropropane	3.1	15.5	nd	nd	nd	nd	nd	nd	nd
1,2-Dibromoethane (EDB)	3.6	18.0	nd	nd	nd	nd	nd	nd	nd
Dibromomethane	3.8	19.0	nd	nd	nd	nd	nd	nd	nd
1,2-Dichlorobenzene	4.7	23.5	nd	nd	nd	nd	nd	nd	nd
1,3-Dichlorobenzene	4.9	24.5	nd	nd	nd	nd	nd	nd	nd
1,4-Dichlorobenzene	5	25.0	nd	nd	nd	nd	nd	nd	nd
Dichlorodifluoromethane	5.2	26.0	nd	nd	nd	nd	nd	nd	nd
1,1-Dichloroethane	2.4	12.0	nd	nd	nd	nd	nd	nd	nd
1,2-Dichloroethane	2.8	14.0	nd	nd	nd	nd	nd	nd	nd
1,1-Dichloroethene	4.5	22.5	nd	nd	nd	nd	nd	nd	nd
cis-1,2-Dichloroethene	4.7	23.5	nd	nd	nd	nd	nd	nd	nd
trans-1,2-Dichloroethene	2.3	11.5	nd	nd	nd	nd	nd	nd	nd
1,2-Dichloropropane	2.7	13.5	nd	nd	nd	nd	nd	nd	nd
1,3-Dichloropropane	3.2	16.0	nd	nd	nd	nd	nd	nd	nd
2,2-Dichloropropane	2.9	14.5	nd	nd	nd	nd	nd	nd	nd
1,1-Dichloropropene	2.1	10.5	nd	nd	nd	nd	nd	nd	nd
cis-1,3-Dichloropropene	2.2	11.0	nd	nd	nd	nd	nd	nd	nd
trans-1,3-Dichloropropene	2.8	14.0	nd	nd	nd	nd	nd	nd	nd
Diisopropyl ether (DIPE)	3.2	16.0	nd	nd	nd	nd	nd	nd	nd
Ethylbenzene	3.1	15.5	nd	nd	nd	nd	nd	nd	nd
Hexachlorobutadiene	4.6	23.0	nd	nd	nd	nd	nd	nd	nd

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Chemistry Log No.	Date Sampled	Date Received	Date Analyzed	Sample Description
LI03348	3/10/2008	3/11/2008	3/13/2008	KA 11-7'
LI03349	3/10/2008	3/11/2008	3/13/2008	KA 11-10'
LI03350	3/10/2008	3/11/2008	3/13/2008	KA 12-2'
LI03351	3/10/2008	3/11/2008	3/13/2008	KA 12-5'
LI03352	3/10/2008	3/11/2008	3/13/2008	KA 12-7'
LI03353	3/10/2008	3/11/2008	3/13/2008	KA 12-10'
LI03354	3/10/2008	3/11/2008	3/13/2008	KA 13-2'

Compounds	MDL (ug/kg)	PQL (ug/kg)	LI03348 Amount (ug/kg)	LI03349 Amount (ug/kg)	LI03350 Amount (ug/kg)	LI03351 Amount (ug/kg)	LI03352 Amount (ug/kg)	LI03353 Amount (ug/kg)	LI03354 Amount (ug/kg)
2-Hexanone	2.2	11.0	nd	nd	nd	nd	nd	nd	nd
Isopropylbenzene	1.9	9.5	nd	nd	nd	nd	nd	nd	nd
p-Isopropyltoluene	2.5	12.5	nd	nd	nd	nd	nd	nd	nd
Methyl-t-butyl ether (MTBE)	3.1	15.5	nd	nd	nd	nd	nd	nd	nd
Methylene chloride	3.9	19.5	nd	nd	nd	nd	nd	nd	nd
Methyl iodide (Iodomethane)	4.9	24.5	nd	nd	nd	nd	nd	nd	nd
4-Methyl-2-pentanone (MIBK)	2.3	11.5	nd	nd	nd	nd	nd	nd	nd
Naphthalene	2.7	13.5	nd	nd	nd	nd	nd	nd	nd
Propylbenzene	4.3	21.5	nd	nd	nd	nd	nd	nd	nd
Styrene (Phenylethylene)	2.9	14.5	nd	nd	nd	nd	nd	nd	nd
1,1,1,2-Tetrachloroethane	2.2	11.0	nd	nd	nd	nd	nd	nd	nd
1,1,2,2-Tetrachloroethane	4.4	22.0	nd	nd	nd	nd	nd	nd	nd
Tetrachloroethylene (PCE)	3.4	17.0	nd	nd	nd	nd	nd	nd	nd
Toluene	2	10.0	nd	nd	nd	nd	nd	nd	nd
1,2,3-Trichlorobenzene	3.3	16.5	nd	nd	nd	nd	nd	nd	nd
1,2,4-Trichlorobenzene	2.8	14.0	nd	nd	nd	nd	nd	nd	nd
1,1,1-Trichloroethane	2.9	14.5	nd	nd	nd	nd	nd	nd	nd
1,1,2-Trichloroethane	4.3	21.5	nd	nd	nd	nd	nd	nd	nd
Trichloroethylene (TCE)	1.4	7.0	nd	nd	nd	nd	nd	nd	nd
Trichlorofluoromethane	3.5	17.5	nd	nd	nd	nd	nd	nd	nd
1,2,3-Trichloropropane	2.8	14.0	nd	nd	nd	nd	nd	nd	nd
1,2,4-Trimethylbenzene	2.5	12.5	nd	nd	nd	nd	nd	nd	nd
1,3,5-Trimethylbenzene	2.3	11.5	nd	nd	nd	nd	nd	nd	nd
Vinyl acetate	2.4	12.0	nd	nd	nd	nd	nd	nd	nd
Vinyl Chloride	3.6	18.0	nd	nd	nd	nd	nd	nd	nd
m & p-Xylene	6.7	33.5	nd	nd	nd	nd	nd	nd	nd
o-Xylene	2.2	11.0	nd	nd	nd	nd	nd	nd	nd

MDL - Method Detection Limit
PQL - Practical Quantitation Limit (5xMDL)
J - Concentration above MDL below PQL
nd - Not Detected; below detection limit

Quality Control Data

Surrogates 30 (ug/L each)	QC Limits % Recovery Lower-Upper							
SURR: Bromofluorobenzene	74 - 121	91.3%	92.0%	90.0%	91.0%	89.7%	91.3%	92.0%
SURR: Dibromofluoromethane	80 - 120	84.7%	84.0%	84.0%	83.7%	83.0%	83.0%	83.0%
SURR: Toluene-d8	81 - 117	98.0%	99.0%	98.7%	98.0%	98.3%	97.7%	98.0%

Comment:

Analyst: Bryan Tiu

Reviewed by: Rose Gentallan

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COC 08-0683

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Report of GC/MS Analysis for Purgeable Volatile Organics

EPA SW-846 Method 8260

PROJECT: CHATSWORTH RESERVOIR Sample Matrix: Soil

Chemistry Log No.	Date Sampled	Date Received	Date Analyzed	Sample Description
LI03355	3/10/2008	3/11/2008	3/13/2008	KA 13-5'
LI03356	3/10/2008	3/11/2008	3/18/2008	KA 13-7'
LI03357	3/10/2008	3/11/2008	3/18/2008	KA 13-10'
LI03358	3/10/2008	3/11/2008	3/18/2008	KA 14-2'
LI03359	3/10/2008	3/11/2008	3/18/2008	KA 14-5'
LI03360	3/10/2008	3/11/2008	3/18/2008	KA 14-7'
LI03361	3/10/2008	3/11/2008	3/18/2008	KA 14-10'

Compounds	MDL (ug/kg)	PQL (ug/kg)	LI03355 Amount (ug/kg)	LI03356 Amount (ug/kg)	LI03357 Amount (ug/kg)	LI03358 Amount (ug/kg)	LI03359 Amount (ug/kg)	LI03360 Amount (ug/kg)	LI03361 Amount (ug/kg)
Acetone	8.5	42.5	nd	nd	nd	nd	nd	nd	nd
tert-Amyl methyl ether (TAME)	2.7	13.5	nd	nd	nd	nd	nd	nd	nd
Benzene	2.6	13.0	nd	nd	nd	nd	nd	nd	nd
Bromobenzene	2.9	14.5	nd	nd	nd	nd	nd	nd	nd
Bromochloromethane	2.4	12.0	nd	nd	nd	nd	nd	nd	nd
Bromodichloromethane	3.9	19.5	nd	nd	nd	nd	nd	nd	nd
Bromoform	3.6	18.0	nd	nd	nd	nd	nd	nd	nd
Bromomethane	2.2	11.0	nd	nd	nd	nd	nd	nd	nd
2-Butanone (MEK)	3.4	17.0	nd	nd	nd	nd	nd	nd	nd
tert-Butyl alcohol (TBA)	21.6	108.0	nd	nd	nd	nd	nd	nd	nd
n-Butylbenzene	2.5	12.5	nd	nd	nd	nd	nd	nd	nd
sec-Butylbenzene	3.4	17.0	nd	nd	nd	nd	nd	nd	nd
tert-Butylbenzene	3.1	15.5	nd	nd	nd	nd	nd	nd	nd
tert-Butyl ethyl ether (ETBE)	2.7	13.5	nd	nd	nd	nd	nd	nd	nd
Carbon disulfide	5.3	26.5	nd	nd	nd	nd	nd	nd	nd
Carbon Tetrachloride	3.3	16.5	nd	nd	nd	nd	nd	nd	nd
Chlorobenzene	2.4	12.0	nd	nd	nd	nd	nd	nd	nd
Chloroethane	4.8	24.0	nd	nd	nd	nd	nd	nd	nd
2-Chloroethyl vinyl ether	2	10.0	nd	nd	nd	nd	nd	nd	nd
Chloroform	2.3	11.5	nd	nd	nd	nd	nd	nd	nd
Chloromethane	4.7	23.5	nd	nd	nd	nd	nd	nd	nd
2-Chlorotoluene	4.7	23.5	nd	nd	nd	nd	nd	nd	nd
4-Chlorotoluene	4.3	21.5	nd	nd	nd	nd	nd	nd	nd
Dibromochloromethane	4.2	21.0	nd	nd	nd	nd	nd	nd	nd
1,2-Dibromo-3-chloropropane	3.1	15.5	nd	nd	nd	nd	nd	nd	nd
1,2-Dibromoethane (EDB)	3.6	18.0	nd	nd	nd	nd	nd	nd	nd
Dibromomethane	3.8	19.0	nd	nd	nd	nd	nd	nd	nd
1,2-Dichlorobenzene	4.7	23.5	nd	nd	nd	nd	nd	nd	nd
1,3-Dichlorobenzene	4.9	24.5	nd	nd	nd	nd	nd	nd	nd
1,4-Dichlorobenzene	5	25.0	nd	nd	nd	nd	nd	nd	nd
Dichlorodifluoromethane	5.2	26.0	nd	nd	nd	nd	nd	nd	nd
1,1-Dichloroethane	2.4	12.0	nd	nd	nd	nd	nd	nd	nd
1,2-Dichloroethane	2.8	14.0	nd	nd	nd	nd	nd	nd	nd
1,1-Dichloroethene	4.5	22.5	nd	nd	nd	nd	nd	nd	nd
cis-1,2-Dichloroethene	4.7	23.5	nd	nd	nd	nd	nd	nd	nd
trans-1,2-Dichloroethene	2.3	11.5	nd	nd	nd	nd	nd	nd	nd
1,2-Dichloropropane	2.7	13.5	nd	nd	nd	nd	nd	nd	nd
1,3-Dichloropropane	3.2	16.0	nd	nd	nd	nd	nd	nd	nd
2,2-Dichloropropane	2.9	14.5	nd	nd	nd	nd	nd	nd	nd
1,1-Dichloropropene	2.1	10.5	nd	nd	nd	nd	nd	nd	nd
cis-1,3-Dichloropropene	2.2	11.0	nd	nd	nd	nd	nd	nd	nd
trans-1,3-Dichloropropene	2.8	14.0	nd	nd	nd	nd	nd	nd	nd
Diisopropyl ether (DIPE)	3.2	16.0	nd	nd	nd	nd	nd	nd	nd
Ethylbenzene	3.1	15.5	nd	nd	nd	nd	nd	nd	nd
Hexachlorobutadiene	4.6	23.0	nd	nd	nd	nd	nd	nd	nd

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COC 08-0683

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PROJECT: CHATSWORTH RESERVOIR Sample Matrix: Soil

Chemistry Log No.	Date Sampled	Date Received	Date Analyzed	Sample Description
LI03355	3/10/2008	3/11/2008	3/13/2008	KA 13-5'
LI03356	3/10/2008	3/11/2008	3/18/2008	KA 13-7'
LI03357	3/10/2008	3/11/2008	3/18/2008	KA 13-10'
LI03358	3/10/2008	3/11/2008	3/18/2008	KA 14-2'
LI03359	3/10/2008	3/11/2008	3/18/2008	KA 14-5'
LI03360	3/10/2008	3/11/2008	3/18/2008	KA 14-7'
LI03361	3/10/2008	3/11/2008	3/18/2008	KA 14-10'

Compounds	MDL (ug/kg)	PQL (ug/kg)	LI03355 Amount (ug/kg)	LI03356 Amount (ug/kg)	LI03357 Amount (ug/kg)	LI03358 Amount (ug/kg)	LI03359 Amount (ug/kg)	LI03360 Amount (ug/kg)	LI03361 Amount (ug/kg)
2-Hexanone	2.2	11.0	nd	nd	nd	nd	nd	nd	nd
Isopropylbenzene	1.9	9.5	nd	nd	nd	nd	nd	nd	nd
p-Isopropyltoluene	2.5	12.5	nd	nd	nd	nd	nd	nd	nd
Methyl-t-butyl ether (MTBE)	3.1	15.5	nd	nd	nd	nd	nd	nd	nd
Methylene chloride	3.9	19.5	nd	nd	nd	nd	nd	nd	nd
Methyl Iodide (Iodomethane)	4.9	24.5	nd	nd	nd	nd	nd	nd	nd
4-Methyl-2-pentanone (MIBK)	2.3	11.5	nd	nd	nd	nd	nd	nd	nd
Naphthalene	2.7	13.5	nd	nd	nd	nd	nd	nd	nd
Propylbenzene	4.3	21.5	nd	nd	nd	nd	nd	nd	nd
Styrene (Phenylethylene)	2.9	14.5	nd	nd	nd	nd	nd	nd	nd
1,1,1,2-Tetrachloroethane	2.2	11.0	nd	nd	nd	nd	nd	nd	nd
1,1,2,2-Tetrachloroethane	4.4	22.0	nd	nd	nd	nd	nd	nd	nd
Tetrachloroethylene (PCE)	3.4	17.0	nd	nd	nd	nd	nd	nd	nd
Toluene	2	10.0	nd	nd	nd	nd	nd	nd	nd
1,2,3-Trichlorobenzene	3.3	16.5	nd	nd	nd	nd	nd	nd	nd
1,2,4-Trichlorobenzene	2.8	14.0	nd	nd	nd	nd	nd	nd	nd
1,1,1-Trichloroethane	2.9	14.5	nd	nd	nd	nd	nd	nd	nd
1,1,2-Trichloroethane	4.3	21.5	nd	nd	nd	nd	nd	nd	nd
Trichloroethylene (TCE)	1.4	7.0	nd	nd	nd	nd	nd	nd	nd
Trichlorofluoromethane	3.5	17.5	nd	nd	nd	nd	nd	nd	nd
1,2,3-Trichloropropane	2.8	14.0	nd	nd	nd	nd	nd	nd	nd
1,2,4-Trimethylbenzene	2.5	12.5	nd	nd	nd	nd	nd	nd	nd
1,3,5-Trimethylbenzene	2.3	11.5	nd	nd	nd	nd	nd	nd	nd
Vinyl acetate	2.4	12.0	nd	nd	nd	nd	nd	nd	nd
Vinyl Chloride	3.6	18.0	nd	nd	nd	nd	nd	nd	nd
m & p-Xylene	6.7	33.5	nd	nd	nd	nd	nd	nd	nd
o-Xylene	2.2	11.0	nd	nd	nd	nd	nd	nd	nd

MDL - Method Detection Limit
PQL - Practical Quantitation Limit (5xMDL)

J - Concentration above MDL below PQL
nd - Not Detected; below detection limit

Quality Control Data

Surrogates 30 (ug/L each)	QC Limits % Recovery Lower-Upper							
SURR: Bromofluorobenzene	74 - 121	91.7%	90.0%	92.0%	88.3%	90.0%	89.7%	91%
SURR: Dibromofluoromethane	80 - 120	83.7%	89.3%	86.3%	85.3%	85.0%	85.3%	0.85
SURR: Toluene-d8	81 - 117	99.0%	97.7%	97.7%	97.3%	96.7%	97.7%	0.98

Comment:

Analyst: Bryan Tiu

Reviewed by: Rose Gentallan

400018

COC 08-0683

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Report of GC/MS Analysis for Purgeable Volatile Organics
EPA SW-846 Method 8260

PROJECT: CHATSWORTH RESERVOIR Sample Matrix: Soil

Chemistry Log No.	Date Sampled	Date Received	Date Analyzed	Sample Description
LI03362	3/10/2008	3/11/2008	3/18/2008	KA 15-2'
LI03363	3/10/2008	3/11/2008	3/18/2008	KA 15-5'
LI03364	3/10/2008	3/11/2008	3/18/2008	KA 15-7'
LI03365	3/10/2008	3/11/2008	3/18/2008	KA 15-10'
LI03366	3/10/2008	3/11/2008	3/18/2008	KA 16-2'
LI03367	3/10/2008	3/11/2008	3/18/2008	KA 16-5'
LI03368	3/10/2008	3/11/2008	3/18/2008	KA 16-10'

Compounds	MDL (ug/kg)	PQL (ug/kg)	LI03362 Amount (ug/kg)	LI03363 Amount (ug/kg)	LI03364 Amount (ug/kg)	LI03365 Amount (ug/kg)	LI03366 Amount (ug/kg)	LI03367 Amount (ug/kg)	LI03368 Amount (ug/kg)
Acetone	8.5	42.5	nd	nd	nd	nd	nd	nd	nd
tert-Amyl methyl ether (TAME)	2.7	13.5	nd	nd	nd	nd	nd	nd	nd
Benzene	2.6	13.0	nd	nd	nd	nd	nd	nd	nd
Bromobenzene	2.9	14.5	nd	nd	nd	nd	nd	nd	nd
Bromochloromethane	2.4	12.0	nd	nd	nd	nd	nd	nd	nd
Bromodichloromethane	3.9	19.5	nd	nd	nd	nd	nd	nd	nd
Bromoform	3.6	18.0	nd	nd	nd	nd	nd	nd	nd
Bromomethane	2.2	11.0	nd	nd	nd	nd	nd	nd	nd
2-Butanone (MEK)	3.4	17.0	nd	nd	nd	nd	nd	nd	nd
tert-Butyl alcohol (TBA)	21.6	108.0	nd	nd	nd	nd	nd	nd	nd
n-Butylbenzene	2.5	12.5	nd	nd	nd	nd	nd	nd	nd
sec-Butylbenzene	3.4	17.0	nd	nd	nd	nd	nd	nd	nd
tert-Butylbenzene	3.1	15.5	nd	nd	nd	nd	nd	nd	nd
tert-Butyl ethyl ether (ETBE)	2.7	13.5	nd	nd	nd	nd	nd	nd	nd
Carbon disulfide	5.3	26.5	nd	nd	nd	nd	nd	nd	nd
Carbon Tetrachloride	3.3	16.5	nd	nd	nd	nd	nd	nd	nd
Chlorobenzene	2.4	12.0	nd	nd	nd	nd	nd	nd	nd
Chloroethane	4.8	24.0	nd	nd	nd	nd	nd	nd	nd
2-Chloroethyl vinyl ether	2	10.0	nd	nd	nd	nd	nd	nd	nd
Chloroform	2.3	11.5	nd	nd	nd	nd	nd	nd	nd
Chloromethane	4.7	23.5	nd	nd	nd	nd	nd	nd	nd
2-Chlorotoluene	4.7	23.5	nd	nd	nd	nd	nd	nd	nd
4-Chlorotoluene	4.3	21.5	nd	nd	nd	nd	nd	nd	nd
Dibromochloromethane	4.2	21.0	nd	nd	nd	nd	nd	nd	nd
1,2-Dibromo-3-chloropropane	3.1	15.5	nd	nd	nd	nd	nd	nd	nd
1,2-Dibromoethane (EDB)	3.6	18.0	nd	nd	nd	nd	nd	nd	nd
Dibromomethane	3.8	19.0	nd	nd	nd	nd	nd	nd	nd
1,2-Dichlorobenzene	4.7	23.5	nd	nd	nd	nd	nd	nd	nd
1,3-Dichlorobenzene	4.9	24.5	nd	nd	nd	nd	nd	nd	nd
1,4-Dichlorobenzene	5	25.0	nd	nd	nd	nd	nd	nd	nd
Dichlorodifluoromethane	5.2	26.0	nd	nd	nd	nd	nd	nd	nd
1,1-Dichloroethane	2.4	12.0	nd	nd	nd	nd	nd	nd	nd
1,2-Dichloroethane	2.8	14.0	nd	nd	nd	nd	nd	nd	nd
1,1-Dichloroethene	4.5	22.5	nd	nd	nd	nd	nd	nd	nd
cis-1,2-Dichloroethene	4.7	23.5	nd	nd	nd	nd	nd	nd	nd
trans-1,2-Dichloroethene	2.3	11.5	nd	nd	nd	nd	nd	nd	nd
1,2-Dichloropropane	2.7	13.5	nd	nd	nd	nd	nd	nd	nd
1,3-Dichloropropane	3.2	16.0	nd	nd	nd	nd	nd	nd	nd
2,2-Dichloropropane	2.9	14.5	nd	nd	nd	nd	nd	nd	nd
1,1-Dichloropropene	2.1	10.5	nd	nd	nd	nd	nd	nd	nd
cis-1,3-Dichloropropene	2.2	11.0	nd	nd	nd	nd	nd	nd	nd
trans-1,3-Dichloropropene	2.8	14.0	nd	nd	nd	nd	nd	nd	nd
Diisopropyl ether (DIPE)	3.2	16.0	nd	nd	nd	nd	nd	nd	nd
Ethylbenzene	3.1	15.5	nd	nd	nd	nd	nd	nd	nd
Hexachlorobutadiene	4.6	23.0	nd	nd	nd	nd	nd	nd	nd

400019

COC 08-0683

ENVIRONMENTAL LABORATORY DATA REPORT

Report of GC/MS Analysis for Purgeable Volatile Organics
EPA SW-846 Method 8260

PROJECT: CHATSWORTH RESERVOIR Sample Matrix: Soil

Chemistry Log No.	Date Sampled	Date Received	Date Analyzed	Sample Description
LI03362	3/10/2008	3/11/2008	3/18/2008	KA 15-2'
LI03363	3/10/2008	3/11/2008	3/18/2008	KA 15-5'
LI03364	3/10/2008	3/11/2008	3/18/2008	KA 15-7'
LI03365	3/10/2008	3/11/2008	3/18/2008	KA 15-10'
LI03366	3/10/2008	3/11/2008	3/18/2008	KA 16-2'
LI03367	3/10/2008	3/11/2008	3/18/2008	KA 16-5'
LI03368	3/10/2008	3/11/2008	3/18/2008	KA 16-10'

Compounds	MDL (ug/kg)	PQL (ug/kg)	LI03362 Amount (ug/kg)	LI03363 Amount (ug/kg)	LI03364 Amount (ug/kg)	LI03365 Amount (ug/kg)	LI03366 Amount (ug/kg)	LI03367 Amount (ug/kg)	LI03368 Amount (ug/kg)
2-Hexanone	2.2	11.0	nd	nd	nd	nd	nd	nd	nd
Isopropylbenzene	1.9	9.5	nd	nd	nd	nd	nd	nd	nd
p-Isopropyltoluene	2.5	12.5	nd	nd	nd	nd	nd	nd	nd
Methyl-t-butyl ether (MTBE)	3.1	15.5	nd	nd	nd	nd	nd	nd	nd
Methylene chloride	3.9	19.5	nd	nd	nd	nd	nd	nd	nd
Methyl iodide (Iodomethane)	4.9	24.5	nd	nd	nd	nd	nd	nd	nd
4-Methyl-2-pentanone (MIBK)	2.3	11.5	nd	nd	nd	nd	nd	nd	nd
Naphthalene	2.7	13.5	nd	nd	nd	nd	nd	nd	nd
Propylbenzene	4.3	21.5	nd	nd	nd	nd	nd	nd	nd
Styrene (Phenylethylene)	2.9	14.5	nd	nd	nd	nd	nd	nd	nd
1,1,1,2-Tetrachloroethane	2.2	11.0	nd	nd	nd	nd	nd	nd	nd
1,1,2,2-Tetrachloroethane	4.4	22.0	nd	nd	nd	nd	nd	nd	nd
Tetrachloroethylene (PCE)	3.4	17.0	nd	nd	nd	nd	nd	nd	nd
Toluene	2	10.0	nd	nd	nd	nd	nd	nd	nd
1,2,3-Trichlorobenzene	3.3	16.5	nd	nd	nd	nd	nd	nd	nd
1,2,4-Trichlorobenzene	2.8	14.0	nd	nd	nd	nd	nd	nd	nd
1,1,1-Trichloroethane	2.9	14.5	nd	nd	nd	nd	nd	nd	nd
1,1,2-Trichloroethane	4.3	21.5	nd	nd	nd	nd	nd	nd	nd
Trichloroethylene (TCE)	1.4	7.0	nd	nd	nd	nd	nd	nd	nd
Trichlorofluoromethane	3.5	17.5	nd	nd	nd	nd	nd	nd	nd
1,2,3-Trichloropropane	2.8	14.0	nd	nd	nd	nd	nd	nd	nd
1,2,4-Trimethylbenzene	2.5	12.5	nd	nd	nd	nd	nd	nd	nd
1,3,5-Trimethylbenzene	2.3	11.5	nd	nd	nd	nd	nd	nd	nd
Vinyl acetate	2.4	12.0	nd	nd	nd	nd	nd	nd	nd
Vinyl Chloride	3.6	18.0	nd	nd	nd	nd	nd	nd	nd
m & p-Xylene	6.7	33.5	nd	nd	nd	nd	nd	nd	nd
o-Xylene	2.2	11.0	nd	nd	nd	nd	nd	nd	nd

MDL - Method Detection Limit
PQL - Practical Quantitation Limit (5xMDL)

J - Concentration above MDL below PQL
nd - Not Detected; below detection limit

Quality Control Data

Surrogates 30 (ug/L each)	QC Limits % Recovery Lower-Upper							
SURR: Bromofluorobenzene	74 - 121	88.3%	89.0%	88.7%	86.7%	100%	85.7%	84.0%
SURR: Dibromofluoromethane	80 - 120	85.3%	84.0%	84.0%	83.7%	100%	85.3%	85.0%
SURR: Toluene-d8	81 - 117	97.7%	98.0%	97.0%	96.7%	97.7%	98.3%	98.7%

Comment:

Analyst: Bryan Tiu

Reviewed by: Rose Gentallan

400020

COC 08-0683

ENVIRONMENTAL LABORATORY DATA REPORT

Report of GC/MS Analysis for Purgeable Volatile Organics
EPA SW-846 Method 8260

PROJECT: CHATSWORTH RESERVOIR Sample Matrix: Soil

Chemistry Log No.	Date Sampled	Date Received	Date Analyzed	Sample Description
LI03369	3/10/2008	3/11/2008	3/18/2008	KA 16-10'
LI03370	3/10/2008	3/11/2008	3/18/2008	KA 17-2'
LI03371	3/10/2008	3/11/2008	3/18/2008	KA 17-5'
LI03372	3/10/2008	3/11/2008	3/18/2008	KA 17-7'
LI03373	3/10/2008	3/11/2008	3/18/2008	KA 17-10'
LI03374	3/10/2008	3/11/2008	3/18/2008	KA 18-2'
LI03375	3/10/2008	3/11/2008	3/18/2008	KA 18-5'

Compounds	MDL (ug/kg)	PQL (ug/kg)	LI03369 Amount (ug/kg)	LI03370 Amount (ug/kg)	LI03371 Amount (ug/kg)	LI03372 Amount (ug/kg)	LI03373 Amount (ug/kg)	LI03374 Amount (ug/kg)	LI03375 Amount (ug/kg)
Acetone	8.5	42.5	nd	nd	nd	nd	nd	nd	nd
tert-Amyl methyl ether (TAME)	2.7	13.5	nd	nd	nd	nd	nd	nd	nd
Benzene	2.6	13.0	nd	nd	nd	nd	nd	nd	nd
Bromobenzene	2.9	14.5	nd	nd	nd	nd	nd	nd	nd
Bromochloromethane	2.4	12.0	nd	nd	nd	nd	nd	nd	nd
Bromodichloromethane	3.9	19.5	nd	nd	nd	nd	nd	nd	nd
Bromoform	3.6	18.0	nd	nd	nd	nd	nd	nd	nd
Bromomethane	2.2	11.0	nd	nd	nd	nd	nd	nd	nd
2-Butanone (MEK)	3.4	17.0	nd	nd	nd	nd	nd	nd	nd
tert-Butyl alcohol (TBA)	21.6	108.0	nd	nd	nd	nd	nd	nd	nd
n-Butylbenzene	2.5	12.5	nd	nd	nd	nd	nd	nd	nd
sec-Butylbenzene	3.4	17.0	nd	nd	nd	nd	nd	nd	nd
tert-Butylbenzene	3.1	15.5	nd	nd	nd	nd	nd	nd	nd
tert-Butyl ethyl ether (ETBE)	2.7	13.5	nd	nd	nd	nd	nd	nd	nd
Carbon disulfide	5.3	26.5	nd	nd	nd	nd	nd	nd	nd
Carbon Tetrachloride	3.3	16.5	nd	nd	nd	nd	nd	nd	nd
Chlorobenzene	2.4	12.0	nd	nd	nd	nd	nd	nd	nd
Chloroethane	4.8	24.0	nd	nd	nd	nd	nd	nd	nd
2-Chloroethyl vinyl ether	2	10.0	nd	nd	nd	nd	nd	nd	nd
Chloroform	2.3	11.5	nd	nd	nd	nd	nd	nd	nd
Chloromethane	4.7	23.5	nd	nd	nd	nd	nd	nd	nd
2-Chlorotoluene	4.7	23.5	nd	nd	nd	nd	nd	nd	nd
4-Chlorotoluene	4.3	21.5	nd	nd	nd	nd	nd	nd	nd
Dibromochloromethane	4.2	21.0	nd	nd	nd	nd	nd	nd	nd
1,2-Dibromo-3-chloropropane	3.1	15.5	nd	nd	nd	nd	nd	nd	nd
1,2-Dibromoethane (EDB)	3.6	18.0	nd	nd	nd	nd	nd	nd	nd
Dibromomethane	3.8	19.0	nd	nd	nd	nd	nd	nd	nd
1,2-Dichlorobenzene	4.7	23.5	nd	nd	nd	nd	nd	nd	nd
1,3-Dichlorobenzene	4.9	24.5	nd	nd	nd	nd	nd	nd	nd
1,4-Dichlorobenzene	5	25.0	nd	nd	nd	nd	nd	nd	nd
Dichlorodifluoromethane	5.2	26.0	nd	nd	nd	nd	nd	nd	nd
1,1-Dichloroethane	2.4	12.0	nd	nd	nd	nd	nd	nd	nd
1,2-Dichloroethane	2.8	14.0	nd	nd	nd	nd	nd	nd	nd
1,1-Dichloroethene	4.5	22.5	nd	nd	nd	nd	nd	nd	nd
cis-1,2-Dichloroethene	4.7	23.5	nd	nd	nd	nd	nd	nd	nd
trans-1,2-Dichloroethene	2.3	11.5	nd	nd	nd	nd	nd	nd	nd
1,2-Dichloropropane	2.7	13.5	nd	nd	nd	nd	nd	nd	nd
1,3-Dichloropropane	3.2	16.0	nd	nd	nd	nd	nd	nd	nd
2,2-Dichloropropane	2.9	14.5	nd	nd	nd	nd	nd	nd	nd
1,1-Dichloropropene	2.1	10.5	nd	nd	nd	nd	nd	nd	nd
cis-1,3-Dichloropropene	2.2	11.0	nd	nd	nd	nd	nd	nd	nd
trans-1,3-Dichloropropene	2.8	14.0	nd	nd	nd	nd	nd	nd	nd
Diisopropyl ether (DIPE)	3.2	16.0	nd	nd	nd	nd	nd	nd	nd
Ethylbenzene	3.1	15.5	nd	nd	nd	nd	nd	nd	nd
Hexachlorobutadiene	4.6	23.0	nd	nd	nd	nd	nd	nd	nd

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COC 08-0683

ENVIRONMENTAL LABORATORY DATA REPORT

Report of GC/MS Analysis for Purgeable Volatile Organics
EPA SW-846 Method 8260

PROJECT: CHATSWORTH RESERVOIR Sample Matrix: Soil

Chemistry Log No.	Date Sampled	Date Received	Date Analyzed	Sample Description
LI03369	3/10/2008	3/11/2008	3/18/2008	KA 16-10'
LI03370	3/10/2008	3/11/2008	3/18/2008	KA 17-2'
LI03371	3/10/2008	3/11/2008	3/18/2008	KA 17-5'
LI03372	3/10/2008	3/11/2008	3/18/2008	KA 17-7'
LI03373	3/10/2008	3/11/2008	3/18/2008	KA 17-10'
LI03374	3/10/2008	3/11/2008	3/18/2008	KA 18-2'
LI03375	3/10/2008	3/11/2008	3/18/2008	KA 18-5'

Compounds	MDL (ug/kg)	PQL (ug/kg)	LI03369 Amount (ug/kg)	LI03370 Amount (ug/kg)	LI03371 Amount (ug/kg)	LI03372 Amount (ug/kg)	LI03373 Amount (ug/kg)	LI03374 Amount (ug/kg)	LI03375 Amount (ug/kg)
2-Hexanone	2.2	11.0	nd	nd	nd	nd	nd	nd	nd
Isopropylbenzene	1.9	9.5	nd	nd	nd	nd	nd	nd	nd
p-Isopropyltoluene	2.5	12.5	nd	nd	nd	nd	nd	nd	nd
Methyl-t-butyl ether (MTBE)	3.1	15.5	nd	nd	nd	nd	nd	nd	nd
Methylene chloride	3.9	19.5	nd	nd	nd	nd	nd	nd	nd
Methyl Iodide (Iodomethane)	4.9	24.5	nd	nd	nd	nd	nd	nd	nd
4-Methyl-2-pentanone (MIBK)	2.3	11.5	nd	nd	nd	nd	nd	nd	nd
Naphthalene	2.7	13.5	nd	nd	nd	nd	nd	nd	nd
Propylbenzene	4.3	21.5	nd	nd	nd	nd	nd	nd	nd
Styrene (Phenylethylene)	2.9	14.5	nd	nd	nd	nd	nd	nd	nd
1,1,1,2-Tetrachloroethane	2.2	11.0	nd	nd	nd	nd	nd	nd	nd
1,1,2,2-Tetrachloroethane	4.4	22.0	nd	nd	nd	nd	nd	nd	nd
Tetrachloroethylene (PCE)	3.4	17.0	nd	nd	nd	nd	nd	nd	nd
Toluene	2	10.0	nd	nd	nd	nd	nd	nd	nd
1,2,3-Trichlorobenzene	3.3	16.5	nd	nd	nd	nd	nd	nd	nd
1,2,4-Trichlorobenzene	2.8	14.0	nd	nd	nd	nd	nd	nd	nd
1,1,1-Trichloroethane	2.9	14.5	nd	nd	nd	nd	nd	nd	nd
1,1,2-Trichloroethane	4.3	21.5	nd	nd	nd	nd	nd	nd	nd
Trichloroethylene (TCE)	1.4	7.0	nd	nd	nd	nd	nd	nd	nd
Trichlorofluoromethane	3.5	17.5	nd	nd	nd	nd	nd	nd	nd
1,2,3-Trichloropropane	2.8	14.0	nd	nd	nd	nd	nd	nd	nd
1,2,4-Trimethylbenzene	2.5	12.5	nd	nd	nd	nd	nd	nd	nd
1,3,5-Trimethylbenzene	2.3	11.5	nd	nd	nd	nd	nd	nd	nd
Vinyl acetate	2.4	12.0	nd	nd	nd	nd	nd	nd	nd
Vinyl Chloride	3.6	18.0	nd	nd	nd	nd	nd	nd	nd
m & p-Xylene	6.7	33.5	nd	nd	nd	nd	nd	nd	nd
o-Xylene	2.2	11.0	nd	nd	nd	nd	nd	nd	nd

MDL - Method Detection Limit
PQL - Practical Quantitation Limit (5xMDL)
J - Concentration above MDL below PQL
nd - Not Detected; below detection limit

Quality Control Data

Surrogates 30 (ug/L each)	QC Limits % Recovery Lower-Upper							
SURR: Bromofluorobenzene	74 - 121	86.0%	87.7%	85.7%	85.3%	84.7%	87.7%	88.0%
SURR: Dibromofluoromethane	80 - 120	85.7%	84.7%	84.0%	83.3%	83.3%	83.0%	82.7%
SURR: Toluene-d8	81 - 117	98.3%	97.0%	98.3%	96.7%	97.0%	97.0%	97.7%

Comment:

Analyst: Bryan Tiu

Reviewed by: Rose Gentallan

400022
COC 08-0683

ENVIRONMENTAL LABORATORY DATA REPORT

Report of GC/MS Analysis for Purgeable Volatile Organics
EPA SW-846 Method 8260

PROJECT: CHATSWORTH RESERVOIR Sample Matrix: Soil

Chemistry Log No.	Date Sampled	Date Received	Date Analyzed	Sample Description
LI03376	3/10/2008	3/11/2008	3/18/2008	KA 18-7'
LI03377	3/10/2008	3/11/2008	3/18/2008	KA 18-10'

Compounds	MDL ug/kg	PQL ug/kg	LI03376 Amount ug/kg	LI03377 Amount ug/kg
Acetone	8.5	42.5	nd	nd
tert-Amyl methyl ether (TAME)	2.7	13.5	nd	nd
Benzene	2.6	13.0	nd	nd
Bromobenzene	2.9	14.5	nd	nd
Bromochloromethane	2.4	12.0	nd	nd
Bromodichloromethane	3.9	19.5	nd	nd
Bromoform	3.6	18.0	nd	nd
Bromomethane	2.2	11.0	nd	nd
Methyl ethyl ketone (MEK)	3.4	17.0	nd	nd
tert-Butyl alcohol (TBA)	21.6	108.0	nd	nd
Butylbenzene	2.5	12.5	nd	nd
sec-Butylbenzene	3.4	17.0	nd	nd
tert-Butylbenzene	3.1	15.5	nd	nd
tert-Butyl ethyl ether (ETBE)	2.7	13.5	nd	nd
Carbon disulfide	5.3	26.5	nd	nd
Carbon Tetrachloride	3.3	16.5	nd	nd
Chlorobenzene	2.4	12.0	nd	nd
Chloroethane	4.8	24.0	nd	nd
2-Chloroethyl vinyl ether	2	10.0	nd	nd
Chloroform	2.3	11.5	nd	nd
Chloromethane	4.7	23.5	nd	nd
2-Chlorotoluene	4.7	23.5	nd	nd
4-Chlorotoluene	4.3	21.5	nd	nd
Dibromochloromethane	4.2	21.0	nd	nd
1,2-Dibromo-3-chloropropane	3.1	15.5	nd	nd
1,2-Dibromoethane	3.6	18.0	nd	nd
Dibromomethane	3.8	19.0	nd	nd
1,2-Dichlorobenzene	4.7	23.5	nd	nd
1,3-Dichlorobenzene	4.9	24.5	nd	nd
1,4-Dichlorobenzene	5	25.0	nd	nd
Dichlorodifluoromethane	5.2	26.0	nd	nd
1,1-Dichloroethane	2.4	12.0	nd	nd
1,2-Dichloroethane	2.8	14.0	nd	nd
1,1-Dichloroethene	4.5	22.5	nd	nd
cis-1,2-Dichloroethene	4.7	23.5	nd	nd
trans-1,2-Dichloroethene	2.3	11.5	nd	nd
1,2-Dichloropropane	2.7	13.5	nd	nd
1,3-Dichloropropane	3.2	16.0	nd	nd
2,2-Dichloropropane	2.9	14.5	nd	nd
1,1-Dichloropropene	2.1	10.5	nd	nd
cis-1,3-Dichloropropene	2.2	11.0	nd	nd
trans-1,3-Dichloropropene	2.8	14.0	nd	nd
Diisopropyl ether (DIPE)	3.2	16.0	nd	nd
Ethylbenzene	3.1	15.5	nd	nd
Hexachlorobutadiene	4.6	23.0	nd	nd

400023
COC 08-0683

ENVIRONMENTAL LABORATORY DATA REPORT

Report of GC/MS Analysis for Purgeable Volatile Organics
EPA SW-846 Method 8260

PROJECT: CHATSWORTH RESERVOIR Sample Matrix: Soil

Chemistry Log No.	Date Sampled	Date Received	Date Analyzed	Sample Description
LI03376	3/10/2008	3/11/2008	3/18/2008	KA 18-7'
LI03377	3/10/2008	3/11/2008	3/18/2008	KA 18-10'

Compounds	MDL ug/kg	PQL ug/kg	LI03376 Amount ug/kg	LI03377 Amount ug/kg
2-Hexanone	2.2	11.0	nd	nd
Isopropylbenzene	1.9	9.5	nd	nd
p-Isopropyltoluene	2.5	12.5	nd	nd
Methyl-t-butyl ether (MTBE)	3.1	15.5	nd	nd
Methylene chloride	3.9	19.5	nd	nd
Iodomethane	4.9	24.5	nd	nd
Methyl isobutyl ketone (MIBK)	2.3	11.5	nd	nd
Naphthalene	2.7	13.5	nd	nd
Propylbenzene	4.3	21.5	nd	nd
Styrene	2.9	14.5	nd	nd
1,1,1,2-Tetrachloroethane	2.2	11.0	nd	nd
1,1,2,2-Tetrachloroethane	4.4	22.0	nd	nd
Tetrachloroethylene	3.4	17.0	nd	nd
Toluene	2	10.0	nd	nd
1,2,3-Trichlorobenzene	3.3	16.5	nd	nd
1,2,4-Trichlorobenzene	2.8	14.0	nd	nd
1,1,1-Trichloroethane	2.9	14.5	nd	nd
1,1,2-Trichloroethane	4.3	21.5	nd	nd
Trichloroethylene	1.4	7.0	nd	nd
Trichlorofluoromethane	3.5	17.5	nd	nd
1,2,3-Trichloropropane	2.8	14.0	nd	nd
1,2,4-Trimethylbenzene	2.5	12.5	nd	nd
1,3,5-Trimethylbenzene	2.3	11.5	nd	nd
Vinyl acetate	2.4	12.0	nd	nd
Vinyl Chloride (Chloroethene)	3.6	18.0	nd	nd
m & p-Xylene	6.7	33.5	nd	nd
o-Xylene	2.2	11.0	nd	nd

MDL - Method Detection Limit
PQL - Practical Quantitation Limit (5xMDL)
J - Concentration above MDL below PQL
nd - Not Detected; below detection limit

Quality Control Data

Surrogates 30 (ug/L each)	QC Limits % Recovery Lower-Upper		
SURR: Bromofluorobenzene	74 - 121	91.0%	89.7%
SURR: Dibromofluoromethane	80 - 120	83.3%	83.7%
SURR: Toluene-d8	81 - 117	98.0%	96.7%

Comment:

Analyst: Bryan Tiu

Reviewed by: Rose Gentallan

400024
COC 08-0683

ENVIRONMENTAL LABORATORY DATA REPORT

Report of GC/MS Analysis for Purgeable Volatile Organics
EPA SW-846 Method 8260

PROJECT: CHATSWORTH RESERVOIR Sample Matrix: Soil

Chemistry Log No.	Date Sampled	Date Received	Date Analyzed	Sample Description
Blank	3/10/2008	3/11/2008	3/11/2008	Method Blank
Blank	3/10/2008	3/11/2008	3/12/2008	Method Blank
Blank	3/10/2008	3/11/2008	3/12/2008	Method Blank
Blank	3/10/2008	3/11/2008	3/13/2008	Method Blank

Compounds	MDL ug/kg	PQL ug/kg	Blank Amount ug/kg	Blank Amount ug/kg	Blank Amount ug/kg	Blank Amount ug/kg
Acetone	8.5	42.5	nd	nd	nd	nd
tert-Amyl methyl ether (TAME)	2.7	13.5	nd	nd	nd	nd
Benzene	2.6	13.0	nd	nd	nd	nd
Bromobenzene	2.9	14.5	nd	nd	nd	nd
Bromochloromethane	2.4	12.0	nd	nd	nd	nd
Bromodichloromethane	3.9	19.5	nd	nd	nd	nd
Bromoform	3.6	18.0	nd	nd	nd	nd
Bromomethane	2.2	11.0	nd	nd	nd	nd
Acetone	8.5	42.5	nd	nd	nd	nd
Methyl ethyl ketone (MEK)	3.4	17.0	nd	nd	nd	nd
tert-Amyl methyl ether (TAME)	2.7	13.5	nd	nd	nd	nd
tert-Butyl alcohol (TBA)	21.6	108.0	nd	nd	nd	nd
Benzene	2.6	13.0	nd	nd	nd	nd
Butylbenzene	2.5	12.5	nd	nd	nd	nd
Bromobenzene	2.9	14.5	nd	nd	nd	nd
sec-Butylbenzene	3.4	17.0	nd	nd	nd	nd
Bromochloromethane	2.4	12.0	nd	nd	nd	nd
tert-Butylbenzene	3.1	15.5	nd	nd	nd	nd
Bromodichloromethane	3.9	19.5	nd	nd	nd	nd
tert-Butyl ethyl ether (ETBE)	2.7	13.5	nd	nd	nd	nd
Bromoform	3.6	18.0	nd	nd	nd	nd
Carbon disulfide	5.3	26.5	nd	nd	nd	nd
Bromomethane	2.2	11.0	nd	nd	nd	nd
Carbon Tetrachloride	3.3	16.5	nd	nd	nd	nd
Chlorobenzene	2.4	12.0	nd	nd	nd	nd
Methyl ethyl ketone (MEK)	3.4	17.0	nd	nd	nd	nd
Chloroethane	4.8	24.0	nd	nd	nd	nd
tert-Butyl alcohol (TBA)	21.6	108.0	nd	nd	nd	nd
2-Chloroethyl vinyl ether	2	10.0	nd	nd	nd	nd
Butylbenzene	2.5	12.5	nd	nd	nd	nd
Chloroform	2.3	11.5	nd	nd	nd	nd
sec-Butylbenzene	3.4	17.0	nd	nd	nd	nd
Chloromethane	4.7	23.5	nd	nd	nd	nd
tert-Butylbenzene	3.1	15.5	nd	nd	nd	nd
2-Chlorotoluene	4.7	23.5	nd	nd	nd	nd
tert-Butyl ethyl ether (ETBE)	2.7	13.5	nd	nd	nd	nd
4-Chlorotoluene	4.3	21.5	nd	nd	nd	nd
Carbon disulfide	5.3	26.5	nd	nd	nd	nd
Carbon Tetrachloride	3.3	16.5	nd	nd	nd	nd
Dibromochloromethane	4.2	21.0	nd	nd	nd	nd
1,2-Dibromo-3-chloropropane	3.1	15.5	nd	nd	nd	nd
Chlorobenzene	2.4	12.0	nd	nd	nd	nd
1,2-Dibromoethane	3.6	18.0	nd	nd	nd	nd
Chloroethane	4.8	24.0	nd	nd	nd	nd

400025
COC 08-0683

ENVIRONMENTAL LABORATORY DATA REPORT

Report of GC/MS Analysis for Purgeable Volatile Organics
EPA SW-846 Method 8260

PROJECT: CHATSWORTH RESERVOIR Sample Matrix: Soil

Chemistry Log No.	Date Sampled	Date Received	Date Analyzed	Sample Description
Blank	3/10/2008	3/11/2008	3/11/2008	Method Blank
Blank	3/10/2008	3/11/2008	3/12/2008	Method Blank
Blank	3/10/2008	3/11/2008	3/12/2008	Method Blank
Blank	3/10/2008	3/11/2008	3/13/2008	Method Blank

Compounds	MDL ug/kg	PQL ug/kg	Blank Amount ug/kg	Blank Amount ug/kg	Blank Amount ug/kg	Blank Amount ug/kg
2-Chloroethyl vinyl ether	2	10.0	nd	nd	nd	nd
Dibromomethane	3.8	19.0	nd	nd	nd	nd
1,2-Dichlorobenzene	4.7	23.5	nd	nd	nd	nd
Chloroform	2.3	11.5	nd	nd	nd	nd
1,3-Dichlorobenzene	4.9	24.5	nd	nd	nd	nd
Chloromethane	4.7	23.5	nd	nd	nd	nd
1,4-Dichlorobenzene	5	25.0	nd	nd	nd	nd
2-Chlorotoluene	4.7	23.5	nd	nd	nd	nd
4-Chlorotoluene	4.3	21.5	nd	nd	nd	nd
Dichlorodifluoromethane	5.2	26.0	nd	nd	nd	nd
1,1-Dichloroethane	2.4	12.0	nd	nd	nd	nd
Dibromochloromethane	4.2	21.0	nd	nd	nd	nd
1,2-Dibromo-3-chloropropane	3.1	15.5	nd	nd	nd	nd
1,2-Dichloroethane	2.8	14.0	nd	nd	nd	nd
1,1-Dichloroethene	4.5	22.5	nd	nd	nd	nd
1,2-Dibromoethane	3.6	18.0	nd	nd	nd	nd
cis-1,2-Dichloroethene	4.7	23.5	nd	nd	nd	nd
Dibromomethane	3.8	19.0	nd	nd	nd	nd
1,2-Dichlorobenzene	4.7	23.5	nd	nd	nd	nd
trans-1,2-Dichloroethene	2.3	11.5	nd	nd	nd	nd
1,2-Dichloropropane	2.7	13.5	nd	nd	nd	nd
1,3-Dichlorobenzene	4.9	24.5	nd	nd	nd	nd
1,3-Dichloropropane	3.2	16.0	nd	nd	nd	nd
1,4-Dichlorobenzene	5	25.0	nd	nd	nd	nd
2,2-Dichloropropane	2.9	14.5	nd	nd	nd	nd
Dichlorodifluoromethane	5.2	26.0	nd	nd	nd	nd
1,1-Dichloroethane	2.4	12.0	nd	nd	nd	nd
1,1-Dichloropropene	2.1	10.5	nd	nd	nd	nd

MDL - Method Detection Limit
PQL - Practical Quantitation Limit (5xMDL)
J - Concentration above MDL below PQL
nd - Not Detected; below detection limit

Quality Control Data

Surrogates 30 (ug/L each)	QC Limits % Recovery Lower-Upper				
SURR: Bromofluorobenzene	74 - 121	93.3%	93.3%	89.3%	89.3%
SURR: Dibromofluoromethane	80 - 120	89.0%	89.0%	87.3%	87.3%
SURR: Toluene-d8	81 - 117	97.0%	97.0%	97.3%	97.3%

Comment:

Analyst: Bryan Tiu

Reviewed by: Rose Gentalian

QC SUMMARIES

400026

Project No: **CHATSWORTH RESERVOIR**

(RWQCB LabForm10A;Ver12/94)

Quality Assurance Report

Matrix Spike (MS)/Matrix Spike Duplicate (MSD)

DATE PERFORMED: 3/11/08 ANALYTICAL METHOD: USEPA 8260

BATCH #: LI03306 LI03306 LI03306 LI03307 LI03308 LI03309 LI03310 LI03311 LI03312 LI03313 LI03314 LI03315

LAB SAMPLE I.D.: LI03306 UNIT: ug/kg

ANALYTE	SAMPLE RESULT	SPIKE CONC	MS	%MS	SPIKE CONC (DUP)	MSD	%MSD	RPD	MS/MSD LIMIT	RPD LIMIT
1,1-Dichloroethene	ND	30.0	19.5	65.0	30.0	19.1	63.7	2.0 %	59-172	22%
Benzene	ND	30.0	24.5	81.7	30.0	24.3	81.0	0.86 %	66-142	21%
Trichloroethylene	ND	30.0	25.8	86.0	30.0	25.6	85.3	0.82 %	62-137	24%
Toluene	ND	30.0	31.6	105	30.0	31.8	106	0.95 %	59-139	21%
Chlorobenzene	ND	30.0	34.7	116	30.0	34.5	115	0.87 %	60-133	21%

Laboratory Quality Control Check Sample (LCS)

DATE PERFORMED: 3/11/08 ANALYTICAL METHOD: USEPA 8260

SUPPLY SOURCE: LAB LCS I.D.: Q7224

LOT NUMBER: UNIT: ug/kg

DATE OF SOURCE:

ANALYTE	LCS RESULT ug/kg	TRUE VALUE ug/kg	% RECOVERY	Advisory Range%
1,1,2-Trichloroethane	30.3	30	101%	70 - 130
1,2-Dichloroethane	27.3	30	91.0%	70 - 130
1,4-Dichlorobenzene	33.5	30	112%	70 - 130
Benzene	22.5	30	75.0%	70 - 130
Bromoform	27.7	30	92.3%	70 - 130
Carbon Tetrachloride	21.9	30	73.0%	70 - 130
Tetrachloroethylene	27.3	30	91.0%	70 - 130
Trichloroethylene	24.3	30	81.0%	70 - 130

Analyst: B. Tiu

Reviewed by: R. Gentallen

400027

Project No: **CHATSWORTH RESERVOIR**

(RWQCB LabForm10A;Ver12/94)

Quality Assurance Report

Matrix Spike (MS)/Matrix Spike Duplicate (MSD)

DATE PERFORMED: 3/12/08
BATCH #: $VOC-S-363 LI03316
LAB SAMPLE I.D.: LI03316

ANALYTICAL METHOD: USEPA 8260
UNIT: ug/kg

ANALYTE	SAMPLE RESULT	SPIKE CONC	MS	%MS	SPIKE CONC (DUP)	MSD	%MSD	RPD	MS/MSD LIMIT	RPD LIMIT
1,1-Dichloroethene	ND	30.0	20.8	69.3	30.0	19.9	66.3	4.4%	59-172	14%
Benzene	ND	30.0	24.6	82.0	30.0	23.4	78.0	5.0%	66-142	11%
Trichloroethylene	ND	30.0	27.0	90.0	30.0	25.8	86.0	4.5%	62-137	14%
Toluene	ND	30.0	33.1	110	30.0	32.1	107	2.8%	59-139	13%
Chlorobenzene	ND	30.0	35.8	119	30.0	34.7	116	2.6%	60-133	13%

Laboratory Quality Control Check Sample (LCS)

DATE PERFORMED: 3/12/08
SUPPLY SOURCE:
LOT NUMBER:
DATE OF SOURCE:

ANALYTICAL METHOD: USEPA 8260
LAB LCS I.D.: Q7224
UNIT: ug/kg

ANALYTE	LCS RESULTS ug/kg	TRUE VALUE ug/kg	% RECOVERY	Advisory Range
1,1,2-Trichloroethylene	30.3	30	101%	70 - 130
1,2-Dichloroethane	27.3	30	91.0%	70 - 130
1,4-Dichlorobenzene	33.5	30	112%	70 - 130
Benzene	22.5	30	75.0%	70 - 130
Bromoform	27.7	30	92.3%	70 - 130
Carbon Tetrachloride	21.9	30	73.0%	70 - 130
Tetrachloroethylene	27.3	30	91.0%	70 - 130
Trichloroethylene	24.3	30	81.0%	70 - 130

Analyst: B. Tiu

Reviewed by: R. Gentallen

400028

Project No: **CHATSWORTH RESERVOIR**

(RWQCB LabForm10A;Ver12/94)

Quality Assurance Report

Matrix Spike (MS)/Matrix Spike Duplicate (MSD)

DATE PERFORMED: 3/12/08
BATCH #: $VOC-S-363 LI03326
LAB SAMPLE I.D.: LI03326

ANALYTICAL METHOD: USEPA 8260
UNIT: ug/kg

ANALYTE	SAMPLE RESULT	SPIKE CONC	MS	%MS	SPIKE CONC (DUP)	MSD	%MSD	RPD	MS/MSD LIMIT	RPD LIMIT
1,1-Dichloroethene	ND	30.0	16.7	55.7	30.0	20.8	69.3	21.9%	59 -172	14%
Benzene	ND	30.0	21.1	70.3	30.0	25.5	85.0	18.9%	66-142	11%
Trichloroethylene	ND	30.0	18.7	62.3	30.0	24.0	80.0	24.8%	62-137	14%
Toluene	ND	30.0	23.0	76.7	30.0	29.8	99.3	25.8%	59-139	13%
Chlorobenzene	ND	30.0	25.0	83.3	30.0	31.8	106	23.9%	60-133	13%

Laboratory Quality Control Check Sample (LCS)

DATE PERFORMED: 3/12/08
SUPPLY SOURCE:
LOT NUMBER:
DATE OF SOURCE:

ANALYTICAL METHOD: USEPA 8260
LAB LCS I.D.: None
UNIT: ug/kg

ANALYTE	LCS RESULTS ug/kg	TRUE VALUE ug/kg	% RECOVERY	Advisory Range
1,1,2-Trichloroethylene	31.7	30	106%	70 - 130
1,2-Dichloroethane	27.7	30	92.3%	70 - 130
1,4-Dichlorobenzene	34.4	30	115%	70 - 130
Benzene	22.0	30	73.3%	70 - 130
Bromoform	25.6	30	85.3%	70 - 130
Carbon Tetrachloride	19.6	30	65.3%	70 - 130
Tetrachloroethylene	28.2	30	94.0%	70 - 130
Trichloroethylene	25.4	30	84.7%	70 - 130

Analyst: B. Tiu

Reviewed by: R. Gentallan

400029

Project No: **CHATSWORTH RESERVOIR**

(RWQCB LabForm10A;Ver12/94)

Quality Assurance Report

Matrix Spike (MS)/Matrix Spike Duplicate (MSD)

DATE PERFORMED: 3/12/08
BATCH #: $VOC-S-363 LI03336
LAB SAMPLE I.D.: LI03336

ANALYTICAL METHOD: USEPA 8260
UNIT: ug/kg

ANALYTE	SAMPLE RESULT	SPIKE CONC	MS	%MS	SPIKE CONC (DUP)	MSD	%MSD	RPD	MS/MSD LIMIT	RPD LIMIT
1,1-Dichloroethene	ND	30.0	23.5	78.3	30.0	24.2	80.7	2.9%	59 -172	14%
Benzene	ND	30.0	23.9	79.7	30.0	31	103.3	25.9%	66-142	11%
Trichloroethylene	ND	30.0	23.5	78.3	30.0	30.5	101.7	25.9%	62-137	14%
Toluene	ND	30.0	29.0	96.7	30.0	37.3	124.3	25.0%	59-139	13%
Chlorobenzene	ND	30.0	31.3	104.3	30.0	40.2	134	24.9%	60-133	13%

Laboratory Quality Control Check Sample (LCS)

DATE PERFORMED: 3/13/08
SUPPLY SOURCE:
LOT NUMBER:
DATE OF SOURCE:

ANALYTICAL METHOD: USEPA 8260
LAB LCS I.D.: None
UNIT: ug/kg

ANALYTE	LCS RESULTS ug/kg	TRUE VALUE ug/kg	% RECOVERY	Advisory Range
1,1,2-Trichloroethylene	31.4	30	105%	70 - 130
1,2-Dichloroethane	27.7	30	92.3%	70 - 130
1,4-Dichlorobenzene	33.2	30	111%	70 - 130
Benzene	20.6	30	68.7%	70 - 130
Bromoform	26.1	30	87.0%	70 - 130
Carbon Tetrachloride	18.6	30	62.0%	70 - 130
Tetrachloroethylene	25.5	30	85.0%	70 - 130
Trichloroethylene	24.1	30	80.3%	70 - 130

Analyst: B. Tiu

Reviewed by: R. Gentallan

400030

Project No: **CHATSWORTH RESERVOIR**

(RWQCB LabForm10A;Ver12/94)

Quality Assurance Report

Matrix Spike (MS)/Matrix Spike Duplicate (MSD)

DATE PERFORMED: 3/13/08
BATCH #: $VOC-S-363 LI03346
LAB SAMPLE I.D.: LI03346

ANALYTICAL METHOD: USEPA 8260
UNIT: ug/kg

ANALYTE	SAMPLE RESULT	SPIKE CONC	MS	%MS	SPIKE CONC (DUP)	MSD	%MSD	RPD	MS/MSD LIMIT	RPD LIMIT
1,1-Dichloroethene	ND	30.0	18.0	60.0	30.0	19.1	63.7	5.9%	59 -172	14%
Benzene	ND	30.0	20.7	69.0	30.0	21.9	73.0	5.6%	66-142	11%
Trichloroethylene	ND	30.0	20.3	67.7	30.0	21.3	71.0	4.8%	62-137	14%
Toluene	ND	30.0	25.4	84.7	30.0	26.7	89.0	5.0%	59-139	13%
Chlorobenzene	ND	30.0	27.4	91.3	30.0	28.7	95.7	4.6%	60-133	13%

Laboratory Quality Control Check Sample (LCS)

DATE PERFORMED: 3/13/08
SUPPLY SOURCE:
LOT NUMBER:
DATE OF SOURCE:

ANALYTICAL METHOD: USEPA 8260
LAB LCS I.D.: None
UNIT: ug/kg

ANALYTE	LCS RESULTS ug/kg	TRUE VALUE ug/kg	% RECOVERY	Advisory Range
1,1,2-Trichloroethylene	30.3	30	101%	70 - 130
1,2-Dichloroethane	27.0	30	90.0%	70 - 130
1,4-Dichlorobenzene	33.1	30	110%	70 - 130
Benzene	19.3	30	64.3%	70 - 130
Bromoform	21.1	30	70.3%	70 - 130
Carbon Tetrachloride	16.0	30	53.3%	70 - 130
Tetrachloroethylene	26.2	30	87.3%	70 - 130
Trichloroethylene	24.0	30	80.0%	70 - 130

Analyst: B. Tiu

Reviewed by: R. Gentallan

400031

Project No: **CHATSWORTH RESERVOIR**

(RWQCB LabForm10A;Ver12/94)

Quality Assurance Report

Matrix Spike (MS)/Matrix Spike Duplicate (MSD)

DATE PERFORMED: 3/17/08 ANALYTICAL METHOD: USEPA 8260

BATCH #:

LAB SAMPLE I.D.: LI03356 UNIT: ug/kg

ANALYTE	SAMPLE RESULT	SPIKE CONC	MS	%MS	SPIKE CONC (DUP)	MSD	%MSD	RPD	MS/MSD LIMIT	RPD LIMIT
1,1-Dichloroethene	ND	30	24.9	83.0	30	29.2	97.3	15.9%	59 -172	14%
Benzene	ND	30	25.5	85.0	30	31	103.3	19.5%	66-142	11%
Trichloroethylene	ND	30	33.7	112.3	30	39.7	132.3	16.3%	62-137	14%
Toluene	ND	30	32.8	109.3	30	38	126.7	14.7%	59-139	13%
Chlorobenzene	ND	30	37.2	124.0	30	43.7	145.7	16.1%	60-133	13%

Laboratory Quality Control Check Sample (LCS)

DATE PERFORMED: 3/13/08 ANALYTICAL METHOD: USEPA 8260

SUPPLY SOURCE: LAB LCS I.D.: None

LOT NUMBER: UNIT: ug/kg

DATE OF SOURCE:

ANALYTE	LCS RESULTS ug/kg	TRUE VALUE ug/kg	% RECOVERY	Advisory Range
1,1,2-Trichloroethylene	29.8	30	99.3%	70 - 130
1,2-Dichloroethane	28.5	30	95.0%	70 - 130
1,4-Dichlorobenzene	33.6	30	112%	70 - 130
Benzene	27.5	30	91.7%	70 - 130
Bromoform	34.8	30	116%	70 - 130
Carbon Tetrachloride	32.2	30	107%	70 - 130
Tetrachloroethylene	27.2	30	90.7%	70 - 130
Trichloroethylene	37.8	30	126%	70 - 130

Analyst: B. Tiu

Reviewed by: R. Gentallan

400032

Project No: **CHATSWORTH RESERVOIR**

(RWQCB LabForm10A;Ver12/94)

Quality Assurance Report

Matrix Spike (MS)/Matrix Spike Duplicate (MSD)

DATE PERFORMED: 3/18/08 ANALYTICAL METHOD: USEPA 8260
BATCH #:
LAB SAMPLE I.D.: LI03366 UNIT: ug/kg

ANALYTE	SAMPLE RESULT	SPIKE CONC	MS	%MS	SPIKE CONC (DUP)	MSD	%MSD	RPD	MS/MSD LIMIT	RPD LIMIT
1,1-Dichloroethene	ND	30	24.2	80.7	30	25.5	85.0	5.2%	59 -172	14%
Benzene	ND	30	24.6	82.0	30	26.1	87.0	5.9%	66-142	11%
Trichloroethylene	ND	30	32.4	108.0	30	34.9	116.3	7.4%	62-137	14%
Toluene	ND	30	32.7	109.0	30	34.0	113.3	3.9%	59-139	13%
Chlorobenzene	ND	30	35.2	117.3	30	37.4	124.7	6.1%	60-133	13%

Laboratory Quality Control Check Sample (LCS)

DATE PERFORMED: 3/18/08 ANALYTICAL METHOD: USEPA 8260
SUPPLY SOURCE: LAB LCS I.D.: q7224
LOT NUMBER: UNIT: ug/kg
DATE OF SOURCE:

ANALYTE	LCS RESULTS ug/kg	TRUE VALUE ug/kg	% RECOVERY	Advisory Range
1,1,2-Trichloroethylene	29.4	30	98.0%	70 - 130
1,2-Dichloroethane	28.1	30	93.7%	70 - 130
1,4-Dichlorobenzene	32.8	30	109%	70 - 130
Benzene	26.2	30	87.3%	70 - 130
Bromoform	34.0	30	113%	70 - 130
Carbon Tetrachloride	30.0	30	100%	70 - 130
Tetrachloroethylene	25.9	30	86.3%	70 - 130
Trichloroethylene	36.3	30	121%	70 - 130

Analyst: B. Tiu

Reviewed by: R. Gentallan

Attachment #5

EPA Method 8270D
Semi-Volatile Organic Compounds (SVOC)

CITY OF LOS ANGELES, DEPARTMENT OF WATER & POWER
ENVIRONMENTAL LABORATORY

Case Narrative
Semi-Volatile Organic Compounds (SVOC) by EPA Method 8270C

Client: Kelvin Lew			
Project: Chatsworth Reservoir			
COC No.:08-0683			
Data Review Criteria	**Yes**	**No**	**N/A**
Holding time			
1. Samples were extracted and anlayzed within holding time limit.	X		
Comments:			
Calibration			
1. Initial Calibration was performed at five different concentrations for PCB-1221, PCB-1232, PCB-1242, PCB-1248, PCB-1254, and PCB-1260.	X		
2. Percent Relative Stadard Deviation (% RSD) are wtihin 15%.	X		
Comments:			
Method Blank, Blank Spikes, Blank Spike Duplicate			
1. Laboratory blank soil was used as method blank.	X		
2. Blank recoveries met QC criteria.	X		
3. Blanks were free of contamination at the reporting level.	X		
Comments:			
Lab Control Samples (LCSs)			
1. LCS (certified QC soil sample) was analyzed per batch.	X		
2. Recoveries of LCSs met QC criteria.	X		
Comments:			
Surrogate Recovery			
1. Surrogate recoveries met acceptable QC criteria.	X		
Comments:			
Matrix Spike (MS) and Matrix Spike Duplicate (MSD)			
1. MS and MSD samples were analyzed per batch .	X		
2. Recoveries of MS and MSD met QC criteria.	X		
Comments:			
Sample Analysis			
1. Samples were analyzed according to the prescribed QC procedures.	X		
2. All QC criteria were met.	X		
Comments:			

N/A: Not Applicable

Sample Results

ENVIRONMENTAL LABORATORY DATA REPORT

COC 08-0683

Report of GC/MS Analysis for Semi-Volatile Organics
EPA SW-846 Method 3541/8270D

Project: Chatsworth Reservoir Sample Matrix: Soil

Chemistry Log No.	Date Sampled	Date Extracted	Date Analyzed	Sample Description
LI03306	3/10/2008	3/12/2008	3/14/2008	KA1-2'
LI03307	3/10/2008	3/12/2008	3/14/2008	KA1-5'
LI03308	3/10/2008	3/12/2008	3/14/2008	KA1-7'
LI03309	3/10/2008	3/12/2008	3/14/2008	KA1-10'
LI03310	3/10/2008	3/12/2008	3/14/2008	KA2-2'
LI03311	3/10/2008	3/12/2008	3/14/2008	KA2-5'
LI03312	3/10/2008	3/12/2008	3/14/2008	KA2-7'
LI03313	3/10/2008	3/12/2008	3/14/2008	KA2-10'

Compounds	MDL ug/kg	RL ug/kg	LI03306 ug/kg	LI03307 ug/kg	LI03308 ug/kg	LI03309 ug/kg	LI03310 ug/kg	LI03311 ug/kg	LI03312 ug/kg	LI03313 ug/kg
Acenaphthene	132	658	nd	nd	nd	nd	nd	nd	nd	nd
Acenaphthylene	149	745	nd	nd	nd	nd	nd	nd	nd	nd
Anthracene	55.4	277	nd	nd	nd	nd	nd	nd	nd	nd
Aniline	101	504	nd	nd	nd	nd	nd	nd	nd	nd
Azobezene	112	561	nd	nd	nd	nd	nd	nd	nd	nd
Benzidine*	11700	58500	nd	nd	nd	nd	nd	nd	nd	nd
Benzoic acid*	58.1	290	nd	nd	nd	nd	nd	nd	nd	nd
Benzo(a)anthracene	40.7	204	nd	nd	nd	nd	nd	nd	nd	nd
Benzo(b)flouranthene	67.6	338	nd	nd	nd	nd	nd	nd	nd	nd
Benzo(k)flouranthene	94.4	472	nd	nd	nd	nd	nd	nd	nd	nd
Benzo(g,h,i)perylene	56.8	284	nd	nd	nd	nd	nd	nd	nd	nd
Benzo(a)pyrene	136	678	nd	nd	nd	nd	nd	nd	nd	nd
Benzyl alcohol	159	796	nd	nd	nd	nd	nd	nd	nd	nd
Bis(2-chloroethoxy)methane	170	848	nd	nd	nd	nd	nd	nd	nd	nd
Bis(2-chloroethyl)ether	218	1089	nd	nd	nd	nd	nd	nd	nd	nd
Bis(2-chloroisopropyl)ether	315	1574	nd	nd	nd	nd	nd	nd	nd	nd
Bis(2-ethylhexyl)phthalate	346	1729	nd	nd	nd	nd	nd	nd	nd	nd
4-Bromophenyl-phenylether	96.0	480	nd	nd	nd	nd	nd	nd	nd	nd
Benzyl butyl phthalate	54.1	271	nd	nd	nd	nd	nd	nd	nd	nd
Carbazole	97.6	488	nd	nd	nd	nd	nd	nd	nd	nd
4-Chloroaniline	403	2017	nd	nd	nd	nd	nd	nd	nd	nd
2-Chloronaphthalene	189	946	nd	nd	nd	nd	nd	nd	nd	nd
4-Chloro-3-methylphenol	79.5	398	nd	nd	nd	nd	nd	nd	nd	nd
2-Chlorophenol	124	618	nd	nd	nd	nd	nd	nd	nd	nd
4-Chlorophenyl-phenylether	135	675	nd	nd	nd	nd	nd	nd	nd	nd
Chrysene	107	535	nd	nd	nd	nd	nd	nd	nd	nd
3,3-Dichlorobenzidine	367	1833	nd	nd	nd	nd	nd	nd	nd	nd
Dibenz(a,h)anthracene	304	1518	nd	nd	nd	nd	nd	nd	nd	nd
Dibenzofuran	149	746	nd	nd	nd	nd	nd	nd	nd	nd
Di-n-Butylphthalate	166	830	nd	nd	nd	nd	nd	nd	nd	nd
1,3-Dichlorobenzene	129	645	nd	nd	nd	nd	nd	nd	nd	nd
1,4-Dichlorobenzene	122	611	nd	nd	nd	nd	nd	nd	nd	nd
1,2-Dichlorobenzene	99.1	496	nd	nd	nd	nd	nd	nd	nd	nd
2,4-Dichlorophenol	120	598	nd	nd	nd	nd	nd	nd	nd	nd
Diethyl phthalate	75.0	375	nd	nd	nd	nd	nd	nd	nd	nd
2,4-Dimethylphenol	221	1107	nd	nd	nd	nd	nd	nd	nd	nd
Dimethyl phthalate	89.4	447	nd	nd	nd	nd	nd	nd	nd	nd
4,6-Dinitro-2-methylphenol	114	568	nd	nd	nd	nd	nd	nd	nd	nd
2,4-Dinitrophenol	83.8	419	nd	nd	nd	nd	nd	nd	nd	nd
2,4-Dinitrotoluene	77.1	385	nd	nd	nd	nd	nd	nd	nd	nd
2,6-Dinitrotoluene	85.9	429	nd	nd	nd	nd	nd	nd	nd	nd
Di-n-Octylphthalate	53.6	268	nd	nd	nd	nd	nd	nd	nd	nd
Flouranthene	46.0	230	nd	nd	nd	nd	nd	nd	nd	nd
Flourene	117	583	nd	nd	nd	nd	nd	nd	nd	nd
Hexachlorobenzene	54.2	271	nd	nd	nd	nd	nd	nd	nd	nd
Hexachlorobutadiene	114	570	nd	nd	nd	nd	nd	nd	nd	nd
Hexachlorocyclopentadiene	113	566	nd	nd	nd	nd	nd	nd	nd	nd
Hexachloroethane	136	680	nd	nd	nd	nd	nd	nd	nd	nd

500003

ENVIRONMENTAL LABORATORY DATA REPORT

COC 08-0683

Report of GC/MS Analysis for Semi-Volatile Organics
EPA SW-846 Method 3541/8270D

Project: Chatsworth Reservoir Sample Matrix: Soil

Chemistry Log No.	Date Sampled	Date Extracted	Date Analyzed	Sample Description
LI03306	3/10/2008	3/12/2008	3/14/2008	KA1-2'
LI03307	3/10/2008	3/12/2008	3/14/2008	KA1-5'
LI03308	3/10/2008	3/12/2008	3/14/2008	KA1-7'
LI03309	3/10/2008	3/12/2008	3/14/2008	KA1-10'
LI03310	3/10/2008	3/12/2008	3/14/2008	KA2-2'
LI03311	3/10/2008	3/12/2008	3/14/2008	KA2-5'
LI03312	3/10/2008	3/12/2008	3/14/2008	KA2-7'
LI03313	3/10/2008	3/12/2008	3/14/2008	KA2-10'

Compounds	MDL ug/kg	RL ug/kg	LI03306 ug/kg	LI03307 ug/kg	LI03308 ug/kg	LI03309 ug/kg	LI03310 ug/kg	LI03311 ug/kg	LI03312 ug/kg	LI03313 ug/kg
Indeno(1,2,3-cd)pyrene	306	1528	nd	nd	nd	nd	nd	nd	nd	nd
Isophorone	166	832	nd	nd	nd	nd	nd	nd	nd	nd
2-Methylnaphthalene	214	1070	nd	nd	nd	nd	nd	nd	nd	nd
2-Methylphenol	58.8	294	nd	nd	nd	nd	nd	nd	nd	nd
4-Methylphenol	59.6	298	nd	nd	nd	nd	nd	nd	nd	nd
Naphthalene	207	1034	nd	nd	nd	nd	nd	nd	nd	nd
2-Nitroaniline	138	691	nd	nd	nd	nd	nd	nd	nd	nd
3-Nitroaniline	164	822	nd	nd	nd	nd	nd	nd	nd	nd
4-Nitroaniline	67.5	338	nd	nd	nd	nd	nd	nd	nd	nd
Nitrobenzene	71.9	360	nd	nd	nd	nd	nd	nd	nd	nd
2-Nitrophenol	129	646	nd	nd	nd	nd	nd	nd	nd	nd
4-Nitrophenol	71.1	355	nd	nd	nd	nd	nd	nd	nd	nd
N-Nitrosodimethylamine	109	546	nd	nd	nd	nd	nd	nd	nd	nd
N-Nitrosodiphenylamine	16.1	80	nd	nd	nd	nd	nd	nd	nd	nd
N-Nitrosodi-n-propylamine	230	1148	nd	nd	nd	nd	nd	nd	nd	nd
Pentachlorophenol	78.4	392	nd	nd	nd	nd	nd	nd	nd	nd
Phenanthrene	43.0	215	nd	nd	nd	nd	nd	nd	nd	nd
Phenol	122	611	nd	nd	nd	nd	nd	nd	nd	nd
Pyrene	5.35	27	nd	nd	nd	nd	nd	nd	nd	nd
Pyridine*	2310	11550	nd	nd	nd	nd	nd	nd	nd	nd
1,2,4-Trichlorobenzene	96.6	483	nd	nd	nd	nd	nd	nd	nd	nd
2,4,5-Trichlorophenol	105	525	nd	nd	nd	nd	nd	nd	nd	nd
2,4,6-Trichlorophenol	70.2	351	nd	nd	nd	nd	nd	nd	nd	nd

MDL - Method Detection Limit
RL - Reporting Limit (5xMDL)
* Erratic chromatographic behavior

J - Concentration above MDL below RL
nd - Not Detected; below MDL

Quality Control Data

Surrogates 8000 ug/Kg for Surrogate	EPA Limits % Recovery Lower-Upper	% Rec	% Rec	% Rec	% Rec	% Rec	% Rec	% Rec	% Rec
SURR: Phenol-d5	24 - 113	60.6%	29.1%	26.6%	44.9%	20.8%	41.1%	28.3%	44.5%
SURR: 2-Fluorophenol	25 - 121	58.0%	34.3%	26.5%	54.4%	21.9%	35.3%	27.9%	52.1%
SURR: 2,4,6-Tribromophenol	19 - 122	76.1%	58.9%	49.4%	51.8%	62.5%	77.1%	57.0%	52.6%
SURR: 2-Fluorobiphenyl	30 - 115	70.5%	38.0%	38.9%	55.8%	32.8%	53.9%	32.0%	55.8%
SURR: Nitrobenzene-d5	23 - 120	58.1%	40.9%	37.5%	61.0%	30.8%	37.6%	36.1%	61.9%
SURR: p-Terphenyl-d14	18 - 137	88.3%	88.5%	74.6%	81.4%	89.8%	81.1%	80.3%	80.4%

Analyst: Jong Yi

Reviewed by: Rose Gentallan 4/14/08

ENVIRONMENTAL LABORATORY DATA REPORT

COC 08-0683

500004

Report of GC/MS Analysis for Semi-Volatile Organics
EPA SW-846 Method 3541/8270D

Project: Chatsworth Reservoir Sample Matrix: Soil

Chemistry Log No.	Date Sampled	Date Extracted	Date Analyzed	Sample Description
LI03314	3/10/2008	3/12/2008	3/14/2008	KA3-2'
LI03315	3/10/2008	3/12/2008	3/14/2008	KA3-5'
LI03316	3/10/2008	3/12/2008	3/14/2008	KA3-7'
LI03317	3/10/2008	3/12/2008	3/14/2008	KA3-10'
LI03318	3/10/2008	3/12/2008	3/14/2008	KA4-2'
LI03319	3/10/2008	3/12/2008	3/14/2008	KA4-5'
LI03320	3/10/2008	3/12/2008	3/14/2008	KA4-7'
LI03321	3/10/2008	3/12/2008	3/14/2008	KA4-10'

Compounds	MDL ug/kg	RL ug/kg	LI03314 ug/kg	LI03315 ug/kg	LI03316 ug/kg	LI03317 ug/kg	LI03318 ug/kg	LI03319 ug/kg	LI03320 ug/kg	LI03321 ug/kg
Acenaphthene	132	658	nd	nd	nd	nd	nd	nd	nd	nd
Acenaphthylene	149	745	nd	nd	nd	nd	nd	nd	nd	nd
Anthracene	55.4	277	nd	nd	nd	nd	nd	nd	nd	nd
Aniline	101	504	nd	nd	nd	nd	nd	nd	nd	nd
Azobezene	112	561	nd	nd	nd	nd	nd	nd	nd	nd
Benzidine*	11700	58500	nd	nd	nd	nd	nd	nd	nd	nd
Benzoic acid*	58.1	290	nd	nd	nd	nd	nd	nd	nd	nd
Benzo(a)anthracene	40.7	204	nd	nd	nd	nd	nd	nd	nd	nd
Benzo(b)flouranthene	67.6	338	nd	nd	nd	nd	nd	nd	nd	nd
Benzo(k)flouranthene	94.4	472	nd	nd	nd	nd	nd	nd	nd	nd
Benzo(g,h,i)perylene	56.8	284	nd	nd	nd	nd	nd	nd	nd	nd
Benzo(a)pyrene	136	678	nd	nd	nd	nd	nd	nd	nd	nd
Benzyl alcohol	159	796	nd	nd	nd	nd	nd	nd	nd	nd
Bis(2-chloroethoxy)methane	170	848	nd	nd	nd	nd	nd	nd	nd	nd
Bis(2-chloroethyl)ether	218	1089	nd	nd	nd	nd	nd	nd	nd	nd
Bis(2-chloroisopropyl)ether	315	1574	nd	nd	nd	nd	nd	nd	nd	nd
Bis(2-ethylhexyl)phthalate	346	1729	nd	nd	nd	nd	nd	nd	nd	nd
4-Bromophenyl-phenylether	96.0	480	nd	nd	nd	nd	nd	nd	nd	nd
Benzyl butyl phthalate	54.1	271	nd	nd	nd	nd	nd	nd	nd	nd
Carbazole	97.6	488	nd	nd	nd	nd	nd	nd	nd	nd
4-Chloroaniline	403	2017	nd	nd	nd	nd	nd	nd	nd	nd
2-Chloronaphthalene	189	946	nd	nd	nd	nd	nd	nd	nd	nd
4-Chloro-3-methylphenol	79.5	398	nd	nd	nd	nd	nd	nd	nd	nd
2-Chlorophenol	124	618	nd	nd	nd	nd	nd	nd	nd	nd
4-Chlorophenyl-phenylether	135	675	nd	nd	nd	nd	nd	nd	nd	nd
Chrysene	107	535	nd	nd	nd	nd	nd	nd	nd	nd
3,3-Dichlorobenzidine	367	1833	nd	nd	nd	nd	nd	nd	nd	nd
Dibenz(a,h)anthracene	304	1518	nd	nd	nd	nd	nd	nd	nd	nd
Dibenzofuran	149	746	nd	nd	nd	nd	nd	nd	nd	nd
Di-n-Butylphthalate	166	830	nd	nd	nd	nd	nd	nd	nd	nd
1,3-Dichlorobenzene	129	645	nd	nd	nd	nd	nd	nd	nd	nd
1,4-Dichlorobenzene	122	611	nd	nd	nd	nd	nd	nd	nd	nd
1,2-Dichlorobenzene	99.1	496	nd	nd	nd	nd	nd	nd	nd	nd
2,4-Dichlorophenol	120	598	nd	nd	nd	nd	nd	nd	nd	nd
Diethyl phthalate	75.0	375	nd	nd	nd	nd	nd	nd	nd	nd
2,4-Dimethylphenol	221	1107	nd	nd	nd	nd	nd	nd	nd	nd
Dimethyl phthalate	89.4	447	nd	nd	nd	nd	nd	nd	nd	nd
4,6-Dinitro-2-methylphenol	114	568	nd	nd	nd	nd	nd	nd	nd	nd
2,4-Dinitrophenol	83.8	419	nd	nd	nd	nd	nd	nd	nd	nd
2,4-Dinitrotoluene	77.1	385	nd	nd	nd	nd	nd	nd	nd	nd
2,6-Dinitrotoluene	85.9	429	nd	nd	nd	nd	nd	nd	nd	nd
Di-n-Octylphthalate	53.6	268	nd	nd	nd	nd	nd	nd	nd	nd
Flouranthene	46.0	230	nd	nd	nd	nd	nd	nd	nd	nd
Flourene	117	583	nd	nd	nd	nd	nd	nd	nd	nd
Hexachlorobenzene	54.2	271	nd	nd	nd	nd	nd	nd	nd	nd
Hexachlorobutadiene	114	570	nd	nd	nd	nd	nd	nd	nd	nd
Hexachlorocyclopentadiene	113	566	nd	nd	nd	nd	nd	nd	nd	nd
Hexachloroethane	136	680	nd	nd	nd	nd	nd	nd	nd	nd

ENVIRONMENTAL LABORATORY DATA REPORT

COC 08-0683

500005

Report of GC/MS Analysis for Semi-Volatile Organics
EPA SW-846 Method 3541/8270D

Project: Chatsworth Reservoir Sample Matrix: Soil

Chemistry Log No.	Date Sampled	Date Extracted	Date Analyzed	Sample Description
LI03314	3/10/2008	3/12/2008	3/14/2008	KA3-2'
LI03315	3/10/2008	3/12/2008	3/14/2008	KA3-5'
LI03316	3/10/2008	3/12/2008	3/14/2008	KA3-7'
LI03317	3/10/2008	3/12/2008	3/14/2008	KA3-10'
LI03318	3/10/2008	3/12/2008	3/14/2008	KA4-2'
LI03319	3/10/2008	3/12/2008	3/14/2008	KA4-5'
LI03320	3/10/2008	3/12/2008	3/14/2008	KA4-7'
LI03321	3/10/2008	3/12/2008	3/14/2008	KA4-10'

Compounds	MDL ug/kg	RL ug/kg	LI03314 ug/kg	LI03315 ug/kg	LI03316 ug/kg	LI03317 ug/kg	LI03318 ug/kg	LI03319 ug/kg	LI03320 ug/kg	LI03321 ug/kg
Indeno(1,2,3-cd)pyrene	306	1528	nd	nd	nd	nd	nd	nd	nd	nd
Isophorone	166	832	nd	nd	nd	nd	nd	nd	nd	nd
2-Methylnaphthalene	214	1070	nd	nd	nd	nd	nd	nd	nd	nd
2-Methylphenol	58.8	294	nd	nd	nd	nd	nd	nd	nd	nd
4-Methylphenol	59.6	298	nd	nd	nd	nd	nd	nd	nd	nd
Naphthalene	207	1034	nd	nd	nd	nd	nd	nd	nd	nd
2-Nitroaniline	138	691	nd	nd	nd	nd	nd	nd	nd	nd
3-Nitroaniline	164	822	nd	nd	nd	nd	nd	nd	nd	nd
4-Nitroaniline	67.5	338	nd	nd	nd	nd	nd	nd	nd	nd
Nitrobenzene	71.9	360	nd	nd	nd	nd	nd	nd	nd	nd
2-Nitrophenol	129	646	nd	nd	nd	nd	nd	nd	nd	nd
4-Nitrophenol	71.1	355	nd	nd	nd	nd	nd	nd	nd	nd
N-Nitrosodimethylamine	109	546	nd	nd	nd	nd	nd	nd	nd	nd
N-Nitrosodiphenylamine	16.1	80	nd	nd	nd	nd	nd	nd	nd	nd
N-Nitrosodi-n-propylamine	230	1148	nd	nd	nd	nd	nd	nd	nd	nd
Pentachlorophenol	78.4	392	nd	nd	nd	nd	nd	nd	nd	nd
Phenanthrene	43.0	215	nd	nd	nd	nd	nd	nd	nd	nd
Phenol	122	611	nd	nd	nd	nd	nd	nd	nd	nd
Pyrene	5.35	27	nd	nd	nd	nd	nd	nd	nd	nd
Pyridine*	2310	11550	nd	nd	nd	nd	nd	nd	nd	nd
1,2,4-Trichlorobenzene	96.6	483	nd	nd	nd	nd	nd	nd	nd	nd
2,4,5-Trichlorophenol	105	525	nd	nd	nd	nd	nd	nd	nd	nd
2,4,6-Trichlorophenol	70.2	351	nd	nd	nd	nd	nd	nd	nd	nd

MDL - Method Detection Limit
RL - Reporting Limit (5xMDL)
* Erratic chromatographic behavior

J - Concentration above MDL below RL
nd - Not Detected; below MDL

Quality Control Data

Surrogates 8000 ug/Kg for Surrogate	EPA Limits % Recovery Lower-Upper	% Rec	% Rec	% Rec	% Rec	% Rec	% Rec	% Rec	% Rec
SURR: Phenol-d5	24 - 113	37.8%	38.6%	56.5%	23.9%	49.6%	38.9%	32.4%	31.6%
SURR: 2-Fluorophenol	25 - 121	34.0%	47.4%	72.9%	26.5%	54.8%	44.5%	40.8%	38.4%
SURR: 2,4,6-Tribromophenol	19 - 122	75.4%	53.3%	45.1%	41.5%	69.8%	57.3%	61.4%	43.0%
SURR: 2-Fluorobiphenyl	30 - 115	52.3%	44.9%	27.4%	27.5%	63.3%	45.3%	41.0%	34.5%
SURR: Nitrobenzene-d5	23 - 120	38.5%	53.0%	74.3%	33.5%	59.6%	49.8%	48.4%	41.3%
SURR: p-Terphenyl-d14	18 - 137	84.6%	78.4%	83.3%	82.0%	76.3%	83.1%	89.1%	76.9%

Analyst: Jong Yi

Reviewed by: Rose Gentallan 4/14/08

ENVIRONMENTAL LABORATORY DATA REPORT

COC 08-0683

Report of GC/MS Analysis for Semi-Volatile Organics
EPA SW-846 Method 3541/8270D

Project: Chatsworth Reservoir Sample Matrix: Soil

Chemistry Log No.	Date Sampled	Date Extracted	Date Analyzed	Sample Description
LI03322	3/10/2008	3/12/2008	3/14/2008	KA5-2'
LI03323	3/10/2008	3/12/2008	3/14/2008	KA5-5'
LI03324	3/10/2008	3/14/2008	3/18/2008	KA5-7'
LI03325	3/10/2008	3/14/2008	3/18/2008	KA5-10'
LI03326	3/10/2008	3/14/2008	3/18/2008	KA6-2'
LI03327	3/10/2008	3/14/2008	3/18/2008	KA6-5'
LI03328	3/10/2008	3/14/2008	3/18/2008	KA6-7'
LI03329	3/10/2008	3/14/2008	3/18/2008	KA6-10'

Compounds	MDL ug/kg	RL ug/kg	LI03322 ug/kg	LI03323 ug/kg	LI03324 ug/kg	LI03325 ug/kg	LI03326 ug/kg	LI03327 ug/kg	LI03328 ug/kg	LI03329 ug/kg
Acenaphthene	132	658	nd	nd	nd	nd	nd	nd	nd	nd
Acenaphthylene	149	745	nd	nd	nd	nd	nd	nd	nd	nd
Anthracene	55.4	277	nd	nd	nd	nd	nd	nd	nd	nd
Aniline	101	504	nd	nd	nd	nd	nd	nd	nd	nd
Azobezene	112	561	nd	nd	nd	nd	nd	nd	nd	nd
Benzidine*	11700	58500	nd	nd	nd	nd	nd	nd	nd	nd
Benzoic acid*	58.1	290	nd	nd	nd	nd	nd	nd	nd	nd
Benzo(a)anthracene	40.7	204	nd	nd	nd	nd	nd	nd	nd	nd
Benzo(b)flouranthene	67.6	338	nd	nd	nd	nd	nd	nd	nd	nd
Benzo(k)flouranthene	94.4	472	nd	nd	nd	nd	nd	nd	nd	nd
Benzo(g,h,i)perylene	56.8	284	nd	nd	nd	nd	nd	nd	nd	nd
Benzo(a)pyrene	136	678	nd	nd	nd	nd	nd	nd	nd	nd
Benzyl alcohol	159	796	nd	nd	nd	nd	nd	nd	nd	nd
Bis(2-chloroethoxy)methane	170	848	nd	nd	nd	nd	nd	nd	nd	nd
Bis(2-chloroethyl)ether	218	1089	nd	nd	nd	nd	nd	nd	nd	nd
Bis(2-chloroisopropyl)ether	315	1574	nd	nd	nd	nd	nd	nd	nd	nd
Bis(2-ethylhexyl)phthalate	346	1729	nd	nd	nd	**1660J**	**616J**	nd	**528J**	**400J**
4-Bromophenyl-phenylether	96.0	480	nd	nd	nd	nd	nd	nd	nd	nd
Benzyl butyl phthalate	54.1	271	nd	nd	nd	nd	nd	nd	nd	nd
Carbazole	97.6	488	nd	nd	nd	nd	nd	nd	nd	nd
4-Chloroaniline	403	2017	nd	nd	nd	nd	nd	nd	nd	nd
2-Chloronaphthalene	189	946	nd	nd	nd	nd	nd	nd	nd	nd
4-Chloro-3-methylphenol	79.5	398	nd	nd	nd	nd	nd	nd	nd	nd
2-Chlorophenol	124	618	nd	nd	nd	nd	nd	nd	nd	nd
4-Chlorophenyl-phenylether	135	675	nd	nd	nd	nd	nd	nd	nd	nd
Chrysene	107	535	nd	nd	nd	nd	nd	nd	nd	nd
3,3-Dichlorobenzidine	367	1833	nd	nd	nd	nd	nd	nd	nd	nd
Dibenz(a,h)anthracene	304	1518	nd	nd	nd	nd	nd	nd	nd	nd
Dibenzofuran	149	746	nd	nd	nd	nd	nd	nd	nd	nd
Di-n-Butylphthalate	166	830	nd	nd	**781J**	nd	nd	nd	nd	nd
1,3-Dichlorobenzene	129	645	nd	nd	nd	nd	nd	nd	nd	nd
1,4-Dichlorobenzene	122	611	nd	nd	nd	nd	nd	nd	nd	nd
1,2-Dichlorobenzene	99.1	496	nd	nd	nd	nd	nd	nd	nd	nd
2,4-Dichlorophenol	120	598	nd	nd	nd	nd	nd	nd	nd	nd
Diethyl phthalate	75.0	375	nd	nd	nd	nd	nd	nd	nd	nd
2,4-Dimethylphenol	221	1107	nd	nd	nd	nd	nd	nd	nd	nd
Dimethyl phthalate	89.4	447	nd	nd	nd	nd	nd	nd	nd	nd
4,6-Dinitro-2-methylphenol	114	568	nd	nd	nd	nd	nd	nd	nd	nd
2,4-Dinitrophenol	83.8	419	nd	nd	nd	nd	nd	nd	nd	nd
2,4-Dinitrotoluene	77.1	385	nd	nd	nd	nd	nd	nd	nd	nd
2,6-Dinitrotoluene	85.9	429	nd	nd	nd	nd	nd	nd	nd	nd
Di-n-Octylphthalate	53.6	268	nd	nd	nd	nd	nd	nd	nd	nd
Flouranthene	46.0	230	nd	nd	nd	nd	nd	nd	nd	nd
Flourene	117	583	nd	nd	nd	nd	nd	nd	nd	nd
Hexachlorobenzene	54.2	271	nd	nd	nd	nd	nd	nd	nd	nd
Hexachlorobutadiene	114	570	nd	nd	nd	nd	nd	nd	nd	nd
Hexachlorocyclopentadiene	113	566	nd	nd	nd	nd	nd	nd	nd	nd
Hexachloroethane	136	680	nd	nd	nd	nd	nd	nd	nd	nd

ENVIRONMENTAL LABORATORY DATA REPORT

COC 08-0683

Report of GC/MS Analysis for Semi-Volatile Organics
EPA SW-846 Method 3541/8270D

Project: Chatsworth Reservoir Sample Matrix: Soil

Chemistry Log No.	Date Sampled	Date Extracted	Date Analyzed	Sample Description
LI03322	3/10/2008	3/12/2008	3/14/2008	KA5-2'
LI03323	3/10/2008	3/12/2008	3/14/2008	KA5-5'
LI03324	3/10/2008	3/14/2008	3/18/2008	KA5-7'
LI03325	3/10/2008	3/14/2008	3/18/2008	KA5-10'
LI03326	3/10/2008	3/14/2008	3/18/2008	KA6-2'
LI03327	3/10/2008	3/14/2008	3/18/2008	KA6-5'
LI03328	3/10/2008	3/14/2008	3/18/2008	KA6-7'
LI03329	3/10/2008	3/14/2008	3/18/2008	KA6-10'

Compounds	MDL ug/kg	RL ug/kg	LI03322 ug/kg	LI03323 ug/kg	LI03324 ug/kg	LI03325 ug/kg	LI03326 ug/kg	LI03327 ug/kg	LI03328 ug/kg	LI03329 ug/kg
Indeno(1,2,3-cd)pyrene	306	1528	nd	nd	nd	nd	nd	nd	nd	nd
Isophorone	166	832	nd	nd	nd	nd	nd	nd	nd	nd
2-Methylnaphthalene	214	1070	nd	nd	nd	nd	nd	nd	nd	nd
2-Methylphenol	58.8	294	nd	nd	nd	nd	nd	nd	nd	nd
4-Methylphenol	59.6	298	nd	nd	nd	nd	nd	nd	nd	nd
Naphthalene	207	1034	nd	nd	nd	nd	nd	nd	nd	nd
2-Nitroaniline	138	691	nd	nd	nd	nd	nd	nd	nd	nd
3-Nitroaniline	164	822	nd	nd	nd	nd	nd	nd	nd	nd
4-Nitroaniline	67.5	338	nd	nd	nd	nd	nd	nd	nd	nd
Nitrobenzene	71.9	360	nd	nd	nd	nd	nd	nd	nd	nd
2-Nitrophenol	129	646	nd	nd	nd	nd	nd	nd	nd	nd
4-Nitrophenol	71.1	355	nd	nd	nd	nd	nd	nd	nd	nd
N-Nitrosodimethylamine	109	546	nd	nd	nd	nd	nd	nd	nd	nd
N-Nitrosodiphenylamine	16.1	80	nd	nd	nd	nd	nd	nd	nd	nd
N-Nitrosodi-n-propylamine	230	1148	nd	nd	nd	nd	nd	nd	nd	nd
Pentachlorophenol	78.4	392	nd	nd	nd	nd	nd	nd	nd	nd
Phenanthrene	43.0	215	nd	nd	nd	nd	nd	nd	nd	nd
Phenol	122	611	nd	nd	nd	nd	nd	nd	nd	nd
Pyrene	5.35	27	nd	nd	nd	nd	nd	nd	nd	nd
Pyridine*	2310	11550	nd	nd	nd	nd	nd	nd	nd	nd
1,2,4-Trichlorobenzene	96.6	483	nd	nd	nd	nd	nd	nd	nd	nd
2,4,5-Trichlorophenol	105	525	nd	nd	nd	nd	nd	nd	nd	nd
2,4,6-Trichlorophenol	70.2	351	nd	nd	nd	nd	nd	nd	nd	nd

MDL - Method Detection Limit
RL - Reporting Limit (5xMDL)
J - Concentration above MDL below RL
nd - Not Detected; below MDL
* Erratic chromatographic behavior
Note: Low levels of phthalates indicate possible contamination from cellulose thimbles during extraction.

Quality Control Data

Surrogates 8000 ug/Kg for Surrogate	EPA Limits % Recovery Lower-Upper	% Rec	% Rec	% Rec	% Rec	% Rec	% Rec	% Rec	% Rec
SURR: Phenol-d5	24 - 113	42.0%	33.0%	22.6%	34.0%	42.4%	51.8%	55.3%	53.3%
SURR: 2-Fluorophenol	25 - 121	44.8%	31.3%	24.8%	37.9%	52.3%	57.0%	58.9%	65.5%
SURR: 2,4,6-Tribromophenol	19 - 122	75.4%	74.6%	55.6%	54.6%	62.3%	66.5%	79.9%	50.8%
SURR: 2-Fluorobiphenyl	30 - 115	60.6%	43.5%	30.6%	45.9%	54.0%	66.6%	76.1%	64.9%
SURR: Nitrobenzene-d5	23 - 120	49.4%	36.0%	34.0%	48.9%	59.8%	71.6%	65.1%	76.8%
SURR: p-Terphenyl-d14	18 - 137	83.5%	86.8%	88.5%	91.4%	94.9%	98.8%	89.9%	88.3%

Analyst: Jong Yi

Reviewed by: Rose Gentallan 4/4/08

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ENVIRONMENTAL LABORATORY DATA REPORT

COC 08-0683

Report of GC/MS Analysis for Semi-Volatile Organics
EPA SW-846 Method 3541/8270D

Project: Chatsworth Reservoir Sample Matrix: Soil

Chemistry Log No.	Date Sampled	Date Extracted	Date Analyzed	Sample Description
LI03330	3/10/2008	3/14/2008	3/18/2008	KA7-2'
LI03331	3/10/2008	3/14/2008	3/18/2008	KA7-5'
LI03332	3/10/2008	3/14/2008	3/18/2008	KA7-7'
LI03333	3/10/2008	3/14/2008	3/18/2008	KA7-10'
LI03334	3/10/2008	3/14/2008	3/18/2008	KA8-2'
LI03335	3/10/2008	3/14/2008	3/18/2008	KA8-5'
LI03336	3/10/2008	3/14/2008	3/18/2008	KA8-7'
LI03337	3/10/2008	3/14/2008	3/18/2008	KA8-10'

Compounds	MDL ug/kg	RL ug/kg	LI03330 ug/kg	LI03331 ug/kg	LI03332 ug/kg	LI03333 ug/kg	LI03334 ug/kg	LI03335 ug/kg	LI03336 ug/kg	LI03337 ug/kg
Acenaphthene	132	658	nd	nd	nd	nd	nd	nd	nd	nd
Acenaphthylene	149	745	nd	nd	nd	nd	nd	nd	nd	nd
Anthracene	55.4	277	nd	nd	nd	nd	nd	nd	nd	nd
Aniline	101	504	nd	nd	nd	nd	nd	nd	nd	nd
Azobezene	112	561	nd	nd	nd	nd	nd	nd	nd	nd
Benzidine*	11700	58500	nd	nd	nd	nd	nd	nd	nd	nd
Benzoic acid*	58.1	290	nd	nd	nd	nd	nd	nd	nd	nd
Benzo(a)anthracene	40.7	204	nd	nd	nd	nd	nd	nd	nd	nd
Benzo(b)flouranthene	67.6	338	nd	nd	nd	nd	nd	nd	nd	nd
Benzo(k)flouranthene	94.4	472	nd	nd	nd	nd	nd	nd	nd	nd
Benzo(g,h,i)perylene	56.8	284	nd	nd	nd	nd	nd	nd	nd	nd
Benzo(a)pyrene	136	678	nd	nd	nd	nd	nd	nd	nd	nd
Benzyl alcohol	159	796	nd	nd	nd	nd	nd	nd	nd	nd
Bis(2-chloroethoxy)methane	170	848	nd	nd	nd	nd	nd	nd	nd	nd
Bis(2-chloroethyl)ether	218	1089	nd	nd	nd	nd	nd	nd	nd	nd
Bis(2-chloroisopropyl)ether	315	1574	nd	nd	nd	nd	nd	nd	nd	nd
Bis(2-ethylhexyl)phthalate	346	1729	**985J**	nd	nd	nd	**4620**	**495J**	nd	nd
4-Bromophenyl-phenylether	96.0	480	nd	nd	nd	nd	nd	nd	nd	nd
Benzyl butyl phthalate	54.1	271	nd	nd	nd	nd	nd	nd	nd	nd
Carbazole	97.6	488	nd	nd	nd	nd	nd	nd	nd	nd
4-Chloroaniline	403	2017	nd	nd	nd	nd	nd	nd	nd	nd
2-Chloronaphthalene	189	946	nd	nd	nd	nd	nd	nd	nd	nd
4-Chloro-3-methylphenol	79.5	398	nd	nd	nd	nd	nd	nd	nd	nd
2-Chlorophenol	124	618	nd	nd	nd	nd	nd	nd	nd	nd
4-Chlorophenyl-phenylether	135	675	nd	nd	nd	nd	nd	nd	nd	nd
Chrysene	107	535	nd	nd	nd	nd	nd	nd	nd	nd
3,3-Dichlorobenzidine	367	1833	nd	nd	nd	nd	nd	nd	nd	nd
Dibenz(a,h)anthracene	304	1518	nd	nd	nd	nd	nd	nd	nd	nd
Dibenzofuran	149	746	nd	nd	nd	nd	nd	nd	nd	nd
Di-n-Butylphthalate	166	830	nd	nd	nd	nd	nd	nd	nd	nd
1,3-Dichlorobenzene	129	645	nd	nd	nd	nd	nd	nd	nd	nd
1,4-Dichlorobenzene	122	611	nd	nd	nd	nd	nd	nd	nd	nd
1,2-Dichlorobenzene	99.1	496	nd	nd	nd	nd	nd	nd	nd	nd
2,4-Dichlorophenol	120	598	nd	nd	nd	nd	nd	nd	nd	nd
Diethyl phthalate	75.0	375	nd	nd	nd	nd	nd	nd	nd	nd
2,4-Dimethylphenol	221	1107	nd	nd	nd	nd	nd	nd	nd	nd
Dimethyl phthalate	89.4	447	nd	nd	nd	nd	nd	nd	nd	nd
4,6-Dinitro-2-methylphenol	114	568	nd	nd	nd	nd	nd	nd	nd	nd
2,4-Dinitrophenol	83.8	419	nd	nd	nd	nd	nd	nd	nd	nd
2,4-Dinitrotoluene	77.1	385	nd	nd	nd	nd	nd	nd	nd	nd
2,6-Dinitrotoluene	85.9	429	nd	nd	nd	nd	nd	nd	nd	nd
Di-n-Octylphthalate	53.6	268	nd	nd	nd	nd	nd	nd	nd	nd
Flouranthene	46.0	230	nd	nd	nd	nd	nd	nd	nd	nd
Flourene	117	583	nd	nd	nd	nd	nd	nd	nd	nd
Hexachlorobenzene	54.2	271	nd	nd	nd	nd	nd	nd	nd	nd
Hexachlorobutadiene	114	570	nd	nd	nd	nd	nd	nd	nd	nd
Hexachlorocyclopentadiene	113	566	nd	nd	nd	nd	nd	nd	nd	nd
Hexachloroethane	136	680	nd	nd	nd	nd	nd	nd	nd	nd

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ENVIRONMENTAL LABORATORY DATA REPORT

COC 08-0683

Report of GC/MS Analysis for Semi-Volatile Organics
EPA SW-846 Method 3541/8270D

Project: Chatsworth Reservoir Sample Matrix: Soil

Chemistry Log No.	Date Sampled	Date Extracted	Date Analyzed	Sample Description
LI03330	3/10/2008	3/14/2008	3/18/2008	KA7-2'
LI03331	3/10/2008	3/14/2008	3/18/2008	KA7-5'
LI03332	3/10/2008	3/14/2008	3/18/2008	KA7-7'
LI03333	3/10/2008	3/14/2008	3/18/2008	KA7-10'
LI03334	3/10/2008	3/14/2008	3/18/2008	KA8-2'
LI03335	3/10/2008	3/14/2008	3/18/2008	KA8-5'
LI03336	3/10/2008	3/14/2008	3/18/2008	KA8-7'
LI03337	3/10/2008	3/14/2008	3/18/2008	KA8-10'

Compounds	MDL ug/kg	RL ug/kg	LI03330 ug/kg	LI03331 ug/kg	LI03332 ug/kg	LI03333 ug/kg	LI03334 ug/kg	LI03335 ug/kg	LI03336 ug/kg	LI03337 ug/kg
Indeno(1,2,3-cd)pyrene	306	1528	nd	nd	nd	nd	nd	nd	nd	nd
Isophorone	166	832	nd	nd	nd	nd	nd	nd	nd	nd
2-Methylnaphthalene	214	1070	nd	nd	nd	nd	nd	nd	nd	nd
2-Methylphenol	58.8	294	nd	nd	nd	nd	nd	nd	nd	nd
4-Methylphenol	59.6	298	nd	nd	nd	nd	nd	nd	nd	nd
Naphthalene	207	1034	nd	nd	nd	nd	nd	nd	nd	nd
2-Nitroaniline	138	691	nd	nd	nd	nd	nd	nd	nd	nd
3-Nitroaniline	164	822	nd	nd	nd	nd	nd	nd	nd	nd
4-Nitroaniline	67.5	338	nd	nd	nd	nd	nd	nd	nd	nd
Nitrobenzene	71.9	360	nd	nd	nd	nd	nd	nd	nd	nd
2-Nitrophenol	129	646	nd	nd	nd	nd	nd	nd	nd	nd
4-Nitrophenol	71.1	355	nd	nd	nd	nd	nd	nd	nd	nd
N-Nitrosodimethylamine	109	546	nd	nd	nd	nd	nd	nd	nd	nd
N-Nitrosodiphenylamine	16.1	80	nd	nd	nd	nd	nd	nd	nd	nd
N-Nitrosodi-n-propylamine	230	1148	nd	nd	nd	nd	nd	nd	nd	nd
Pentachlorophenol	78.4	392	nd	nd	nd	nd	nd	nd	nd	nd
Phenanthrene	43.0	215	nd	nd	nd	nd	nd	nd	nd	nd
Phenol	122	611	nd	nd	nd	nd	nd	nd	nd	nd
Pyrene	5.35	27	nd	nd	nd	nd	nd	nd	nd	nd
Pyridine*	2310	11550	nd	nd	nd	nd	nd	nd	nd	nd
1,2,4-Trichlorobenzene	96.6	483	nd	nd	nd	nd	nd	nd	nd	nd
2,4,5-Trichlorophenol	105	525	nd	nd	nd	nd	nd	nd	nd	nd
2,4,6-Trichlorophenol	70.2	351	nd	nd	nd	nd	nd	nd	nd	nd

MDL - Method Detection Limit
RL - Reporting Limit (5xMDL)
J - Concentration above MDL below RL
nd - Not Detected; below MDL
* Erratic chromatographic behavior
Note: Low levels of phthalates indicate possible contamination from cellulose thimbles during extraction.

Quality Control Data

Surrogates 8000 ug/Kg for Surrogate	EPA Limits % Recovery Lower-Upper	% Rec	% Rec	% Rec	% Rec	% Rec	% Rec	% Rec	% Rec
SURR: Phenol-d5	24 - 113	25.9%	37.8%	31.4%	33.3%	43.4%	33.8%	36.0%	33.9%
SURR: 2-Fluorophenol	25 - 121	29.9%	44.9%	34.4%	33.6%	55.4%	41.1%	41.3%	42.0%
SURR: 2,4,6-Tribromophenol	19 - 122	51.0%	43.6%	50.8%	45.8%	61.5%	38.3%	58.6%	61.8%
SURR: 2-Fluorobiphenyl	30 - 115	35.6%	56.0%	45.4%	48.4%	58.8%	37.1%	32.4%	37.9%
SURR: Nitrobenzene-d5	23 - 120	39.6%	59.6%	45.4%	48.5%	69.4%	48.4%	44.1%	47.1%
SURR: p-Terphenyl-d14	18 - 137	89.5%	89.3%	93.9%	89.5%	82.3%	66.6%	79.5%	91.6%

Analyst: Jong Yi

Reviewed by: Rose Gentallan 4/16/08

ENVIRONMENTAL LABORATORY DATA REPORT

COC 08-0683

Report of GC/MS Analysis for Semi-Volatile Organics
EPA SW-846 Method 3541/8270D

Project: Chatsworth Reservoir Sample Matrix: Soil

Chemistry Log No.	Date Sampled	Date Extracted	Date Analyzed	Sample Description
LI03338	3/10/2008	3/14/2008	3/18/2008	KA9-2'
LI03339	3/10/2008	3/14/2008	3/18/2008	KA9-5'
LI03340	3/10/2008	3/14/2008	3/18/2008	KA9-7'
LI03341	3/10/2008	3/14/2008	3/18/2008	KA9-10'
LI03342	3/10/2008	3/14/2008	3/18/2008	KA10-2'
LI03343	3/10/2008	3/14/2008	3/18/2008	KA10-5'
LI03344	3/10/2008	3/15/2008	3/18/2008	KA10-7'
LI03345	3/10/2008	3/15/2008	3/18/2008	KA10-10'

Compounds	MDL ug/kg	RL ug/kg	LI03338 ug/kg	LI03339 ug/kg	LI03340 ug/kg	LI03341 ug/kg	LI03342 ug/kg	LI03343 ug/kg	LI03344 ug/kg	LI03345 ug/kg
Acenaphthene	132	658	nd	nd	nd	nd	nd	nd	nd	nd
Acenaphthylene	149	745	nd	nd	nd	nd	nd	nd	nd	nd
Anthracene	55.4	277	nd	nd	nd	nd	nd	nd	nd	nd
Aniline	101	504	nd	nd	nd	nd	nd	nd	nd	nd
Azobezene	112	561	nd	nd	nd	nd	nd	nd	nd	nd
Benzidine*	11700	58500	nd	nd	nd	nd	nd	nd	nd	nd
Benzoic acid*	58.1	290	nd	nd	nd	nd	nd	nd	nd	nd
Benzo(a)anthracene	40.7	204	nd	nd	nd	nd	nd	nd	nd	nd
Benzo(b)flouranthene	67.6	338	nd	nd	nd	nd	nd	nd	nd	nd
Benzo(k)flouranthene	94.4	472	nd	nd	nd	nd	nd	nd	nd	nd
Benzo(g,h,i)perylene	56.8	284	nd	nd	nd	nd	nd	nd	nd	nd
Benzo(a)pyrene	136	678	nd	nd	nd	nd	nd	nd	nd	nd
Benzyl alcohol	159	796	nd	nd	nd	nd	nd	nd	nd	nd
Bis(2-chloroethoxy)methane	170	848	nd	nd	nd	nd	nd	nd	nd	nd
Bis(2-chloroethyl)ether	218	1089	nd	nd	nd	nd	nd	nd	nd	nd
Bis(2-chloroisopropyl)ether	315	1574	nd	nd	nd	nd	nd	nd	nd	nd
Bis(2-ethylhexyl)phthalate	346	1729	nd	nd	**1680J**	nd	nd	nd	nd	**1290J**
4-Bromophenyl-phenylether	96.0	480	nd	nd	nd	nd	nd	nd	nd	nd
Benzyl butyl phthalate	54.1	271	nd	nd	nd	nd	nd	nd	nd	nd
Carbazole	97.6	488	nd	nd	nd	nd	nd	nd	nd	nd
4-Chloroaniline	403	2017	nd	nd	nd	nd	nd	nd	nd	nd
2-Chloronaphthalene	189	946	nd	nd	nd	nd	nd	nd	nd	nd
4-Chloro-3-methylphenol	79.5	398	nd	nd	nd	nd	nd	nd	nd	nd
2-Chlorophenol	124	618	nd	nd	nd	nd	nd	nd	nd	nd
4-Chlorophenyl-phenylether	135	675	nd	nd	nd	nd	nd	nd	nd	nd
Chrysene	107	535	nd	nd	nd	nd	nd	nd	nd	nd
3,3-Dichlorobenzidine	367	1833	nd	nd	nd	nd	nd	nd	nd	nd
Dibenz(a,h)anthracene	304	1518	nd	nd	nd	nd	nd	nd	nd	nd
Dibenzofuran	149	746	nd	nd	nd	nd	nd	nd	nd	nd
Di-n-Butylphthalate	166	830	nd	nd	nd	nd	nd	nd	nd	nd
1,3-Dichlorobenzene	129	645	nd	nd	nd	nd	nd	nd	nd	nd
1,4-Dichlorobenzene	122	611	nd	nd	nd	nd	nd	nd	nd	nd
1,2-Dichlorobenzene	99.1	496	nd	nd	nd	nd	nd	nd	nd	nd
2,4-Dichlorophenol	120	598	nd	nd	nd	nd	nd	nd	nd	nd
Diethyl phthalate	75.0	375	nd	nd	nd	nd	nd	nd	nd	nd
2,4-Dimethylphenol	221	1107	nd	nd	nd	nd	nd	nd	nd	nd
Dimethyl phthalate	89.4	447	nd	nd	nd	nd	nd	nd	nd	nd
4,6-Dinitro-2-methylphenol	114	568	nd	nd	nd	nd	nd	nd	nd	nd
2,4-Dinitrophenol	83.8	419	nd	nd	nd	nd	nd	nd	nd	nd
2,4-Dinitrotoluene	77.1	385	nd	nd	nd	nd	nd	nd	nd	nd
2,6-Dinitrotoluene	85.9	429	nd	nd	nd	nd	nd	nd	nd	nd
Di-n-Octylphthalate	53.6	268	nd	nd	nd	nd	nd	nd	nd	nd
Flouranthene	46.0	230	nd	nd	nd	nd	nd	nd	nd	nd
Flourene	117	583	nd	nd	nd	nd	nd	nd	nd	nd
Hexachlorobenzene	54.2	271	nd	nd	nd	nd	nd	nd	nd	nd
Hexachlorobutadiene	114	570	nd	nd	nd	nd	nd	nd	nd	nd
Hexachlorocyclopentadiene	113	566	nd	nd	nd	nd	nd	nd	nd	nd
Hexachloroethane	136	680	nd	nd	nd	nd	nd	nd	nd	nd

500011

ENVIRONMENTAL LABORATORY DATA REPORT

COC 08-0683

Report of GC/MS Analysis for Semi-Volatile Organics
EPA SW-846 Method 3541/8270D

Project: Chatsworth Reservoir Sample Matrix: Soil

Chemistry Log No.	Date Sampled	Date Extracted	Date Analyzed	Sample Description
LI03338	3/10/2008	3/14/2008	3/18/2008	KA9-2'
LI03339	3/10/2008	3/14/2008	3/18/2008	KA9-5'
LI03340	3/10/2008	3/14/2008	3/18/2008	KA9-7'
LI03341	3/10/2008	3/14/2008	3/18/2008	KA9-10'
LI03342	3/10/2008	3/14/2008	3/18/2008	KA10-2'
LI03343	3/10/2008	3/14/2008	3/18/2008	KA10-5'
LI03344	3/10/2008	3/15/2008	3/18/2008	KA10-7'
LI03345	3/10/2008	3/15/2008	3/18/2008	KA10-10'

Compounds	MDL ug/kg	RL ug/kg	LI03338 ug/kg	LI03339 ug/kg	LI03340 ug/kg	LI03341 ug/kg	LI03342 ug/kg	LI03343 ug/kg	LI03344 ug/kg	LI03345 ug/kg
Indeno(1,2,3-cd)pyrene	306	1528	nd	nd	nd	nd	nd	nd	nd	nd
Isophorone	166	832	nd	nd	nd	nd	nd	nd	nd	nd
2-Methylnaphthalene	214	1070	nd	nd	nd	nd	nd	nd	nd	nd
2-Methylphenol	58.8	294	nd	nd	nd	nd	nd	nd	nd	nd
4-Methylphenol	59.6	298	nd	nd	nd	nd	nd	nd	nd	nd
Naphthalene	207	1034	nd	nd	nd	nd	nd	nd	nd	nd
2-Nitroaniline	138	691	nd	nd	nd	nd	nd	nd	nd	nd
3-Nitroaniline	164	822	nd	nd	nd	nd	nd	nd	nd	nd
4-Nitroaniline	67.5	338	nd	nd	nd	nd	nd	nd	nd	nd
Nitrobenzene	71.9	360	nd	nd	nd	nd	nd	nd	nd	nd
2-Nitrophenol	129	646	nd	nd	nd	nd	nd	nd	nd	nd
4-Nitrophenol	71.1	355	nd	nd	nd	nd	nd	nd	nd	nd
N-Nitrosodimethylamine	109	546	nd	nd	nd	nd	nd	nd	nd	nd
N-Nitrosodiphenylamine	16.1	80	nd	nd	nd	nd	nd	nd	nd	nd
N-Nitrosodi-n-propylamine	230	1148	nd	nd	nd	nd	nd	nd	nd	nd
Pentachlorophenol	78.4	392	nd	nd	nd	nd	nd	nd	nd	nd
Phenanthrene	43.0	215	nd	nd	nd	nd	nd	nd	nd	nd
Phenol	122	611	nd	nd	nd	nd	nd	nd	nd	nd
Pyrene	5.35	27	nd	nd	nd	nd	nd	nd	nd	nd
Pyridine*	2310	11550	nd	nd	nd	nd	nd	nd	nd	nd
1,2,4-Trichlorobenzene	96.6	483	nd	nd	nd	nd	nd	nd	nd	nd
2,4,5-Trichlorophenol	105	525	nd	nd	nd	nd	nd	nd	nd	nd
2,4,6-Trichlorophenol	70.2	351	nd	nd	nd	nd	nd	nd	nd	nd

MDL - Method Detection Limit
RL - Reporting Limit (5xMDL)
* Erratic chromatographic behavior
J - Concentration above MDL below RL
nd - Not Detected; below MDL

Note: Low levels of phthalates indicate possible contamination from cellulose thimbles during extraction.

Quality Control Data

Surrogates 8000 ug/Kg for Surrogate	EPA Limits % Recovery Lower-Upper	% Rec	% Rec	% Rec	% Rec	% Rec	% Rec	% Rec	% Rec
SURR: Phenol-d5	24 - 113	37.0%	42.5%	19.4%	26.3%	59.6%	54.3%	68.5%	51.9%
SURR: 2-Fluorophenol	25 - 121	44.0%	53.9%	23.8%	32.8%	73.5%	70.9%	79.8%	60.5%
SURR: 2,4,6-Tribromophenol	19 - 122	70.4%	68.5%	64.6%	58.0%	81.9%	67.6%	69.6%	65.5%
SURR: 2-Fluorobiphenyl	30 - 115	45.6%	43.6%	26.0%	25.8%	73.1%	69.6%	81.5%	69.4%
SURR: Nitrobenzene-d5	23 - 120	56.0%	57.1%	33.4%	37.5%	78.5%	83.0%	92.6%	74.9%
SURR: p-Terphenyl-d14	18 - 137	92.1%	88.3%	90.5%	83.3%	98.5%	92.3%	110.8%	107.5%

Analyst: Jong Yi

Reviewed by: Rose Gentallan 4/16/08

ENVIRONMENTAL LABORATORY DATA REPORT

COC 08-0683

Report of GC/MS Analysis for Semi-Volatile Organics
EPA SW-846 Method 3541/8270D

Project: Chatsworth Reservoir Sample Matrix: Soil

Chemistry Log No.	Date Sampled	Date Extracted	Date Analyzed	Sample Description
LI03346	3/10/2008	3/15/2008	3/18/2008	KA11-2'
LI03347	3/10/2008	3/15/2008	3/18/2008	KA11-5'
LI03348	3/10/2008	3/15/2008	3/18/2008	KA11-7'
LI03349	3/10/2008	3/15/2008	3/19/2008	KA11-10'
LI03350	3/10/2008	3/15/2008	3/19/2008	KA12-2'
LI03351	3/10/2008	3/15/2008	3/19/2008	KA12-5'
LI03352	3/10/2008	3/15/2008	3/19/2008	KA12-7'
LI03353	3/10/2008	3/15/2008	3/19/2008	KA12-10'

Compounds	MDL ug/kg	RL ug/kg	LI03346 ug/kg	LI03347 ug/kg	LI03348 ug/kg	LI03349 ug/kg	LI03350 ug/kg	LI03351 ug/kg	LI03352 ug/kg	LI03353 ug/kg
Acenaphthene	132	658	nd	nd	nd	nd	nd	nd	nd	nd
Acenaphthylene	149	745	nd	nd	nd	nd	nd	nd	nd	nd
Anthracene	55.4	277	nd	nd	nd	nd	nd	nd	nd	nd
Aniline	101	504	nd	nd	nd	nd	nd	nd	nd	nd
Azobezene	112	561	nd	nd	nd	nd	nd	nd	nd	nd
Benzidine*	11700	58500	nd	nd	nd	nd	nd	nd	nd	nd
Benzoic acid*	58.1	290	nd	nd	nd	nd	nd	nd	nd	nd
Benzo(a)anthracene	40.7	204	nd	nd	nd	nd	nd	nd	nd	nd
Benzo(b)flouranthene	67.6	338	nd	nd	nd	nd	nd	nd	nd	nd
Benzo(k)flouranthene	94.4	472	nd	nd	nd	nd	nd	nd	nd	nd
Benzo(g,h,i)perylene	56.8	284	nd	nd	nd	nd	nd	nd	nd	nd
Benzo(a)pyrene	136	678	nd	nd	nd	nd	nd	nd	nd	nd
Benzyl alcohol	159	796	nd	nd	nd	nd	nd	nd	nd	nd
Bis(2-chloroethoxy)methane	170	848	nd	nd	nd	nd	nd	nd	nd	nd
Bis(2-chloroethyl)ether	218	1089	nd	nd	nd	nd	nd	nd	nd	nd
Bis(2-chloroisopropyl)ether	315	1574	nd	nd	nd	nd	nd	nd	nd	nd
Bis(2-ethylhexyl)phthalate	346	1729	nd	**1640J**	**592J**	nd	**558J**	nd	**1840**	nd
4-Bromophenyl-phenylether	96.0	480	nd	nd	nd	nd	nd	nd	nd	nd
Benzyl butyl phthalate	54.1	271	nd	nd	nd	nd	nd	nd	nd	nd
Carbazole	97.6	488	nd	nd	nd	nd	nd	nd	nd	nd
4-Chloroaniline	403	2017	nd	nd	nd	nd	nd	nd	nd	nd
2-Chloronaphthalene	189	946	nd	nd	nd	nd	nd	nd	nd	nd
4-Chloro-3-methylphenol	79.5	398	nd	nd	nd	nd	nd	nd	nd	nd
2-Chlorophenol	124	618	nd	nd	nd	nd	nd	nd	nd	nd
4-Chlorophenyl-phenylether	135	675	nd	nd	nd	nd	nd	nd	nd	nd
Chrysene	107	535	nd	nd	nd	nd	nd	nd	nd	nd
3,3-Dichlorobenzidine	367	1833	nd	nd	nd	nd	nd	nd	nd	nd
Dibenz(a,h)anthracene	304	1518	nd	nd	nd	nd	nd	nd	nd	nd
Dibenzofuran	149	746	nd	nd	nd	nd	nd	nd	nd	nd
Di-n-Butylphthalate	166	830	nd	nd	nd	nd	nd	nd	**254J**	nd
1,3-Dichlorobenzene	129	645	nd	nd	nd	nd	nd	nd	nd	nd
1,4-Dichlorobenzene	122	611	nd	nd	nd	nd	nd	nd	nd	nd
1,2-Dichlorobenzene	99.1	496	nd	nd	nd	nd	nd	nd	nd	nd
2,4-Dichlorophenol	120	598	nd	nd	nd	nd	nd	nd	nd	nd
Diethyl phthalate	75.0	375	nd	nd	nd	nd	nd	nd	nd	nd
2,4-Dimethylphenol	221	1107	nd	nd	nd	nd	nd	nd	nd	nd
Dimethyl phthalate	89.4	447	nd	nd	nd	nd	nd	nd	nd	nd
4,6-Dinitro-2-methylphenol	114	568	nd	nd	nd	nd	nd	nd	nd	nd
2,4-Dinitrophenol	83.8	419	nd	nd	nd	nd	nd	nd	nd	nd
2,4-Dinitrotoluene	77.1	385	nd	nd	nd	nd	nd	nd	nd	nd
2,6-Dinitrotoluene	85.9	429	nd	nd	nd	nd	nd	nd	nd	nd
Di-n-Octylphthalate	53.6	268	nd	nd	nd	nd	nd	nd	nd	nd
Flouranthene	46.0	230	nd	nd	nd	nd	nd	nd	nd	nd
Flourene	117	583	nd	nd	nd	nd	nd	nd	nd	nd
Hexachlorobenzene	54.2	271	nd	nd	nd	nd	nd	nd	nd	nd
Hexachlorobutadiene	114	570	nd	nd	nd	nd	nd	nd	nd	nd
Hexachlorocyclopentadiene	113	566	nd	nd	nd	nd	nd	nd	nd	nd
Hexachloroethane	136	680	nd	nd	nd	nd	nd	nd	nd	nd

500013

ENVIRONMENTAL LABORATORY DATA REPORT

COC 08-0683

Report of GC/MS Analysis for Semi-Volatile Organics
EPA SW-846 Method 3541/8270D

Project: Chatsworth Reservoir Sample Matrix: Soil

Chemistry Log No.	Date Sampled	Date Extracted	Date Analyzed	Sample Description
LI03346	3/10/2008	3/15/2008	3/18/2008	KA11-2'
LI03347	3/10/2008	3/15/2008	3/18/2008	KA11-5'
LI03348	3/10/2008	3/15/2008	3/18/2008	KA11-7'
LI03349	3/10/2008	3/15/2008	3/19/2008	KA11-10'
LI03350	3/10/2008	3/15/2008	3/19/2008	KA12-2'
LI03351	3/10/2008	3/15/2008	3/19/2008	KA12-5'
LI03352	3/10/2008	3/15/2008	3/19/2008	KA12-7'
LI03353	3/10/2008	3/15/2008	3/19/2008	KA12-10'

Compounds	MDL ug/kg	RL ug/kg	LI03346 ug/kg	LI03347 ug/kg	LI03348 ug/kg	LI03349 ug/kg	LI03350 ug/kg	LI03351 ug/kg	LI03352 ug/kg	LI03353 ug/kg
Indeno(1,2,3-cd)pyrene	306	1528	nd	nd	nd	nd	nd	nd	nd	nd
Isophorone	166	832	nd	nd	nd	nd	nd	nd	nd	nd
2-Methylnaphthalene	214	1070	nd	nd	nd	nd	nd	nd	nd	nd
2-Methylphenol	58.8	294	nd	nd	nd	nd	nd	nd	nd	nd
4-Methylphenol	59.6	298	nd	nd	nd	nd	nd	nd	nd	nd
Naphthalene	207	1034	nd	nd	nd	nd	nd	nd	nd	nd
2-Nitroaniline	138	691	nd	nd	nd	nd	nd	nd	nd	nd
3-Nitroaniline	164	822	nd	nd	nd	nd	nd	nd	nd	nd
4-Nitroaniline	67.5	338	nd	nd	nd	nd	nd	nd	nd	nd
Nitrobenzene	71.9	360	nd	nd	nd	nd	nd	nd	nd	nd
2-Nitrophenol	129	646	nd	nd	nd	nd	nd	nd	nd	nd
4-Nitrophenol	71.1	355	nd	nd	nd	nd	nd	nd	nd	nd
N-Nitrosodimethylamine	109	546	nd	nd	nd	nd	nd	nd	nd	nd
N-Nitrosodiphenylamine	16.1	80	nd	nd	nd	nd	nd	nd	nd	nd
N-Nitrosodi-n-propylamine	230	1148	nd	nd	nd	nd	nd	nd	nd	nd
Pentachlorophenol	78.4	392	nd	nd	nd	nd	nd	nd	nd	nd
Phenanthrene	43.0	215	nd	nd	nd	nd	nd	nd	nd	nd
Phenol	122	611	nd	nd	nd	nd	nd	nd	nd	nd
Pyrene	5.35	27	nd	nd	nd	nd	nd	nd	nd	nd
Pyridine*	2310	11550	nd	nd	nd	nd	nd	nd	nd	nd
1,2,4-Trichlorobenzene	96.6	483	nd	nd	nd	nd	nd	nd	nd	nd
2,4,5-Trichlorophenol	105	525	nd	nd	nd	nd	nd	nd	nd	nd
2,4,6-Trichlorophenol	70.2	351	nd	nd	nd	nd	nd	nd	nd	nd

MDL - Method Detection Limit
RL - Reporting Limit (5xMDL)
J - Concentration above MDL below RL
nd - Not Detected; below MDL
* Erratic chromatographic behavior
Note: Low levels of phthalates indicate possible contamination from cellulose thimbles during extraction.

Quality Control Data

Surrogates 8000 ug/Kg for Surrogate	EPA Limits % Recovery Lower-Upper	% Rec	% Rec	% Rec	% Rec	% Rec	% Rec	% Rec	% Rec
SURR: Phenol-d5	24 - 113	39.1%	49.3%	31.5%	51.1%	45.4%	15.5%	44.4%	56.5%
SURR: 2-Fluorophenol	25 - 121	44.1%	48.1%	34.9%	63.1%	51.1%	12.8%	55.6%	64.0%
SURR: 2,4,6-Tribromophenol	19 - 122	56.8%	67.0%	57.4%	64.4%	78.6%	55.1%	70.4%	63.6%
SURR: 2-Fluorobiphenyl	30 - 115	51.3%	66.1%	39.9%	60.3%	54.8%	23.3%	54.4%	74.9%
SURR: Nitrobenzene-d5	23 - 120	60.4%	61.5%	55.0%	74.0%	57.5%	16.5%	64.9%	87.6%
SURR: p-Terphenyl-d14	18 - 137	104.5%	114.5%	111.3%	98.5%	102.3%	106.9%	110.5%	108.3%

Analyst: Jong Yi

Reviewed by: Rose Gentalian 4/4/08

500014

ENVIRONMENTAL LABORATORY DATA REPORT

COC 08-0683

Report of GC/MS Analysis for Semi-Volatile Organics
EPA SW-846 Method 3541/8270D

Project: Chatsworth Reservoir Sample Matrix: Soil

Chemistry Log No.	Date Sampled	Date Extracted	Date Analyzed	Sample Description
LI03354	3/10/2008	3/15/2008	3/19/2008	KA13-2'
LI03355	3/10/2008	3/15/2008	3/19/2008	KA13-5'
LI03356	3/10/2008	3/15/2008	3/19/2008	KA13-7'
LI03357	3/10/2008	3/15/2008	3/19/2008	KA13-10'
LI03358	3/10/2008	3/15/2008	3/19/2008	KA14-2'
LI03359	3/10/2008	3/15/2008	3/19/2008	KA14-5'
LI03360	3/10/2008	3/15/2008	3/19/2008	KA14-7'
LI03361	3/10/2008	3/15/2008	3/19/2008	KA14-10'

Compounds	MDL ug/kg	RL ug/kg	LI03354 ug/kg	LI03355 ug/kg	LI03356 ug/kg	LI03357 ug/kg	LI03358 ug/kg	LI03359 ug/kg	LI03360 ug/kg	LI03361 ug/kg
Acenaphthene	132	658	nd	nd	nd	nd	nd	nd	nd	nd
Acenaphthylene	149	745	nd	nd	nd	nd	nd	nd	nd	nd
Anthracene	55.4	277	nd	nd	nd	nd	nd	nd	nd	nd
Aniline	101	504	nd	nd	nd	nd	nd	nd	nd	nd
Azobezene	112	561	nd	nd	nd	nd	nd	nd	nd	nd
Benzidine*	11700	58500	nd	nd	nd	nd	nd	nd	nd	nd
Benzoic acid*	58.1	290	nd	nd	nd	nd	nd	nd	nd	nd
Benzo(a)anthracene	40.7	204	nd	nd	nd	nd	nd	nd	nd	nd
Benzo(b)flouranthene	67.6	338	nd	nd	nd	nd	nd	nd	nd	nd
Benzo(k)flouranthene	94.4	472	nd	nd	nd	nd	nd	nd	nd	nd
Benzo(g,h,i)perylene	56.8	284	nd	nd	nd	nd	nd	nd	nd	nd
Benzo(a)pyrene	136	678	nd	nd	nd	nd	nd	nd	nd	nd
Benzyl alcohol	159	796	nd	nd	nd	nd	nd	nd	nd	nd
Bis(2-chloroethoxy)methane	170	848	nd	nd	nd	nd	nd	nd	nd	nd
Bis(2-chloroethyl)ether	218	1089	nd	nd	nd	nd	nd	nd	nd	nd
Bis(2-chloroisopropyl)ether	315	1574	nd	nd	nd	nd	nd	nd	nd	nd
Bis(2-ethylhexyl)phthalate	346	1729	**541J**	nd	**1190J**	**1600J**	**359J**	nd	nd	**949J**
4-Bromophenyl-phenylether	96.0	480	nd	nd	nd	nd	nd	nd	nd	nd
Benzyl butyl phthalate	54.1	271	nd	nd	nd	nd	nd	nd	nd	nd
Carbazole	97.6	488	nd	nd	nd	nd	nd	nd	nd	nd
4-Chloroaniline	403	2017	nd	nd	nd	nd	nd	nd	nd	nd
2-Chloronaphthalene	189	946	nd	nd	nd	nd	nd	nd	nd	nd
4-Chloro-3-methylphenol	79.5	398	nd	nd	nd	nd	nd	nd	nd	nd
2-Chlorophenol	124	618	nd	nd	nd	nd	nd	nd	nd	nd
4-Chlorophenyl-phenylether	135	675	nd	nd	nd	nd	nd	nd	nd	nd
Chrysene	107	535	nd	nd	nd	nd	nd	nd	nd	nd
3,3-Dichlorobenzidine	367	1833	nd	nd	nd	nd	nd	nd	nd	nd
Dibenz(a,h)anthracene	304	1518	nd	nd	nd	nd	nd	nd	nd	nd
Dibenzofuran	149	746	nd	nd	nd	nd	nd	nd	nd	nd
Di-n-Butylphthalate	166	830	nd	nd	nd	nd	nd	nd	nd	nd
1,3-Dichlorobenzene	129	645	nd	nd	nd	nd	nd	nd	nd	nd
1,4-Dichlorobenzene	122	611	nd	nd	nd	nd	nd	nd	nd	nd
1,2-Dichlorobenzene	99.1	496	nd	nd	nd	nd	nd	nd	nd	nd
2,4-Dichlorophenol	120	598	nd	nd	nd	nd	nd	nd	nd	nd
Diethyl phthalate	75.0	375	nd	nd	nd	nd	nd	nd	nd	nd
2,4-Dimethylphenol	221	1107	nd	nd	nd	nd	nd	nd	nd	nd
Dimethyl phthalate	89.4	447	nd	nd	nd	nd	nd	nd	nd	nd
4,6-Dinitro-2-methylphenol	114	568	nd	nd	nd	nd	nd	nd	nd	nd
2,4-Dinitrophenol	83.8	419	nd	nd	nd	nd	nd	nd	nd	nd
2,4-Dinitrotoluene	77.1	385	nd	nd	nd	nd	nd	nd	nd	nd
2,6-Dinitrotoluene	85.9	429	nd	nd	nd	nd	nd	nd	nd	nd
Di-n-Octylphthalate	53.6	268	nd	nd	nd	nd	nd	nd	nd	nd
Flouranthene	46.0	230	nd	nd	nd	nd	nd	nd	nd	nd
Flourene	117	583	nd	nd	nd	nd	nd	nd	nd	nd
Hexachlorobenzene	54.2	271	nd	nd	nd	nd	nd	nd	nd	nd
Hexachlorobutadiene	114	570	nd	nd	nd	nd	nd	nd	nd	nd
Hexachlorocyclopentadiene	113	566	nd	nd	nd	nd	nd	nd	nd	nd
Hexachloroethane	136	680	nd	nd	nd	nd	nd	nd	nd	nd

500015

ENVIRONMENTAL LABORATORY DATA REPORT

COC 08-0683

Report of GC/MS Analysis for Semi-Volatile Organics
EPA SW-846 Method 3541/8270D

Project: Chatsworth Reservoir Sample Matrix: Soil

Chemistry Log No.	Date Sampled	Date Extracted	Date Analyzed	Sample Description
LI03354	3/10/2008	3/15/2008	3/19/2008	KA13-2'
LI03355	3/10/2008	3/15/2008	3/19/2008	KA13-5'
LI03356	3/10/2008	3/15/2008	3/19/2008	KA13-7'
LI03357	3/10/2008	3/15/2008	3/19/2008	KA13-10'
LI03358	3/10/2008	3/15/2008	3/19/2008	KA14-2'
LI03359	3/10/2008	3/15/2008	3/19/2008	KA14-5'
LI03360	3/10/2008	3/15/2008	3/19/2008	KA14-7'
LI03361	3/10/2008	3/15/2008	3/19/2008	KA14-10'

Compounds	MDL ug/kg	RL ug/kg	LI03354 ug/kg	LI03355 ug/kg	LI03356 ug/kg	LI03357 ug/kg	LI03358 ug/kg	LI03359 ug/kg	LI03360 ug/kg	LI03361 ug/kg
Indeno(1,2,3-cd)pyrene	306	1528	nd	nd	nd	nd	nd	nd	nd	nd
Isophorone	166	832	nd	nd	nd	nd	nd	nd	nd	nd
2-Methylnaphthalene	214	1070	nd	nd	nd	nd	nd	nd	nd	nd
2-Methylphenol	58.8	294	nd	nd	nd	nd	nd	nd	nd	nd
4-Methylphenol	59.6	298	nd	nd	nd	nd	nd	nd	nd	nd
Naphthalene	207	1034	nd	nd	nd	nd	nd	nd	nd	nd
2-Nitroaniline	138	691	nd	nd	nd	nd	nd	nd	nd	nd
3-Nitroaniline	164	822	nd	nd	nd	nd	nd	nd	nd	nd
4-Nitroaniline	67.5	338	nd	nd	nd	nd	nd	nd	nd	nd
Nitrobenzene	71.9	360	nd	nd	nd	nd	nd	nd	nd	nd
2-Nitrophenol	129	646	nd	nd	nd	nd	nd	nd	nd	nd
4-Nitrophenol	71.1	355	nd	nd	nd	nd	nd	nd	nd	nd
N-Nitrosodimethylamine	109	546	nd	nd	nd	nd	nd	nd	nd	nd
N-Nitrosodiphenylamine	16.1	80	nd	nd	nd	nd	nd	nd	nd	nd
N-Nitrosodi-n-propylamine	230	1148	nd	nd	nd	nd	nd	nd	nd	nd
Pentachlorophenol	78.4	392	nd	nd	nd	nd	nd	nd	nd	nd
Phenanthrene	43.0	215	nd	nd	nd	nd	nd	nd	nd	nd
Phenol	122	611	nd	nd	nd	nd	nd	nd	nd	nd
Pyrene	5.35	27	nd	nd	nd	nd	nd	nd	nd	nd
Pyridine*	2310	11550	nd	nd	nd	nd	nd	nd	nd	nd
1,2,4-Trichlorobenzene	96.6	483	nd	nd	nd	nd	nd	nd	nd	nd
2,4,5-Trichlorophenol	105	525	nd	nd	nd	nd	nd	nd	nd	nd
2,4,6-Trichlorophenol	70.2	351	nd	nd	nd	nd	nd	nd	nd	nd

MDL - Method Detection Limit
RL - Reporting Limit (5xMDL)
* Erratic chromatographic behavior
J - Concentration above MDL below RL
nd - Not Detected; below MDL
Note: Low levels of phthalates indicate possible contamination from cellulose thimbles during extraction.

Quality Control Data

Surrogates 8000 ug/Kg for Surrogate	EPA Limits % Recovery Lower-Upper	% Rec	% Rec	% Rec	% Rec	% Rec	% Rec	% Rec	% Rec
SURR: Phenol-d5	24 - 113	32.8%	47.6%	32.1%	31.5%	25.8%	35.9%	30.4%	30.4%
SURR: 2-Fluorophenol	25 - 121	36.3%	58.8%	26.9%	29.8%	18.6%	23.5%	25.9%	30.0%
SURR: 2,4,6-Tribromophenol	19 - 122	61.3%	62.1%	7.2%	9.8%	4.4%	5.8%	10.5%	16.9%
SURR: 2-Fluorobiphenyl	30 - 115	42.0%	58.8%	64.5%	55.3%	61.4%	71.0%	54.1%	45.0%
SURR: Nitrobenzene-d5	23 - 120	44.9%	70.4%	73.8%	66.0%	69.0%	82.1%	63.9%	53.8%
SURR: p-Terphenyl-d14	18 - 137	109.5%	107.4%	108.0%	106.4%	110.4%	104.9%	99.0%	108.0%

Analyst: Jong Yi

Reviewed by: Rose Gentalian 4/14/08

ENVIRONMENTAL LABORATORY DATA REPORT

COC 08-0683 500016

Report of GC/MS Analysis for Semi-Volatile Organics
EPA SW-846 Method 3541/8270D

Project: Chatsworth Reservoir Sample Matrix: Soil

Chemistry Log No.	Date Sampled	Date Extracted	Date Analyzed	Sample Description
LI03362	3/10/2008	3/15/2008	3/19/2008	KA15-2'
LI03363	3/10/2008	3/15/2008	3/19/2008	KA15-5'
LI03364	3/10/2008	3/17/2008	3/19/2008	KA15-7'
LI03365	3/10/2008	3/17/2008	3/19/2008	KA15-10'
LI03366	3/10/2008	3/17/2008	3/19/2008	KA16-2'
LI03367	3/10/2008	3/17/2008	3/19/2008	KA16-5'
LI03368	3/10/2008	3/17/2008	3/19/2008	KA16-7'
LI03369	3/10/2008	3/17/2008	3/19/2008	KA16-10'

Compounds	MDL ug/kg	RL ug/kg	LI03362 ug/kg	LI03363 ug/kg	LI03364 ug/kg	LI03365 ug/kg	LI03366 ug/kg	LI03367 ug/kg	LI03368 ug/kg	LI03369 ug/kg
Acenaphthene	132	658	nd	nd	nd	nd	nd	nd	nd	nd
Acenaphthylene	149	745	nd	nd	nd	nd	nd	nd	nd	nd
Anthracene	55.4	277	nd	nd	nd	nd	nd	nd	nd	nd
Aniline	101	504	nd	nd	nd	nd	nd	nd	nd	nd
Azobezene	112	561	nd	nd	nd	nd	nd	nd	nd	nd
Benzidine*	11700	58500	nd	nd	nd	nd	nd	nd	nd	nd
Benzoic acid*	58.1	290	nd	nd	nd	nd	nd	nd	nd	nd
Benzo(a)anthracene	40.7	204	nd	nd	nd	nd	nd	nd	nd	nd
Benzo(b)flouranthene	67.6	338	nd	nd	nd	nd	nd	nd	nd	nd
Benzo(k)flouranthene	94.4	472	nd	nd	nd	nd	nd	nd	nd	nd
Benzo(g,h,i)perylene	56.8	284	nd	nd	nd	nd	nd	nd	nd	nd
Benzo(a)pyrene	136	678	nd	nd	nd	nd	nd	nd	nd	nd
Benzyl alcohol	159	796	nd	nd	nd	nd	nd	nd	nd	nd
Bis(2-chloroethoxy)methane	170	848	nd	nd	nd	nd	nd	nd	nd	nd
Bis(2-chloroethyl)ether	218	1089	nd	nd	nd	nd	nd	nd	nd	nd
Bis(2-chloroisopropyl)ether	315	1574	nd	nd	nd	nd	nd	nd	nd	nd
Bis(2-ethylhexyl)phthalate	346	1729	nd	**2350**	nd	**420J**	**738J**	nd	nd	nd
4-Bromophenyl-phenylether	96.0	480	nd	nd	nd	nd	nd	nd	nd	nd
Benzyl butyl phthalate	54.1	271	nd	nd	nd	nd	nd	nd	nd	nd
Carbazole	97.6	488	nd	nd	nd	nd	nd	nd	nd	nd
4-Chloroaniline	403	2017	nd	nd	nd	nd	nd	nd	nd	nd
2-Chloronaphthalene	189	946	nd	nd	nd	nd	nd	nd	nd	nd
4-Chloro-3-methylphenol	79.5	398	nd	nd	nd	nd	nd	nd	nd	nd
2-Chlorophenol	124	618	nd	nd	nd	nd	nd	nd	nd	nd
4-Chlorophenyl-phenylether	135	675	nd	nd	nd	nd	nd	nd	nd	nd
Chrysene	107	535	nd	nd	nd	nd	nd	nd	nd	nd
3,3-Dichlorobenzidine	367	1833	nd	nd	nd	nd	nd	nd	nd	nd
Dibenz(a,h)anthracene	304	1518	nd	nd	nd	nd	nd	nd	nd	nd
Dibenzofuran	149	746	nd	nd	nd	nd	nd	nd	nd	nd
Di-n-Butylphthalate	166	830	nd	nd	nd	nd	nd	nd	nd	nd
1,3-Dichlorobenzene	129	645	nd	nd	nd	nd	nd	nd	nd	nd
1,4-Dichlorobenzene	122	611	nd	nd	nd	nd	nd	nd	nd	nd
1,2-Dichlorobenzene	99.1	496	nd	nd	nd	nd	nd	nd	nd	nd
2,4-Dichlorophenol	120	598	nd	nd	nd	nd	nd	nd	nd	nd
Diethyl phthalate	75.0	375	nd	nd	nd	nd	nd	nd	nd	nd
2,4-Dimethylphenol	221	1107	nd	nd	nd	nd	nd	nd	nd	nd
Dimethyl phthalate	89.4	447	nd	nd	nd	nd	nd	nd	nd	nd
4,6-Dinitro-2-methylphenol	114	568	nd	nd	nd	nd	nd	nd	nd	nd
2,4-Dinitrophenol	83.8	419	nd	nd	nd	nd	nd	nd	nd	nd
2,4-Dinitrotoluene	77.1	385	nd	nd	nd	nd	nd	nd	nd	nd
2,6-Dinitrotoluene	85.9	429	nd	nd	nd	nd	nd	nd	nd	nd
Di-n-0ctylphthalate	53.6	268	nd	nd	nd	nd	nd	nd	nd	nd
Flouranthene	46.0	230	nd	nd	nd	nd	nd	nd	nd	nd
Flourene	117	583	nd	nd	nd	nd	nd	nd	nd	nd
Hexachlorobenzene	54.2	271	nd	nd	nd	nd	nd	nd	nd	nd
Hexachlorobutadiene	114	570	nd	nd	nd	nd	nd	nd	nd	nd
Hexachlorocyclopentadiene	113	566	nd	nd	nd	nd	nd	nd	nd	nd
Hexachloroethane	136	680	nd	nd	nd	nd	nd	nd	nd	nd

ENVIRONMENTAL LABORATORY DATA REPORT

COC 08-0683

500017

Report of GC/MS Analysis for Semi-Volatile Organics
EPA SW-846 Method 3541/8270D

Project: Chatsworth Reservoir Sample Matrix: Soil

Chemistry Log No.	Date Sampled	Date Extracted	Date Analyzed	Sample Description
LI03362	3/10/2008	3/15/2008	3/19/2008	KA15-2'
LI03363	3/10/2008	3/15/2008	3/19/2008	KA15-5'
LI03364	3/10/2008	3/17/2008	3/19/2008	KA15-7'
LI03365	3/10/2008	3/17/2008	3/19/2008	KA15-10'
LI03366	3/10/2008	3/17/2008	3/19/2008	KA16-2'
LI03367	3/10/2008	3/17/2008	3/19/2008	KA16-5'
LI03368	3/10/2008	3/17/2008	3/19/2008	KA16-7'
LI03369	3/10/2008	3/17/2008	3/19/2008	KA16-10'

Compounds	MDL ug/kg	RL ug/kg	LI03362 ug/kg	LI03363 ug/kg	LI03364 ug/kg	LI03365 ug/kg	LI03366 ug/kg	LI03367 ug/kg	LI03368 ug/kg	LI03369 ug/kg
Indeno(1,2,3-cd)pyrene	306	1528	nd	nd	nd	nd	nd	nd	nd	nd
Isophorone	166	832	nd	nd	nd	nd	nd	nd	nd	nd
2-Methylnaphthalene	214	1070	nd	nd	nd	nd	nd	nd	nd	nd
2-Methylphenol	58.8	294	nd	nd	nd	nd	nd	nd	nd	nd
4-Methylphenol	59.6	298	nd	nd	nd	nd	nd	nd	nd	nd
Naphthalene	207	1034	nd	nd	nd	nd	nd	nd	nd	nd
2-Nitroaniline	138	691	nd	nd	nd	nd	nd	nd	nd	nd
3-Nitroaniline	164	822	nd	nd	nd	nd	nd	nd	nd	nd
4-Nitroaniline	67.5	338	nd	nd	nd	nd	nd	nd	nd	nd
Nitrobenzene	71.9	360	nd	nd	nd	nd	nd	nd	nd	nd
2-Nitrophenol	129	646	nd	nd	nd	nd	nd	nd	nd	nd
4-Nitrophenol	71.1	355	nd	nd	nd	nd	nd	nd	nd	nd
N-Nitrosodimethylamine	109	546	nd	nd	nd	nd	nd	nd	nd	nd
N-Nitrosodiphenylamine	16.1	80	nd	nd	nd	nd	nd	nd	nd	nd
N-Nitrosodi-n-propylamine	230	1148	nd	nd	nd	nd	nd	nd	nd	nd
Pentachlorophenol	78.4	392	nd	nd	nd	nd	nd	nd	nd	nd
Phenanthrene	43.0	215	nd	nd	nd	nd	nd	nd	nd	nd
Phenol	122	611	nd	nd	nd	nd	nd	nd	nd	nd
Pyrene	5.35	27	nd	nd	nd	nd	nd	nd	nd	nd
Pyridine*	2310	11550	nd	nd	nd	nd	nd	nd	nd	nd
1,2,4-Trichlorobenzene	96.6	483	nd	nd	nd	nd	nd	nd	nd	nd
2,4,5-Trichlorophenol	105	525	nd	nd	nd	nd	nd	nd	nd	nd
2,4,6-Trichlorophenol	70.2	351	nd	nd	nd	nd	nd	nd	nd	nd

MDL - Method Detection Limit
RL - Reporting Limit (5xMDL)
J - Concentration above MDL below RL
nd - Not Detected; below MDL
* Erratic chromatographic behavior
Note: Low levels of phthalates indicate possible contamination from cellulose thimbles during extraction.

Quality Control Data

Surrogates 8000 ug/Kg for Surrogate	EPA Limits % Recovery Lower-Upper	% Rec	% Rec	% Rec	% Rec	% Rec	% Rec	% Rec	% Rec
SURR: Phenol-d5	24 - 113	33.3%	19.9%	31.5%	43.0%	30.3%	21.1%	19.3%	25.6%
SURR: 2-Fluorophenol	25 - 121	35.8%	15.3%	22.0%	41.1%	20.3%	11.8%	10.7%	17.0%
SURR: 2,4,6-Tribromophenol	19 - 122	40.4%	5.6%	4.4%	16.4%	5.5%	3.4%	3.5%	3.9%
SURR: 2-Fluorobiphenyl	30 - 115	44.3%	44.3%	74.1%	70.9%	73.0%	72.6%	55.5%	70.1%
SURR: Nitrobenzene-d5	23 - 120	52.1%	45.8%	79.5%	77.3%	76.5%	74.3%	55.5%	77.3%
SURR: p-Terphenyl-d14	18 - 137	114.9%	114.5%	109.3%	105.5%	111.4%	107.6%	107.6%	106.1%

Analyst: Jong Yi

Reviewed by: Rose Gentalian 4/14/08

ENVIRONMENTAL LABORATORY DATA REPORT COC 08-0683 500018

Report of GC/MS Analysis for Semi-Volatile Organics
EPA SW-846 Method 3541/8270D

Project: Chatsworth Reservoir Sample Matrix: Soil

Chemistry Log No.	Date Sampled	Date Extracted	Date Analyzed	Sample Description
LI03370	3/10/2008	3/17/2008	3/19/2008	KA17-2'
LI03371	3/10/2008	3/17/2008	3/19/2008	KA17-5'
LI03372	3/10/2008	3/17/2008	3/19/2008	KA17-7'
LI03373	3/10/2008	3/17/2008	3/19/2008	KA17-10'
LI03374	3/10/2008	3/17/2008	3/20/2008	KA18-2'
LI03375	3/10/2008	3/17/2008	3/20/2008	KA18-5'
LI03376	3/10/2008	3/17/2008	3/20/2008	KA18-7'
LI03377	3/10/2008	3/17/2008	3/20/2008	KA18-10'

Compounds	MDL ug/kg	RL ug/kg	LI03370 ug/kg	LI03371 ug/kg	LI03372 ug/kg	LI03373 ug/kg	LI03374 ug/kg	LI03375 ug/kg	LI03376 ug/kg	LI03377 ug/kg
Acenaphthene	132	658	nd	nd	nd	nd	nd	nd	nd	nd
Acenaphthylene	149	745	nd	nd	nd	nd	nd	nd	nd	nd
Anthracene	55.4	277	nd	nd	nd	nd	nd	nd	nd	nd
Aniline	101	504	nd	nd	nd	nd	nd	nd	nd	nd
Azobezene	112	561	nd	nd	nd	nd	nd	nd	nd	nd
Benzidine*	11700	58500	nd	nd	nd	nd	nd	nd	nd	nd
Benzoic acid*	58.1	290	nd	nd	nd	nd	nd	nd	nd	nd
Benzo(a)anthracene	40.7	204	nd	nd	nd	nd	nd	nd	nd	nd
Benzo(b)flouranthene	67.6	338	nd	nd	nd	nd	nd	nd	nd	nd
Benzo(k)flouranthene	94.4	472	nd	nd	nd	nd	nd	nd	nd	nd
Benzo(g,h,i)perylene	56.8	284	nd	nd	nd	nd	nd	nd	nd	nd
Benzo(a)pyrene	136	678	nd	nd	nd	nd	nd	nd	nd	nd
Benzyl alcohol	159	796	nd	nd	nd	nd	nd	nd	nd	nd
Bis(2-chloroethoxy)methane	170	848	nd	nd	nd	nd	nd	nd	nd	nd
Bis(2-chloroethyl)ether	218	1089	nd	nd	nd	nd	nd	nd	nd	nd
Bis(2-chloroisopropyl)ether	315	1574	nd	nd	nd	nd	nd	nd	nd	nd
Bis(2-ethylhexyl)phthalate	346	1729	**1870**	**730J**	**9240**	**1000J**	**1380J**	nd	**2600**	**4290**
4-Bromophenyl-phenylether	96.0	480	nd	nd	nd	nd	nd	nd	nd	nd
Benzyl butyl phthalate	54.1	271	nd	nd	nd	nd	nd	nd	nd	nd
Carbazole	97.6	488	nd	nd	nd	nd	nd	nd	nd	nd
4-Chloroaniline	403	2017	nd	nd	nd	nd	nd	nd	nd	nd
2-Chloronaphthalene	189	946	nd	nd	nd	nd	nd	nd	nd	nd
4-Chloro-3-methylphenol	79.5	398	nd	nd	nd	nd	nd	nd	nd	nd
2-Chlorophenol	124	618	nd	nd	nd	nd	nd	nd	nd	nd
4-Chlorophenyl-phenylether	135	675	nd	nd	nd	nd	nd	nd	nd	nd
Chrysene	107	535	nd	nd	nd	nd	nd	nd	nd	nd
3,3-Dichlorobenzidine	367	1833	nd	nd	nd	nd	nd	nd	nd	nd
Dibenz(a,h)anthracene	304	1518	nd	nd	nd	nd	nd	nd	nd	nd
Dibenzofuran	149	746	nd	nd	nd	nd	nd	nd	nd	nd
Di-n-Butylphthalate	166	830	nd	nd	nd	nd	nd	nd	nd	nd
1,3-Dichlorobenzene	129	645	nd	nd	nd	nd	nd	nd	nd	nd
1,4-Dichlorobenzene	122	611	nd	nd	nd	nd	nd	nd	nd	nd
1,2-Dichlorobenzene	99.1	496	nd	nd	nd	nd	nd	nd	nd	nd
2,4-Dichlorophenol	120	598	nd	nd	nd	nd	nd	nd	nd	nd
Diethyl phthalate	75.0	375	nd	nd	nd	nd	nd	nd	nd	nd
2,4-Dimethylphenol	221	1107	nd	nd	nd	nd	nd	nd	nd	nd
Dimethyl phthalate	89.4	447	nd	nd	nd	nd	nd	nd	nd	nd
4,6-Dinitro-2-methylphenol	114	568	nd	nd	nd	nd	nd	nd	nd	nd
2,4-Dinitrophenol	83.8	419	nd	nd	nd	nd	nd	nd	nd	nd
2,4-Dinitrotoluene	77.1	385	nd	nd	nd	nd	nd	nd	nd	nd
2,6-Dinitrotoluene	85.9	429	nd	nd	nd	nd	nd	nd	nd	nd
Di-n-0ctylphthalate	53.6	268	nd	nd	nd	nd	nd	nd	nd	nd
Flouranthene	46.0	230	nd	nd	nd	nd	nd	nd	nd	nd
Flourene	117	583	nd	nd	nd	nd	nd	nd	nd	nd
Hexachlorobenzene	54.2	271	nd	nd	nd	nd	nd	nd	nd	nd
Hexachlorobutadiene	114	570	nd	nd	nd	nd	nd	nd	nd	nd
Hexachlorocyclopentadiene	113	566	nd	nd	nd	nd	nd	nd	nd	nd
Hexachloroethane	136	680	nd	nd	nd	nd	nd	nd	nd	nd

ENVIRONMENTAL LABORATORY DATA REPORT

COC 08-0683

500019

Report of GC/MS Analysis for Semi-Volatile Organics
EPA SW-846 Method 3541/8270D

Project: Chatsworth Reservoir Sample Matrix: Soil

Chemistry Log No.	Date Sampled	Date Extracted	Date Analyzed	Sample Description
LI03370	3/10/2008	3/17/2008	3/19/2008	KA17-2'
LI03371	3/10/2008	3/17/2008	3/19/2008	KA17-5'
LI03372	3/10/2008	3/17/2008	3/19/2008	KA17-7'
LI03373	3/10/2008	3/17/2008	3/19/2008	KA17-10'
LI03374	3/10/2008	3/17/2008	3/20/2008	KA18-2'
LI03375	3/10/2008	3/17/2008	3/20/2008	KA18-5'
LI03376	3/10/2008	3/17/2008	3/20/2008	KA18-7'
LI03377	3/10/2008	3/17/2008	3/20/2008	KA18-10'

Compounds	MDL ug/kg	RL ug/kg	LI03370 ug/kg	LI03371 ug/kg	LI03372 ug/kg	LI03373 ug/kg	LI03374 ug/kg	LI03375 ug/kg	LI03376 ug/kg	LI03377 ug/kg
Indeno(1,2,3-cd)pyrene	306	1528	nd	nd	nd	nd	nd	nd	nd	nd
Isophorone	166	832	nd	nd	nd	nd	nd	nd	nd	nd
2-Methylnaphthalene	214	1070	nd	nd	nd	nd	nd	nd	nd	nd
2-Methylphenol	58.8	294	nd	nd	nd	nd	nd	nd	nd	nd
4-Methylphenol	59.6	298	nd	nd	nd	nd	nd	nd	nd	nd
Naphthalene	207	1034	nd	nd	nd	nd	nd	nd	nd	nd
2-Nitroaniline	138	691	nd	nd	nd	nd	nd	nd	nd	nd
3-Nitroaniline	164	822	nd	nd	nd	nd	nd	nd	nd	nd
4-Nitroaniline	67.5	338	nd	nd	nd	nd	nd	nd	nd	nd
Nitrobenzene	71.9	360	nd	nd	nd	nd	nd	nd	nd	nd
2-Nitrophenol	129	646	nd	nd	nd	nd	nd	nd	nd	nd
4-Nitrophenol	71.1	355	nd	nd	nd	nd	nd	nd	nd	nd
N-Nitrosodimethylamine	109	546	nd	nd	nd	nd	nd	nd	nd	nd
N-Nitrosodiphenylamine	16.1	80	nd	nd	nd	nd	nd	nd	nd	nd
N-Nitrosodi-n-propylamine	230	1148	nd	nd	nd	nd	nd	nd	nd	nd
Pentachlorophenol	78.4	392	nd	nd	nd	nd	nd	nd	nd	nd
Phenanthrene	43.0	215	nd	nd	nd	nd	nd	nd	nd	nd
Phenol	122	611	nd	nd	nd	nd	nd	nd	nd	nd
Pyrene	5.35	27	nd	nd	nd	nd	nd	nd	nd	nd
Pyridine*	2310	11550	nd	nd	nd	nd	nd	nd	nd	nd
1,2,4-Trichlorobenzene	96.6	483	nd	nd	nd	nd	nd	nd	nd	nd
2,4,5-Trichlorophenol	105	525	nd	nd	nd	nd	nd	nd	nd	nd
2,4,6-Trichlorophenol	70.2	351	nd	nd	nd	nd	nd	nd	nd	nd

MDL - Method Detection Limit
RL - Reporting Limit (5xMDL)
J - Concentration above MDL below RL
nd - Not Detected; below MDL
* Erratic chromatographic behavior
Note: Low levels of phthalates indicate possible contamination from cellulose thimbles during extraction.

Quality Control Data

Surrogates 8000 ug/Kg for Surrogate	EPA Limits % Recovery Lower-Upper	% Rec	% Rec	% Rec	% Rec	% Rec	% Rec	% Rec	% Rec
SURR: Phenol-d5	24 - 113	30.0%	27.5%	40.3%	15.3%	28.0%	17.9%	27.6%	32.6%
SURR: 2-Fluorophenol	25 - 121	23.4%	18.8%	30.1%	9.8%	19.5%	10.4%	18.1%	25.4%
SURR: 2,4,6-Tribromophenol	19 - 122	6.3%	5.2%	8.6%	3.8%	7.6%	3.4%	4.1%	8.3%
SURR: 2-Fluorobiphenyl	30 - 115	61.0%	63.6%	81.6%	41.6%	52.4%	63.1%	72.0%	64.4%
SURR: Nitrobenzene-d5	23 - 120	64.1%	57.3%	89.4%	50.8%	54.1%	69.0%	76.9%	69.6%
SURR: p-Terphenyl-d14	18 - 137	109.8%	102.3%	98.3%	107.5%	105.8%	101.8%	101.5%	100.9%

Analyst: Jong Yi

Reviewed by: Rose Gentallan RG 4/14/08

500020

ENVIRONMENTAL LABORATORY DATA REPORT

Report of GC/MS Analysis for Semi-Volatile Organics
EPA SW-846 Method 8270

Project: Chatsworth Reservoir Sample Matrix: Soil

Chemistry Log No.	Date Sampled	Date Extracted	Date Analyzed	Sample Description
BLK 3-12-08		3/12/2008	3/13/2008	
BLK 3-14-08		3/14/2008	3/18/2008	
BLK 3-15-08		3/15/2008	3/18/2008	
BLK 3-17-08		3/17/2008	3/19/2008	

Compounds	MDL ug/kg	RL ug/kg	BLK 3-12-08 ug/kg	BLK 3-14-08 ug/kg	BLK 3-15-08 ug/kg	BLK 3-17-08 ug/kg
Acenaphthene	132	658	nd	nd	nd	nd
Acenaphthylene	149	745	nd	nd	nd	nd
Anthracene	55.4	277	nd	nd	nd	nd
Aniline	101	504	nd	nd	nd	nd
Azobezene	112	561	nd	nd	nd	nd
Benzidine*	11700	58500	nd	nd	nd	nd
Benzoic acid*	58.1	290	nd	nd	nd	nd
Benzo(a)anthracene	40.7	204	nd	nd	nd	nd
Benzo(b)flouranthene	67.6	338	nd	nd	nd	nd
Benzo(k)flouranthene	94.4	472	nd	nd	nd	nd
Benzo(g,h,i)perylene	56.8	284	nd	nd	nd	nd
Benzo(a)pyrene	136	678	nd	nd	nd	nd
Benzyl alcohol	159	796	nd	nd	nd	nd
Bis(2-chloroethoxy)methane	170	848	nd	nd	nd	nd
Bis(2-chloroethyl)ether	218	1089	nd	nd	nd	nd
Bis(2-chloroisopropyl)ether	315	1574	nd	nd	nd	nd
Bis(2-ethylhexyl)phthalate	346	1729	nd	nd	nd	nd
4-Bromophenyl-phenylether	96.0	480	nd	nd	nd	nd
Benzyl butyl phthalate	54.1	271	nd	nd	nd	nd
Carbazole	97.6	488	nd	nd	nd	nd
4-Chloroaniline	403	2017	nd	nd	nd	nd
2-Chloronaphthalene	189	946	nd	nd	nd	nd
4-Chloro-3-methylphenol	79.5	398	nd	nd	nd	nd
2-Chlorophenol	124	618	nd	nd	nd	nd
4-Chlorophenyl-phenylether	135	675	nd	nd	nd	nd
Chrysene	107	535	nd	nd	nd	nd
3,3-Dichlorobenzidine	367	1833	nd	nd	nd	nd
Dibenz(a,h)anthracene	304	1518	nd	nd	nd	nd
Dibenzofuran	149	746	nd	nd	nd	nd
Di-n-Butylphthalate	166	830	**1750**	**1530**	**1630**	**1470**
1,3-Dichlorobenzene	129	645	nd	nd	nd	nd
1,4-Dichlorobenzene	122	611	nd	nd	nd	nd
1,2-Dichlorobenzene	99.1	496	nd	nd	nd	nd
2,4-Dichlorophenol	120	598	nd	nd	nd	nd
Diethyl phthalate	75.0	375	nd	nd	nd	nd
2,4-Dimethylphenol	221	1107	nd	nd	nd	nd
Dimethyl phthalate	89.4	447	nd	nd	nd	nd
4,6-Dinitro-2-methylphenol	114	568	nd	nd	nd	nd
2,4-Dinitrophenol	83.8	419	nd	nd	nd	nd
2,4-Dinitrotoluene	77.1	385	nd	nd	nd	nd
2,6-Dinitrotoluene	85.9	429	nd	nd	nd	nd
Di-n-Octylphthalate	53.6	268	**133J**	nd	nd	nd
Flouranthene	46.0	230	nd	nd	nd	nd
Flourene	117	583	nd	nd	nd	nd
Hexachlorobenzene	54.2	271	nd	nd	nd	nd
Hexachlorobutadiene	114	570	nd	nd	nd	nd
Hexachlorocyclopentadiene	113	566	nd	nd	nd	nd
Hexachloroethane	136	680	nd	nd	nd	nd

500021

ENVIRONMENTAL LABORATORY DATA REPORT

Report of GC/MS Analysis for Semi-Volatile Organics
EPA SW-846 Method 8270

Project: Chatsworth Reservoir Sample Matrix: Soil

Chemistry Log No.	Date Sampled	Date Extracted	Date Analyzed	Sample Description
BLK 3-12-08		3/12/2008	3/13/2008	
BLK 3-14-08		3/14/2008	3/18/2008	
BLK 3-15-08		3/15/2008	3/18/2008	
BLK 3-17-08		3/17/2008	3/19/2008	

Compounds	MDL ug/kg	RL ug/kg	BLK 3-12-08 ug/kg	BLK 3-14-08 ug/kg	BLK 3-15-08 ug/kg	BLK 3-17-08 ug/kg
Indeno(1,2,3-cd)pyrene	306	1528	nd	nd	nd	nd
Isophorone	166	832	nd	nd	nd	nd
2-Methylnaphthalene	214	1070	nd	nd	nd	nd
2-Methylphenol	58.8	294	nd	nd	nd	nd
4-Methylphenol	59.6	298	nd	nd	nd	nd
Naphthalene	207	1034	nd	nd	nd	nd
2-Nitroaniline	138	691	nd	nd	nd	nd
3-Nitroaniline	164	822	nd	nd	nd	nd
4-Nitroaniline	67.5	338	nd	nd	nd	nd
Nitrobenzene	71.9	360	nd	nd	nd	nd
2-Nitrophenol	129	646	nd	nd	nd	nd
4-Nitrophenol	71.1	355	nd	nd	nd	nd
N-Nitrosodimethylamine	109	546	nd	nd	nd	nd
N-Nitrosodiphenylamine	16.1	80	nd	nd	nd	nd
N-Nitrosodi-n-propylamine	230	1148	nd	nd	nd	nd
Pentachlorophenol	78.4	392	nd	nd	nd	nd
Phenanthrene	43.0	215	nd	nd	nd	nd
Phenol	122	611	nd	nd	nd	nd
Pyrene	5.35	27	nd	nd	nd	nd
Pyridine*	2310	11550	nd	nd	nd	nd
1,2,4-Trichlorobenzene	96.6	483	nd	nd	nd	nd
2,4,5-Trichlorophenol	105	525	nd	nd	nd	nd
2,4,6-Trichlorophenol	70.2	351	nd	nd	nd	nd

MDL - Method Detection Limit
RL - Reporting Limit (5xMDL)
* Erratic chromatographic behavior
J - Concentration above MDL below RL
nd - Not Detected; below MDL
Note: Low levels of phthalates indicate possible contamination from cellulose thimbles and blank soil.

Quality Control Data

Surrogates 8000 ug/Kg for Surrogate	EPA Limits % Recovery Lower-Upper	Surrogate % Rec	Surrogate % Rec	Surrogate % Rec	Surrogate % Rec
SURR: Phenol-d5	24 - 113	41.3%	37.6%	21.3%	17.5%
SURR: 2-Fluorophenol	25 - 121	48.5%	47.5%	12.4%	9.6%
SURR: 2,4,6-Tribromophenol	19 - 122	47.8%	74.0%	3.5%	3.2%
SURR: 2-Fluorobiphenyl	30 - 115	52.0%	44.0%	75.3%	67.9%
SURR: Nitrobenzene-d5	23 - 120	59.0%	54.1%	84.6%	74.0%
SURR: p-Terphenyl-d14	18 - 137	85.5%	94.5%	108.5%	107.6%

Comment:

Analyst: Jong Yi

Reviewed by: Rose Gentallan

500022

ENVIRONMENTAL LABORATORY DATA REPORT

Report of GC/MS Analysis for Semi- Volatile Organics
EPA SW-846 Method 3541/8270C

Project: Chatsworth Reservoir Sample Matrix: Soil

Chemistry Log No.	Date Sampled	Date Extracted	Date Analyzed	Sample Description
LI03322 DUP	3/10/2008	3/12/2008	3/14/2008	KA5-2'
LI03364 DUP	3/10/2008	3/17/2008	3/19/2008	KA15-7'

Compounds	MDL ug/kg	RL ug/kg	LI03322 DUP ug/kg	LI03364 DUP ug/kg
Acenaphthene	132	658	nd	nd
Acenaphthylene	149	745	nd	nd
Anthracene	55.4	277	nd	nd
Aniline	101	504	nd	nd
Azobezene	112	561	nd	nd
Benzidine*	11700	58500	nd	nd
Benzoic acid*	58.1	290	nd	nd
Benzo(a)anthracene	40.7	204	nd	nd
Benzo(b)flouranthene	67.6	338	nd	nd
Benzo(k)flouranthene	94.4	472	nd	nd
Benzo(g,h,i)perylene	56.8	284	nd	nd
Benzo(a)pyrene	136	678	nd	nd
Benzyl alcohol	159	796	nd	nd
Bis(2-chloroethoxy)methane	170	848	nd	nd
Bis(2-chloroethyl)ether	218	1089	nd	nd
Bis(2-chloroisopropyl)ether	315	1574	nd	nd
Bis(2-ethylhexyl)phthalate	346	1729	nd	**442J**
4-Bromophenyl-phenylether	96.0	480	nd	nd
Benzyl butyl phthalate	54.1	271	nd	nd
Carbazole	97.6	488	nd	nd
4-Chloroaniline	403	2017	nd	nd
2-Chloronaphthalene	189	946	nd	nd
4-Chloro-3-methylphenol	79.5	398	nd	nd
2-Chlorophenol	124	618	nd	nd
4-Chlorophenyl-phenylether	135	675	nd	nd
Chrysene	107	535	nd	nd
3,3-Dichlorobenzidine	367	1833	nd	nd
Dibenz(a,h)anthracene	304	1518	nd	nd
Dibenzofuran	149	746	nd	nd
Di-n-Butylphthalate	166	830	nd	nd
1,3-Dichlorobenzene	129	645	nd	nd
1,4-Dichlorobenzene	122	611	nd	nd
1,2-Dichlorobenzene	99.1	496	nd	nd
2,4-Dichlorophenol	120	598	nd	nd
Diethyl phthalate	75.0	375	nd	nd
2,4-Dimethylphenol	221	1107	nd	nd
Dimethyl phthalate	89.4	447	nd	nd
4,6-Dinitro-2-methylphenol	114	568	nd	nd
2,4-Dinitrophenol	83.8	419	nd	nd
2,4-Dinitrotoluene	77.1	385	nd	nd
2,6-Dinitrotoluene	85.9	429	nd	nd
Di-n-0ctylphthalate	53.6	268	nd	nd
Flouranthene	46.0	230	nd	nd
Flourene	117	583	nd	nd
Hexachlorobenzene	54.2	271	nd	nd
Hexachlorobutadiene	114	570	nd	nd
Hexachlorocyclopentadiene	113	566	nd	nd
Hexachloroethane	136	680	nd	nd

500023

ENVIRONMENTAL LABORATORY DATA REPORT

Report of GC/MS Analysis for Semi- Volatile Organics
EPA SW-846 Method 3541/8270C

Project: Chatsworth Reservoir Sample Matrix: Soil

Chemistry Log No.	Date Sampled	Date Extracted	Date Analyzed	Sample Description
LI03322 DUP	3/10/2008	3/12/2008	3/14/2008	KA5-2'
LI03364 DUP	3/10/2008	3/17/2008	3/19/2008	KA15-7'

Compounds	MDL ug/kg	RL ug/kg	LI03322 DUP ug/kg	LI03364 DUP ug/kg
Indeno(1,2,3-cd)pyrene	306	1528	nd	nd
Isophorone	166	832	nd	nd
2-Methylnaphthalene	214	1070	nd	nd
2-Methylphenol	58.8	294	nd	nd
4-Methylphenol	59.6	298	nd	nd
Naphthalene	207	1034	nd	nd
2-Nitroaniline	138	691	nd	nd
3-Nitroaniline	164	822	nd	nd
4-Nitroaniline	67.5	338	nd	nd
Nitrobenzene	71.9	360	nd	nd
2-Nitrophenol	129	646	nd	nd
4-Nitrophenol	71.1	355	nd	nd
N-Nitrosodimethylamine	109	546	nd	nd
N-Nitrosodiphenylamine	16.1	80	nd	nd
N-Nitrosodi-n-propylamine	230	1148	nd	nd
Pentachlorophenol	78.4	392	nd	nd
Phenanthrene	43.0	215	nd	nd
Phenol	122	611	nd	nd
Pyrene	5.35	27	nd	nd
Pyridine*	2310	11550	nd	nd
1,2,4-Trichlorobenzene	96.6	483	nd	nd
2,4,5-Trichlorophenol	105	525	nd	nd
2,4,6-Trichlorophenol	70.2	351	nd	nd

MDL - Method Detection Limit
RL - Reporting Limit (5xMDL)
J - Concentration above MDL below RL
nd - Not Detected; below MDL
* Erratic chromatographic behavior
Note: Low levels of phthalates indicate possible contamination from cellulose thimbles during extraction.

Quality Control Data

Surrogates 8000 ug/Kg for Surrogate	EPA Limits % Recovery Lower-Upper	Surrogate % Rec	Surrogate % Rec
SURR: Phenol-d5	24 - 113	48.1%	23.3%
SURR: 2-Fluorophenol	25 - 121	50.9%	14.0%
SURR: 2,4,6-Tribromophenol	19 - 122	83.0%	3.6%
SURR: 2-Fluorobiphenyl	30 - 115	60.6%	72.9%
SURR: Nitrobenzene-d5	23 - 120	52.3%	78.9%
SURR: p-Terphenyl-d14	18 - 137	84.8%	109.9%

Comment:

Analyst: Jong Yi

Reviewed by: Rose Gentallan 4/9/2008

QC SUMMARIES

Laboratory Quality Control Check Sample (LCS)

Project: Chatsworth Reservoir Sample Matrix: SOIL

DATE EXTRACTED:	3/12/2008	EXTRACTION METHOD :	USEPA 3541
DATE ANALYZED:	3/13/2008	ANALYTICAL METHOD:	USEPA 8270
SUPPLY SOURCE:	Cerilliant	LAB LCS I.D.:	Q7371
LOT NUMBER:	ER090605-01		

Compounds	True Value	Result LCS1	LCS1	Result LCS2	LCS2	RPD
	ug/kg	ug/kg	%Recovery	ug/kg	%Recovery	(%)
Acenaphthene	5000	3570	71.4%	3870	77.4%	8.1%
Acenaphthylene	5000	3850	77.0%	4100	82.0%	6.3%
Anthracene	5000	4720	94.4%	4700	94.0%	0.4%
Azobezene	5000	5250	105.0%	5110	102.2%	2.7%
Benzo(a)anthracene	5000	4270	85.4%	4680	93.6%	9.2%
Benzo(b)flouranthene	5000	5050	101.0%	5530	110.6%	9.1%
Benzo(k)flouranthene	5000	5220	104.4%	5020	100.4%	3.9%
Benzo(g,h,I)perylene	5000	5200	104.0%	5200	104.0%	0.0%
Benzo(a)pyrene	5000	4380	87.6%	4450	89.0%	1.6%
Bis(2-chloroethoxy)methane	5000	2300	46.0%	2670	53.4%	14.9%
Bis(2-chloroethyl)ether	5000	2720	54.4%	3360	67.2%	21.1%
Bis(2-chloroisopropyl)ether	5000	2900	58.0%	3410	68.2%	16.2%
Bis(2-ethylhexyl)phthalate	5000	5000	100.0%	5310	106.2%	6.0%
4-Bromophenyl-phenylether	5000	4280	85.6%	4590	91.8%	7.0%
Benzyl butyl phthalate	5000	5200	104.0%	5520	110.4%	6.0%
Carbazole	5000	4750	95.0%	4720	94.4%	0.6%
2-Chloronaphthalene	5000	3180	63.6%	3450	69.0%	8.1%
4-Chloro-3-methylphenol	5000	2900	58.0%	3120	62.4%	7.3%
2-Chlorophenol	5000	3100	62.0%	3770	75.4%	19.5%
4-Chlorophenyl-phenylether	5000	3980	79.6%	4000	80.0%	0.5%
Chrysene	5000	4750	95.0%	5000	100.0%	5.1%
Dibenz(a,h)anthracene	5000	5220	104.4%	5220	104.4%	0.0%
Di-n-Butylphthalate	5000	6330	126.6%	6660	133.2%	5.1%
1,3-Dichlorobenzene	5000	2250	45.0%	2790	55.8%	21.4%
1,4-Dichlorobenzene	5000	2250	45.0%	2900	58.0%	25.2%
1,2-Dichlorobenzene	5000	2560	51.2%	3080	61.6%	18.4%
2,4-Dichlorophenol	5000	2500	50.0%	2840	56.8%	12.7%
Diethyl phthalate	5000	5960	119.2%	5640	112.8%	5.5%
2,4-Dimethylphenol	5000	1510	30.2%	1400	28.0%	7.6%
Dimethyl phthalate	5000	4430	88.6%	4200	84.0%	5.3%
4,6-Dinitro-2-methylphenol	5000	3830	76.6%	4190	83.8%	9.0%
2,4-Dinitrophenol	5000	3680	73.6%	4040	80.8%	9.3%
2,4-Dinitrotoluene	5000	4220	84.4%	4140	82.8%	1.9%
2,6-Dinitrotoluene	5000	4020	80.4%	4140	82.8%	2.9%
Di-n-0ctylphthalate	5000	5110	102.2%	5120	102.4%	0.2%
Flouranthene	5000	4980	99.6%	5010	100.2%	0.6%
Flourene	5000	3940	78.8%	4000	80.0%	1.5%
Hexachlorobenzene	5000	4260	85.2%	4470	89.4%	4.8%
Hexachlorobutadiene	5000	2230	44.6%	2390	47.8%	6.9%
Hexachlorocyclopentadiene	5000	3790	75.8%	4080	81.6%	7.4%
Hexachloroethane	5000	2400	48.0%	2940	58.8%	20.2%
Indeno(1,2,3-cd)pyrene	5000	5280	105.6%	5270	105.4%	0.2%
Isophorone	5000	3000	60.0%	3350	67.0%	11.0%
Naphthalene	5000	2700	54.0%	2970	59.4%	9.5%
Nitrobenzene	5000	2760	55.2%	3070	61.4%	10.6%
2-Nitrophenol	5000	2370	47.4%	2710	54.2%	13.4%
4-Nitrophenol	5000	4770	95.4%	4940	98.8%	3.5%
N-Nitrosodimethylamine	5000	2960	59.2%	3540	70.8%	17.8%

Laboratory Quality Control Check Sample (LCS)

Project: Chatsworth Reservoir Sample Matrix: SOIL

DATE EXTRACTED:	3/12/2008	EXTRACTION METHOD :	USEPA 3541
DATE ANALYZED:	3/13/2008	ANALYTICAL METHOD:	USEPA 8270
SUPPLY SOURCE:	Cerilliant	LAB LCS I.D.:	Q7371
LOT NUMBER:	ER090605-01		

Compounds	True Value ug/kg	Result LCS1 ug/kg	LCS1 %Recovery	Result LCS2 ug/kg	LCS2 %Recovery	RPD (%)
N-Nitrosodiphenylamine	5000	590	11.8%	565	11.3%	4.3%
N-Nitrosodi-n-propylamine	5000	3050	61.0%	3670	73.4%	18.5%
Pentachlorophenol	5000	4160	83.2%	3940	78.8%	5.4%
Phenanthrene	5000	4630	92.6%	4740	94.8%	2.3%
Phenol	5000	2760	55.2%	3300	66.0%	17.8%
Pyrene	5000	4680	93.6%	4740	94.8%	1.3%
1,2,4-Trichlorobenzene	5000	2390	47.8%	2780	55.6%	15.1%
2,4,6-Trichlorophenol	5000	4200	84.0%	4270	85.4%	1.7%

Quality Control Data

Surrogates 8000 ug/Kg for Surrogate	True value ug/kg	surrogate Results ug/kg	% Rec	surrogate Results ug/kg	% Rec	RPD %	EPA Limits % Recovery Lower-Upper
SURR: Phenol-d5	8000	3830	47.9%	4520	56.5%	16.5%	24 - 113
SURR: 2-Fluorophenol	8000	4090	51.1%	4730	59.1%	14.5%	25 - 121
SURR: 2,4,6-Tribromophenol	8000	6900	86.3%	6430	80.4%	7.1%	19 - 122
SURR: 2-Fluorobiphenyl	8000	4930	61.6%	5250	65.6%	6.3%	30 - 115
SURR: Nitrobenzene-d5	8000	3960	49.5%	4370	54.6%	9.8%	23 - 120
SURR: p-Terphenyl-d14	8000	6830	85.4%	6750	84.4%	1.2%	18 - 137

Comment:

Analyst: Jong Yi Reviewed by: Rose Gentallan 4/14/08

Laboratory Quality Control Check Sample (LCS)

Project: Chatsworth Reservoir Sample Matrix: SOIL

DATE EXTRACTED:	3/14/2008	EXTRACTION METHOD :	USEPA 3541
DATE ANALYZED:	3/18/2008	ANALYTICAL METHOD:	USEPA 8270
SUPPLY SOURCE:	Cerilliant	LAB LCS I.D.:	Q7371
LOT NUMBER:	ER090605-01		

Compounds	True Value	Result LCS1	LCS1	Result LCS2	LCS2	RPD
	ug/kg	ug/kg	%Recovery	ug/kg	%Recovery	(%)
Acenaphthene	5000	3450	69.0%			
Acenaphthylene	5000	3630	72.6%			
Anthracene	5000	4350	87.0%			
Azobezene	5000	4930	98.6%			
Benzo(a)anthracene	5000	4540	90.8%			
Benzo(b)flouranthene	5000	5070	101.4%			
Benzo(k)flouranthene	5000	4800	96.0%			
Benzo(g,h,I)perylene	5000	4760	95.2%			
Benzo(a)pyrene	5000	4120	82.4%			
Bis(2-chloroethoxy)methane	5000	2430	48.6%			
Bis(2-chloroethyl)ether	5000	3120	62.4%			
Bis(2-chloroisopropyl)ether	5000	2960	59.2%			
Bis(2-ethylhexyl)phthalate	5000	4910	98.2%			
4-Bromophenyl-phenylether	5000	4450	89.0%			
Benzyl butyl phthalate	5000	5320	106.4%			
Carbazole	5000	4640	92.8%			
2-Chloronaphthalene	5000	2930	58.6%			
4-Chloro-3-methylphenol	5000	3090	61.8%			
2-Chlorophenol	5000	3300	66.0%			
4-Chlorophenyl-phenylether	5000	3920	78.4%			
Chrysene	5000	4600	92.0%			
Dibenz(a,h)anthracene	5000	4930	98.6%			
Di-n-Butylphthalate	5000	6250	125.0%			
1,3-Dichlorobenzene	5000	2460	49.2%			
1,4-Dichlorobenzene	5000	2600	52.0%			
1,2-Dichlorobenzene	5000	2930	58.6%			
2,4-Dichlorophenol	5000	2640	52.8%			
Diethyl phthalate	5000	5280	105.6%			
2,4-Dimethylphenol	5000	819	16.4%			
Dimethyl phthalate	5000	4160	83.2%			
4,6-Dinitro-2-methylphenol	5000	3600	72.0%			
2,4-Dinitrophenol	5000	3840	76.8%			
2,4-Dinitrotoluene	5000	4050	81.0%			
2,6-Dinitrotoluene	5000	3930	78.6%			
Di-n-0ctylphthalate	5000	5120	102.4%			
Flouranthene	5000	5140	102.8%			
Flourene	5000	3780	75.6%			
Hexachlorobenzene	5000	4560	91.2%			
Hexachlorobutadiene	5000	2310	46.2%			
Hexachlorocyclopentadiene	5000	3290	65.8%			
Hexachloroethane	5000	2530	50.6%			
Indeno(1,2,3-cd)pyrene	5000	4910	98.2%			
Isophorone	5000	3210	64.2%			
Naphthalene	5000	2760	55.2%			
Nitrobenzene	5000	2970	59.4%			
2-Nitrophenol	5000	2560	51.2%			
4-Nitrophenol	5000	4450	89.0%			
N-Nitrosodimethylamine	5000	3380	67.6%			

Laboratory Quality Control Check Sample (LCS)

Project: Chatsworth Reservoir

Sample Matrix: SOIL

DATE EXTRACTED:	3/14/2008	EXTRACTION METHOD :	USEPA 3541
DATE ANALYZED:	3/18/2008	ANALYTICAL METHOD:	USEPA 8270
SUPPLY SOURCE:	Cerilliant	LAB LCS I.D.:	Q7371
LOT NUMBER:	ER090605-01		

Compounds	True Value ug/kg	Result LCS1 ug/kg	LCS1 %Recovery	Result LCS2 ug/kg	LCS2 %Recovery	RPD (%)
N-Nitrosodiphenylamine	5000	501	10.0%			
N-Nitrosodi-n-propylamine	5000	3150	63.0%			
Pentachlorophenol	5000	5450	109.0%			
Phenanthrene	5000	4740	94.8%			
Phenol	5000	2930	58.6%			
Pyrene	5000	4220	84.4%			
1,2,4-Trichlorobenzene	5000	2490	49.8%			
2,4,6-Trichlorophenol	5000	4160	83.2%			

Quality Control Data

Surrogates 8000 ug/Kg for Surrogate	True value ug/kg	surrogate Results ug/kg	% Rec	surrogate Results ug/kg	% Rec	RPD %	EPA Limits % Recovery Lower-Upper
SURR: Phenol-d5	8000	4040	50.5%				24 - 113
SURR: 2-Fluorophenol	8000	4760	59.5%				25 - 121
SURR: 2,4,6-Tribromophenol	8000	6410	80.1%				19 - 122
SURR: 2-Fluorobiphenyl	8000	5040	63.0%				30 - 115
SURR: Nitrobenzene-d5	8000	4430	55.4%				23 - 120
SURR: p-Terphenyl-d14	8000	7090	88.6%				18 - 137

Comment: In this extraction batch, only one LCS was extracted.

Analyst: Jong Yi

Reviewed by: Rose Gentallan 4/14/08

Laboratory Quality Control Check Sample (LCS)

Project: Chatsworth Reservoir Sample Matrix: SOIL

DATE EXTRACTED:	3/15/2008	EXTRACTION METHOD :	USEPA 3541
DATE ANALYZED:	3/19/2008	ANALYTICAL METHOD:	USEPA 8270
SUPPLY SOURCE:	Cerilliant	LAB LCS I.D.:	Q7371
LOT NUMBER:	ER090605-01		

Compounds	True Value	Result LCS1	LCS1	Result LCS2	LCS2	RPD
	ug/kg	ug/kg	%Recovery	ug/kg	%Recovery	(%)
Acenaphthene	5000	3820	76.4%			
Acenaphthylene	5000	3500	70.0%			
Anthracene	5000	2400	48.0%			
Azobezene	5000	5380	107.6%			
Benzo(a)anthracene	5000	4590	91.8%			
Benzo(b)flouranthene	5000	6060	121.2%			
Benzo(k)flouranthene	5000	6090	121.8%			
Benzo(g,h,i)perylene	5000	5930	118.6%			
Benzo(a)pyrene	5000	2460	49.2%			
Bis(2-chloroethoxy)methane	5000	2820	56.4%			
Bis(2-chloroethyl)ether	5000	3290	65.8%			
Bis(2-chloroisopropyl)ether	5000	3150	63.0%			
Bis(2-ethylhexyl)phthalate	5000	5980	119.6%			
4-Bromophenyl-phenylether	5000	4630	92.6%			
Benzyl butyl phthalate	5000	6400	128.0%			
Carbazole	5000	4580	91.6%			
2-Chloronaphthalene	5000	3400	68.0%			
4-Chloro-3-methylphenol	5000	2050	41.0%			
2-Chlorophenol	5000	2190	43.8%			
4-Chlorophenyl-phenylether	5000	4240	84.8%			
Chrysene	5000	5790	115.8%			
Dibenz(a,h)anthracene	5000	6070	121.4%			
Di-n-Butylphthalate	5000	6260	125.2%			
1,3-Dichlorobenzene	5000	2410	48.2%			
1,4-Dichlorobenzene	5000	2450	49.0%			
1,2-Dichlorobenzene	5000	3010	60.2%			
2,4-Dichlorophenol	5000	1620	32.4%			
Diethyl phthalate	5000	6110	122.2%			
2,4-Dimethylphenol	5000	339	6.8%			
Dimethyl phthalate	5000	4700	94.0%			
4,6-Dinitro-2-methylphenol	5000	3820	76.4%			
2,4-Dinitrophenol	5000	3600	72.0%			
2,4-Dinitrotoluene	5000	4360	87.2%			
2,6-Dinitrotoluene	5000	4310	86.2%			
Di-n-Octylphthalate	5000	6210	124.2%			
Flouranthene	5000	5240	104.8%			
Flourene	5000	4140	82.8%			
Hexachlorobenzene	5000	4570	91.4%			
Hexachlorobutadiene	5000	2370	47.4%			
Hexachlorocyclopentadiene	5000	4200	84.0%			
Hexachloroethane	5000	2400	48.0%			
Indeno(1,2,3-cd)pyrene	5000	6040	120.8%			
Isophorone	5000	3510	70.2%			
Naphthalene	5000	2900	58.0%			
Nitrobenzene	5000	3300	66.0%			
2-Nitrophenol	5000	2880	57.6%			
4-Nitrophenol	5000	5140	102.8%			
N-Nitrosodimethylamine	5000	6770	135.4%			

Laboratory Quality Control Check Sample (LCS)

Project: Chatsworth Reservoir Sample Matrix: SOIL

DATE EXTRACTED:	3/15/2008	EXTRACTION METHOD :	USEPA 3541
DATE ANALYZED:	3/19/2008	ANALYTICAL METHOD:	USEPA 8270
SUPPLY SOURCE:	Cerilliant	LAB LCS I.D.:	Q7371
LOT NUMBER:	ER090605-01		

Compounds	True Value ug/kg	Result LCS1 ug/kg	LCS1 %Recovery	Result LCS2 ug/kg	LCS2 %Recovery	RPD (%)
N-Nitrosodiphenylamine	5000	187	3.7%			
N-Nitrosodi-n-propylamine	5000	3620	72.4%			
Pentachlorophenol	5000	4480	89.6%			
Phenanthrene	5000	4750	95.0%			
Phenol	5000	2480	49.6%			
Pyrene	5000	5000	100.0%			
1,2,4-Trichlorobenzene	5000	2510	50.2%			
2,4,6-Trichlorophenol	5000	1600	32.0%			

Quality Control Data

Surrogates 8000 ug/Kg for Surrogate	True value ug/kg	surrogate Results ug/kg	% Rec	surrogate Results ug/kg	% Rec	RPD %	EPA Limits % Recovery Lower-Upper
SURR: Phenol-d5	8000	3650	45.6%				24 - 113
SURR: 2-Fluorophenol	8000	2950	36.9%				25 - 121
SURR: 2,4,6-Tribromophenol	8000	1380	17.3%				19 - 122
SURR: 2-Fluorobiphenyl	8000	5660	70.8%				30 - 115
SURR: Nitrobenzene-d5	8000	4790	59.9%				23 - 120
SURR: p-Terphenyl-d14	8000	8580	107.3%				18 - 137

Comment: In this extraction batch, only one LCS was extracted.

Analyst: Jong Yi Reviewed by: Rose Gentallan 4/14/08

Laboratory Quality Control Check Sample (LCS)

Project: Chatsworth Reservoir Sample Matrix: SOIL

DATE EXTRACTED:	3/17/2008	EXTRACTION METHOD :	USEPA 3541
DATE ANALYZED:	3/20/2008	ANALYTICAL METHOD:	USEPA 8270
SUPPLY SOURCE:	Cerilliant	LAB LCS I.D.:	Q7371
LOT NUMBER:	ER090605-01		

Compounds	True Value	Result LCS1	LCS1	Result LCS2	LCS2	RPD
	ug/kg	ug/kg	%Recovery	ug/kg	%Recovery	(%)
Acenaphthene	5000	2480	49.6%	4020	80.4%	47.4%
Acenaphthylene	5000	2000	40.0%	3240	64.8%	47.3%
Anthracene	5000	1740	34.8%	2020	40.4%	14.9%
Azobezene	5000	3520	70.4%	4800	96.0%	30.8%
Benzo(a)anthracene	5000	3470	69.4%	4380	87.6%	23.2%
Benzo(b)flouranthene	5000	4430	88.6%	5340	106.8%	18.6%
Benzo(k)flouranthene	5000	4160	83.2%	5340	106.8%	24.8%
Benzo(g,h,i)perylene	5000	4110	82.2%	5180	103.6%	23.0%
Benzo(a)pyrene	5000	1940	38.8%	2030	40.6%	4.5%
Bis(2-chloroethoxy)methane	5000	1780	35.6%	2950	59.0%	49.5%
Bis(2-chloroethyl)ether	5000	2160	43.2%	4090	81.8%	61.8%
Bis(2-chloroisopropyl)ether	5000	2220	44.4%	4070	81.4%	58.8%
Bis(2-ethylhexyl)phthalate	5000	4580	91.6%	5740	114.8%	22.5%
4-Bromophenyl-phenylether	5000	3050	61.0%	4080	81.6%	28.9%
Benzyl butyl phthalate	5000	4810	96.2%	5890	117.8%	20.2%
Carbazole	5000	3100	62.0%	3950	79.0%	24.1%
2-Chloronaphthalene	5000	2110	42.2%	3700	74.0%	54.7%
4-Chloro-3-methylphenol	5000	1180	23.6%	1440	28.8%	19.8%
2-Chlorophenol	5000	1210	24.2%	2070	41.4%	52.4%
4-Chlorophenyl-phenylether	5000	2720	54.4%	4130	82.6%	41.2%
Chrysene	5000	4280	85.6%	5300	106.0%	21.3%
Dibenz(a,h)anthracene	5000	4190	83.8%	5320	106.4%	23.8%
Di-n-Butylphthalate	5000	4930	98.6%	6170	123.4%	22.3%
1,3-Dichlorobenzene	5000	2010	40.2%	3530	70.6%	54.9%
1,4-Dichlorobenzene	5000	1990	39.8%	3420	68.4%	52.9%
1,2-Dichlorobenzene	5000	2420	48.4%	4190	83.8%	53.6%
2,4-Dichlorophenol	5000	832	16.6%	1230	24.6%	38.6%
Diethyl phthalate	5000	4630	92.6%	5840	116.8%	23.1%
2,4-Dimethylphenol	5000	223	4.5%	269	5.4%	18.7%
Dimethyl phthalate	5000	3140	62.8%	4380	87.6%	33.0%
4,6-Dinitro-2-methylphenol	5000	3330	66.6%	4360	87.2%	26.8%
2,4-Dinitrophenol	5000	3950	79.0%	5360	107.2%	30.3%
2,4-Dinitrotoluene	5000	3300	66.0%	4310	86.2%	26.5%
2,6-Dinitrotoluene	5000	2990	59.8%	4120	82.4%	31.8%
Di-n-Octylphthalate	5000	4710	94.2%	5820	116.4%	21.1%
Flouranthene	5000	3690	73.8%	4790	95.8%	25.9%
Flourene	5000	2750	55.0%	3900	78.0%	34.6%
Hexachlorobenzene	5000	3050	61.0%	3780	75.6%	21.4%
Hexachlorobutadiene	5000	1850	37.0%	2960	59.2%	46.2%
Hexachlorocyclopentadiene	5000	2790	55.8%	5110	102.2%	58.7%
Hexachloroethane	5000	1970	39.4%	3420	68.4%	53.8%
Indeno(1,2,3-cd)pyrene	5000	4200	84.0%	5290	105.8%	23.0%
Isophorone	5000	2390	47.8%	3630	72.6%	41.2%
Naphthalene	5000	2100	42.0%	3270	65.4%	43.6%
Nitrobenzene	5000	2420	48.4%	3610	72.2%	39.5%
2-Nitrophenol	5000	1960	39.2%	3170	63.4%	47.2%
4-Nitrophenol	5000	4220	84.4%	5270	105.4%	22.1%
N-Nitrosodimethylamine	5000	2490	49.8%	16000	320.0%	146.1%

500031

Laboratory Quality Control Check Sample (LCS)

Project: Chatsworth Reservoir

Sample Matrix: SOIL

DATE EXTRACTED:	3/17/2008	EXTRACTION METHOD :	USEPA 3541
DATE ANALYZED:	3/20/2008	ANALYTICAL METHOD:	USEPA 8270
SUPPLY SOURCE:	Cerilliant	LAB LCS I.D.:	Q7371
LOT NUMBER:	ER090605-01		

Compounds	True Value ug/kg	Result LCS1 ug/kg	LCS1 %Recovery	Result LCS2 ug/kg	LCS2 %Recovery	RPD (%)
N-Nitrosodiphenylamine	5000	164	3.3%	171	3.4%	4.2%
N-Nitrosodi-n-propylamine	5000	2340	46.8%	4030	80.6%	53.1%
Pentachlorophenol	5000	4600	92.0%	4830	96.6%	4.9%
Phenanthrene	5000	3260	65.2%	4180	83.6%	24.7%
Phenol	5000	1370	27.4%	2500	50.0%	58.4%
Pyrene	5000	3680	73.6%	4820	96.4%	26.8%
1,2,4-Trichlorobenzene	5000	1840	36.8%	2920	58.4%	45.4%
2,4,6-Trichlorophenol	5000	1150	23.0%	1310	26.2%	13.0%

Quality Control Data

Surrogates 8000 ug/Kg for Surrogate	True value ug/kg	surrogate Results ug/kg	% Rec	surrogate Results ug/kg	% Rec	RPD %	EPA Limits % Recovery Lower-Upper
SURR: Phenol-d5	8000	2150	26.9%	3750	46.9%	54.2%	24 - 113
SURR: 2-Fluorophenol	8000	1630	20.4%	2600	32.5%	45.9%	25 - 121
SURR: 2,4,6-Tribromophenol	8000	773	9.7%	785	9.8%	1.5%	19 - 122
SURR: 2-Fluorobiphenyl	8000	3440	43.0%	6120	76.5%	56.1%	30 - 115
SURR: Nitrobenzene-d5	8000	3620	45.3%	4920	61.5%	30.4%	23 - 120
SURR: p-Terphenyl-d14	8000	6260	78.3%	7610	95.1%	19.5%	18 - 137

Comment:

Analyst: Jong Yi

Reviewed by: Rose Gentalan RG 4/14/08

500032

ENVIRONMENTAL LABORATORY
DEPARTMENT OF WATER AND POWER
CITY OF LOS ANGELES

1630 N. MAIN ST. BUILDING #7
LOS ANGELES, CA 90012
213-367-7399

CHEMISTRY LABORATORY QUALITY CONTROL REPORT

Report of GC/MS analysis for Semi-Volatile Organics
EPA SW-846 METHOD 8270D

% RECOVERIES OF SURROGATE & SPIKE SAMPLES

Sample Matrix	**Soil**
Sample ID	**LI03322 SPK & SPK Dup**
Sample Name	**Chatsworth Reservoir**
Sample Weight(g)	**10**
Final Volume(ml)	**1**

Date Sampled : 3/11/08
Date Extracted : 3/12/08
Date Analyzed: 3/14/08

SURROGATE

Compound	Sample Results (ug/kg)	Amount Spiked (ug/Kg)	LI03322 SPK (ug/Kg)	SURR Rec (%)	LI03322 SPK DUP (ug/Kg)	SURR DUP Rec (%)	RPD (%)	EPA Limits % Recovery Lower – Upper
Phenol-d5	nd	**8000**	2940	36.8%	3110	38.9%	5.6%	24 - 113
2-Fluorophenol	nd	**8000**	2590	32.4%	3010	37.6%	15.0%	25 - 121
2,4,6-Tribromophenol	nd	**8000**	5980	74.8%	6780	84.8%	12.5%	19 - 122
2-Fluorobiphenyl	nd	**8000**	3700	46.3%	4050	50.6%	9.0%	30 - 115
Nitrobenzene-d5	nd	**8000**	2730	34.1%	3610	45.1%	27.8%	23 - 130
p-terphenyl-d14	nd	**8000**	6250	78.1%	6550	81.9%	4.7%	18 - 137

SPIKE / SPIKE DUP

Compound	Sample Results (ug/kg)	Amount Spiked (ug/Kg)	LI03322 SPK (ug/Kg)	SPK Rec (%)	LI03322 SPK DUP (ug/Kg)	SPK DUP Rec (%)	RPD (%)	EPA Limits % Recovery Lower – Upper
Phenol	nd	**10000**	4090	40.9%	4320	43.2%	5.5%	26 - 90
2-Chlorophenol	nd	**10000**	3990	39.9%	4630	46.3%	14.8%	25 - 102
1,4-Dichlorobenzene	nd	**5000**	1090	21.8%	1780	35.6%	48.1%	28 - 104
N-Nitrosodi-n-propylamine	nd	**5000**	1930	38.6%	2300	46.0%	17.5%	41 - 126
1,2,4-trichlorobenzene	nd	**5000**	1500	30.0%	2040	40.8%	30.5%	38 - 107
4-Chloro-3-methylphenol	nd	**10000**	7860	78.6%	8430	84.3%	7.0%	26 - 103
Acenaphthene	nd	**5000**	2460	49.2%	2610	52.2%	5.9%	31 - 137
4-nitrophenol	nd	**10000**	7860	78.6%	7950	79.5%	1.1%	11 - 114
2,4-Dinitrotoluene	nd	**5000**	3460	69.2%	3770	75.4%	8.6%	28 - 89
Pentachlorophenol	nd	**10000**	8560	85.6%	7600	76.0%	11.9%	17 - 109
Pyrene	nd	**5000**	3640	72.8%	3750	75.0%	3.0%	35 - 142

*RPD -Relative Percent Difference; percent difference for each compound in the spiked samples for each analytical batch.

Analyzed by : Jong Yi

Reviewed by : Rose Gentallan 4/14/08

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DEPARTMENT OF WATER AND POWER
CITY OF LOS ANGELES

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CHEMISTRY LABORATORY QUALITY CONTROL REPORT

Report of GC/MS analysis for Semi-Volatile Organics
EPA SW-846 METHOD 8270D

% RECOVERIES OF SURROGATE & SPIKE SAMPLES

Sample Matrix	**Soil**	Date Sampled : 3/11/08
Sample ID	**LI03334 SPK & SPK Dup**	Date Extracted : 3/14/08
Sample Name	**Chatsworth Reservoir**	Date Analyzed: 3/18/08
Sample Weight(g)	**10**	
Final Volume(ml)	**1**	

SURROGATE

Compound	Sample Results (ug/kg)	Amount Spiked (ug/Kg)	LI03334 SPK (ug/Kg)	SURR Rec (%)	LI03334 SPK DUP (ug/Kg)	SURR DUP Rec (%)	RPD (%)	EPA Limits % Recovery Lower -- Upper
Phenol-d5	nd	**8000**	3890	48.6%	3570	44.6%	8.6%	24 - 113
2-Fluorophenol	nd	**8000**	3920	49.0%	3850	48.1%	1.8%	25 - 121
2,4,6-Tribromophenol	nd	**8000**	7240	90.5%	6950	86.9%	4.1%	19 - 122
2-Fluorobiphenyl	nd	**8000**	4560	57.0%	4260	53.3%	6.8%	30 - 115
Nitrobenzene-d5	nd	**8000**	4300	53.8%	4850	60.6%	12.0%	23 - 130
p-terphenyl-d14	nd	**8000**	6900	86.3%	7710	96.4%	11.1%	18 - 137

SPIKE / SPIKE DUP

Compound	Sample Results (ug/kg)	Amount Spiked (ug/Kg)	LI03334 SPK (ug/Kg)	SPK Rec (%)	LI03334 SPK DUP (ug/Kg)	SPK DUP Rec (%)	RPD (%)	EPA Limits % Recovery Lower -- Upper
Phenol	nd	**10000**	5150	51.5%	4640	46.4%	10.4%	26 - 90
2-Chlorophenol	nd	**10000**	5440	54.4%	5400	54.0%	0.7%	25 - 102
1,4-Dichlorobenzene	nd	**5000**	1820	36.4%	2150	43.0%	16.6%	28 - 104
N-Nitrosodi-n-propylamine	nd	**5000**	2690	53.8%	2490	49.8%	7.7%	41 - 126
1,2,4-trichlorobenzene	nd	**5000**	2160	43.2%	2560	51.2%	16.9%	38 - 107
4-Chloro-3-methylphenol	nd	**10000**	6920	69.2%	7700	77.0%	10.7%	26 - 103
Acenaphthene	nd	**5000**	2410	48.2%	2270	45.4%	6.0%	31 - 137
4-nitrophenol	nd	**10000**	9010	90.1%	9050	90.5%	0.4%	11 - 114
2,4-Dinitrotoluene	nd	**5000**	4030	80.6%	4110	82.2%	2.0%	28 - 89
Pentachlorophenol	nd	**10000**	10100	101.0%	10700	107.0%	5.8%	17 - 109
Pyrene	nd	**5000**	3780	75.6%	4000	80.0%	5.7%	35 - 142

*RPD -Relative Percent Difference; percent difference for each compound in the spiked samples for each analytical batch.

Analyzed by : Jong Yi

Reviewed by : Rose Gentallan 4/14/08

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DEPARTMENT OF WATER AND POWER
CITY OF LOS ANGELES

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CHEMISTRY LABORATORY QUALITY CONTROL REPORT

Report of GC/MS analysis for Semi-Volatile Organics
EPA SW-846 METHOD 8270D

% RECOVERIES OF SURROGATE & SPIKE SAMPLES

Sample Matrix	**Soil**	Date Sampled : 3/11/08
Sample ID	**LI03355 SPK & SPK Dup**	Date Extracted : 3/15/08
Sample Name	**Chatsworth Reservoir**	Date Analyzed: 3/19/08
Sample Weight(g)	**10**	
Final Volume(ml)	**1**	

SURROGATE

Compound	Sample Results (ug/kg)	Amount Spiked (ug/Kg)	LI03355 SPK (ug/Kg)	SURR Rec (%)	LI03355 SPK DUP (ug/Kg)	SURR DUP Rec (%)	RPD (%)	EPA Limits % Recovery Lower -- Upper
Phenol-d5	nd	**8000**	1870	23.4%	2760	34.5%	38.4%	24 - 113
2-Fluorophenol	nd	**8000**	1440	18.0%	2200	27.5%	41.8%	25 - 121
2,4,6-Tribromophenol	nd	**8000**	657	8.2%	718	9.0%	8.9%	19 - 122
2-Fluorobiphenyl	nd	**8000**	2980	37.3%	4590	57.4%	42.5%	30 - 115
Nitrobenzene-d5	nd	**8000**	3710	46.4%	5810	72.6%	44.1%	23 - 130
p-terphenyl-d14	nd	**8000**	9060	113.3%	8780	109.8%	3.1%	18 - 137

SPIKE / SPIKE DUP

Compound	Sample Results (ug/kg)	Amount Spiked (ug/Kg)	LI03355 SPK (ug/Kg)	SPK Rec (%)	LI03355 SPK DUP (ug/Kg)	SPK DUP Rec (%)	RPD (%)	EPA Limits % Recovery Lower -- Upper
Phenol	nd	**10000**	2320	23.2%	3470	34.7%	39.7%	26 - 90
2-Chlorophenol	nd	**10000**	1960	19.6%	3030	30.3%	42.9%	25 - 102
1,4-Dichlorobenzene	nd	**5000**	1720	34.4%	2560	51.2%	39.3%	28 - 104
N-Nitrosodi-n-propylamine	nd	**5000**	1970	39.4%	3050	61.0%	43.0%	41 - 126
1,2,4-trichlorobenzene	nd	**5000**	1910	38.2%	2950	59.0%	42.8%	38 - 107
4-Chloro-3-methylphenol	nd	**10000**	2640	26.4%	2920	29.2%	10.1%	26 - 103
Acenaphthene	nd	**5000**	1670	33.4%	2170	43.4%	26.0%	31 - 137
4-nitrophenol	nd	**10000**	9200	92.0%	10000	100.0%	8.3%	11 - 114
2,4-Dinitrotoluene	nd	**5000**	3960	79.2%	4180	83.6%	5.4%	28 - 89
Pentachlorophenol	nd	**10000**	4940	49.4%	5160	51.6%	4.4%	17 - 109
Pyrene	nd	**5000**	4730	94.6%	4370	87.4%	7.9%	35 - 142

*RPD -Relative Percent Difference; percent difference for each compound in the spiked samples for each analytical batch.

Analyzed by : Jong Yi

Reviewed by : Rose Gentallan RG 4/14/08

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ENVIRONMENTAL LABORATORY
DEPARTMENT OF WATER AND POWER
CITY OF LOS ANGELES

1630 N. MAIN ST. BUILDING #7
LOS ANGELES, CA 90012
213-367-7399

CHEMISTRY LABORATORY QUALITY CONTROL REPORT

Report of GC/MS analysis for Semi-Volatile Organics
EPA SW-846 METHOD 8270D

% RECOVERIES OF SURROGATE & SPIKE SAMPLES

Sample Matrix	**Soil**	Date Sampled : 3/11/08
Sample ID	**LI03364 SPK & SPK Dup**	Date Extracted : 3/17/08
Sample Name	**Chatsworth Reservoir**	Date Analyzed: 3/19/08
Sample Weight(g)	**10**	
Final Volume(ml)	**1**	

SURROGATE

Compound	Sample Results (ug/kg)	Amount Spiked (ug/Kg)	LI03364 SPK (ug/Kg)	SURR Rec (%)	LI03364 SPK DUP (ug/Kg)	SURR DUP Rec (%)	RPD (%)	EPA Limits % Recovery Lower -- Upper
Phenol-d5	nd	**8000**	3700	46.3%	3490	43.6%	5.8%	24 - 113
2-Fluorophenol	nd	**8000**	2940	36.8%	2870	35.9%	2.4%	25 - 121
2,4,6-Tribromophenol	nd	**8000**	850	10.6%	996	12.5%	15.8%	19 - 122
2-Fluorobiphenyl	nd	**8000**	5810	72.6%	5090	63.6%	13.2%	30 - 115
Nitrobenzene-d5	nd	**8000**	6450	80.6%	5690	71.1%	12.5%	23 - 130
p-terphenyl-d14	nd	**8000**	8540	106.8%	9690	121.1%	12.6%	18 - 137

SPIKE / SPIKE DUP

Compound	Sample Results (ug/kg)	Amount Spiked (ug/Kg)	LI03364 SPK (ug/Kg)	SPK Rec (%)	LI03364 SPK DUP (ug/Kg)	SPK DUP Rec (%)	RPD (%)	EPA Limits % Recovery Lower -- Upper
Phenol	nd	**10000**	4870	48.7%	4400	44.0%	10.1%	26 - 90
2-Chlorophenol	nd	**10000**	4360	43.6%	4150	41.5%	4.9%	25 - 102
1,4-Dichlorobenzene	nd	**5000**	3130	62.6%	2750	55.0%	12.9%	28 - 104
N-Nitrosodi-n-propylamine	nd	**5000**	3670	73.4%	3320	66.4%	10.0%	41 - 126
1,2,4-trichlorobenzene	nd	**5000**	3740	74.8%	3150	63.0%	17.1%	38 - 107
4-Chloro-3-methylphenol	nd	**10000**	3590	35.9%	3500	35.0%	2.5%	26 - 103
Acenaphthene	nd	**5000**	2720	54.4%	2400	48.0%	12.5%	31 - 137
4-nitrophenol	nd	**10000**	9730	97.3%	9050	90.5%	7.2%	11 - 114
2,4-Dinitrotoluene	nd	**5000**	4110	82.2%	3870	77.4%	6.0%	28 - 89
Pentachlorophenol	nd	**10000**	5990	59.9%	6160	61.6%	2.8%	17 - 109
Pyrene	nd	**5000**	4390	87.8%	4230	84.6%	3.7%	35 - 142

*RPD -Relative Percent Difference; percent difference for each compound in the spiked samples for each analytical batch.

Analyzed by : Jong Yi

Reviewed by : Rose Gentallan 4/14/08

ATTACHMENT # 6

EPA Method 3060A/7199
Hexavalent Chromium

CITY OF LOS ANGELES, DEPARTMENT OF WATER & POWER
ENVIRONMENTAL LABORATORY

Case Narrative
Chromium 6 by EPA Method 3060A/7199

Client: Kelvin Lew			
Project: Chatsworth Reservoir			
COC No.: 08-0683			
Data Review Criteria	**Yes**	**No**	**N/A**
Holding time			
1. Analysis met holding time criteria.	X		
Comments:			
Calibration			
1. Calibration check standards were analyzed per batch.	X		
2. Standards recoveries met QC criteria.	X		
Comments:			
Method Blank, Blank Spikes, Blank Spike Duplicate			
1. Distilled water was used as a method blank in the analysis of soil samples.	X		
2. Blank recoveries met QC criteria.	X		
Comments:			
Lab Control Samples (LCSs)			
1. LCS (certified QC soil sample) was analyzed per batch.	X		
2. Recoveries of LCSs met QC criteria.	X		
Comments:			
Matrix Spike (MS) and Matrix Spike Duplicate (MSD)			
1. MS and MSD samples were analyzed per batch .	X		
2. Recoveries of MS and MSD met QC criteria.	X		
Comments:			
Sample Analysis			
1. Samples were analyzed according to the prescribed QC procedures.	X		
.2. All QC criteria were met.	X		
Comments:			

N/A: Not Applicable

Sample Results

COC 08-0683

ENVIRONMENTAL LABORATORY DATA REPORT

ANALYTICAL RESULT FOR HEXAVALENT CHROMIUM

EPA Method 3060A/7199

Sample Matrix: Soil

Project: Chatsworth

Sample	Description	Date Sampled	Date Analyzed	Cr6 in Soil (ug/kg)	Qualifier	MDL (ug/kg)	RL (ug/kg)
LI03306	KA1-2'	3/10/2008	3/13/2008	574		100	500
LI03307	KA1-5'	3/10/2008	3/13/2008	562		100	500
LI03308	KA1-7'	3/10/2008	3/21/2008	250	J	100	500
LI03309	KA1-10'	3/10/2008	3/13/2008	228	J	100	500
LI03310	KA2-2'	3/10/2008	3/13/2008	378	J	100	500
LI03311	KA2-5'	3/10/2008	3/13/2008	568		100	500
LI03312	KA2-7'	3/10/2008	3/13/2008	283	J	100	500
LI03313	KA2-10'	3/10/2008	3/13/2008	235	J	100	500
LI03314	KA3-2'	3/10/2008	3/13/2008	348	J	100	500
LI03315	KA3-5'	3/10/2008	3/13/2008	278	J	100	500
LI03316	KA3-7'	3/10/2008	3/13/2008	514		100	500
LI03317	KA3-10'	3/10/2008	3/13/2008	289	J	100	500
LI03318	KA4-2'	3/10/2008	3/13/2008	290	J	100	500
LI03319	KA4-5'	3/10/2008	3/13/2008	397	J	100	500
LI03320	KA4-7'	3/10/2008	3/13/2008	288	J	100	500
LI03321	KA4-10'	3/10/2008	3/13/2008	279	J	100	500
LI03322	KA5-2'	3/10/2008	3/13/2008	370	J	100	500
LI03323	KA5-5'	3/10/2008	3/13/2008	624		100	500
LI03324	KA5-7'	3/10/2008	3/13/2008	432	J	100	500
LI03325	KA5-10'	3/10/2008	3/13/2008	254	J	100	500
LI03326	KA6-2'	3/10/2008	3/13/2008	336	J	100	500
LI03327	KA6-5'	3/10/2008	3/13/2008	275	J	100	500
LI03328	KA6-7'	3/10/2008	3/13/2008	365	J	100	500
LI03329	KA6-10'	3/10/2008	3/13/2008	235	J	100	500
LI03330	KA7-2'	3/10/2008	3/13/2008	341	J	100	500
LI03331	KA7-5'	3/10/2008	3/13/2008	354	J	100	500
LI03332	KA7-7'	3/10/2008	3/13/2008	326	J	100	500
LI03333	KA7-10'	3/10/2008	3/13/2008	205	J	100	500
LI03334	KA8-2'	3/10/2008	3/13/2008	263	J	100	500
LI03335	KA8-5'	3/10/2008	3/13/2008	229	J	100	500

Qualifier "J": Result is above the method detection limit (MDL), but below the reporting limit (RL).

ENVIRONMENTAL LABORATORY DATA REPORT

ANALYTICAL RESULT FOR HEXAVALENT CHROMIUM

EPA Method 3060A/7199

Sample Matrix: Soil

Project: Chatsworth

Sample	Description	Date Sampled	Date Analyzed	Cr6 in Soil (ug/kg)	Qualifier	MDL (ug/kg)	RL (ug/kg)
LI03336	KA8-7'	3/10/2008	3/13/2008	250	J	100	500
LI03337	KA8-10'	3/10/2008	3/13/2008	239	J	100	500
LI03338	KA9-2'	3/10/2008	3/17/2008	250	J	100	500
LI03339	KA9-5'	3/10/2008	3/17/2008	301	J	100	500
LI03340	KA9-7'	3/10/2008	3/17/2008	273	J	100	500
LI03341	KA9-10'	3/10/2008	3/17/2008	254	J	100	500
LI03342	KA10-2'	3/10/2008	3/17/2008	198	J	100	500
LI03343	KA10-5'	3/10/2008	3/17/2008	255	J	100	500
LI03344	KA10-7'	3/10/2008	3/17/2008	242	J	100	500
LI03345	KA10-10'	3/10/2008	3/17/2008	239	J	100	500
LI03346	KA11-2'	3/10/2008	3/19/2008	490	J	100	500
LI03347	KA11-5'	3/10/2008	3/19/2008	400	J	100	500
LI03348	KA11-7'	3/10/2008	3/19/2008	256	J	100	500
LI03349	KA11-10'	3/10/2008	3/19/2008	311	J	100	500
LI03350	KA12-2'	3/10/2008	3/19/2008	488	J	100	500
LI03351	KA12-5'	3/10/2008	3/19/2008	274	J	100	500
LI03352	KA12-7'	3/10/2008	3/19/2008	299	J	100	500
LI03353	KA12-10'	3/10/2008	3/19/2008	250	J	100	500
LI03354	KA13-2'	3/10/2008	3/19/2008	214	J	100	500
LI03355	KA13-5'	3/10/2008	3/19/2008	195	J	100	500
LI03356	KA13-7'	3/10/2008	3/19/2008	217	J	100	500
LI03357	KA13-10'	3/10/2008	3/19/2008	282	J	100	500
LI03358	KA14-2'	3/10/2008	3/19/2008	197	J	100	500
LI03359	KA14-5'	3/10/2008	3/19/2008	334	J	100	500
LI03360	KA14-7'	3/10/2008	3/19/2008	397	J	100	500
LI03361	KA14-10'	3/10/2008	3/19/2008	128	J	100	500
LI03362	KA15-2'	3/10/2008	3/19/2008	259	J	100	500
LI03363	KA15-5'	3/10/2008	3/19/2008	249	J	100	500
LI03364	KA15-7'	3/10/2008	3/19/2008	306	J	100	500
LI03365	KA15-10'	3/10/2008	3/19/2008	282	J	100	500

Qualifier "J": Result is above the method detection limit (MDL), but below the reporting limit (RL).

ENVIRONMENTAL LABORATORY DATA REPORT

ANALYTICAL RESULT FOR HEXAVALENT CHROMIUM

EPA Method 3060A/7199

Sample Matrix: Soil

Project: Chatsworth

Sample	Description	Date Sampled	Date Analyzed	Cr6 in Soil (ug/kg)	Qualifier	MDL (ug/kg)	RL (ug/kg)
LI03366	KA16-2'	3/10/2008	3/21/2008	253	J	100	500
LI03367	KA16-5'	3/10/2008	3/21/2008	279	J	100	500
LI03368	KA16-7'	3/10/2008	3/21/2008	306	J	100	500
LI03369	KA16-10'	3/10/2008	3/21/2008	278	J	100	500
LI03370	KA17-2'	3/10/2008	3/21/2008	204	J	100	500
LI03371	KA17-5'	3/10/2008	3/21/2008	247	J	100	500
LI03372	KA17-7'	3/10/2008	3/21/2008	330	J	100	500
LI03373	KA17-10'	3/10/2008	3/21/2008	322	J	100	500
LI03374	KA18-2'	3/10/2008	3/21/2008	503	J	100	500
LI03375	KA18-5'	3/10/2008	3/21/2008	230	J	100	500
LI03376	KA18-7'	3/10/2008	3/21/2008	359	J	100	500
LI03377	KA18-10'	3/10/2008	3/21/2008	382	J	100	500

Qualifier "J": Result is above the method detection limit (MDL), but below the reporting limit (RL).

QC SUMMARIES

ENVIRONMENTAL LABORATORY DATA REPORT

QA/QC Report
Chromium 6 by EPA 3060A/7199
Sample Matrix: Soil

Project: Chatsworth

I. Matrix Spike (MS) / Matrix Spike Duplicate (MSD)

Reporting Unit: ug/kg

SAMPLE LOG NO.	DATE ANALYZED	SAMPLE CONC	SAMPLE DUP	SPIKE CONC	MS	% MS	MSD	% MSD	RPD	MS/MSD % ACP	RPD ACP
LI03325	3/13/2008	254	312	2000	2249	100%	2343	104%	4.1%	70 - 130	≤20 %
LI03345	3/17/2008	239	181	2000	1973	87%	2151	96%	9%	70 - 130	≤20 %
LI03365	3/19/2008	282	288	2000	2107	91%	2296	101%	9%	70 - 130	≤20 %
LI03377	3/21/2008	382	314	2000	2354	99%	2356	99%	0%	70 - 130	≤20 %

SPIKE CONC = Spiking Concentration;
MS = Matrix Spike
MSD = Matrix Spike Duplicate
% MS = Percent Recovery of MS
% MSD = Percent Recovery of MSD
RPD = Relative Percent Difference
ACP = Acceptable Range of Percent

II. Laboratory Quality Control Check Sample (LCS)

LCS Log No. Q6866

Reporting Unit: ug/kg

ANALYTE	DATE ANALYZED	SPIKE CONC	RESULT	% REC	SPIKE CONC	DUP RESULT	% REC	Acceptable Range
Hexavalent Chromium	3/13/08	2000	2222	111%	2000	2162	108%	70-130 %
Hexavalent Chromium	3/17/08	2000	2118	106%	2000	1984	99%	70-130 %
Hexavalent Chromium	3/19/08	2000	2040	102%	2000	1873	94%	70-130 %
Hexavalent Chromium	3/21/08	2000	2006	100%	2000	1992	100%	70-130 %

ATTACHMENT # 7

SM 2520B
Salinity

Sample Results

DEPARTMENT OF WATER AND POWER
OF THE CITY OF LOS ANGELES
WATER QUALITY AND OPERATIONS

ENVIRONMENTAL LABORATORY DATA REPORT

Chatsworth Reservoir

DATA

LA DWP Sample ID	Location	Salinity (g/L)
LI03306	KA1-2 ft	<0.1
LI03307	KA1-5 ft	0.1
LI03308	KA1-7 ft	0.4
LI03309	KA1-10 ft	0.3
LI03310	KA2-2 ft	<0.1
LI03311	KA2-5 ft	0.4
LI03312	KA2-7 ft	0.4
LI03313	KA2-10 ft	0.4
LI03314	KA3-2 ft	<0.1
LI03315	KA3-5 ft	0.1
LI03316	KA3-7 ft	0.1
LI03317	KA3-10 ft	0.1
LI03318	KA4-2 ft	0.1
LI03319	KA4-5 ft	0.1
LI03320	KA4-7 ft	0.1
LI03321	KA4-10 ft	0.2
LI03322	KA5-2 ft	0.1
LI03323	KA5-5 ft	0.1
LI03324	KA5-7 ft	0.1
LI03325	KA5-10 ft	0.1
LI03326	KA6-2 ft	0.1
LI03327	KA6-5 ft	0.4
LI03328	KA6-7 ft	0.4
LI03329	KA6-10 ft	0.3
LI03330	KA7-2 ft	0.1
LI03331	KA7-5 ft	0.5
LI03332	KA7-7 ft	0.3
LI03333	KA7-10 ft	0.1
LI03334	KA8-2 ft	<0.1
LI03335	KA8-5 ft	0.2
LI03336	KA8 7 ft	0.3
LI03337	KA8-10 ft	0.2
LI03338	KA9-2 ft	0.8
LI03339	KA9-5 ft	0.2
LI03340	KA9-7 ft	0.1
LI03341	KA9-10 ft	0.1
LI03342	KA10-2 ft	1.5

DEPARTMENT OF WATER AND POWER
OF THE CITY OF LOS ANGELES
WATER QUALITY AND OPERATIONS

ENVIRONMENTAL LABORATORY DATA REPORT
Chatsworth Reservoir

DATA

LA DWP Sample ID	Location	Salinity (g/L)
LI03343	KA10-5 ft	0.2
LI03344	KA10-7 ft	0.2
LI03345	KA10-10 ft	0.2
LI03346	KA11-2 ft	0.9
LI03347	KA11-5 ft	0.4
LI03348	KA11-7 ft	0.2
LI03349	KA11-10 ft	0.2
LI03350	KA12-2 ft	0.4
LI03351	KA12-5 ft	<0.1
LI03352	KA12-7 ft	<0.1
LI03353	KA12-10 ft	<0.1
LI03354	KA13-2 ft	0.3
LI03355	KA13-5 ft	0.1
LI03356	KA13-7 ft	<0.1
LI03357	KA13-10 ft	0.1
LI03358	KA14-2 ft	0.7
LI03359	KA14-5 ft	0.4
LI03360	KA14-7 ft	0.4
LI03361	KA14-10 ft	0.4
LI03362	KA15-2 ft	0.4
LI03363	KA15-5 ft	0.1
LI03364	KA15-7 ft	<0.1
LI03365	KA15-10 ft	<0.1
LI03366	KA16-2 ft	2.3
LI03367	KA16-5 ft	1.9
LI03368	KA16-7 ft	1.1
LI03369	KA16-10 ft	0.6
LI03370	KA17-2 ft	1.0
LI03371	KA17-5 ft	0.7
LI03372	KA17-7 ft	0.4
LI03373	KA17-10 ft	0.3
LI03374	KA18-2 ft	0.9
LI03375	KA18-5 ft	0.7
LI03376	KA18-7 ft	0.2
LI03377	KA18-10 ft	0.4

* g/L gram per liter

Gonzalez, Brian

From: Gonzalez, Brian
Sent: Tuesday, March 31, 2009 2:57 PM
To: 'EcoMom2000@aol.com'
Subject: LADWP CPRA Records Request R09-0050
Attachments: Christine Rowe.pdf

Good afternoon Ms. Rowe,

Thank you for taking a moment this afternoon to discuss your California Public Records Act (CPRA) request. Per our conversation, attached for your review is the duplication cost estimate for the records responsive to your request.

As a reminder, you may choose to review the records at no cost by scheduling an appointment. Should you wish to exercise this option, please call (213) 367-4440.

If I can answer any questions or be of further assistance, please feel free to contact me. Thank you.

Regards,

Brian Gonzalez
Tel: (213) 367-3655
E-mail: brian.gonzalez@ladwp.com

ESTIMATE CPRA No. R09-0050 DWP

City of Los Angeles
Los Angeles Department of Water and Power
Estimate for CPRA Records

The amount of $52.70 is billed to Christine Rowe (Requestor's Name) of West Hills NC (Requestor's Affiliation).

The basis for this amount is:

Quantity	Page Size/Item Description	Cost per page/item	Total
460	8 ½ × 11 inch	$0.10	$46.00
0	8 ½ × 14 inch	$0.10	$0.00
3	11 × 17 inch	$0.25	$0.75
0	8 ½ × 11 inch - colored	$0.25	$0.00
0	Map (54 cents per square foot) Inches: 18 × 24	$1.62	$0.00
0	Color Map ($4 per square foot) Inches: 18 × 24	$12.00	$0.00
0	CD (Office Depot Brand - 100 spindle)	$0.40	$0.00
	Postage Cost 4 lbs		$4.95
	Request Fee		$1.00
	Total		$52.70

Documents provided by: _____ (CAO Staff) on _____ (Date)

☐ Check (No. _____) ☐ Cash Payment received by: _____ (CAO Staff) on _____ (Date)

Funds deposited with Cashier by: _____ (CAO Staff) on _____ (Date)

Comments:

Cash or Check Only. Please make all checks payable to:

Los Angeles Department of Water and Power
ATTN: Office of the Chief Administrative Officer
CPRA Coordinator
111 N. Hope Street
Los Angeles, CA 90012-2607

Records will be released upon receipt of payment.

Please be advised that there is no cost to review the records at the Los Angeles Department of Water and Power. Please call (213) 367-4440 to schedule an appointment.

For any questions, please contact the Brian Gonzalez at (213) 367-3655.

Thank you.

c: Christine Rowe, CPRA file

Department of Water and Power the City of Los Angeles

ANTONIO R. VILLARAIGOSA
Mayor

Commission
LEE KANON ALPERT, *President*
EDITH RAMIREZ, *Vice President*
WALLY KNOX
FORESCEE HOGAN-ROWLES
JONATHAN PARFREY
BARBARA E. MOSCHOS, *Secretary*

H. DAVID NAHAI,
Chief Executive Officer and General Manager

March 19, 2009

Ms. Christine Rowe
6732 Faust Avenue
West Hills, CA 91307

Dear Ms. Rowe:

Subject: California Public Records Act (CPRA) Request: Chatsworth Reservoir Laboratory Results for the last 5 years or a thorough explanation of why the reservoir was shut down in 1969

This is in response to your CPRA request dated March 08, 2009, which seeks records relating to the above subject, our reference number R09-0050.

The Los Angeles Department of Water and Power (LADWP) has concluded its search for records responsive to your request.

To schedule a viewing of these records, please contact the LADWP CPRA Coordinator at (213) 367-4440. During the record-review session, you may indicate which, if any, records you wish to have photocopied. In accordance with the Los Angeles Administrative Code, the fee for records duplication service is $1.00 for the request, 10 cents per 8.5x11-inch or 8.5x14-inch page, and 25 cents per 11x17-inch page. There is no fee if you wish only to review the documents. Payment, which is due at the time of the request, may be in cash or check made payable to Los Angeles Department of Water and Power.

If you have any additional requests for records, you are encouraged to submit your request on the LADWP CPRA Request Form, a copy of which is enclosed. A written request helps clarify the records being sought and will assist us in our response to you. LADWP CPRA Request Forms are also available at the LADWP website www.ladwp.com/ladwp/cms/ladwp006433.pdf or from the CPRA Hotline at (213) 367-4440.

Sincerely,
ORIGINAL SIGNED
JOSEPH M. RAMALLO

Joseph M. Ramallo
Director of Public Affairs

Enclosure

R09-050 DWP

March 10, 2009

Loretta Dotson/John Rudek – Please oversee gathering of records and prepare an appropriate response for this request received on March 9.

Please submit to the CAO's office by Noon, Tuesday, March 17.

c: Raman Raj
Cecilia K.T. Weldon
James B. McDaniel
Katie Zordilla
Evan Georgoulis
Joseph Ramallo
Winifred Yancy
Joyce Shirado
Sherry Morimoto
Brian Gonzalez

From: EcoMom2000@aol.com [mailto:EcoMom2000@aol.com]
Sent: Sunday, March 08, 2009 11:33 PM
To: Taylor, Simone
Cc: Adams, Martin; dwisemanmd@yahoo.com; rcollins@dtsc.ca.gov; nchang@waterboards.ca.gov
Subject: Chatsworth Reservoir - Public Records Act Request

Chatsworth Reservoir aka: Chatsworth Nature Preserve Public Records Request

Dear Ms. Taylor,
I am sorry that I did not get to talk to you at the Encino NC about a week ago. It would have been nice to finally meet you in person.

I am forwarding to you an email from Mr. Martin Adams of the LADWP from October 2008. I had requested the lab results for the Chatsworth Nature Preserve aka: the Chatsworth Reservoir.

I sent Mr. Adams a document link with the historical contaminants found in the reservoir. As a member of the West Hills Neighborhood Council, I have been trying to get my hands on this document for some time.

The Corporate Pointe site is a RCRA site. The LARWQCB has a sampling plan for it. It backs up to the Chatsworth Reservoir. Historically, it is believed that TCE and other contaminants may have migrated to the reservoir.

The DTSC is the lead agency for the RCRA site. They are also concerned with what is in the surface water, the ground water, and the soil.

The West Hills Neighborhood Council has voted to request a health risk assessment for the Corporate Pointe site and the surrounding properties. Any documents that you can produce will assist the LARWQB and the DTSC - as well as the CDPH - with their work.

I would appreciate it very much if you can produce any lab results - water or soil that have been done on this property in the past 5 years, or any thorough documents that would explain why the reservoir was shut down in 1969.

Thank you.

Christine Rowe
6732 Faust Ave
West Hills, CA 91307

From: EcoMom2000@aol.com [mailto:EcoMom2000@aol.com]
Sent: Sunday, October 12, 2008 7:15 PM
To: Adams, Martin; tegoscue@waterboards.ca.gov

Cc: dwisemanmd@yahoo.com
Subject: Chatsworth Reservoir

Dear Mr. Adams,

I met you at the Sustainable Water event. You were going to get me a report of current sampling of the Chatsworth Reservoir. I sent you a report a couple of weeks ago. It is on this list again.

This is a new document that refers to ground water and surface water - radionuclides in it, etc.

http://www.etec.energy.gov/Health-and-Safety/Documents/ASERS/Env_Rpt_1964_(Jan-Jun).pdf

I do not have the capability to interpret the data, but I assume that someone at the LA DWP or the LA RWQCB, does.

There are different stories about when and why the reservoir was shut down - depending on which document that you read. I have documents that say it was shut down in 1969 - before the Northridge earthquake.

http://www.etec.energy.gov/Health-and-Safety/Documents/ChatsworthReservoir/Chatsworth_Reservoir_Sampling_and_Testing_Report.pdf

http://www.etec.energy.gov/Health-and-Safety/Documents/ASERS/Environmental_Monitoring-1962Q12.pdf

http://www.etec.energy.gov/Health-and-Safety/Documents/ASERS/Environmental_Monitoring-1963Q12.pdf

I highly recommend that the LA DWP and the LA RWQCB look at the Chatsworth Reservoir - analyze the data in these reports, to determine if the radionuclides are above background and may have come from any local radioactive sources, including the Santa Susana Field Laboratory **and** what is currently known as the Corporate Pointe site:

http://www.etec.energy.gov/Templates/search.html?cx=006152805635308128020%3Aby7abxwjqqs&cof=FORID%3A11&q=Chatsworth+Reservoir#1098

This information is so important to our aquifer system - what is the extent in the West San Fernando Valley of radionuclides? We need to consider this when we talk about recharging our aquifer system or we discuss ground water. There is tritium at the SSFL now. I do not know the affect it has on the aquifer system and ground water.

Thank you.

Chris Rowe

July 22, 2004

Mr. George Faeustle, Project Scientist [213-367-4708]
Los Angeles Department of Water and Power
111 North Hope Street, Room 1050
Los Angeles, CA 90012

Dear Mr. Faeustle:

Subject: **Final Site Investigation Report - Soil Suitability Evaluation**
Chatsworth Reservoir, Chatsworth, California

Essentia Management Services LLC (Essentia) and our valued team members are pleased to submit this Final Site Investigation (SI) Report documenting our efforts to evaluate the suitability of soils at the Chatsworth Reservoir in Chatsworth, California to be used for other Los Angeles Department of Water and Power (LADWP) projects. This SI Report has been prepared within the context of Task Assignment #02 issued under the terms and conditions of Agreement #47278-4.

Please feel free to contact either of us at your convenience should you have questions regarding this document at 562-740-1060.

Sincerely,
Essentia Management Services LLC

Kenneth Floom, PE
Task Assignment Manager

Edward Rogan, PE, REA II
Project Principal/Manager

Enclosures (6)

1.0 INTRODUCTION

1.1 Purpose

Essentia Management Services LLC (Essentia) was authorized by the Los Angeles Department of Water & Power (LADWP) to conduct a limited environmental assessment of near-surface soil and groundwater at the Chatsworth Reservoir. The purpose of the assessment was to evaluate the suitability of near-surface unsaturated soil at the bottom of the Chatsworth Reservoir for potential reuse as borrow material for future LADWP projects. Soil considered suitable as borrow material will have chemicals of potential concern at concentrations less than regulatory action levels or guidelines.

1.2 Site Location

The Chatsworth Reservoir is located in the City of Chatsworth, California. The approximate 360 acre reservoir is bound to the north by Valley Circle Boulevard, to the east by residential areas west of Highway 27 (i.e., Topanga Canyon Boulevard), to the south by residential areas north of Roscoe Boulevard, and to the west by Valley Circle Boulevard (see Figure 1). The site is a former water supply reservoir and is currently dry.

1.3 Report Organization

This report is organized as follows:

- **Section 1.0** – Introduction
- **Section 2.0** – Scope and Purpose of Work
- **Section 3.0** – Background Information
- **Section 4.0** – Sampling and Analysis Plan and Health and Safety Plan
- **Section 5.0** – Field Investigations
- **Section 6.0** – Analytical Testing
- **Section 7.0** – Comparison of Analytical Results to Regulatory Standards
- **Section 8.0** – Conclusions and Recommendations
- **Section 9.0** – List of References

2.0 SCOPE OF WORK

The LADWP is evaluating soil at the bottom of Chatsworth Reservoir for potential reuse as borrow material. The Essentia Project Team was authorized to assess unsaturated soil at six boring locations and groundwater at four locations. Soil and groundwater boring locations are shown on Figure 2. The scope of work was developed jointly with LADWP staff and is discussed in detail in the Cost Proposal (Essentia, 2004).

The authorized scope of work included completing the following activities:

- Obtain and review background information including miscellaneous reports resident in the LADWP files as well as from Environmental Data Resources, Inc. (EDR).
- Prepare and submit a Sampling and Analysis Plan (SAP) and a Health and Safety Plan (HSP).
- Conduct field investigations consisting of soil sampling from push-probe borings and groundwater sampling from temporary PVC wells.
- Analyze soil and groundwater samples for the following constituents:
  - Perchlorate
  - Dioxin and Furan Compounds
  - N-Nitrosodimethyl amine (NDMA)
  - 1,4-Dioxane
  - Total extractable petroleum hydrocarbons (TEPH)
  - Polychlorinated biphenyls (PCBs)
  - Volatile organic compounds (VOCs)
  - Semi-volatile organic compounds (SVOCs)
  - Radionuclides including cesium 137, thorium (soil only), tritium (groundwater only), strontium 90, potassium 40 (soil only), and uranium (soil only)
  - Title 22 metals (total and soluble)
  - Hexavalent Chromium
  - Total Coliform (water only)
- Compare analytical results with applicable regulatory standards or guidance
- Prepare and submit Site Investigation Report

Each of these tasks is described in this report in more detail below.

The following properties were identified as potential sources of environmental concerns within the 1.5 mile radius search:

Facility	Address
Former Hughes Aircraft Company [Currently Boeing]	8433 Fallbrook Ave., Canoga Park, CA
LA County Fire Station # 075	23310 Lake Manor Dr., Chatsworth, CA

5.0 FIELD INVESTIGATIONS

A limited field investigation was completed at the Chatsworth Reservoir to evaluate the suitability of soils in two distinct areas of the Chatsworth Reservoir for potential reuse as borrow material for future LADWP projects. Groundwater sampling was also completed at four locations.

The locations for both the soil and groundwater borings were designated by the LADWP and are shown on Figure 2. The LADWP determined the location of the borings by survey. The results of the survey are as follows:

Coordinates (1)			
Boring No. Soil/Groundwater	**North**	**East**	**Elevation, ft. msl (2)**
B-1	1908882.8	6373272.1	865.1
B-2/B-2W	1907821.0	6372723.1	862.3
B-3/B-3W	1907078.4	6372474.3	859.7
B-4/B-4W	1907447.5	6369319.9	866.1
B-5/B-5W	1906108.2	6368427.9	870.7
B-6	1905545.2	6367854.7	873.4

(1) Horiz. Datum CCS83, Vert. Datum NGVD29 ('85 adj.)

(2) msl – mean sea level

Note – no groundwater sampling was conducted at location B-1 or B-6.

Summaries of the field investigations for both the soil and groundwater are provided below. A detailed discussion regarding the goals and objectives of these investigations is provided in the SAPs discussed in Section 4.0 (Essentia, 2004a; 2004b).

5.1 Soil Investigation

The soil investigation consisted of advancing six direct push probes at locations shown on Figure 2 to depths ranging from 11 to 20 feet below ground surface (bgs). Four-foot long soil samples were collected in acetate sleeves as the push probes were advanced. Soil samples were typically collected representing depth intervals of 1-5, 6-10, 11-15, and 16 to 20 feet bgs.

Borings logs for the six push probes are included in Appendix A and provide information regarding sample depth intervals, depth to water, and soil types encountered. The soil types encountered included silty sand, sandy silt, clayey silt, sandy clay, silty clay, and clay.

6.0 ANALYTICAL RESULTS

The soil and groundwater samples were submitted to various analytical laboratories for analytical testing. Soil and groundwater analytical results (e.g., laboratory data sheets) are provided in Appendices B and C, respectively. Soil analytical results are discussed in Section 6.1 and groundwater analytical results are discussed in Section 6.2.

6.1 Soil Analytical Results

Fifteen discrete Encore soil samples were analyzed for VOC constituents in accordance with EPA Method 8260B. The analytical results are provided in Appendix B. The results indicate that VOCs were not detected at or above laboratory reporting limits. One composite soil sample from each of the six push-probe borings was submitted for analytical testing for the following analytes/analyte groups:

- Perchlorate
- Dioxins
- Radionuclides - Potassium 40, Cesium 137, Strontium 90, Thorium, and Uranium
- TEPH
- PCBs
- SVOCs
- Title 22 metals – Total
- Title 22 metals – Soluble
- N-Nitrosodimethyl amine
- Hexavalent Chromium

The results for the six composite soil samples indicate that the following analytes/analyte groups were not detected at or above laboratory reporting limits:

- Perchlorate
- Cesium 137
- Strontium 90
- TEPH
- PCBs
- N-Nitrosodimethyl amine
- 1,4-Dioxane

6.1.2 Dioxin and Furans

Tables 1 through 4 present the analytical results for the dioxin and furan compounds, metals, hexavalent chromium, and radionuclides in soil. These four tables present results for those analytes which had concentrations measured in one or more of the six composite soil samples. Trace levels of several dioxin and furan compounds were detected in the part per trillion (pg/g) or less range (Table 1). The above soil analytical results are discussed further in Section 7.0 relative to measured concentrations compared to regulatory standards.

6.1.3 Metals

Fourteen of seventeen Title 22 Metals were detected in the soil at an average concentration of less than 50 mg/kg with a few detections at just below 200 mg/kg (Table 2); the three metals not detected above laboratory reporting limits included mercury, silver, and thallium. The detected concentrations were unremarkable and were generally within the concentration ranges for California soils (Kearney, 1996). Hexavalent chromium was detected at low concentrations, ranging from 84 µg/kg to 280 µg/kg (Table 3). Potassium 40, Thorium (isotopes 228, 230, and 232), and uranium were detected above the reporting limits (Table 4). The above soil analytical results are discussed further in Section 7.0 relative to measured concentrations compared to regulatory standards.

6.1.4 Radionuclides

The observed radioactivity of these isotopes was as follows: Potassium 40 – approximately 20 pico Curies per gram (pCi/g); Thorium – about 1 pCi/g or less for each isotope reported; and Uranium - less than 5 pCi/g. The above soil analytical results are discussed further in Section 7.0 relative to measured concentrations compared to regulatory standards.

6.2 Groundwater Analytical Results

Groundwater samples were collected from hydropunch sample locations B2-W, B3-W, B4-W and B5-W were analyzed for the following analytes/analyte groups:

- Perchlorate
- Dioxins
- Radionuclides - Cesium 137, Strontium 90, and Tritium
- TEPH
- PCBs
- VOCs
- SVOCs
- Title 22 metals – Total & Soluble
- N-Nitrosodimethyl Amine
- 1,4-Dioxane

7.0 COMPARISON OF ANALYTICAL RESULTS TO REGULATORY STANDARDS

Tables 1 through 7 present the soil and groundwater analytical results for those analytes that were detected in at least one composite soil sample collected from the six borings or one groundwater sample collected from the four hydropunches. Soil and groundwater analytical results are compared to regulatory standards or guidance in Sections 7.1 and 7.2 for those constituents with measured concentrations above detection limits. The standards and guidance include EPA Region 9 PRGs and State and Federal Maximum Contaminant Levels (MCLs) and State Action Levels.

7.1 Soil Analytical Results

Table 1 presents the results for dioxin and furan compounds in soil. As illustrated in Table 1, the concentrations are extremely low (a few parts per trillion or less) with most reported values 'J' flagged, i.e. concentrations are estimated. There are no applicable regulatory standards for these analytes. The results do not indicate any remarkable concentrations.

Table 2 presents the results for metals in soil. As illustrated, several constituents had measured concentrations. It is normal that certain metals are present in soil. A comparison of the measured concentrations to Total Threshold Limit Concentrations (TTLC) and Industrial and Residential PRGs indicates there were no exceedances, except that the arsenic cancer-endpoint PRGs (industrial and residential) values were exceeded. Arsenic is commonly found in southwestern soils at concentrations that exceed residential and industrial cancer-endpoint PRGs.

Table 3 presents the results for hexavalent chromium in soil. As shown, all measured values are below the Industrial and Residential PRGs. Thus, the concentrations of hexavalent chromium appear to be within acceptable levels.

Several radionuclides were detected (see Table 4), the results of which were reported in terms of radioactivity (i.e., curies per mass). PRGs have not been established for these radionuclides.

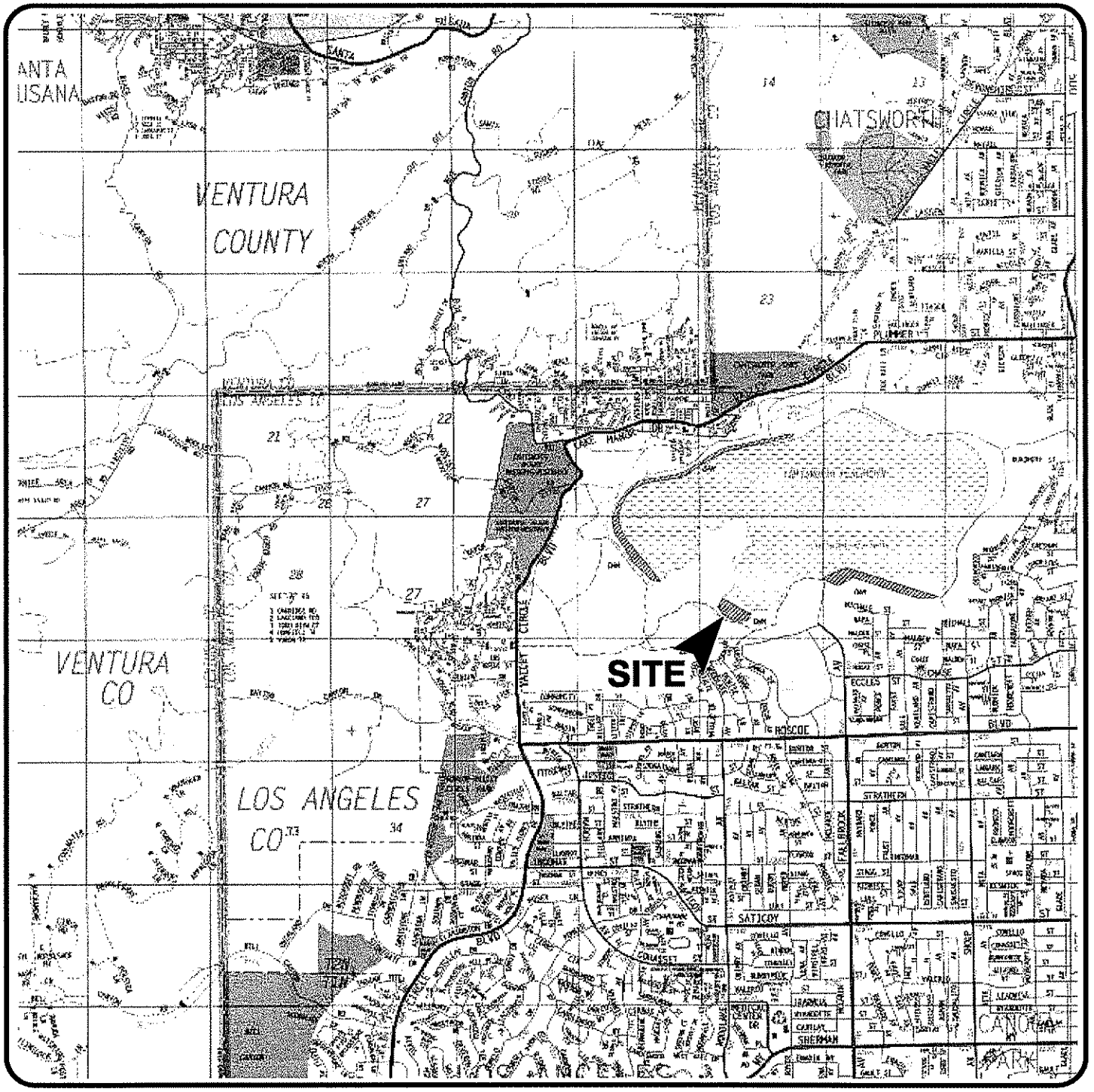
7.2 Groundwater Analytical Results

Federal and State Maximum Contaminant Levels (MCLs), State Action Levels (AL), and/or EPA PRGs for tap water were not exceeded for the four VOCs (acetone, carbon disulfide, toluene, and xylenes) detected in groundwater (Table 5).

Several dioxins and furans were detected in the part per trillion concentrations; however, Federal or State regulatory levels or guidance have not been established for these compounds. One compound with regulatory standards or guidance – 2,3,7,8-TCDD was not specifically analyzed; however, no total tetra-dioxins, of which TCDD is included, were detected above laboratory reporting limits (Table 6).

8.0 CONCLUSIONS AND RECOMMENDATIONS

This report discusses the results of a limited environmental assessment of the near surface soils found in the unsaturated zone and groundwater at the Chatsworth Reservoir. The unsaturated soil and groundwater underlying the reservoir bottom do not appear to contain constituents at concentrations that would pose a health risk if the soil were used as a borrow material for earthworks construction for future industrial LADWP projects.



REFERENCE: 2000 THOMAS GUIDE FOR LOS ANGELES/ORANGE COUNTIES, STREET GUIDE AND DIRECTORY

NORTH

0 2400 4800

APPROXIMATE SCALE IN FEET

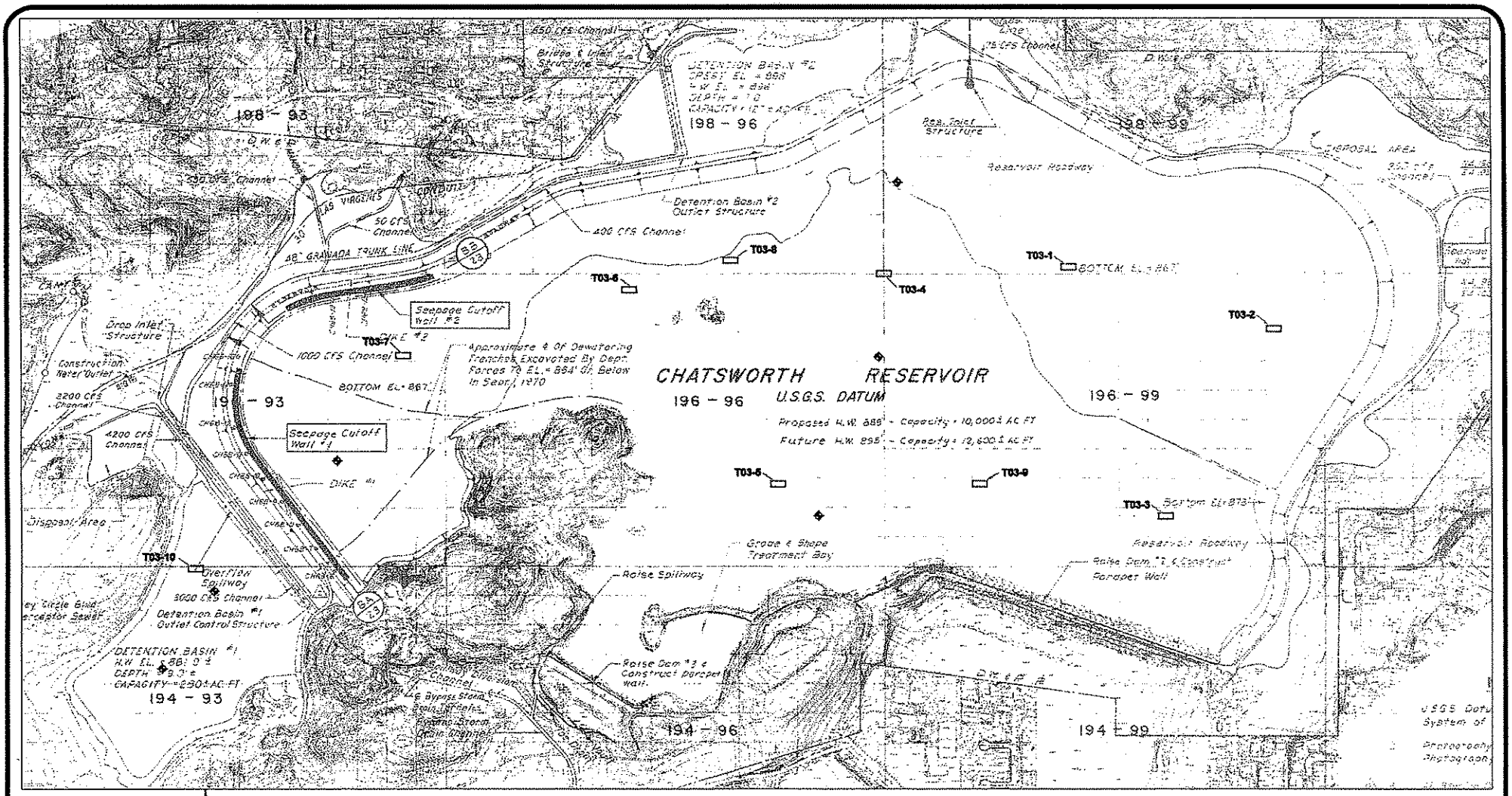
Essentia

SITE LOCATION MAP

CHATSWORTH RESERVOIR
CHATSWORTH, CALIFORNIA

PROJECT NO.	DATE	FIGURE
205411002	2/2004	1

205411-A1.DWG



N

LEGEND

T03-10 APPROXIMATE LOCATION OF TRENCH

APPROXIMATE LOCATION OF PROPOSED BORING

0 800 1600

APPROXIMATE SCALE IN FEET

NOTE: ALL DIMENSIONS, DIRECTIONS AND LOCATIONS ARE APPROXIMATE.

Ninyo & Moore

SITE PLAN

CHATSWORTH RESERVOIR
CHATSWORTH, CALIFORNIA

PROJECT NO.	DATE	FIGURE
205411002	1/2004	2

205411-A2.DWG

July 22, 2004

Mr. George Faeustle, Project Scientist [213-367-4708]
Los Angeles Department of Water and Power
111 North Hope Street, Room 1050
Los Angeles, CA 90012

Dear Mr. Faeustle:

Subject: **Final Site Investigation Report - Soil Suitability Evaluation**
Chatsworth Reservoir, Chatsworth, California

Essentia Management Services LLC (Essentia) and our valued team members are pleased to submit this Final Site Investigation (SI) Report documenting our efforts to evaluate the suitability of soils at the Chatsworth Reservoir in Chatsworth, California to be used for other Los Angeles Department of Water and Power (LADWP) projects. This SI Report has been prepared within the context of Task Assignment #02 issued under the terms and conditions of Agreement #47278-4.

Please feel free to contact either of us at your convenience should you have questions regarding this document at 562-740-1060.

Sincerely,
Essentia Management Services LLC

Kenneth Floom, PE
Task Assignment Manager

Edward Rogan, PE, REA II
Project Principal/Manager

Enclosures (6)

1.0 INTRODUCTION

1.1 Purpose

Essentia Management Services LLC (Essentia) was authorized by the Los Angeles Department of Water & Power (LADWP) to conduct a limited environmental assessment of near-surface soil and groundwater at the Chatsworth Reservoir. The purpose of the assessment was to evaluate the suitability of near-surface unsaturated soil at the bottom of the Chatsworth Reservoir for potential reuse as borrow material for future LADWP projects. Soil considered suitable as borrow material will have chemicals of potential concern at concentrations less than regulatory action levels or guidelines.

1.2 Site Location

The Chatsworth Reservoir is located in the City of Chatsworth, California. The approximate 360 acre reservoir is bound to the north by Valley Circle Boulevard, to the east by residential areas west of Highway 27 (i.e., Topanga Canyon Boulevard), to the south by residential areas north of Roscoe Boulevard, and to the west by Valley Circle Boulevard (see Figure 1). The site is a former water supply reservoir and is currently dry.

1.3 Report Organization

This report is organized as follows:

- **Section 1.0** – Introduction
- **Section 2.0** – Scope and Purpose of Work
- **Section 3.0** – Background Information
- **Section 4.0** – Sampling and Analysis Plan and Health and Safety Plan
- **Section 5.0** – Field Investigations
- **Section 6.0** – Analytical Testing
- **Section 7.0** – Comparison of Analytical Results to Regulatory Standards
- **Section 8.0** – Conclusions and Recommendations
- **Section 9.0** – List of References

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2.0 SCOPE OF WORK

The LADWP is evaluating soil at the bottom of Chatsworth Reservoir for potential reuse as borrow material. The Essentia Project Team was authorized to assess unsaturated soil at six boring locations and groundwater at four locations. Soil and groundwater boring locations are shown on Figure 2. The scope of work was developed jointly with LADWP staff and is discussed in detail in the Cost Proposal (Essentia, 2004).

The authorized scope of work included completing the following activities:

- Obtain and review background information including miscellaneous reports resident in the LADWP files as well as from Environmental Data Resources, Inc. (EDR).
- Prepare and submit a Sampling and Analysis Plan (SAP) and a Health and Safety Plan (HSP).
- Conduct field investigations consisting of soil sampling from push-probe borings and groundwater sampling from temporary PVC wells.
- Analyze soil and groundwater samples for the following constituents:
  - Perchlorate
  - Dioxin and Furan Compounds
  - N-Nitrosodimethyl amine (NDMA)
  - 1,4-Dioxane
  - Total extractable petroleum hydrocarbons (TEPH)
  - Polychlorinated biphenyls (PCBs)
  - Volatile organic compounds (VOCs)
  - Semi-volatile organic compounds (SVOCs)
  - Radionuclides including cesium 137, thorium (soil only), tritium (groundwater only), strontium 90, potassium 40 (soil only), and uranium (soil only)
  - Title 22 metals (total and soluble)
  - Hexavalent Chromium
  - Total Coliform (water only)
- Compare analytical results with applicable regulatory standards or guidance
- Prepare and submit Site Investigation Report

Each of these tasks is described in this report in more detail below.

3.0 BACKGROUND INFORMATION

LADWP provided Essentia with documents relative to the Chatsworth Reservoir. The documents were reviewed to obtain an understanding of the reservoir construction and potential chemicals of concern based on past site use and facilities located in the vicinity of the site. These documents included the following:

- Final Report on the Enlargement of Chatsworth Reservoir, Field Engineering Division (LADWP, 1932)
- Chatsworth Reservoir Improvements Project Planning Report, Water Engineering Design Division, Planning Section, (LADWP, 1973)
- Phase 1 Environmental Site Assessment, Parcel 4 of Chatsworth Reservoir, LADWP File # W-67655. Box Canyon Road / Valley Circle Boulevard, Chatsworth, California, (Dames & Moore, 1999)

In addition to the documents listed above, an Environmental Data Resources, Inc. report (EDR, 2003) was acquired and reviewed by the Essentia Project Team.

As a result of the review of the above documents, the following observations were made primarily relative to possible sources of chemical constituents that could be present in soil or groundwater underlying the reservoir:

- The reservoir was originally constructed in 1919 (D&M, 1999). The reservoir was drained in 1969 and has remained dry and undeveloped since then.
- Indication of a slight seepage of gas and oil was noted as coming from Parcel 4 across from Valley Circle Boulevard, where the keyway for the reservoir blanket was excavated along the northerly edge of the reservoir adjacent to detention basin No. 2 (LADWP, 1973). LADWP further notes that it should be assumed that there may be more oil and gas seeps outside of the above area. This suggests a possible natural source of TPH and other constituents (e.g., dissolved inorganics).
- D&M, 1999 presents the findings of a Phase 1 Environmental Site Assessment (ESA) of Parcel 4 of the Chatsworth Reservoir. The purpose of the ESA was to gather information to assess if any conditions of potential environmental concern exist within Parcel 4. The assessment did not reveal evidence of Recognized Environmental Conditions (RECs) associated with Parcel 4.
- EDR, 2003 presents environmental records within a 1.5-mile radius of the center of the reservoir in accordance with requirements of ASTM Standard Practice for Environmental Site Assessments, E1527-00. The search was centered on the following coordinates → North Latitude – 34.233300 & West Latitude – 118.641700.

The following properties were identified as potential sources of environmental concerns within the 1.5 mile radius search:

Facility	Address
Former Hughes Aircraft Company [Currently Boeing]	8433 Fallbrook Ave., Canoga Park, CA
LA County Fire Station # 075	23310 Lake Manor Dr., Chatsworth, CA

4.0 SAMPLING AND ANALYSIS PLAN AND HEALTH AND SAFETY PLAN

Two versions of the Sampling and Analysis Plan (SAP) and Health and Safety Plan (HSP) (Essentia, 2004a; 2004b) were prepared. The first version was specific to the soil investigation phase. Eventually, a second version of each document was prepared and submitted that included the groundwater investigation phase. The HSPs were presented as appendices to the SAPs.

The SAPs described the details of the field investigations in regards to the following:

- Proposed scope of work
- Field methods for completing the scope of services
- Locations of the field investigations, i.e. borehole locations
- Field sampling procedures
- Sample handling protocols
- Analytical tests to be performed and their associated container types, volumes, preservatives, holding times and laboratory conducting the tests.

5.0 FIELD INVESTIGATIONS

A limited field investigation was completed at the Chatsworth Reservoir to evaluate the suitability of soils in two distinct areas of the Chatsworth Reservoir for potential reuse as borrow material for future LADWP projects. Groundwater sampling was also completed at four locations.

The locations for both the soil and groundwater borings were designated by the LADWP and are shown on Figure 2. The LADWP determined the location of the borings by survey. The results of the survey are as follows:

Coordinates (1)			
Boring No. Soil/Groundwater	**North**	**East**	**Elevation, ft. msl (2)**
B-1	1908882.8	6373272.1	865.1
B-2/B-2W	1907821.0	6372723.1	862.3
B-3/B-3W	1907078.4	6372474.3	859.7
B-4/B-4W	1907447.5	6369319.9	866.1
B-5/B-5W	1906108.2	6368427.9	870.7
B-6	1905545.2	6367854.7	873.4

(1) Horiz. Datum CCS83, Vert. Datum NGVD29 ('85 adj.)

(2) msl – mean sea level

Note – no groundwater sampling was conducted at location B-1 or B-6.

Summaries of the field investigations for both the soil and groundwater are provided below. A detailed discussion regarding the goals and objectives of these investigations is provided in the SAPs discussed in Section 4.0 (Essentia, 2004a; 2004b).

5.1 Soil Investigation

The soil investigation consisted of advancing six direct push probes at locations shown on Figure 2 to depths ranging from 11 to 20 feet below ground surface (bgs). Four-foot long soil samples were collected in acetate sleeves as the push probes were advanced. Soil samples were typically collected representing depth intervals of 1-5, 6-10, 11-15, and 16 to 20 feet bgs.

Borings logs for the six push probes are included in Appendix A and provide information regarding sample depth intervals, depth to water, and soil types encountered. The soil types encountered included silty sand, sandy silt, clayey silt, sandy clay, silty clay, and clay.

These soils appear to be present in discontinuous alternating layers of finite thickness typical of an alluvial depositional environment.

Depth to groundwater ranged from 10 to greater than 20 feet bgs at locations B-1 through B-5. Boring B-6 was advanced to refusal which occurred at a depth of 11 feet. Groundwater was not encountered in this boring. The groundwater depth observations may be deeper than static groundwater levels since no attempt was made to assess that groundwater levels had stabilized in the borings. Groundwater depths were measured using an electric sounder (e.g. M-Scope).

As discussed above, 4-foot long soil samples were collected representing 5-foot depth intervals. Encore samples, were was collected at each sample depth interval above the observed water table using EPA Method 5035, an approved sample preparation method for VOCs analysis in accordance with EPA Method 8260B. The Encore samples were preserved in accordance with the requirements of the SAP and transported to LADWP's analytical laboratory for analysis. The remainder of the soil samples collected above the water table from within individual borings was composited. The composite soil samples were preserved in accordance with the requirements of the SAP and transported to various analytical laboratories under chain-of-custody forms for analysis of the non-VOC analytes (Essentia, 2004a).

Upon completion of drilling and sampling at each location, the borings were backfilled with bentonite, which was subsequently hydrated with decontamination and/or potable water.

5.2 Groundwater Investigation

The groundwater investigation consisted of advancing four direct push hydropunch samples at locations adjacent to soil borings B2, B3, B4, and B5, as shown on Figure 2. The hydropunch samples were advanced to depths greater than 20 feet bgs to ensure that the hydropunch screen was below the water table and that there would be sufficient groundwater recharge to collect the requisite volume of groundwater for laboratory analysis. Once the desired depth was achieved, the hydropunch was retracted to expose the screen interval, and groundwater was extracted through the screen to the surface using a hand-pump or a peristaltic pump. Groundwater sampling methods are discussed in detail in the SAP (Essentia, 2004b).

Groundwater samples were preserved in accordance with the requirements of the SAP (Essentia, 2004b). Sample bottles for VOCs analyses were transported to LADWP's analytical laboratory. Sample bottles for non-VOC and TEPH analyses were shipped to other analytical laboratories under chain-of-custody forms.

Upon completion of the groundwater sampling at each hydropunch location, the borings were backfilled with bentonite, which was subsequently hydrated with decontamination and/or potable water.

6.0 ANALYTICAL RESULTS

The soil and groundwater samples were submitted to various analytical laboratories for analytical testing. Soil and groundwater analytical results (e.g., laboratory data sheets) are provided in Appendices B and C, respectively. Soil analytical results are discussed in Section 6.1 and groundwater analytical results are discussed in Section 6.2.

6.1 Soil Analytical Results

Fifteen discrete Encore soil samples were analyzed for VOC constituents in accordance with EPA Method 8260B. The analytical results are provided in Appendix B. The results indicate that VOCs were not detected at or above laboratory reporting limits. One composite soil sample from each of the six push-probe borings was submitted for analytical testing for the following analytes/analyte groups:

- Perchlorate
- Dioxins
- Radionuclides - Potassium 40, Cesium 137, Strontium 90, Thorium, and Uranium
- TEPH
- PCBs
- SVOCs
- Title 22 metals – Total
- Title 22 metals – Soluble
- N-Nitrosodimethyl amine
- Hexavalent Chromium

The results for the six composite soil samples indicate that the following analytes/analyte groups were not detected at or above laboratory reporting limits:

- Perchlorate
- Cesium 137
- Strontium 90
- TEPH
- PCBs
- N-Nitrosodimethyl amine
- 1,4-Dioxane

6.1.1 Semivolatile Analytical Results

The results for SVOCs indicate detections of two of the 71 compounds tested for. The two compounds detected were as follows:

- Bis(2-ethylhexyl)phthalate
- Di-n-Butylphthalate

Of particular note relative to the detections of the above two constituents, is that these compounds were detected in a majority of the samples analyzed (e.g., bis(2-ethylhexyl)phthalate was detected in 5 of 6 samples and Di-n-Butylphtlate was detected in 4 of 6 samples). Furthermore, the concentrations had a wide range (from ND to 27,550 ug/kg for bis(2-ethylhexyl)phthalate and from ND to 791 ug/kg for Di-n-Butylphthalate). Furthermore, a comparison of the concentrations for these constituents in samples B1 and the B1 duplicate shows a relatively wide variance, as follows:

	B1	**B1 Duplicate**
Bis(2-ethyhexyl)phthalate	92 J ug/kg (3)	14,540 ug/kg
Di-n-Butylphthalate	306 J ug/kg	84 J ug/kg

(3) J = Estimated Value

Possible sources of these SVOC constituents include the following:

- Present within the soils from past site uses
- Laboratory artifacts
- Field sampling equipment

Past site uses, as discussed in Section 3.0, do not support a source for SVOCs. Discussions with various laboratories indicates the above two compounds are common laboratory artifacts. A review of the sampling methods and equipment do not indicate a source for these SVOCs as follows:

- The sample trowel used to prepare the composite samples was plastic and decontaminated properly prior to use and between samples.
- The acetate sleeves (Rimtec 4355 UV Clear) in which the soil was collected is a rigid extrusion compound. No plasticizers are used to produce it.

The industrial and residential Preliminary Remediation Goals (PRGs) for these SVOC compounds are as follows:

	Industrial PRGs	Residential PRGs
■ Bis(2-ethylhexyl)phthalate	120,000 ug/kg	35,000 ug/kg
■ Di-n-Butylphthalate	62,000,000 ug/kg	6,100,000 ug/kg

Measured concentrations are below both the respective residential and industrial PRGs.

6.1.2 Dioxin and Furans

Tables 1 through 4 present the analytical results for the dioxin and furan compounds, metals, hexavalent chromium, and radionuclides in soil. These four tables present results for those analytes which had concentrations measured in one or more of the six composite soil samples. Trace levels of several dioxin and furan compounds were detected in the part per trillion (pg/g) or less range (Table 1). The above soil analytical results are discussed further in Section 7.0 relative to measured concentrations compared to regulatory standards.

6.1.3 Metals

Fourteen of seventeen Title 22 Metals were detected in the soil at an average concentration of less than 50 mg/kg with a few detections at just below 200 mg/kg (Table 2); the three metals not detected above laboratory reporting limits included mercury, silver, and thallium. The detected concentrations were unremarkable and were generally within the concentration ranges for California soils (Kearney, 1996). Hexavalent chromium was detected at low concentrations, ranging from 84 µg/kg to 280 µg/kg (Table 3). Potassium 40, Thorium (isotopes 228, 230, and 232), and uranium were detected above the reporting limits (Table 4). The above soil analytical results are discussed further in Section 7.0 relative to measured concentrations compared to regulatory standards.

6.1.4 Radionuclides

The observed radioactivity of these isotopes was as follows: Potassium 40 – approximately 20 pico Curies per gram (pCi/g); Thorium – about 1 pCi/g or less for each isotope reported; and Uranium - less than 5 pCi/g. The above soil analytical results are discussed further in Section 7.0 relative to measured concentrations compared to regulatory standards.

6.2 Groundwater Analytical Results

Groundwater samples were collected from hydropunch sample locations B2-W, B3-W, B4-W and B5-W were analyzed for the following analytes/analyte groups:

- Perchlorate
- Dioxins
- Radionuclides - Cesium 137, Strontium 90, and Tritium
- TEPH
- PCBs
- VOCs
- SVOCs
- Title 22 metals – Total & Soluble
- N-Nitrosodimethyl Amine
- 1,4-Dioxane

- Hexavalent Chromium
- Total Coliform

The results for the four groundwater samples indicate that the following analytes/analyte groups were not detected at or above laboratory reporting limits:

- Perchlorate
- Radionuclides
- TEPH
- PCBs
- N-Nitrosodimethyl Amine
- 1,4-Dioxane
- Hexavalent Chromium

Groundwater analytical results are presented in Appendix C. Data are summarized in Tables 5 through 7 for those analytes/analyte groups with detectable concentrations in at least one of the four groundwater samples. Four VOCs - acetone, carbon disulfide, toluene, and m-&p- isomers of xylenes – were detected in at least one boring, each at concentrations below regulatory standards or guidance (Table 5). All other VOCs were not detected above laboratory reporting limits.

Several dioxin and furan compounds were detected above laboratory reporting limits. Analytical results are summarized in Table 6. The results are presented in units of picograms per gram (i.e., units of solids rather than water) since the groundwater samples contained more than 10% sediment in the sample containers. This characterization of the water samples with soil units is required by testing methods when the solid content exceeds one percent. While regulatory standards or guidance are not available for the respective dioxins and furans detected, the detectable concentrations were nonetheless very low.

Fourteen of seventeen Title 22 metals were detected above the laboratory reporting limits. As was the case with the soil samples, mercury, silver and thallium were not detected above laboratory reporting limits. Regulatory standards or guidance for each of the metals detected were exceeded in the groundwater/sediment samples. In general, higher metal concentrations were detected in samples collected from boring locations B-2W and B-3W. Detectable concentrations and regulatory standards or guidance for metals are summarized on Table 7.

7.0 COMPARISON OF ANALYTICAL RESULTS TO REGULATORY STANDARDS

Tables 1 through 7 present the soil and groundwater analytical results for those analytes that were detected in at least one composite soil sample collected from the six borings or one groundwater sample collected from the four hydropunches. Soil and groundwater analytical results are compared to regulatory standards or guidance in Sections 7.1 and 7.2 for those constituents with measured concentrations above detection limits. The standards and guidance include EPA Region 9 PRGs and State and Federal Maximum Contaminant Levels (MCLs) and State Action Levels.

7.1 Soil Analytical Results

Table 1 presents the results for dioxin and furan compounds in soil. As illustrated in Table 1, the concentrations are extremely low (a few parts per trillion or less) with most reported values 'J' flagged, i.e. concentrations are estimated. There are no applicable regulatory standards for these analytes. The results do not indicate any remarkable concentrations.

Table 2 presents the results for metals in soil. As illustrated, several constituents had measured concentrations. It is normal that certain metals are present in soil. A comparison of the measured concentrations to Total Threshold Limit Concentrations (TTLC) and Industrial and Residential PRGs indicates there were no exceedances, except that the arsenic cancer-endpoint PRGs (industrial and residential) values were exceeded. Arsenic is commonly found in southwestern soils at concentrations that exceed residential and industrial cancer-endpoint PRGs.

Table 3 presents the results for hexavalent chromium in soil. As shown, all measured values are below the Industrial and Residential PRGs. Thus, the concentrations of hexavalent chromium appear to be within acceptable levels.

Several radionuclides were detected (see Table 4), the results of which were reported in terms of radioactivity (i.e., curies per mass). PRGs have not been established for these radionuclides.

7.2 Groundwater Analytical Results

Federal and State Maximum Contaminant Levels (MCLs), State Action Levels (AL), and/or EPA PRGs for tap water were not exceeded for the four VOCs (acetone, carbon disulfide, toluene, and xylenes) detected in groundwater (Table 5).

Several dioxins and furans were detected in the part per trillion concentrations; however, Federal or State regulatory levels or guidance have not been established for these compounds. One compound with regulatory standards or guidance – 2,3,7,8-TCDD was not specifically analyzed; however, no total tetra-dioxins, of which TCDD is included, were detected above laboratory reporting limits (Table 6).

Each of the Title 22 metals detected in the groundwater samples were detected at concentrations that exceed either a Federal or State regulatory standard or guidance (Table 7). These standards or guidance levels are designated for drinking water sources or supply.

8.0 CONCLUSIONS AND RECOMMENDATIONS

This report discusses the results of a limited environmental assessment of the near surface soils found in the unsaturated zone and groundwater at the Chatsworth Reservoir. The unsaturated soil and groundwater underlying the reservoir bottom do not appear to contain constituents at concentrations that would pose a health risk if the soil were used as a borrow material for earthworks construction for future industrial LADWP projects.

9.0 LIST OF REFERENCES

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Essentia Management Services Project Team, "Draft Sampling and Analysis Plan for Evaluation of Borrow Soil Present at Chatsworth Reservoir, Chatsworth, California", dated January 20, 2004 (Essentia, 2004a)

Essentia Management Services Project Team, "Draft Sampling and Analysis Plan, Limited Evaluation of Groundwater Present at Chatsworth Reservoir, Chatsworth, California" dated February 6, 2004 (Essentia, 2004b)

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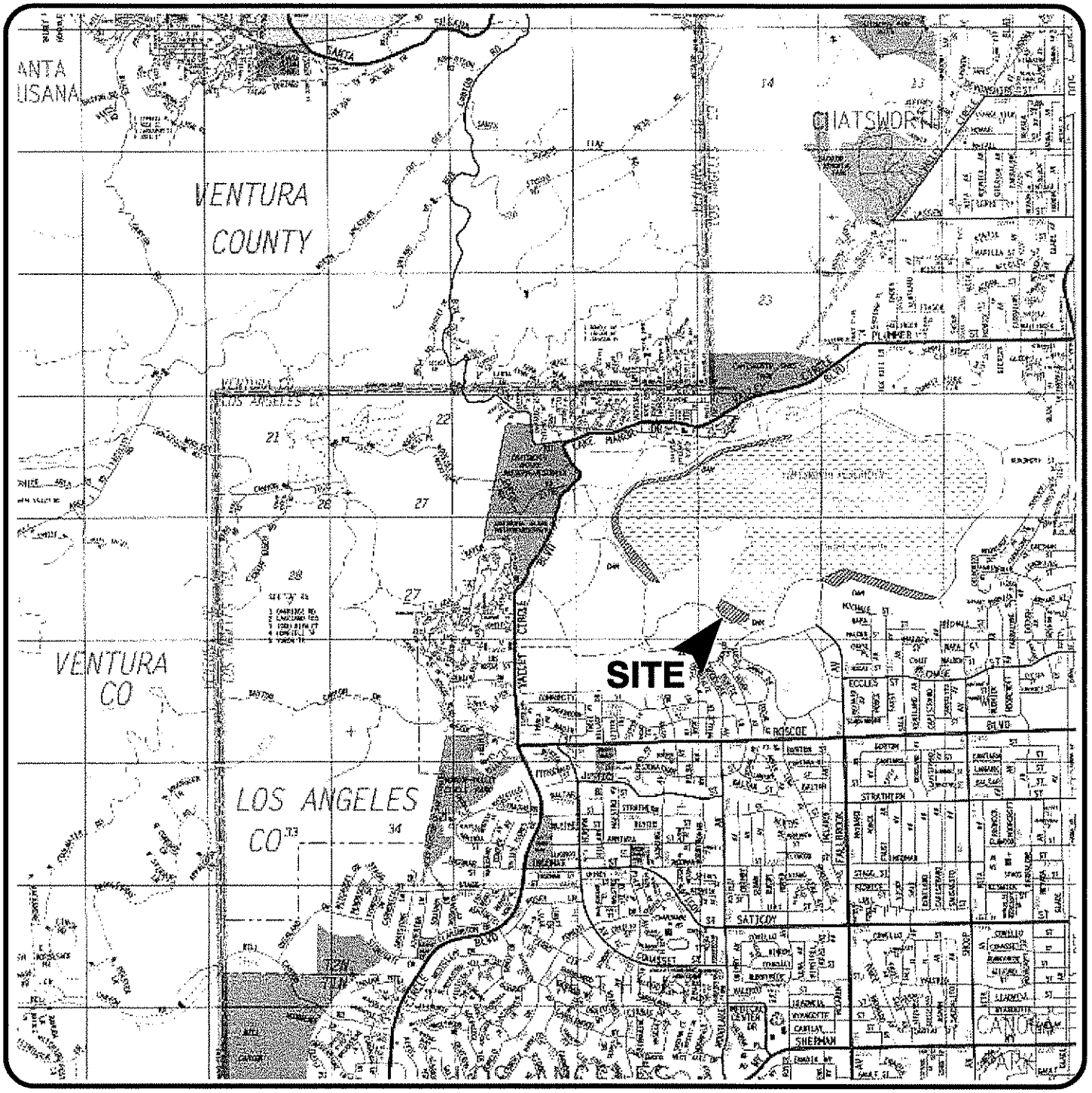
Los Angeles Department of Water & Power, Final Report on the Enlargement of Chatsworth Reservoir, by the Field Engineering Division, dated August 13, 1932 (LADWP, 1932)

Los Angeles Department of Water & Power, Chatsworth Reservoir Improvements Project Report, dated 1973 (LADWP, 1973)



REFERENCE: 2000 THOMAS GUIDE FOR LOS ANGELES/ORANGE COUNTIES, STREET GUIDE AND DIRECTORY

NORTH

0 2400 4800

APPROXIMATE SCALE IN FEET

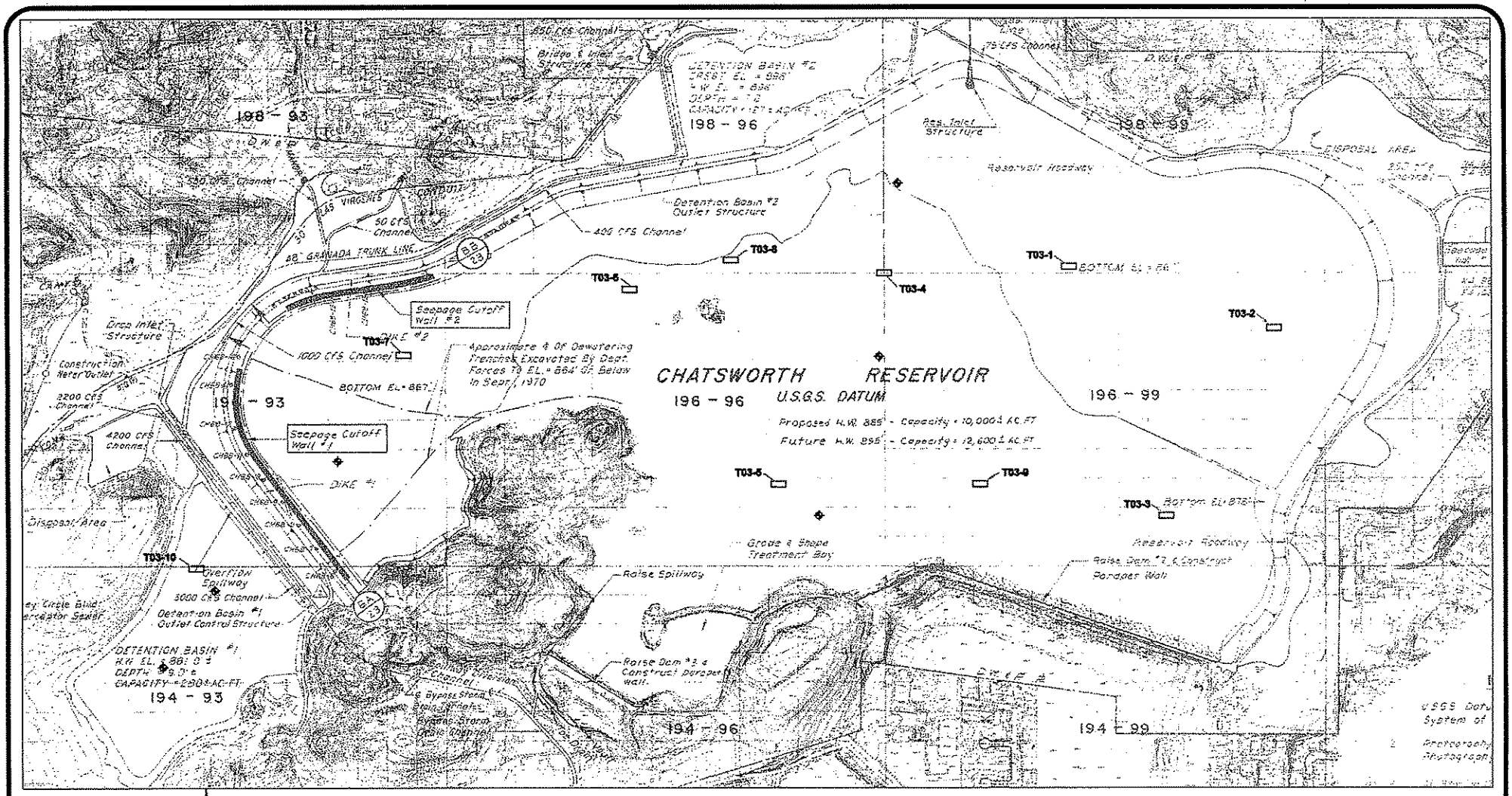
Essentia

205411-A1.DWG

SITE LOCATION MAP

CHATSWORTH RESERVOIR
CHATSWORTH, CALIFORNIA

PROJECT NO.	DATE	FIGURE
205411002	2/2004	1



N

LEGEND

T03-10 APPROXIMATE LOCATION OF TRENCH

APPROXIMATE LOCATION OF PROPOSED BORING

0 800 1600

APPROXIMATE SCALE IN FEET

NOTE: ALL DIMENSIONS, DIRECTIONS AND LOCATIONS ARE APPROXIMATE.

Ninyo & Moore

SITE PLAN

CHATSWORTH RESERVOIR
CHATSWORTH, CALIFORNIA

PROJECT NO.	DATE	FIGURE
205411002	1/2004	2

205411-A2.DWG

TABLE 1
SOIL ANALYTICAL RESULTS - DIOXIN AND FURAN COMPOUNDS
EPA Method 1613
Chatsworth Reservoir, Chatsworth, California

			Boring # Sample ID: Sample Date:	B-1 B1 Comp 1/28/04	B-2 B2 Comp 1/28/04	B-3 B3 Comp 1/28/04	B-4 B4 Comp 1/28/04	B-5 B5 Comp 1/28/04	B-6 B6 Comp 1/28/04
Analyte	**Industrial PRGs**	**Residential PRGs**	**Units**	**CONC.**	**CONC.**	**CONC.**	**CONC.**	**CONC.**	**CONC.**
1,2,3,4,6,7,8-HpCDD	NE	NE	pg/g	0.411 (J)	0.573 (J)	0.897 (J)	<0.359	0.603 (J)	0.924 (J)
1,2,3,4,6,7,8-HpCDF	NE	NE	pg/g	<0.129	<0.119	<0.146	<0.132	<0.122	0.233 (J)
1,2,3,7,8,9-HxCDF	NE	NE	pg/g	<0.124	<0.195	0.292 (J)	<0.123	<0.129	<0.135
OCDD	NE	NE	pg/g	1.76 (J)	1.48 (J)	3.65 (J)	1.37 (J)	3.79 (J)	6.24
OCDF	NE	NE	pg/g	<0.451	<0.401	<0.578	<0.421	<0.432	0.667 (J)
Total Hepta-Dioxins	NE	NE	pg/g	0.867 (J)	1.03 (J)	1.87 (J)	<0.359	1.75 (J)	1.96 (J)
Total Hepta-Furans	NE	NE	pg/g	<0.158	<0.142	<0.163	<0.143	<0.135	0.491 (J)
Total Hexa-Furans	NE	NE	pg/g	<0.124	<0.195	0.503 (J)	<0.123	<0.129	<0.135
Total Penta-Furans	NE	NE	pg/g	<0.224	<0.220	0.773 (J,M)	<0.206	<0.177	<0.219
Total Tetra-Dioxins (1)	16	3.9	pg/g	<0.102	<0.174	<0.130	<0.103	1.45	<0.101
Total Tetra-Furans	NE	NE	pg/g	<0.0990	<0.108	0.248 (J)	<0.0884	1.67 (M)	<0.0996

Notes:

Regulatory Standard or Guidance refers to statutory, preliminary, or proposed concentration limit (e.g., EPA Preliminary Remediation Goals or Title 22 hazardous waste criteria - Total Threshold Limit Concentration [TTLC] and Soluble Threshold Limit Concentration [STLC]).

pg/g - picograms per gram

<0.129 - Analyte not detected above indicated Reporting Limit.

NE - None Established

J - The analyte was positively identified at a concentration less than the laboratory reporting limit. The associated numerical value is the estimated concentration of the analyte in the sample.

M - Maximum possible concentration

(1) - Industrial and Residential PRG's for 2,3,7,8 - TCDD (a Tetra dioxin) are 1.6 E -05 mg/kg (16 pg/g) and 3.9 E -06 (3.9 pg/g), respectively

TABLE 2
SOIL ANALYTICAL RESULTS - METALS
EPA Method 6010B /7471 (Hg)
Chatsworth Reservoir, Chatsworth, California

ANALYTE	Regulatory Standard or Guidance				Boring # / Sample ID: / Sample Date: / Units	B1 / B1 Comp / 1/28/04	B1 / B1 Comp-Dup / 1/28/04	B2 / B2 Comp / 1/28/04	B3 / B3 Comp / 1/28/04	B4 / B4 Comp / 1/28/04	B5 / B5 Comp / 1/28/04	B6 / B6 Comp / 1/28/04
	Limit TTLC mg/kg	Limit STLC mg/L	Industrial PRGs mg/kg	Residential PRGs mg/kg								
Antimony	500	15	410	31	mg/kg	3.3 (J)	<0.80	5.30	5.10	<0.80	<0.80	<0.80
Arsenic (1)	500	5	1.6	0.39	mg/kg	9.60	4.9 (J)	8.80	7.30	6.10	4.5 (J)	4.8 (J)
Barium	10000	100	67000	5,400	mg/kg	75.9	72.0	171.8	186.7	93.9	109.8	72.2
Beryllium	75	0.75	1900	150	mg/kg	0.4 (J)	0.37 (J)	0.9 (J)	0.8 (J)	0.6 (J)	0.7 (J)	0.6 (J)
Cadmium	100	1	450	37	mg/kg	3.20	3.40	6.20	5.80	3.0 (J)	2.7 (J)	2.7 (J)
Chromium (Total)	500	5	450	210	mg/kg	11.4	11.0	27.4	24.2	14.7	15.4	13.1
Cobalt	8000	80	1900	900	mg/kg	9.90	10.0	21.3	19.6	13.6	12.0	13.7
Copper	2500	25	41000	3,100	mg/kg	7.70	8.10	27.8	23.9	5.70	7.90	17.5
Lead	1000	5	750	150	mg/kg	14.5	11.0	10.4	10.9	17.3	12.2	17.5
Mercury	20	0.2	310	23	mg/kg	<0.02	*NA*	<0.02	0.0305 (J)	<0.02	<0.02	<0.02
Molybdenum	3500	350	5100	390	mg/kg	6.1	3.20	10.9	6.90	0.80 (J)	1.20	0.60 (J)
Nickel	2000	20	20000	1,600	mg/kg	12.5	13.0	34.7	28.0	10.8	10.3	10.6
Selenium	100	1	5100	390	mg/kg	3.60	<0.70	<0.70	<0.70	<0.70	<0.70	<0.70
Silver	500	5	5100	390	mg/kg	<2.50	<2.50	<2.50	<2.50	<2.50	<2.50	<02.50
Thallium	700	7	67	5.2	mg/kg	<2.50	<2.50	<2.50	<2.50	<2.50	<2.50	<2.50
Vanadium	2400	24	7200	550	mg/kg	29.1	29.0	67.1	61.0	29.6	22.9	24.2
Zinc	5000	250	100000	23,000	mg/kg	31.9	33.0	83.2	72.6	46.6	42.2	39.3

Notes:

Regulatory Standard or Guidance refers to statutory, preliminary, or proposed concentration limit (e.g., EPA Preliminary Remediation Goals or Title 22 hazardous waste criteria - Total Threshold Limit Concentration [TTLC] and Soluble Threshold Limit Concentration [STLC]).

mg/kg - milligrams per kilogram

mg/L - milligrams per liter

NA - Not Analyzed

<0.80 - Analyte not detected above indicated Reporting Limit.

J - The analyte was positively identified at a concentration less than the laboratory reporting limit. The associated numerical value is the estimated concentration of the analyte in the sample.

(1) - Arsenic - cancer endpoint PRGs listed; non-cancer endpoint PRGs are 260 mg/kg (industrial) and 22 mg/kg (residential), respectively.

TABLE 3
SOIL ANALYTICAL RESULTS - HEXAVALENT CHROMIUM
EPA Method 7199
Chatsworth Reservoir, Chatsworth, California

ANALYTE	Regulatory Standard or Guidance				Boring # / Sample ID:	B1 / B1 Comp	B2 / B2 Comp	B3 / B3 Comp	B4 / B4 Comp	B5 / B5 Comp	B6 / B6 Comp
	Limit TTLC mg/kg	Limit STLC mg/L	Industrial PRGs mg/kg	Residential PRGs mg/kg	Sample Date: / Units	1/28/04 ug/kg	1/28/04 ug/kg	1/28/04 ug/kg	1/28/04 ug/kg	1/28/04 ug/kg	1/28/04 ug/kg
Hexavalent Chromium	*	**	64,000	30,000		92	280	140	120	84	130

Notes:

Regulatory Standard or Guidance refers to statutory, preliminary, or proposed concentration limit (e.g., EPA Preliminary Remediation Goals [PRGs] or Title 22 hazardous waste criteria - Total Threshold Limit Concentration [TTLC] and Soluble Threshold Limit Concentration [STLC]).

µg/kg - micrograms per kilogram (e.g., 1000 ug/kg = 1 mg/kg)

NA - Not Analyzed

* - A TTLC for hexavalent chromium has not been established. The TTLC for total chromium is 500 mg/kg.

** - A STLC for hexavalent chromium has not been established. The STLC for total chromium is 5 mg/L.

TABLE 4
SOIL ANALYTICAL RESULTS - RADIONUCLIDES

Chatsworth Reservoir, Chatsworth, California

ANALYTE	Method	Unit	Reporting Limit	Boring # / Sample ID: / Sample Date:	B1 / B1 / 1/28/04	B2 / B2 / 1/28/04	B3 / B3 / 1/28/04	B4 / B4 / 1/28/04	B5 / B5 / 1/28/04	B6 / B6 / 1/28/04
RADIONUCLIDES-GAMMA										
Cesium 137	E901.1	pCi/g-dry	2.0		ND	ND	ND	ND	ND	ND
Potassium 40	E901.1	pCi/g	2.0		21.3	16.6	17.9	23.5	19.3	23.5
RADIONUCLIDES - TOTAL										
Thorium 228	E907.0	pCi/g-dry	0.2		0.6	0.8	1.0	0.7	0.9	0.8
Thorium 230	E907.0	pCi/g-dry	0.2		0.5	1.1	1.2	0.3	0.4	0.3
Thorium 232±)	E907.0	pCi/g-dry	0.2		0.4	0.6	0.9	0.6	0.7	0.7
Uranium	SW6020	mg/kg-dry	0.5		2.5	4.1	4.9	1.2	1.9	1.3
Strontium 90	E905.0	pCi/g-dry	0.600		ND	ND	ND	ND	ND	ND

Notes:

EPA Preliminary Remediation Goals [PRGs] in Soil for the above Radionuclides have not been developed.
pCi/g - pico curie per gram
mg/kg - milligrams per kilogram
ND - Not Detected at the Reporting Limit

TABLE 5
GROUNDWATER ANALYTICAL RESULTS - VOCs
EPA Method 8260B
Chatsworth Reservoir, Chatsworth, California

ANALYTE	Regulatory Standard or Guidance			Boring # / Sample Date: / Units	B-2W 3/24/04	B-3W 3/24/04	B-4W 3/24/04	B-5W 3/24/04
	Federal MCL	State MCL/AL	EPA PRG Tap Water					
Acetone	NE	NE	610	mg/L	ND	15.6	ND	ND
Carbon disulfide	NE	160	1000	mg/L	ND	ND	ND	2.35
Toluene	1000	150	720	mg/L	0.184J	0.707	0.3J	0.653
m & p-Xylene	10000	1750	210	mg/L	ND	ND	ND	0.499J

Notes:
Regulatory Standard or Guidance refers to statutory, preliminary, or proposed concentration limit (e.g., EPA Preliminary Remediation Goals or Title 22 hazardous waste criteria - Total Threshold Limit Concentration [TTLC] and Soluble Threshold Limit Concentration [STLC]).

mg/L - micrograms per liter
NE - None Established
ND - Analyte not detected above indicated Reporting Limit.
J - The analyte was positively identified at a concentration less than the laboratory reporting limit. The associated
MCL - Maximum Contaminant Level.
AL - Action Level
(1) - Regulatory Standard or guidance for xylenes are provided for total of o-, m-, & p- xylene isomers.

TABLE 6
GROUNDWATER ANALYTICAL RESULTS - DIOXIN AND FURAN COMPOUNDS
EPA Method 1613
Chatsworth Reservoir, Chatsworth, California

	Regulatory Standard or Guidance			Boring # Sample Date:	B-2W 3/24/04	B-3W 3/24/04	B-4W 3/24/04	B-5W 3/24/04
	Federal MCL	State MCL/AL	EPA PRG Tap Water	Units	CONC.	CONC.	CONC.	CONC.
1,2,3,4,6,7,8-HpCDD	NE	NE	NE	pg/g	4.01	2.70	8.12	11.0
1,2,3,4,6,7,8-HpCDF	NE	NE	NE	pg/g	ND	ND	ND	2.98
1,2,3,7,8,9-HxCDF	NE	NE	NE	pg/g	ND	ND	ND	ND
OCDD	NE	NE	NE	pg/g	27.1	15.2	32.9	86.3
OCDF	NE	NE	NE	pg/g	ND	ND	ND	5.68
Total Hepta-Dioxins	NE	NE	NE	pg/g	11.9	6.8	16.2	37.1
Total Hepta-Furans	NE	NE	NE	pg/g	ND	ND	ND	5.72
Total Hexa-Furans	NE	NE	NE	pg/g	ND	ND	ND	ND
Total Penta-Furans	NE	NE	NE	pg/g	ND	ND	ND	ND
Total Tetra-Dioxins (1)	3.8 E -04	NE	4..5 E -04	pg/g	ND	ND	ND	ND
Total Tetra-Furans	NE	NE	NE	pg/g	ND	ND	ND	ND

Notes:
Regulatory Standard or Guidance refers to statutory, preliminary, or proposed concentration limit (e.g., EPA and / or State maximum contaminant level [MCL] or Action Level [AL], or EPA Preliminary Remediation Goals [PRG] for tap water).

pg/g - picograms per gram
ND - Analyte not detected above indicated Reporting Limit.
NE - None Established
J - The analyte was positively identified at a concentration less than the laboratory reporting limit. Estimated concentration of the analyte in the sample.
(1) - Regulatory levels shown for 2,3,7,8 - TCDD - a tetra dioxin. Units have been converted from µg/L to pg/g of water.

TABLE 7
GROUNDWATER ANALYTICAL RESULTS - METALS
EPA 6010B/ 245.1 (Hg)
Chatsworth Reservoir, Chatsworth, California

ANALYTE	Regulatory Standard or Guidance mg/L			Boring # Sample Date:	B-2W 3/24/04	B-3W 3/24/04	B-4W 3/24/04	B-5W 3/24/04
	Federal MCL	State MCL/AL	EPA PRG Tap Water	Units				
Antimony	0.006	0.006	0.015	mg/L	0.022J	0.174	ND	ND
Arsenic	0.01	0.05	0.000045	mg/L	1.579	3.217	0.072J	0.403
Barium	1	1	2.6	mg/L	15.670	17.840	0.920	7.080
Beryllium	0.004	0.004	0.073	mg/L	0.078	0.123	0..007J	0.041
Cadmium	0.005	0.005	0.018	mg/L	0.543	0.686	0.025J	0.129
Chromium (Total)	0.05	0.05	55 (Cr^{+3})	mg/L	2.362	3.273	0.328	2.106
Cobalt	NE	NE	0.73	mg/L	1.859	2.202	0.155	0.659
Copper	NE	1.3	1.5	mg/L	3.921	10.080	0.098	1.209
Lead	NE	0.015	NE	mg/L	1.266	2.238	0.059J	0.807
Mercury	0.002	0.002	0.011	mg/L	ND	ND	ND	ND
Molybdenum	NE	NE	0.18	mg/L	0.396	0.227	ND	0.062
Nickel	0.1	0.1	0.73	mg/L	2.861	2.703	0.154	0.473
Selenium	0.05	0.08	0.18	mg/L	0.304	0.249	ND	ND
Silver	NE	NE	0.18	mg/L	ND	ND	ND	ND
Thallium	0.002	0.002	0.0024	mg/L	ND	ND	ND	ND
Vanadium	NE	0.05	0.26	mg/L	1.862	6.932	0.367	1.310
Zinc	NE	NE	11	mg/L	9.036	12.590	0.629	2.632

Notes:
Regulatory Standard or Guidance refers to statutory, preliminary, or proposed concentration limit (e.g., EPA or State MCLs or Action Levels or EPA Preliminary Remediation Goals [PRGs] for tap water.

mg/L - milligrams per liter
NE - None Established
ND - Analyte not detected above indicated Reporting Limit.
J - The analyte was positively identified at a concentration less than the laboratory reporting limit. The associated numerical value is the estimated concentration of the analyte in the sample.
MCL - Maximum Contaminant Level
AL - Action Level

DATE DRILLED 1/28/04 BORING NO. B1

GROUND ELEVATION 865.1 MSL SHEET 1 OF 1

METHOD OF DRILLING Direct Push

DRIVE WEIGHT NA DROP NA

SAMPLED BY RHS LOGGED BY RHS REVIEWED BY WRC

DEPTH (feet)	SAMPLES (Bulk / Driven)	BLOWS/FOOT	SAMPLE ID	ORGANIC VAPORS (ppm)	MOISTURE	SYMBOL	CLASSIFICATION U.S.C.S.	DESCRIPTION/INTERPRETATION
0			B1-5	<1			SM	ALLUVIUM: Dark yellowish orange (10 YR 6/6), damp, silty SAND.
10			B1-10	<1				
					▼		CL	Dark yellowish orange (10 YR 6/6), moist, silty CLAY. Becomes saturated at 14 feet bgs. Localized sand lenses down to 20 feet bgs. @ 16 feet: groundwater encountered after drilling.
20								Total Depth = 20 feet. Groundwater encountered at 16.5 feet bgs. Composite sample from 1-5, 6-10 foot samples. Backfilled with hydrated bentonite on 1/28/04.
30								
40								

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BORING LOG

Chatsworth Reservoir
Chatsworth, California

PROJECT NO.	DATE	FIGURE
205411002	5/2004	A-1

DATE DRILLED 1/28/04 BORING NO. B2

GROUND ELEVATION 862.3 MSL SHEET 1 OF 1

METHOD OF DRILLING Direct Push

DRIVE WEIGHT NA DROP NA

SAMPLED BY RHS LOGGED BY RHS REVIEWED BY WRC

DEPTH (feet)	SAMPLES (Bulk / Driven)	BLOWS/FOOT	SAMPLE ID	ORGANIC VAPORS (ppm)	MOISTURE	SYMBOL	CLASSIFICATION U.S.C.S.	DESCRIPTION/INTERPRETATION
0			B2-5	<1			ML	ALLUVIUM: Moderate yellowish brown (10 YR 5/4), damp, clayey SILT.
10			B2-10	<1			CL	Moderate yellowish brown (10 YR 5/4), damp, silty CLAY.
			B2-15		▼			Becomes sandy CLAY. @ 16.5 feet: groundwater encountered after drilling. Quick recharge.
20								Total Depth = 20 feet. Groundwater encountered at 16.5 feet bgs. Composite sample from 1-5, 6-10, 11-15 foot samples. Backfilled with hydrated bentonite on 1/28/04.
30								
40								

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BORING LOG

Chatsworth Reservoir
Chatsworth, California

PROJECT NO.	DATE	FIGURE
205411002	5/2004	A-2

DATE DRILLED 1/28/04 BORING NO. B3

GROUND ELEVATION 859.7 MSL SHEET 1 OF 1

METHOD OF DRILLING Direct Push

DRIVE WEIGHT NA DROP NA

SAMPLED BY RHS LOGGED BY RHS REVIEWED BY WRC

DEPTH (feet)	SAMPLES (Bulk / Driven)	BLOWS/FOOT	SAMPLE ID	ORGANIC VAPORS (ppm)	MOISTURE	SYMBOL	CLASSIFICATION U.S.C.S.	DESCRIPTION/INTERPRETATION
0			B3-5	<1			ML	ALLUVIUM: Moderate yellowish brown (10 YR 5/4), damp, sandy SILT.
10			B3-10	<1			CL	Moderate yellowish brown (10 YR 5/4), damp, sandy CLAY. Becomes moderate brown (5 YR 3/4).
			B3-15	<1				
20			B3-20	<1	▽			Total Depth = 20 feet. Groundwater deeper than 20 feet bgs. Composite sample from 1-5, 6-10, 11-16 foot samples. Backfilled with hydrated bentonite on 1/28/04.
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40								

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BORING LOG

Chatsworth Reservoir
Chatsworth, California

PROJECT NO.	DATE	FIGURE
205411002	5/2004	A-3

DATE DRILLED 1/28/04 BORING NO. B4

GROUND ELEVATION 866.1 MSL SHEET 1 OF 1

METHOD OF DRILLING Direct Push

DRIVE WEIGHT NA DROP NA

SAMPLED BY RHS LOGGED BY RHS REVIEWED BY WRC

DEPTH (feet)	SAMPLES (Bulk / Driven)	BLOWS/FOOT	SAMPLE ID	ORGANIC VAPORS (ppm)	MOISTURE	SYMBOL	CLASSIFICATION U.S.C.S.	DESCRIPTION/INTERPRETATION
0			B4-5	<1			ML	ALLUVIUM: Moderate yellowish brown (10 YR 5/4), damp, clayey SILT; few fine sands.
10			B4-10	<1	▼		SM	Moderate yellowish brown (10 YR 5/4), moist, silty SAND; few clays. @ 10 feet: groundwater encountered after drilling.
20								Total Depth = 16 feet. Groundwater encountered at 10 feet bgs. Composite sample from 1-5, 6-10 foot samples. Backfilled with hydrated bentonite on 1/28/04.
30								
40								

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BORING LOG

Chatsworth Reservoir
Chatsworth, California

PROJECT NO.	DATE	FIGURE
205411002	5/2004	A-4

DATE DRILLED 1/28/04 BORING NO. B5

GROUND ELEVATION 870.7 MSL SHEET 1 OF 1

METHOD OF DRILLING Direct Push

DRIVE WEIGHT NA DROP NA

SAMPLED BY RHS LOGGED BY RHS REVIEWED BY WRC

DEPTH (feet)	SAMPLES: Bulk	SAMPLES: Driven	BLOWS/FOOT	SAMPLE ID	ORGANIC VAPORS (ppm)	MOISTURE	SYMBOL	CLASSIFICATION U.S.C.S.	DESCRIPTION/INTERPRETATION
0				B5-5	<1			CL	ALLUVIUM: Dark yellowish brown (10 YR 2/2), moist, sandy CLAY.
10				B5-10	<1	▼			Becomes moderate blueish gray (5 B 5/1). @ 12 feet: groundwater encountered after drilling.
20									Total Depth = 16 feet. Groundwater encountered at 12 feet bgs. Composite sample from 1-5, 6-10 foot samples. Backfilled with hydrated bentonite on 1/28/04.
30									
40									

Essentia management services

BORING LOG

Chatsworth Reservoir
Chatsworth, California

PROJECT NO.	DATE	FIGURE
205411002	5/2004	A-5

DATE DRILLED 1/28/04 BORING NO. B6

GROUND ELEVATION 873.4 MSL SHEET 1 OF 1

METHOD OF DRILLING Direct Push

DRIVE WEIGHT NA DROP NA

SAMPLED BY RHS LOGGED BY RHS REVIEWED BY WRC

DEPTH (feet)	SAMPLES (Bulk / Driven)	BLOWS/FOOT	SAMPLE ID	ORGANIC VAPORS (ppm)	MOISTURE	SYMBOL	CLASSIFICATION U.S.C.S.	DESCRIPTION/INTERPRETATION
0			B6-5				CL	ALLUVIUM: Dark yellowish orange (10 YR 6/6), damp, sandy CLAY.
10			B6-10					Refusal at 11 feet. Total Depth = 11 feet. No groundwater encountered. Composite sample from 1-5, 6-10 foot samples. Backfilled with granular bentonite on 1/28/04.
20								
30								
40								

Essentia management services

BORING LOG

Chatsworth Reservoir
Chatsworth, California

PROJECT NO.	DATE	FIGURE
205411002	5/2004	A-6

Calscience
Environmental
Laboratories, Inc.

April 02, 2004

Ken Floom
Essentia Management Service
5000 East Spring Street, Suite 720
Long Beach, CA 90815-1270

Subject: **Calscience Work Order No.:** **04-03-1493**
Client Reference: **LADWP-Chatsworth Resrvoir**

Dear Client:

Enclosed is an analytical report for the above-referenced project. The samples included in this report were received 3/24/2004 and analyzed in accordance with the attached chain-of-custody.

Unless otherwise noted, all analytical testing was accomplished in accordance with the guidelines established in our Quality Assurance Program Manual, applicable standard operating procedures, and other related documentation. The original report of any subcontracted analysis is provided herein, and follows the standard Calscience data package. The results in this analytical report are limited to the samples tested and any reproduction thereof must be made in its entirety.

If you have any questions regarding this report, please do not hesitate to contact the undersigned.

Sincerely,

Calscience Environmental
Laboratories, Inc.
Stephen Nowak
Project Manager

Michael J. Crisostomo
Quality Assurance Manager

Calscience Environmental Laboratories, Inc.

Analytical Report

Essentia Management Service
5000 East Spring Street, Suite 720
Long Beach, CA 90815-1270

Date Received: 03/24/04
Work Order No: 04-03-1493
Preparation: N/A
Method: EPA 314.0

Project: LADWP-Chatsworth Resrvoir

Client Sample Number	Lab Sample Number	Date Collected	Matrix	Date Prepared	Date Analyzed	QC Batch ID
B5-W	**04-03-1493-1**	**03/24/04**	**Aqueous**	**N/A**	**03/26/04**	**040325L01**

Parameter	Result	RL	DF	Qual	Units
Perchlorate	ND	2.0	1		ug/L

Client Sample Number	Lab Sample Number	Date Collected	Matrix	Date Prepared	Date Analyzed	QC Batch ID
B4-W	**04-03-1493-2**	**03/24/04**	**Aqueous**	**N/A**	**03/26/04**	**040325L01**

Parameter	Result	RL	DF	Qual	Units
Perchlorate	ND	2.0	1		ug/L

Client Sample Number	Lab Sample Number	Date Collected	Matrix	Date Prepared	Date Analyzed	QC Batch ID
B2-W	**04-03-1493-3**	**03/24/04**	**Aqueous**	**N/A**	**03/26/04**	**040325L01**

Parameter	Result	RL	DF	Qual	Units
Perchlorate	ND	2.0	1		ug/L

Client Sample Number	Lab Sample Number	Date Collected	Matrix	Date Prepared	Date Analyzed	QC Batch ID
B3-W	**04-03-1493-4**	**03/24/04**	**Aqueous**	**N/A**	**03/26/04**	**040325L01**

Parameter	Result	RL	DF	Qual	Units
Perchlorate	ND	2.0	1		ug/L

Client Sample Number	Lab Sample Number	Date Collected	Matrix	Date Prepared	Date Analyzed	QC Batch ID
Method Blank	**099-05-203-136**	**N/A**	**Aqueous**	**N/A**	**03/25/04**	**040325L01**

Parameter	Result	RL	DF	Qual	Units
Perchlorate	ND	2.0	1		ug/L

RL - Reporting Limit , DF - Dilution Factor , Qual - Qualifiers

Calscience Environmental Laboratories, Inc.

Analytical Report

Essentia Management Service
5000 East Spring Street, Suite 720
Long Beach, CA 90815-1270

Date Received: 03/24/04
Work Order No: 04-03-1493
Preparation: N/A
Method: EPA 7199

Project: LADWP-Chatsworth Resrvoir

Client Sample Number	Lab Sample Number	Date Collected	Matrix	Date Prepared	Date Analyzed	QC Batch ID
B5-W	**04-03-1493-1**	**03/24/04**	**Aqueous**	**N/A**	**03/24/04**	**40324CRL1**

Parameter	Result	RL	DF	Qual	Units
Chromium, Hexavalent	ND	1.0	1		ug/L

Client Sample Number	Lab Sample Number	Date Collected	Matrix	Date Prepared	Date Analyzed	QC Batch ID
B4-W	**04-03-1493-2**	**03/24/04**	**Aqueous**	**N/A**	**03/24/04**	**40324CRL1**

Parameter	Result	RL	DF	Qual	Units
Chromium, Hexavalent	ND	1.0	1		ug/L

Client Sample Number	Lab Sample Number	Date Collected	Matrix	Date Prepared	Date Analyzed	QC Batch ID
B2-W	**04-03-1493-3**	**03/24/04**	**Aqueous**	**N/A**	**03/24/04**	**40324CRL1**

Parameter	Result	RL	DF	Qual	Units
Chromium, Hexavalent	ND	1.0	1		ug/L

Client Sample Number	Lab Sample Number	Date Collected	Matrix	Date Prepared	Date Analyzed	QC Batch ID
B3-W	**04-03-1493-4**	**03/24/04**	**Aqueous**	**N/A**	**03/24/04**	**40324CRL1**

Parameter	Result	RL	DF	Qual	Units
Chromium, Hexavalent	ND	1.0	1		ug/L

Client Sample Number	Lab Sample Number	Date Collected	Matrix	Date Prepared	Date Analyzed	QC Batch ID
Method Blank	**099-05-123-1,331**	**N/A**	**Aqueous**	**N/A**	**03/24/04**	**40324CRL1**

Parameter	Result	RL	DF	Qual	Units
Chromium, Hexavalent	ND	1.0	1		ug/L

RL - Reporting Limit , DF - Dilution Factor , Qual - Qualifiers

Calscience Environmental Laboratories, Inc.

Analytical Report

Essentia Management Service
5000 East Spring Street, Suite 720
Long Beach, CA 90815-1270

Date Received: 03/24/04
Work Order No: 04-03-1493
Preparation: EPA 3510C
Method: TPH - Carbon Range

Project: LADWP-Chatsworth Resrvoir

Client Sample Number	Lab Sample Number	Date Collected	Matrix	Date Prepared	Date Analyzed	QC Batch ID
B5-W	**04-03-1493-1**	**03/24/04**	**Aqueous**	**03/25/04**	**03/25/04**	**040325B04**

Parameter	Result	RL	DF	Qual	Units	Parameter	Result	RL	DF	Qual	Units
C7	ND		1		ug/L	C19-C20	ND		1		ug/L
C8	ND		1		ug/L	C21-C22	ND		1		ug/L
C9-C10	ND		1		ug/L	C23-C24	ND		1		ug/L
C11-C12	ND		1		ug/L	C25-C28	ND		1		ug/L
C13-C14	ND		1		ug/L	C29-C32	ND		1		ug/L
C15-C16	ND		1		ug/L	C33-C36	ND		1		ug/L
C17-C18	ND		1		ug/L	C7-C36 Total	ND	1000	1		ug/L

Surrogates:	REC (%)	Control Limits	Qual
Decachlorobiphenyl	86	51-141	

B4-W	04-03-1493-2	03/24/04	Aqueous	03/25/04	03/26/04	040325B04

Parameter	Result	RL	DF	Qual	Units	Parameter	Result	RL	DF	Qual	Units
C7	ND		1		ug/L	C19-C20	ND		1		ug/L
C8	ND		1		ug/L	C21-C22	ND		1		ug/L
C9-C10	ND		1		ug/L	C23-C24	ND		1		ug/L
C11-C12	ND		1		ug/L	C25-C28	ND		1		ug/L
C13-C14	ND		1		ug/L	C29-C32	ND		1		ug/L
C15-C16	ND		1		ug/L	C33-C36	ND		1		ug/L
C17-C18	ND		1		ug/L	C7-C36 Total	ND	1000	1		ug/L

Surrogates:	REC (%)	Control Limits	Qual
Decachlorobiphenyl	92	51-141	

B2-W	04-03-1493-3	03/24/04	Aqueous	03/25/04	03/26/04	040325B04

Parameter	Result	RL	DF	Qual	Units	Parameter	Result	RL	DF	Qual	Units
C7	ND		1		ug/L	C19-C20	ND		1		ug/L
C8	ND		1		ug/L	C21-C22	ND		1		ug/L
C9-C10	ND		1		ug/L	C23-C24	ND		1		ug/L
C11-C12	ND		1		ug/L	C25-C28	ND		1		ug/L
C13-C14	ND		1		ug/L	C29-C32	ND		1		ug/L
C15-C16	ND		1		ug/L	C33-C36	ND		1		ug/L
C17-C18	ND		1		ug/L	C7-C36 Total	ND	1000	1		ug/L

Surrogates:	REC (%)	Control Limits	Qual
Decachlorobiphenyl	87	51-141	

RL - Reporting Limit , DF - Dilution Factor , Qual - Qualifiers

Calscience Environmental Laboratories, Inc.

Analytical Report

Essentia Management Service
5000 East Spring Street, Suite 720
Long Beach, CA 90815-1270

Date Received: 03/24/04
Work Order No: 04-03-1493
Preparation: EPA 3510C
Method: TPH - Carbon Range

Project: LADWP-Chatsworth Resrvoir

Client Sample Number	Lab Sample Number	Date Collected	Matrix	Date Prepared	Date Analyzed	QC Batch ID
B3-W	**04-03-1493-4**	**03/24/04**	**Aqueous**	**03/25/04**	**03/26/04**	**040325B04**

Parameter	Result	RL	DF	Qual	Units	Parameter	Result	RL	DF	Qual	Units
C7	ND		1		ug/L	C19-C20	ND		1		ug/L
C8	ND		1		ug/L	C21-C22	ND		1		ug/L
C9-C10	ND		1		ug/L	C23-C24	ND		1		ug/L
C11-C12	ND		1		ug/L	C25-C28	ND		1		ug/L
C13-C14	ND		1		ug/L	C29-C32	ND		1		ug/L
C15-C16	ND		1		ug/L	C33-C36	ND		1		ug/L
C17-C18	ND		1		ug/L	C7-C36 Total	ND	1000	1		ug/L

Surrogates:	REC (%)	Control Limits	Qual
Decachlorobiphenyl	91	51-141	

Method Blank	**098-03-003-2,046**	**N/A**	**Aqueous**	**03/25/04**	**03/25/04**	**040325B04**

Parameter	Result	RL	DF	Qual	Units
TPH as Diesel	ND	1000	1		ug/L

Surrogates:	REC (%)	Control Limits	Qual
Decachlorobiphenyl	103	51-141	

RL - Reporting Limit , DF - Dilution Factor , Qual - Qualifiers

Calscience Environmental Laboratories, Inc.

Analytical Report

Essentia Management Service
5000 East Spring Street, Suite 720
Long Beach, CA 90815-1270

Date Received: 03/24/04
Work Order No: 04-03-1493
Preparation: EPA 3520B
Method: EPA 8082

Project: LADWP-Chatsworth Resrvoir

Client Sample Number	Lab Sample Number	Date Collected	Matrix	Date Prepared	Date Analyzed	QC Batch ID
B5-W	**04-03-1493-1**	**03/24/04**	**Aqueous**	**03/29/04**	**03/31/04**	**040329L09**

Parameter	Result	RL	DF	Qual	Units	Parameter	Result	RL	DF	Qual	Units
Aroclor-1016	ND	1.0	1		ug/L	Aroclor-1248	ND	1.0	1		ug/L
Aroclor-1221	ND	1.0	1		ug/L	Aroclor-1254	ND	1.0	1		ug/L
Aroclor-1232	ND	1.0	1		ug/L	Aroclor-1260	ND	1.0	1		ug/L
Aroclor-1242	ND	1.0	1		ug/L	Aroclor-1262	ND	1.0	1		ug/L

Surrogates:	REC (%)	Control Limits	Qual	Surrogates:	REC (%)	Control Limits	Qual
Decachlorobiphenyl	29	50-135	2	2,4,5,6-Tetrachloro-m-Xylene	87	50-135	

B4-W	04-03-1493-2	03/24/04	Aqueous	03/29/04	03/31/04	040329L09

Parameter	Result	RL	DF	Qual	Units	Parameter	Result	RL	DF	Qual	Units
Aroclor-1016	ND	1.0	1		ug/L	Aroclor-1248	ND	1.0	1		ug/L
Aroclor-1221	ND	1.0	1		ug/L	Aroclor-1254	ND	1.0	1		ug/L
Aroclor-1232	ND	1.0	1		ug/L	Aroclor-1260	ND	1.0	1		ug/L
Aroclor-1242	ND	1.0	1		ug/L	Aroclor-1262	ND	1.0	1		ug/L

Surrogates:	REC (%)	Control Limits	Qual	Surrogates:	REC (%)	Control Limits	Qual
Decachlorobiphenyl	36	50-135	2	2,4,5,6-Tetrachloro-m-Xylene	85	50-135	

B2-W	04-03-1493-3	03/24/04	Aqueous	03/29/04	03/31/04	040329L09

Parameter	Result	RL	DF	Qual	Units	Parameter	Result	RL	DF	Qual	Units
Aroclor-1016	ND	1.0	1		ug/L	Aroclor-1248	ND	1.0	1		ug/L
Aroclor-1221	ND	1.0	1		ug/L	Aroclor-1254	ND	1.0	1		ug/L
Aroclor-1232	ND	1.0	1		ug/L	Aroclor-1260	ND	1.0	1		ug/L
Aroclor-1242	ND	1.0	1		ug/L	Aroclor-1262	ND	1.0	1		ug/L

Surrogates:	REC (%)	Control Limits	Qual	Surrogates:	REC (%)	Control Limits	Qual
Decachlorobiphenyl	44	50-135	2	2,4,5,6-Tetrachloro-m-Xylene	92	50-135	

B3-W	04-03-1493-4	03/24/04	Aqueous	03/29/04	03/31/04	040329L09

Parameter	Result	RL	DF	Qual	Units	Parameter	Result	RL	DF	Qual	Units
Aroclor-1016	ND	1.0	1		ug/L	Aroclor-1248	ND	1.0	1		ug/L
Aroclor-1221	ND	1.0	1		ug/L	Aroclor-1254	ND	1.0	1		ug/L
Aroclor-1232	ND	1.0	1		ug/L	Aroclor-1260	ND	1.0	1		ug/L
Aroclor-1242	ND	1.0	1		ug/L	Aroclor-1262	ND	1.0	1		ug/L

Surrogates:	REC (%)	Control Limits	Qual	Surrogates:	REC (%)	Control Limits	Qual
Decachlorobiphenyl	43	50-135	2	2,4,5,6-Tetrachloro-m-Xylene	91	50-135	

RL - Reporting Limit , DF - Dilution Factor , Qual - Qualifiers

Calscience Environmental Laboratories, Inc.

Analytical Report

Essentia Management Service
5000 East Spring Street, Suite 720
Long Beach, CA 90815-1270

Date Received: 03/24/04
Work Order No: 04-03-1493
Preparation: EPA 3520B
Method: EPA 8082

Project: LADWP-Chatsworth Resrvoir

Client Sample Number	Lab Sample Number	Date Collected	Matrix	Date Prepared	Date Analyzed	QC Batch ID
Method Blank	**099-07-010-181**	**N/A**	**Aqueous**	**03/29/04**	**03/31/04**	**040329L09**

Parameter	Result	RL	DF	Qual	Units	Parameter	Result	RL	DF	Qual	Units
Aroclor-1016	ND	1.0	1		ug/L	Aroclor-1248	ND	1.0	1		ug/L
Aroclor-1221	ND	1.0	1		ug/L	Aroclor-1254	ND	1.0	1		ug/L
Aroclor-1232	ND	1.0	1		ug/L	Aroclor-1260	ND	1.0	1		ug/L
Aroclor-1242	ND	1.0	1		ug/L	Aroclor-1262	ND	1.0	1		ug/L

Surrogates:	REC (%)	Control Limits	Qual	Surrogates:	REC (%)	Control	Qual
Decachlorobiphenyl	100	50-135		2,4,5,6-Tetrachloro-m-Xylene	83	50-135	

RL - Reporting Limit , DF - Dilution Factor , Qual - Qualifiers

Calscience Environmental Laboratories, Inc.

Analytical Report

Essentia Management Service
5000 East Spring Street, Suite 720
Long Beach, CA 90815-1270

Date Received: 03/24/04
Work Order No: 04-03-1493
Preparation: EPA 3520B
Method: EPA 8270C

Project: LADWP-Chatsworth Resrvoir

Client Sample Number	Lab Sample Number	Date Collected	Matrix	Date Prepared	Date Analyzed	QC Batch ID
B5-W	**04-03-1493-1**	**03/24/04**	**Aqueous**	**03/25/04**	**03/30/04**	**040325L06**

Parameter	Result	RL	DF	Qual	Units	Parameter	Result	RL	DF	Qual	Units
N-Nitrosodimethylamine	ND	10	1		ug/L	2,4-Dinitrophenol	ND	50	1		ug/L
Aniline	ND	10	1		ug/L	4-Nitrophenol	ND	10	1		ug/L
Phenol	ND	10	1		ug/L	Dibenzofuran	ND	10	1		ug/L
Bis(2-Chloroethyl) Ether	ND	25	1		ug/L	2,4-Dinitrotoluene	ND	10	1		ug/L
2-Chlorophenol	ND	10	1		ug/L	2,6-Dinitrotoluene	ND	10	1		ug/L
1,3-Dichlorobenzene	ND	10	1		ug/L	Diethyl Phthalate	ND	10	1		ug/L
1,4-Dichlorobenzene	ND	10	1		ug/L	4-Chlorophenyl-Phenyl Ether	ND	10	1		ug/L
Benzyl Alcohol	ND	10	1		ug/L	Fluorene	ND	10	1		ug/L
1,2-Dichlorobenzene	ND	10	1		ug/L	4-Nitroaniline	ND	10	1		ug/L
2-Methylphenol	ND	10	1		ug/L	Azobenzene	ND	10	1		ug/L
Bis(2-Chloroisopropyl) Ether	ND	10	1		ug/L	4,6-Dinitro-2-Methylphenol	ND	50	1		ug/L
3/4-Methylphenol	ND	10	1		ug/L	N-Nitrosodiphenylamine	ND	10	1		ug/L
N-Nitroso-di-n-propylamine	ND	10	1		ug/L	4-Bromophenyl-Phenyl Ether	ND	10	1		ug/L
Hexachloroethane	ND	10	1		ug/L	Hexachlorobenzene	ND	10	1		ug/L
Nitrobenzene	ND	25	1		ug/L	Pentachlorophenol	ND	10	1		ug/L
Isophorone	ND	10	1		ug/L	Phenanthrene	ND	10	1		ug/L
2-Nitrophenol	ND	10	1		ug/L	Anthracene	ND	10	1		ug/L
2,4-Dimethylphenol	ND	10	1		ug/L	Di-n-Butyl Phthalate	ND	10	1		ug/L
Benzoic Acid	ND	50	1		ug/L	Fluoranthene	ND	10	1		ug/L
Bis(2-Chloroethoxy) Methane	ND	10	1		ug/L	Benzidine	ND	50	1		ug/L
2,4-Dichlorophenol	ND	10	1		ug/L	Pyrene	ND	10	1		ug/L
1,2,4-Trichlorobenzene	ND	10	1		ug/L	Pyridine	ND	10	1		ug/L
Naphthalene	ND	10	1		ug/L	Butyl Benzyl Phthalate	ND	10	1		ug/L
4-Chloroaniline	ND	10	1		ug/L	3,3'-Dichlorobenzidine	ND	25	1		ug/L
Hexachloro-1,3-Butadiene	ND	10	1		ug/L	Benzo (a) Anthracene	ND	10	1		ug/L
4-Chloro-3-Methylphenol	ND	10	1		ug/L	Bis(2-Ethylhexyl) Phthalate	ND	10	1		ug/L
2-Methylnaphthalene	ND	10	1		ug/L	Chrysene	ND	10	1		ug/L
Hexachlorocyclopentadiene	ND	25	1		ug/L	Di-n-Octyl Phthalate	ND	10	1		ug/L
2,4,6-Trichlorophenol	ND	10	1		ug/L	Benzo (k) Fluoranthene	ND	10	1		ug/L
2,4,5-Trichlorophenol	ND	10	1		ug/L	Benzo (b) Fluoranthene	ND	10	1		ug/L
2-Chloronaphthalene	ND	10	1		ug/L	Benzo (a) Pyrene	ND	10	1		ug/L
2-Nitroaniline	ND	10	1		ug/L	Benzo (g,h,i) Perylene	ND	10	1		ug/L
Dimethyl Phthalate	ND	10	1		ug/L	Indeno (1,2,3-c,d) Pyrene	ND	10	1		ug/L
Acenaphthylene	ND	10	1		ug/L	Dibenz (a,h) Anthracene	ND	10	1		ug/L
3-Nitroaniline	ND	10	1		ug/L	1-Methylnaphthalene	ND	10	1		ug/L
Acenaphthene	ND	10	1		ug/L						

Surrogates:	REC (%)	Control Limits	Qual	Surrogates:	REC (%)	Control	Qual
2-Fluorophenol	76	15-138		Phenol-d6	78	17-141	
Nitrobenzene-d5	90	28-139		2-Fluorobiphenyl	79	33-144	
2,4,6-Tribromophenol	94	32-143		p-Terphenyl-d14	133	23-160	

RL - Reporting Limit , DF - Dilution Factor , Qual - Qualifiers

Essentia Management Service
5000 East Spring Street, Suite 720
Long Beach, CA 90815-1270

Date Received: 03/24/04
Work Order No: 04-03-1493
Preparation: EPA 3520B
Method: EPA 8270C

Project: LADWP-Chatsworth Resrvoir

Client Sample Number	Lab Sample Number	Date Collected	Matrix	Date Prepared	Date Analyzed	QC Batch ID
B4-W	**04-03-1493-2**	**03/24/04**	**Aqueous**	**03/25/04**	**03/30/04**	**040325L06**

Parameter	Result	RL	DF	Qual	Units	Parameter	Result	RL	DF	Qual	Units
N-Nitrosodimethylamine	ND	10	1		ug/L	2,4-Dinitrophenol	ND	50	1		ug/L
Aniline	ND	10	1		ug/L	4-Nitrophenol	ND	10	1		ug/L
Phenol	ND	10	1		ug/L	Dibenzofuran	ND	10	1		ug/L
Bis(2-Chloroethyl) Ether	ND	25	1		ug/L	2,4-Dinitrotoluene	ND	10	1		ug/L
2-Chlorophenol	ND	10	1		ug/L	2,6-Dinitrotoluene	ND	10	1		ug/L
1,3-Dichlorobenzene	ND	10	1		ug/L	Diethyl Phthalate	ND	10	1		ug/L
1,4-Dichlorobenzene	ND	10	1		ug/L	4-Chlorophenyl-Phenyl Ether	ND	10	1		ug/L
Benzyl Alcohol	ND	10	1		ug/L	Fluorene	ND	10	1		ug/L
1,2-Dichlorobenzene	ND	10	1		ug/L	4-Nitroaniline	ND	10	1		ug/L
2-Methylphenol	ND	10	1		ug/L	Azobenzene	ND	10	1		ug/L
Bis(2-Chloroisopropyl) Ether	ND	10	1		ug/L	4,6-Dinitro-2-Methylphenol	ND	50	1		ug/L
3/4-Methylphenol	ND	10	1		ug/L	N-Nitrosodiphenylamine	ND	10	1		ug/L
N-Nitroso-di-n-propylamine	ND	10	1		ug/L	4-Bromophenyl-Phenyl Ether	ND	10	1		ug/L
Hexachloroethane	ND	10	1		ug/L	Hexachlorobenzene	ND	10	1		ug/L
Nitrobenzene	ND	25	1		ug/L	Pentachlorophenol	ND	10	1		ug/L
Isophorone	ND	10	1		ug/L	Phenanthrene	ND	10	1		ug/L
2-Nitrophenol	ND	10	1		ug/L	Anthracene	ND	10	1		ug/L
2,4-Dimethylphenol	ND	10	1		ug/L	Di-n-Butyl Phthalate	ND	10	1		ug/L
Benzoic Acid	ND	50	1		ug/L	Fluoranthene	ND	10	1		ug/L
Bis(2-Chloroethoxy) Methane	ND	10	1		ug/L	Benzidine	ND	50	1		ug/L
2,4-Dichlorophenol	ND	10	1		ug/L	Pyrene	ND	10	1		ug/L
1,2,4-Trichlorobenzene	ND	10	1		ug/L	Pyridine	ND	10	1		ug/L
Naphthalene	ND	10	1		ug/L	Butyl Benzyl Phthalate	ND	10	1		ug/L
4-Chloroaniline	ND	10	1		ug/L	3,3'-Dichlorobenzidine	ND	25	1		ug/L
Hexachloro-1,3-Butadiene	ND	10	1		ug/L	Benzo (a) Anthracene	ND	10	1		ug/L
4-Chloro-3-Methylphenol	ND	10	1		ug/L	Bis(2-Ethylhexyl) Phthalate	ND	10	1		ug/L
2-Methylnaphthalene	ND	10	1		ug/L	Chrysene	ND	10	1		ug/L
Hexachlorocyclopentadiene	ND	25	1		ug/L	Di-n-Octyl Phthalate	ND	10	1		ug/L
2,4,6-Trichlorophenol	ND	10	1		ug/L	Benzo (k) Fluoranthene	ND	10	1		ug/L
2,4,5-Trichlorophenol	ND	10	1		ug/L	Benzo (b) Fluoranthene	ND	10	1		ug/L
2-Chloronaphthalene	ND	10	1		ug/L	Benzo (a) Pyrene	ND	10	1		ug/L
2-Nitroaniline	ND	10	1		ug/L	Benzo (g,h,i) Perylene	ND	10	1		ug/L
Dimethyl Phthalate	ND	10	1		ug/L	Indeno (1,2,3-c,d) Pyrene	ND	10	1		ug/L
Acenaphthylene	ND	10	1		ug/L	Dibenz (a,h) Anthracene	ND	10	1		ug/L
3-Nitroaniline	ND	10	1		ug/L	1-Methylnaphthalene	ND	10	1		ug/L
Acenaphthene	ND	10	1		ug/L						

Surrogates:	REC (%)	Control Limits	Qual	Surrogates:	REC (%)	Control Limits	Qual
2-Fluorophenol	80	15-138		Phenol-d6	39	17-141	
Nitrobenzene-d5	87	28-139		2-Fluorobiphenyl	88	33-144	
2,4,6-Tribromophenol	82	32-143		p-Terphenyl-d14	128	23-160	

RL - Reporting Limit , DF - Dilution Factor , Qual - Qualifiers

Calscience Environmental Laboratories, Inc.

Analytical Report

Essentia Management Service
5000 East Spring Street, Suite 720
Long Beach, CA 90815-1270

Date Received: 03/24/04
Work Order No: 04-03-1493
Preparation: EPA 3520B
Method: EPA 8270C

Project: LADWP-Chatsworth Resrvoir

Client Sample Number	Lab Sample Number	Date Collected	Matrix	Date Prepared	Date Analyzed	QC Batch ID
B2-W	**04-03-1493-3**	**03/24/04**	**Aqueous**	**03/25/04**	**03/30/04**	**040325L06**

Parameter	Result	RL	DF	Qual	Units	Parameter	Result	RL	DF	Qual	Units
N-Nitrosodimethylamine	ND	12	1.2		ug/L	2,4-Dinitrophenol	ND	60	1.2		ug/L
Aniline	ND	12	1.2		ug/L	4-Nitrophenol	ND	12	1.2		ug/L
Phenol	ND	12	1.2		ug/L	Dibenzofuran	ND	12	1.2		ug/L
Bis(2-Chloroethyl) Ether	ND	30	1.2		ug/L	2,4-Dinitrotoluene	ND	12	1.2		ug/L
2-Chlorophenol	ND	12	1.2		ug/L	2,6-Dinitrotoluene	ND	12	1.2		ug/L
1,3-Dichlorobenzene	ND	12	1.2		ug/L	Diethyl Phthalate	ND	12	1.2		ug/L
1,4-Dichlorobenzene	ND	12	1.2		ug/L	4-Chlorophenyl-Phenyl Ether	ND	12	1.2		ug/L
Benzyl Alcohol	ND	12	1.2		ug/L	Fluorene	ND	12	1.2		ug/L
1,2-Dichlorobenzene	ND	12	1.2		ug/L	4-Nitroaniline	ND	12	1.2		ug/L
2-Methylphenol	ND	12	1.2		ug/L	Azobenzene	ND	12	1.2		ug/L
Bis(2-Chloroisopropyl) Ether	ND	12	1.2		ug/L	4,6-Dinitro-2-Methylphenol	ND	60	1.2		ug/L
3/4-Methylphenol	ND	12	1.2		ug/L	N-Nitrosodiphenylamine	ND	12	1.2		ug/L
N-Nitroso-di-n-propylamine	ND	12	1.2		ug/L	4-Bromophenyl-Phenyl Ether	ND	12	1.2		ug/L
Hexachloroethane	ND	12	1.2		ug/L	Hexachlorobenzene	ND	12	1.2		ug/L
Nitrobenzene	ND	30	1.2		ug/L	Pentachlorophenol	ND	12	1.2		ug/L
Isophorone	ND	12	1.2		ug/L	Phenanthrene	ND	12	1.2		ug/L
2-Nitrophenol	ND	12	1.2		ug/L	Anthracene	ND	12	1.2		ug/L
2,4-Dimethylphenol	ND	12	1.2		ug/L	Di-n-Butyl Phthalate	ND	12	1.2		ug/L
Benzoic Acid	ND	60	1.2		ug/L	Fluoranthene	ND	12	1.2		ug/L
Bis(2-Chloroethoxy) Methane	ND	12	1.2		ug/L	Benzidine	ND	60	1.2		ug/L
2,4-Dichlorophenol	ND	12	1.2		ug/L	Pyrene	ND	12	1.2		ug/L
1,2,4-Trichlorobenzene	ND	12	1.2		ug/L	Pyridine	ND	12	1.2		ug/L
Naphthalene	ND	12	1.2		ug/L	Butyl Benzyl Phthalate	ND	12	1.2		ug/L
4-Chloroaniline	ND	12	1.2		ug/L	3,3'-Dichlorobenzidine	ND	30	1.2		ug/L
Hexachloro-1,3-Butadiene	ND	12	1.2		ug/L	Benzo (a) Anthracene	ND	12	1.2		ug/L
4-Chloro-3-Methylphenol	ND	12	1.2		ug/L	Bis(2-Ethylhexyl) Phthalate	ND	12	1.2		ug/L
2-Methylnaphthalene	ND	12	1.2		ug/L	Chrysene	ND	12	1.2		ug/L
Hexachlorocyclopentadiene	ND	30	1.2		ug/L	Di-n-Octyl Phthalate	ND	12	1.2		ug/L
2,4,6-Trichlorophenol	ND	12	1.2		ug/L	Benzo (k) Fluoranthene	ND	12	1.2		ug/L
2,4,5-Trichlorophenol	ND	12	1.2		ug/L	Benzo (b) Fluoranthene	ND	12	1.2		ug/L
2-Chloronaphthalene	ND	12	1.2		ug/L	Benzo (a) Pyrene	ND	12	1.2		ug/L
2-Nitroaniline	ND	12	1.2		ug/L	Benzo (g,h,i) Perylene	ND	12	1.2		ug/L
Dimethyl Phthalate	ND	12	1.2		ug/L	Indeno (1,2,3-c,d) Pyrene	ND	12	1.2		ug/L
Acenaphthylene	ND	12	1.2		ug/L	Dibenz (a,h) Anthracene	ND	12	1.2		ug/L
3-Nitroaniline	ND	12	1.2		ug/L	1-Methylnaphthalene	ND	12	1.2		ug/L
Acenaphthene	ND	12	1.2		ug/L						

Surrogates:	REC (%)	Control Limits	Qual	Surrogates:	REC (%)	Control	Qual
2-Fluorophenol	82	15-138		Phenol-d6	82	17-141	
Nitrobenzene-d5	93	28-139		2-Fluorobiphenyl	87	33-144	
2,4,6-Tribromophenol	90	32-143		p-Terphenyl-d14	124	23-160	

RL - Reporting Limit , DF - Dilution Factor , Qual - Qualifiers

Calscience Environmental Laboratories, Inc.

Analytical Report

Essentia Management Service
5000 East Spring Street, Suite 720
Long Beach, CA 90815-1270

Date Received: 03/24/04
Work Order No: 04-03-1493
Preparation: EPA 3520B
Method: EPA 8270C

Project: LADWP-Chatsworth Resrvoir

Client Sample Number	Lab Sample Number	Date Collected	Matrix	Date Prepared	Date Analyzed	QC Batch ID
B3-W	**04-03-1493-4**	**03/24/04**	**Aqueous**	**03/25/04**	**03/30/04**	**040325L06**

Parameter	Result	RL	DF	Qual	Units	Parameter	Result	RL	DF	Qual	Units
N-Nitrosodimethylamine	ND	12	1.2		ug/L	2,4-Dinitrophenol	ND	60	1.2		ug/L
Aniline	ND	12	1.2		ug/L	4-Nitrophenol	ND	12	1.2		ug/L
Phenol	ND	12	1.2		ug/L	Dibenzofuran	ND	12	1.2		ug/L
Bis(2-Chloroethyl) Ether	ND	30	1.2		ug/L	2,4-Dinitrotoluene	ND	12	1.2		ug/L
2-Chlorophenol	ND	12	1.2		ug/L	2,6-Dinitrotoluene	ND	12	1.2		ug/L
1,3-Dichlorobenzene	ND	12	1.2		ug/L	Diethyl Phthalate	ND	12	1.2		ug/L
1,4-Dichlorobenzene	ND	12	1.2		ug/L	4-Chlorophenyl-Phenyl Ether	ND	12	1.2		ug/L
Benzyl Alcohol	ND	12	1.2		ug/L	Fluorene	ND	12	1.2		ug/L
1,2-Dichlorobenzene	ND	12	1.2		ug/L	4-Nitroaniline	ND	12	1.2		ug/L
2-Methylphenol	ND	12	1.2		ug/L	Azobenzene	ND	12	1.2		ug/L
Bis(2-Chloroisopropyl) Ether	ND	12	1.2		ug/L	4,6-Dinitro-2-Methylphenol	ND	60	1.2		ug/L
3/4-Methylphenol	ND	12	1.2		ug/L	N-Nitrosodiphenylamine	ND	12	1.2		ug/L
N-Nitroso-di-n-propylamine	ND	12	1.2		ug/L	4-Bromophenyl-Phenyl Ether	ND	12	1.2		ug/L
Hexachloroethane	ND	12	1.2		ug/L	Hexachlorobenzene	ND	12	1.2		ug/L
Nitrobenzene	ND	30	1.2		ug/L	Pentachlorophenol	ND	12	1.2		ug/L
Isophorone	ND	12	1.2		ug/L	Phenanthrene	ND	12	1.2		ug/L
2-Nitrophenol	ND	12	1.2		ug/L	Anthracene	ND	12	1.2		ug/L
2,4-Dimethylphenol	ND	12	1.2		ug/L	Di-n-Butyl Phthalate	ND	12	1.2		ug/L
Benzoic Acid	ND	60	1.2		ug/L	Fluoranthene	ND	12	1.2		ug/L
Bis(2-Chloroethoxy) Methane	ND	12	1.2		ug/L	Benzidine	ND	60	1.2		ug/L
2,4-Dichlorophenol	ND	12	1.2		ug/L	Pyrene	ND	12	1.2		ug/L
1,2,4-Trichlorobenzene	ND	12	1.2		ug/L	Pyridine	ND	12	1.2		ug/L
Naphthalene	ND	12	1.2		ug/L	Butyl Benzyl Phthalate	ND	12	1.2		ug/L
4-Chloroaniline	ND	12	1.2		ug/L	3,3'-Dichlorobenzidine	ND	30	1.2		ug/L
Hexachloro-1,3-Butadiene	ND	12	1.2		ug/L	Benzo (a) Anthracene	ND	12	1.2		ug/L
4-Chloro-3-Methylphenol	ND	12	1.2		ug/L	Bis(2-Ethylhexyl) Phthalate	ND	12	1.2		ug/L
2-Methylnaphthalene	ND	12	1.2		ug/L	Chrysene	ND	12	1.2		ug/L
Hexachlorocyclopentadiene	ND	30	1.2		ug/L	Di-n-Octyl Phthalate	ND	12	1.2		ug/L
2,4,6-Trichlorophenol	ND	12	1.2		ug/L	Benzo (k) Fluoranthene	ND	12	1.2		ug/L
2,4,5-Trichlorophenol	ND	12	1.2		ug/L	Benzo (b) Fluoranthene	ND	12	1.2		ug/L
2-Chloronaphthalene	ND	12	1.2		ug/L	Benzo (a) Pyrene	ND	12	1.2		ug/L
2-Nitroaniline	ND	12	1.2		ug/L	Benzo (g,h,i) Perylene	ND	12	1.2		ug/L
Dimethyl Phthalate	ND	12	1.2		ug/L	Indeno (1,2,3-c,d) Pyrene	ND	12	1.2		ug/L
Acenaphthylene	ND	12	1.2		ug/L	Dibenz (a,h) Anthracene	ND	12	1.2		ug/L
3-Nitroaniline	ND	12	1.2		ug/L	1-Methylnaphthalene	ND	12	1.2		ug/L
Acenaphthene	ND	12	1.2		ug/L						

Surrogates:	REC (%)	Control Limits	Qual	Surrogates:	REC (%)	Control	Qual
2-Fluorophenol	85	15-138		Phenol-d6	66	17-141	
Nitrobenzene-d5	97	28-139		2-Fluorobiphenyl	82	33-144	
2,4,6-Tribromophenol	93	32-143		p-Terphenyl-d14	126	23-160	

RL - Reporting Limit , DF - Dilution Factor , Qual - Qualifiers

Calscience Environmental Laboratories, Inc.

Analytical Report

Essentia Management Service
5000 East Spring Street, Suite 720
Long Beach, CA 90815-1270

Date Received: 03/24/04
Work Order No: 04-03-1493
Preparation: EPA 3520B
Method: EPA 8270C

Project: LADWP-Chatsworth Resrvoir

Client Sample Number	Lab Sample Number	Date Collected	Matrix	Date Prepared	Date Analyzed	QC Batch ID
Method Blank	**095-01-003-1,446**	**N/A**	**Aqueous**	**03/25/04**	**03/30/04**	**040325L06**

Parameter	Result	RL	DF	Qual	Units	Parameter	Result	RL	DF	Qual	Units
N-Nitrosodimethylamine	ND	10	1		ug/L	2,4-Dinitrophenol	ND	50	1		ug/L
Aniline	ND	10	1		ug/L	4-Nitrophenol	ND	10	1		ug/L
Phenol	ND	10	1		ug/L	Dibenzofuran	ND	10	1		ug/L
Bis(2-Chloroethyl) Ether	ND	25	1		ug/L	2,4-Dinitrotoluene	ND	10	1		ug/L
2-Chlorophenol	ND	10	1		ug/L	2,6-Dinitrotoluene	ND	10	1		ug/L
1,3-Dichlorobenzene	ND	10	1		ug/L	Diethyl Phthalate	ND	10	1		ug/L
1,4-Dichlorobenzene	ND	10	1		ug/L	4-Chlorophenyl-Phenyl Ether	ND	10	1		ug/L
Benzyl Alcohol	ND	10	1		ug/L	Fluorene	ND	10	1		ug/L
1,2-Dichlorobenzene	ND	10	1		ug/L	4-Nitroaniline	ND	10	1		ug/L
2-Methylphenol	ND	10	1		ug/L	Azobenzene	ND	10	1		ug/L
Bis(2-Chloroisopropyl) Ether	ND	10	1		ug/L	4,6-Dinitro-2-Methylphenol	ND	50	1		ug/L
3/4-Methylphenol	ND	10	1		ug/L	N-Nitrosodiphenylamine	ND	10	1		ug/L
N-Nitroso-di-n-propylamine	ND	10	1		ug/L	4-Bromophenyl-Phenyl Ether	ND	10	1		ug/L
Hexachloroethane	ND	10	1		ug/L	Hexachlorobenzene	ND	10	1		ug/L
Nitrobenzene	ND	25	1		ug/L	Pentachlorophenol	ND	10	1		ug/L
Isophorone	ND	10	1		ug/L	Phenanthrene	ND	10	1		ug/L
2-Nitrophenol	ND	10	1		ug/L	Anthracene	ND	10	1		ug/L
2,4-Dimethylphenol	ND	10	1		ug/L	Di-n-Butyl Phthalate	ND	10	1		ug/L
Benzoic Acid	ND	50	1		ug/L	Fluoranthene	ND	10	1		ug/L
Bis(2-Chloroethoxy) Methane	ND	10	1		ug/L	Benzidine	ND	50	1		ug/L
2,4-Dichlorophenol	ND	10	1		ug/L	Pyrene	ND	10	1		ug/L
1,2,4-Trichlorobenzene	ND	10	1		ug/L	Pyridine	ND	10	1		ug/L
Naphthalene	ND	10	1		ug/L	Butyl Benzyl Phthalate	ND	10	1		ug/L
4-Chloroaniline	ND	10	1		ug/L	3,3'-Dichlorobenzidine	ND	25	1		ug/L
Hexachloro-1,3-Butadiene	ND	10	1		ug/L	Benzo (a) Anthracene	ND	10	1		ug/L
4-Chloro-3-Methylphenol	ND	10	1		ug/L	Bis(2-Ethylhexyl) Phthalate	ND	10	1		ug/L
2-Methylnaphthalene	ND	10	1		ug/L	Chrysene	ND	10	1		ug/L
Hexachlorocyclopentadiene	ND	25	1		ug/L	Di-n-Octyl Phthalate	ND	10	1		ug/L
2,4,6-Trichlorophenol	ND	10	1		ug/L	Benzo (k) Fluoranthene	ND	10	1		ug/L
2,4,5-Trichlorophenol	ND	10	1		ug/L	Benzo (b) Fluoranthene	ND	10	1		ug/L
2-Chloronaphthalene	ND	10	1		ug/L	Benzo (a) Pyrene	ND	10	1		ug/L
2-Nitroaniline	ND	10	1		ug/L	Benzo (g,h,i) Perylene	ND	10	1		ug/L
Dimethyl Phthalate	ND	10	1		ug/L	Indeno (1,2,3-c,d) Pyrene	ND	10	1		ug/L
Acenaphthylene	ND	10	1		ug/L	Dibenz (a,h) Anthracene	ND	10	1		ug/L
3-Nitroaniline	ND	10	1		ug/L	1-Methylnaphthalene	ND	10	1		ug/L
Acenaphthene	ND	10	1		ug/L						

Surrogates:	REC (%)	Control Limits	Qual	Surrogates:	REC (%)	Control	Qual
2-Fluorophenol	66	15-138		Phenol-d6	69	17-141	
Nitrobenzene-d5	78	28-139		2-Fluorobiphenyl	68	33-144	
2,4,6-Tribromophenol	86	32-143		p-Terphenyl-d14	128	23-160	

RL - Reporting Limit , DF - Dilution Factor , Qual - Qualifiers

Calscience Environmental Laboratories, Inc.

Analytical Report

Essentia Management Service
5000 East Spring Street, Suite 720
Long Beach, CA 90815-1270

Date Received: 03/24/04
Work Order No: 04-03-1493
Preparation: EPA 3520B
Method: GC/MS Isotope Dilution

Project: LADWP-Chatsworth Resrvoir

Client Sample Number	Lab Sample Number	Date Collected	Matrix	Date Prepared	Date Analyzed	QC Batch ID
B5-W	**04-03-1493-1**	**03/24/04**	**Aqueous**	**03/25/04**	**03/30/04**	**040325L06**

Parameter	Result	RL	DF	Qual	Units
1,4-Dioxane	ND	2.0	1		ug/L

Surrogates:	REC (%)	Control Limits	Qual
Nitrobenzene-d5	90	56-123	

Client Sample Number	Lab Sample Number	Date Collected	Matrix	Date Prepared	Date Analyzed	QC Batch ID
B4-W	**04-03-1493-2**	**03/24/04**	**Aqueous**	**03/25/04**	**03/30/04**	**040325L06**

Parameter	Result	RL	DF	Qual	Units
1,4-Dioxane	ND	2.0	1		ug/L

Surrogates:	REC (%)	Control Limits	Qual
Nitrobenzene-d5	87	56-123	

Client Sample Number	Lab Sample Number	Date Collected	Matrix	Date Prepared	Date Analyzed	QC Batch ID
B2-W	**04-03-1493-3**	**03/24/04**	**Aqueous**	**03/25/04**	**03/30/04**	**040325L06**

Parameter	Result	RL	DF	Qual	Units
1,4-Dioxane	ND	2.0	1		ug/L

Surrogates:	REC (%)	Control Limits	Qual
Nitrobenzene-d5	93	56-123	

Client Sample Number	Lab Sample Number	Date Collected	Matrix	Date Prepared	Date Analyzed	QC Batch ID
B3-W	**04-03-1493-4**	**03/24/04**	**Aqueous**	**03/25/04**	**03/30/04**	**040325L06**

Parameter	Result	RL	DF	Qual	Units
1,4-Dioxane	ND	2.0	1		ug/L

Surrogates:	REC (%)	Control Limits	Qual
Nitrobenzene-d5	97	56-123	

RL - Reporting Limit , DF - Dilution Factor , Qual - Qualifiers

Calscience Environmental Laboratories, Inc.

Analytical Report

Essentia Management Service
5000 East Spring Street, Suite 720
Long Beach, CA 90815-1270

Date Received: 03/24/04
Work Order No: 04-03-1493
Preparation: EPA 3520B
Method: GC/MS Isotope Dilution

Project: LADWP-Chatsworth Resrvoir

Client Sample Number	Lab Sample Number	Date Collected	Matrix	Date Prepared	Date Analyzed	QC Batch ID
Method Blank	**099-09-004-212**	**N/A**	**Aqueous**	**03/25/04**	**03/30/04**	**040325L06**

Parameter	Result	RL	DF	Qual	Units
1,4-Dioxane	ND	2.0	1		ug/L

Surrogates:	REC (%)	Control Limits	Qual
Nitrobenzene-d5	78	56-123	

RL - Reporting Limit , DF - Dilution Factor , Qual - Qualifiers

Calscience Environmental Laboratories, Inc.

Quality Control - Spike/Spike Duplicate

Essentia Management Service
5000 East Spring Street, Suite 720
Long Beach, CA 90815-1270

Date Received: 03/24/04
Work Order No: 04-03-1493
Preparation: N/A
Method: EPA 314.0

Project: LADWP-Chatsworth Resrvoir

Quality Control Sample ID	Matrix	Instrument	Date Prepared	Date Analyzed	MS/MSD Batch Number
04-03-1398-1	**Aqueous**	**IC 6**	**N/A**	**03/26/04**	**040325S01**

Parameter	MS %REC	MSD %REC	%REC CL	RPD	RPD CL	Qualifiers
Perchlorate	111	104	80-120	6	0-15	

Calscience Environmental Laboratories, Inc.

Quality Control - LCS/LCS Duplicate

Essentia Management Service
5000 East Spring Street, Suite 720
Long Beach, CA 90815-1270

Project: LADWP-Chatsworth Resrvoir

Date Received: N/A
Work Order No: 04-03-1493
Preparation: N/A
Method: EPA 314.0

Quality Control Sample ID	Matrix	Instrument	Date Prepared	Date Analyzed	LCS/LCSD Batch Number
099-05-203-136	**Aqueous**	**IC 6**	**N/A**	**03/25/04**	**040325L01**

Parameter	LCS %REC	LCSD %REC	%REC CL	RPD	RPD CL	Qualifiers
Perchlorate	108	113	85-115	5	0-15	

Calscience Environmental Laboratories, Inc.

Quality Control - Spike/Spike Duplicate

Essentia Management Service
5000 East Spring Street, Suite 720
Long Beach, CA 90815-1270

Date Received: 03/24/04
Work Order No: 04-03-1493
Preparation: N/A
Method: EPA 7199

Project: LADWP-Chatsworth Resrvoir

Quality Control Sample ID	Matrix	Instrument	Date Prepared	Date Analyzed	MS/MSD Batch Number
04-03-1445-3	**Aqueous**	**IC 5**	**N/A**	**03/24/04**	**40324CRS1**

Parameter	MS %REC	MSD %REC	%REC CL	RPD	RPD CL	Qualifiers
Chromium, Hexavalent	97	99	70-130	0	0-25	

Calscience Environmental Laboratories, Inc.

Quality Control - Laboratory Control Sample

Essentia Management Service
5000 East Spring Street, Suite 720
Long Beach, CA 90815-1270

Project: LADWP-Chatsworth Resrvoir

Date Received: N/A
Work Order No: 04-03-1493
Preparation: N/A
Method: EPA 7199

Quality Control Sample ID	Matrix	Instrument	Date Analyzed	Lab File ID	LCS Batch Number
099-05-123-1,331	Aqueous	IC 5	03/24/04	NONE	40324CRL1

Parameter	Conc Added	Conc Recovered	%Rec	%Rec CL	Qualifiers
Chromium, Hexavalent	10	10	102	80-120	

Calscience Environmental Laboratories, Inc.

Quality Control - LCS/LCS Duplicate

Essentia Management Service
5000 East Spring Street, Suite 720
Long Beach, CA 90815-1270

Project: LADWP-Chatsworth Resrvoir

Date Received: N/A
Work Order No: 04-03-1493
Preparation: EPA 3510C
Method: TPH - Carbon Range

Quality Control Sample ID	Matrix	Instrument	Date Prepared	Date Analyzed	LCS/LCSD Batch Number
098-03-003-2,046	**Aqueous**	**GC 23**	**03/25/04**	**03/25/04**	**040325B04**

Parameter	LCS %REC	LCSD %REC	%REC CL	RPD	RPD CL	Qualifiers
TPH as Diesel	93	98	60-132	5	0-11	

Calscience Environmental Laboratories, Inc.

Quality Control - LCS/LCS Duplicate

Essentia Management Service
5000 East Spring Street, Suite 720
Long Beach, CA 90815-1270

Project: LADWP-Chatsworth Resrvoir

Date Received: N/A
Work Order No: 04-03-1493
Preparation: EPA 3520B
Method: EPA 8082

Quality Control Sample ID	Matrix	Instrument	Date Prepared	Date Analyzed	LCS/LCSD Batch Number
099-07-010-181	**Aqueous**	**GC 17**	**03/29/04**	**03/31/04**	**040329L09**

Parameter	LCS %REC	LCSD %REC	%REC CL	RPD	RPD CL	Qualifiers
Aroclor-1260	126	121	50-135	4	0-25	

Calscience Environmental Laboratories, Inc.

Quality Control - LCS/LCS Duplicate

Essentia Management Service
5000 East Spring Street, Suite 720
Long Beach, CA 90815-1270

Date Received: N/A
Work Order No: 04-03-1493
Preparation: EPA 3520B
Method: EPA 8270C

Project: LADWP-Chatsworth Resrvoir

Quality Control Sample ID	Matrix	Instrument	Date Prepared	Date Analyzed	LCS/LCSD Batch Number
095-01-003-1,446	Aqueous	GC/MS GG	03/25/04	03/30/04	040325L06

Parameter	LCS %REC	LCSD %REC	%REC CL	RPD	RPD CL	Qualifiers
Phenol	81	83	4-118	2	0-18	
2-Chlorophenol	65	64	35-101	1	0-21	
1,4-Dichlorobenzene	65	65	39-93	0	0-45	
N-Nitroso-di-n-propylamine	61	59	33-123	3	0-38	
1,2,4-Trichlorobenzene	78	79	47-101	1	0-35	
4-Chloro-3-Methylphenol	86	83	0-295	3	0-30	
Acenaphthene	102	101	31-133	1	0-31	
4-Nitrophenol	81	72	1-143	12	0-44	
2,4-Dinitrotoluene	110	105	16-166	5	0-49	
Pentachlorophenol	86	94	1-154	9	0-53	
Pyrene	92	87	15-159	6	0-47	

Calscience Environmental Laboratories, Inc.

Quality Control - LCS/LCS Duplicate

Essentia Management Service
5000 East Spring Street, Suite 720
Long Beach, CA 90815-1270

Project: LADWP-Chatsworth Resrvoir

Date Received: N/A
Work Order No: 04-03-1493
Preparation: EPA 3520B
Method: GC/MS Isotope Dilution

Quality Control Sample ID	Matrix	Instrument	Date Prepared	Date Analyzed	LCS/LCSD Batch Number
099-09-004-212	**Aqueous**	**GC/MS GG**	**03/25/04**	**03/30/04**	**040325L06**

Parameter	LCS %REC	LCSD %REC	%REC CL	RPD	RPD CL	Qualifiers
1,4-Dioxane	71	71	50-130	0	0-20	

Calscience Environmental Laboratories, Inc.

Glossary of Terms and Qualifiers

Work Order Number: 04-03-1493

Qualifier	Definition
2	Surrogate spike compound was out of control due to matrix interference. The associated method blank surrogate spike compound was in control and, therefore, the sample data was reported without further clarification.
ND	Not detected at indicated reporting limit.

Calscience Environmental Laboratories, Inc.

WORK ORDER #: 04 - 03 - 1493

Cooler 1 of 1

SAMPLE RECEIPT FORM

CLIENT: N + M **DATE:** 3/24/04

TEMPERATURE – SAMPLES RECEIVED BY:

CALSCIENCE COURIER:

_____ Chilled, cooler with temperature blank provided.
_____ Chilled, cooler without temperature blank.
_____ Chilled and placed in cooler with wet ice.
_____ Ambient and placed in cooler with wet ice.
_____ Ambient temperature.

_____ °C Temperature blank.

LABORATORY (Other than Calscience Courier):

_____ °C Temperature blank.
3.6 °C IR thermometer.
_____ Ambient temperature.

Initial: NC

CUSTODY SEAL INTACT:

Sample(s): _____ Cooler: _____ No (Not Intact) : _____ Not Applicable (N/A): ✓

Initial: NC

SAMPLE CONDITION:

	Yes	No	N/A
Chain-Of-Custody document(s) received with samples	✓		
Sample container label(s) consistent with custody papers	✓		
Sample container(s) intact and good condition	✓		
Correct containers for analyses requested	✓ pp	✓	
Proper preservation noted on sample label(s)	✓		ore
VOA vial(s) free of headspace.	✓		
Tedlar bag(s) free of condensation			✓

Initial: CV

COMMENTS:

250mL unpreserved plastic bottles received for Total Coliform analysis - transferred to correct containers upon receipt

SILLIKER, Inc.
Southern California Laboratory
1139 East Dominguez, Suite I
Carson, CA 90746
310/ 637 7121 Fax 310/ 637 2953

CERTIFICATE OF ANALYSIS

COA No:	SCA-30103167-0
Supersedes:	None
COA Date	3/26/04
Page 1 of 1	

TO:
Mr. Bob Stearns
Project Manager
Calscience Environmental Laboratories
7440 Lincoln Way
Garden Grove, CA 92841-1432

Received From:	Garden Grove, CA
Received Date:	3/24/04
P.O.# / ID:	04-03-1493
Location of Test: (except where noted)	Carson, CA

Analytical Results

Desc. 1:	Sample ID: B5-W	**Desc. 4:**	Matrix:WW	**Laboratory ID:**	300575490
Desc. 2:	Date: 03/24/04	**Desc. 5:**	Project #: 04-03-1493	**Condition Rec'd:**	NORMAL
Desc. 3:	Time: 8:11			**Temp Rec'd (°C):**	7.2

Analyte	Result	Units	Method Reference	Test Date	Loc.
Coliforms - 5 tube MPN	<20	/100mL	SMEWW 20th, 9221A-D	3/26/04	

Desc. 1:	Sample ID: B4-W	**Desc. 4:**	Matrix:WW	**Laboratory ID:**	300575491
Desc. 2:	Date: 03/24/04	**Desc. 5:**	Project #: 04-03-1493	**Condition Rec'd:**	NORMAL
Desc. 3:	Time: 9:31			**Temp Rec'd (°C):**	7.2

Analyte	Result	Units	Method Reference	Test Date	Loc.
Coliforms - 5 tube MPN	<20	/100mL	SMEWW 20th, 9221A-D	3/26/04	

Desc. 1:	Sample ID: B2-W	**Desc. 4:**	Matrix:WW	**Laboratory ID:**	300575492
Desc. 2:	Date: 03/24/04	**Desc. 5:**	Project #: 04-03-1493	**Condition Rec'd:**	NORMAL
Desc. 3:	Time: 12:45			**Temp Rec'd (°C):**	7.2

Analyte	Result	Units	Method Reference	Test Date	Loc.
Coliforms - 5 tube MPN	80	/100mL	SMEWW 20th, 9221A-D	3/28/04	

Desc. 1:	Sample ID: B3-W	**Desc. 4:**	Matrix:WW	**Laboratory ID:**	300575493
Desc. 2:	Date: 03/24/04	**Desc. 5:**	Project #: 04-03-1493	**Condition Rec'd:**	NORMAL
Desc. 3:	Time: 13:35			**Temp Rec'd (°C):**	7.2

Analyte	Result	Units	Method Reference	Test Date	Loc.
Coliforms - 5 tube MPN	<20	/100mL	SMEWW 20th, 9221A-D	3/26/04	

Vidhya Gangar, M.S. — Laboratory Director

The results of these tests relate only to the samples tested. This report shall not be reproduced except in full, without the written approval of the laboratory.

Ninyo & Moore

475 Goddard, Suite 200
Irvine, CA 92618

Tel: (949) 753-7070
Fax (949) 753-7071

PROJECT INFORMATION

PROJECT NAME:	LADWP – Chatsworth Reservoir
ADDRESS:	Chatsworth Reservoir
CITY/STATE:	Chatsworth, California
Global ID:	Log Code:
Project Manager:	Ken Floom
Project Number:	47278-4
SAMPLED BY:	Krista Brodersen – Ninyo & Moore

Lab:
Calscience Laboratories
7440 Lincoln Way
Garden Grove, CA 92841
(714) 895-5494

FIELD POINT NAME	SAMPLE ID	NUMBER OF CONTAINERS	SAMPLE DATE	SAMPLE TIME	SAMPLE MATRIX	CONTAINER TYPE	PRESERV	1,4 dioxane by GC/MS Extende Dilution	Hexavalent Chromium 7199/3060A	Total Cyanide 9010A/335.4	Method SMFEWW TPHcc 8015M	PCBs 8082	SVOCs 8270C	Perchlorate 314		REMARKS
	B5-W	1/1/1/1	3-24-04	8:11	Water	Liter/500 mL/VOA/Liter/Liter	None	X	X	X	X	X	X	X		1493
	B4-W	↓	↓	9:31	↓	↓		↓	↓	↓	↓	↓	↓	↓		
	B2-W			12:45												
	B3-W	↓	↓	13:35	↓	↓		↓	↓	↓	↓	↓	↓	↓		
Total No. of Samples:																

Comments
Fax results to: Ken Floom at (562) 740-1070
E-mail final report to: ken_floom@essentia-llc.com

Relinquished By:	Date/Time	Received By:	Date/Time
Krista Brodersen	3-24-04 1700		
Relinquished By:	Date/Time	Received By:	Date/Time
Relinquished By:	Date/Time	Received By:	Date/Time
			3/24/04 1706

TURN AROUND TIME	SAMPLE INTEGRITY	REPORT FORMAT
☐ 24 HOUR	☐ SAMPLES INTACT?	☐ SARWQCB and GEOTRACKER
☐ 48 HOUR	☐ SAMPLES CHILLED	☐ SAN DIEGO HMMD
☐ 3 DAY	☐ SECURITY TAPE INTACT?	☐ NORMAL
☐ 5-DAY	☐ NO SECURITY TAPE USED	☐ OTHER:_____
☐ 14 DAY		
☒ Other _Normal_____		

ENERGY LABORATORIES, INC. *2393 Salt Creek Highway (82601)* P.O. Box 3258 * Casper, WY 82602
Toll Free 888.235.0515 * 307.235.0515 * Fax 307.234.1639 * casper@energylab.com

LABORATORY ANALYTICAL REPORT

Client: Essentia Management Services
Project: LADWP-Chatsworth Reservoir 47278-4
Lab ID: C04020172-001
Client Sample ID: B1

Report Date: 05/21/04
Collection Date: 01/28/04 12:25
Date Received: 02/04/04
Matrix: Soil

Analyses	Result	Units	Qual	RL	MCL/ QCL	Method	Analysis Date / By
PHYSICAL PROPERTIES							
Moisture	10.3	%		0.1		USDA26	02/05/04 17:00 / lmh
RADIONUCLIDES - GAMMA							
Cesium 137	ND	pCi/g-dry		2.0		E901.1	02/09/04 11:34 / db
Potassium 40	21.3	pCi/g-dry		2.0		E901.1	02/09/04 11:34 / db
Potassium 40 precision (±)	1.4	pCi/g-dry				E901.1	02/09/04 11:34 / db
RADIONUCLIDES - TOTAL							
Thorium 228	0.6	pCi/g-dry		0.2		E907.0	05/14/04 10:30 / ph
Thorium 228 precision (±)	0.1	pCi/g-dry				E907.0	05/14/04 10:30 / ph
Thorium 230	0.5	pCi/g-dry		0.2		E907.0	05/14/04 10:30 / ph
Thorium 230 precision (±)	0.1	pCi/g-dry				E907.0	05/14/04 10:30 / ph
Thorium 232	0.4	pCi/g-dry		0.2		E907.0	05/14/04 10:30 / ph
Thorium 232 precision (±)	0.1	pCi/g-dry				E907.0	05/14/04 10:30 / ph
Uranium	2.5	mg/kg-dry		0.5		SW6020	05/14/04 19:54 / bws
Strontium 90	ND	pCi/g-dry		0.600		E905.0	02/10/04 17:00 / db

Report Definitions:
RL - Analyte reporting limit.
QCL - Quality control limit.
MCL - Maximum contaminant level.
ND - Not detected at the reporting limit.

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LABORATORY ANALYTICAL REPORT

Client: Essentia Management Services
Project: LADWP-Chatsworth Reservoir 47278-4
Lab ID: C04020172-002
Client Sample ID: B2

Report Date: 05/21/04
Collection Date: 01/28/04 13:20
Date Received: 02/04/04
Matrix: Soil

Analyses	Result	Units	Qual	RL	MCL/ QCL	Method	Analysis Date / By
PHYSICAL PROPERTIES							
Moisture	19.3	%		0.1		USDA26	02/05/04 17:00 / lmh
RADIONUCLIDES - GAMMA							
Cesium 137	ND	pCi/g-dry		2.0		E901.1	02/09/04 11:34 / db
Potassium 40	16.6	pCi/g-dry		2.0		E901.1	02/09/04 11:34 / db
Potassium 40 precision (±)	1.1	pCi/g-dry				E901.1	02/09/04 11:34 / db
RADIONUCLIDES - TOTAL							
Thorium 228	0.8	pCi/g-dry		0.2		E907.0	05/14/04 10:30 / ph
Thorium 228 precision (±)	0.1	pCi/g-dry				E907.0	05/14/04 10:30 / ph
Thorium 230	1.1	pCi/g-dry		0.2		E907.0	05/14/04 10:30 / ph
Thorium 230 precision (±)	0.2	pCi/g-dry				E907.0	05/14/04 10:30 / ph
Thorium 232	0.6	pCi/g-dry		0.2		E907.0	05/14/04 10:30 / ph
Thorium 232 precision (±)	0.1	pCi/g-dry				E907.0	05/14/04 10:30 / ph
Uranium	4.1	mg/kg-dry		0.5		SW6020	05/14/04 20:49 / bws
Strontium 90	ND	pCi/g-dry		0.600		E905.0	02/10/04 17:00 / db

Report Definitions:
RL - Analyte reporting limit.
QCL - Quality control limit.
MCL - Maximum contaminant level.
ND - Not detected at the reporting limit.

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LABORATORY ANALYTICAL REPORT

Client: Essentia Management Services
Project: LADWP-Chatsworth Reservoir 47278-4
Lab ID: C04020172-003
Client Sample ID: B3

Report Date: 05/21/04
Collection Date: 01/28/04 14:15
Date Received: 02/04/04
Matrix: Soil

Analyses	Result	Units	Qual	RL	MCL/ QCL	Method	Analysis Date / By
PHYSICAL PROPERTIES							
Moisture	19.9	%		0.1		USDA26	02/05/04 17:00 / lmh
RADIONUCLIDES - GAMMA							
Cesium 137	ND	pCi/g-dry		2.0		E901.1	02/09/04 11:34 / db
Potassium 40	17.9	pCi/g-dry		2.0		E901.1	02/09/04 11:34 / db
Potassium 40 precision (±)	1.2	pCi/g-dry				E901.1	02/09/04 11:34 / db
RADIONUCLIDES - TOTAL							
Thorium 228	1.0	pCi/g-dry		0.2		E907.0	05/14/04 10:30 / ph
Thorium 228 precision (±)	0.2	pCi/g-dry				E907.0	05/14/04 10:30 / ph
Thorium 230	1.2	pCi/g-dry		0.2		E907.0	05/14/04 10:30 / ph
Thorium 230 precision (±)	0.2	pCi/g-dry				E907.0	05/14/04 10:30 / ph
Thorium 232	0.9	pCi/g-dry		0.2		E907.0	05/14/04 10:30 / ph
Thorium 232 precision (±)	0.1	pCi/g-dry				E907.0	05/14/04 10:30 / ph
Uranium	4.9	mg/kg-dry		0.5		SW6020	05/14/04 20:56 / bws
Strontium 90	ND	pCi/g-dry		0.600		E905.0	02/10/04 17:00 / db

Report Definitions:
RL - Analyte reporting limit.
QCL - Quality control limit.
MCL - Maximum contaminant level.
ND - Not detected at the reporting limit.

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LABORATORY ANALYTICAL REPORT

Client: Essentia Management Services
Project: LADWP-Chatsworth Reservoir 47278-4
Lab ID: C04020172-004
Client Sample ID: B4

Report Date: 05/21/04
Collection Date: 01/28/04 11:20
Date Received: 02/04/04
Matrix: Soil

Analyses	Result	Units	Qual	RL	MCL/ QCL	Method	Analysis Date / By
PHYSICAL PROPERTIES							
Moisture	13.8	%		0.1		USDA26	02/05/04 17:00 / lmh
RADIONUCLIDES - GAMMA							
Cesium 137	ND	pCi/g-dry		2.0		E901.1	02/09/04 11:34 / db
Potassium 40	23.5	pCi/g-dry		2.0		E901.1	02/09/04 11:34 / db
Potassium 40 precision (±)	1.3	pCi/g-dry				E901.1	02/09/04 11:34 / db
RADIONUCLIDES - TOTAL							
Thorium 228	0.7	pCi/g-dry		0.2		E907.0	05/14/04 10:30 / ph
Thorium 228 precision (±)	0.1	pCi/g-dry				E907.0	05/14/04 10:30 / ph
Thorium 230	0.3	pCi/g-dry		0.2		E907.0	05/14/04 10:30 / ph
Thorium 230 precision (±)	0.09	pCi/g-dry				E907.0	05/14/04 10:30 / ph
Thorium 232	0.6	pCi/g-dry		0.2		E907.0	05/14/04 10:30 / ph
Thorium 232 precision (±)	0.1	pCi/g-dry				E907.0	05/14/04 10:30 / ph
Uranium	1.2	mg/kg-dry		0.5		SW6020	05/14/04 21:04 / bws
Strontium 90	ND	pCi/g-dry		0.600		E905.0	02/10/04 17:00 / db

Report Definitions:
RL - Analyte reporting limit.
QCL - Quality control limit.
MCL - Maximum contaminant level.
ND - Not detected at the reporting limit.

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LABORATORY ANALYTICAL REPORT

Client: Essentia Management Services
Project: LADWP-Chatsworth Reservoir 47278-4
Lab ID: C04020172-005
Client Sample ID: B5

Report Date: 05/21/04
Collection Date: 01/28/04 10:15
Date Received: 02/04/04
Matrix: Soil

Analyses	Result	Units	Qual	RL	MCL/ QCL	Method	Analysis Date / By
PHYSICAL PROPERTIES							
Moisture	16.7	%		0.1		USDA26	02/05/04 17:00 / lmh
RADIONUCLIDES - GAMMA							
Cesium 137	ND	pCi/g-dry		2.0		E901.1	02/09/04 11:34 / db
Potassium 40	19.3	pCi/g-dry		2.0		E901.1	02/09/04 11:34 / db
Potassium 40 precision (±)	1.2	pCi/g-dry				E901.1	02/09/04 11:34 / db
RADIONUCLIDES - TOTAL							
Thorium 228	0.9	pCi/g-dry		0.2		E907.0	05/14/04 10:30 / ph
Thorium 228 precision (±)	0.2	pCi/g-dry				E907.0	05/14/04 10:30 / ph
Thorium 230	0.4	pCi/g-dry		0.2		E907.0	05/14/04 10:30 / ph
Thorium 230 precision (±)	0.1	pCi/g-dry				E907.0	05/14/04 10:30 / ph
Thorium 232	0.7	pCi/g-dry		0.2		E907.0	05/14/04 10:30 / ph
Thorium 232 precision (±)	0.1	pCi/g-dry				E907.0	05/14/04 10:30 / ph
Uranium	1.9	mg/kg-dry		0.5		SW6020	05/14/04 21:11 / bws
Strontium 90	ND	pCi/g-dry		0.600		E905.0	02/10/04 17:00 / db

Report Definitions:
RL - Analyte reporting limit.
QCL - Quality control limit.
MCL - Maximum contaminant level.
ND - Not detected at the reporting limit.

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LABORATORY ANALYTICAL REPORT

Client: Essentia Management Services
Project: LADWP-Chatsworth Reservoir 47278-4
Lab ID: C04020172-006
Client Sample ID: B6

Report Date: 05/21/04
Collection Date: 01/28/04 09:15
Date Received: 02/04/04
Matrix: Soil

Analyses	Result	Units	Qual	RL	MCL/ QCL	Method	Analysis Date / By
PHYSICAL PROPERTIES							
Moisture	12.7	%		0.1		USDA26	02/05/04 17:00 / lmh
RADIONUCLIDES - GAMMA							
Cesium 137	ND	pCi/g-dry		2.0		E901.1	02/09/04 11:34 / db
Potassium 40	23.5	pCi/g-dry		2.0		E901.1	02/09/04 11:34 / db
Potassium 40 precision (±)	1.3	pCi/g-dry				E901.1	02/09/04 11:34 / db
RADIONUCLIDES - TOTAL							
Thorium 228	0.8	pCi/g-dry		0.2		E907.0	05/14/04 10:30 / ph
Thorium 228 precision (±)	0.1	pCi/g-dry				E907.0	05/14/04 10:30 / ph
Thorium 230	0.3	pCi/g-dry		0.2		E907.0	05/14/04 10:30 / ph
Thorium 230 precision (±)	0.09	pCi/g-dry				E907.0	05/14/04 10:30 / ph
Thorium 232	0.7	pCi/g-dry		0.2		E907.0	05/14/04 10:30 / ph
Thorium 232 precision (±)	0.1	pCi/g-dry				E907.0	05/14/04 10:30 / ph
Uranium	1.3	mg/kg-dry		0.5		SW6020	05/14/04 21:18 / bws
Strontium 90	ND	pCi/g-dry		0.600		E905.0	02/10/04 17:00 / db

Report Definitions:
RL - Analyte reporting limit.
QCL - Quality control limit.
MCL - Maximum contaminant level.
ND - Not detected at the reporting limit.

FRONTIER
ANALYTICAL LABORATORY

February 9, 2004

FAL Project ID: 2444

Mr. Ken Floom
Essentia Management Services
5000 E. Spring Street, Suite 720
Long Beach, CA 90815

Dear Mr. Floom,

Enclosed are the results for Frontier Analytical Laboratory project **2444**. This corresponds to your project LADWP #47278-4. The six soil samples received on 2/2/04 were extracted and analyzed by EPA Method 1613 for tetra through octa chlorinated dibenzo dioxins and dibenzo furans. Essentia Management Services requested Frontier Analytical Laboratory's standard turnaround time of ten business days for project **2444**. Frontier Analytical Laboratory successfully fulfilled this request.

The following report consists of an Analytical Data section and a Sample Receipt section. The Analytical Data section contains the project-sample tracking log, qualifier reference guide, ML/MDL form and the analytical results. The Sample Receipt section contains the chain of custody, sample login form and sample photo.

If you have any questions regarding project **2444**, please feel free to contact me at (916) 934-0900. Thank you for choosing Frontier Analytical Laboratory for your analytical testing needs.

Sincerely,

Bradley B. Silverbush
Director of Operations

FRONTIER
ANALYTICAL LABORATORY

Frontier Analytical Laboratory

Sample Tracking Log

FAL Project ID: **2444**

Received on: **02/02/2004** Project Due: **02/24/2004** Storage: **R1**

FAL Sample ID	Dup	Client Project ID	Client Sample ID	Requested Method	Matrix	Sampling Date	Sampling Time	Hold Time Due Date
2444-001-SA	2	LADWP - 47278-4	B1	EPA 1613 D/F	Soil	01/28/2004	12:25 pm	01/27/2005
2444-002-SA	2	LADWP - 47278-4	B2	EPA 1613 D/F	Soil	01/28/2004	01:20 pm	01/27/2005
2444-003-SA	0	LADWP - 47278-4	B3	EPA 1613 D/F	Soil	01/28/2004	02:15 pm	01/27/2005
2444-004-SA	2	LADWP - 47278-4	B4	EPA 1613 D/F	Soil	01/28/2004	11:20 am	01/27/2005
2444-005-SA	2	LADWP - 47278-4	B5	EPA 1613 D/F	Soil	01/28/2004	10:15 am	01/27/2005
2444-006-SA	2	LADWP - 47278-4	B6	EPA 1613 D/F	Soil	01/28/2004	09:15 am	01/27/2005

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FRONTIER ANALYTICAL LABORATORY

Qualifier Reference Guide

A	Isotopic Labeled Standard outside QC range but signal to noise ratio is >10:1
B	Analyte is present in Method Blank
C	Chemical Interference
D	Presence of Diphenyl Ethers
E	Analyte concentration is above calibration range
F	Analyte confirmation on secondary column
J‡	Analyte concentration is below calibration range
M	Maximum possible concentration
NP	Not Provided
S	Sample acceptance criteria not met
X	Matrix interferences
*	Result taken from dilution or reinjection
-	Analyte Not Detected

‡ "J" values are equivalent to DNQ (detected but not quantified) for California Toxics Rule (CTR)/National Pollutant Discharge Elimination System (NPDES) samples

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EPA Method 1613/8290 Solid MDL
(Soxhlet/SDS Extraction)

FRONTIER ANALYTICAL LABORATORY

Analyte	ML	MDL
2,3,7,8-TCDD	0.500	0.132
1,2,3,7,8-PeCDD	2.50	0.213
1,2,3,4,7,8-HxCDD	2.50	0.321
1,2,3,6,7,8-HxCDD	2.50	0.364
1,2,3,7,8,9-HxCDD	2.50	0.315
1,2,3,4,6,7,8-HpCDD	2.50	0.328
OCDD	5.00	0.832
2,3,7,8-TCDF	0.500	0.108
1,2,3,7,8-PeCDF	2.50	0.252
2,3,4,7,8-PeCDF	2.50	0.236
1,2,3,4,7,8-HxCDF	2.50	0.101
1,2,3,6,7,8-HxCDF	2.50	0.0991
1,2,3,7,8,9-HxCDF	2.50	0.101
2,3,4,6,7,8-HxCDF	2.50	0.122
1,2,3,4,6,7,8-HpCDF	2.50	0.140
1,2,3,4,7,8,9-HpCDF	2.50	0.168
OCDF	5.00	0.594

Project **2330**, Extracted 11/25/03; analyzed 12/01/03. Based on 10g sample, pg/g.

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EPA Method 1613
PCDD/F

FRONTIER ANALYTICAL LABORATORY

FAL ID: 2444-001-MB
Client ID: Method Blank
Matrix: Soil
Batch No: X0171

Date Extracted: 02-03-2004
Date Received: NA
Amount: 10.00 g

ICal: PCDDFAL1-1-19-04
GC Column: DB5
Units: pg/g

Acquired: 02-05-2004
WHO TEQ: 0.00

Compound	Conc	DL	Qual	WHO Tox	Compound	Conc	DL	Qual	#Hom
2,3,7,8-TCDD	-	0.122		-					
1,2,3,7,8-PeCDD	-	0.145		-					
1,2,3,4,7,8-HxCDD	-	0.213		-					
1,2,3,6,7,8-HxCDD	-	0.231		-	Total Tetra-Dioxins	-	0.122		0
1,2,3,7,8,9-HxCDD	-	0.196		-	Total Penta-Dioxins	-	0.145		0
1,2,3,4,6,7,8-HpCDD	-	0.272		-	Total Hexa-Dioxins	-	0.231		0
OCDD	-	0.830		-	Total Hepta-Dioxins	-	0.272		0
2,3,7,8-TCDF	-	0.109		-					
1,2,3,7,8-PeCDF	-	0.133		-					
2,3,4,7,8-PeCDF	-	0.128		-					
1,2,3,4,7,8-HxCDF	-	0.100		-					
1,2,3,6,7,8-HxCDF	-	0.124		-					
2,3,4,6,7,8-HxCDF	-	0.132		-					
1,2,3,7,8,9-HxCDF	-	0.156		-	Total Tetra-Furans	-	0.109		0
1,2,3,4,6,7,8-HpCDF	-	0.128		-	Total Penta-Furans	-	0.133		0
1,2,3,4,7,8,9-HpCDF	-	0.140		-	Total Hexa-Furans	-	0.156		0
OCDF	-	0.344		-	Total Hepta-Furans	-	0.140		0

Internal Standards	% Rec	QC Limits	Qual
13C-2,3,7,8-TCDD	102	25.0 - 164	
13C-1,2,3,7,8-PeCDD	87.5	25.0 - 181	
13C-1,2,3,4,7,8-HxCDD	108	32.0 - 141	
13C-1,2,3,6,7,8-HxCDD	118	28.0 - 130	
13C-1,2,3,4,6,7,8-HpCDD	102	23.0 - 140	
13C-OCDD	78.2	17.0 - 157	
13C-2,3,7,8-TCDF	108	24.0 - 169	
13C-1,2,3,7,8-PeCDF	96.8	24.0 - 185	
13C-2,3,4,7,8-PeCDF	95.2	21.0 - 178	
13C-1,2,3,4,7,8-HxCDF	96.1	26.0 - 152	
13C-1,2,3,6,7,8-HxCDF	97.5	26.0 - 123	
13C-2,3,4,6,7,8-HxCDF	96.5	28.0 - 136	
13C-1,2,3,7,8,9-HxCDF	91.7	29.0 - 147	
13C-1,2,3,4,6,7,8-HpCDF	97.4	28.0 - 143	
13C-1,2,3,4,7,8,9-HpCDF	94.7	26.0 - 138	
13C-OCDF	84.0	17.0 - 157	

Cleanup Surrogate		
37Cl-2,3,7,8-TCDD	79.0	35.0 - 197

Analyst: _____
Date: 2/6/04

Reviewed By: _____
Date: 2/9/04

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EPA Method 1613
PCDD/F

FRONTIER ANALYTICAL LABORATORY

FAL ID: 2444-001-OPR
Client ID: OPR
Matrix: Soil
Batch No: X0171

Date Extracted: 02-03-2004
Date Received: NA
Amount: 10.00 g

ICal: PCDDFAL1-1-19-04
GC Column: DB5
Units: ng/ml

Acquired: 02-05-2004
WHO TEQ: NA

Compound	Conc	QC Limits
2,3,7,8-TCDD	9.18	6.70 - 15.8
1,2,3,7,8-PeCDD	44.7	35.0 - 71.0
1,2,3,4,7,8-HxCDD	46.3	35.0 - 82.0
1,2,3,6,7,8-HxCDD	45.5	38.0 - 67.0
1,2,3,7,8,9-HxCDD	40.0	32.0 - 81.0
1,2,3,4,6,7,8-HpCDD	46.5	35.0 - 70.0
OCDD	96.9	78.0 - 144
2,3,7,8-TCDF	8.90	7.50 - 15.8
1,2,3,7,8-PeCDF	45.4	40.0 - 67.0
2,3,4,7,8-PeCDF	46.0	34.0 - 80.0
1,2,3,4,7,8-HxCDF	47.7	36.0 - 67.0
1,2,3,6,7,8-HxCDF	47.5	42.0 - 65.0
2,3,4,6,7,8-HxCDF	46.3	35.0 - 78.0
1,2,3,7,8,9-HxCDF	46.4	39.0 - 65.0
1,2,3,4,6,7,8-HpCDF	48.7	41.0 - 61.0
1,2,3,4,7,8,9-HpCDF	49.3	39.0 - 69.0
OCDF	93.9	63.0 - 170

Internal Standards	% Rec	QC Limits
13C-2,3,7,8-TCDD	104	20.0 - 175
13C-1,2,3,7,8-PeCDD	90.1	21.0 - 227
13C-1,2,3,4,7,8-HxCDD	109	21.0 - 193
13C-1,2,3,6,7,8-HxCDD	121	25.0 - 163
13C-1,2,3,4,6,7,8-HpCDD	99.9	26.0 - 166
13C-OCDD	71.9	13.0 - 198
13C-2,3,7,8-TCDF	109	22.0 - 152
13C-1,2,3,7,8-PeCDF	94.9	21.0 - 192
13C-2,3,4,7,8-PeCDF	97.8	13.0 - 328
13C-1,2,3,4,7,8-HxCDF	95.2	19.0 - 202
13C-1,2,3,6,7,8-HxCDF	100	21.0 - 159
13C-2,3,4,6,7,8-HxCDF	95.5	22.0 - 176
13C-1,2,3,7,8,9-HxCDF	91.4	17.0 - 205
13C-1,2,3,4,6,7,8-HpCDF	91.3	21.0 - 158
13C-1,2,3,4,7,8,9-HpCDF	93.6	20.0 - 186
13C-OCDF	76.2	13.0 - 198

Cleanup Surrogate		
37Cl-2,3,7,8-TCDD	79.4	31.0 - 191

Analyst: _____
Date: 2/6/04

Reviewed By: _____
Date: 2/9/04

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EPA Method 1613
PCDD/F

FRONTIER ANALYTICAL LABORATORY

FAL ID: 2444-001-SA
Client ID: B1
Matrix: Soil
Batch No: X0171

Date Extracted: 02-03-2004
Date Received: 02-02-2004
Amount: 10.01 g
% Solids: 91.4

ICal: PCDDFAL1-1-19-04
GC Column: DB5
Units: pg/g

Acquired: 02-05-2004
WHO TEQ: 0.00429

Compound	Conc	DL	Qual	WHO Tox	Compound	Conc	DL	Qual	#Hom
2,3,7,8-TCDD	-	0.102		-					
1,2,3,7,8-PeCDD	-	0.213		-					
1,2,3,4,7,8-HxCDD	-	0.268		-					
1,2,3,6,7,8-HxCDD	-	0.287		-	Total Tetra-Dioxins	-	0.102		0
1,2,3,7,8,9-HxCDD	-	0.244		-	Total Penta-Dioxins	-	0.213		0
1,2,3,4,6,7,8-HpCDD	0.411	-	J	0.00411	Total Hexa-Dioxins	-	0.287		0
OCDD	1.76	-	J	0.000176	Total Hepta-Dioxins	0.867	-	J	2
2,3,7,8-TCDF	-	0.0989		-					
1,2,3,7,8-PeCDF	-	0.224		-					
2,3,4,7,8-PeCDF	-	0.215		-					
1,2,3,4,7,8-HxCDF	-	0.0778		-					
1,2,3,6,7,8-HxCDF	-	0.0954		-					
2,3,4,6,7,8-HxCDF	-	0.102		-					
1,2,3,7,8,9-HxCDF	-	0.124		-	Total Tetra-Furans	-	0.0990		0
1,2,3,4,6,7,8-HpCDF	-	0.129		-	Total Penta-Furans	-	0.224		0
1,2,3,4,7,8,9-HpCDF	-	0.158		-	Total Hexa-Furans	-	0.124		0
OCDF	-	0.451		-	Total Hepta-Furans	-	0.158		0

Internal Standards	% Rec	QC Limits	Qual
13C-2,3,7,8-TCDD	104	25.0 - 164	
13C-1,2,3,7,8-PeCDD	88.5	25.0 - 181	
13C-1,2,3,4,7,8-HxCDD	107	32.0 - 141	
13C-1,2,3,6,7,8-HxCDD	118	28.0 - 130	
13C-1,2,3,4,6,7,8-HpCDD	106	23.0 - 140	
13C-OCDD	85.5	17.0 - 157	
13C-2,3,7,8-TCDF	109	24.0 - 169	
13C-1,2,3,7,8-PeCDF	99.9	24.0 - 185	
13C-2,3,4,7,8-PeCDF	98.2	21.0 - 178	
13C-1,2,3,4,7,8-HxCDF	94.1	26.0 - 152	
13C-1,2,3,6,7,8-HxCDF	96.1	26.0 - 123	
13C-2,3,4,6,7,8-HxCDF	96.8	28.0 - 136	
13C-1,2,3,7,8,9-HxCDF	94.8	29.0 - 147	
13C-1,2,3,4,6,7,8-HpCDF	104	28.0 - 143	
13C-1,2,3,4,7,8,9-HpCDF	93.7	26.0 - 138	
13C-OCDF	86.8	17.0 - 157	

Cleanup Surrogate		
37Cl-2,3,7,8-TCDD	80.4	35.0 - 197

Analyst: _____
Date: 2/6/04

Reviewed By: _____
Date: 2/9/04

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EPA Method 1613
PCDD/F

FRONTIER ANALYTICAL LABORATORY

FAL ID: 2444-002-SA
Client ID: B2
Matrix: Soil
Batch No: X0171

Date Extracted: 02-03-2004
Date Received: 02-02-2004
Amount: 9.98 g
% Solids: 80.5

ICal: PCDDFAL1-1-19-04
GC Column: DB5
Units: pg/g

Acquired: 02-05-2004
WHO TEQ: 0.00588

Compound	Conc	DL	Qual	WHO Tox	Compound	Conc	DL	Qual	#Hom
2,3,7,8-TCDD	-	0.108		-					
1,2,3,7,8-PeCDD	-	0.215		-					
1,2,3,4,7,8-HxCDD	-	0.308		-					
1,2,3,6,7,8-HxCDD	-	0.329		-	Total Tetra-Dioxins	-	0.174		0
1,2,3,7,8,9-HxCDD	-	0.280		-	Total Penta-Dioxins	-	0.215		0
1,2,3,4,6,7,8-HpCDD	0.573	-	J	0.00573	Total Hexa-Dioxins	-	0.329		0
OCDD	1.48	-	J	0.000148	Total Hepta-Dioxins	1.03	-	J	2
2,3,7,8-TCDF	-	0.0915		-					
1,2,3,7,8-PeCDF	-	0.208		-					
2,3,4,7,8-PeCDF	-	0.220		-					
1,2,3,4,7,8-HxCDF	-	0.132		-					
1,2,3,6,7,8-HxCDF	-	0.153		-					
2,3,4,6,7,8-HxCDF	-	0.173		-					
1,2,3,7,8,9-HxCDF	-	0.195		-	Total Tetra-Furans	-	0.108		0
1,2,3,4,6,7,8-HpCDF	-	0.119		-	Total Penta-Furans	-	0.220		0
1,2,3,4,7,8,9-HpCDF	-	0.142		-	Total Hexa-Furans	-	0.195		0
OCDF	-	0.401		-	Total Hepta-Furans	-	0.142		0

Internal Standards	% Rec	QC Limits	Qual
13C-2,3,7,8-TCDD	106	25.0 - 164	
13C-1,2,3,7,8-PeCDD	92.4	25.0 - 181	
13C-1,2,3,4,7,8-HxCDD	109	32.0 - 141	
13C-1,2,3,6,7,8-HxCDD	122	28.0 - 130	
13C-1,2,3,4,6,7,8-HpCDD	110	23.0 - 140	
13C-OCDD	91.6	17.0 - 157	
13C-2,3,7,8-TCDF	106	24.0 - 169	
13C-1,2,3,7,8-PeCDF	97.9	24.0 - 185	
13C-2,3,4,7,8-PeCDF	94.5	21.0 - 178	
13C-1,2,3,4,7,8-HxCDF	97.2	26.0 - 152	
13C-1,2,3,6,7,8-HxCDF	101	26.0 - 123	
13C-2,3,4,6,7,8-HxCDF	102	28.0 - 136	
13C-1,2,3,7,8,9-HxCDF	98.3	29.0 - 147	
13C-1,2,3,4,6,7,8-HpCDF	104	28.0 - 143	
13C-1,2,3,4,7,8,9-HpCDF	100	26.0 - 138	
13C-OCDF	93.3	17.0 - 157	

Cleanup Surrogate		
37Cl-2,3,7,8-TCDD	84.0	35.0 - 197

Analyst: _____
Date: 2/6/04

Reviewed By: _____
Date: 2/9/04

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EPA Method 1613
PCDD/F

FRONTIER ANALYTICAL LABORATORY

FAL ID: 2444-003-SA
Client ID: B3
Matrix: Soil
Batch No: X0171

Date Extracted: 02-03-2004
Date Received: 02-02-2004
Amount: 10.55 g
% Solids: 82.1

ICal: PCDDFAL1-1-19-04
GC Column: DB5
Units: pg/g

Acquired: 02-05-2004
WHO TEQ: 0.0385

Compound	Conc	DL	Qual	WHO Tox	Compound	Conc	DL	Qual	#Hom
2,3,7,8-TCDD	-	0.130		-					
1,2,3,7,8-PeCDD	-	0.233		-					
1,2,3,4,7,8-HxCDD	-	0.310		-					
1,2,3,6,7,8-HxCDD	-	0.335		-	Total Tetra-Dioxins	-	0.130		0
1,2,3,7,8,9-HxCDD	-	0.288		-	Total Penta-Dioxins	-	0.233		0
1,2,3,4,6,7,8-HpCDD	0.897	-	J	0.00897	Total Hexa-Dioxins	-	0.335		0
OCDD	3.65	-	J	0.000365	Total Hepta-Dioxins	1.87	-	J	2
2,3,7,8-TCDF	-	0.0773		-					
1,2,3,7,8-PeCDF	-	0.142		-					
2,3,4,7,8-PeCDF	-	0.136		-					
1,2,3,4,7,8-HxCDF	-	0.0502		-					
1,2,3,6,7,8-HxCDF	-	0.0597		-					
2,3,4,6,7,8-HxCDF	-	0.0725		-					
1,2,3,7,8,9-HxCDF	0.292	-	J	0.0292	Total Tetra-Furans	0.248	-	J	1
1,2,3,4,6,7,8-HpCDF	-	0.146		-	Total Penta-Furans	0.773	-	J,M	2
1,2,3,4,7,8,9-HpCDF	-	0.163		-	Total Hexa-Furans	0.503	-	J	2
OCDF	-	0.578		-	Total Hepta-Furans	-	0.163		0

Internal Standards	% Rec	QC Limits	Qual
13C-2,3,7,8-TCDD	104	25.0 - 164	
13C-1,2,3,7,8-PeCDD	86.0	25.0 - 181	
13C-1,2,3,4,7,8-HxCDD	103	32.0 - 141	
13C-1,2,3,6,7,8-HxCDD	115	28.0 - 130	
13C-1,2,3,4,6,7,8-HpCDD	100	23.0 - 140	
13C-OCDD	84.8	17.0 - 157	
13C-2,3,7,8-TCDF	109	24.0 - 169	
13C-1,2,3,7,8-PeCDF	95.4	24.0 - 185	
13C-2,3,4,7,8-PeCDF	96.7	21.0 - 178	
13C-1,2,3,4,7,8-HxCDF	91.2	26.0 - 152	
13C-1,2,3,6,7,8-HxCDF	97.5	26.0 - 123	
13C-2,3,4,6,7,8-HxCDF	92.7	28.0 - 136	
13C-1,2,3,7,8,9-HxCDF	89.9	29.0 - 147	
13C-1,2,3,4,6,7,8-HpCDF	94.8	28.0 - 143	
13C-1,2,3,4,7,8,9-HpCDF	95.0	26.0 - 138	
13C-OCDF	86.5	17.0 - 157	

Cleanup Surrogate		
37Cl-2,3,7,8-TCDD	79.0	35.0 - 197

Analyst: _____
Date: 2/6/04

Reviewed By: _____
Date: 2/9/04

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EPA Method 1613
PCDD/F

FRONTIER ANALYTICAL LABORATORY

FAL ID: 2444-004-SA
Client ID: B4
Matrix: Soil
Batch No: X0171

Date Extracted: 02-03-2004
Date Received: 02-02-2004
Amount: 10.00 g
% Solids: 86.4

ICal: PCDDFAL1-1-19-04
GC Column: DB5
Units: pg/g

Acquired: 02-05-2004
WHO TEQ: 0.000137

Compound	Conc	DL	Qual	WHO Tox	Compound	Conc	DL	Qual	#Hom
2,3,7,8-TCDD	-	0.103		-					
1,2,3,7,8-PeCDD	-	0.189		-					
1,2,3,4,7,8-HxCDD	-	0.286		-					
1,2,3,6,7,8-HxCDD	-	0.289		-	Total Tetra-Dioxins	-	0.103		0
1,2,3,7,8,9-HxCDD	-	0.241		-	Total Penta-Dioxins	-	0.189		0
1,2,3,4,6,7,8-HpCDD	-	0.359		-	Total Hexa-Dioxins	-	0.289		0
OCDD	1.37	-	J	0.000137	Total Hepta-Dioxins	-	0.359		0
2,3,7,8-TCDF	-	0.0884		-					
1,2,3,7,8-PeCDF	-	0.206		-					
2,3,4,7,8-PeCDF	-	0.201		-					
1,2,3,4,7,8-HxCDF	-	0.0805		-					
1,2,3,6,7,8-HxCDF	-	0.0943		-					
2,3,4,6,7,8-HxCDF	-	0.108		-					
1,2,3,7,8,9-HxCDF	-	0.123		-	Total Tetra-Furans	-	0.0884		0
1,2,3,4,6,7,8-HpCDF	-	0.132		-	Total Penta-Furans	-	0.206		0
1,2,3,4,7,8,9-HpCDF	-	0.143		-	Total Hexa-Furans	-	0.123		0
OCDF	-	0.421		-	Total Hepta-Furans	-	0.143		0

Internal Standards	% Rec	QC Limits	Qual
13C-2,3,7,8-TCDD	107	25.0 - 164	
13C-1,2,3,7,8-PeCDD	92.4	25.0 - 181	
13C-1,2,3,4,7,8-HxCDD	111	32.0 - 141	
13C-1,2,3,6,7,8-HxCDD	120	28.0 - 130	
13C-1,2,3,4,6,7,8-HpCDD	106	23.0 - 140	
13C-OCDD	85.5	17.0 - 157	
13C-2,3,7,8-TCDF	113	24.0 - 169	
13C-1,2,3,7,8-PeCDF	101	24.0 - 185	
13C-2,3,4,7,8-PeCDF	99.7	21.0 - 178	
13C-1,2,3,4,7,8-HxCDF	97.6	26.0 - 152	
13C-1,2,3,6,7,8-HxCDF	102	26.0 - 123	
13C-2,3,4,6,7,8-HxCDF	102	28.0 - 136	
13C-1,2,3,7,8,9-HxCDF	98.5	29.0 - 147	
13C-1,2,3,4,6,7,8-HpCDF	102	28.0 - 143	
13C-1,2,3,4,7,8,9-HpCDF	97.5	26.0 - 138	
13C-OCDF	90.9	17.0 - 157	

Cleanup Surrogate		
37Cl-2,3,7,8-TCDD	83.3	35.0 - 197

Analyst: _____
Date: 2/6/04

Reviewed By: _____
Date: 2/9/04

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EPA Method 1613
PCDD/F

FRONTIER ANALYTICAL LABORATORY

FAL ID: 2444-005-SA
Client ID: B5
Matrix: Soil
Batch No: X0171

Date Extracted: 02-03-2004
Date Received: 02-02-2004
Amount: 9.96 g
% Solids: 84.2

ICal: PCDDFAL1-1-19-04
GC Column: DB5
Units: pg/g

Acquired: 02-05-2004
WHO TEQ: 0.00668

Compound	Conc	DL	Qual	WHO Tox	Compound	Conc	DL	Qual	#Hom
2,3,7,8-TCDD	-	0.0925		-					
1,2,3,7,8-PeCDD	-	0.122		-					
1,2,3,4,7,8-HxCDD	-	0.179		-					
1,2,3,6,7,8-HxCDD	-	0.201		-	Total Tetra-Dioxins	1.45	-		1
1,2,3,7,8,9-HxCDD	-	0.169		-	Total Penta-Dioxins	-	0.194		0
1,2,3,4,6,7,8-HpCDD	0.630	-	J	0.00630	Total Hexa-Dioxins	-	0.358		0
OCDD	3.79	-	J	0.000379	Total Hepta-Dioxins	1.75	-	J	2
2,3,7,8-TCDF	-	0.0470		-					
1,2,3,7,8-PeCDF	-	0.173		-					
2,3,4,7,8-PeCDF	-	0.176		-					
1,2,3,4,7,8-HxCDF	-	0.0866		-					
1,2,3,6,7,8-HxCDF	-	0.105		-					
2,3,4,6,7,8-HxCDF	-	0.112		-					
1,2,3,7,8,9-HxCDF	-	0.129		-	Total Tetra-Furans	1.67	-	M	2
1,2,3,4,6,7,8-HpCDF	-	0.122		-	Total Penta-Furans	-	0.177		0
1,2,3,4,7,8,9-HpCDF	-	0.135		-	Total Hexa-Furans	-	0.129		0
OCDF	-	0.432		-	Total Hepta-Furans	-	0.135		0

Internal Standards	% Rec	QC Limits	Qual
13C-2,3,7,8-TCDD	97.1	25.0 - 164	
13C-1,2,3,7,8-PeCDD	85.8	25.0 - 181	
13C-1,2,3,4,7,8-HxCDD	107	32.0 - 141	
13C-1,2,3,6,7,8-HxCDD	115	28.0 - 130	
13C-1,2,3,4,6,7,8-HpCDD	104	23.0 - 140	
13C-OCDD	84.9	17.0 - 157	
13C-2,3,7,8-TCDF	111	24.0 - 169	
13C-1,2,3,7,8-PeCDF	99.6	24.0 - 185	
13C-2,3,4,7,8-PeCDF	96.4	21.0 - 178	
13C-1,2,3,4,7,8-HxCDF	92.6	26.0 - 152	
13C-1,2,3,6,7,8-HxCDF	98.1	26.0 - 123	
13C-2,3,4,6,7,8-HxCDF	98.1	28.0 - 136	
13C-1,2,3,7,8,9-HxCDF	95.6	29.0 - 147	
13C-1,2,3,4,6,7,8-HpCDF	95.9	28.0 - 143	
13C-1,2,3,4,7,8,9-HpCDF	96.7	26.0 - 138	
13C-OCDF	90.4	17.0 - 157	

Cleanup Surrogate		
37Cl-2,3,7,8-TCDD	77.8	35.0 - 197

Analyst: _____
Date: 2/6/04

Reviewed By: _____
Date: 2/9/04

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EPA Method 1613
PCDD/F

FRONTIER ANALYTICAL LABORATORY

FAL ID: 2444-006-SA
Client ID: B6
Matrix: Soil
Batch No: X0171

Date Extracted: 02-03-2004
Date Received: 02-02-2004
Amount: 9.95 g
% Solids: 88.7

ICal: PCDDFAL1-1-19-04
GC Column: DB5
Units: sample

Acquired: 02-06-2004
WHO TEQ: 0.0123

Compound	Conc	DL	Qual	WHO Tox	Compound	Conc	DL	Qual	#Hom
2,3,7,8-TCDD	-	0.101		-					
1,2,3,7,8-PeCDD	-	0.213		-					
1,2,3,4,7,8-HxCDD	-	0.299		-					
1,2,3,6,7,8-HxCDD	-	0.308		-	Total Tetra-Dioxins	-	0.101		0
1,2,3,7,8,9-HxCDD	-	0.262		-	Total Penta-Dioxins	-	0.213		0
1,2,3,4,6,7,8-HpCDD	0.924	-	J	0.00925	Total Hexa-Dioxins	-	0.308		0
OCDD	6.24	-		0.000624	Total Hepta-Dioxins	1.96	-	J	2
2,3,7,8-TCDF	-	0.0996		-					
1,2,3,7,8-PeCDF	-	0.215		-					
2,3,4,7,8-PeCDF	-	0.215		-					
1,2,3,4,7,8-HxCDF	-	0.0862		-					
1,2,3,6,7,8-HxCDF	-	0.100		-					
2,3,4,6,7,8-HxCDF	-	0.118		-					
1,2,3,7,8,9-HxCDF	-	0.135		-	Total Tetra-Furans	-	0.0996		0
1,2,3,4,6,7,8-HpCDF	0.233	-	J	0.00233	Total Penta-Furans	-	0.219		0
1,2,3,4,7,8,9-HpCDF	-	0.0785		-	Total Hexa-Furans	-	0.135		0
OCDF	0.667	-	J	0.000067(	Total Hepta-Furans	0.491	-	J	2

Internal Standards	% Rec	QC Limits	Qual
13C-2,3,7,8-TCDD	106	25.0 - 164	
13C-1,2,3,7,8-PeCDD	93.0	25.0 - 181	
13C-1,2,3,4,7,8-HxCDD	106	32.0 - 141	
13C-1,2,3,6,7,8-HxCDD	117	28.0 - 130	
13C-1,2,3,4,6,7,8-HpCDD	99.2	23.0 - 140	
13C-OCDD	73.0	17.0 - 157	
13C-2,3,7,8-TCDF	109	24.0 - 169	
13C-1,2,3,7,8-PeCDF	97.6	24.0 - 185	
13C-2,3,4,7,8-PeCDF	98.1	21.0 - 178	
13C-1,2,3,4,7,8-HxCDF	93.9	26.0 - 152	
13C-1,2,3,6,7,8-HxCDF	97.6	26.0 - 123	
13C-2,3,4,6,7,8-HxCDF	95.4	28.0 - 136	
13C-1,2,3,7,8,9-HxCDF	92.6	29.0 - 147	
13C-1,2,3,4,6,7,8-HpCDF	92.7	28.0 - 143	
13C-1,2,3,4,7,8,9-HpCDF	91.2	26.0 - 138	
13C-OCDF	75.5	17.0 - 157	

Cleanup Surrogate		
37Cl-2,3,7,8-TCDD	86.0	35.0 - 197

Analyst: _____
Date: 2/6/04

Reviewed By: _____
Date: 2/9/04

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Essentia Management Services **CHAIN OF CUSTODY RECORD** Date: 1/29/04 Page: 1 of 1

☐ 5000 E Spring Street, Suite 720
Long Beach, CA 90815
562/740-1060 phone
562/740-1070 fax

Project Name: LADWP – Chatsworth Reservoir	**Project No.** 47278-4	**Laboratory Name:** Frontier Analytical Laboratory	**Laboratory Address** Attn: Bradley Silverbush 5172 Hillsdale Circle El Dorado Hills, CA 95762
Client Name: LADWP	**Project Manager** Ken Floom	**Laboratory Phone:** 916-934-0900	
Site/Location: Chatsworth Reservoir	**Fax Results to:** (562) 740-1070	**Sampler Name:** Rich Stevenson	
E-mail Final Report to: ken_floom@essentia-llc.com	**Geotracker ID:** na	**Sampler Signature:** [signature]	**Turnaround time:** ☐ Same Day ☐ 24 hrs ☐ 48 hrs ☐ 3rd day ☐ 4th day ☒ Std. (15 days) ☐ Other:
Special Instructions/Comments:		**Cooler Receipt Temp. =** 4 °C	

Sample No.	Lab ID	Sample ID	Depth	Sampling Date	Sampling Time	Matrix	No. of Containers	Preservative Type	Dioxins EPA Method 1613/8290														Hold
1		B1		01/28/04	1225	Soil	3	—	X														
2		B2		01/28/04	1320	Soil	3	—	X														
3		B3		01/28/04	1415	Soil	1	—	X														
4		B4		01/28/04	1120	Soil	3	—	X														
5		B5		01/28/04	1015	Soil	3	—	X														
6		B6		01/28/04	915	Soil	3	—	X														
7																							
8																							
9																							
10																							

	Relinquished by: (Signature)	Date & Time	Received by: (Signature)	Date & time:
1	[signature]	1/30/04 10:00	[signature]	2/2/04 07:30
2				
3				

000013 of 000015

Frontier Analytical Laboratory

Sample Login Form

FAL Project ID: **2444**

Client:	Essentia Management Services
Client Project ID:	LADWP - Chatsworth Reservoir
Date Received:	02/02/2004
Time Received:	07:30 am
Received By:	BS
Logged In By:	NM
# of Samples Received:	6
Duplicates:	10
Storage Location:	R1

Method of Delivery:	Courier
Tracking Number:	
Shipping Container Received Intact	Yes
Custody seals(s) present?	No
Custody seals(s) intact?	No
Sample Arrival Temperature (C)	4
Cooling Method	Blue Ice
Chain Of Custody Present?	Yes
Return Shipping Container To Client	Yes
Test for residual Chlorine	No
Thiosulfate Added	No
Earliest Sample Hold Time Expiration	01/27/2005
Adequate Sample Volume	Yes

Anomalies or additional comments:

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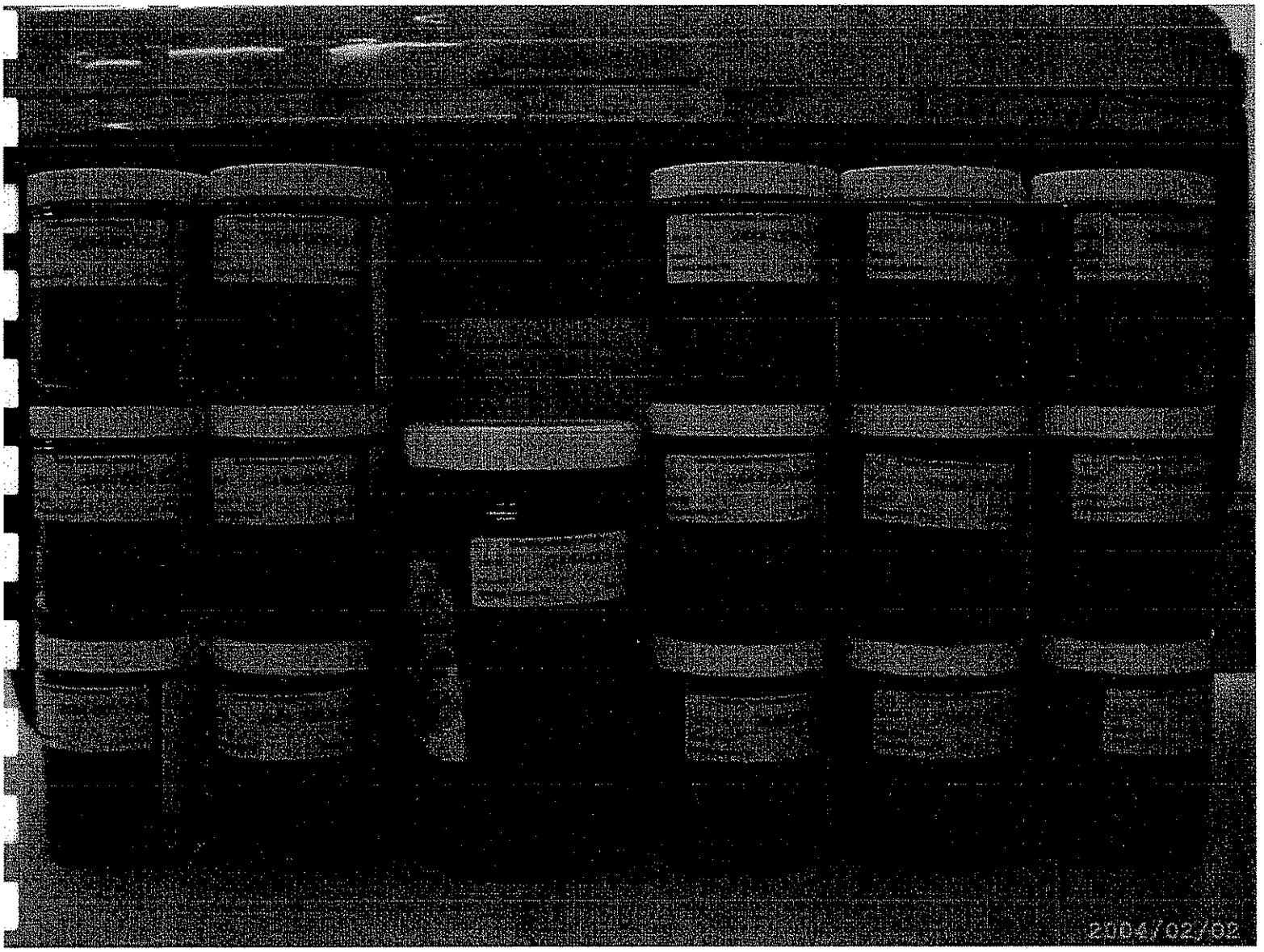

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DEPARTMENT OF WATER AND POWER
OF THE CITY OF LOS ANGELES
WATER QUALITY AND OPERATIONS

ENVIRONMENTAL LABORATORY DATA REPORT

CHATSWORTH RESERVOIR

Soil samples from Chatsworht Reservoir were delivered on January 28, 2004 and analyzed for polychlorinated biphenyls (PCB), total extractable petroleum hydrocarbons (TEPH), Semi Volatile Organic Compounds (SVOC), Metals/Mercury, and Volatile Organic Compounds (VOC) analyses. The samples and their corresponding analytes, methods and results are listed below.

The samples were identified as follows:

Chem Lab Sample ID	COC Number	Sample Date	Sample Description	Chem Lab Sample ID	COC Number	Sample Date	Sample Description
LE00754	04-0177	1/28/04	B1 Composite	LE00765	04-0177	1/28/04	B3-5
LE00755			B2 Composite	LE00766			B3-10
LE00756			B3 Composite	LE00767			B3-15
LE00757			B4 Composite	LE00768			B3-20
LE00758			B5 Composite	LE00769			B4-5
LE00759			B6 Composite	LE00770			B4-10
LE00760			B1-5	LE00771			B5-5
LE00761			B1-10	LE00772			B5-10
LE00762			B2-5	LE00773			B6-5
LE00763			B2-10	LE00774			B6-10
LE00764			B2-15				

The analyses and results were as follows :

Analysis	Environmental Lab Sample ID	EPA Method No.	Analysis Date	Results	Analyzed by
PCB	LE00754 – LE00774	8082A	2/4/04	Attachment #1	Environmental Lab
TEPH		8015M	2/3/04	Attachment #2	
SVOC		8270C	2/11/04	Attachment #3	
Metals		6010B	2/7/04	Attachment #4	
Mercury		7471	1/30/04		
VOC		8260B	1/29/04	Attachment #5	

If there are any questions, or if further information is needed, please contact Mr. Lucas Wang at (213) 367-7271 or Mr. Stanley Kung at 213-367-7270

Date Completed: 2/19/04
Work Order: UND21
Job Card #: J96086
Copies To: George Faeustle
Stanley Kung
Filenet

Test made by: Environmental Lab

Report by: KC
Checked by: LW 2-19-04
Approved by: S. Kung/LW

MANAGER
ENVIRONMENTAL LABORATORY

Environmental Laboratory
30 N. Main Street, Bldg 7
s Angeles, CA. 90012
(3) 367-7248/7399
(3) 367-7285 FAX

100000

Department of Water and Power
City of Los Angeles

Chain of Custody Record

COC #: 04-0177

Page 1 of 6

Report C#_____ JC#_____ WO#_____

Refrig#. 2 Shelf 2 Bin#._____

Initial of Field Personnel: RHS

No. of Field Test_____

PAGE-30445

Sample Location: CHATSWORTH RESERVOIR

Chem Lab use only MISTRY LOG NUMBERS (sample duplicates use .1 or .X)	Sample Date	(24 Hr) Sample Time	Sample Location and Description	Preservatives	Container No.	Container Type	Container Size	Sample Matrix	Analysis Required	Test Result	Analyst(s) Assigned
00754	1/28/04	12:25	B1 Composite	—	5	Jar	8oz.	Soil	TPHcc, PCBs, SVOCs, Title 22 Metals		
~~00755~~ NM 00755		1320	B2 Composite	—	5				TPHcc, PCBs, SVOCs, Title 22 Metals		
~~00756~~ NM 00756		1415	B3 Composite	—	5				TPHcc, PCBs, SVOCs, Title 22 Metals		
~~00757~~ NM 00757		1120	B4 Composite	—	5				TPHcc, PCBs, SVOCs, Title 22 Metals		
~~00758~~ NM 00758		1015	B5 Composite	—	5				TPHcc, PCBs, SVOCs, Title 22 Metals		
~~00759~~ NM 00759		915	B6 Composite	—	5	↓	↓	↓	TPHcc, PCBs, SVOCs, Title 22 Metals		
~~00760~~ NM 00760		1215	B1-5	—	3	Encore			VOCs		
~~00761~~ NM 00761		1220	B1-10	—	3	Encore			VOCs		
~~00762~~ NM 00762		1305	B2-5	—	3	Encore			VOCs		
~~00763~~ NM 00763		1310	B2 10	—	3	Encore			VOCs		
~~00764~~ NM 00764		1315	B2-15	—	3	Encore			VOCs		
~~00765~~ NM 00765		1355	B3-5	—	3	Encore			VOCs		
~~00766~~ NM 00766		1400	B3-10	—	3	Encore			VOCs		
~~00767~~ NM 00767		1405	B3-15	—	3	Encore			VOCs		
~~00768~~ NM 00768		1410	B3-20	—	3	Encore			VOCs		
~~00769~~ NM 00769		1110	B4-5	—	3	Encore			VOCs		

Date & Time Stamp
DEPARTMENT OF WATER & POWER
JAN 29 PM 4:05
ENVIRONMENTAL LABORATORY SERVICES RECEIVED

Requested by_____ Organization / Div._____

Address._____ Tele._____ Fax._____

Analyst_____ date_____

Approved by_____ date_____

Priority
2-4 Hrs
1Day
2 Wks
4Wks
Specify

SK
LW
JW
RP
BT
BE
EC
WATO

Printed Name	Signature	Time	Date
Sampled by: Richard Stevenson	Sampled by:	1600	1/28/04
Relinquished by: Richard Stevenson	Relinquished by:	1600	1/28/04
Received by N. Manila	Received by:	1603	1/28/04

Chem Lab COC Form.xls
Revision: 10/2/2001

nvironmental Laboratory
530 N. Main Street, Bldg 7
os Angeles, CA. 90012
13) 367-7248/7399
13) 367-7285 FAX

000002

Department of Water and Power
City of Los Angeles

Chain of Custody Record

COC #:

Page 1 of 1

Report C#_____ JC#_____ WO#_____
Refrig#._____ Shelf_____ Bin#._____
Initial of Field Personnel: RHS
No. of Field Test:

Sample Location: Chatsworth Reservoir

Chem Lab use only CHEMISTRY LOG NUMBERS (for sample duplicates use A or X)	Sample Date	(24 Hr) Sample Time	Sample Location and Description	Preservatives	Container No.	Container Type	Container Size	Sample Matrix	Analysis Required	Test Result	Analyst(s) Assigned
E ~~00771~~ 00770	1/28/04	1115	B4-10	—	3	Encore		Soil	VOCs		
~~00772~~ 00771		1005	B5-5	—	3	Encore			VOCs		
00772		1010	B5-10	—	3	Encore			VOCs		
00773		905	B6-5	—	3	Encore			VOCs		
00774		910	B6-10	—	3	Encore			VOCs		

Date & Time Stamp

Requested by. _____ Organization / Div. _____
Address. _____ Tele. _____ Fax. _____

Analyst_____ date_____
Approved by_____ date_____

Priority
2-4 Hrs
1Day
2 Wks
4Wks
Specify

Printed Name	Signature	Time	Date
Sampled by:	Sampled by:		
Relinquished by:	Relinquished by:		
Received by	Received by		

Chem Lab COC Form #1
Revision: 10/2/2001

ATTACHMENT # 1

POLYCHLORINATED BIPHENYLS
PCB - EPA METHOD 8082A

Report No. C10582

CITY OF LOS ANGELES, DEPARTMENT OF WATER & POWER
ENVIRONMENTAL LABORATORY

Case Narrative

Project: Chatsworth Reservoir

METHOD 8082A
PCB (Polychlorinated Biphenyls)

1. Holding Time

Samples were extracted and analyzed within holding time limit.

2. Method Blank

Laboratory blank soil was used as method blank. There was no contamination detected at reporting level.

3. Lab Control Sample (LCS)

Certified QC sample was analyzed as LCS. Recovery was within QC limits

4 Surrogate Recovery

Recoveries were within QC limits.

5. Matrix Spike/Matrix Spike Duplicate

Sample LE00754 was analyzed for MS/MSD. Recovery met QC criteria.

7. Calibration

Initial calibration was performed at five different concentrations for PCB-1221, PCB-1232, PCB-1242, PCB-1248, PCB-1254, and PCB-1260. The percent Relative Standard Deviation (% RSD) were all within 15%. Calibration checks were performed at ten samples interval for PCB-1242 and PCB-1260, and at thirty samples interval for PCB-1221, PCB-1232, PCB-1248, and PCB-1254.

8. Sample Analysis

Samples were extracted using EPA300/SR-94/112 method for the screening of soils and sediment samples for the presence of polychlorinated biphenyl (PCB) mixtures. The reported method detection limits (MDL) were determined using the same procedures. The sample extracts were analyzed by gas chromatography.

001002

ENVIRONMENTAL LABORATORY DATA REPORT

ANALYTICAL RESULT FOR PCBs
by USEPA Method 300/SR-94/112 & 8082A
(Polychlorinated Biphenyls)
Sample Matrix: Soil

Project: CHATSWORTH RESERVOIR

LABORATORY LOG NO	DATE SAMPLED	DATE RECEIVED	DATE EXTRACTED	DATE ANALYZED	SAMPLE DESCRIPTION	INSTR. ID	RUN LOG / BATCH QC
LE00754	1/28/2004	1/28/2004	2/3/2004	2/4/2004	B1 COMPOSITE	H.P.GC 2	20040204-11/A
LE00755	1/28/2004	1/28/2004	2/3/2004	2/4/2004	B2 COMPOSITE	H.P.GC 2	20040204-15/A
LE00756	1/28/2004	1/28/2004	2/3/2004	2/4/2004	B3 COMPOSITE	H.P.GC 2	20040204-16/A
LE00757	1/28/2004	1/28/2004	2/3/2004	2/4/2004	B4 COMPOSITE	H.P.GC 2	20040204-20/A
LE00758	1/28/2004	1/28/2004	2/3/2004	2/4/2004	B5 COMPOSITE	H.P.GC 2	20040204-21/A
LE00759	1/28/2004	1/28/2004	2/3/2004	2/4/2004	B6 COMPOSITE	H.P.GC 2	20040204-22/A

PARAMETERS	MDL (mg/kg)	RL (mg/kg)	LE00754 mg/kg	LE00755 mg/kg	LE00756 mg/kg	LE00757 mg/kg	LE00758 mg/kg	LE00759 mg/kg	
PCB - 1221	0.006	0.030	ND	ND	ND	ND	ND	ND	
PCB - 1232	0.008	0.040	ND	ND	ND	ND	ND	ND	
PCB - 1242	0.017	0.085	ND	ND	ND	ND	ND	ND	
PCB - 1248	0.005	0.025	ND	ND	ND	ND	ND	ND	
PCB - 1254	0.010	0.050	ND	ND	ND	ND	ND	ND	
PCB - 1260	0.013	0.065	ND	ND	ND	ND	ND	ND	

SURROGATE PARAMETERS	QC LIMIT	% Recovery	% Recovery	% Recovery	% Recovery	% Recovery	% Recovery	
	D.F	1	1	1	1	1	1	
DECACHLOROBIPHENYL	70% - 130%	111%	110%	111%	105%	107%	108%	

MDL - Method Detection Limit
RL - Reporting Limit (5xMDL)
ND - Not Detected at indicated RL
j : above MDL but below RL
D.F - Dilution Factor
RUN LOG / BATCH QC - Line Number of Sequence Filename / Batch Identification

Analyst: R. Petersen

Project Name : CHATSWORTH RESERVOIR

001003

QA/QC Report for Method Blank

I. Method Blank, Method Blank Spike (MBS), & Method Blank Spike Duplicate (MBSD)

DATE ANALYZED: 02/04/04
RUN LOG / BATCH QC: 20040204-7/A,8/A,9/A
LAB SAMPLE I.D.: Method Blank Spike (MBS) & Method Blank Spike Dup (MBSD)

USEPA Method /600/SR-94/112 & 8082A
Instrument I.D. H. P. GC 2 UNIT: mg/kg

BATCH QC	A		A		(DUP)	A			MS/MSD	%
PARAMETERS	METHOD BLANK	SPIKE CONC	MBS	%MS	SPIKE CONC	MBSD	%MSD	RPD	% REC. LIMIT	RPD LIMIT
PCB-1221	ND	0.0			0.0					
PCB-1232	ND	0.0			0.0					
PCB-1242	ND	25.0	25.7	103	25.0	26.1	104	1%	70 - 130	30
PCB-1248	ND	0.0			0.0					
PCB-1254	ND	0.0			0.0					
PCB-1260	ND	25.0	22.8	91	25.0	23.6	94	3%	70 - 130	30

II. Matrix Spike (MS)/Matrix Spike Duplicate (MSD)

DATE ANALYZED: 02/04/04
RUN LOG / BATCH QC: 20040204-11/A,13/A,14/A
LAB SAMPLE I.D.: LE00754 Spike & Spike Duplicate

USEPA Method /600/SR-94/112 & 8082A
Instrument I.D. H. P. GC 2 UNIT: mg/kg

BATCH QC	A		A		(DUP)	A			MS/MSD	%
PARAMETERS	SAMPLE RESULT	SPIKE CONC	MS	%MS	SPIKE CONC	MSD	%MSD	RPD	% REC. LIMIT	RPD LIMIT
PCB-1221	ND	0.0			0.0					
PCB-1232	ND	0.0			0.0					
PCB-1242	ND	25.0	25.1	100	25.0	26.1	104	4%	70 - 130	30
PCB-1248	ND	0.0			0.0					
PCB-1254	ND	0.0			0.0					
PCB-1260	ND	25.0	23.2	93	25.0	23.5	94	1%	70 - 130	30

MS - Matrix Spike *MSD - Matrix Spike Dupplicate* *RPD - Relative Percent Difference*
%MS - Percent Recovery of Matrix Spike *%MSD - Percent Recovery of Matrix Spike Duplicate*
ND - Not Detected
RUN LOG / BATCH QC - Line Number of Sequence Filename / Batch Identification

Analyst: Bryan Tiu

001006

Project Name : CHATSWORTH RESERVOIR

III. Initial Calibration: PCB1W-10312003 Instrument I.D. H. P. GC 2

IV. Calibration Check Standard

DATE ANALYZED: 2/4/2004
LAB ID.: Q2583,2588,3460,3438,2589
RUN LOG / BATCH QC: 20040204-2/A,3/A,4/A,5/A,6/A,19/A

USEPA Method /600/SR-94/112 & 8082A
Instrument I.D. H. P. GC 2 UNIT: mg/kg

	BATCH QC		A		A						
PARAMETERS	LAB ID	TRUE CONC	RESULT	% RC	RESULT	% RC	RESULT	% RC	RESULT	% RC	ACCEPTANCE LIMITS (%)
PCB - 1221	Q2583	50.0	52.3	105%	NA						70 - 130
PCB - 1232	Q2588	50.0	47.8	96%	NA						70 - 130
PCB - 1242	Q3357	50.0	48.8	98%	49.7	99%					70 - 130
PCB - 1248	Q3438	50.0	52.3	105%	NA						70 - 130
PCB - 1254	Q2589	50.0	49.4	99%	NA						70 - 130
PCB - 1260	Q3357	50.0	51.7	103%	52.7	105%					70 - 130

V. Laboratory Control Check Sample (LCS)

DATE ANALYZED: 2/4/2004
LCS I.D.: Q4748
RUN LOG / BATCH QC: 20040204-10/A

USEPA Method /600/SR-94/112 & 8082A
Instrument I.D. H. P. GC 2 UNIT: mg/kg

	BATCH QC		A								
PARAMETERS	LAB ID	TRUE CONC	RESULT	% RC	RESULT	% RC	RESULT	% RC	RESULT	% RC	ACCEPTANCE LIMITS (%)
PCB - 1221		0.0	ND								70 - 130
PCB - 1232		0.0	ND								70 - 130
PCB - 1242		0.0	ND								70 - 130
PCB - 1248	Q4748	15.0	11.5	78							70 - 130
PCB - 1254		0.0	ND								70 - 130
PCB - 1260		0.0	ND								70 - 130

%RC - Percent Recovery
NA - Not Analyzed
ND - Not Detected

RUN LOG / BATCH QC - Line Number of Sequence Filename / Batch Identification

Analyst: Bryan Tiu

Checked by: Rose Gentallan

ATTACHMENT # 2

TOTAL EXTRACTABLE PETROLEUM HYDROCARBONS
TEPH - EPA METHOD 8015M

Report No. C10582

CITY OF LOS ANGELES, DEPARTMENT OF WATER & POWER
ENVIRONMENTAL LABORATORY

Case Narrative

Project: Chatsworth Reservoir

METHOD 8015M
Total Extractable Petroleum Hydrocarbons (TEPH)

1. Holding Time

   Analytical holding time was met.

2. Method Blank

   There was no contamination detected at reporting level.

3. Lab Control Sample

   Recovery was within QC limits.

4. Surrogate Recovery

   Recoveries were within QC limits.

5. Matrix Spike/Matrix Spike Duplicate

   Sample LE00754 was analyzed for MS/MSD. Recoveries met QC criteria.

6. Calibration

   Initial calibration was performed at five different concentrations. The percent relative standard deviation (% RSD) was within 15%. Calibration check standards were within QC limits.

7. Sample Analysis

   Samples were analyzed according to the prescribed QC procedures. There was no contamination detected at reporting level.

002002

COC No. 04-0177

ENVIRONMENTAL LABORATORY

ANALYTICAL TEST RESULT FOR EPA 8015M
TEPH (Total Extractable Petroleum Hydrocarbons, C9 - C36)

Sample Matrix: SOIL
Project: CHATSWORTH RESERVOIR

SAMPLE LOG NO	DATE SAMPLED	DATE RECEIVED	DATE EXTRACTED	DATE ANALYZED	SAMPLE DESC	INSTR. ID	RUN LOG	BATCH QC
LE00754	01/28/04	01/28/04	02/03/04	02/03/04	B1 COMP	H.P. GC 5	20040203-18	20040203
LE00755	01/28/04	01/28/04	02/03/04	02/03/04	B2 COMP	H.P. GC 5	20040203-23	20040203
LE00756	01/28/04	01/28/04	02/03/04	02/03/04	B3 COMP	H.P. GC 5	20040203-24	20040203
LE00757	01/28/04	01/28/04	02/03/04	02/03/04	B4 COMP	H.P. GC 5	20040203-25	20040203
LE00758	01/28/04	01/28/04	02/03/04	02/03/04	B5 COMP	H.P. GC 5	20040203-26	20040203
LE00759	01/28/04	01/28/04	02/03/04	02/03/04	B6 COMP	H.P. GC 6	20040203-27	20040204

	MDL / PQL mg/kg	MB mg/kg	LE00754 mg/kg	LE00755 mg/kg	LE00756 mg/kg	LE00757 mg/kg	LE00758 mg/kg	LE00759 mg/kg
Dilution Factor		1	1	1	1	1	1	1
DRO - (C10 - C28)		ND	ND	ND	ND	ND	ND	ND
TEPH - (C13 - C22)		ND	ND	ND	ND	ND	ND	ND
TEPH - (C23 - C32)		ND	ND	ND	ND	ND	ND	ND
TEPH - (C9 - C36)	0.7/3.5	ND	ND	ND	ND	ND	ND	ND
Quality Control Data		MB						
Surrogate/Internal Std.	% ACP	% RC	%RC	%RC	%RC	%RC	%RC	%RC
1-Chlorooctadecane	(70 - 130)	111%	80.8%	93.3%	90.6%	90%	92%	93.4%

ND - Not Detected; below method detection limit
MDL - Method Detection Limit
PQL - Practical Quantitation Limit (5 x MDL)
J - above MDL but below PQL
**High recovery caused by overlap with TEPH peaks.*

ACP % = Acceptable Range of Percent
% RC = % Recovery
MB - Method Blank
DRO - Diesel Range Organics
RUN LOG - Line Number of Sequence Filename
BATCH QC - Batch Identification

COC 04-0177

ENVIRONMENTAL LABORATORY

QA/QC REPORT

TEPH (Total Extractable Petroleum Hydrocarbon, C9 - C36)

Sample Matrix: SOIL

Project: CHATSWORTH RESERVOIR

I. Matrix Spike (MS) / Matrix Spike Duplicate (MSD)

Reporting Unit: mg/kg

SAMPLE LOG NO.	RUN LOG	BATCH QC	SAMPLE CONC	SPIKE CONC	MS	% MS	MSD	% MSD	RPD	MS/MSD % ACP	RPD ACP
LE00754	20040203-20,21	20040203	ND	10.0	12.1	121.0%	10.7	107.0%	12.3%	70 - 130	30

SPIKE CONC = Spiking Concentration;
MS = Matrix Spike
MSD = Matrix Spike Duplicate
% MS = Percent Recovery of MS
% MSD = Percent Recovery of MSD
RPD = Relative Percent Difference
ACP = Acceptable Range of Percent
RUN LOG - Line Number of Sequence Filename
BATCH QC - Batch Identification

II. Laboratory Quality Control Check Sample (LCS)

LCS Log No. Q4791

ANALYTE	RUN LOG	BATCH QC	DATE ANALYZED	SPIKE CONC.	RESULT	% RC.	Acceptable Range
TEPH	20040203-17	20040203	2/3/2004	10.0	9.5	94.9	70 - 130

% RC - Percent recovery
RUN LOG - Line Number of Sequence Filename
BATCH QC - Batch Identification

III. Calibration Standard Q4853

ANALYTE	RUN LOG	BATCH QC	INITIAL CALIBRATION DATE: 02/03/04		DAILY CALIBRATION		
			INITIAL RF_{ave}	%RSD ≤ ± 15%	DATE	DAILY RF	% DIFF w/ RF_{ave} ≤ ± 15%
TEPH (C9 - C36)	20040203-16	20040203	3.95E+04	8.4	02/03/04	3.82E+04	3.2
	20040203-28	20040203	3.95E+04	8.4	02/03/04	4.03E+04	2.0

SPIKE CONC = Spiking Concentration;
ACP = Acceptable Range of Percent
RF_{ave} = Average Response Factor
DAILY RF = Response Factor from Daily Calibration
%RSD = Percent Relative Standard Deviation;
%DIFF = Percent Difference
RUN LOG - Line Number of Sequence Filename
BATCH QC - Batch Identification

Analyst R. Olvina

ATTACHMENT # 3

SEMI VOLATILE ORGANIC COMPOUNDS
SVOC - EPA METHOD 8270C

CITY OF LOS ANGELES, DEPARTMENT OF WATER & POWER
ENVIRONMENTAL LABORATORY

Case Narrative

Project: Chatsworth Reservoir

METHOD 8270C
Semi-Volatile Organic Compounds by GC/MS

1. Holding Time

   Analytical holding time was met.

2. Tuning and Calibration

   Tuning and calibration met QC criteria.

3. Method Blank

   Laboratory soil blank was used as method blank. Phthalate compounds were detected in soil blanks.

4. Lab Control Sample

   Recoveries met QC criteria.

5. Surrogate Recovery

   Recoveries met QC criteria.

6. Matrix Spike/Matrix Spike Duplicate

   Sample LE00754 was analyzed for MS/MSD. Recoveries met QC criteria.

7. Calibration

   Initial calibration was performed at five different concentrations. The percent relative standard deviation (% RSD) was within 15%. Calibration check standards were within QC limits.

7. Sample Analysis

   Samples were analyzed according to the prescribed QC procedures. There was no contamination detected at reporting level except for phthalate compounds which may be due to matrix and sample handling.

ENVIRONMENTAL LABORATORY DATA REPORT

COC 04-0177

003002

Report of GC/MS Analysis for Semi-Volatile Organics
EPA SW-846 Method 3541/8270C

Project: Chatsworth Reservoir

Sample Matrix: Soil

Chemistry Log No.	Date Sampled	Date Extracted	Date Analyzed	Sample Description
LE00754	1/28/2004	2/6/2004	2/11/2004	B1 Composite
LE00755	1/28/2004	2/6/2004	2/11/2004	B2 Composite
LE00756	1/28/2004	2/6/2004	2/11/2004	B3 Composite
LE00757	1/28/2004	2/6/2004	2/11/2004	B4 Composite
LE00758	1/28/2004	2/6/2004	2/11/2004	B5 Composite
LE00759	1/28/2004	2/6/2004	2/11/2004	B6 Composite

Compounds	MDL ug/kg	RL ug/kg	LE00754 ug/kg	LE00755 ug/kg	LE00756 ug/kg	LE00757 ug/kg	LE00758 ug/kg	LE00759 ug/kg
Acenaphthene	37	186	nd	nd	nd	nd	nd	nd
Acenaphthylene	49	245	nd	nd	nd	nd	nd	nd
Anthracene	12	62	nd	nd	nd	nd	nd	nd
Aniline	105	527	nd	nd	nd	nd	nd	nd
Azobezene	39	194	nd	nd	nd	nd	nd	nd
Benzidine*	651	3255	nd	nd	nd	nd	nd	nd
Benzoic acid*	435	2175	nd	nd	nd	nd	nd	nd
Benzo(a)anthracene	31	156	nd	nd	nd	nd	nd	nd
Benzo(b)flouranthene	13	64	nd	nd	nd	nd	nd	nd
Benzo(k)flouranthene	164	820	nd	nd	nd	nd	nd	nd
Benzo(g,h,i)perylene	23	115	nd	nd	nd	nd	nd	nd
Benzo(a)pyrene	29	147	nd	nd	nd	nd	nd	nd
Benzyl alcohol	50	248	nd	nd	nd	nd	nd	nd
Bis(2-chloroethoxy)methane	49	245	nd	nd	nd	nd	nd	nd
Bis(2-chloroethyl)ether	74	369	nd	nd	nd	nd	nd	nd
Bis(2-chloroisopropyl)ether	107	533	nd	nd	nd	nd	nd	nd
Bis(2-ethylhexyl)phthalate	78	392	92J	684	27550	303J	237J	nd
4-Bromophenyl-phenylether	34	170	nd	nd	nd	nd	nd	nd
Benzyl butyl phthalate	50	251	nd	nd	nd	nd	nd	nd
Carbazole	54	271	nd	nd	nd	nd	nd	nd
4-Chloroaniline	31	157	nd	nd	nd	nd	nd	nd
2-Chloronaphthalene	54	268	nd	nd	nd	nd	nd	nd
4-Chloro-3-methylphenol	54	269	nd	nd	nd	nd	nd	nd
2-Chlorophenol	49	243	nd	nd	nd	nd	nd	nd
4-Chlorophenyl-phenylether	51	255	nd	nd	nd	nd	nd	nd
Chrysene	14	70	nd	nd	nd	nd	nd	nd
3,3-Dichlorobenzidine	65	326	nd	nd	nd	nd	nd	nd
Dibenz(a,h)anthracene	76	379	nd	nd	nd	nd	nd	nd
Dibenzofuran	41	205	nd	nd	nd	nd	nd	nd
Di-n-Butylphthalate	78	390	306J	443	nd	791	412	nd
1,3-Dichlorobenzene	65	324	nd	nd	nd	nd	nd	nd
1,4-Dichlorobenzene	59	294	nd	nd	nd	nd	nd	nd
1,2-Dichlorobenzene	73	367	nd	nd	nd	nd	nd	nd
2,4-Dichlorophenol	32	161	nd	nd	nd	nd	nd	nd
Diethyl phthalate	41	205	nd	nd	nd	nd	nd	nd
2,4-Dimethylphenol	98	491	nd	nd	nd	nd	nd	nd
Dimethyl phthalate	27	137	nd	nd	nd	nd	nd	nd
4,6-Dinitro-2-methylphenol	62	310	nd	nd	nd	nd	nd	nd
2,4-Dinitrophenol	84	419	nd	nd	nd	nd	nd	nd
2,4-Dinitrotoluene	45	226	nd	nd	nd	nd	nd	nd
2,6-Dinitrotoluene	28	139	nd	nd	nd	nd	nd	nd
Di-n-0ctylphthalate	78	390	nd	nd	nd	nd	nd	nd
Flouranthene	30	149	nd	nd	nd	nd	nd	nd
Flourene	38	188	nd	nd	nd	nd	nd	nd
Hexachlorobenzene	9	46	nd	nd	nd	nd	nd	nd
Hexachlorobutadiene	64	319	nd	nd	nd	nd	nd	nd
Hexachlorocyclopentadiene	47	233	nd	nd	nd	nd	nd	nd
Hexachloroethane	58	291	nd	nd	nd	nd	nd	nd

ENVIRONMENTAL LABORATORY DATA REPORT COC 04-0177

Report of GC/MS Analysis for Semi-Volatile Organics

EPA SW-846 Method 3541/8270C

003003

Project: Chatsworth Reservoir Sample Matrix: Soil

Chemistry Log No.	Date Sampled	Date Extracted	Date Analyzed	Sample Description
LE00754	1/28/2004	2/6/2004	2/11/2004	B1 Composite
LE00755	1/28/2004	2/6/2004	2/11/2004	B2 Composite
LE00756	1/28/2004	2/6/2004	2/11/2004	B3 Composite
LE00757	1/28/2004	2/6/2004	2/11/2004	B4 Composite
LE00758	1/28/2004	2/6/2004	2/11/2004	B5 Composite
LE00759	1/28/2004	2/6/2004	2/11/2004	B6 Composite

Compounds	MDL ug/kg	RL ug/kg	LE00754 ug/kg	LE00755 ug/kg	LE00756 ug/kg	LE00757 ug/kg	LE00758 ug/kg	LE00759 ug/kg
Indeno(1,2,3-cd)pyrene	39	193	nd	nd	nd	nd	nd	nd
Isophorone	33	165	nd	nd	nd	nd	nd	nd
2-Methylnaphthalene	28	139	nd	nd	nd	nd	nd	nd
2-Methylphenol	39	194	nd	nd	nd	nd	nd	nd
4-Methylphenol	59	297	nd	nd	nd	nd	nd	nd
Naphthalene	55	275	nd	nd	nd	nd	nd	nd
2-Nitroaniline	16	82	nd	nd	nd	nd	nd	nd
3-Nitroaniline	35	174	nd	nd	nd	nd	nd	nd
4-Nitroaniline	49	244	nd	nd	nd	nd	nd	nd
Nitrobenzene	69	344	nd	nd	nd	nd	nd	nd
2-Nitrophenol	48	240	nd	nd	nd	nd	nd	nd
4-Nitrophenol	36	182	nd	nd	nd	nd	nd	nd
N-Nitrosodimethylamine	79	397	nd	nd	nd	nd	nd	nd
N-Nitrosodiphenylamine	61	305	nd	nd	nd	nd	nd	nd
N-Nitrosodi-n-propylamine	48	242	nd	nd	nd	nd	nd	nd
Pentachlorophenol	36	180	nd	nd	nd	nd	nd	nd
Phenanthrene	15	77	nd	nd	nd	nd	nd	nd
Phenol	88	441	nd	nd	nd	nd	nd	nd
Pyrene	34	172	nd	nd	nd	nd	nd	nd
Pyridine*	167	836	nd	nd	nd	nd	nd	nd
1,2,4-Trichlorobenzene	73	364	nd	nd	nd	nd	nd	nd
2,4,5-Trichlorophenol	51	256	nd	nd	nd	nd	nd	nd
2,4,6-Trichlorophenol	30	148	nd	nd	nd	nd	nd	nd

MDL - Method Detection Limit

RL - Reporting Limit (5xMDL)

J - Concentration above MDL, but below PQL

nd - Not Detected at indicated PQL

* Erratic chromatographic behavior

Quality Control Data

Surrogates 6000 ug/Kg for Acid Surrogate 3000 ug/Kg for Base Surrogate	EPA Limits % Recovery Lower-Upper	% Rec	% Rec	% Rec	% Rec	% Rec	% Rec
SURR: Phenol-d5	24 - 113	71.2%	3.9%	51.3%	61.1%	73.3%	74.8%
SURR: 2-Fluorophenol	25 - 121	94.2%	40.8%	76.5%	84.0%	102.4%	97.9%
SURR: 2,4,6-Tribromophenol	19 - 122	82.3%	62.2%	27.4%	83.6%	72.8%	64.4%
SURR: 2-Fluorobiphenyl	30 - 115	65.2%	38.9%	71.5%	70.5%	75.6%	70.6%
SURR: Nitrobenzidine-d5	23 - 120	77.0%	28.3%	62.7%	74.3%	88.4%	90.1%
SURR: p-Terphenyl-d14	18 - 137	91.3%	84.0%	97.7%	89.7%	84.3%	91.4%

Analyst: Kasey Chung

Reviewed by: Rose Gentallan

ENVIRONMENTAL LABORATORY DATA REPORT

COC 04-0177

Report of GC/MS Analysis for Semi- Volatile Organics
EPA SW-846 Method 3541/8270C

003004

Project: Chatsworth Reservoir Sample Matrix: Soil

Chemistry Log No.	Date Sampled	Date Extracted	Date Analyzed	Sample Description
LE00754	1/28/2004	2/6/2004	2/11/2004	B1 Composite - Duplicate

Compounds	MDL ug/kg	RL ug/kg	LE00754 ug/kg
Acenaphthene	37	186	nd
Acenaphthylene	49	245	nd
Anthracene	12	62	nd
Aniline	105	527	nd
Azobezene	39	194	nd
Benzidine*	651	3255	nd
Benzoic acid*	435	2175	nd
Benzo(a)anthracene	31	156	nd
Benzo(b)flouranthene	13	64	nd
Benzo(k)flouranthene	164	820	nd
Benzo(g,h,i)perylene	23	115	nd
Benzo(a)pyrene	29	147	nd
Benzyl alcohol	50	248	nd
Bis(2-chloroethoxy)methane	49	245	nd
Bis(2-chloroethyl)ether	74	369	nd
Bis(2-chloroisopropyl)ether	107	533	nd
Bis(2-ethylhexyl)phthalate	78	392	14540
4-Bromophenyl-phenylether	34	170	nd
Benzyl butyl phthalate	50	251	nd
Carbazole	54	271	nd
4-Chloroaniline	31	157	nd
2-Chloronaphthalene	54	268	nd
4-Chloro-3-methylphenol	54	269	nd
2-Chlorophenol	49	243	nd
4-Chlorophenyl-phenylether	51	255	nd
Chrysene	14	70	nd
3,3-Dichlorobenzidine	65	326	nd
Dibenz(a,h)anthracene	76	379	nd
Dibenzofuran	41	205	nd
Di-n-Butylphthalate	78	390	84J
1,3-Dichlorobenzene	65	324	nd
1,4-Dichlorobenzene	59	294	nd
1,2-Dichlorobenzene	73	367	nd
2,4-Dichlorophenol	32	161	nd
Diethyl phthalate	41	205	nd
2,4-Dimethylphenol	98	491	nd
Dimethyl phthalate	27	137	nd
4,6-Dinitro-2-methylphenol	62	310	nd
2,4-Dinitrophenol	84	419	nd
2,4-Dinitrotoluene	45	226	nd
2,6-Dinitrotoluene	28	139	nd
Di-n-0ctylphthalate	78	390	nd
Flouranthene	30	149	nd
Flourene	38	188	nd
Hexachlorobenzene	9	46	nd
Hexachlorobutadiene	64	319	nd
Hexachlorocyclopentadiene	47	233	nd
Hexachloroethane	58	291	nd

ENVIRONMENTAL LABORATORY DATA REPORT

Report of GC/MS Analysis for Semi- Volatile Organics
EPA SW-846 Method 3541/8270C

COC 04-0177

003005

Project: Chatsworth Reservoir

Sample Matrix: Soil

Chemistry Log No.	Date Sampled	Date Extracted	Date Analyzed	Sample Description
LE00754	1/28/2004	2/6/2004	2/11/2004	B1 Composite - Duplicate

Compounds	MDL ug/kg	RL ug/kg	LE00754 ug/kg
Indeno(1,2,3-cd)pyrene	39	193	nd
Isophorone	33	165	nd
2-Methylnaphthalene	28	139	nd
2-Methylphenol	39	194	nd
4-Methylphenol	59	297	nd
Naphthalene	55	275	nd
2-Nitroaniline	16	82	nd
3-Nitroaniline	35	174	nd
4-Nitroaniline	49	244	nd
Nitrobenzene	69	344	nd
2-Nitrophenol	48	240	nd
4-Nitrophenol	36	182	nd
N-Nitrosodimethylamine	79	397	nd
N-Nitrosodiphenylamine	61	305	nd
N-Nitrosodi-n-propylamine	48	242	nd
Pentachlorophenol	36	180	nd
Phenanthrene	15	77	nd
Phenol	88	441	nd
Pyrene	34	172	nd
Pyridine*	167	836	nd
1,2,4-Trichlorobenzene	73	364	nd
2,4,5-Trichlorophenol	51	256	nd
2,4,6-Trichlorophenol	30	148	nd

MDL - Method Detection Limit
RL - Reporting Limit (5xMDL)

J - Concentration above MDL below PQL
nd - Not Detected at Indicated PQL

* Erratic chromatographic behavior

Quality Control Data

Surrogates 3000 ug/Kg for Base Surrogate 6000 ug/Kg for Acid Surrogate	EPA Limits % Recovery Lower-Upper	Surrogate % Rec
SURR: Phenol-d5	24 - 113	100.0%
SURR: 2-Fluorophenol	25 - 121	99.6%
SURR: 2,4,6-Tribromophenol	19 - 122	78.4%
SURR: 2-Fluorobiphenyl	30 - 115	73.4%
SURR: Nitrobenzidine-d5	23 - 120	98.3%
SURR: p-Terphenyl-d14	18 - 137	92.7%

Comment:

Analyst: Kasey Chung

Reviewed by:

ENVIRONMENTAL LABORATORY DATA REPORT

Report of GC/MS Analysis for Semi-Volatile Organics
EPA SW-846 Method 8270

003006

Project: Chatsworth Reservoir

Sample Matrix: Soil

Chemistry Log No.	Date Sampled	Date Extracted	Date Analyzed	Sample Description
Q4856	1/28/2004	2/6/2004	2/11/2004	Blank Soil

Compounds	MDL ug/kg	RL ug/kg	Q4856 ug/kg
Acenaphthene	37	186	nd
Acenaphthylene	49	245	nd
Anthracene	12	62	nd
Aniline	105	527	nd
Azobezene	39	194	nd
Benzidine*	651	3255	nd
Benzoic acid*	435	2175	nd
Benzo(a)anthracene	31	156	nd
Benzo(b)flouranthene	13	64	nd
Benzo(k)flouranthene	164	820	nd
Benzo(g,h,i)perylene	23	115	nd
Benzo(a)pyrene	29	147	nd
Benzyl alcohol	50	248	nd
Bis(2-chloroethoxy)methane	49	245	nd
Bis(2-chloroethyl)ether	74	369	nd
Bis(2-chloroisopropyl)ether	107	533	nd
Bis(2-ethylhexyl)phthalate	78	392	nd
4-Bromophenyl-phenylether	34	170	nd
Benzyl butyl phthalate	50	251	nd
Carbazole	54	271	nd
4-Chloroaniline	31	157	nd
2-Chloronaphthalene	54	268	nd
4-Chloro-3-methylphenol	54	269	nd
2-Chlorophenol	49	243	nd
4-Chlorophenyl-phenylether	51	255	nd
Chrysene	14	70	nd
3,3-Dichlorobenzidine	65	326	nd
Dibenz(a,h)anthracene	76	379	nd
Dibenzofuran	41	205	nd
Di-n-Butylphthalate	78	390	nd
1,3-Dichlorobenzene	65	324	nd
1,4-Dichlorobenzene	59	294	nd
1,2-Dichlorobenzene	73	367	nd
2,4-Dichlorophenol	32	161	nd
Diethyl phthalate	41	205	nd
2,4-Dimethylphenol	98	491	nd
Dimethyl phthalate	27	137	nd
4,6-Dinitro-2-methylphenol	62	310	nd
2,4-Dinitrophenol	84	419	nd
2,4-Dinitrotoluene	45	226	nd
2,6-Dinitrotoluene	28	139	nd
Di-n-0ctylphthalate	78	390	nd
Flouranthene	30	149	nd
Flourene	38	188	nd
Hexachlorobenzene	9	46	nd
Hexachlorobutadiene	64	319	nd
Hexachlorocyclopentadiene	47	233	nd
Hexachloroethane	58	291	nd

ENVIRONMENTAL LABORATORY DATA REPORT

Report of GC/MS Analysis for Semi-Volatile Organics
EPA SW-846 Method 8270

Project: Chatsworth Reservoir

Sample Matrix: Soil

Chemistry Log No.	Date Sampled	Date Extracted	Date Analyzed	Sample Description
Q4856	1/28/2004	2/6/2004	2/11/2004	Blank Soil

Compounds	MDL ug/kg	RL ug/kg	Q4856 ug/kg
Indeno(1,2,3-cd)pyrene	39	193	nd
Isophorone	33	165	nd
2-Methylnaphthalene	28	139	nd
2-Methylphenol	39	194	nd
4-Methylphenol	59	297	nd
Naphthalene	55	275	nd
2-Nitroaniline	16	82	nd
3-Nitroaniline	35	174	nd
4-Nitroaniline	49	244	nd
Nitrobenzene	69	344	nd
2-Nitrophenol	48	240	nd
4-Nitrophenol	36	182	nd
N-Nitrosodimethylamine	79	397	nd
N-Nitrosodiphenylamine	61	305	nd
N-Nitrosodi-n-propylamine	48	242	nd
Pentachlorophenol	36	180	nd
Phenanthrene	15	77	nd
Phenol	88	441	nd
Pyrene	34	172	nd
Pyridine*	167	836	nd
1,2,4-Trichlorobenzene	73	364	nd
2,4,5-Trichlorophenol	51	256	nd
2,4,6-Trichlorophenol	30	148	nd

MDL - Method Detection Limit
RL - Reporting Limit (5xMDL)

J - Concentration above MDL below PQL
nd - Not Detected; below detection limit

* Erratic chromatographic behavior

Quality Control Data

Surrogates 3000 ug/Kg for Base Surrogate 6000 ug/Kg for Acid Surrogate	EPA Limits % Recovery Lower-Upper	Surrogate % Rec
SURR: Phenol-d5	24 - 113	80.3%
SURR: 2-Fluorophenol	25 - 121	98.3%
SURR: 2,4,6-Tribromophenol	19 - 122	65.8%
SURR: 2-Fluorobiphenyl	30 - 115	71.2%
SURR: Nitrobenzidine-d5	23 - 120	88.8%
SURR: p-Terphenyl-d14	18 - 137	88.4%

Comment:

Analyst: Kasey Chung

Reviewed by:

ENVIRONMENTAL LABORATORY
DEPARTMENT OF WATER AND POWER
CITY OF LOS ANGELES

1630 N. MAIN ST. BUILDING #7
LOS ANGELES, CA 91207
213-367-7399

003008

CHEMISTRY LABORATORY QUALITY CONTROL REPORT

Report of GC/MS analysis for Semi-Volatile Organics
EPA SW-846 METHOD 8270C

% RECOVERIES OF SURROGATE & SPIKE SAMPLES

Sample Matrix	Soil
Sample ID	Blank SPK & Blank SPK Dup
Sample Name	Q4856
Sample Weight(g)	5
Final Volume(ml)	1

Date Sampled :
Date Extracted : 2/6/04
Date Analyzed: 2/11/04

SURROGATE

Compound	Sample Results (ug/kg)	Amount Spiked (ug/Kg)	Blank SPK (ug/Kg)	SURR Rec (%)	BLK SPK DUP (ug/Kg)	SURR DUP Rec (%)	RPD (%)	EPA Limits % Recovery Lower – Upper
Phenol-d5	nd	**6000**	5810	96.8%	5655	94.3%	2.7%	24 - 113
2-Fluorophenol	nd	**6000**	5358	89.3%	5573	92.9%	3.9%	25 - 121
2,4,6-Tribromophenol	nd	**6000**	4356	72.6%	4835	80.6%	10.4%	19 - 122
2-Fluorobiphenyl	nd	**3000**	2396	79.9%	2280	76.0%	5.0%	30 - 115
Nitrobenzene-d5	nd	**3000**	2705	90.2%	2684	89.5%	0.8%	23 - 130
p-terphenyl-d14	nd	**3000**	2505	83.5%	2506	83.5%	0.0%	18 - 137

SPIKE / SPIKE DUP

Compound	Sample Results (ug/kg)	Amount Spiked (ug/Kg)	Blank SPK (ug/Kg)	SPK Rec (%)	Blank SPK DUP (ug/Kg)	Blank SPK DUP Rec (%)	RPD (%)	EPA Limits % Recovery Lower – Upper
Phenol	nd	**10000**	7642	76.4%	7835	78.4%	2.5%	26 - 90
2-Chlorophenol	nd	**10000**	7711	77.1%	7725	77.3%	0.2%	25 - 102
1,4-Dichlorobenzene	nd	**5000**	3680	73.6%	3294	65.9%	11.1%	28 - 104
N-Nitrosodi-n-propylamine	nd	**5000**	4391	87.8%	4087	81.7%	7.2%	41 - 126
1,2,4-trichlorobenzene	nd	**5000**	3703	74.1%	3883	77.7%	4.7%	38 - 107
4-Chloro-3-methylphenol	nd	**10000**	6628	66.3%	6796	68.0%	2.5%	26 - 103
Acenaphthene	nd	**5000**	4075	81.5%	3890	77.8%	4.6%	31 - 137
4-nitrophenol	nd	**10000**	660	6.6%	619	6.2%	6.4%	11 - 114
2,4-Dinitrotoluene	nd	**5000**	3852	77.0%	3696	73.9%	4.1%	28 - 89
Pentachlorophenol	nd	**10000**	9802	98.0%	5816	58.2%	51.0%	17 - 109
Pyrene	nd	**5000**	4031	80.6%	4016	80.3%	0.4%	35 - 142

*RPD -Relative Percent Difference; percent difference for each compound in the spiked samples for each analytical batch.

Analyzed by : Kasey Chung

Reviewed by : Rose Gentallan

ENVIRONMENTAL LABORATORY
DEPARTMENT OF WATER AND POWER
CITY OF LOS ANGELES

1630 N. MAIN ST. BUILDING #7
LOS ANGELES, CA 91207
213-367-7399

CHEMISTRY LABORATORY QUALITY CONTROL REPORT

Report of GC/MS analysis for Semi-Volatile Organics
EPA SW-846 METHOD 8270C

% RECOVERIES OF SURROGATE & SPIKE SAMPLES

Sample Matrix	Soil
Sample ID	LE00754 SPK & SPK Dup
Sample Name	B1 Composite
Sample Weight(g)	5
Final Volume(ml)	1

Date Sampled : 1/28/04
Date Extracted : 2/6/04
Date Analyzed: 2/11/04

SURROGATE

Compound	Sample Results (ug/kg)	Amount Spiked (ug/Kg)	LE00754 SPK (ug/Kg)	SURR Rec (%)	LE00754 SPK DUP (ug/Kg)	SURR DUP Rec (%)	RPD (%)	EPA Limits % Recovery Lower -- Upper
Phenol-d5	nd	6000	6520	108.7%	4715	78.6%	32.1%	24 - 113
2-Fluorophenol	nd	6000	6485	108.1%	4730	78.8%	31.3%	25 - 121
2,4,6-Tribromophenol	nd	6000	5885	98.1%	5347	89.1%	9.6%	19 - 122
2-Fluorobiphenyl	nd	3000	2687	89.6%	1946	64.9%	32.0%	30 - 115
Nitrobenzene-d5	nd	3000	3237	107.9%	1775	59.2%	58.3%	23 - 130
p-terphenyl-d14	nd	3000	2830	94.3%	2517	83.9%	11.7%	18 - 137

SPIKE / SPIKE DUP

Compound	Sample Results (ug/kg)	Amount Spiked (ug/Kg)	LE00754 SPK (ug/Kg)	SURR Rec (%)	LE00754 SPK DUP (ug/Kg)	SURR DUP Rec (%)	RPD (%)	EPA Limits % Recovery Lower -- Upper
Phenol	nd	10000	8669	86.7%	7260	72.6%	17.7%	26 - 90
2-Chlorophenol	nd	10000	8419	84.2%	7064	70.6%	17.5%	25 - 102
1,4-Dichlorobenzene	nd	5000	3690	73.8%	754	15.1%	132.1%	28 - 104
N-Nitrosodi-n-propylamine	nd	5000	4325	86.5%	3614	72.3%	17.9%	41 - 126
1,2,4-trichlorobenzene	nd	5000	4199	84.0%	1875	37.5%	76.5%	38 - 107
4-Chloro-3-methylphenol	nd	10000	8367	83.7%	7536	75.4%	10.5%	26 - 103
Acenaphthene	nd	5000	3997	79.9%	3568	71.4%	11.3%	31 - 137
4-nitrophenol	nd	10000	854	8.5%	563	5.6%	41.1%	11 - 114
2,4-Dinitrotoluene	nd	5000	3868	77.4%	3763	75.3%	2.8%	28 - 89
Pentachlorophenol	nd	10000	11596	116.0%	11936	119.4%	2.9%	17 - 109
Pyrene	nd	5000	4147	82.9%	3957	79.1%	4.7%	35 - 142

*RPD -Relative Percent Difference; percent difference for each compound in the spiked samples for each analytical batch.

Analyzed by : Kasey Chung

Reviewed by : Rose Gentallan

Laboratory Quality Control Check Sample (LCS)

Project: Chatsworth Reservoir

003010

DATE EXTRACTED: 2/6/2004
DATE ANALYZED: 2/11/2004
SUPPLY SOURCE: Resource Technology Corp
LOT NUMBER: FI 113

EXTRACTION METHOD : USEPA 3541
ANALYTICAL METHOD: USEPA 8270
LAB LCS I.D.: Q4818

ANALYTE	LCS RESULT (ug/kg)	TRUE VALUE (ug/kg)	% RECOVERY	Advisory Range
4-methyl phenol	543	7550	7.2%	0 - 15000
Hexachloroethane	1445	1650	87.6%	435 - 2870
Nitrobenzene	8511	5880	144.7%	1610 - 10200
2-Nitroaniline	18428	14500	127.1%	3760 -25300
3-Nitroaniline	214	975	21.9%	0 - 2070
2,4-Dinitrophenol	3675	1640	224.1%	0 - 4710
4-Nitrophenol	272	4560	6.0%	0 - 10300
2,4-Dinitrotoluene	17890	16000	111.8%	4550 - 27400
Fluorene	6878	8410	81.8%	3490 - 13300
Hexachlorobenzene	13739	14300	96.1%	7180 - 21400
Fluoranthene	11364	6510	174.6%	1190 - 11800
Pyrene	33034	37000	89.3%	3160 - 70900
Chrysene	6103	7210	84.6%	1380 - 13000
Bis (2-ethylhexyte) phthalate	1058	967	109.4%	137 - 1800
Benzo (b) fluoranthene	8065	3530	228.5%	1030 - 6030
Benzo (a) pyrene	4267	3170	134.6%	1110 - 5230

Surrogates 6000 ug/Kg for Acid Surrogate 3000 ug/Kg for Base Surrogate	EPA Limits % Recovery Lower-Upper	Conc. (ug/kg)	% Recovery
SURR: Phenol-d5	24 - 113	5647	94.1%
SURR: 2-Fluorophenol	25 - 121	6126	102.1%
SURR: 2,4,6-Tribromophenol	19 - 122	5573	92.9%
SURR: 2-Fluorobiphenyl	30 - 115	2407	80.2%
SURR: Nitrobenzidine-d5	23 - 120	2728	90.9%
SURR: p-Terphenyl-d14	18 - 137	2737	91.2%

Comment:

Analyst: Kasey Chung

Reviewed by:

ATTACHMENT # 4

METALS / MERCURY
EPA METHOD 6010B / 7471

CITY OF LOS ANGELES, DEPARTMENT OF WATER & POWER
ENVIRONMENTAL LABORATORY

Case Narrative

Project: Chatsworth Reservoir

METHOD 6010B/7471
METALS

1. Holding Time

   Analysis met holding time criteria.

2. Method Blank/Blank Spike/Blank Spike Duplicate

   Distilled water was used as method blank in the analysis of soil matrix. Recoveries met QC criteria.

3. Lab Control Sample

   Laboratory control sample (certified QC soil sample) was analyzed in every batch. Recoveries met QC criteria.

4. Matrix Spike/Matrix Spike Duplicate

   Sample LE00754 was analyzed for MS/MSD. Recoveries met QC criteria.

5. Sample Analysis

   Samples were analyzed according to the prescribed QC procedures.

ENVIRONMENTAL LABORATORY DATA REPORT

COC 04-0177

ANALYTICAL RESULT FOR METALS

00400

TTLC (Total Threshold Limit Concentration)

EPA Method 6010B

Sample Matrix: SOIL

Project Name : CHATSWORTH RESERVOIR

LABORATORY LOG NO.	DATE SAMPLED	DATE RECEIVED	DATE ANALYZED	SAMPLE DESCRIPTION	QC BATCH
LE00754	1/28/04	1/28/04	2/7/04	B1 COMPOSITE	$TTLCS-992
LE00755	1/28/04	1/28/04	2/7/04	B2 COMPOSITE	$TTLCS-992
LE00756	1/28/04	1/28/04	2/7/04	B3 COMPOSITE	$TTLCS-992
LE00757	1/28/04	1/28/04	2/7/04	B4 COMPOSITE	$TTLCS-992
LE00758	1/28/04	1/28/04	2/7/04	B5 COMPOSITE	$TTLCS-992
LE00759	1/28/04	1/28/04	2/7/04	B6 COMPOSITE	$TTLCS-992

METAL	LIMIT TTLC (mg/kg)	LIMIT STLC (mg/l)	METHOD	MDL	RL	D. F.	LE00754 mg/kg	LE00755 mg/kg	LE00756 mg/kg	LE00757 mg/kg	LE00758 mg/kg	LE00759 mg/kg
Antimony	500	15	6010	0.8	4.0	1	3.3J	5.3	5.1	ND	ND	ND
Arsenic	500	5	6010	1.0	5.0	1	9.6	8.8	7.3	6.1	4.5J	4.8J
Barium	10000	100	6010	0.5	2.5	1	75.9	171.8	186.7	93.9	109.8	72.2
Beryllium	75	0.75	6010	0.3	1.5	1	0.4J	0.9J	0.8J	0.6J	0.7J	0.6J
Cadmium	100	1	6010	0.6	3.0	1	3.2	6.2	5.8	3.0J	2.7J	2.7J
Chromium (T)	500	5	6010	0.3	1.5	1	11.4	27.4	24.2	14.7	15.4	13.1
Cobalt	8000	80	6010	0.2	1.0	1	9.9	21.3	19.6	13.6	12.0	13.7
Copper	2500	25	6010	0.2	1.0	1	7.7	27.8	23.9	5.7	7.9	17.5
Lead	1000	5	6010	0.9	4.5	1	14.5	10.4	10.9	17.3	12.2	17.5
Molybdenum	3500	350	6010	0.2	1.0	1	6.1	10.9	6.9	0.8J	1.2	0.6J
Nickel	2000	20	6010	0.4	2.0	1	12.5	34.7	28.0	10.8	10.3	10.6
Selenium	100	1	6010	0.7	3.5	1	3.6	ND	ND	ND	ND	ND
Silver	500	5	6010	2.5	12.5	1	ND	ND	ND	ND	ND	ND
Thallium	700	7	6010	2.5	12.5	1	ND	ND	ND	ND	ND	ND
Vanadium	2400	24	6010	0.3	1.5	1	29.1	67.1	61.0	29.6	22.9	24.2
Zinc	5000	250	6010	0.3	1.5	1	31.9	83.2	72.6	46.6	42.2	39.3
Mercury	20	0.2	7471	0.02	0.10	1	ND	ND	0.0305J	ND	ND	ND

ND - Not Detected; below method detection limit

MDL - Method Detection Limit

R.L. - Report Limit

D. F. - Dilution Factor

** - exceed TTLC limit

* - exceed 10x STLC limit

J - concentration above MDL and below RL

Annalyst: C. Y. Hwang

ENVIRONMENTAL LABORATORY DATA REPORT

COC 04-0177

ANALYTICAL RESULT FOR METALS

TTLC (Total Threshold Limit Concentration)

EPA Method 6010B

Sample Matrix: SOIL

004003

Project Name : CHATSWORTH RESERVOIR

LABORATORY LOG NO.	DATE SAMPLED	DATE RECEIVED	DATE ANALYZED	SAMPLE DESCRIPTION	QC BATCH
LE00754 Dup	01/28/04	1/28/04	2/7/04	B1 COMPOSITE	$TTLCS-992

METAL	LIMIT TTLC (mg/kg)	LIMIT STLC (mg/l)	METHOD	MDL	RL	D. F.	LE00754 (mg/kg)
Antimony	500	15	6010	0.8	4.0	1	ND
Arsenic	500	5	6010	1.0	5.0	1	4.9J
Barium	10000	100	6010	0.5	2.5	1	72
Beryllium	75	0.75	6010	0.3	1.5	1	0.37J
Cadmium	100	1	6010	0.6	3.0	1	3.4
Chromium (T)	2500	5	6010	0.3	1.5	1	11
Cobalt	8000	80	6010	0.2	1.0	1	10
Copper	2500	25	6010	0.2	1.0	1	8.1
Lead	1000	5	6010	0.9	4.5	1	11
Molybdenum	3500	350	6010	0.2	1.0	1	3.2
Nickel	2000	20	6010	0.4	2.0	1	13
Selenium	100	1	6010	0.7	3.5	1	ND
Silver	500	5	6010	2.5	12.5	1	ND
Thallium	700	7	6010	2.5	12.5	1	ND
Vanadium	2400	24	6010	0.3	1.5	1	29
Zinc	5000	250	6010	0.3	1.5	1	33

ND - Not Detected; below method detection limit
MDL - Method Detection Limit
R.L. - Report Limit
D. F. - Dilution Factor

** - exceed TTLC limit
* - exceed 10x STLC limit
J - concentration above MDL and below RL

Analyst: C. Y. Hwang

Project No: CHATSWORTH RESERVOIR

QA/QC Report

I. Matrix Spike (MS)/Matrix Spike Duplicate (MSD)

DATE ANALYZED: 02/07/04 ANALYTICAL METHOD USEPA 6010/7000

BATCH #: \$TTLCS-992 (LE00754 LE00755 LE00756 LE00757 LE00758 LE00759)

LAB SAMPLE I.D.: LE00754 UNIT: (Circle One) (mg/kg)

METAL	SAMPLE RESULT	SPIKE CONC	MS	%MS	(DUP) SPIKE CONC	MSD	%MSD	RPD	MS/MSD % REC. LIMIT	RPD LIMIT
Antimony	3.3	100	45.2	41.9	100	35.0	31.7	27.7%	70 - 130	<30%
Arsenic	9.6	100	95.3	85.7	100	94.2	84.6	1.3%	70 - 130	<30%
Barium	—	—	—	—	—	—	—	—	70 - 130	<30%
Beryllium	0.4	100	102	102	100	100	99.6	2.4%	70 - 130	<30%
Cadmium	3.2	100	99.6	96.4	100	97.7	94.5	2.0%	70 - 130	<30%
Chromium (T)	11.4	100	109	97.6	100	105	93.6	4.2%	70 - 130	<30%
Cobalt	9.9	100	109	99.1	100	108	98.1	1.0%	70 - 130	<30%
Copper	7.7	100	106	98.3	100	102	94.3	4.2%	70 - 130	<30%
Lead	14.5	100	124	110	100	122	108	1.8%	70 - 130	<30%
Molybdenum	6.1	100	105	98.9	100	104	97.9	1.0%	70 - 130	<30%
Nickel	12.5	100	106	93.5	100	103	90.5	3.3%	70 - 130	<30%
Selenium	3.6	100	96.8	93.2	100	100	96.4	3.4%	70 - 130	<30%
Silver	—	—	—	—	—	—	—	—	70 - 130	<30%
Thallium	—	—	—	—	—	—	—	—	70 - 130	<30%
Vanadium	29.1	100	131	102	100	128	98.9	3.1%	70 - 130	<30%
Zinc	31.9	100	130	98.1	100	124	92.1	6.3%	70 - 130	<30%

MS = Matrix Spike MSD = Matrix Spike Duplicate
%MS = Percent Recovery of Matrix Spike

RPD = Relative Percent Difference
%MSD = Percent Recovery of Matrix Spike Duplicate

Analyst: C. Y. Hwang

Project : CHATSWORTH RESERVOIR 004005

III. Calibration and Laboratory Quality Control Check Sample (LCS)

DATE ANALYZED: 2/7/2004

SUPPLY SOURCE: Environmental Resource Associates

LOT NUMBER: D035-540

ANALYTICAL METHOD : EPA 6010B

LAB LCS I.D.: Q3259

UNIT: (Circle One)

(mg/kg) ug/L

METAL	LCS RESULTS mg/kg	TRUE VALUE mg/kg	RECOVERY %	Acceptane Range mg/kg
Aluminum	5735	6050	94.8%	1860 - 10200
Antimony	35	69.1	50.7%	15.1 - 123
Arsenic	94	193	48.7%	153 - 233
Barium	79	429	18.3%	341 - 517
Beryllium	100	102	98.0%	82.9 - 121
Cadmium	98	128	76.6%	103 - 153
Chromium (T)	105	137	76.6%	106 - 168
Cobalt	108	64.2	168.2%	54.4 - 74
Copper	102	92.1	110.7%	73.7 - 111
Lead	122	163	74.8%	126 - 200
Magnesium	3567	1960	182.0%	1350 - 2580
Manganeses	281	326	86.2%	246 - 406
Molybdenum	104	66.8	155.7%	53 - 80.6
Nickel	103	176	58.5%	138 - 214
Potassium	1601	1930	83.0%	1230 - 2630
Selenium	100	104	96.2%	74.4 - 133
Silver	50	116	43.1%	63.5 - 169
Sodium	356	282	126.2%	143 - 421
Thallium	13	78.6	16.5%	51.8 - 105
Vanadium	128	98.3	130.2%	68.8 - 128
Zinc	124	246	50.4%	189 - 303

Analyst: C. Y. Hwang / A. Luu

Report No.C10582
COC 04-0177

004000

Project Name: CHATSWORTH RESERVOIR

Mercury QA/QC Report

I. Method Blank Spike (BS)/ Method BlankSpike Duplicate (MBSD)

DATE ANALYZED: 01/30/04
BATCH #: 20040130/A
LAB SAMPLE I.D.: Method Blank, Method Blank Spike(MBS), and Method Blank Spike Dup(MBSD)

ANALYTICAL METHOD: USEPA 7471
UNIT: ug/kg

METAL	METHOD BLANK	SPIKE CONC	MBS	%MS	(DUP) SPIKE CONC	MBSD	%MSD	% RPD	MS/MSD % REC. LIMIT	% RPD LIMIT
MERCURY	7.0	2500	2800	111.7	2500	2770	110.5	0.5	70 - 130	30

II. Matrix Spike (MS)/Matrix Spike Duplicate (MSD)

BATCH #: 20040130/A
LAB SAMPLE I.D.: LE00754 Spike & Spike Duplicate

UNIT: ug/kg

METAL	SAMPLE RESULT	SPIKE CONC	MS	%MS	(DUP) SPIKE CONC	MSD	%MSD	% RPD	MS/MSD % REC. LIMIT	% RPD LIMIT
MERCURY	10.4	250	265	101.8	250	265	101.8	0	70 - 130	30

MS - Matrix Spike *MSD - Matrix Spike Dupllicate* *RPD - Relative Percent Difference*
%MS - Percent Recovery of Matrix Spike *%MSD - Percent Recovery of Matrix Spike Duplicate*

Analyst: R. Petersen / Kasey Chung

Report No.C10582
COC 04-0177

004007

Project Name: CHATSWORTH RESERVOIR

Mercury QA/QC Report

III. Laboratory Control Check Sample (LCS)

DATE ANALYZED: 1/30/2004
LCS I.D.: Q3295
BATCH QC: 20040130/A

UNIT: ug/kg

BATCH QC	A												
METAL	LAB ID	TRUE CONC	RESULT	% RC	LAB ID	TRUE CONC	RESULT	% RC	LAB ID	TRUE CONC	RESULT	% RC	ACCEPTANCE LIMITS (%)
MERCURY	Q3295	4700	5900	125.5									70 - 130

%RC - Percent Recovery
Batch - ten samples per batch

Analyst: R. Petersen / Kasey Chung

ATTACHMENT # 5

VOLATILE ORGANIC COMPOUNDS
VOC - EPA METHOD 8260B

CITY OF LOS ANGELES, DEPARTMENT OF WATER & POWER
ENVIRONMENTAL LABORATORY

Case Narrative

Project: Chatsworth Reservoir

METHOD 8260B
Volatile Organic Compounds by GC/MS

1. Holding Time

   Samples were analyzed within holding time limit.

2. Tuning and Calibration

   Tuning and calibration met QC requirements.

3. Method Blank

   There was no contamination detected at reporting level.

4. Lab Control Sample

   Laboratory control sample (certified QC soil sample) was analyzed in every batch. Recoveries met acceptable QC criteria.

5 Surrogate Recovery

   Recoveries met acceptable QC criteria.

6. Matrix Spike/Matrix Spike Duplicate

   Sample LE00760 was analyzed for MS/MSD. Recoveries met QC criteria.

7. Calibration

   Initial calibration was performed at five different concentrations. The percent relative standard deviation (% RSD) was within 15%. Calibration check standards met QC requirements.

7. Sample Analysis

   Samples were analyzed according to the prescribed QC procedures. There was no contamination detected at reporting level.

ENVIRONMENTAL LABORATORY DATA REPORT COC 04-0177

Report of GC/MS Analysis for Purgeable Volatile Organics

EPA SW-846 Method 8260

005002

PROJECT: CHATSWORTH RESERVOIR Sample Matrix: Soil

Chemistry Log No.	Date Sampled	Date Received	Date Analyzed	Sample Description
LE00760	1/28/2004	1/28/2004	1/29/2004	CHATSWORTH RESERVOIR B1-5
LE00761	1/28/2004	1/28/2004	1/29/2004	CHATSWORTH RESERVOIR B1-10
LE00762	1/28/2004	1/28/2004	1/29/2004	CHATSWORTH RESERVOIR B2-5
LE00763	1/28/2004	1/28/2004	1/29/2004	CHATSWORTH RESERVOIR B2-10
LE00764	1/28/2004	1/28/2004	1/29/2004	CHATSWORTH RESERVOIR B2-15
LE00765	1/28/2004	1/28/2004	1/29/2004	CHATSWORTH RESERVOIR B3-5
LE00766	1/28/2004	1/28/2004	1/29/2004	CHATSWORTH RESERVOIR B3-10

Compounds	MDL ug/kg	PQL ug/kg	LE00760 Amount ug/kg	LE00761 Amount ug/kg	LE00762 Amount ug/kg	LE00763 Amount ug/kg	LE00764 Amount ug/kg	LE00765 Amount ug/kg	LE00766 Amount ug/kg
Acetone	8.5	42.5	nd	nd	nd	nd	nd	nd	nd
tert-Amyl methyl ether (TAME)	2.7	13.5	nd	nd	nd	nd	nd	nd	nd
Benzene	2.6	13.0	nd	nd	nd	nd	nd	nd	nd
Bromobenzene	2.9	14.5	nd	nd	nd	nd	nd	nd	nd
Bromochloromethane	2.4	12.0	nd	nd	nd	nd	nd	nd	nd
Bromodichloromethane	3.9	19.5	nd	nd	nd	nd	nd	nd	nd
Bromoform	3.6	18.0	nd	nd	nd	nd	nd	nd	nd
Bromomethane	2.2	11.0	nd	nd	nd	nd	nd	nd	nd
Methyl ethyl ketone (MEK)	3.4	17.0	nd	nd	nd	nd	nd	nd	nd
tert-Butyl alcohol (TBA)	21.6	108.0	nd	nd	nd	nd	nd	nd	nd
Butylbenzene	2.5	12.5	nd	nd	nd	nd	nd	nd	nd
sec-Butylbenzene	3.4	17.0	nd	nd	nd	nd	nd	nd	nd
tert-Butylbenzene	3.1	15.5	nd	nd	nd	nd	nd	nd	nd
tert-Butyl ethyl ether (ETBE)	2.7	13.5	nd	nd	nd	nd	nd	nd	nd
Carbon disulfide	5.3	26.5	nd	nd	nd	nd	nd	nd	nd
Carbon Tetrachloride	3.3	16.5	nd	nd	nd	nd	nd	nd	nd
Chlorobenzene	2.4	12.0	nd	nd	nd	nd	nd	nd	nd
Chloroethane	4.8	24.0	nd	nd	nd	nd	nd	nd	nd
2-Chloroethyl vinyl ether	2	10.0	nd	nd	nd	nd	nd	nd	nd
Chloroform	2.3	11.5	nd	nd	nd	nd	nd	nd	nd
Chloromethane	4.7	23.5	nd	nd	nd	nd	nd	nd	nd
2-Chlorotoluene	4.7	23.5	nd	nd	nd	nd	nd	nd	nd
4-Chlorotoluene	4.3	21.5	nd	nd	nd	nd	nd	nd	nd
Dibromochloromethane	4.2	21.0	nd	nd	nd	nd	nd	nd	nd
1,2-Dibromo-3-chloropropane	3.1	15.5	nd	nd	nd	nd	nd	nd	nd
1,2-Dibromoethane	3.6	18.0	nd	nd	nd	nd	nd	nd	nd
Dibromomethane	3.8	19.0	nd	nd	nd	nd	nd	nd	nd
1,2-Dichlorobenzene	4.7	23.5	nd	nd	nd	nd	nd	nd	nd
1,3-Dichlorobenzene	4.9	24.5	nd	nd	nd	nd	nd	nd	nd
1,4-Dichlorobenzene	5	25.0	nd	nd	nd	nd	nd	nd	nd
Dichlorodifluoromethane	5.2	26.0	nd	nd	nd	nd	nd	nd	nd
1,1-Dichloroethane	2.4	12.0	nd	nd	nd	nd	nd	nd	nd
1,2-Dichloroethane	2.8	14.0	nd	nd	nd	nd	nd	nd	nd
1,1-Dichloroethene	4.5	22.5	nd	nd	nd	nd	nd	nd	nd
cis-1,2-Dichloroethene	4.7	23.5	nd	nd	nd	nd	nd	nd	nd
trans-1,2-Dichloroethene	2.3	11.5	nd	nd	nd	nd	nd	nd	nd
1,2-Dichloropropane	2.7	13.5	nd	nd	nd	nd	nd	nd	nd
1,3-Dichloropropane	3.2	16.0	nd	nd	nd	nd	nd	nd	nd
2,2-Dichloropropane	2.9	14.5	nd	nd	nd	nd	nd	nd	nd
1,1-Dichloropropene	2.1	10.5	nd	nd	nd	nd	nd	nd	nd
cis-1,3-Dichloropropene	2.2	11.0	nd	nd	nd	nd	nd	nd	nd
trans-1,3-Dichloropropene	2.8	14.0	nd	nd	nd	nd	nd	nd	nd
Diisopropyl ether (DIPE)	3.2	16.0	nd	nd	nd	nd	nd	nd	nd
Ethylbenzene	3.1	15.5	nd	nd	nd	nd	nd	nd	nd
Hexachlorobutadiene	4.6	23.0	nd	nd	nd	nd	nd	nd	nd

ENVIRONMENTAL LABORATORY DATA REPORT

COC 04-0177

Report of GC/MS Analysis for Purgeable Volatile Organics
EPA SW-846 Method 8260

005003

PROJECT: CHATSWORTH RESERVOIR Sample Matrix: Soil

Chemistry Log No.	Date Sampled	Date Received	Date Analyzed	Sample Description
LE00760	1/28/2004	1/28/2004	1/29/2004	CHATSWORTH RESERVOIR B1-5
LE00761	1/28/2004	1/28/2004	1/29/2004	CHATSWORTH RESERVOIR B1-10
LE00762	1/28/2004	1/28/2004	1/29/2004	CHATSWORTH RESERVOIR B2-5
LE00763	1/28/2004	1/28/2004	1/29/2004	CHATSWORTH RESERVOIR B2-10
LE00764	1/28/2004	1/28/2004	1/29/2004	CHATSWORTH RESERVOIR B2-15
LE00765	1/28/2004	1/28/2004	1/29/2004	CHATSWORTH RESERVOIR B3-5
LE00766	1/28/2004	1/28/2004	1/29/2004	CHATSWORTH RESERVOIR B3-10

Compounds	MDL ug/kg	PQL ug/kg	LE00760 Amount ug/kg	LE00761 Amount ug/kg	LE00762 Amount ug/kg	LE00763 Amount ug/kg	LE00764 Amount ug/kg	LE00765 Amount ug/kg	LE00766 Amount ug/kg
2-Hexanone	2.2	11.0	nd	nd	nd	nd	nd	nd	nd
Isopropylbenzene	1.9	9.5	nd	nd	nd	nd	nd	nd	nd
p-Isopropyltoluene	2.5	12.5	nd	nd	nd	nd	nd	nd	nd
Methyl-t-butyl ether (MTBE)	3.1	15.5	nd	nd	nd	nd	nd	nd	nd
Methylene chloride	3.9	19.5	nd	nd	nd	nd	nd	nd	nd
Iodomethane	4.9	24.5	nd	nd	nd	nd	nd	nd	nd
Methyl isobutyl ketone (MIBK)	2.3	11.5	nd	nd	nd	nd	nd	nd	nd
Naphthalene	2.7	13.5	nd	nd	nd	nd	nd	nd	nd
Propylbenzene	4.3	21.5	nd	nd	nd	nd	nd	nd	nd
Styrene	2.9	14.5	nd	nd	nd	nd	nd	nd	nd
1,1,1,2-Tetrachloroethane	2.2	11.0	nd	nd	nd	nd	nd	nd	nd
1,1,2,2-Tetrachloroethane	4.4	22.0	nd	nd	nd	nd	nd	nd	nd
Tetrachloroethylene	3.4	17.0	nd	nd	nd	nd	nd	nd	nd
Toluene	2	10.0	nd	nd	nd	nd	nd	nd	nd
1,2,3-Trichlorobenzene	3.3	16.5	nd	nd	nd	nd	nd	nd	nd
1,2,4-Trichlorobenzene	2.8	14.0	nd	nd	nd	nd	nd	nd	nd
1,1,1-Trichloroethane	2.9	14.5	nd	nd	nd	nd	nd	nd	nd
1,1,2-Trichloroethane	4.3	21.5	nd	nd	nd	nd	nd	nd	nd
Trichloroethylene	1.4	7.0	nd	nd	nd	nd	nd	nd	nd
Trichlorofluoromethane	3.5	17.5	nd	nd	nd	nd	nd	nd	nd
1,2,3-Trichloropropane	2.8	14.0	nd	nd	nd	nd	nd	nd	nd
1,2,4-Trimethylbenzene	2.5	12.5	nd	nd	nd	nd	nd	nd	nd
1,3,5-Trimethylbenzene	2.3	11.5	nd	nd	nd	nd	nd	nd	nd
Vinyl acetate	2.4	12.0	nd	nd	nd	nd	nd	nd	nd
Vinyl Chloride (Chloroethene)	3.6	18.0	nd	nd	nd	nd	nd	nd	nd
m & p-Xylene	6.7	33.5	nd	nd	nd	nd	nd	nd	nd
o-Xylene	2.2	11.0	nd	nd	nd	nd	nd	nd	nd

MDL - Method Detection Limit
PQL - Practical Quantitation Limit (5xMDL)

J - Concentration above MDL below PQL
nd - Not Detected; below detection limit

Quality Control Data

Surrogates 30 (ug/L each)	QC Limits % Recovery Lower-Upper							
SURR: Bromofluorobenzene	74 - 121	109.3%	108.0%	107.7%	108.7%	108.3%	110.0%	110.3%
SURR: Dibromofluoromethane	80 - 120	97.0%	97.3%	96.3%	97.7%	97.7%	96.7%	97.3%
SURR: Toluene-d8	81 - 117	113.0%	111.0%	112.3%	113.0%	111.0%	112.7%	110.7%

Comment:

Analyst: Bryan Tiu

Reviewed by: Rose Gentallan

ENVIRONMENTAL LABORATORY DATA REPORT

COC 04-0177

00500

Report of GC/MS Analysis for Purgeable Volatile Organics
EPA SW-846 Method 8260

PROJECT: CHATSWORTH RESERVOIR Sample Matrix: Soil

Chemistry Log No.	Date Sampled	Date Received	Date Analyzed	Sample Description
LE00767	1/28/2004	1/28/2004	1/29/2004	CHATSWORTH RESERVOIR B3-15
LE00768	1/28/2004	1/28/2004	1/29/2004	CHATSWORTH RESERVOIR B3-20
LE00769	1/28/2004	1/28/2004	1/29/2004	CHATSWORTH RESERVOIR B4-5
LE00770	1/28/2004	1/28/2004	1/30/2004	CHATSWORTH RESERVOIR B4-10
LE00771	1/28/2004	1/28/2004	1/30/2004	CHATSWORTH RESERVOIR B5-5
LE00772	1/28/2004	1/28/2004	1/30/2004	CHATSWORTH RESERVOIR B5-10
LE00773	1/28/2004	1/28/2004	1/30/2004	CHATSWORTH RESERVOIR B6-5

Compounds	MDL (ug/kg)	PQL (ug/kg)	LE00767 Amount (ug/kg)	LE00768 Amount (ug/kg)	LE00769 Amount (ug/kg)	LE00770 Amount (ug/kg)	LE00771 Amount (ug/kg)	LE00772 Amount (ug/kg)	LE00773 Amount (ug/kg)
Acetone	8.5	42.5	nd	nd	nd	nd	nd	nd	nd
tert-Amyl methyl ether (TAME)	2.7	13.5	nd	nd	nd	nd	nd	nd	nd
Benzene	2.6	13.0	nd	nd	nd	nd	nd	nd	nd
Bromobenzene	2.9	14.5	nd	nd	nd	nd	nd	nd	nd
Bromochloromethane	2.4	12.0	nd	nd	nd	nd	nd	nd	nd
Bromodichloromethane	3.9	19.5	nd	nd	nd	nd	nd	nd	nd
Bromoform	3.6	18.0	nd	nd	nd	nd	nd	nd	nd
Bromomethane	2.2	11.0	nd	nd	nd	nd	nd	nd	nd
2-Butanone (MEK)	3.4	17.0	nd	nd	nd	nd	nd	nd	nd
tert-Butyl alcohol (TBA)	21.6	108.0	nd	nd	nd	nd	nd	nd	nd
n-Butylbenzene	2.5	12.5	nd	nd	nd	nd	nd	nd	nd
sec-Butylbenzene	3.4	17.0	nd	nd	nd	nd	nd	nd	nd
tert-Butylbenzene	3.1	15.5	nd	nd	nd	nd	nd	nd	nd
tert-Butyl ethyl ether (ETBE)	2.7	13.5	nd	nd	nd	nd	nd	nd	nd
Carbon disulfide	5.3	26.5	nd	nd	nd	nd	nd	nd	nd
Carbon Tetrachloride	3.3	16.5	nd	nd	nd	nd	nd	nd	nd
Chlorobenzene	2.4	12.0	nd	nd	nd	nd	nd	nd	nd
Chloroethane	4.8	24.0	nd	nd	nd	nd	nd	nd	nd
2-Chloroethyl vinyl ether	2	10.0	nd	nd	nd	nd	nd	nd	nd
Chloroform	2.3	11.5	nd	nd	nd	nd	nd	nd	nd
Chloromethane	4.7	23.5	nd	nd	nd	nd	nd	nd	nd
2-Chlorotoluene	4.7	23.5	nd	nd	nd	nd	nd	nd	nd
4-Chlorotoluene	4.3	21.5	nd	nd	nd	nd	nd	nd	nd
Dibromochloromethane	4.2	21.0	nd	nd	nd	nd	nd	nd	nd
1,2-Dibromo-3-chloropropane	3.1	15.5	nd	nd	nd	nd	nd	nd	nd
1,2-Dibromoethane (EDB)	3.6	18.0	nd	nd	nd	nd	nd	nd	nd
Dibromomethane	3.8	19.0	nd	nd	nd	nd	nd	nd	nd
1,2-Dichlorobenzene	4.7	23.5	nd	nd	nd	nd	nd	nd	nd
1,3-Dichlorobenzene	4.9	24.5	nd	nd	nd	nd	nd	nd	nd
1,4-Dichlorobenzene	5	25.0	nd	nd	nd	nd	nd	nd	nd
Dichlorodifluoromethane	5.2	26.0	nd	nd	nd	nd	nd	nd	nd
1,1-Dichloroethane	2.4	12.0	nd	nd	nd	nd	nd	nd	nd
1,2-Dichloroethane	2.8	14.0	nd	nd	nd	nd	nd	nd	nd
1,1-Dichloroethene	4.5	22.5	nd	nd	nd	nd	nd	nd	nd
cis-1,2-Dichloroethene	4.7	23.5	nd	nd	nd	nd	nd	nd	nd
trans-1,2-Dichloroethene	2.3	11.5	nd	nd	nd	nd	nd	nd	nd
1,2-Dichloropropane	2.7	13.5	nd	nd	nd	nd	nd	nd	nd
1,3-Dichloropropane	3.2	16.0	nd	nd	nd	nd	nd	nd	nd
2,2-Dichloropropane	2.9	14.5	nd	nd	nd	nd	nd	nd	nd
1,1-Dichloropropene	2.1	10.5	nd	nd	nd	nd	nd	nd	nd
cis-1,3-Dichloropropene	2.2	11.0	nd	nd	nd	nd	nd	nd	nd
trans-1,3-Dichloropropene	2.8	14.0	nd	nd	nd	nd	nd	nd	nd
Diisopropyl ether (DIPE)	3.2	16.0	nd	nd	nd	nd	nd	nd	nd
Ethylbenzene	3.1	15.5	nd	nd	nd	nd	nd	nd	nd
Hexachlorobutadiene	4.6	23.0	nd	nd	nd	nd	nd	nd	nd

ENVIRONMENTAL LABORATORY DATA REPORT

COC 04-0177

005005

Report of GC/MS Analysis for Purgeable Volatile Organics
EPA SW-846 Method 8260

PROJECT: CHATSWORTH RESERVOIR Sample Matrix: Soil

Chemistry Log No.	Date Sampled	Date Received	Date Analyzed	Sample Description
LE00767	1/28/2004	1/28/2004	1/29/2004	CHATSWORTH RESERVOIR B3-15
LE00768	1/28/2004	1/28/2004	1/29/2004	CHATSWORTH RESERVOIR B3-20
LE00769	1/28/2004	1/28/2004	1/29/2004	CHATSWORTH RESERVOIR B4-5
LE00770	1/28/2004	1/28/2004	1/30/2004	CHATSWORTH RESERVOIR B4-10
LE00771	1/28/2004	1/28/2004	1/30/2004	CHATSWORTH RESERVOIR B5-5
LE00772	1/28/2004	1/28/2004	1/30/2004	CHATSWORTH RESERVOIR B5-10
LE00773	1/28/2004	1/28/2004	1/30/2004	CHATSWORTH RESERVOIR B6-5

Compounds	MDL (ug/kg)	PQL (ug/kg)	LE00767 Amount (ug/kg)	LE00768 Amount (ug/kg)	LE00769 Amount (ug/kg)	LE00770 Amount (ug/kg)	LE00771 Amount (ug/kg)	LE00772 Amount (ug/kg)	LE00773 Amount (ug/kg)
2-Hexanone	2.2	11.0	nd	nd	nd	nd	nd	nd	nd
Isopropylbenzene	1.9	9.5	nd	nd	nd	nd	nd	nd	nd
p-Isopropyltoluene	2.5	12.5	nd	nd	nd	nd	nd	nd	nd
Methyl-t-butyl ether (MTBE)	3.1	15.5	nd	nd	nd	nd	nd	nd	nd
Methylene chloride	3.9	19.5	nd	nd	nd	nd	nd	nd	nd
Methyl Iodide (Iodomethane)	4.9	24.5	nd	nd	nd	nd	nd	nd	nd
4-Methyl-2-pentanone (MIBK)	2.3	11.5	nd	nd	nd	nd	nd	nd	nd
Naphthalene	2.7	13.5	nd	nd	nd	nd	nd	nd	nd
Propylbenzene	4.3	21.5	nd	nd	nd	nd	nd	nd	nd
Styrene (Phenylethylene)	2.9	14.5	nd	nd	nd	nd	nd	nd	nd
1,1,1,2-Tetrachloroethane	2.2	11.0	nd	nd	nd	nd	nd	nd	nd
1,1,2,2-Tetrachloroethane	4.4	22.0	nd	nd	nd	nd	nd	nd	nd
Tetrachloroethylene (PCE)	3.4	17.0	nd	nd	nd	nd	nd	nd	nd
Toluene	2	10.0	nd	nd	nd	nd	nd	nd	nd
1,2,3-Trichlorobenzene	3.3	16.5	nd	nd	nd	nd	nd	nd	nd
1,2,4-Trichlorobenzene	2.8	14.0	nd	nd	nd	nd	nd	nd	nd
1,1,1-Trichloroethane	2.9	14.5	nd	nd	nd	nd	nd	nd	nd
1,1,2-Trichloroethane	4.3	21.5	nd	nd	nd	nd	nd	nd	nd
Trichloroethylene (TCE)	1.4	7.0	nd	nd	nd	nd	nd	nd	nd
Trichlorofluoromethane	3.5	17.5	nd	nd	nd	nd	nd	nd	nd
1,2,3-Trichloropropane	2.8	14.0	nd	nd	nd	nd	nd	nd	nd
1,2,4-Trimethylbenzene	2.5	12.5	nd	nd	nd	nd	nd	nd	nd
1,3,5-Trimethylbenzene	2.3	11.5	nd	nd	nd	nd	nd	nd	nd
Vinyl acetate	2.4	12.0	nd	nd	nd	nd	nd	nd	nd
Vinyl Chloride	3.6	18.0	nd	nd	nd	nd	nd	nd	nd
m & p-Xylene	6.7	33.5	nd	nd	nd	nd	nd	nd	nd
o-Xylene	2.2	11.0	nd	nd	nd	nd	nd	nd	nd

MDL - Method Detection Limit
PQL - Practical Quantitation Limit (5xMDL)

J - Concentration above MDL below PQL
nd - Not Detected; below detection limit

Quality Control Data

Surrogates 30 (ug/L each)	QC Limits % Recovery Lower-Upper							
SURR: Bromofluorobenzene	74 - 121	109.0%	108.3%	108.7%	108.3%	110.3%	109.3%	109.0%
SURR: Dibromofluoromethane	80 - 120	96.0%	96.3%	96.3%	95.7%	95.7%	97.7%	96.3%
SURR: Toluene-d8	81 - 117	112.0%	111.7%	111.3%	111.3%	111.3%	110.3%	111.0%

Comment:

Analyst: Bryan Tiu

Reviewed by: Rose Gentallan

ENVIRONMENTAL LABORATORY DATA REPORT

COC 04-0177

Report of GC/MS Analysis for Purgeable Volatile Organics
EPA SW-846 Method 8260

005006

PROJECT: CHATSWORTH RESERVOIR Sample Matrix: Soil

Chemistry Log No.	Date Sampled	Date Received	Date Analyzed	Sample Description
LE00774	1/28/2004	1/28/2004	1/30/2004	CHATSWORTH RESERVOIR B6-10

Compounds	MDL (ug/kg)	PQL (ug/kg)	LE00774 Amount (ug/kg)
Acetone	8.5	42.5	nd
tert-Amyl methyl ether (TAME)	2.7	13.5	nd
Benzene	2.6	13.0	nd
Bromobenzene	2.9	14.5	nd
Bromochloromethane	2.4	12.0	nd
Bromodichloromethane	3.9	19.5	nd
Bromoform	3.6	18.0	nd
Bromomethane	2.2	11.0	nd
2-Butanone (MEK)	3.4	17.0	nd
tert-Butyl alcohol (TBA)	21.6	108.0	nd
n-Butylbenzene	2.5	12.5	nd
sec-Butylbenzene	3.4	17.0	nd
tert-Butylbenzene	3.1	15.5	nd
tert-Butyl ethyl ether (ETBE)	2.7	13.5	nd
Carbon disulfide	5.3	26.5	nd
Carbon Tetrachloride	3.3	16.5	nd
Chlorobenzene	2.4	12.0	nd
Chloroethane	4.8	24.0	nd
2-Chloroethyl vinyl ether	2	10.0	nd
Chloroform	2.3	11.5	nd
Chloromethane	4.7	23.5	nd
2-Chlorotoluene	4.7	23.5	nd
4-Chlorotoluene	4.3	21.5	nd
Dibromochloromethane	4.2	21.0	nd
1,2-Dibromo-3-chloropropane	3.1	15.5	nd
1,2-Dibromoethane (EDB)	3.6	18.0	nd
Dibromomethane	3.8	19.0	nd
1,2-Dichlorobenzene	4.7	23.5	nd
1,3-Dichlorobenzene	4.9	24.5	nd
1,4-Dichlorobenzene	5	25.0	nd
Dichlorodifluoromethane	5.2	26.0	nd
1,1-Dichloroethane	2.4	12.0	nd
1,2-Dichloroethane	2.8	14.0	nd
1,1-Dichloroethene	4.5	22.5	nd
cis-1,2-Dichloroethene	4.7	23.5	nd
trans-1,2-Dichloroethene	2.3	11.5	nd
1,2-Dichloropropane	2.7	13.5	nd
1,3-Dichloropropane	3.2	16.0	nd
2,2-Dichloropropane	2.9	14.5	nd
1,1-Dichloropropene	2.1	10.5	nd
cis-1,3-Dichloropropene	2.2	11.0	nd
trans-1,3-Dichloropropene	2.8	14.0	nd
Diisopropyl ether (DIPE)	3.2	16.0	nd
Ethylbenzene	3.1	15.5	nd
Hexachlorobutadiene	4.6	23.0	nd

ENVIRONMENTAL LABORATORY DATA REPORT

COC 04-0177

Report of GC/MS Analysis for Purgeable Volatile Organics
EPA SW-846 Method 8260
Page 2 of 2

005007

PROJECT: CHATSWORTH RESERVOIR Sample Matrix: Soil

Chemistry Log No.	Date Sampled	Date Received	Date Analyzed	Sample Description
LE00774	1/28/2004	1/28/2004	1/30/2004	CHATSWORTH RESERVOIR B6-10

Compounds	MDL (ug/kg)	PQL (ug/kg)	LE00774 Amount (ug/kg)
2-Hexanone	2.2	11.0	nd
Isopropylbenzene	1.9	9.5	nd
p-Isopropyltoluene	2.5	12.5	nd
Methyl-t-butyl ether (MTBE)	3.1	15.5	nd
Methylene chloride	3.9	19.5	nd
Methyl Iodide (Iodomethane)	4.9	24.5	nd
4-Methyl-2-pentanone (MIBK)	2.3	11.5	nd
Naphthalene	2.7	13.5	nd
Propylbenzene	4.3	21.5	nd
Styrene (Phenylethylene)	2.9	14.5	nd
1,1,1,2-Tetrachloroethane	2.2	11.0	nd
1,1,2,2-Tetrachloroethane	4.4	22.0	nd
Tetrachloroethylene (PCE)	3.4	17.0	nd
Toluene	2	10.0	nd
1,2,3-Trichlorobenzene	3.3	16.5	nd
1,2,4-Trichlorobenzene	2.8	14.0	nd
1,1,1-Trichloroethane	2.9	14.5	nd
1,1,2-Trichloroethane	4.3	21.5	nd
Trichloroethylene (TCE)	1.4	7.0	nd
Trichlorofluoromethane	3.5	17.5	nd
1,2,3-Trichloropropane	2.8	14.0	nd
1,2,4-Trimethylbenzene	2.5	12.5	nd
1,3,5-Trimethylbenzene	2.3	11.5	nd
Vinyl acetate	2.4	12.0	nd
Vinyl Chloride	3.6	18.0	nd
m & p-Xylene	6.7	33.5	nd
o-Xylene	2.2	11.0	nd

MDL - Method Detection Limit
PQL - Practical Quantitation Limit (5xMDL)

J - Concentration above MDL below PQL
nd - Not Detected; below detection limit

Quality Control Data

Surrogates 30 (ug/L each)	QC Limits % Recovery Lower-Upper	
SURR: Bromofluorobenzene	74 - 121	108.3%
SURR: Dibromofluoromethane	80 - 120	97.0%
SURR: Toluene-d8	81 - 117	112.3%

Comment:

Analyst: Bryan Tiu

Reviewed by: Rose Gentallan

ENVIRONMENTAL LABORATORY DATA REPORT

COC 04-0177

Report of GC/MS Analysis for Purgeable Volatile Organics
EPA SW-846 Method 8260

005008

PROJECT: CHATSWORTH RESERVOIR Sample Matrix: Soil

Chemistry Log No.	Date Sampled	Date Received	Date Analyzed	Sample Description
Blank	1/28/2004	1/28/2004	1/29/2004	Method Blank

Compounds	MDL ug/kg	PQL ug/kg	Blank Amount ug/kg
Acetone	8.5	42.5	nd
tert-Amyl methyl ether (TAME)	2.7	13.5	nd
Benzene	2.6	13.0	nd
Bromobenzene	2.9	14.5	nd
Bromochloromethane	2.4	12.0	nd
Bromodichloromethane	3.9	19.5	nd
Bromoform	3.6	18.0	nd
Bromomethane	2.2	11.0	nd
Methyl ethyl ketone (MEK)	3.4	17.0	nd
tert-Butyl alcohol (TBA)	21.6	108.0	nd
Butylbenzene	2.5	12.5	nd
sec-Butylbenzene	3.4	17.0	nd
tert-Butylbenzene	3.1	15.5	nd
tert-Butyl ethyl ether (ETBE)	2.7	13.5	nd
Carbon disulfide	5.3	26.5	nd
Carbon Tetrachloride	3.3	16.5	nd
Chlorobenzene	2.4	12.0	nd
Chloroethane	4.8	24.0	nd
2-Chloroethyl vinyl ether	2	10.0	nd
Chloroform	2.3	11.5	nd
Chloromethane	4.7	23.5	nd
2-Chlorotoluene	4.7	23.5	nd
4-Chlorotoluene	4.3	21.5	nd
Dibromochloromethane	4.2	21.0	nd
1,2-Dibromo-3-chloropropane	3.1	15.5	nd
1,2-Dibromoethane	3.6	18.0	nd
Dibromomethane	3.8	19.0	nd
1,2-Dichlorobenzene	4.7	23.5	nd
1,3-Dichlorobenzene	4.9	24.5	nd
1,4-Dichlorobenzene	5	25.0	nd
Dichlorodifluoromethane	5.2	26.0	nd
1,1-Dichloroethane	2.4	12.0	nd
1,2-Dichloroethane	2.8	14.0	nd
1,1-Dichloroethene	4.5	22.5	nd
cis-1,2-Dichloroethene	4.7	23.5	nd
trans-1,2-Dichloroethene	2.3	11.5	nd
1,2-Dichloropropane	2.7	13.5	nd
1,3-Dichloropropane	3.2	16.0	nd
2,2-Dichloropropane	2.9	14.5	nd
1,1-Dichloropropene	2.1	10.5	nd
cis-1,3-Dichloropropene	2.2	11.0	nd
trans-1,3-Dichloropropene	2.8	14.0	nd
Diisopropyl ether (DIPE)	3.2	16.0	nd
Ethylbenzene	3.1	15.5	nd

ENVIRONMENTAL LABORATORY DATA REPORT

COC 04-0177

Report of GC/MS Analysis for Purgeable Volatile Organics
EPA SW-846 Method 8260

005009

PROJECT: CHATSWORTH RESERVOIR Sample Matrix: Soil

Chemistry Log No.	Date Sampled	Date Received	Date Analyzed	Sample Description
Blank	1/28/2004	1/28/2004	1/29/2004	Method Blank

Compounds	MDL ug/kg	PQL ug/kg	Blank Amount ug/kg
Hexachlorobutadiene	4.6	23.0	nd
2-Hexanone	2.2	11.0	nd
Isopropylbenzene	1.9	9.5	nd
p-Isopropyltoluene	2.5	12.5	nd
Methyl-t-butyl ether (MTBE)	3.1	15.5	nd
Methylene chloride	3.9	19.5	nd
Iodomethane	4.9	24.5	nd
Methyl isobutyl ketone (MIBK)	2.3	11.5	nd
Naphthalene	2.7	13.5	nd
Propylbenzene	4.3	21.5	nd
Styrene	2.9	14.5	nd
1,1,1,2-Tetrachloroethane	2.2	11.0	nd
1,1,2,2-Tetrachloroethane	4.4	22.0	nd
Tetrachloroethylene	3.4	17.0	nd
Toluene	2	10.0	nd
1,2,3-Trichlorobenzene	3.3	16.5	nd
1,2,4-Trichlorobenzene	2.8	14.0	nd
1,1,1-Trichloroethane	2.9	14.5	nd
1,1,2-Trichloroethane	4.3	21.5	nd
Trichloroethylene	1.4	7.0	nd
Trichlorofluoromethane	3.5	17.5	nd
1,2,3-Trichloropropane	2.8	14.0	nd
1,2,4-Trimethylbenzene	2.5	12.5	nd
1,3,5-Trimethylbenzene	2.3	11.5	nd
Vinyl acetate	2.4	12.0	nd
Vinyl Chloride (Chloroethene)	3.6	18.0	nd
m & p-Xylene	6.7	33.5	nd
o-Xylene	2.2	11.0	nd

MDL - Method Detection Limit
PQL - Practical Quantitation Limit (5xMDL)

J - Concentration above MDL below PQL
nd - Not Detected; below detection limit

Quality Control Data

Surrogates 30 (ug/L each)	QC Limits % Recovery Lower-Upper	
SURR: Bromofluorobenzene	74 - 121	105.3%
SURR: Dibromofluoromethane	80 - 120	97.0%
SURR: Toluene-d8	81 - 117	114.7%

Comment:

Analyst: Bryan Tiu

Reviewed by: Rose Gentallan

Project No: CHATSWORTH RESERVOIR

(RWQCB LabForm10A;Ver12/94)

Quality Assurance Report

005016

Matrix Spike (MS)/Matrix Spike Duplicate (MSD)

DATE PERFORMED: 1/29/04
BATCH #: LE00760 LE LE00760 LE00761 LE00762 LE00763 LE00764 LE00765 LE00766 LE00767 LE00768 LE00769
LAB SAMPLE I.D.: LE00760

ANALYTICAL METHOD: USEPA 8260
UNIT: ug/kg

ANALYTE	SAMPLE RESULT	SPIKE CONC	MS	%MS	SPIKE CONC (DUP)	MSD	%MSD	RPD	MS/MSD LIMIT	RPD LIMIT
1,1-Dichloroethene	ND	30.0	31.2	104	30.0	29.2	97.3	6.7%	59-172	22%
Benzene	ND	30.0	40.2	134	30.0	37.7	126	6.2%	66-142	21%
Trichloroethylene	ND	30.0	40.6	135	30.0	38.1	127	6.1%	62-137	24%
Toluene	ND	30.0	41.3	138	30.0	38.9	130	6.0%	59-139	21%
Chlorobenzene	ND	30.0	31.6	105	30.0	30.2	101	3.9%	60-133	21%

Laboratory Quality Control Check Sample (LCS)

DATE PERFORMED: 1/29/04
SUPPLY SOURCE:
LOT NUMBER:
DATE OF SOURCE:

ANALYTICAL METHOD: USEPA 8260
LAB LCS I.D.: Q4664
UNIT: ug/kg

ANALYTE	LCS RESULT ug/kg	TRUE VALUE ug/kg	% RECOVERY	Advisory Range
1,1,1-Trichloroethane	19.8	18.2	108.8	12.8 - 22.2
1,1,2,2-Tetrachloroethane	84	82.4	101.9	58.3 - 110
1,1,2-Trichloroethane	78.4	56.2	139.5	43.0 - 70.5
1,1-Dichloroethene	26.6	33.8	78.7	20.8 - 43.6
1,2-Dichlorobenzene	45.5	46.4	98.1	34.6 - 57.5
1,2-Dichloroethane	90.2	74.5	121.1	56.5 - 93.9
1,2-Dichloropropane	120	91.1	131.7	68.4 - 111
1,3-Dichlorobenzene	13.2	13.8	95.7	9.96 - 16.8
1,4-Dichlorobenzene	23.3	24.2	96.3	17.9 - 30.0
Acetone	165	156	105.8	69.6 - 240
Benzene	69.8	57.4	121.6	43.5 - 70.0
Bromodichloromethane	50.8	35.3	143.9	27.5 - 45.2
Bromoform	84.7	71.8	118.0	51.4 - 93.3
Carbon Tetrachloride	39.5	29.1	135.7	18.6 - 36.4
Chlorobenzene	27.6	27.5	100.4	21.4 - 33.0
Chloroform	30.9	26.4	117.0	19.9 - 32.5
Dibromochloromethane	71.8	47.4	151.5	35.8 - 59.3
Ethylbenzene	31.5	31.7	99.4	23.1 - 38.7
Methyl isobutyl ketone (MIBK)	153	129	118.6	76.9 - 174
Methylene chloride	42.3	41.4	102.2	27.9 - 53.8
o-Xylene	127	124	102.4	86.6 - 155
Tetrachloroethylene	80.7	63.7	126.7	40.8 - 75.8

Analyst: B. Tiu

Reviewed by: R. Gentallen

ANALYTICAL METHOD QA/QC SUMMARY

006001

Table 1
Analytical Method Summary
LADWP Environmental Laboratory

Project: CHATSWORTH RESERVOIR

Analytical Group	Media	Analytes	Extraction or Sample Preparation Method	Analytical Method	Measurement Accuracy (% Recovery)	Measurement Precision (% RPD)	LCS Accuracy (% Recovery)	Field Duplicate Precision (% RPD)	Completeness (%)	MDL/PQL (ug/kg)
Volatile Organic Compounds (VOCs)	Soil	Acetone	5035	8260B	-		45 - 154	<30%	100%	8.5/43
	Soil	Acrolein	5035	8260B	-		--			
	Soil	Acrylonitrile	5035	8260B	-		--			
	Soil	tert-Amyl methyl ether	5035	8260B	-		--			2.7/14
	Soil	Benzene	5035	8260B	66 -142	<21%	75 - 121	<30%	100%	2.6/13
	Soil	Bromobenzene	5035	8260B	-		--			2.9/15
	Soil	Bromochloromethane	5035	8260B	-		--			2.4/12
	Soil	Bromodichloromethane	5035	8260B	-		75 - 125	<30%	0%*	3.9/20
	Soil	Bromoform	5035	8260B	-		71 - 137	<30%	100%	3.6/18
	Soil	Bromomethane	5035	8260B	-		--			2.2/11
	Soil	2-Butanone (MEK)	5035	8260B	-		--			3.4/17
	Soil	tert-Butyl alcohol (TBA)	5035	8260B	-		--			21.6/108
	Soil	Butylbenzene	5035	8260B	-		--			2.5/13
	Soil	sec-Butylbenzene	5035	8260B	-		--			3.4/17
	Soil	tert-Butylbenzene	5035	8260B	-		--			3.1/16
	Soil	tert-Butyl ethyl ether (ETBE)	5035	8260B	-		--			2.7/14
	Soil	Carbon disulfide	5035	8260B	-		--			5.3/27
	Soil	Carbon Tetrachloride	5035	8260B	-		63 - 125	<30%	0%*	3.3/17
	Soil	Chlorobenzene	5035	8260B	60 - 133	<21%	77 - 120	<30%	100%	2.4/12
	Soil	Chloroethane	5035	8260B	-		--			4.8/24
	Soil	2-Chloroethyl vinyl ether	5035	8260B	-		--			2.0/10
	Soil	Chloroform	5035	8260B	-		75 - 123	<30%	100%	2.3/12
	Soil	Chloromethane	5035	8260B	-		--			4.7/24
	Soil	2-Chlorotoluene	5035	8260B	-		--			4.7/24
	Soil	4-Chlorotoluene	5035	8260B	-		--			4.3/22
	Soil	Dibromochloromethane	5035	8260B	-		75 - 125	<30%	0%*	4.2/21
	Soil	1,2-Dibromo-3-chloropropane	5035	8260B	-		--			3.1/16
	Soil	1,2-Dibromoethane (EDB)	5035	8260B	-		--			3.6/18

- Indicates a compound not included in the spike solution.

-- Indicates a compound not included in the LCS solution.

0%* - based on one batch

Table 1
Analytical Method Summary
LADWP Environmental Laboratory

Project: CHATSWORTH RESERVOIR

Analytical Group	Media	Analyte	Extraction/ Sample Preparation Method	Analytical Method	Measurement of Accuracy (% Recovery)	Measurement of Precision (% RPD)	LCS/ LCSD Acceptance (% Recovery)	Field Duplicate Precision (% RPD)	Completeness (%)	MDL/PQL (ug/kg)
Volatile Organic Compounds (VOCs)	Soil	Acetone	5035	8260B	-		45 - 154	<30%	100%	8.5/43
	Soil	Acrolein	5035	8260B	-		--			
	Soil	Acrylonitrile	5035	8260B	-		--			
	Soil	tert-Amyl methyl ether	5035	8260B	-		--			2.7/14
	Soil	Benzene	5035	8260B	66 -142	<21%	75 - 121	<30%	100%	2.6/13
	Soil	Bromobenzene	5035	8260B	-		--			2.9/15
	Soil	Bromochloromethane	5035	8260B	-		--			2.4/12
	Soil	Bromodichloromethane	5035	8260B	-		75 - 125	<30%	0%*	3.9/20
	Soil	Bromoform	5035	8260B	-		71 - 137	<30%	100%	3.6/18
	Soil	Bromomethane	5035	8260B	-		--			2.2/11
	Soil	2-Butanone (MEK)	5035	8260B	-		--			3.4/17
	Soil	tert-Butyl alcohol (TBA)	5035	8260B	-		--			21.6/108
	Soil	Butylbenzene	5035	8260B	-		--			2.5/13
	Soil	sec-Butylbenzene	5035	8260B	-		--			3.4/17
	Soil	tert-Butylbenzene	5035	8260B	-		--			3.1/16
	Soil	tert-Butyl ethyl ether (ETBE)	5035	8260B	-		--			2.7/14
	Soil	Carbon disulfide	5035	8260B	-		--			5.3/27
	Soil	Carbon Tetrachloride	5035	8260B	-		63 - 125	<30%	0%*	3.3/17
	Soil	Chlorobenzene	5035	8260B	60 - 133	<21%	77 - 120	<30%	100%	2.4/12
	Soil	Chloroethane	5035	8260B	-		--			4.8/24
	Soil	2-Chloroethyl vinyl ether	5035	8260B	-		--			2.0/10
	Soil	Chloroform	5035	8260B	-		75 - 123	<30%	100%	2.3/12
	Soil	Chloromethane	5035	8260B	-		--			4.7/24
	Soil	2-Chlorotoluene	5035	8260B	-		--			4.7/24
	Soil	4-Chlorotoluene	5035	8260B	-		--			4.3/22
	Soil	Dibromochloromethane	5035	8260B	-		75 - 125	<30%	0%*	4.2/21
	Soil	1,2-Dibromo-3-chloropropane	5035	8260B	-		--			3.1/16
	Soil	1,2-Dibromoethane (EDB)	5035	8260B	-		--			3.6/18

- Indicates a compound not included in the spike solution.

-- Indicates a compound not included in the LCS solution.

0%* - based on one batch

Table 1
Analytical Method Summary
LADWP Environmental Laboratory

Analytical Group*	Media	Analyte	Extraction/ Sample Preparation Method	Analytical Method	Measurement Accuracy (% Recovery)	Measurement Precision (% RPD)	LCS Accuracy (% Recovery)	Field Duplicate Precision (% RPD)	Completeness (%)	MDL/PQL (ug/kg)
Volatile Organic Compounds (VOCs)	Soil	Dibromomethane	5035	8260B	-		--			3.8/19
	Soil	1,2-Dichlorobenzene	5035	8260B	-		74 - 123	<30%	100%	4.7/24
	Soil	1,3-Dichlorobenzene	5035	8260B	-		72 - 121	<30%	100%	4.9/25
	Soil	1,4-Dichlorobenzene	5035	8260B	-		74 - 123	<30%	100%	5.0/25
	Soil	Dichlorodifluoromethane	5035	8260B	-		--			5.2/26
	Soil	1,1-Dichloroethane	5035	8260B	-		--			2.4/12
	Soil	1,2-Dichloroethane	5035	8260B	-		74 - 123	<30%	100%	2.8/14
	Soil	1,1-Dichloroethene	5035	8260B	59 - 172	<22%	61 - 128	<30%	100%	4.5/23
	Soil	cis-1,2-Dichloroethene	5035	8260B	-		--			4.7/24
	Soil	trans-1,2-Dichloroethene	5035	8260B	-		--			2.3/12
	Soil	1,2-Dichloropropane	5035	8260B	-		75 - 121	<30%	0%*	2.7/14
	Soil	1,3-Dichloropropane	5035	8260B	-		--			3.2/16
	Soil	2,2-Dichloropropane	5035	8260B	-		--			2.9/15
	Soil	1,1-Dichloropropene	5035	8260B	-		--			2.1/11
	Soil	cis-1,3-Dichloropropene	5035	8260B	-		--			2.2/11
	Soil	trans-1,3-Dichloropropene	5035	8260B	-		--			2.8/14
	Soil	Diisopropyl ether (DIPE)	5035	8260B	-		--			3.2/16
	Soil	Ethylbenzene	5035	8260B	-		72 - 122	<30%	100%	3.1/16
	Soil	Hexachlorobutadiene	5035	8260B	-		--			4.6/23
	Soil	2-Hexanone	5035	8260B	-		--			2.2/11
	Soil	Isopropylbenzene	5035	8260B	-		--			1.9/10
	Soil	p-Isopropyltoluene	5035	8260B	-		--			2.5/13
	Soil	Methyl-t-butyl ether (MTBE)	5035	8260B	-		--			3.1/16
	Soil	Methylene chloride	5035	8260B	-		67 - 130	<30%	100%	3.9/20
	Soil	Methyl iodide (Iodomethane)	5035	8260B	-		--			4.9/25
	Soil	Methyl Iso Butyl Ketone*	5035	8260B	-		59 - 134	<30%	0%*	2.3/12
	Soil	4-Methyl-2-pentanone	5035	8260B	-		--			2.3/12
	Soil	Naphthalene	5035	8260B	-		--			2.7/14
	Soil	Propylbenzene	5035	8260B	-		--			4.3/22

0%* - based on one batch

- Indicates a compound not included in the spike solution.

-- Indicates a compound not included in the LCS solution.

006004

Table 1
Analytical Method Summary
LADWP Environmental Laboratory

Analytical Group	Media	Analyte	Extraction/ Sample Preparation Method	Analytical Method	Measurement Accuracy (% Recovery)	Measurement Precision (% RPD)	LCS Accuracy (% Recovery)	MS/D Duplicate Precision (%RPD)	Completeness (%)	MDL/PQL (µg/kg)
Volatile Organic Compounds (VOCs)	SOIL	Styrene (Phenylethylene)	5035	8260B	-		--			2.9/15
	SOIL	1,1,1,2-Tetrachloroethane	5035	8260B	-		--			2.2/11
	SOIL	1,1,2,2-Tetrachloroethane	5035	8260B	-		70 - 133	<30%	0%*	4.4/22
	SOIL	Tetrachloroethylene (PCE)	5035	8260B	-		64 - 119	<30%	100%	3.4/17
	SOIL	Toluene	5035	8260B	59 - 139	<21%	--		100%	2.0/10
	SOIL	1,2,3-Trichlorobenzene	5035	8260B	-		--			3.3/17
	SOIL	1,2,4-Trichlorobenzene	5035	8260B	-		--			2.8/14
	SOIL	1,1,1-Trichloroethane	5035	8260B	-		70 - 122	<30%	100%	2.9/15
	SOIL	1,1,2-Trichloroethane	5035	8260B	-		76 - 125	<30%	0%*	4.3/22
	SOIL	Trichloroethylene (TCE)	5035	8260B	62 - 137	<24%	--		100%	1.4/7
	SOIL	Trichlorofluoromethane	5035	8260B	-		--			3.5/18
	SOIL	1,2,3-Trichloropropane	5035	8260B	-		--			2.8/14
	SOIL	1,2,4-Trimethylbenzene	5035	8260B	-		--			2.5/13
	SOIL	1,3,5-Trimethylbenzene	5035	8260B	-		--			2.3/12
	SOIL	Vinyl acetate	5035	8260B	-		--			2.4/12
	SOIL	Vinyl Chloride	5035	8260B	-		--			3.6/18
	SOIL	m & p-Xylene	5035	8260B	-		--			6.7/34
	SOIL	o-Xylene	5035	8260B	-		69 - 125	<30%	100%	2.2/11
Surrogates:										
BFB[1]	SOIL		5035	8260B	70 - 130	<30%	--	<30%	100%	
DBFM[2]	SOIL		5035	8260B	70 - 130	<30%	--	<30%	100%	
Toluene-d8	SOIL		5035	8260B	70 - 130	<30%	--	<30%	100%	

(1) 4-Bromofluorobenzene

(2) Dibromofluoromethane

- Indicates a compound not included in the spike solution.

-- Indicates a compound not included in the LCS solution.

NA - Not Applicable

0%* - based on one batch

Table 2
Analytical Method Summary
West Coast Analytical Services, Inc

Analytical Group	Media	Analyte	Extraction / Sample Preparation Method	Analytical Method	Measurement Accuracy (% Recovery)	Measurement Precision (%RPD)	LCS Accuracy (% Recovery)	Field Duplicate Precision (%RPD)	Completeness (%)	MDL / PQL (mg/kg)
Biphenyls (PCBs)	SOIL	Aroclor 1221	3541	8082A	-		--			0.01 / 0.05
	SOIL	Aroclor 1232	3541	8082A	-		--			0.01 / 0.05
	SOIL	Aroclor 1242	3541	8082A	59 - 130	<30%	--		100%	0.01 / 0.05
	SOIL	Aroclor 1248	3541	8082A	-		70 - 130		100%	0.01 / 0.05
	SOIL	Aroclor 1254	3541	8082A	-		--			0.01 / 0.05
	SOIL	Aroclor 1260	3541	8082A	59 - 130	<30%	--		100%	0.01 / 0.05
Surrogates:	SOIL									
TCMX[3]	SOIL		3541	8082A	-		--			
DCBP[4]	SOIL		3541	8082A	60 - 150	<30%	--	<30%	100%	
Petroleum Hydrocarbons	SOIL	TRPH	418.1	418.1						
	SOIL	TEPH (C_9 - C_{36})	3541	8015M	77 -122	<30%	49 -123	<30%	100%	0.4 / 2.0
	SOIL	TPH - diesel range	3541	8015M						
	SOIL	TPH - gasoline range	8015B	8015B						
Surrogates:										
Chlorooctadecane	SOIL	TEPH (C_9 - C_{36})	3541	8015M	65 - 135	<30%	--	<30%	100%	
TFT[5]	SOIL		8015B	8015B						
BFB[6]	SOIL		8015B	8015B						

(3) Tetrachloro-m-xylene
(4) Decachlorobiphenyl
(5) Trifluorotoluene
(6) 4-Bromofluorobenzene
- Indicates a compound not included in the spike solution.
-- Indicates a compound not included in the LCS solution.

900900

Table 3
Analytical Method Summary
LADWP Environmental Laboratory

Analytical Group	Media	Analyte	Extraction/ Sample Preparation Method	Analytical Method	Measurement Accuracy (% Recovery)	Measurement Precision (% RPD)	LCS Accuracy (% Recovery)	Field Duplicate Precision (% RPD)	Completeness (%)	MDL / PQL (mg/kg)
Metals	SOIL	Aluminum	3050	6010B	-		31 - 169	<30	100%	
	SOIL	Antimony	3050	6010B	70 - 130	<30	22 - 178	<30	100%	0.8 / 4.0
	SOIL	Arsenic	3050	6010B	70 - 130	<30	79 - 121	<30	67%	1.0 / 5.0
	SOIL	Barium	3050	6010B	-		79 - 120	<30	0%*	0.5 / 2.5
	SOIL	Beryllium	3050	6010B	70 - 130	<30	81 - 120	<30	100%	0.3 / 1.5
	SOIL	Cadmium	3050	6010B	70 - 130	<30	80 - 119	<30	67%	0.6 / 3.0
	SOIL	Calcium	3050	6010B	-		--			
	SOIL	Chromium	3050	6010B	70 - 130	<30	77 - 123	<30	67%	0.3 / 1.5
	SOIL	Cobalt	3050	6010B	70 - 130	<30	85 - 115	<30	67%	0.2 / 1.0
	SOIL	Copper	3050	6010B	70 - 130	<30	80 - 121	<30	100%	0.2 / 1.0
	SOIL	Iron	3050	6010B	-		--			
	SOIL	Lead	3050	6010B	70 - 130	<30	77 - 127	<30	67%	0.9 / 4.5
	SOIL	Magnesium	3050	6010B	-		--			
	SOIL	Manganese	3050	6010B	-		--			
	SOIL	Mercury	3050	7471	70 - 130	<30	70 - 130	<30	100%	0.02 / 0.1
	SOIL	Molybdenum	3050	6010B	70 - 130	<30	79 - 121	<30	67%	0.2 / 1.0
	SOIL	Nickel	3050	6010B	70 - 130	<30	78 - 122	<30	67%	0.4 / 2.0
	SOIL	Potassium	3050	6010B	-		--			
	SOIL	Selenium	3050	6010B	70 - 130	<30	72 - 130	<30	90%	0.7 / 3.5
	SOIL	Silver	3050	6010B	70 - 130	<30	55 - 145	<30	67%	2.5 / 12.5
	SOIL	Sodium	3050	6010B	-		--			
	SOIL	Thallium	3050	6010B	-		66 - 134	<30	0%*	2.5 / 12.5
	SOIL	Vanadium	3050	6010B	70 - 130	<30	70 - 130	<30	100%	0.3 / 1.5
	SOIL	Zinc	3050	6010B	70 - 130	<30	77 - 123	<30	100%	0.3 / 1.5

- Indicates a compound not included in the spike solution.

-- Indicates a compound not included in the LCS solution.

0%* - based on one batch

Table 4
Analytical Method Summary
LADWP Environmental Laboratory

Analytical Group	Media	Analyte	Extraction/ Sample Preparation Method	Analytical Method	Measurement Accuracy (% Recovery)	Measurement Precision (% RPD)	LCS Accuracy (% Recovery)	Field Duplicate Precision (% RPD)	Completeness (%)	MDL/POL (ug/kg)
Organic Compounds (SVOC)	SOIL	Acenaphthene	3541	8270C	31 - 137	<30			100%	37 / 186
	SOIL	Acenaphthylene	3541	8270C						49 / 245
	SOIL	Anthracene	3541	8270C						12 / 62
	SOIL	Aniline	3541	8270C						105 / 527
	SOIL	Azobezene	3541	8270C						39 / 194
	SOIL	Benzidine*	3541	8270C						651 / 3255
	SOIL	Benzoic acid*	3541	8270C						435 / 2175
	SOIL	Benzo(a)anthracene	3541	8270C						31 / 156
	SOIL	Benzo(b)flouranthene	3541	8270C			29 - 171	<30	0%*	13 / 64
	SOIL	Benzo(k)flouranthene	3541	8270C						164 / 820
	SOIL	Benzo(g,h,i)perylene	3541	8270C						23 / 115
	SOIL	Benzo(a)pyrene	3541	8270C			35 - 165	<30	100%	29 / 147
	SOIL	Benzyl alcohol	3541	8270C						50 / 248
	SOIL	Bis(2-chloroethoxy)methane	3541	8270C						49 / 248
	SOIL	Bis(2-chloroethyl)ether	3541	8270C						74 / 369
	SOIL	Bis(2-chloroisopropyl)ether	3541	8270C						107 / 533
	SOIL	Bis(2-ethylhexyl)phthalate	3541	8270C			14 - 186	<30	100%	78 / 392
	SOIL	4-Bromophenyl-phenylether	3541	8270C						34 / 170
	SOIL	Benzyl butyl phthalate	3541	8270C						50 / 251
	SOIL	Carbazole	3541	8270C						54 / 271
	SOIL	4-Chloroaniline	3541	8270C						31 / 157
	SOIL	2-Chloronaphthalene	3541	8270C						54 / 268
	SOIL	4-Chloro-3-methylphenol	3541	8270C	26 - 103	<30			100%	54 / 269
	SOIL	2-Chlorophenol	3541	8270C	25 - 102	<30			100%	49 / 243
	SOIL	4-Chlorophenyl-phenylether	3541	8270C						51 / 255
	SOIL	Chrysene	3541	8270C			19 - 180	<30	100%	14 / 70
	SOIL	3,3-Dichlorobenzidine	3541	8270C						65 / 326
	SOIL	Dibenz(a,h)anthracene	3541	8270C						76 / 379
	SOIL	Dibenzofuran	3541	8270C						41 / 205
	SOIL	Di-n-Butylphthalate	3541	8270C						78 / 390
	SOIL	1,3-Dichlorobenzene	3541	8270C						65 / 324
	SOIL	1,4-Dichlorobenzene	3541	8270C	28 - 104	<30			100%	59 / 294
	SOIL	1,2-Dichlorobenzene	3541	8270C						73 / 367
	SOIL	2,4-Dichlorophenol	3541	8270C						32 / 161
	SOIL	Diethyl phthalate	3541	8270C						41 / 205
	SOIL	2,4-Dimethylphenol	3541	8270C						98 / 491
	SOIL	Dimethyl phthalate	3541	8270C						27 / 137
	SOIL	4,6-Dinitro-2-methylphenol	3541	8270C						62 / 310
	SOIL	2,4-Dinitrophenol	3541	8270C			0 - 287	<30	100%	84 / 419
	SOIL	2,4-Dinitrotoluene	3541	8270C	28 - 29	<30	28 - 171	<30	100%	45 / 226

* Erratic Chromatographic Behavior 0%** - based on one batch

300900

Table 4
Analytical Method Summary
LADWP Environmental Laboratory

Analytical Group	Media	Analyte	Extraction/ Sample Preparation Method	Analytical Method	Measurement Accuracy (% Recovery)	Measurement Precision (% RPD)	LCS Accuracy (% Recovery)	Field Duplicate Precision (% RPD)	Completeness (%)	MDL/PQL (ug/kg)
Organic Compounds (SVOC)	SOIL	2,6-Dinitrotoluene	3541	8270C						28 / 139
	SOIL	Di-n-0ctylphthalate	3541	8270C						78 / 390
	SOIL	Flouranthene	3541	8270C			18 - 181	<30	100%	30 / 149
	SOIL	Flourene	3541	8270C			41 - 158	<30	100%	38 / 188
	SOIL	Hexachlorobenzene	3541	8270C			50 - 150	<30	100%	9 / 46
	SOIL	Hexachlorobutadiene	3541	8270C						64 /319
	SOIL	Hexachlorocyclopentadiene	3541	8270C						47 / 233
	SOIL	Hexachloroethane	3541	8270C			27 - 174	<30	100%	58 / 291
	SOIL	Indeno(1,2,3-cd)pyrene	3541	8270C						39 / 193
	SOIL	Isophorone	3541	8270C						33 / 165
	SOIL	2-Methylnaphthalene	3541	8270C						28 / 139
	SOIL	2-Methylphenol	3541	8270C						39 / 194
	SOIL	4-Methylphenol	3541	8270C			0 - 198	<30	100%	59 / 297
	SOIL	Naphthalene	3541	8270C						55 / 275
	SOIL	2-Nitroaniline	3541	8270C			27 - 174	<30	100%	16 / 82
	SOIL	3-Nitroaniline	3541	8270C			0 - 212	<30	100%	35 / 174
	SOIL	4-Nitroaniline	3541	8270C						49 / 244
	SOIL	Nitrobenzene	3541	8270C			27 - 173	<30	100%	69 / 344
	SOIL	2-Nitrophenol	3541	8270C						48 / 240
	SOIL	4-Nitrophenol	3541	8270C	11 - 114	<30	0 - 226	<30	20%	36 / 182
	SOIL	N-Nitrosodimethylamine	3541	8270C						79 / 397
	SOIL	N-Nitrosodiphenylamine	3541	8270C						61 / 305
	SOIL	N-Nitrosodi-n-propylamine	3541	8270C	26 - 103	<30			100%	48 / 242
	SOIL	Pentachlorophenol	3541	8270C	17 - 109	<30			100%	36 / 180
	SOIL	Phenanthrene	3541	8270C						15 / 77
	SOIL	Phenol	3541	8270C	26 - 90	<30			100%	88 / 441
	SOIL	Pyrene	3541	8270C	35 - 142	<30	8 - 192	<30	100%	34 / 172
	SOIL	Pyridine*	3541	8270C						167/ 836
	SOIL	1,2,4-Trichlorobenzene	3541	8270C	38 - 107	<30			100%	73 / 364
	SOIL	2,4,5-Trichlorophenol	3541	8270C						51 / 256
	SOIL	2,4,6-Trichlorophenol	3541	8270C						30 / 148
Surrogates:	SOIL	Nittrobenzidine-d5	3541	8270C	23 - 120	<30		<30	100%	
	SOIL	2-Fluorobiphenyl	3541	8270C	30 - 115	<30		<30	100%	
	SOIL	Terphenyl-d14	3541	8270C	18 - 137	<30		<30	100%	
	SOIL	Phenol-d6	3541	8270C	24 - 113	<30		<30	92%	
	SOIL	2-Fluorophenol	3541	8270C	25 - 121	<30		<30	100%	
	SOIL	2,4,6-Tribromophenol	3541	8270C	19 - 122	<30		<30	100%	

* Erratic Chromatographic Behavior

Calscience Environmental Laboratories, Inc.

April 02, 2004

Ken Floom
Essentia Management Service
5000 East Spring Street, Suite 720
Long Beach, CA 90815-1270

Subject: **Calscience Work Order No.:** **04-03-1493**
Client Reference: **LADWP-Chatsworth Resrvoir**

Dear Client:

Enclosed is an analytical report for the above-referenced project. The samples included in this report were received 3/24/2004 and analyzed in accordance with the attached chain-of-custody.

Unless otherwise noted, all analytical testing was accomplished in accordance with the guidelines established in our Quality Assurance Program Manual, applicable standard operating procedures, and other related documentation. The original report of any subcontracted analysis is provided herein, and follows the standard Calscience data package. The results in this analytical report are limited to the samples tested and any reproduction thereof must be made in its entirety.

If you have any questions regarding this report, please do not hesitate to contact the undersigned.

Sincerely,

Calscience Environmental
Laboratories, Inc.
Stephen Nowak
Project Manager

Michael J. Crisostomo
Quality Assurance Manager

Calscience Environmental Laboratories, Inc.

Analytical Report

Essentia Management Service
5000 East Spring Street, Suite 720
Long Beach, CA 90815-1270

Date Received: 03/24/04
Work Order No: 04-03-1493
Preparation: N/A
Method: EPA 314.0

Project: LADWP-Chatsworth Resrvoir

Client Sample Number	Lab Sample Number	Date Collected	Matrix	Date Prepared	Date Analyzed	QC Batch ID
B5-W	04-03-1493-1	03/24/04	Aqueous	N/A	03/26/04	040325L01

Parameter	Result	RL	DF	Qual	Units
Perchlorate	ND	2.0	1		ug/L

Client Sample Number	Lab Sample Number	Date Collected	Matrix	Date Prepared	Date Analyzed	QC Batch ID
B4-W	04-03-1493-2	03/24/04	Aqueous	N/A	03/26/04	040325L01

Parameter	Result	RL	DF	Qual	Units
Perchlorate	ND	2.0	1		ug/L

Client Sample Number	Lab Sample Number	Date Collected	Matrix	Date Prepared	Date Analyzed	QC Batch ID
B2-W	04-03-1493-3	03/24/04	Aqueous	N/A	03/26/04	040325L01

Parameter	Result	RL	DF	Qual	Units
Perchlorate	ND	2.0	1		ug/L

Client Sample Number	Lab Sample Number	Date Collected	Matrix	Date Prepared	Date Analyzed	QC Batch ID
B3-W	04-03-1493-4	03/24/04	Aqueous	N/A	03/26/04	040325L01

Parameter	Result	RL	DF	Qual	Units
Perchlorate	ND	2.0	1		ug/L

Client Sample Number	Lab Sample Number	Date Collected	Matrix	Date Prepared	Date Analyzed	QC Batch ID
Method Blank	099-05-203-136	N/A	Aqueous	N/A	03/25/04	040325L01

Parameter	Result	RL	DF	Qual	Units
Perchlorate	ND	2.0	1		ug/L

RL - Reporting Limit , DF - Dilution Factor , Qual - Qualifiers

Calscience Environmental Laboratories, Inc.

Analytical Report

Essentia Management Service
5000 East Spring Street, Suite 720
Long Beach, CA 90815-1270

Date Received: 03/24/04
Work Order No: 04-03-1493
Preparation: N/A
Method: EPA 7199

Project: LADWP-Chatsworth Resrvoir

Client Sample Number	Lab Sample Number	Date Collected	Matrix	Date Prepared	Date Analyzed	QC Batch ID
B5-W	04-03-1493-1	03/24/04	Aqueous	N/A	03/24/04	40324CRL1

Parameter	Result	RL	DF	Qual	Units
Chromium, Hexavalent	ND	1.0	1		ug/L

Client Sample Number	Lab Sample Number	Date Collected	Matrix	Date Prepared	Date Analyzed	QC Batch ID
B4-W	04-03-1493-2	03/24/04	Aqueous	N/A	03/24/04	40324CRL1

Parameter	Result	RL	DF	Qual	Units
Chromium, Hexavalent	ND	1.0	1		ug/L

Client Sample Number	Lab Sample Number	Date Collected	Matrix	Date Prepared	Date Analyzed	QC Batch ID
B2-W	04-03-1493-3	03/24/04	Aqueous	N/A	03/24/04	40324CRL1

Parameter	Result	RL	DF	Qual	Units
Chromium, Hexavalent	ND	1.0	1		ug/L

Client Sample Number	Lab Sample Number	Date Collected	Matrix	Date Prepared	Date Analyzed	QC Batch ID
B3-W	04-03-1493-4	03/24/04	Aqueous	N/A	03/24/04	40324CRL1

Parameter	Result	RL	DF	Qual	Units
Chromium, Hexavalent	ND	1.0	1		ug/L

Client Sample Number	Lab Sample Number	Date Collected	Matrix	Date Prepared	Date Analyzed	QC Batch ID
Method Blank	099-05-123-1,331	N/A	Aqueous	N/A	03/24/04	40324CRL1

Parameter	Result	RL	DF	Qual	Units
Chromium, Hexavalent	ND	1.0	1		ug/L

RL - Reporting Limit , DF - Dilution Factor , Qual - Qualifiers

Calscience Environmental Laboratories, Inc.

Analytical Report

Essentia Management Service
5000 East Spring Street, Suite 720
Long Beach, CA 90815-1270

Date Received: 03/24/04
Work Order No: 04-03-1493
Preparation: EPA 3510C
Method: TPH - Carbon Range

Project: LADWP-Chatsworth Resrvoir

Client Sample Number	Lab Sample Number	Date Collected	Matrix	Date Prepared	Date Analyzed	QC Batch ID
B5-W	04-03-1493-1	03/24/04	Aqueous	03/25/04	03/25/04	040325B04

Parameter	Result	RL	DF	Qual	Units	Parameter	Result	RL	DF	Qual	Units
C7	ND		1		ug/L	C19-C20	ND		1		ug/L
C8	ND		1		ug/L	C21-C22	ND		1		ug/L
C9-C10	ND		1		ug/L	C23-C24	ND		1		ug/L
C11-C12	ND		1		ug/L	C25-C28	ND		1		ug/L
C13-C14	ND		1		ug/L	C29-C32	ND		1		ug/L
C15-C16	ND		1		ug/L	C33-C36	ND		1		ug/L
C17-C18	ND		1		ug/L	C7-C36 Total	ND	1000	1		ug/L

Surrogates:	REC (%)	Control Limits	Qual
Decachlorobiphenyl	86	51-141	

Client Sample Number	Lab Sample Number	Date Collected	Matrix	Date Prepared	Date Analyzed	QC Batch ID
B4-W	04-03-1493-2	03/24/04	Aqueous	03/25/04	03/26/04	040325B04

Parameter	Result	RL	DF	Qual	Units	Parameter	Result	RL	DF	Qual	Units
C7	ND		1		ug/L	C19-C20	ND		1		ug/L
C8	ND		1		ug/L	C21-C22	ND		1		ug/L
C9-C10	ND		1		ug/L	C23-C24	ND		1		ug/L
C11-C12	ND		1		ug/L	C25-C28	ND		1		ug/L
C13-C14	ND		1		ug/L	C29-C32	ND		1		ug/L
C15-C16	ND		1		ug/L	C33-C36	ND		1		ug/L
C17-C18	ND		1		ug/L	C7-C36 Total	ND	1000	1		ug/L

Surrogates:	REC (%)	Control Limits	Qual
Decachlorobiphenyl	92	51-141	

Client Sample Number	Lab Sample Number	Date Collected	Matrix	Date Prepared	Date Analyzed	QC Batch ID
B2-W	04-03-1493-3	03/24/04	Aqueous	03/25/04	03/26/04	040325B04

Parameter	Result	RL	DF	Qual	Units	Parameter	Result	RL	DF	Qual	Units
C7	ND		1		ug/L	C19-C20	ND		1		ug/L
C8	ND		1		ug/L	C21-C22	ND		1		ug/L
C9-C10	ND		1		ug/L	C23-C24	ND		1		ug/L
C11-C12	ND		1		ug/L	C25-C28	ND		1		ug/L
C13-C14	ND		1		ug/L	C29-C32	ND		1		ug/L
C15-C16	ND		1		ug/L	C33-C36	ND		1		ug/L
C17-C18	ND		1		ug/L	C7-C36 Total	ND	1000	1		ug/L

Surrogates:	REC (%)	Control Limits	Qual
Decachlorobiphenyl	87	51-141	

RL - Reporting Limit , DF - Dilution Factor , Qual - Qualifiers

Calscience Environmental Laboratories, Inc.

Analytical Report

Essentia Management Service
5000 East Spring Street, Suite 720
Long Beach, CA 90815-1270

Date Received: 03/24/04
Work Order No: 04-03-1493
Preparation: EPA 3510C
Method: TPH - Carbon Range

Project: LADWP-Chatsworth Resrvoir

Client Sample Number	Lab Sample Number	Date Collected	Matrix	Date Prepared	Date Analyzed	QC Batch ID
B3-W	04-03-1493-4	03/24/04	Aqueous	03/25/04	03/26/04	040325B04

Parameter	Result	RL	DF	Qual	Units	Parameter	Result	RL	DF	Qual	Units
C7	ND		1		ug/L	C19-C20	ND		1		ug/L
C8	ND		1		ug/L	C21-C22	ND		1		ug/L
C9-C10	ND		1		ug/L	C23-C24	ND		1		ug/L
C11-C12	ND		1		ug/L	C25-C28	ND		1		ug/L
C13-C14	ND		1		ug/L	C29-C32	ND		1		ug/L
C15-C16	ND		1		ug/L	C33-C36	ND		1		ug/L
C17-C18	ND		1		ug/L	C7-C36 Total	ND	1000	1		ug/L

Surrogates:	REC (%)	Control Limits	Qual
Decachlorobiphenyl	91	51-141	

Method Blank	098-03-003-2,046	N/A	Aqueous	03/25/04	03/25/04	040325B04

Parameter	Result	RL	DF	Qual	Units
TPH as Diesel	ND	1000	1		ug/L

Surrogates:	REC (%)	Control Limits	Qual
Decachlorobiphenyl	103	51-141	

RL - Reporting Limit , DF - Dilution Factor , Qual - Qualifiers

Calscience Environmental Laboratories, Inc.

Analytical Report

Essentia Management Service	Date Received: 03/24/04
5000 East Spring Street, Suite 720	Work Order No: 04-03-1493
Long Beach, CA 90815-1270	Preparation: EPA 3520B
	Method: EPA 8082

Project: LADWP-Chatsworth Resrvoir

Client Sample Number	Lab Sample Number	Date Collected	Matrix	Date Prepared	Date Analyzed	QC Batch ID
B5-W	04-03-1493-1	03/24/04	Aqueous	03/29/04	03/31/04	040329L09

Parameter	Result	RL	DF	Qual	Units	Parameter	Result	RL	DF	Qual	Units
Aroclor-1016	ND	1.0	1		ug/L	Aroclor-1248	ND	1.0	1		ug/L
Aroclor-1221	ND	1.0	1		ug/L	Aroclor-1254	ND	1.0	1		ug/L
Aroclor-1232	ND	1.0	1		ug/L	Aroclor-1260	ND	1.0	1		ug/L
Aroclor-1242	ND	1.0	1		ug/L	Aroclor-1262	ND	1.0	1		ug/L

Surrogates:	REC (%)	Control Limits	Qual	Surrogates:	REC (%)	Control Limits	Qual
Decachlorobiphenyl	29	50-135	2	2,4,5,6-Tetrachloro-m-Xylene	87	50-135	

Client Sample Number	Lab Sample Number	Date Collected	Matrix	Date Prepared	Date Analyzed	QC Batch ID
B4-W	04-03-1493-2	03/24/04	Aqueous	03/29/04	03/31/04	040329L09

Parameter	Result	RL	DF	Qual	Units	Parameter	Result	RL	DF	Qual	Units
Aroclor-1016	ND	1.0	1		ug/L	Aroclor-1248	ND	1.0	1		ug/L
Aroclor-1221	ND	1.0	1		ug/L	Aroclor-1254	ND	1.0	1		ug/L
Aroclor-1232	ND	1.0	1		ug/L	Aroclor-1260	ND	1.0	1		ug/L
Aroclor-1242	ND	1.0	1		ug/L	Aroclor-1262	ND	1.0	1		ug/L

Surrogates:	REC (%)	Control Limits	Qual	Surrogates:	REC (%)	Control Limits	Qual
Decachlorobiphenyl	36	50-135	2	2,4,5,6-Tetrachloro-m-Xylene	85	50-135	

Client Sample Number	Lab Sample Number	Date Collected	Matrix	Date Prepared	Date Analyzed	QC Batch ID
B2-W	04-03-1493-3	03/24/04	Aqueous	03/29/04	03/31/04	040329L09

Parameter	Result	RL	DF	Qual	Units	Parameter	Result	RL	DF	Qual	Units
Aroclor-1016	ND	1.0	1		ug/L	Aroclor-1248	ND	1.0	1		ug/L
Aroclor-1221	ND	1.0	1		ug/L	Aroclor-1254	ND	1.0	1		ug/L
Aroclor-1232	ND	1.0	1		ug/L	Aroclor-1260	ND	1.0	1		ug/L
Aroclor-1242	ND	1.0	1		ug/L	Aroclor-1262	ND	1.0	1		ug/L

Surrogates:	REC (%)	Control Limits	Qual	Surrogates:	REC (%)	Control Limits	Qual
Decachlorobiphenyl	44	50-135	2	2,4,5,6-Tetrachloro-m-Xylene	92	50-135	

Client Sample Number	Lab Sample Number	Date Collected	Matrix	Date Prepared	Date Analyzed	QC Batch ID
B3-W	04-03-1493-4	03/24/04	Aqueous	03/29/04	03/31/04	040329L09

Parameter	Result	RL	DF	Qual	Units	Parameter	Result	RL	DF	Qual	Units
Aroclor-1016	ND	1.0	1		ug/L	Aroclor-1248	ND	1.0	1		ug/L
Aroclor-1221	ND	1.0	1		ug/L	Aroclor-1254	ND	1.0	1		ug/L
Aroclor-1232	ND	1.0	1		ug/L	Aroclor-1260	ND	1.0	1		ug/L
Aroclor-1242	ND	1.0	1		ug/L	Aroclor-1262	ND	1.0	1		ug/L

Surrogates:	REC (%)	Control Limits	Qual	Surrogates:	REC (%)	Control Limits	Qual
Decachlorobiphenyl	43	50-135	2	2,4,5,6-Tetrachloro-m-Xylene	91	50-135	

RL - Reporting Limit , DF - Dilution Factor , Qual - Qualifiers

Calscience Environmental Laboratories, Inc.

Analytical Report

Essentia Management Service		Date Received:	03/24/04
5000 East Spring Street, Suite 720		Work Order No:	04-03-1493
Long Beach, CA 90815-1270		Preparation:	EPA 3520B
		Method:	EPA 8082

Project: LADWP-Chatsworth Resrvoir

Client Sample Number	Lab Sample Number	Date Collected	Matrix	Date Prepared	Date Analyzed	QC Batch ID
Method Blank	099-07-010-161	N/A	Aqueous	03/29/04	03/31/04	040329L09

Parameter	Result	RL	DF	Qual	Units	Parameter	Result	RL	DF	Qual	Units
Aroclor-1016	ND	1.0	1		ug/L	Aroclor-1248	ND	1.0	1		ug/L
Aroclor-1221	ND	1.0	1		ug/L	Aroclor-1254	ND	1.0	1		ug/L
Aroclor-1232	ND	1.0	1		ug/L	Aroclor-1260	ND	1.0	1		ug/L
Aroclor-1242	ND	1.0	1		ug/L	Aroclor-1262	ND	1.0	1		ug/L

Surrogates:	REC (%)	Control Limits	Qual	Surrogates:	REC (%)	Control	Qual
Decachlorobiphenyl	100	50-135		2,4,5,6-Tetrachloro-m-Xylene	83	50-135	

RL - Reporting Limit , DF - Dilution Factor , Qual - Qualifiers

Calscience Environmental Laboratories, Inc.

Analytical Report

Essentia Management Service
5000 East Spring Street, Suite 720
Long Beach, CA 90815-1270

Date Received: 03/24/04
Work Order No: 04-03-1493
Preparation: EPA 3520B
Method: EPA 8270C

Project: LADWP-Chatsworth Resrvoir

Client Sample Number	Lab Sample Number	Date Collected	Matrix	Date Prepared	Date Analyzed	QC Batch ID
B5-W	04-03-1493-1	03/24/04	Aqueous	03/26/04	03/30/04	040326L06

Parameter	Result	RL	DF	Qual	Units	Parameter	Result	RL	DF	Qual	Units
N-Nitrosodimethylamine	ND	10	1		ug/L	2,4-Dinitrophenol	ND	50	1		ug/L
Aniline	ND	10	1		ug/L	4-Nitrophenol	ND	10	1		ug/L
Phenol	ND	10	1		ug/L	Dibenzofuran	ND	10	1		ug/L
Bis(2-Chloroethyl) Ether	ND	25	1		ug/L	2,4-Dinitrotoluene	ND	10	1		ug/L
2-Chlorophenol	ND	10	1		ug/L	2,6-Dinitrotoluene	ND	10	1		ug/L
1,3-Dichlorobenzene	ND	10	1		ug/L	Diethyl Phthalate	ND	10	1		ug/L
1,4-Dichlorobenzene	ND	10	1		ug/L	4-Chlorophenyl-Phenyl Ether	ND	10	1		ug/L
Benzyl Alcohol	ND	10	1		ug/L	Fluorene	ND	10	1		ug/L
1,2-Dichlorobenzene	ND	10	1		ug/L	4-Nitroaniline	ND	10	1		ug/L
2-Methylphenol	ND	10	1		ug/L	Azobenzene	ND	10	1		ug/L
Bis(2-Chloroisopropyl) Ether	ND	10	1		ug/L	4,6-Dinitro-2-Methylphenol	ND	50	1		ug/L
3/4-Methylphenol	ND	10	1		ug/L	N-Nitrosodiphenylamine	ND	10	1		ug/L
N-Nitroso-di-n-propylamine	ND	10	1		ug/L	4-Bromophenyl-Phenyl Ether	ND	10	1		ug/L
Hexachloroethane	ND	10	1		ug/L	Hexachlorobenzene	ND	10	1		ug/L
Nitrobenzene	ND	25	1		ug/L	Pentachlorophenol	ND	10	1		ug/L
Isophorone	ND	10	1		ug/L	Phenanthrene	ND	10	1		ug/L
2-Nitrophenol	ND	10	1		ug/L	Anthracene	ND	10	1		ug/L
2,4-Dimethylphenol	ND	10	1		ug/L	Di-n-Butyl Phthalate	ND	10	1		ug/L
Benzoic Acid	ND	50	1		ug/L	Fluoranthene	ND	10	1		ug/L
Bis(2-Chloroethoxy) Methane	ND	10	1		ug/L	Benzidine	ND	50	1		ug/L
2,4-Dichlorophenol	ND	10	1		ug/L	Pyrene	ND	10	1		ug/L
1,2,4-Trichlorobenzene	ND	10	1		ug/L	Pyridine	ND	10	1		ug/L
Naphthalene	ND	10	1		ug/L	Butyl Benzyl Phthalate	ND	10	1		ug/L
4-Chloroaniline	ND	10	1		ug/L	3,3'-Dichlorobenzidine	ND	25	1		ug/L
Hexachloro-1,3-Butadiene	ND	10	1		ug/L	Benzo (a) Anthracene	ND	10	1		ug/L
4-Chloro-3-Methylphenol	ND	10	1		ug/L	Bis(2-Ethylhexyl) Phthalate	ND	10	1		ug/L
2-Methylnaphthalene	ND	10	1		ug/L	Chrysene	ND	10	1		ug/L
Hexachlorocyclopentadiene	ND	25	1		ug/L	Di-n-Octyl Phthalate	ND	10	1		ug/L
2,4,6-Trichlorophenol	ND	10	1		ug/L	Benzo (k) Fluoranthene	ND	10	1		ug/L
2,4,5-Trichlorophenol	ND	10	1		ug/L	Benzo (b) Fluoranthene	ND	10	1		ug/L
2-Chloronaphthalene	ND	10	1		ug/L	Benzo (a) Pyrene	ND	10	1		ug/L
2-Nitroaniline	ND	10	1		ug/L	Benzo (g,h,i) Perylene	ND	10	1		ug/L
Dimethyl Phthalate	ND	10	1		ug/L	Indeno (1,2,3-c,d) Pyrene	ND	10	1		ug/L
Acenaphthylene	ND	10	1		ug/L	Dibenz (a,h) Anthracene	ND	10	1		ug/L
3-Nitroaniline	ND	10	1		ug/L	1-Methylnaphthalene	ND	10	1		ug/L
Acenaphthene	ND	10	1		ug/L						

Surrogates:	REC (%)	Control Limits	Qual	Surrogates:	REC (%)	Control	Qual
2-Fluorophenol	76	15-138		Phenol-d6	78	17-141	
Nitrobenzene-d5	90	28-139		2-Fluorobiphenyl	79	33-144	
2,4,6-Tribromophenol	94	32-143		p-Terphenyl-d14	133	23-160	

RL - Reporting Limit , DF - Dilution Factor , Qual - Qualifiers

Calscience Environmental Laboratories, Inc.

Analytical Report

Essentia Management Service
5000 East Spring Street, Suite 720
Long Beach, CA 90815-1270

Date Received: 03/24/04
Work Order No: 04-03-1493
Preparation: EPA 3520B
Method: EPA 8270C

Project: LADWP-Chatsworth Resrvoir

Client Sample Number	Lab Sample Number	Date Collected	Matrix	Date Prepared	Date Analyzed	QC Batch ID
B4-W	04-03-1493-2	03/24/04	Aqueous	03/25/04	03/30/04	040325L06

Parameter	Result	RL	DF	Qual	Units	Parameter	Result	RL	DF	Qual	Units
N-Nitrosodimethylamine	ND	10	1		ug/L	2,4-Dinitrophenol	ND	50	1		ug/L
Aniline	ND	10	1		ug/L	4-Nitrophenol	ND	10	1		ug/L
Phenol	ND	10	1		ug/L	Dibenzofuran	ND	10	1		ug/L
Bis(2-Chloroethyl) Ether	ND	25	1		ug/L	2,4-Dinitrotoluene	ND	10	1		ug/L
2-Chlorophenol	ND	10	1		ug/L	2,6-Dinitrotoluene	ND	10	1		ug/L
1,3-Dichlorobenzene	ND	10	1		ug/L	Diethyl Phthalate	ND	10	1		ug/L
1,4-Dichlorobenzene	ND	10	1		ug/L	4-Chlorophenyl-Phenyl Ether	ND	10	1		ug/L
Benzyl Alcohol	ND	10	1		ug/L	Fluorene	ND	10	1		ug/L
1,2-Dichlorobenzene	ND	10	1		ug/L	4-Nitroaniline	ND	10	1		ug/L
2-Methylphenol	ND	10	1		ug/L	Azobenzene	ND	10	1		ug/L
Bis(2-Chloroisopropyl) Ether	ND	10	1		ug/L	4,6-Dinitro-2-Methylphenol	ND	50	1		ug/L
3/4-Methylphenol	ND	10	1		ug/L	N-Nitrosodiphenylamine	ND	10	1		ug/L
N-Nitroso-di-n-propylamine	ND	10	1		ug/L	4-Bromophenyl-Phenyl Ether	ND	10	1		ug/L
Hexachloroethane	ND	10	1		ug/L	Hexachlorobenzene	ND	10	1		ug/L
Nitrobenzene	ND	25	1		ug/L	Pentachlorophenol	ND	10	1		ug/L
Isophorone	ND	10	1		ug/L	Phenanthrene	ND	10	1		ug/L
2-Nitrophenol	ND	10	1		ug/L	Anthracene	ND	10	1		ug/L
2,4-Dimethylphenol	ND	10	1		ug/L	Di-n-Butyl Phthalate	ND	10	1		ug/L
Benzoic Acid	ND	50	1		ug/L	Fluoranthene	ND	10	1		ug/L
Bis(2-Chloroethoxy) Methane	ND	10	1		ug/L	Benzidine	ND	50	1		ug/L
2,4-Dichlorophenol	ND	10	1		ug/L	Pyrene	ND	10	1		ug/L
1,2,4-Trichlorobenzene	ND	10	1		ug/L	Pyridine	ND	10	1		ug/L
Naphthalene	ND	10	1		ug/L	Butyl Benzyl Phthalate	ND	10	1		ug/L
4-Chloroaniline	ND	10	1		ug/L	3,3'-Dichlorobenzidine	ND	25	1		ug/L
Hexachloro-1,3-Butadiene	ND	10	1		ug/L	Benzo (a) Anthracene	ND	10	1		ug/L
4-Chloro-3-Methylphenol	ND	10	1		ug/L	Bis(2-Ethylhexyl) Phthalate	ND	10	1		ug/L
2-Methylnaphthalene	ND	10	1		ug/L	Chrysene	ND	10	1		ug/L
Hexachlorocyclopentadiene	ND	25	1		ug/L	Di-n-Octyl Phthalate	ND	10	1		ug/L
2,4,6-Trichlorophenol	ND	10	1		ug/L	Benzo (k) Fluoranthene	ND	10	1		ug/L
2,4,5-Trichlorophenol	ND	10	1		ug/L	Benzo (b) Fluoranthene	ND	10	1		ug/L
2-Chloronaphthalene	ND	10	1		ug/L	Benzo (a) Pyrene	ND	10	1		ug/L
2-Nitroaniline	ND	10	1		ug/L	Benzo (g,h,i) Perylene	ND	10	1		ug/L
Dimethyl Phthalate	ND	10	1		ug/L	Indeno (1,2,3-c,d) Pyrene	ND	10	1		ug/L
Acenaphthylene	ND	10	1		ug/L	Dibenz (a,h) Anthracene	ND	10	1		ug/L
3-Nitroaniline	ND	10	1		ug/L	1-Methylnaphthalene	ND	10	1		ug/L
Acenaphthene	ND	10	1		ug/L						

Surrogates:	REC (%)	Control Limits	Qual	Surrogates:	REC (%)	Control Limits	Qual
2-Fluorophenol	80	15-138		Phenol-d6	39	17-141	
Nitrobenzene-d5	87	28-139		2-Fluorobiphenyl	88	33-144	
2,4,6-Tribromophenol	82	32-143		p-Terphenyl-d14	128	23-160	

RL - Reporting Limit , DF - Dilution Factor , Qual - Qualifiers

Essentia Management Service
5000 East Spring Street, Suite 720
Long Beach, CA 90815-1270

Date Received: 03/24/04
Work Order No: 04-03-1493
Preparation: EPA 3520B
Method: EPA 8270C

Project: LADWP-Chatsworth Resrvoir

Client Sample Number	Lab Sample Number	Date Collected	Matrix	Date Prepared	Date Analyzed	QC Batch ID
B2-W	04-03-1493-3	03/24/04	Aqueous	03/25/04	03/30/04	040326L06

Parameter	Result	RL	DF	Qual	Units	Parameter	Result	RL	DF	Qual	Units
N-Nitrosodimethylamine	ND	12	1.2		ug/L	2,4-Dinitrophenol	ND	60	1.2		ug/L
Aniline	ND	12	1.2		ug/L	4-Nitrophenol	ND	12	1.2		ug/L
Phenol	ND	12	1.2		ug/L	Dibenzofuran	ND	12	1.2		ug/L
Bis(2-Chloroethyl) Ether	ND	30	1.2		ug/L	2,4-Dinitrotoluene	ND	12	1.2		ug/L
2-Chlorophenol	ND	12	1.2		ug/L	2,6-Dinitrotoluene	ND	12	1.2		ug/L
1,3-Dichlorobenzene	ND	12	1.2		ug/L	Diethyl Phthalate	ND	12	1.2		ug/L
1,4-Dichlorobenzene	ND	12	1.2		ug/L	4-Chlorophenyl-Phenyl Ether	ND	12	1.2		ug/L
Benzyl Alcohol	ND	12	1.2		ug/L	Fluorene	ND	12	1.2		ug/L
1,2-Dichlorobenzene	ND	12	1.2		ug/L	4-Nitroaniline	ND	12	1.2		ug/L
2-Methylphenol	ND	12	1.2		ug/L	Azobenzene	ND	12	1.2		ug/L
Bis(2-Chloroisopropyl) Ether	ND	12	1.2		ug/L	4,6-Dinitro-2-Methylphenol	ND	60	1.2		ug/L
3/4-Methylphenol	ND	12	1.2		ug/L	N-Nitrosodiphenylamine	ND	12	1.2		ug/L
N-Nitroso-di-n-propylamine	ND	12	1.2		ug/L	4-Bromophenyl-Phenyl Ether	ND	12	1.2		ug/L
Hexachloroethane	ND	12	1.2		ug/L	Hexachlorobenzene	ND	12	1.2		ug/L
Nitrobenzene	ND	30	1.2		ug/L	Pentachlorophenol	ND	12	1.2		ug/L
Isophorone	ND	12	1.2		ug/L	Phenanthrene	ND	12	1.2		ug/L
2-Nitrophenol	ND	12	1.2		ug/L	Anthracene	ND	12	1.2		ug/L
2,4-Dimethylphenol	ND	12	1.2		ug/L	Di-n-Butyl Phthalate	ND	12	1.2		ug/L
Benzoic Acid	ND	60	1.2		ug/L	Fluoranthene	ND	12	1.2		ug/L
Bis(2-Chloroethoxy) Methane	ND	12	1.2		ug/L	Benzidine	ND	60	1.2		ug/L
2,4-Dichlorophenol	ND	12	1.2		ug/L	Pyrene	ND	12	1.2		ug/L
1,2,4-Trichlorobenzene	ND	12	1.2		ug/L	Pyridine	ND	12	1.2		ug/L
Naphthalene	ND	12	1.2		ug/L	Butyl Benzyl Phthalate	ND	12	1.2		ug/L
4-Chloroaniline	ND	12	1.2		ug/L	3,3'-Dichlorobenzidine	ND	30	1.2		ug/L
Hexachloro-1,3-Butadiene	ND	12	1.2		ug/L	Benzo (a) Anthracene	ND	12	1.2		ug/L
4-Chloro-3-Methylphenol	ND	12	1.2		ug/L	Bis(2-Ethylhexyl) Phthalate	ND	12	1.2		ug/L
2-Methylnaphthalene	ND	12	1.2		ug/L	Chrysene	ND	12	1.2		ug/L
Hexachlorocyclopentadiene	ND	30	1.2		ug/L	Di-n-Octyl Phthalate	ND	12	1.2		ug/L
2,4,6-Trichlorophenol	ND	12	1.2		ug/L	Benzo (k) Fluoranthene	ND	12	1.2		ug/L
2,4,5-Trichlorophenol	ND	12	1.2		ug/L	Benzo (b) Fluoranthene	ND	12	1.2		ug/L
2-Chloronaphthalene	ND	12	1.2		ug/L	Benzo (a) Pyrene	ND	12	1.2		ug/L
2-Nitroaniline	ND	12	1.2		ug/L	Benzo (g,h,i) Perylene	ND	12	1.2		ug/L
Dimethyl Phthalate	ND	12	1.2		ug/L	Indeno (1,2,3-c,d) Pyrene	ND	12	1.2		ug/L
Acenaphthylene	ND	12	1.2		ug/L	Dibenz (a,h) Anthracene	ND	12	1.2		ug/L
3-Nitroaniline	ND	12	1.2		ug/L	1-Methylnaphthalene	ND	12	1.2		ug/L
Acenaphthene	ND	12	1.2		ug/L						

Surrogates:	REC (%)	Control Limits	Qual	Surrogates:	REC (%)	Control	Qual
2-Fluorophenol	82	15-138		Phenol-d6	82	17-141	
Nitrobenzene-d5	93	28-139		2-Fluorobiphenyl	87	33-144	
2,4,6-Tribromophenol	90	32-143		p-Terphenyl-d14	124	23-160	

RL - Reporting Limit, DF - Dilution Factor, Qual - Qualifiers

Calscience Environmental Laboratories, Inc.

Analytical Report

Essentia Management Service
5000 East Spring Street, Suite 720
Long Beach, CA 90815-1270

Date Received: 03/24/04
Work Order No: 04-03-1493
Preparation: EPA 3520B
Method: EPA 8270C

Project: LADWP-Chatsworth Resrvoir

Client Sample Number	Lab Sample Number	Date Collected	Matrix	Date Prepared	Date Analyzed	QC Batch ID
BS-W	04-03-1493-4	03/24/04	Aqueous	03/25/04	03/30/04	040325L06

Parameter	Result	RL	DF	Qual	Units	Parameter	Result	RL	DF	Qual	Units
N-Nitrosodimethylamine	ND	12	1.2		ug/L	2,4-Dinitrophenol	ND	60	1.2		ug/L
Aniline	ND	12	1.2		ug/L	4-Nitrophenol	ND	12	1.2		ug/L
Phenol	ND	12	1.2		ug/L	Dibenzofuran	ND	12	1.2		ug/L
Bis(2-Chloroethyl) Ether	ND	30	1.2		ug/L	2,4-Dinitrotoluene	ND	12	1.2		ug/L
2-Chlorophenol	ND	12	1.2		ug/L	2,6-Dinitrotoluene	ND	12	1.2		ug/L
1,3-Dichlorobenzene	ND	12	1.2		ug/L	Diethyl Phthalate	ND	12	1.2		ug/L
1,4-Dichlorobenzene	ND	12	1.2		ug/L	4-Chlorophenyl-Phenyl Ether	ND	12	1.2		ug/L
Benzyl Alcohol	ND	12	1.2		ug/L	Fluorene	ND	12	1.2		ug/L
1,2-Dichlorobenzene	ND	12	1.2		ug/L	4-Nitroaniline	ND	12	1.2		ug/L
2-Methylphenol	ND	12	1.2		ug/L	Azobenzene	ND	12	1.2		ug/L
Bis(2-Chloroisopropyl) Ether	ND	12	1.2		ug/L	4,6-Dinitro-2-Methylphenol	ND	60	1.2		ug/L
3/4-Methylphenol	ND	12	1.2		ug/L	N-Nitrosodiphenylamine	ND	12	1.2		ug/L
N-Nitroso-di-n-propylamine	ND	12	1.2		ug/L	4-Bromophenyl-Phenyl Ether	ND	12	1.2		ug/L
Hexachloroethane	ND	12	1.2		ug/L	Hexachlorobenzene	ND	12	1.2		ug/L
Nitrobenzene	ND	30	1.2		ug/L	Pentachlorophenol	ND	12	1.2		ug/L
Isophorone	ND	12	1.2		ug/L	Phenanthrene	ND	12	1.2		ug/L
2-Nitrophenol	ND	12	1.2		ug/L	Anthracene	ND	12	1.2		ug/L
2,4-Dimethylphenol	ND	12	1.2		ug/L	Di-n-Butyl Phthalate	ND	12	1.2		ug/L
Benzoic Acid	ND	60	1.2		ug/L	Fluoranthene	ND	12	1.2		ug/L
Bis(2-Chloroethoxy) Methane	ND	12	1.2		ug/L	Benzidine	ND	60	1.2		ug/L
2,4-Dichlorophenol	ND	12	1.2		ug/L	Pyrene	ND	12	1.2		ug/L
1,2,4-Trichlorobenzene	ND	12	1.2		ug/L	Pyridine	ND	12	1.2		ug/L
Naphthalene	ND	12	1.2		ug/L	Butyl Benzyl Phthalate	ND	12	1.2		ug/L
4-Chloroaniline	ND	12	1.2		ug/L	3,3'-Dichlorobenzidine	ND	30	1.2		ug/L
Hexachloro-1,3-Butadiene	ND	12	1.2		ug/L	Benzo (a) Anthracene	ND	12	1.2		ug/L
4-Chloro-3-Methylphenol	ND	12	1.2		ug/L	Bis(2-Ethylhexyl) Phthalate	ND	12	1.2		ug/L
2-Methylnaphthalene	ND	12	1.2		ug/L	Chrysene	ND	12	1.2		ug/L
Hexachlorocyclopentadiene	ND	30	1.2		ug/L	Di-n-Octyl Phthalate	ND	12	1.2		ug/L
2,4,6-Trichlorophenol	ND	12	1.2		ug/L	Benzo (k) Fluoranthene	ND	12	1.2		ug/L
2,4,5-Trichlorophenol	ND	12	1.2		ug/L	Benzo (b) Fluoranthene	ND	12	1.2		ug/L
2-Chloronaphthalene	ND	12	1.2		ug/L	Benzo (a) Pyrene	ND	12	1.2		ug/L
2-Nitroaniline	ND	12	1.2		ug/L	Benzo (g,h,i) Perylene	ND	12	1.2		ug/L
Dimethyl Phthalate	ND	12	1.2		ug/L	Indeno (1,2,3-c,d) Pyrene	ND	12	1.2		ug/L
Acenaphthylene	ND	12	1.2		ug/L	Dibenz (a,h) Anthracene	ND	12	1.2		ug/L
3-Nitroaniline	ND	12	1.2		ug/L	1-Methylnaphthalene	ND	12	1.2		ug/L
Acenaphthene	ND	12	1.2		ug/L						

Surrogates:	REC (%)	Control Limits	Qual	Surrogates:	REC (%)	Control	Qual
2-Fluorophenol	85	15-138		Phenol-d6	66	17-141	
Nitrobenzene-d5	97	28-139		2-Fluorobiphenyl	82	33-144	
2,4,6-Tribromophenol	93	32-143		p-Terphenyl-d14	126	23-160	

RL - Reporting Limit , DF - Dilution Factor , Qual - Qualifiers

Calscience Environmental Laboratories, Inc.

Analytical Report

Essentia Management Service
5000 East Spring Street, Suite 720
Long Beach, CA 90815-1270

Date Received: 03/24/04
Work Order No: 04-03-1493
Preparation: EPA 3520B
Method: EPA 8270C

Project: LADWP-Chatsworth Resrvoir

Client Sample Number	Lab Sample Number	Date Collected	Matrix	Date Prepared	Date Analyzed	QC Batch ID
Method Blank	095-01-003-1,446	N/A	Aqueous	03/26/04	03/30/04	040325L06

Parameter	Result	RL	DF	Qual	Units	Parameter	Result	RL	DF	Qual	Units
N-Nitrosodimethylamine	ND	10	1		ug/L	2,4-Dinitrophenol	ND	50	1		ug/L
Aniline	ND	10	1		ug/L	4-Nitrophenol	ND	10	1		ug/L
Phenol	ND	10	1		ug/L	Dibenzofuran	ND	10	1		ug/L
Bis(2-Chloroethyl) Ether	ND	25	1		ug/L	2,4-Dinitrotoluene	ND	10	1		ug/L
2-Chlorophenol	ND	10	1		ug/L	2,6-Dinitrotoluene	ND	10	1		ug/L
1,3-Dichlorobenzene	ND	10	1		ug/L	Diethyl Phthalate	ND	10	1		ug/L
1,4-Dichlorobenzene	ND	10	1		ug/L	4-Chlorophenyl-Phenyl Ether	ND	10	1		ug/L
Benzyl Alcohol	ND	10	1		ug/L	Fluorene	ND	10	1		ug/L
1,2-Dichlorobenzene	ND	10	1		ug/L	4-Nitroaniline	ND	10	1		ug/L
2-Methylphenol	ND	10	1		ug/L	Azobenzene	ND	10	1		ug/L
Bis(2-Chloroisopropyl) Ether	ND	10	1		ug/L	4,6-Dinitro-2-Methylphenol	ND	50	1		ug/L
3/4-Methylphenol	ND	10	1		ug/L	N-Nitrosodiphenylamine	ND	10	1		ug/L
N-Nitroso-di-n-propylamine	ND	10	1		ug/L	4-Bromophenyl-Phenyl Ether	ND	10	1		ug/L
Hexachloroethane	ND	10	1		ug/L	Hexachlorobenzene	ND	10	1		ug/L
Nitrobenzene	ND	25	1		ug/L	Pentachlorophenol	ND	10	1		ug/L
Isophorone	ND	10	1		ug/L	Phenanthrene	ND	10	1		ug/L
2-Nitrophenol	ND	10	1		ug/L	Anthracene	ND	10	1		ug/L
2,4-Dimethylphenol	ND	10	1		ug/L	Di-n-Butyl Phthalate	ND	10	1		ug/L
Benzoic Acid	ND	50	1		ug/L	Fluoranthene	ND	10	1		ug/L
Bis(2-Chloroethoxy) Methane	ND	10	1		ug/L	Benzidine	ND	50	1		ug/L
2,4-Dichlorophenol	ND	10	1		ug/L	Pyrene	ND	10	1		ug/L
1,2,4-Trichlorobenzene	ND	10	1		ug/L	Pyridine	ND	10	1		ug/L
Naphthalene	ND	10	1		ug/L	Butyl Benzyl Phthalate	ND	10	1		ug/L
4-Chloroaniline	ND	10	1		ug/L	3,3'-Dichlorobenzidine	ND	25	1		ug/L
Hexachloro-1,3-Butadiene	ND	10	1		ug/L	Benzo (a) Anthracene	ND	10	1		ug/L
4-Chloro-3-Methylphenol	ND	10	1		ug/L	Bis(2-Ethylhexyl) Phthalate	ND	10	1		ug/L
2-Methylnaphthalene	ND	10	1		ug/L	Chrysene	ND	10	1		ug/L
Hexachlorocyclopentadiene	ND	25	1		ug/L	Di-n-Octyl Phthalate	ND	10	1		ug/L
2,4,6-Trichlorophenol	ND	10	1		ug/L	Benzo (k) Fluoranthene	ND	10	1		ug/L
2,4,5-Trichlorophenol	ND	10	1		ug/L	Benzo (b) Fluoranthene	ND	10	1		ug/L
2-Chloronaphthalene	ND	10	1		ug/L	Benzo (a) Pyrene	ND	10	1		ug/L
2-Nitroaniline	ND	10	1		ug/L	Benzo (g,h,i) Perylene	ND	10	1		ug/L
Dimethyl Phthalate	ND	10	1		ug/L	Indeno (1,2,3-c,d) Pyrene	ND	10	1		ug/L
Acenaphthylene	ND	10	1		ug/L	Dibenz (a,h) Anthracene	ND	10	1		ug/L
3-Nitroaniline	ND	10	1		ug/L	1-Methylnaphthalene	ND	10	1		ug/L
Acenaphthene	ND	10	1		ug/L						

Surrogates:	REC (%)	Control Limits	Qual	Surrogates:	REC (%)	Control	Qual
2-Fluorophenol	66	15-138		Phenol-d6	69	17-141	
Nitrobenzene-d5	78	28-139		2-Fluorobiphenyl	68	33-144	
2,4,6-Tribromophenol	86	32-143		p-Terphenyl-d14	128	23-160	

RL - Reporting Limit , DF - Dilution Factor , Qual - Qualifiers

Calscience Environmental Laboratories, Inc.

Analytical Report

Essentia Management Service
5000 East Spring Street, Suite 720
Long Beach, CA 90815-1270

Date Received: 03/24/04
Work Order No: 04-03-1493
Preparation: EPA 3520B
Method: GC/MS Isotope Dilution

Project: LADWP-Chatsworth Resrvoir

Client Sample Number	Lab Sample Number	Date Collected	Matrix	Date Prepared	Date Analyzed	QC Batch ID
B5-W	04-03-1493-1	03/24/04	Aqueous	03/25/04	03/30/04	040325L06

Parameter	Result	RL	DF	Qual	Units
1,4-Dioxane	ND	2.0	1		ug/L

Surrogates:	REC (%)	Control Limits	Qual
Nitrobenzene-d5	90	56-123	

Client Sample Number	Lab Sample Number	Date Collected	Matrix	Date Prepared	Date Analyzed	QC Batch ID
B4-W	04-03-1493-2	03/24/04	Aqueous	03/25/04	03/30/04	040325L06

Parameter	Result	RL	DF	Qual	Units
1,4-Dioxane	ND	2.0	1		ug/L

Surrogates:	REC (%)	Control Limits	Qual
Nitrobenzene-d5	87	56-123	

Client Sample Number	Lab Sample Number	Date Collected	Matrix	Date Prepared	Date Analyzed	QC Batch ID
B2-W	04-03-1493-3	03/24/04	Aqueous	03/25/04	03/30/04	040325L06

Parameter	Result	RL	DF	Qual	Units
1,4-Dioxane	ND	2.0	1		ug/L

Surrogates:	REC (%)	Control Limits	Qual
Nitrobenzene-d5	93	56-123	

Client Sample Number	Lab Sample Number	Date Collected	Matrix	Date Prepared	Date Analyzed	QC Batch ID
B3-W	04-03-1493-4	03/24/04	Aqueous	03/25/04	03/30/04	040325L06

Parameter	Result	RL	DF	Qual	Units
1,4-Dioxane	ND	2.0	1		ug/L

Surrogates:	REC (%)	Control Limits	Qual
Nitrobenzene-d5	97	56-123	

RL - Reporting Limit , DF - Dilution Factor , Qual - Qualifiers

Calscience Environmental Laboratories, Inc.

Analytical Report

Essentia Management Service
5000 East Spring Street, Suite 720
Long Beach, CA 90815-1270

Date Received: 03/24/04
Work Order No: 04-03-1493
Preparation: EPA 3520B
Method: GC/MS Isotope Dilution

Project: LADWP-Chatsworth Resrvoir

Client Sample Number	Lab Sample Number	Date Collected	Matrix	Date Prepared	Date Analyzed	QC Batch ID
Method Blank	099-09-004-212	N/A	Aqueous	03/25/04	03/30/04	040325L06

Parameter	Result	RL	DF	Qual	Units
1,4-Dioxane	ND	2.0	1		ug/L

Surrogates:	REC (%)	Control Limits	Qual
Nitrobenzene-d5	78	56-123	

RL - Reporting Limit, DF - Dilution Factor, Qual - Qualifiers

Calscience Environmental Laboratories, Inc.

Quality Control - Spike/Spike Duplicate

Essentia Management Service	Date Received: 03/24/04
5000 East Spring Street, Suite 720	Work Order No: 04-03-1493
Long Beach, CA 90815-1270	Preparation: N/A
	Method: EPA 314.0

Project: LADWP-Chatsworth Resrvoir

Quality Control Sample ID	Matrix	Instrument	Date Prepared	Date Analyzed	MS/MSD Batch Number
04-03-1398-1	Aqueous	IC 6	N/A	03/26/04	040326S01

Parameter	MS %REC	MSD %REC	%REC CL	RPD	RPD CL	Qualifiers
Perchlorate	111	104	80-120	6	0-15	

Calscience Environmental Laboratories, Inc.

Quality Control - LCS/LCS Duplicate

Essentia Management Service
5000 East Spring Street, Suite 720
Long Beach, CA 90815-1270

Project: LADWP-Chatsworth Resrvoir

Date Received: N/A
Work Order No: 04-03-1493
Preparation: N/A
Method: EPA 314.0

Quality Control Sample ID	Matrix	Instrument	Date Prepared	Date Analyzed	LCS/LCSD Batch Number
099-05-203-136	Aqueous	IC 6	N/A	03/25/04	040325L01

Parameter	LCS %REC	LCSD %REC	%REC CL	RPD	RPD CL	Qualifiers
Perchlorate	108	113	85-115	5	0-15	

Calscience Environmental Laboratories, Inc.

Quality Control - Spike/Spike Duplicate

Essentia Management Service
5000 East Spring Street, Suite 720
Long Beach, CA 90815-1270

Date Received: 03/24/04
Work Order No: 04-03-1493
Preparation: N/A
Method: EPA 7199

Project: LADWP-Chatsworth Resrvoir

Quality Control Sample ID	Matrix	Instrument	Date Prepared	Date Analyzed	MS/MSD Batch Number
04-03-1445-3	Aqueous	IC 5	N/A	03/24/04	40324CRS1

Parameter	MS %REC	MSD %REC	%REC CL	RPD	RPD CL	Qualifiers
Chromium, Hexavalent	97	99	70-130	0	0-25	

Calscience Environmental Laboratories, Inc.

Quality Control - Laboratory Control Sample

Essentia Management Service
5000 East Spring Street, Suite 720
Long Beach, CA 90815-1270

Project: LADWP-Chatsworth Resrvoir

Date Received:	N/A
Work Order No:	04-03-1493
Preparation:	N/A
Method:	EPA 7199

Quality Control Sample ID	Matrix	Instrument	Date Analyzed	Lab File ID	LCS Batch Number
099-05-123-1,331	Aqueous	IC 5	03/24/04	NONE	40324CRL1

Parameter	Conc Added	Conc Recovered	%Rec	%Rec CL	Qualifiers
Chromium, Hexavalent	10	10	102	80-120	

Calscience Environmental Laboratories, Inc.

Quality Control - LCS/LCS Duplicate

Essentia Management Service
5000 East Spring Street, Suite 720
Long Beach, CA 90815-1270

Project: LADWP-Chatsworth Resrvoir

Date Received: N/A
Work Order No: 04-03-1493
Preparation: EPA 3510C
Method: TPH - Carbon Range

Quality Control Sample ID	Matrix	Instrument	Date Prepared	Date Analyzed	LCS/LCSD Batch Number
098-03-008-2,046	Aqueous	GC 23	03/25/04	03/25/04	040325B04

Parameter	LCS %REC	LCSD %REC	%REC CL	RPD	RPD CL	Qualifiers
TPH as Diesel	93	98	60-132	5	0-11	

Calscience Environmental Laboratories, Inc.

Quality Control - LCS/LCS Duplicate

Essentia Management Service
5000 East Spring Street, Suite 720
Long Beach, CA 90815-1270

Project: LADWP-Chatsworth Resrvoir

Date Received: N/A
Work Order No: 04-03-1493
Preparation: EPA 3520B
Method: EPA 8082

Quality Control Sample ID	Matrix	Instrument	Date Prepared	Date Analyzed	LCS/LCSD Batch Number
099-07-010-181	Aqueous	GC 17	03/29/04	03/31/04	040329L09

Parameter	LCS %REC	LCSD %REC	%REC CL	RPD	RPD CL	Qualifiers
Aroclor-1260	126	121	50-135	4	0-25	

Calscience Environmental Laboratories, Inc.

Quality Control - LCS/LCS Duplicate

Essentia Management Service
5000 East Spring Street, Suite 720
Long Beach, CA 90815-1270

Project: LADWP-Chatsworth Resrvoir

Date Received: N/A
Work Order No: 04-03-1493
Preparation: EPA 3520B
Method: EPA 8270C

Quality Control Sample ID	Matrix	Instrument	Date Prepared	Date Analyzed	LCS/LCSD Batch Number
095-01-003-1,446	Aqueous	GC/MS GG	03/25/04	03/30/04	040325L06

Parameter	LCS %REC	LCSD %REC	%REC CL	RPD	RPD CL	Qualifiers
Phenol	81	83	4-118	2	0-18	
2-Chlorophenol	65	64	35-101	1	0-21	
1,4-Dichlorobenzene	65	65	39-93	0	0-45	
N-Nitroso-di-n-propylamine	61	59	33-123	3	0-38	
1,2,4-Trichlorobenzene	78	79	47-101	1	0-35	
4-Chloro-3-Methylphenol	86	83	0-295	3	0-30	
Acenaphthene	102	101	31-133	1	0-31	
4-Nitrophenol	81	72	1-143	12	0-44	
2,4-Dinitrotoluene	110	105	16-166	5	0-49	
Pentachlorophenol	86	94	1-154	9	0-53	
Pyrene	92	87	15-159	6	0-47	

Calscience Environmental Laboratories, Inc.

Quality Control - LCS/LCS Duplicate

Essentia Management Service
5000 East Spring Street, Suite 720
Long Beach, CA 90815-1270

Project: LADWP-Chatsworth Resrvoir

Date Received: N/A
Work Order No: 04-03-1493
Preparation: EPA 3520B
Method: GC/MS Isotope Dilution

Quality Control Sample ID	Matrix	Instrument	Date Prepared	Date Analyzed	LCS/LCSD Batch Number
099-09-004-212	Aqueous	GC/MS GG	03/25/04	03/30/04	040325L06

Parameter	LCS %REC	LCSD %REC	%REC CL	RPD	RPD CL	Qualifiers
1,4-Dioxane	71	71	50-130	0	0-20	

Calscience Environmental Laboratories, Inc.

Glossary of Terms and Qualifiers

Work Order Number: 04-03-1493

Qualifier	Definition
2	Surrogate spike compound was out of control due to matrix interference. The associated method blank surrogate spike compound was in control and, therefore, the sample data was reported without further clarification.
ND	Not detected at indicated reporting limit.

Calscience Environmental Laboratories, Inc.

WORK ORDER #: 04 - 03 - 1493

Cooler 1 of 1

SAMPLE RECEIPT FORM

CLIENT: N + M DATE: 3/24/04

TEMPERATURE – SAMPLES RECEIVED BY:

CALSCIENCE COURIER:

_____ Chilled, cooler with temperature blank provided.
_____ Chilled, cooler without temperature blank.
_____ Chilled and placed in cooler with wet ice.
_____ Ambient and placed in cooler with wet ice.
_____ Ambient temperature.

_____ °C Temperature blank.

LABORATORY (Other than Calscience Courier):

_____ °C Temperature blank.
3.6 °C IR thermometer.
_____ Ambient temperature.

Initial: NC

CUSTODY SEAL INTACT:

Sample(s): _____ Cooler: _____ No (Not Intact) : _____ Not Applicable (N/A): ✓

Initial: NC

SAMPLE CONDITION:

	Yes	No	N/A
Chain-Of-Custody document(s) received with samples	✓		
Sample container label(s) consistent with custody papers	✓		
Sample container(s) intact and good condition	✓		
Correct containers for analyses requested	✓ pp	✓	
Proper preservation noted on sample label(s)	✓		pre
VOA vial(s) free of headspace.	✓		
Tedlar bag(s) free of condensation			✓

Initial: ①

COMMENTS:

250mL unpreserved plastic bottles received for Total Coliform analysis - transferred to correct containers upon receipt

SILLIKER, Inc.
Southern California Laboratory
1139 East Dominguez, Suite I
Carson, CA 90746
310/ 637 7121 Fax 310/ 637 2953

CERTIFICATE OF ANALYSIS

COA No:	SCA-30103167-0
Supersedes:	None
COA Date	3/28/04
Page 1 of 1	

TO:
Mr. Bob Stearns
Project Manager
Calscience Environmental Laboratories
7440 Lincoln Way
Garden Grove, CA 92841-1432

Received From:	Garden Grove, CA
Received Date:	3/24/04
P.O.# / ID:	04-03-1493
Location of Test: (except where noted)	Carson, CA

Analytical Results

Desc. 1:	Sample ID: B5-W	**Desc. 4:**	Matrix:WW	**Laboratory ID:**	300575490
Desc. 2:	Date: 03/24/04	**Desc. 5:**	Project #: 04-03-1493	**Condition Rec'd:**	NORMAL
Desc. 3:	Time: 8:11			**Temp Rec'd (°C):**	7.2

Analyte	Result	Units	Method Reference	Test Date	Loc.
Coliforms - 5 tube MPN	<20	/100mL	SMEWW 20th, 9221A-D	3/26/04	

Desc. 1:	Sample ID: B4-W	**Desc. 4:**	Matrix:WW	**Laboratory ID:**	300575491
Desc. 2:	Date: 03/24/04	**Desc. 5:**	Project #: 04-03-1493	**Condition Rec'd:**	NORMAL
Desc. 3:	Time: 9:31			**Temp Rec'd (°C):**	7.2

Analyte	Result	Units	Method Reference	Test Date	Loc.
Coliforms - 5 tube MPN	<20	/100mL	SMEWW 20th, 9221A-D	3/26/04	

Desc. 1:	Sample ID: B2-W	**Desc. 4:**	Matrix:WW	**Laboratory ID:**	300575492
Desc. 2:	Date: 03/24/04	**Desc. 5:**	Project #: 04-03-1493	**Condition Rec'd:**	NORMAL
Desc. 3:	Time: 12:45			**Temp Rec'd (°C):**	7.2

Analyte	Result	Units	Method Reference	Test Date	Loc.
Coliforms - 5 tube MPN	80	/100mL	SMEWW 20th, 9221A-D	3/28/04	

Desc. 1:	Sample ID: B3-W	**Desc. 4:**	Matrix:WW	**Laboratory ID:**	300575493
Desc. 2:	Date: 03/24/04	**Desc. 5:**	Project #: 04-03-1493	**Condition Rec'd:**	NORMAL
Desc. 3:	Time: 13:35			**Temp Rec'd (°C):**	7.2

Analyte	Result	Units	Method Reference	Test Date	Loc.
Coliforms - 5 tube MPN	<20	/100mL	SMEWW 20th, 9221A-D	3/26/04	

Vidhya Gangar
Vidhya Gangar, M.S. Laboratory Director

The results of these tests relate only to the samples tested. This report shall not be reproduced except in full, without the written approval of the laboratory.

Ninyo & Moore

475 Goddard, Suite 200
Irvine, CA 92618

Tel: (949) 753-7070
Fax (949) 753-7071

PROJECT INFORMATION

PROJECT NAME:	LADWP – Chatsworth Reservoir
ADDRESS:	Chatsworth Reservoir
CITY/STATE:	Chatsworth, California
Global ID:	Log Code:
Project Manager	Ken Floom — Project Number 47278-4
SAMPLED BY:	Krista Brodersen – Ninyo & Moore

Lab: Calscience Laboratories, 7440 Lincoln Way, Garden Grove, CA 92841, (714) 895-5494

FIELD POINT NAME	SAMPLE ID	NUMBER OF CONTAINERS	SAMPLE DATE	SAMPLE TIME	SAMPLE MATRIX	CONTAINER TYPE	PRESERV	1,4-dioxane by GS/MS	Isotope Dilution	Hexavalent Chromium 7199/3060A	Total ~~Chromium~~ Coli	Method SM FWW	TPHCC 8015M	PCBs 8082	SVOCs 8270C	Perchlorate 314		REMARKS
	B5-W	1/1/1/1/1	3-24-04	8:11	Water	Liter/500 ml/250 ml/	None	X	X	X	X	X	X	X	X			1493
	B4-W	↓	↓	9:31	↓	VOA/Liter/Liter		↓	↓	↓	↓	↓	↓	↓				
	B2-W	↓	↓	12:45	↓	↓		↓	↓	↓	↓	↓	↓	↓				
	B3-W	↓	↓	13:35	↓	↓		↓	↓	↓	↓	↓	↓	↓				
Total No. of Samples:																		

Comments
Fax results to: Ken Floom at (562) 740-1070
E-mail final report to: ken_floom@essentia-llc.com

Relinquished By:	Date/Time	Received By:	Date/Time
Krista Brodersen	3-24-04 1700		
		[signature]	3/24/04 1706

TURN AROUND TIME
- ☐ 24 HOUR
- ☐ 48 HOUR
- ☐ 3 DAY
- ☐ 5-DAY
- ☐ 14 DAY
- ☒ Other _Normal_____

SAMPLE INTEGRITY
- ☐ SAMPLES INTACT?
- ☐ SAMPLES CHILLED
- ☐ SECURITY TAPE INTACT?
- ☐ NO SECURITY TAPE USED

REPORT FORMAT
- ☐ SARWQCB and GEOTRACKER
- ☐ SAN DIEGO HMMD
- ☐ NORMAL
- ☐ OTHER:_____

Ninyo & Moore

475 Goddard, Suite 200
Irvine, CA 92618

Tel: (949) 753-7070
Fax (949) 753-7071

PROJECT INFORMATION

PROJECT NAME:	LADWP – Chatsworth Reservoir
ADDRESS:	Chatsworth Reservoir
CITY/STATE:	Chatsworth, California
Global ID:	Log Code:
Project Manager	Ken Floom
Project Number	47278-4
SAMPLED BY:	Krista Brodersen – Ninyo & Moore

Lab:
Calscience Laboratories
7440 Lincoln Way
Garden Grove, CA 92841
(714) 895-5494

FIELD POINT NAME	SAMPLE ID	NUMBER OF CONTAINERS	SAMPLE DATE	SAMPLE TIME	SAMPLE MATRIX	CONTAINER TYPE	PRESERV	1,4-dioxane by GC/MS Isotope Dilution	Hexavalent chromium 7199/3060A	Total Cyanide 9012	Methyl-tert-butyl ether (MTBE) 8260B	TPHdd 8015M	PCBs 8082	SVOCs 8270C	Perchlorate 314	REMARKS
	B5-W	1/1/1/1	3-24-04	8:11	Water	Liter/500 ml/250 ml/VOA/Liter/Liter	None	X	X	X	X	X	X	X	X	1493
	B4-W			9:31												
	B2-W			12:45												
	B3-W			13:35												
Total No. of Samples:																

Comments
Fax results to: Ken Floom at (562) 740-1070
E-mail final report to: ken_floom@essentia-llc.com

Relinquished By:	Date/Time	Received By:	Date/Time
Krista Brodersen	3-24-04 1700		
Relinquished By:	Date/Time	Received By:	Date/Time
Relinquished By:	Date/Time	Received By:	Date/Time
			3/24/04 1706

TURN AROUND TIME
- ☐ 24 HOUR
- ☐ 48 HOUR
- ☐ 3 DAY
- ☐ 5-DAY
- ☐ 14 DAY
- ☒ Other _Normal_____

SAMPLE INTEGRITY
- ☐ SAMPLES INTACT?
- ☐ SAMPLES CHILLED
- ☐ SECURITY TAPE INTACT?
- ☐ NO SECURITY TAPE USED

REPORT FORMAT
- ☐ SARWQCB and GEOTRACKER
- ☐ SAN DIEGO HMMD
- ☐ NORMAL
- ☐ OTHER:_____

ENERGY LABORATORIES, INC. • 2393 Salt Creek Highway (82601) • P.O. Box 3258 • Casper, WY 82602
Toll Free 888.235.0515 • 307.235.0515 • Fax 307.234.1639 • casper@energylab.com • www.energylab.com

INVOICE

Invoice Date: *April 09, 2004*

Invoice No: 240430308

BILL TO: **Essentia Management Services**
Attn: Ken Floom
5000 E Spring St Ste 720
Long Beach, CA 90815

Purchase Order:
Account Number C11683
TERMS: NET 30 Days
Interest charged after 30 days 1.5% per month.
VISA/MasterCard payments accepted

Project Name: LADWP - Chatsworth Reservoir 472784

Lab Number	Client Sample ID	Remarks	Matrix	List Price	Mult	Price	Total
WorkOrder: C04031143							
C04031143-001	**B5-W**		**Aqueous**				**$250.00**
Gross Gamma				$75.00	1	$75.00	
Strontium 90				$100.00	1	$100.00	
Tritium in Water				$75.00	1	$75.00	
C04031143-002	**B4-W**		**Aqueous**				**$250.00**
Gross Gamma				$75.00	1	$75.00	
Strontium 90				$100.00	1	$100.00	
Tritium in Water				$75.00	1	$75.00	
C04031143-003	**B2-W**		**Aqueous**				**$250.00**
Gross Gamma				$75.00	1	$75.00	
Strontium 90				$100.00	1	$100.00	
Tritium in Water				$75.00	1	$75.00	
C04031143-004	**B3-W**		**Aqueous**				**$250.00**
Gross Gamma				$75.00	1	$75.00	
Strontium 90				$100.00	1	$100.00	
Tritium in Water				$75.00	1	$75.00	

INVOICE Total:	**$1,000.00**
Amount Received:	$0.00
AMOUNT DUE:	**$1,000.00**

Samples received from Ninyo & Moore 29-Apr-04.

Please detach and return this section with your payment. Thank you

REMIT TO: **Energy Laboratories Inc.**
Accounts Receivable
PO Box 30975
Billings, MT 59107-0975

Account Number:	**C11683**
Invoice Number:	**240430308**
Invoice Date:	**04/09/04**
Purchase Order:	
Invoice Total:	**$1,000.00**
Amount Received:	**$0.00**
Amount Due:	**$1,000.00**

C11683 240430308 000100000 0240542058

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LABORATORY ANALYTICAL REPORT

Client: Essentia Management Services
Project: LADWP - Chatsworth Reservoir 472784

Lab Order: C04031143
Report Date: 04/09/04

Lab ID: C04031143-001
Client Sample ID: B5-W
Matrix: AQUEOUS

Collection Date: 03/24/04 08:11
DateReceived: 03/29/04

Analyses	Result	Units	Qual	RL	MCL/ QCL	Method	Analysis Date / By
RADIONUCLIDES - TOTAL							
Cesium 137	ND	pCi/L		20		E901.1	04/02/04 10:12 / db
Strontium 90	ND	pCi/L		10		E905.0	04/01/04 16:00 / db
Tritium	ND	pCi/L		1200		E906.0	04/01/04 12:00 / db

Lab ID: C04031143-002
Client Sample ID: B4-W
Matrix: AQUEOUS

Collection Date: 03/24/04 09:31
DateReceived: 03/29/04

Analyses	Result	Units	Qual	RL	MCL/ QCL	Method	Analysis Date / By
RADIONUCLIDES - TOTAL							
Cesium 137	ND	pCi/L		20		E901.1	04/02/04 10:12 / db
Strontium 90	ND	pCi/L		10		E905.0	04/01/04 16:00 / db
Tritium	ND	pCi/L		1200		E906.0	04/01/04 12:00 / db

Lab ID: C04031143-003
Client Sample ID: B2-W
Matrix: AQUEOUS

Collection Date: 03/24/04 12:45
DateReceived: 03/29/04

Analyses	Result	Units	Qual	RL	MCL/ QCL	Method	Analysis Date / By
RADIONUCLIDES - TOTAL							
Cesium 137	ND	pCi/L		20		E901.1	04/02/04 10:12 / db
Strontium 90	ND	pCi/L		10		E905.0	04/01/04 16:00 / db
Tritium	ND	pCi/L		1200		E906.0	04/01/04 12:00 / db

Report Definitions:
RL - Analyte reporting limit.
QCL - Quality control limit.
MCL - Maximum contaminant level.
ND - Not detected at the reporting limit.

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LABORATORY ANALYTICAL REPORT

Client: Essentia Management Services
Project: LADWP - Chatsworth Reservoir 472784

Lab Order: C04031143
Report Date: 04/09/04

Lab ID: C04031143-004
Client Sample ID: B3-W
Matrix: AQUEOUS

Collection Date: 03/24/04 13:35
DateReceived: 03/29/04

Analyses	Result	Units	Qual	RL	MCL/ QCL	Method	Analysis Date / By
RADIONUCLIDES - TOTAL							
Cesium 137	ND	pCi/L		20		E901.1	04/02/04 10:12 / db
Strontium 90	ND	pCi/L		10		E905.0	04/01/04 16:00 / db
Tritium	ND	pCi/L		1200		E906.0	04/01/04 12:00 / db

Report Definitions:
RL - Analyte reporting limit.
QCL - Quality control limit.
MCL - Maximum contaminant level.
ND - Not detected at the reporting limit.

CO403143

Ninyo & Moore

475 Goddard, Suite 200
Irvine, CA 92618

Tel: (949) 753-7070
Fax (949) 753-7071

PROJECT INFORMATION

PROJECT NAME:	LADWP – Chatsworth Reservoir
ADDRESS:	Chatsworth Reservoir
CITY/STATE:	Chatsworth, California
Global ID:	Log Code:
Project Manager:	Ken Floom
Project Number:	47278-4
SAMPLED BY:	Krista Brodersen – Ninyo & Moore

Lab:
Energy Laboratories, Inc.
2393 Salt Creek Hwy (82601)
Casper, Wyoming 82601
(307) 235-0515
Attn: James Yocum

FIELD POINT NAME	SAMPLE ID	NUMBER OF CONTAINERS	SAMPLE DATE	SAMPLE TIME	SAMPLE MATRIX	CONTAINER TYPE	PRESERV	Cesium 137 – 901.1	Tritium – 906	Strontium 90 – 905	REMARKS
BS	BS-W	4/5	3-24-04	8:11	Water	Liter	Nitric	X	X	X	*4 - 1L containers preserved w Nitric
B4	B4-W	↓	↓	9:31	↓	↓	None	↓	↓	↓	
B2	B2-W			12:45							
B3	B3-W	↓	↓	13:35	↓	↓	↓	↓	↓	↓	1 - 1L container no preservative
											Voice Mail from Krista Sample #1 should be BS-W label on bottle is wrong JR 3/30/04 07:11
Total No. of Samples:											

Comments
Fax results to: Ken Floom at (562) 740-1070
E-mail final report to: ken_floom@essentia-llc.com

Relinquished By:	Date/Time	Received By:	Date/Time
Krista Brodersen	3-24-04 16:00	UPS	
Relinquished By:	Date/Time	Received By: Jasmine Schuetz	Date/Time 3/29/04 10:00
Relinquished By:	Date/Time	Received By:	Date/Time

TURN AROUND TIME	SAMPLE INTEGRITY	REPORT FORMAT
☐ 24 HOUR	☒ SAMPLES INTACT?	☐ SARWQCB and GEOTRACKER
☐ 48 HOUR	☒ SAMPLES CHILLED	☐ SAN DIEGO HMMD
☐ 3 DAY	☐ SECURITY TAPE INTACT?	☐ NORMAL
☐ 5-DAY	☒ NO SECURITY TAPE USED	☐ OTHER:
☐ 14 DAY		
☒ Other _Normal_		

Page ___ of ___

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Track# CO403143 Page

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Energy Laboratories Inc.

Sample Receipt Checklist

Client Name: **Essentia Management Services** Date and Time Received: **3/29/2004 10:00:00**

Work Order Number **C04031143** Received by: **trs**

Checklist completed by: Tammie Schultz 3/30/04 (Signature / Date) Reviewed by _____ (Initials / Date)

Carrier name: UPS

Shipping container/cooler in good condition?	Yes ☑	No ☐	Not Present ☐
Custody seals intact on shipping container/cooler?	Yes ☐	No ☐	Not Present ☑
Custody seals intact on sample bottles?	Yes ☐	No ☐	Not Present ☑
Chain of custody present?	Yes ☑	No ☐	
Chain of custody signed when relinquished and received?	Yes ☑	No ☐	
Chain of custody agrees with sample labels?	Yes ☐	No ☑	
Samples in proper container/bottle?	Yes ☑	No ☐	
Sample containers intact?	Yes ☑	No ☐	
Sufficient sample volume for indicated test?	Yes ☑	No ☐	
All samples received within holding time?	Yes ☑	No ☐	
Container/Temp Blank temperature in compliance?	Yes ☐	No ☑	9 °C
Water - VOA vials have zero headspace?	Yes ☐	No ☐	No VOA vials submitted ☑
Water - pH acceptable upon receipt?	Yes ☑	No ☐	Not Applicable ☐

Adjusted? _____ Checked by _____

Any No and/or NA (not applicable) response must be detailed in the comments section below.

Client contacted: _____ Date contacted: _____ Person contacted _____

Contacted by: _____ Regarding: _____

Comments:
Sample C04031143-001 is listed on COC as BW-5. Bottle is labeled B4-W. Per Krista 5-BW on COC is correct. 7-30-04 07:11.

Corrective Action _____

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ANALYTICAL SUMMARY REPORT

April 09, 2004

Ken Floom
Essentia Management Services
5000 E Spring St Ste 720
Long Beach, CA 90815

Workorder No.: C04031143
Project Name: LADWP - Chatsworth Reservoir 472784

Energy Laboratories Inc. received the following 4 samples from Essentia Management Services on 3/29/2004 for analysis.

Sample ID	Client Sample ID	Collect Date	Receive Date	Matrix	Test
C04031143-001	B5-W	03/24/04 8:11	03/29/04	Aqueous	Gross Gamma Strontium 90 Tritium in Water
C04031143-002	B4-W	03/24/04 9:31	03/29/04	Aqueous	Same As Above
C04031143-003	B2-W	03/24/04 12:45	03/29/04	Aqueous	Same As Above
C04031143-004	B3-W	03/24/04 13:35	03/29/04	Aqueous	Same As Above

There were no problems with the analyses and all data for associated QC met EPA or laboratory specifications except where noted in the Case Narrative or Report.

If you have any questions regarding these tests results, please call.

Report Approved By: R.A. Leaching
ROGER GARLING
LABORATORY SUPERVISOR

ENERGY LABORATORIES, INC. • 2393 Salt Creek Highway (82601) • P.O. Box 3258 • Casper, WY 82602
Toll Free 888.235.0515 • 307.235.0515 • Fax 307.234.1639 • casper@energylab.com • www.energylab.com

Date: *09-Apr-04*

CLIENT: Essentia Management Services
Project: LADWP - Chatsworth Reservoir 472784
Sample Delivery Group: C04031143

CASE NARRATIVE

THIS IS THE FINAL PAGE OF THE LABORATORY ANALYTICAL REPORT

BRANCH LABORATORY LOCATIONS
eli-b - Energy Laboratories, Inc. - Billings, MT
eli-cs - Energy Laboratories, Inc. - College Station, TX
eli-g - Energy Laboratories, Inc. - Gillette, WY
eli-h - Energy Laboratories, Inc. - Helena, MT
eli-r - Energy Laboratories, Inc. - Rapid City, SD

ORIGINAL SAMPLE SUBMITTAL(S)
All original sample submittals have been returned with the data package. A copy of the submittal(s) has been included and tracked in the data package.

SUBCONTRACTING ANALYSIS
Subcontracting of sample analyses to an outside laboratory may be required. If so, ENERGY LABORATORIES will utilize its branch laboratories or qualified contract laboratories for this service. Any such laboratories will be indicated within the Laboratory Analytical Report.

SAMPLE TEMPERATURE COMPLIANCE: 4°C (±2°C)
Temperature of samples received may not be considered properly preserved by accepted standards. Samples that are hand delivered immediately after collection shall be considered acceptable if there is evidence that the chilling process has begun.

ENERGY LABORATORIES, INC. - CASPER,WY certifies that certain method selections contained in this report meet requirements as set forth by NELAC. Some client specific reporting requirements may not require NELAC reporting protocol.

ELI appreciates the opportunity to provide you with this analytical service. For additional information and services visit our web page www.energylab.com.

The total number of pages of this report are indicated by the last four digits of the tracking number located in the lower right corner.

Ninyo & Moore

475 Goddard, Suite 200
Irvine, CA 92618

Tel: (949) 753-7070
Fax (949) 753-7071

PROJECT INFORMATION

PROJECT NAME:	LADWP – Chatsworth Reservoir
ADDRESS:	Chatsworth Reservoir
CITY/STATE:	Chatsworth, California
Global ID:	Log Code:
Project Manager	Ken Floom — Project Number 47278-4
SAMPLED BY:	Krista Brodersen – Ninyo & Moore

Lab:
Energy Laboratories, Inc
2393 Salt Creek Hwy
(82601)
Casper, Wyoming 82601
(307) 235-0515
Attn: James Yocum

FIELD POINT NAME	SAMPLE ID	NUMBER OF CONTAINERS	SAMPLE DATE	SAMPLE TIME	SAMPLE MATRIX	CONTAINER TYPE	PRESERV	Cesium 137-901.1	Tritium-906	Strontium 90-905						REMARKS
B5	B5-W	4/~~5~~1	3-24-04	8:11	Water	Liter	Nitric/	X	X	X						#4 - 1L containers
B4	B4-W	↓	↓	9:31	↓	↓	None	↓	↓	↓						preserved w
B2	B2-W	↓	↓	12:45	↓	↓	↓	↓	↓	↓						Nitric
B3	B3-W	↓	↓	13:35	↓	↓	↓	↓	↓	↓						
																1 - 1L container
																no preservative
																Voice Mail from
																Krista Sample
																#1 should be
																B5-W label
																on bottle
																is wrong
																JRS
																3/30/04 07:11
Total No. of Samples:																

Comments
Fax results to: Ken Floom at (562) 740-1070
E-mail final report to: ken_floom@essentia-llc.com

Relinquished By:	Date/Time	Received By:	Date/Time
Krista Brodersen	3-24-04 16:00	Tammie Schultz (UPS)	3/29/04 10:00
Relinquished By:	Date/Time	Received By:	Date/Time
Relinquished By:	Date/Time	Received By:	Date/Time

TURN AROUND TIME
- ☐ 24 HOUR
- ☐ 48 HOUR
- ☐ 3 DAY
- ☐ 5-DAY
- ☐ 14 DAY
- ☒ Other _Normal_____

SAMPLE INTEGRITY
- ☒ SAMPLES INTACT?
- ☒ SAMPLES CHILLED
- ☐ SECURITY TAPE INTACT?
- ☒ NO SECURITY TAPE USED

REPORT FORMAT
- ☐ SARWQCB and GEOTRACKER
- ☐ SAN DIEGO HMMD
- ☐ NORMAL
- ☐ OTHER:_____

9°

FRONTIER
ANALYTICAL LABORATORY

April 22, 2004

FAL Project ID: 2514

Mr. Ken Floom
Essentia Management Services
5000 E. Spring Street, Suite 720
Long Beach, CA 90815

Dear Mr. Floom,

Enclosed are the results for Frontier Analytical Laboratory project **2514**. This corresponds to your project LADWP #47278-4. Four "aqueous" samples containing sediment were received on 3/29/04 in good condition. Prior to extracting these "aqueous" samples, it was determined that all four samples had percent solids greater than one percent. EPA Method 1613 states that if an "aqueous" sample has a solid content of greater than one percent, the sample must be analyzed as a solid sample. Due to this requirement, all four samples were analyzed as solid samples by EPA Method 1613 for tetra through octa chlorinated dibenzo dioxins and dibenzo furans.

Essentia Management Services requested a turnaround time of fifteen business days for project **2514**. On Wednesday, April 14th, Essentia Management Services was contacted regarding the heavy sediment content of their four "aqueous" samples. Essentia Management Services requested that we place the four samples on hold while they determined if other backup samples containing less sediment could be sent as replacements. On Friday, April 16th, Essentia Management Services requested we take the samples "off" hold because the sampling technique used for acquiring the samples causes turbidity in the samples and would have the same affect on any backup samples. Frontier Analytical Laboratory completed project **2514** within five business days after the samples were taken off hold.

The following report consists of an Analytical Data section and a Sample Receipt section. The Analytical Data section contains the project-sample tracking log, qualifier reference guide, ML/MDL form and the analytical results. The Sample Receipt section contains the chain of custody, sample login form and sample photo.

If you have any questions regarding project **2514**, please feel free to contact me at (916) 934-0900. Thank you for choosing Frontier Analytical Laboratory for your analytical needs.

Sincerely,

Bradley B. Silverbush
Director of Operations

FRONTIER ANALYTICAL LABORATORY
5172 Hillsdale Circle • El Dorado Hills, CA 95762
Tel (916) 934-0900 • Fax (916) 934-0999
dioxin@frontieranalytical.com

FRONTIER ANALYTICAL LABORATORY

Frontier Analytical Laboratory

Sample Tracking Log

FAL Project ID: 2514

Received on: 03/29/2004 Project Due: 04/20/2004 Storage: R1

FAL Sample ID	Dup	Client Project ID	Client Sample ID	Requested Method	Matrix	Sampling Date	Sampling Time	Hold Time Due Date
2514-001-SA	0	LADWP - 47278-4	B5-W	EPA 1613 D/F	Solid	03/24/2004	08:11 am	03/24/2005
2514-002-SA	0	LADWP - 47278-4	B4-W	EPA 1613 D/F	Solid	03/24/2004	09:31 am	03/24/2005
2514-003-SA	0	LADWP - 47278-4	B2-W	EPA 1613 D/F	Solid	03/24/2004	12:45 pm	03/24/2005
2514-004-SA	0	LADWP - 47278-4	B3-W	EPA 1613 D/F	Solid	03/24/2004	01:35 pm	03/24/2005

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Qualifier Reference Guide

A	Isotopic Labeled Standard outside QC range but signal to noise ratio is >10:1
B	Analyte is present in Method Blank
C	Chemical Interference
D	Presence of Diphenyl Ethers
E	Analyte concentration is above calibration range
F	Analyte confirmation on secondary column
J‡	Analyte concentration is below calibration range
M	Maximum possible concentration
NP	Not Provided
S	Sample acceptance criteria not met
X	Matrix interferences
*	Result taken from dilution or reinjection
-	Analyte Not Detected

‡ "J" values are equivalent to DNQ (detected but not quantified) for California Toxics Rule (CTR)/National Pollutant Discharge Elimination System (NPDES) samples

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EPA Method 1613/8290 Solid MDL
(Soxhlet/SDS Extraction)

FRONTIER ANALYTICAL LABORATORY

Analyte	ML	MDL
2,3,7,8-TCDD	0.500	0.132
1,2,3,7,8-PeCDD	2.50	0.213
1,2,3,4,7,8-HxCDD	2.50	0.321
1,2,3,6,7,8-HxCDD	2.50	0.364
1,2,3,7,8,9-HxCDD	2.50	0.315
1,2,3,4,6,7,8-HpCDD	2.50	0.328
OCDD	5.00	0.832
2,3,7,8-TCDF	0.500	0.108
1,2,3,7,8-PeCDF	2.50	0.252
2,3,4,7,8-PeCDF	2.50	0.236
1,2,3,4,7,8-HxCDF	2.50	0.101
1,2,3,6,7,8-HxCDF	2.50	0.0991
1,2,3,7,8,9-HxCDF	2.50	0.101
2,3,4,6,7,8-HxCDF	2.50	0.122
1,2,3,4,6,7,8-HpCDF	2.50	0.140
1,2,3,4,7,8,9-HpCDF	2.50	0.168
OCDF	5.00	0.594

Project **2330**, Extracted 11/25/03; analyzed 12/01/03. Based on 10g sample, pg/g.

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EPA Method 1613
PCDD/F

FRONTIER ANALYTICAL LABORATORY

FAL ID: 2514-001-MB
Client ID: Method Blank
Matrix: Solid
Batch No: X0225

Date Extracted: 04-19-2004
Date Received: NA
Amount: 10.00 g

ICal: PCDDFAL2-3-30-04
GC Column: DB5
Units: pg/g

Acquired: 04-22-2004
WHO TEQ: 0.00

Compound	Conc	DL	Qual	WHO Tox	Compound	Conc	DL	Qual	#Hom
2,3,7,8-TCDD	-	0.163		-					
1,2,3,7,8-PeCDD	-	0.261		-					
1,2,3,4,7,8-HxCDD	-	0.640		-					
1,2,3,6,7,8-HxCDD	-	0.692		-	Total Tetra-Dioxins	-	0.352		0
1,2,3,7,8,9-HxCDD	-	0.608		-	Total Penta-Dioxins	-	0.487		0
1,2,3,4,6,7,8-HpCDD	-	0.998		-	Total Hexa-Dioxins	-	0.849		0
OCDD	-	2.34		-	Total Hepta-Dioxins	-	1.03		0
2,3,7,8-TCDF	-	0.177		-					
1,2,3,7,8-PeCDF	-	0.554		-					
2,3,4,7,8-PeCDF	-	0.529		-					
1,2,3,4,7,8-HxCDF	-	0.176		-					
1,2,3,6,7,8-HxCDF	-	0.249		-					
2,3,4,6,7,8-HxCDF	-	0.257		-					
1,2,3,7,8,9-HxCDF	-	0.311		-	Total Tetra-Furans	-	0.313		0
1,2,3,4,6,7,8-HpCDF	-	0.314		-	Total Penta-Furans	-	0.669		0
1,2,3,4,7,8,9-HpCDF	-	0.358		-	Total Hexa-Furans	-	0.257		0
OCDF	-	0.892		-	Total Hepta-Furans	-	0.358		0

Internal Standards	% Rec	QC Limits	Qual
13C-2,3,7,8-TCDD	76.3	25.0 - 164	
13C-1,2,3,7,8-PeCDD	76.4	25.0 - 181	
13C-1,2,3,4,7,8-HxCDD	76.9	32.0 - 141	
13C-1,2,3,6,7,8-HxCDD	72.7	28.0 - 130	
13C-1,2,3,4,6,7,8-HpCDD	89.8	23.0 - 140	
13C-OCDD	91.0	17.0 - 157	
13C-2,3,7,8-TCDF	76.9	24.0 - 169	
13C-1,2,3,7,8-PeCDF	84.9	24.0 - 185	
13C-2,3,4,7,8-PeCDF	85.5	21.0 - 178	
13C-1,2,3,4,7,8-HxCDF	69.0	26.0 - 152	
13C-1,2,3,6,7,8-HxCDF	68.4	26.0 - 123	
13C-2,3,4,6,7,8-HxCDF	71.4	28.0 - 136	
13C-1,2,3,7,8,9-HxCDF	79.3	29.0 - 147	
13C-1,2,3,4,6,7,8-HpCDF	78.3	28.0 - 143	
13C-1,2,3,4,7,8,9-HpCDF	96.1	26.0 - 138	
13C-OCDF	86.2	17.0 - 157	

Cleanup Surrogate			
37Cl-2,3,7,8-TCDD	80.6	35.0 - 197	

Analyst: _____
Date: 4/22/04

Reviewed By: DN
Date: 4/22/2004

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EPA Method 1613
PCDD/F

FRONTIER ANALYTICAL LABORATORY

FAL ID: 2514-001-OPR
Client ID: OPR
Matrix: Solid
Batch No: X0225

Date Extracted: 04-19-2004
Date Received: NA
Amount: 10.00 g

ICal: PCDDFAL2-3-30-04
GC Column: DB5
Units: ng/ml

Acquired: 04-22-2004
WHO TEQ: NA

Compound	Conc	QC Limits
2,3,7,8-TCDD	8.30	6.70 - 15.8
1,2,3,7,8-PeCDD	49.1	35.0 - 71.0
1,2,3,4,7,8-HxCDD	51.7	35.0 - 82.0
1,2,3,6,7,8-HxCDD	52.1	38.0 - 67.0
1,2,3,7,8,9-HxCDD	50.8	32.0 - 81.0
1,2,3,4,6,7,8-HpCDD	51.7	35.0 - 70.0
OCDD	99.7	78.0 - 144
2,3,7,8-TCDF	10.3	7.50 - 15.8
1,2,3,7,8-PeCDF	55.7	40.0 - 67.0
2,3,4,7,8-PeCDF	56.4	34.0 - 80.0
1,2,3,4,7,8-HxCDF	54.4	36.0 - 67.0
1,2,3,6,7,8-HxCDF	54.9	42.0 - 65.0
2,3,4,6,7,8-HxCDF	53.8	35.0 - 78.0
1,2,3,7,8,9-HxCDF	57.4	39.0 - 65.0
1,2,3,4,6,7,8-HpCDF	51.3	41.0 - 61.0
1,2,3,4,7,8,9-HpCDF	53.5	39.0 - 69.0
OCDF	105	63.0 - 170

Internal Standards	% Rec	QC Limits
13C-2,3,7,8-TCDD	95.2	20.0 - 175
13C-1,2,3,7,8-PeCDD	90.3	21.0 - 227
13C-1,2,3,4,7,8-HxCDD	94.0	21.0 - 193
13C-1,2,3,6,7,8-HxCDD	89.1	25.0 - 163
13C-1,2,3,4,6,7,8-HpCDD	95.4	26.0 - 166
13C-OCDD	84.8	13.0 - 198
13C-2,3,7,8-TCDF	96.8	22.0 - 152
13C-1,2,3,7,8-PeCDF	102	21.0 - 192
13C-2,3,4,7,8-PeCDF	104	13.0 - 328
13C-1,2,3,4,7,8-HxCDF	88.1	19.0 - 202
13C-1,2,3,6,7,8-HxCDF	87.0	21.0 - 159
13C-2,3,4,6,7,8-HxCDF	87.5	22.0 - 176
13C-1,2,3,7,8,9-HxCDF	92.0	17.0 - 205
13C-1,2,3,4,6,7,8-HpCDF	87.3	21.0 - 158
13C-1,2,3,4,7,8,9-HpCDF	99.6	20.0 - 186
13C-OCDF	83.8	13.0 - 198

Cleanup Surrogate		
37Cl-2,3,7,8-TCDD	97.5	31.0 - 191

Analyst: _____
Date: 4/22/04

Reviewed By: _____
Date: 4/22/04

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EPA Method 1613
PCDD/F

FRONTIER ANALYTICAL LABORATORY

FAL ID: 2514-001-SA
Client ID: B5-W
Matrix: Solid
Batch No: X0225

Date Extracted: 04-19-2004
Date Received: 03-29-2004
Amount: 3.79 g
% Solids: 1.72

ICal: PCDDFAL2-3-30-04
GC Column: DB5
Units: pg/g

Acquired: 04-22-2004
WHO TEQ: 0.149

Compound	Conc	DL	Qual	WHO Tox	Compound	Conc	DL	Qual	#Hom
2,3,7,8-TCDD	-	0.406		-					
1,2,3,7,8-PeCDD	-	0.581		-					
1,2,3,4,7,8-HxCDD	-	2.58		-					
1,2,3,6,7,8-HxCDD	-	2.70		-	Total Tetra-Dioxins	-	0.737		0
1,2,3,7,8,9-HxCDD	-	2.40		-	Total Penta-Dioxins	-	1.72		0
1,2,3,4,6,7,8-HpCDD	11.0	-		0.110	Total Hexa-Dioxins	-	2.99		0
OCDD	86.3	-		0.00863	Total Hepta-Dioxins	37.1	-		2
2,3,7,8-TCDF	-	0.403		-					
1,2,3,7,8-PeCDF	-	1.49		-					
2,3,4,7,8-PeCDF	-	1.37		-					
1,2,3,4,7,8-HxCDF	-	0.628		-					
1,2,3,6,7,8-HxCDF	-	0.917		-					
2,3,4,6,7,8-HxCDF	-	0.942		-					
1,2,3,7,8,9-HxCDF	-	1.22		-	Total Tetra-Furans	-	0.798		0
1,2,3,4,6,7,8-HpCDF	2.98	-	J	0.0298	Total Penta-Furans	-	1.78		0
1,2,3,4,7,8,9-HpCDF	-	0.870		-	Total Hexa-Furans	-	1.22		0
OCDF	5.68	-	J	0.000568	Total Hepta-Furans	5.72	-	J	2

Internal Standards	% Rec	QC Limits	Qual
13C-2,3,7,8-TCDD	94.5	25.0 - 164	
13C-1,2,3,7,8-PeCDD	92.4	25.0 - 181	
13C-1,2,3,4,7,8-HxCDD	93.1	32.0 - 141	
13C-1,2,3,6,7,8-HxCDD	93.2	28.0 - 130	
13C-1,2,3,4,6,7,8-HpCDD	107	23.0 - 140	
13C-OCDD	94.0	17.0 - 157	
13C-2,3,7,8-TCDF	99.2	24.0 - 169	
13C-1,2,3,7,8-PeCDF	106	24.0 - 185	
13C-2,3,4,7,8-PeCDF	110	21.0 - 178	
13C-1,2,3,4,7,8-HxCDF	87.1	26.0 - 152	
13C-1,2,3,6,7,8-HxCDF	85.7	26.0 - 123	
13C-2,3,4,6,7,8-HxCDF	87.5	28.0 - 136	
13C-1,2,3,7,8,9-HxCDF	95.1	29.0 - 147	
13C-1,2,3,4,6,7,8-HpCDF	95.7	28.0 - 143	
13C-1,2,3,4,7,8,9-HpCDF	112	26.0 - 138	
13C-OCDF	71.3	17.0 - 157	

Cleanup Surrogate		
37Cl-2,3,7,8-TCDD	98.9	35.0 - 197

Analyst: _____
Date: 4/22/04

Reviewed By: _____
Date: 4/22/04

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EPA Method 1613
PCDD/F

FRONTIER ANALYTICAL LABORATORY

FAL ID: 2514-002-SA
Client ID: B4-W
Matrix: Solid
Batch No: X0225

Date Extracted: 04-19-2004
Date Received: 03-29-2004
Amount: 3.15 g
% Solids: 1.30

ICal: PCDDFAL2-3-30-04
GC Column: DB5
Units: pg/g

Acquired: 04-22-2004
WHO TEQ: 0.0845

Compound	Conc	DL	Qual	WHO Tox	Compound	Conc	DL	Qual	#Hom
2,3,7,8-TCDD	-	0.349		-					
1,2,3,7,8-PeCDD	-	0.840		-					
1,2,3,4,7,8-HxCDD	-	1.19		-					
1,2,3,6,7,8-HxCDD	-	1.40		-	Total Tetra-Dioxins	-	0.992		0
1,2,3,7,8,9-HxCDD	-	1.19		-	Total Penta-Dioxins	-	2.06		0
1,2,3,4,6,7,8-HpCDD	8.12	-		0.0812	Total Hexa-Dioxins	-	2.07		0
OCDD	32.9	-		0.00329	Total Hepta-Dioxins	16.2	-		2
2,3,7,8-TCDF	-	0.498		-					
1,2,3,7,8-PeCDF	-	1.20		-					
2,3,4,7,8-PeCDF	-	1.11		-					
1,2,3,4,7,8-HxCDF	-	0.596		-					
1,2,3,6,7,8-HxCDF	-	0.870		-					
2,3,4,6,7,8-HxCDF	-	0.959		-					
1,2,3,7,8,9-HxCDF	-	1.16		-	Total Tetra-Furans	-	0.977		0
1,2,3,4,6,7,8-HpCDF	-	0.971		-	Total Penta-Furans	-	1.64		0
1,2,3,4,7,8,9-HpCDF	-	1.13		-	Total Hexa-Furans	-	1.16		0
OCDF	-	2.42		-	Total Hepta-Furans	-	1.13		0

Internal Standards	% Rec	QC Limits	Qual
13C-2,3,7,8-TCDD	93.3	25.0 - 164	
13C-1,2,3,7,8-PeCDD	94.8	25.0 - 181	
13C-1,2,3,4,7,8-HxCDD	93.5	32.0 - 141	
13C-1,2,3,6,7,8-HxCDD	89.7	28.0 - 130	
13C-1,2,3,4,6,7,8-HpCDD	107	23.0 - 140	
13C-OCDD	91.2	17.0 - 157	
13C-2,3,7,8-TCDF	97.0	24.0 - 169	
13C-1,2,3,7,8-PeCDF	102	24.0 - 185	
13C-2,3,4,7,8-PeCDF	111	21.0 - 178	
13C-1,2,3,4,7,8-HxCDF	83.4	26.0 - 152	
13C-1,2,3,6,7,8-HxCDF	83.3	26.0 - 123	
13C-2,3,4,6,7,8-HxCDF	85.1	28.0 - 136	
13C-1,2,3,7,8,9-HxCDF	93.4	29.0 - 147	
13C-1,2,3,4,6,7,8-HpCDF	98.3	28.0 - 143	
13C-1,2,3,4,7,8,9-HpCDF	114	26.0 - 138	
13C-OCDF	90.9	17.0 - 157	

Cleanup Surrogate		
37Cl-2,3,7,8-TCDD	99.6	35.0 - 197

Analyst: _____
Date: 4/22/04

Reviewed By: _____
Date: 4/26/04

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EPA Method 1613
PCDD/F

FRONTIER ANALYTICAL LABORATORY

FAL ID: 2514-003-SA
Client ID: B2-W
Matrix: Solid
Batch No: X0225

Date Extracted: 04-19-2004
Date Received: 03-29-2004
Amount: 6.91 g
% Solids: 3.33

ICal: PCDDFAL2-3-30-04
GC Column: DB5
Units: pg/g

Acquired: 04-22-2004
WHO TEQ: 0.0428

Compound	Conc	DL	Qual	WHO Tox	Compound	Conc	DL	Qual	#Hom
2,3,7,8-TCDD	-	0.247		-					
1,2,3,7,8-PeCDD	-	0.820		-					
1,2,3,4,7,8-HxCDD	-	0.746		-					
1,2,3,6,7,8-HxCDD	-	0.844		-	Total Tetra-Dioxins	-	0.903		0
1,2,3,7,8,9-HxCDD	-	0.741		-	Total Penta-Dioxins	-	0.820		0
1,2,3,4,6,7,8-HpCDD	4.01	-		0.0401	Total Hexa-Dioxins	-	1.17		0
OCDD	27.1	-		0.00271	Total Hepta-Dioxins	11.9	-		2
2,3,7,8-TCDF	-	0.224		-					
1,2,3,7,8-PeCDF	-	0.531		-					
2,3,4,7,8-PeCDF	-	0.445		-					
1,2,3,4,7,8-HxCDF	-	0.221		-					
1,2,3,6,7,8-HxCDF	-	0.339		-					
2,3,4,6,7,8-HxCDF	-	0.349		-					
1,2,3,7,8,9-HxCDF	-	0.409		-	Total Tetra-Furans	-	0.372		0
1,2,3,4,6,7,8-HpCDF	-	1.00		-	Total Penta-Furans	-	0.797		0
1,2,3,4,7,8,9-HpCDF	-	0.322		-	Total Hexa-Furans	-	0.409		0
OCDF	-	1.75		-	Total Hepta-Furans	-	1.11		0

Internal Standards	% Rec	QC Limits	Qual
13C-2,3,7,8-TCDD	96.0	25.0 - 164	
13C-1,2,3,7,8-PeCDD	97.7	25.0 - 181	
13C-1,2,3,4,7,8-HxCDD	92.1	32.0 - 141	
13C-1,2,3,6,7,8-HxCDD	90.2	28.0 - 130	
13C-1,2,3,4,6,7,8-HpCDD	105	23.0 - 140	
13C-OCDD	91.9	17.0 - 157	
13C-2,3,7,8-TCDF	95.5	24.0 - 169	
13C-1,2,3,7,8-PeCDF	106	24.0 - 185	
13C-2,3,4,7,8-PeCDF	114	21.0 - 178	
13C-1,2,3,4,7,8-HxCDF	81.7	26.0 - 152	
13C-1,2,3,6,7,8-HxCDF	80.6	26.0 - 123	
13C-2,3,4,6,7,8-HxCDF	83.1	28.0 - 136	
13C-1,2,3,7,8,9-HxCDF	93.6	29.0 - 147	
13C-1,2,3,4,6,7,8-HpCDF	94.9	28.0 - 143	
13C-1,2,3,4,7,8,9-HpCDF	114	26.0 - 138	
13C-OCDF	91.0	17.0 - 157	

Cleanup Surrogate		
37Cl-2,3,7,8-TCDD	95.9	35.0 - 197

Analyst: TC
Date: 4/22/04

Reviewed By: [signature]
Date: 4/30/04

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EPA Method 1613
PCDD/F

FRONTIER ANALYTICAL LABORATORY

FAL ID: 2514-004-SA
Client ID: B3-W
Matrix: Solid
Batch No: X0225

Date Extracted: 04-19-2004
Date Received: 03-29-2004
Amount: 9.41 g
% Solids: 4.42

ICal: PCDDFAL2-3-30-04
GC Column: DB5
Units: pg/g

Acquired: 04-22-2004
WHO TEQ: 0.0285

Compound	Conc	DL	Qual	WHO Tox	Compound	Conc	DL	Qual	#Hom
2,3,7,8-TCDD	-	0.250		-					
1,2,3,7,8-PeCDD	-	0.647		-					
1,2,3,4,7,8-HxCDD	-	0.669		-					
1,2,3,6,7,8-HxCDD	-	0.728		-	Total Tetra-Dioxins	-	0.250		0
1,2,3,7,8,9-HxCDD	-	0.648		-	Total Penta-Dioxins	-	0.647		0
1,2,3,4,6,7,8-HpCDD	2.70	-		0.0270	Total Hexa-Dioxins	-	0.984		0
OCDD	15.2	-		0.00152	Total Hepta-Dioxins	6.82	-		2
2,3,7,8-TCDF	-	0.294		-					
1,2,3,7,8-PeCDF	-	0.554		-					
2,3,4,7,8-PeCDF	-	0.549		-					
1,2,3,4,7,8-HxCDF	-	0.396		-					
1,2,3,6,7,8-HxCDF	-	0.564		-					
2,3,4,6,7,8-HxCDF	-	0.580		-					
1,2,3,7,8,9-HxCDF	-	0.713		-	Total Tetra-Furans	-	0.294		0
1,2,3,4,6,7,8-HpCDF	-	0.887		-	Total Penta-Furans	-	0.749		0
1,2,3,4,7,8,9-HpCDF	-	0.941		-	Total Hexa-Furans	-	0.713		0
OCDF	-	1.52		-	Total Hepta-Furans	-	0.941		0

Internal Standards	% Rec	QC Limits	Qual
13C-2,3,7,8-TCDD	91.8	25.0 - 164	
13C-1,2,3,7,8-PeCDD	92.1	25.0 - 181	
13C-1,2,3,4,7,8-HxCDD	88.2	32.0 - 141	
13C-1,2,3,6,7,8-HxCDD	85.4	28.0 - 130	
13C-1,2,3,4,6,7,8-HpCDD	103	23.0 - 140	
13C-OCDD	99.4	17.0 - 157	
13C-2,3,7,8-TCDF	93.3	24.0 - 169	
13C-1,2,3,7,8-PeCDF	104	24.0 - 185	
13C-2,3,4,7,8-PeCDF	106	21.0 - 178	
13C-1,2,3,4,7,8-HxCDF	80.9	26.0 - 152	
13C-1,2,3,6,7,8-HxCDF	78.5	26.0 - 123	
13C-2,3,4,6,7,8-HxCDF	81.9	28.0 - 136	
13C-1,2,3,7,8,9-HxCDF	93.0	29.0 - 147	
13C-1,2,3,4,6,7,8-HpCDF	90.7	28.0 - 143	
13C-1,2,3,4,7,8,9-HpCDF	110	26.0 - 138	
13C-OCDF	93.3	17.0 - 157	

Cleanup Surrogate		
37Cl-2,3,7,8-TCDD	94.3	35.0 - 197

Analyst: _____
Date: 4/22/04

Reviewed By: _____
Date: 4/22/04

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Frontier Analytical Laboratory

Sample Login Form

FAL Project ID: **2514**

Client:	Essentia Management Services
Client Project ID:	LADWP - 47278-4
Date Received:	03/29/2004
Time Received:	08:50 am
Received By:	KZ
Logged In By:	KZ
# of Samples Received:	4
Duplicates:	0
Storage Location:	R1

Method of Delivery:	Courier
Tracking Number:	CA Overnight
Shipping Container Received Intact	Yes
Custody seals(s) present?	No
Custody seals(s) intact?	No
Sample Arrival Temperature (C)	4
Cooling Method	Ice
Chain Of Custody Present?	Yes
Return Shipping Container To Client	Yes
Test for residual Chlorine	Yes
Thiosulfate Added	No
Earliest Sample Hold Time Expiration	03/24/2005
Adequate Sample Volume	Yes
Anomalies or additional comments:	

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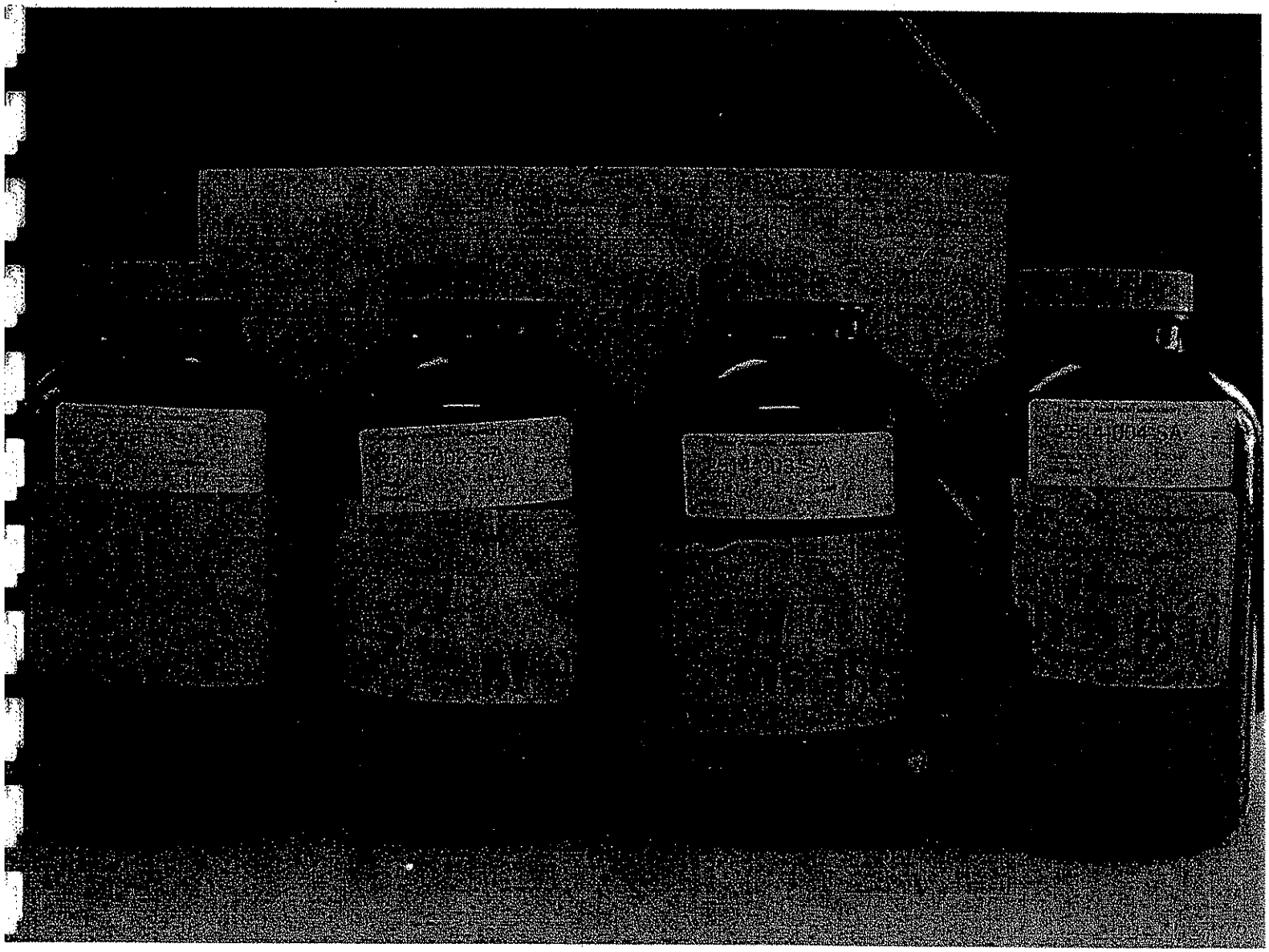
FRONTIER
ANALYTICAL LABORATORY



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Ninyo & Moore

475 Goddard, Suite 200
Irvine, CA 92618

Tel: (949) 753-7070
Fax (949) 753-7071

PROJECT INFORMATION

PROJECT NAME:	LADWP – Chatsworth Reservoir
ADDRESS:	Chatsworth Reservoir
CITY/STATE:	Chatsworth, California
Global ID:	Log Code:
Project Manager	Ken Floom
Project Number	47278-4
SAMPLED BY:	Krista Brodersen – Ninyo & Moore

Lab:
Frontier Analytical Laboratories
5172 Hillsdale Circle
El Dorado Hills, CA 95762
(916)-934-0900
ATTN: Bradley Silverberg

FIELD POINT NAME	SAMPLE ID	NUMBER OF CONTAINERS	SAMPLE DATE	SAMPLE TIME	SAMPLE MATRIX	CONTAINER TYPE	PRESERV	Dioxins- 1613	REMARKS
B5	B5-W	1	3.24.04	8:11	Water	Liter	NONE	X	
B4	B4-W	↓	↓	9:31	↓	↓	↓	↓	
B2	B2-W			12:45					
B3	B3-W			13:35					
Total No. of Samples:									

Comments
Fax results to: Ken Floom at (562) 740-1070
E-mail final report to: ken_floom@essentia-llc.com

Relinquished By:	Date/Time	Received By:	Date/Time
Krista Brodersen	3-24-04 16:00		
Relinquished By:	Date/Time	Received By:	Date/Time
Relinquished By:	Date/Time	Received By:	Date/Time
		Kathy Zito	3/29/04 8:50

TURN AROUND TIME
- ☐ 24 HOUR
- ☐ 48 HOUR
- ☐ 3 DAY
- ☐ 5-DAY
- ☐ 14 DAY
- ☒ Other _Normal_____

SAMPLE INTEGRITY
- ☐ SAMPLES INTACT?
- ☐ SAMPLES CHILLED
- ☐ SECURITY TAPE INTACT?
- ☐ NO SECURITY TAPE USED

REPORT FORMAT
- ☐ SARWQCB and GEOTRACKER
- ☐ SAN DIEGO HMMD
- ☐ NORMAL
- ☐ OTHER:_____

310000 JP 110000

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CLIENT:	**GEORGE FAEUSTLE**	
PROJECT:	**CHATSWORTH RESERVOIR**	
REPORT NO.:	**C10619**	
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METALS/MERCURY	**EPA METHOD 6010B/245.1**	**001000 - 001007**
VOC	**EPA METHOD 8260B**	**002000 - 002006**
QA/QC SUMMARY		**003000 - 003004**

DEPARTMENT OF WATER AND POWER
OF THE CITY OF LOS ANGELES
WATER QUALITY AND OPERATIONS

Report No. C10619
Page 1 of 1 w/attachments
COC 04-0602

ENVIRONMENTAL LABORATORY DATA REPORT

CHATSWORTH RESERVOIR

Water samples from Chatsworth Reservoir were delivered on March 24, 2004 and analyzed for Metals/Mercury and Volatile Organic Compounds (VOC) analyses. The samples and their corresponding analytes, methods and results are listed below.

The samples were identified as follows:

Chem Lab Sample ID	COC Number	Sample Date	Sample Description
LE03464	04-0602	3/24/04	B5-W
LE03465			
LE03466			B4-W
LE03467			
LE03468			B2-W
LE03469			
LE03470			B3-W
LE03471			

The analyses and results were as follows :

Analysis	Environmental Lab Sample ID	EPA Method No.	Analysis Date	Results	Analyzed by
Metals/Mercury	LE03464 – LE03471	6010B/245.1	3/29/04, 4/9/04	**Attachment #1**	Environmental Lab
VOC		8260B	3/31/04	**Attachment #2**	Environmental Lab

If there are any questions, or if further information is needed, please contact Mr. Lucas Wang at (213) 367-7271 or Mr. Stanley Kung at 213-367-7270

Date Completed: 4/20/04
Work Order: UND21
Job Card #: J96086
Copies To: George Faeustle
Stanley Kung
Filenet

Test made by: Environmental Lab

Report by: KC
Checked by: AMK
Approved by: Stanley Kung 4/

MANAGER
ENVIRONMENTAL LABORATORY

C10617

Environmental Laboratory
1630 N. Main Street, Bldg 7
Los Angeles, CA. 90012
(213) 367-7248/7399
(213) 367-7285 FAX

Department of Water and Power
City of Los Angeles

Chain of Custody Record

COC#: 04-0602 Page 1 of 1

Report C#: JC#: WO#:
Refrig#: 4 Shelf: 10 Bin#:
Initial of Field Personnel: KAB No. of Field Test: Vials R953

Sample Location: Chatsworth Reservoir

Chem Lab use only CHEMISTRY LOG NUMBERS (For sample duplicates use .1 or .X)	Sample Date	(24 Hr) Sample Time	Sample Location and Description	Preservatives	Container No.	Container Type	Container Size	Sample Matrix	Analysis Required	Test Result	Analyst Assig
LE —	3-24-04	8:11	~~B5-W KAB~~	~~HCL~~	~~3~~	~~VOA~~	~~40 ml~~	~~Water~~	~~8015M~~		
03464			B5-W	HCL	3	VOA	40 ml		8260B		
—			~~B5-W KAB~~	~~$Na_2S_2O_3$~~	~~1~~	~~C~~	~~L~~		~~8270C~~		
03465			B5-W	Nitric	1	P	500 ml		6010B/7000		
03466		9:31	B4-W	HCL	3	VOA	40 ml		8260B		
03467			B4-W	Nitric	1	P	500 ml		6010B/7000		
03468		12:45	B2-W	HCL	3	VOA	40 ml		8260B		
03469		12:45	B2-W	Nitric	1	P	500 ml		6010B/7000		
03470		13:35	B3-W	HCL	3	VOA	40 ml		8260B		
03471		13:35	B3-W	Nitric	1	P	500 ml		6010B/7000		

Date & Time Stamp: DEPARTMENT OF WATER & POWER 04 MAR 24 PM 3:49

Requested by: George R. Faeustle Organization / Div. EA
Address: JFB 1044 Tele. 74708 Fax. 73582

Analyst: date:
Approved by: date:

Priority	
24 Hrs	SF
4 Day	JW
2 Wks	LW
1 Wks	RP
Specify	CH
	AL
	BT
	WQTO

Printed Name	Signature	Time	Date
Sampled by: Krista Brodersen	Sampled by: [signature]		
Relinquished by: Krista Brodersen	Relinquished by: [signature]	15:48	3/24/04
Received by: N Manila	Received by: [signature]	15:48	3/24/04

Lab COC Form
Revision: 10/2/2001

COC04-0602

ATTACHMENT # 1

METALS / MERCURY
EPA METHOD 6010B / 245.1

CITY OF LOS ANGELES, DEPARTMENT OF WATER & POWER
ENVIRONMENTAL LABORATORY

Case Narrative

Project: Chatsworth Reservoir

Method 3050/6010
Metals by ICP

1. Holding Time

   Analysis met holding time criteria.

2. Method Blank

   Method blanks were free of contamination at reporting level.

3. Lab Control Sample

   Sample results met QC criteria.

4. Matrix Spike/Matrix Spike Duplicate

   Sample LE03471 was analyzed for MS/MSD. Recoveries met QC criteria.

5. Sample Analysis

   Samples were analyzed according to the prescribed QC procedures. Results were below TTLC limits.

ENVIRONMENTAL LABORATORY DATA REPORT

COC 04-0602

ANALYTICAL RESULT FOR METALS

TTLC (Total Threshold Limit Concentration)

EPA Method 6010B

Sample Matrix: WATER

LABORATORY LOG NO.	DATE SAMPLED	DATE RECEIVED	DATE ANALYZED	SAMPLE DESCRIPTION	QC BATCH
LE03465	3/24/04	3/24/04	4/9/04	B5-W	$TTLCW-1075
LE03467	3/24/04	3/24/04	4/9/04	B4-W	$TTLCW-1075
LE03469	3/24/04	3/24/04	4/9/04	B2-W	$TTLCW-1075
LE03471	3/24/04	3/24/04	4/9/04	B3-W	$TTLCW-1075

METAL	LIMIT TTLC (mg/kg)	LIMIT STLC (mg/l)	METHOD	MDL	RL	D. F.	LE03465 mg/l	LE03467 mg/l	LE03469 mg/l	LE03471 mg/l		
Antimony	500	15	6010	0.016	0.080	1	ND	ND	0.022J	0.174		
Arsenic	500	5	6010	0.021	0.105	1	0.403	0.072J	1.579	3.217		
Barium	10000	100	6010	0.01	0.050	1	7.08	0.92	15.67	17.84		
Beryllium	75	0.75	6010	0.006	0.030	1	0.041	0.007J	0.078	0.123		
Cadmium	100	1	6010	0.013	0.065	1	0.129	0.025J	0.543	0.686		
Chromium (T)	500	5	6010	0.006	0.030	1	2.106	0.328	2.362	3.273		
Cobalt	8000	80	6010	0.005	0.025	1	0.659	0.155	1.859	2.202		
Copper	2500	25	6010	0.004	0.020	1	1.209	0.098	3.921	10.080		
Lead	1000	5	6010	0.019	0.095	1	0.807	0.059J	1.266	2.238		
Molybdenum	3500	350	6010	0.004	0.020	1	0.062	ND	0.396	0.227		
Nickel	2000	20	6010	0.008	0.040	1	0.473	0.154	2.861	2.703		
Selenium	100	1	6010	0.014	0.070	1	ND	ND	0.304	0.249		
Silver	500	5	6010	0.05	0.250	1	ND	ND	ND	ND		
Thallium	700	7	6010	0.04	0.200	1	ND	ND	ND	ND		
Vanadium	2400	24	6010	0.007	0.035	1	1.310	0.367	4.862	6.932		
Zinc	5000	250	6010	0.006	0.030	1	2.632	0.629	9.036	12.590		
Mercury	20	0.2	245.1	0.0002	0.001	1	ND	ND	ND	ND		

ND - Not Detected; below method detection limit

MDL - Method Detection Limit

R.L. - Report Limit

D. F. - Dilution Factor

** - exceed TTLC limit

* - exceed 10x STLC limit

J - concentration above MDL and below RL

Annalyst: C. Y. Hwang

ENVIRONMENTAL LABORATORY DATA REPORT

COC 04-0602

ANALYTICAL RESULT FOR METALS

TTLC (Total Threshold Limit Concentration)

EPA Method 6010B

Sample Matrix:

LABORATORY (LOG NO.)	DATE SAMPLED	DATE RECEIVED	DATE ANALYZED	SAMPLE DESCRIPTION	QC BATCH
LE03471 Dup	03/24/04	3/24/04	4/9/04	B3-W	STTLCW-1075

METAL	LIMIT TTLC (mg/kg)	LIMIT STLC (mg/l)	METHOD	MDL	RL	D. F.	LE03471 (mg/l)					
Antimony	500	15	6010	0.016	0.08	1	0.166					
Arsenic	500	5	6010	0.021	0.11	1	3.18					
Barium	10000	100	6010	0.01	0.05	1	17.1					
Beryllium	75	0.75	6010	0.006	0.03	1	0.119					
Cadmium	100	1	6010	0.013	0.07	1	0.652					
Chromium (T)	2500	5	6010	0.006	0.03	1	3.02					
Cobalt	8000	80	6010	0.005	0.03	1	2.10					
Copper	2500	25	6010	0.004	0.02	1	10.1					
Lead	1000	5	6010	0.019	0.10	1	2.13					
Molybdenum	3500	350	6010	0.004	0.02	1	0.205					
Nickel	2000	20	6010	0.008	0.04	1	2.54					
Selenium	100	1	6010	0.014	0.07	1	0.284					
Silver	500	5	6010	0.05	0.25	1	0.0571J					
Thallium	700	7	6010	0.04	0.20	1	ND					
Vanadium	2400	24	6010	0.007	0.04	1	6.44					
Zinc	5000	250	6010	0.006	0.03	1	11.7					

ND - Not Detected; below method detection limit
MDL - Method Detection Limit
R.L. - Report Limit
D. F. - Dilution Factor

** - exceed TTLC limit
* - exceed 10x STLC limit
J - concentration above MDL and below RL

Analyst: C. Y. Hwang

Project No. CHATSWORTH RESERVOIR

QA/QC Report

I. Blank Spike (BS)/Blank Spike Duplicate (BSD)

DATE ANALYZED: 04/09/04

ANALYTICAL METHOD : USEPA 6010/7000

BATCH #: \$TTLCW-1075

LAB SAMPLE I.D.:

UNIT: (Circle One) (mg/l)

METAL	SAMPLE RESULT	SPIKE CONC	BS	%BS	DUP SPIKE CONC	BSD	%BSD	RPD	BS/BSD %REC LIMIT	RPD LIMIT
Antimony	ND	1.0	0.898	89.8	1.0	0.906	90.6	0.9%	70 - 130	<30%
Arsenic	ND	1.0	0.991	99.1	1.0	0.994	99.4	0.3%	70 - 130	<30%
Barium	ND	---	---	---	---	---	---	---	---	---
Beryllium	ND	1.0	1.088	109	1.0	1.097	110	0.9%	70 - 130	<30%
Cadmium	ND	1.0	1.039	104	1.0	1.041	104	0.0%	70 - 130	<30%
Chromium (T)	ND	1.0	1.052	105	1.0	1.052	105	0.0%	70 - 130	<30%
Cobalt	ND	1.0	1.069	107	1.0	1.082	108	0.9%	70 - 130	<30%
Copper	ND	1.0	1.050	105	1.0	1.062	106	0.9%	70 - 130	<30%
Lead	ND	1.0	0.982	98.2	1.0	0.972	97.2	1.0%	70 - 130	<30%
Molybdenum	ND	1.0	1.168	117	1.0	1.152	115	1.7%	70 - 130	<30%
Nickel	ND	1.0	1.042	104	1.0	1.029	103	1.0%	70 - 130	<30%
Selenium	ND	1.0	1.115	112	1.0	1.156	116	3.5%	70 - 130	<30%
Silver	ND	---	---	---	---	---	---	---	---	---
Thallium	ND	---	---	---	---	---	---	---	---	---
Vanadium	0.007	1.0	1.089	109	1.0	1.099	110	0.9%	70 - 130	<30%
Zinc	ND	1.0	1.010	101	1.0	0.995	99.5	1.5%	70 - 130	<30%

BS = Blank Spike BSD = Blank Spike Duplicate RPD = Relative Percent Difference
%BS = Percent Recovery of Blank Spike %BSD = Percent Recovery of Blank Spike Duplicate
--- indicates a compound not included in the spike solution

Analyst: C. Y. Hwang

Project No: CHATSWORTH RESERVOIR

QA/QC Report

II. Matrix Spike (MS)/Matrix Spike Duplicate (MSD)

DATE ANALYZED: 04/09/04 ANALYTICAL METHOD : USEPA 6010/7000

BATCH #: STTLCW-1075 (LE03465, LE03467, LE03469, LE03471)

LAB SAMPLE I.D.: LE03471 UNIT: (Circle One) mg/l

METAL	SAMPLE RESULT	SPIKE CONC	MS	%MS	DUP SPIKE CONC	MSD	%MSD	RPD	MS/MSD % REC. LIMIT	RPD LIMIT
Antimony	0.174	1.0	0.213	3.90	1.0	0.196	2.20	55.7%	70 - 130	<30%
Arsenic	3.217	1.0	3.91	69.3	1.0	3.98	76.3	9.6%	70 - 130	<30%
Barium	17.84	---	---	---	---	---	---	---	---	---
Beryllium	0.123	1.0	0.990	86.7	1.0	1.00	87.7	1.1%	70 - 130	<30%
Cadmium	0.686	1.0	1.33	64.4	1.0	1.34	65.4	1.5%	70 - 130	<30%
Chromium (T)	3.273	1.0	3.95	67.7	1.0	4.01	73.7	8.5%	70 - 130	<30%
Cobalt	2.202	1.0	2.87	66.8	1.0	2.91	70.8	5.8%	70 - 130	<30%
Copper	10.080	1.0	11.0	92.0	1.0	11.4	132	35.7%	70 - 130	<30%
Lead	2.238	1.0	2.80	56.2	1.0	2.85	61.2	8.5%	70 - 130	<30%
Molybdenum	0.227	1.0	0.597	37.0	1.0	0.620	39.3	6.0%	70 - 130	<30%
Nickel	2.703	1.0	3.33	62.7	1.0	3.30	59.7	4.9%	70 - 130	<30%
Selenium	0.249	1.0	0.879	63.0	1.0	0.878	62.9	0.2%	70 - 130	<30%
Silver	ND	---	---	---	---	---	---	---	---	---
Thallium	ND	---	---	---	---	---	---	---	---	---
Vanadium	6.932	1.0	7.38	44.8	1.0	7.61	67.8	40.9%	70 - 130	<30%
Zinc	12.590	1.0	12.8	21.0	1.0	12.8	21.0	0.0%	70 - 130	<30%

MS = Matrix Spike MSD = Matrix Spike Duplicate RPD = Relative Percent Difference
%MS = Percent Recovery of Matrix Spike %MSD = Percent Recovery of Matrix Spike Duplicate
--- indicates a compound not included in the spike solution

Analyst: C. Y. Hwang

Project No. CHATSWORTH RESERVOIR

III. Calibration and Laboratory Quality Control Check Sample (LCS)

DATE ANALYZED: 4/9/2004

SUPPLY SOURCE: CPI International

LOT NUMBER: 0DR176

ANALYTICAL: USEPA 6010/7000

LAB LCS I.D.: Q4518

UNIT: (Circle One) (mg/L) mg/kg

METAL	MDL ug/L	LCS RESULTS ug/L	TRUE VALUE ug/L	RECOVERY %	ACCEPTABLE RANGE
Antimony	0.016	2.248	2.38	94.5%	70 - 130%
Arsenic	0.021	9.61	9.52	100.9%	70 - 130%
Barium	0.01	9.94	9.52	104.4%	70 - 130%
Beryllium	0.006	0.274	0.24	115.1%	70 - 130%
Cadmium	0.013	0.272	0.24	114.1%	70 - 130%
Chromium (T)	0.006	1.02	0.95	106.8%	70 - 130%
Cobalt	0.005	2.67	2.38	112.0%	70 - 130%
Copper	0.004	1.29	1.19	108.4%	70 - 130%
Lead	0.019	2.45	2.38	103.0%	70 - 130%
Molybdenum	0.004	---	---	---	---
Nickel	0.008	2.53	2.38	106.5%	70 - 130%
Selenium	0.014	9.91	9.52	104.1%	70 - 130%
Silver	0.05	0.24	0.24	101.3%	70 - 130%
Thallium	0.05	9.51	9.52	99.9%	70 - 130%
Vanadium	0.007	2.59	2.38	108.9%	70 - 130%
Zinc	0.006	2.55	2.38	107.2%	70 - 130%

--- indicates a compound not included in the LCS solution

Analyst: C. Y. Hwang

Reviewed by:

Report No C10619
COC 04-0602

Project Name: CHATSWORTH RESERVOIR

Mercury QA/QC Report

I. Method Blank, Method Blank Spike (MBS), & Method Blank Spike Duplicate (MBSD)

DATE ANALYZED: 03/29/04
BATCH #: 20040329/A
LAB SAMPLE I.D.: Method Blank , Method Blank Spike & Method Blank Spike Duplicate

ANALYTICAL METHOD: USEPA 254.1
UNIT: ug/L

METAL	Method Blank	SPIKE CONC	MBS	% MBS	DUP SPIKE CONC	MBSD	% MBSD	% RPD	MS/MSD % REC. LIMIT	RPD LIMIT
MERCURY	0.0	2.50	2.55	102.0	2.50	2.56	102.4	0.2	70 - 120	30

II. Laboratory Control Check Sample (LCS)

DATE ANALYZED: 3/29/2004
LCS I.D.: Q3295
BATCH QC : 20040329/A

ANALYTICAL METHOD: USEPA 245.1
UNIT: ug/L

BATCH QC									
METAL	LAB ID	TRUE CONC	T	% RC	LAB ID	TRUE CONC	T	% RC	ACCEPTANCE LIMITS (%)
MERCURY	Q3295	4.70	5.42	115.3					70 - 130

MBS - Method Blank Spike MBSD - Method Blank Spike Duplicate %RSD - Relative Percent Difference
%MBS - Percent Recovery of Method Blank Spike %MBSD - Percent Recovery of Method Blank Spike Duplicate

Analyst: R. Petersen / Kasey Chung

ATTACHMENT # 2

VOLATILE ORGANIC COMPOUNDS
VOC - EPA METHOD 8260B

Report No. C10619

CITY OF LOS ANGELES, DEPARTMENT OF WATER & POWER
ENVIRONMENTAL LABORATORY

Case Narrative

Project: Marine Tank Farm

METHOD 5030/8260B
Volatile Organics by GC/MS

1. Holding Time

Samples were analyzed within holding time.

2. Tuning and Calibration

Tuning and calibration met QC requirements.

3. Method Blank

There was no contamination detected at reporting level.

4. Lab Control Sample

Recoveries met QC criteria.

5 Surrogate Recovery

Recoveries met QC criteria.

6. Matrix Spike/Matrix Spike Duplicate

Sample LE03450 was analyzed for MS/MSD in this analytical batch. Recoveries met QC criteria.

7. Calibration

Initial calibration was performed at five different concentrations. The percent relative standard deviation (% RSD) was within 15%. Continuing calibration check standards recoveries met QC requirements.

7. Sample Analysis

Samples were analyzed according to the prescribed QC procedures. Trace amount of toluene was detected in four samples. Other contaminants were acetone, carbon disulfide and xylene. See data.

COC 04-0602

ENVIRONMENTAL LABORATORY DATA REPORT

Report of GC/MS Analysis for Purgeable Volatile Organics
EPA SW-846 Method 8260

PROJECT: CHATSWORTH RESERVOIR Sample Matrix: Water

Chemistry Log No.	Date Sampled	Date Received	Date Analyzed	Sample Description
LE03464	3/24/2004	3/24/2004	3/31/2004	B5-W
LE03466	3/24/2004	3/24/2004	3/31/2004	B4-W
LE03468	3/24/2004	3/24/2004	3/31/2004	B2-W
LE03470	3/24/2004	3/24/2004	3/31/2004	B3-W

Compounds	MDL (ug/L)	PQL (ug/L)	LE03464 Amount (ug/L)	LE03466 Amount (ug/L)	LE03468 Amount (ug/L)	LE03470 Amount (ug/L)
Acetone	1	5.0	nd	nd	nd	**15.6**
tert-Amyl methyl ether (TAME)	0.5	2.5	nd	nd	nd	nd
Benzene	0.1	0.5	nd	nd	nd	nd
Bromobenzene	0.4	2.0	nd	nd	nd	nd
Bromochloromethane	0.2	1.0	nd	nd	nd	nd
Bromodichloromethane	0.4	2.0	nd	nd	nd	nd
Bromoform	0.3	1.5	nd	nd	nd	nd
Bromomethane	1.1	5.5	nd	nd	nd	nd
Methyl ethyl ketone (MEK)	0.6	3.0	nd	nd	nd	nd
tert-Butyl alcohol (TBA)	3	15.0	nd	nd	nd	nd
Butylbenzene	0.2	1.0	nd	nd	nd	nd
sec-Butylbenzene	0.3	1.5	nd	nd	nd	nd
tert-Butylbenzene	0.3	1.5	nd	nd	nd	nd
tert-Butyl ethyl ether (ETBE)	0.6	3.0	nd	nd	nd	nd
Carbon disulfide	0.3	1.5	**2.35**	nd	nd	nd
Carbon Tetrachloride	0.4	2.0	nd	nd	nd	nd
Chlorobenzene	0.2	1.0	nd	nd	nd	nd
Chloroethane	0.8	4.0	nd	nd	nd	nd
2-Chloroethyl vinyl ether	0.6	3.0	nd	nd	nd	nd
Chloroform	0.2	1.0	nd	nd	nd	nd
Chloromethane	0.4	2.0	nd	nd	nd	nd
2-Chlorotoluene	0.3	1.5	nd	nd	nd	nd
4-Chlorotoluene	0.4	2.0	nd	nd	nd	nd
Dibromochloromethane	0.2	1.0	nd	nd	nd	nd
1,2-Dibromo-3-chloropropane	1.1	5.5	nd	nd	nd	nd
1,2-Dibromoethane	0.5	2.5	nd	nd	nd	nd
Dibromomethane	0.4	2.0	nd	nd	nd	nd
1,2-Dichlorobenzene	0.1	0.5	nd	nd	nd	nd
1,3-Dichlorobenzene	0.3	1.5	nd	nd	nd	nd
1,4-Dichlorobenzene	0.2	1.0	nd	nd	nd	nd
Dichlorodifluoromethane	0.4	2.0	nd	nd	nd	nd
1,1-Dichloroethane	0.3	1.5	nd	nd	nd	nd
1,2-Dichloroethane	0.1	0.5	nd	nd	nd	nd
1,1-Dichloroethene	0.4	2.0	nd	nd	nd	nd
cis-1,2-Dichloroethene	0.3	1.5	nd	nd	nd	nd
trans-1,2-Dichloroethene	0.3	1.5	nd	nd	nd	nd
1,2-Dichloropropane	0.2	1.0	nd	nd	nd	nd
1,3-Dichloropropane	0.3	1.5	nd	nd	nd	nd
2,2-Dichloropropane	0.4	2.0	nd	nd	nd	nd
1,1-Dichloropropene	0.3	1.5	nd	nd	nd	nd
cis-1,3-Dichloropropene	0.5	2.5	nd	nd	nd	nd
trans-1,3-Dichloropropene	0.8	4.0	nd	nd	nd	nd
Diisopropyl ether (DIPE)	0.3	1.5	nd	nd	nd	nd
Ethylbenzene	0.1	0.5	nd	nd	nd	nd
Hexachlorobutadiene	0.7	3.5	nd	nd	nd	nd

ENVIRONMENTAL LABORATORY DATA REPORT COC 04-0602

Report of GC/MS Analysis for Purgeable Volatile Organics

EPA SW-846 Method 8260

PROJECT: CHATSWORTH RESERVOIR Sample Matrix: Water

Chemistry Log No.	Date Sampled	Date Received	Date Analyzed	Sample Description
LE03464	3/24/2004	3/24/2004	3/31/2004	B5-W
LE03466	3/24/2004	3/24/2004	3/31/2004	B4-W
LE03468	3/24/2004	3/24/2004	3/31/2004	B2-W
LE03470	3/24/2004	3/24/2004	3/31/2004	B3-W

Compounds	MDL (ug/L)	PQL (ug/L)	LE03464 Amount (ug/L)	LE03466 Amount (ug/L)	LE03468 Amount (ug/L)	LE03470 Amount (ug/L)
2-Hexanone	0.3	1.5	nd	nd	nd	nd
Isopropylbenzene	0.1	0.5	nd	nd	nd	nd
p-Isopropyltoluene	0.3	1.5	nd	nd	nd	nd
Methyl-t-butyl ether (MTBE)	0.5	2.5	nd	nd	nd	nd
Methylene chloride	0.6	3.0	nd	nd	nd	nd
Iodomethane	1.2	6.0	nd	nd	nd	nd
Methyl isobutyl ketone (MIBK)	0.2	1.0	nd	nd	nd	nd
Naphthalene	0.2	1.0	nd	nd	nd	nd
Propylbenzene	0.2	1.0	nd	nd	nd	nd
Styrene	0.1	0.5	nd	nd	nd	nd
1,1,1,2-Tetrachloroethane	0.3	1.5	nd	nd	nd	nd
1,1,2,2-Tetrachloroethane	0.2	1.0	nd	nd	nd	nd
Tetrachloroethylene	0.3	1.5	nd	nd	nd	nd
Toluene	0.1	0.5	**0.653**	**0.3J**	**0.184J**	**0.707**
1,2,3-Trichlorobenzene	0.3	1.5	nd	nd	nd	nd
1,2,4-Trichlorobenzene	0.4	2.0	nd	nd	nd	nd
1,1,1-Trichloroethane	0.3	1.5	nd	nd	nd	nd
1,1,2-Trichloroethane	0.3	1.5	nd	nd	nd	nd
Trichloroethylene	0.2	1.0	nd	nd	nd	nd
Trichlorofluoromethane	0.2	1.0	nd	nd	nd	nd
1,2,3-Trichloropropane	0.3	1.5	nd	nd	nd	nd
1,2,4-Trimethylbenzene	0.3	1.5	nd	nd	nd	nd
1,3,5-Trimethylbenzene	0.2	1.0	nd	nd	nd	nd
Vinyl acetate	0.5	2.5	nd	nd	nd	nd
Vinyl Chloride (Chloroethene)	0.4	2.0	nd	nd	nd	nd
m & p-Xylene	0.3	1.5	**0.499J**	nd	nd	nd
o-Xylene	0.1	0.5	nd	nd	nd	nd

MDL - Method Detection Limit

PQL - Practical Quantitation Limit (5xMDL)

J - Concentration above MDL below PQL

nd - Not Detected; below detection limit

Quality Control Data

Surrogates 30 (ug/L each)	QC Limits % Recovery Lower-Upper				
SURR: Bromofluorobenzene	80 - 130	93.0%	91.7%	89.7%	91.7%
SURR: Dibromofluoromethane	80 - 120	88.3%	85.0%	84.0%	81.7%
SURR: Toluene-d8	80 - 130	97.0%	96.3%	97.7%	97.7%

Comment:

Analyst: Bryan Tiu

Reviewed by: Rose Gentallan

002004

COC 04-0603

ENVIRONMENTAL LABORATORY DATA REPORT

Report of GC/MS Analysis for Purgeable Volatile Organics
EPA SW-846 Method 8260

PRPJECT: CHATSWORTH RESERVOIR Sample Matrix: Water

Chemistry Log No.	Date Sampled	Date Received	Date Analyzed	Sample Description
Blank	3/24/2004	3/24/2004	3/31/2004	Method Blank

Compounds	MDL (ug/L)	PQL (ug/L)	Blank Amount ug/L
Acetone	1	5.0	nd
tert-Amyl methyl ether (TAME)	0.5	2.5	nd
Benzene	0.1	0.5	nd
Bromobenzene	0.4	2.0	nd
Bromochloromethane	0.2	1.0	nd
Bromodichloromethane	0.4	2.0	nd
Bromoform	0.3	1.5	nd
Bromomethane	1.1	5.5	nd
2-Butanone (MEK)	0.6	3.0	nd
tert-Butyl alcohol (TBA)	3	15.0	nd
n-Butylbenzene	0.2	1.0	nd
sec-Butylbenzene	0.3	1.5	nd
tert-Butylbenzene	0.3	1.5	nd
tert-Butyl ethyl ether (ETBE)	0.6	3.0	nd
Carbon disulfide	0.3	1.5	nd
Carbon Tetrachloride	0.6	3.0	nd
Chlorobenzene	0.2	1.0	nd
Chloroethane	0.8	4.0	nd
2-Chloroethyl vinyl ether	0.6	3.0	nd
Chloroform	0.2	1.0	nd
Chloromethane	0.4	2.0	nd
2-Chlorotoluene	0.3	1.5	nd
4-Chlorotoluene	0.4	2.0	nd
Dibromochloromethane	0.2	1.0	nd
1,2-Dibromo-3-chloropropane	1.1	5.5	nd
1,2-Dibromoethane (EDB)	0.5	2.5	nd
Dibromomethane	0.4	2.0	nd
1,2-Dichlorobenzene	0.1	0.5	nd
1,3-Dichlorobenzene	0.3	1.5	nd
1,4-Dichlorobenzene	0.2	1.0	nd
Dichlorodifluoromethane	0.4	2.0	nd
1,1-Dichloroethane	0.3	1.5	nd
1,2-Dichloroethane	0.1	0.5	nd
1,1-Dichloroethene	0.4	2.0	nd
cis-1,2-Dichloroethene	0.3	1.5	nd
trans-1,2-Dichloroethene	0.3	1.5	nd
1,2-Dichloropropane	0.2	1.0	nd
1,3-Dichloropropane	0.3	1.5	nd
2,2-Dichloropropane	0.4	2.0	nd
1,1-Dichloropropene	0.3	1.5	nd
cis-1,3-Dichloropropene	0.5	2.5	nd
trans-1,3-Dichloropropene	0.8	4.0	nd
Diisopropyl ether (DIPE)	0.3	1.5	nd
Ethylbenzene	0.1	0.5	nd

ENVIRONMENTAL LABORATORY DATA REPORT

COC 04-0603 002005

Report of GC/MS Analysis for Purgeable Volatile Organics
EPA SW-846 Method 8260

PRPJECT: CHATSWORTH RESERVOIR Sample Matrix: Water

Chemistry Log No.	Date Sampled	Date Received	Date Analyzed	Sample Description
Blank	3/24/2004	3/24/2004	3/31/2004	Method Blank

Compounds	MDL (ug/L)	PQL (ug/L)	Blank Amount ug/L
Hexachlorobutadiene	0.7	3.5	nd
2-Hexanone	0.3	1.5	nd
Isopropylbenzene	0.1	0.5	nd
p-Isopropyltoluene	0.3	1.5	nd
Methyl-t-butyl ether (MTBE)	0.5	2.5	nd
Methylene chloride	0.6	3.0	nd
Methyl Iodide (Iodomethane)	1.2	6.0	nd
4-Methyl-2-pentanone (MIBK)	0.2	1.0	nd
Naphthalene	0.2	1.0	nd
Propylbenzene	0.2	1.0	nd
Styrene (Phenylethylene)	0.1	0.5	nd
1,1,1,2-Tetrachloroethane	0.3	1.5	nd
1,1,2,2-Tetrachloroethane	0.2	1.0	nd
Tetrachloroethylene	0.3	1.5	nd
Toluene	0.1	0.5	nd
1,2,3-Trichlorobenzene	0.3	1.5	nd
1,2,4-Trichlorobenzene	0.4	2.0	nd
1,1,1-Trichloroethane	0.3	1.5	nd
1,1,2-Trichloroethane	0.3	1.5	nd
Trichloroethylene	0.2	1.0	nd
Trichlorofluoromethane	0.2	1.0	nd
1,2,3-Trichloropropane	0.3	1.5	nd
1,2,4-Trimethylbenzene	0.3	1.5	nd
1,3,5-Trimethylbenzene	0.2	1.0	nd
Vinyl acetate	0.5	2.5	nd
Vinyl Chloride (chloroethene)	0.6	3.0	nd
m & p-Xylene	0.3	1.5	nd
o-Xylene	0.1	0.5	nd

MDL - Method Detection Limit
PQL - Practical Quantitation Limit (5xMDL)

J - Concentration above MDL below PQL
nd - Not Detected; below detection limit

Quality Control Data

Surrogates 30 (ug/L each)	QC Limits % Recovery Lower-Upper	
SURR: Bromofluorobenzene	80 -130	94.3%
SURR: Dibromofluoromethane	80 - 120	81.7%
SURR: Toluene-d8	80 - 130	96.7%

Comment:

Analyst: Bryan Tlu

Reviewed by: Rose Gentallan

Project No: CHATSWORTH RESORVOIR

(RWQCB LabForm10A;Ver12/94)

Quality Assurance Report

Matrix Spike (MS)/Matrix Spike Duplicate (MSD)

DATE PERFORMED: 3/30/04 ANALYTICAL METHOD: USEPA 8260
BATCH #: $VOC-W-10; LE03444 LE03447 LE03450 LE03453 LE03456 LE03459 LE03460 LE03463
LAB SAMPLE I.D.: LE03450 UNIT: ug/L

ANALYTE	SAMPLE RESULT	SPIKE CONC	MS	%MS	SPIKE CONC (DUP)	MSD	%MSD	RPD	MS/MSD LIMIT	RPD LIMIT
1,1-Dichloroethene	4.04	30.0	25.5	71.5	30.0	26.1	73.5	2.8 %	61-145	14%
Benzene	0.227	30.0	25.6	84.6	30.0	26.5	87.6	3.5 %	76-127	11%
Trichloroethylene	0.743	30.0	28.2	91.5	30.0	28.9	93.9	2.6 %	71-120	14%
Toluene	0.280	30.0	28.7	94.7	30.0	29.6	97.7	3.1 %	76-125	13%
Chlorobenzene	ND	30.0	29.6	98.7	30.0	30.4	101	2.3 %	75-130	13%

Laboratory Quality Control Check Sample (LCS)

DATE PERFORMED: 3/30/04 ANALYTICAL METHOD: USEPA 8260
SUPPLY SOURCE: LAB LCS I.D.: Q4664
LOT NUMBER: UNIT: ug/L
DATE OF SOURCE:

ANALYTE	LCS RESULT ug/L	TRUE VALUE ug/L	% RECOVERY	Advisory Range
1,1,1-Trichloroethane	14.1	18.2	77.5	12.8 - 22.2
1,1,2,2-Tetrachloroethane	95.2	82.4	115.5	58.3 - 110
1,1,2-Trichloroethane	60.3	56.2	107.3	43.0 - 70.5
1,1-Dichloroethene	20.1	33.8	59.5	20.8 - 43.6
1,2-Dichlorobenzene	51.7	46.4	111.4	34.6 - 57.5
1,2-Dichloroethane	78.7	74.5	105.6	56.5 - 93.9
1,2-Dichloropropane	96.3	91.1	105.7	68.4 - 111
1,3-Dichlorobenzene	13.2	13.8	95.7	9.96 - 16.8
1,4-Dichlorobenzene	26.8	24.2	110.7	17.9 - 30.0
Acetone	107	156	68.6	69.6 - 240
Benzene	51.6	57.4	89.9	43.5 - 70.0
Bromodichloromethane	37.1	35.3	105.1	27.5 - 45.2
Bromoform	54.9	71.8	76.5	51.4 - 93.3
Carbon Tetrachloride	24.6	29.1	84.5	18.6 - 36.4
Chlorobenzene	28.7	27.5	104.4	19.8 - 34.9
Chloroform	26	26.4	98.5	19.9 - 32.5
Dibromochloromethane	40.7	47.4	85.9	35.8 - 59.3
Ethylbenzene	31.9	31.7	100.6	23.1 - 38.7
Methyl isobutyl ketone (MIBK)	129	129	100.0	76.9 - 174
Methylene chloride	34.7	41.4	83.8	27.9 - 53.8
o-Xylene	134	124	108.1	86.6 - 155
Tetrachloroethylene	62.4	63.7	98.0	40.8 - 75.8

Analyst: B. Tiu

Reviewed by: R. Gentallan

ANALYTICAL METHOD QA/QC SUMMARY

003001

Table 1
Analytical Method Summary
LADWP Environmental Laboratory

Project: CHATSWORTH RESERVOIR

Analytical Group	Media	Analyte	Preparation Sample Preparation Method	Analytical Method	Measurement Accuracy (% Recovery)	Measurement Precision (% RPD)	LCS Accuracy (% Recovery)	Matrix Duplicate Precision (% RPD)	Compliance (%)
Volatile Organic Compounds (VOCs)	Water	Acetone	5035	8260B	-		45 - 154	<30%	100%
	Water	Acrolein	5035	8260B	-		--		
	Water	Acrylonitrile	5035	8260B	-		--		
	Water	tert-Amyl methyl ether	5035	8260B	-		--		
	Water	Benzene	5035	8260B	66 -142	<21%	75 - 121	<30%	100%
	Water	Bromobenzene	5035	8260B	-		--		
	Water	Bromochloromethane	5035	8260B	-		--		
	Water	Bromodichloromethane	5035	8260B	-		75 - 125	<30%	100%
	Water	Bromoform	5035	8260B	-		71 - 137	<30%	100%
	Water	Bromomethane	5035	8260B	-		--		
	Water	2-Butanone (MEK)	5035	8260B	-		--		
	Water	tert-Butyl alcohol (TBA)	5035	8260B	-		--		
	Water	Butylbenzene	5035	8260B	-		--		
	Water	sec-Butylbenzene	5035	8260B	-		--		
	Water	tert-Butylbenzene	5035	8260B	-		--		
	Water	tert-Butyl ethyl ether (ETBE)	5035	8260B	-		--		
	Water	Carbon disulfide	5035	8260B	-		--		
	Water	Carbon Tetrachloride	5035	8260B	-		63 - 125	<30%	100%
	Water	Chlorobenzene	5035	8260B	60 - 133	<21%	77 - 120	<30%	100%
	Water	Chloroethane	5035	8260B	-		--		
	Water	2-Chloroethyl vinyl ether	5035	8260B	-		--		
	Water	Chloroform	5035	8260B	-		75 - 123	<30%	100%
	Water	Chloromethane	5035	8260B	-		--		
	Water	2-Chlorotoluene	5035	8260B	-		--		
	Water	4-Chlorotoluene	5035	8260B	-		--		
	Water	Dibromochloromethane	5035	8260B	-		75 - 125	<30%	100%
	Water	1,2-Dibromo-3-chloropropane	5035	8260B	-		--		
	Water	1,2-Dibromoethane (EDB)	5035	8260B	-		--		

- Indicates a compound not included in the spike solution.

-- Indicates a compound not included in the LCS solution.

003002

Table 1
Analytical Method Summary
LADWP Environmental Laboratory

Analytical Group	Media	Analyte	Extraction Sample Preparation Method	Analytical Method	Measurement Accuracy (% Recovery)	Measurement Precision (% RPD)	[illegible]	[illegible]	[illegible]
Volatile Organic Compounds (VOCs)	Water	Dibromomethane	5035	8260B	-		--		
	Water	1,2-Dichlorobenzene	5035	8260B	-		74 - 123	<30%	100%
	Water	1,3-Dichlorobenzene	5035	8260B	-		72 - 121	<30%	100%
	Water	1,4-Dichlorobenzene	5035	8260B	-		74 - 123	<30%	100%
	Water	Dichlorodifluoromethane	5035	8260B	-		--		
	Water	1,1-Dichloroethane	5035	8260B	-		61 - 129	<30%	0%*
	Water	1,2-Dichloroethane	5035	8260B	-		74 - 123	<30%	100%
	Water	1,1-Dichloroethene	5035	8260B	59 - 172	<22%	61 - 128	<30%	100%
	Water	cis-1,2-Dichloroethene	5035	8260B	-		--		
	Water	trans-1,2-Dichloroethene	5035	8260B	-		--		
	Water	1,2-Dichloropropane	5035	8260B	-		75 - 121	<30%	100%
	Water	1,3-Dichloropropane	5035	8260B	-		--		
	Water	2,2-Dichloropropane	5035	8260B	-		--		
	Water	1,1-Dichloropropene	5035	8260B	-		--		
	Water	cis-1,3-Dichloropropene	5035	8260B	-		--		
	Water	trans-1,3-Dichloropropene	5035	8260B	-		--		
	Water	Diisopropyl ether (DIPE)	5035	8260B	-		--		
	Water	Ethylbenzene	5035	8260B	-		72 - 122	<30%	100%
	Water	Hexachlorobutadiene	5035	8260B	-		--		
	Water	2-Hexanone	5035	8260B	-		--		
	Water	Isopropylbenzene	5035	8260B	-		--		
	Water	p-Isopropyltoluene	5035	8260B	-		--		
	Water	Methyl-t-butyl ether (MTBE)	5035	8260B	-		--		
	Water	Methylene chloride	5035	8260B	-		67 - 130	<30%	100%
	Water	Methyl iodide (Iodomethane)	5035	8260B	-		--		
	Water	Methyl Iso Butyl Ketone*	5035	8260B	-		59 - 134	<30%	100%
	Water	4-Methyl-2-pentanone	5035	8260B	-		--		
	Water	Naphthalene	5035	8260B	-		--		
	Water	Propylbenzene	5035	8260B	-		--		

- Indicates a compound not included in the spike solution.

-- Indicates a compound not included in the LCS solution.

0%* : based on one batch

003003

Table 1
Analytical Method Summary
LADWP Environmental Laboratory

Analytical Group	Media	Analyte	Extraction Sample Preparation Method	Analytical Method	Measurement Accuracy (% Recovery)	Measurement Precision (% RPD)	LCS Accuracy (% Recovery)	Intra Duplicate Precision (% RPD)	Completeness (%)
Volatile Organic Compounds (VOCs)	Water	Styrene (Phenylethylene)	5035	8260B	-		--		
	Water	1,1,1,2-Tetrachloroethane	5035	8260B	-		--		
	Water	1,1,2,2-Tetrachloroethane	5035	8260B	-		70 - 133	<30%	100%
	Water	Tetrachloroethylene (PCE)	5035	8260B	-		64 - 119	<30%	100%
	Water	Toluene	5035	8260B	59 - 139	<21%	--		100%
	Water	1,2,3-Trichlorobenzene	5035	8260B	-		--		
	Water	1,2,4-Trichlorobenzene	5035	8260B	-		--		
	Water	1,1,1-Trichloroethane	5035	8260B	-		70 - 122	<30%	0%
	Water	1,1,2-Trichloroethane	5035	8260B	-		76 - 125	<30%	100%
	Water	Trichloroethylene (TCE)	5035	8260B	62 - 137	<24%	--		100%
	Water	Trichlorofluoromethane	5035	8260B	-		--		
	Water	1,2,3-Trichloropropane	5035	8260B	-		--		
	Water	1,2,4-Trimethylbenzene	5035	8260B	-		--		
	Water	1,3,5-Trimethylbenzene	5035	8260B	-		--		
	Water	Vinyl acetate	5035	8260B	-		--		
	Water	Vinyl Chloride	5035	8260B	-		--		
	Water	m & p-Xylene	5035	8260B	-		--		
	Water	o-Xylene	5035	8260B	-		69 - 125	<30%	100%
Surrogates:									
BFB(1)	Water		5035	8260B	70 - 130	<30%	--	<30%	100%
DBFM(2)	Water		5035	8260B	70 - 130	<30%	--	<30%	100%
Toluene-d8	Water		5035	8260B	70 - 130	<30%	--	<30%	100%

(1) 4-Bromofluorobenzene

(2) Dibromofluoromethane

- Indicates a compound not included in the spike solution.

-- Indicates a compound not included in the LCS solution.

NA - Not Applicable

003004

Table 3
Analytical Method Summary
LADWP Environmental Laboratory

Analytical Group	Media	Analyte	Method Sample Preparation Method	Analytical Method	Measurement Accuracy (% Recovery)	Measurement Precision (% RPD)	LCS Accuracy (% Recovery)	LCS Precision (% RPD)	Lab Purpose
Metals	Water	Aluminum	3050	6010B	-		---		
	Water	Antimony	3050	6010B	70 - 130	<30	70 - 130	<30	60%
	Water	Arsenic	3050	6010B	70 - 130	<30	70 - 130	<30	100%
	Water	Barium	3050	6010B	-		70 - 130	<30	100%
	Water	Beryllium	3050	6010B	70 - 130	<30	70 - 130	<30	100%
	Water	Cadmium	3050	6010B	70 - 130	<30	70 - 130	<30	100%
	Water	Calcium	3050	6010B	-		--		
	Water	Chromium	3050	6010B	70 - 130	<30	70 - 130	<30	100%
	Water	Cobalt	3050	6010B	70 - 130	<30	70 - 130	<30	100%
	Water	Copper	3050	6010B	70 - 130	<30	70 - 130	<30	100%
	Water	Iron	3050	6010B	-		--		
	Water	Lead	3050	6010B	70 - 130	<30	70 - 130	<30	100%
	Water	Magnesium	3050	6010B	-		--		
	Water	Manganese	3050	6010B	-		--		
	Water	Mercury	3050	245.1	70 - 130	<30	70 - 130	<30	100%
	Water	Molybdenum	3050	6010B	70 - 130	<30	--		
	Water	Nickel	3050	6010B	70 - 130	<30	70 - 130	<30	100%
	Water	Potassium	3050	6010B	-		--		
	Water	Selenium	3050	6010B	70 - 130	<30	70 - 130	<30	100%
	Water	Silver	3050	6010B	70 - 130	<30	70 - 130	<30	100%
	Water	Sodium	3050	6010B	-		--		
	Water	Thallium	3050	6010B	-		70 - 130	<30	100%
	Water	Vanadium	3050	6010B	70 - 130	<30	70 - 130	<30	100%
	Water	Zinc	3050	6010B	70 - 130	<30	70 - 130	<30	100%

- Indicates a compound not included in the spike solution.

-- Indicates a compound not included in the LCS solution.