

C A M B R I A

ENVIRONMENTAL
PROTECTION

April 12, 2000

00 APR 18 PM 4:06

Mr. Kenneth D. Clark
Clark's Home and Garden
23040 Clawiter Road
Hayward, California 95118-3686

Appears anaerobic degrad.
to occurring

Re: **First Quarter 2000 Groundwater Monitoring Report**
Clark's Home and Garden
23040 Clawiter Road
Hayward, California
Cambria Project # 189-1517



Dear Mr. Clark:

As required by the Alameda County Health Care Services Agency (ACHCSA), Cambria Environmental Technology, Inc. (Cambria) has prepared this quarterly monitoring report for the above-referenced site (Figure 1). The first quarter 2000 activities and results, bioparameter sampling analyses results, hydrocarbon distribution in groundwater, and the anticipated second quarter 2000 activities are presented below.

FIRST QUARTER 2000 ACTIVITIES and RESULTS

Monitoring Activities

Field Activities: On January 25, 2000, Cambria gauged and collected groundwater samples from wells MW-1, MW-2, and MW-3 (Figure 2). Field data sheets are presented as Attachment A.

Sample Analyses: Groundwater samples were analyzed for total petroleum hydrocarbons as gasoline (TPHg) and total petroleum hydrocarbons as diesel (TPHd) by modified EPA Method 8015, and benzene, toluene, ethylbenzene, xylenes (BTEX) and methyl tert-butyl ether (MTBE) by EPA Method 8020. The groundwater analytical results are summarized in Table 1. The analytical report is included as Attachment B.

Oakland, CA
Sonoma, CA
Portland, OR
Seattle, WA

**Cambria
Environmental
Technology, Inc.**

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Oakland, CA 94608
Tel (510) 420-0700
Fax (510) 420-9170

Monitoring Results

Groundwater Flow Direction: Based on depth-to-water measurements collected during Cambria’s January 25, 2000 site visit, groundwater beneath the site flows to the northwest with a gradient of 0.01 ft/ft (Figure 2). During 4th quarter 1999, groundwater flowed to the southwest. Depth-to-water and groundwater elevation data are presented in Table 1.

Soil Disposal: Cambria profiled five soil drums left onsite from previous investigations by others. Denbeste Transportation of Windsor, California, transported the drums to Forward Landfill in Manteca, California. The drum’s waste manifest is presented as Attachment C.



BIOPARAMETER ANALYSES RESULTS

To assess the present level of intrinsic bioremediation, Cambria analyzed samples collected from all site wells for oxidation-reduction potential (ORP), nitrate, sulfate, total dissolved iron, alkalinity, and dissolved oxygen (DO). Comparison of TPHg concentrations with the above bioparameters indicate that anaerobic biodegradation of hydrocarbons is occurring at the site. The analytic results and the relative TPHg concentrations are presented below:

Table A - Bioparameter Concentrations in Ground Water							
	ORP	Nitrate	Sulfate	Ferrous Iron	Alkalinity	DO	TPHg
MW-1	-108 mV	3 ppm	30 ppm	0.8 ppm	720 ppm	2.31 ppm	2,200 ppb
MW-2	-130 mV	20 ppm	42 ppm	0.3 ppm	520 ppm	0.31 ppm	2,300 ppb
MW-3	-37 mV	69 ppm	66 ppm	0.02 ppm	470 ppm	0.46 ppm	<50 ppb

As shown above, nitrate and sulfate concentrations decrease with increasing hydrocarbon concentrations. Both these inverse relationships between analyte and hydrocarbon concentration are typically indicative of anaerobic biodegradation. Ferrous Iron concentrations increase with increasing hydrocarbon concentrations; a direct relationship indicates active anaerobic biodegradation. ORP readings measured from downgradient well MW-3 are higher than ORP measured in source area well MW-1, indicating that anaerobic biodegradation is occurring. Although the alkalinity results indicate that aerobic biodegradation is occurring, the dissolved oxygen results are contraindicative of aerobic biodegradation. Additional sampling for these parameters during subsequent quarters should clarify these apparently conflicting analytic results for aerobic biodegradation.

The implications of relationships between bioparameter results and hydrocarbon results and the relationships observed in site monitoring wells are presented in Table B, below.

Table B - Bioparameter Analysis

Bio-parameter	Description of chemical processes and implications of relationship between hydrocarbon and bioparameter concentrations.	Relationship indicating active biodegradation	Observed Relationship
ORP	The oxidation-reduction potential (ORP) of groundwater is a measure of electron activity and is an indicator of the relative tendency of a solute species to gain or lose electrons. The ORP of groundwater generally ranges from -400 millivolts (mV) to +800 mV. Under oxidizing conditions the ORP of groundwater is positive, while under reducing conditions the ORP is usually negative. Reducing conditions (negative ORP) suggests that anaerobic biodegradation is occurring. Generally, the ORP of groundwater inside a hydrocarbon plume should be somewhat less than that measured outside the plume.	inverse	direct
Nitrate	After DO has been depleted in the groundwater, nitrate may be used as an electron acceptor for anaerobic biodegradation. In this denitrification process, nitrate is reduced to nitrite. Reduced nitrate concentrations in the source area compared to the clean area suggests that anaerobic biodegradation is occurring.	inverse	inverse
Sulfate	After DO and nitrate have been depleted in the groundwater, sulfate may be used as an electron acceptor for anaerobic biodegradation. If sulfate concentrations vary inversely with hydrocarbon concentrations, anaerobic biodegradation of fuel hydrocarbons is probably occurring.	inverse	inverse
Ferrous Iron	In some cases ferric iron acts as an electron acceptor during anaerobic biodegradation of petroleum hydrocarbons. In this process, ferric iron is reduced to ferrous iron, which may be soluble in water. Therefore, if the ferrous iron concentrations vary directly with hydrocarbon concentration, anaerobic biodegradation may be occurring.	direct	direct
Alkalinity	The total alkalinity of groundwater indicates the groundwater's ability to neutralize acid. High alkalinity (high pH) conditions occur when groundwater contains elevated hydroxides, carbonates, and bicarbonates of elements such as calcium, magnesium, sodium, potassium, or ammonia. Since these chemical species are created by the respiration of microorganisms, high alkalinity is an indicator of biological activity. However, these chemical species may also result from the dissolution of rock (especially carbonates) and the transfer of carbon dioxide from the atmosphere. Alkalinity also buffers groundwater pH against acid generation by both aerobic and anaerobic biodegradation processes. Higher alkalinity in the source area as compared to clean areas suggests that aerobic biodegradation is occurring.	direct	direct

Dissolved Oxygen	During aerobic biodegradation, DO levels are reduced as aerobic respiration occurs. DO is the most thermodynamically favored electron acceptor used in aerobic biodegradation of petroleum hydrocarbons. Active aerobic biodegradation of BTEX compounds requires at least 1 ppm DO in groundwater and DO concentrations can be as high as 8 to 13 mg/L in oxygen-saturated groundwater that is free of hydrocarbons. Observed inverse relationships between DO and hydrocarbon concentrations indicate the occurrence of aerobic degradation, provided that at least 1 to 2 mg/L of DO is present in groundwater.	inverse	inconclusive
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Hydrocarbon Distribution in Groundwater

Hydrocarbon concentrations detected this quarter are consistent with historical results. A concentration of 3.3 µg/L benzene was detected in groundwater samples collected from well MW-1, located near the former underground storage tanks (USTs). No benzene was detected in monitoring wells MW-2, or MW-3. The maximum TPHg and TPHd concentrations detected were 2,300 µg/L and 2,900 µg/L, respectively, in monitoring well MW-2. The hydrocarbon plume appears to be stable and with evidence of biodegradation.

ANTICIPATED SECOND QUARTER 2000 ACTIVITIES

Monitoring Activities


Quarterly Ground Water Sampling: Cambria will continue to gauge, measure dissolved oxygen, ORP and ferrous iron concentrations, and collect groundwater samples from the wells. Cambria will submit the samples to an analytical laboratory for TPHg, TPHd, BTEX, MTBE, and bioparameters analyses. Cambria will also tabulate the data and prepare a quarterly monitoring report.


Purged Groundwater Disposal: During the removal of the soil drums left onsite by others, it was discovered that four of the drums believed to be soil contained purged groundwater. These drums will be disposed of at an approved facility during the second quarter 2000.


CLOSING

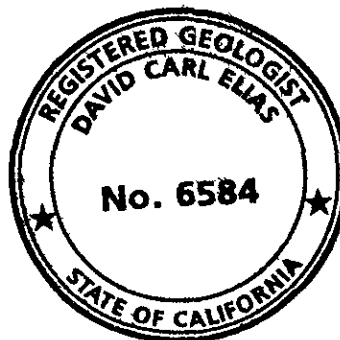
We appreciate the opportunity to provide environmental services on behalf of Mr. Ken Clark. If you have any questions or comments, please call John Riggi at (510) 420-3340.

Sincerely,
Cambria Environmental Technology, Inc.




John A. Riggi
Project Geologist


Dave C. Elias, RG
Senior Geologist



cc:

Ms. Eva Chu, Alameda County Department of Environmental Health
1131 Harbor Bay Parkway, 2nd Floor, Alameda, California 94502

Mr. and Mrs. Bob and Shirley Price, 537 Hidden Valley Road, Grants
Pass, Oregon 97527

ATTACHMENTS

Figure 1 - Vicinity Map

Figure 2 - Groundwater Contour Map

Table 1 - Groundwater Elevation and Analytical Data

Attachment A - Field Data Sheets

Attachment B - Laboratory Analytical Report

Attachment C - Waste Manifest



Clark's Home and Garden
 23040 Clawiter Road
 Hayward, California

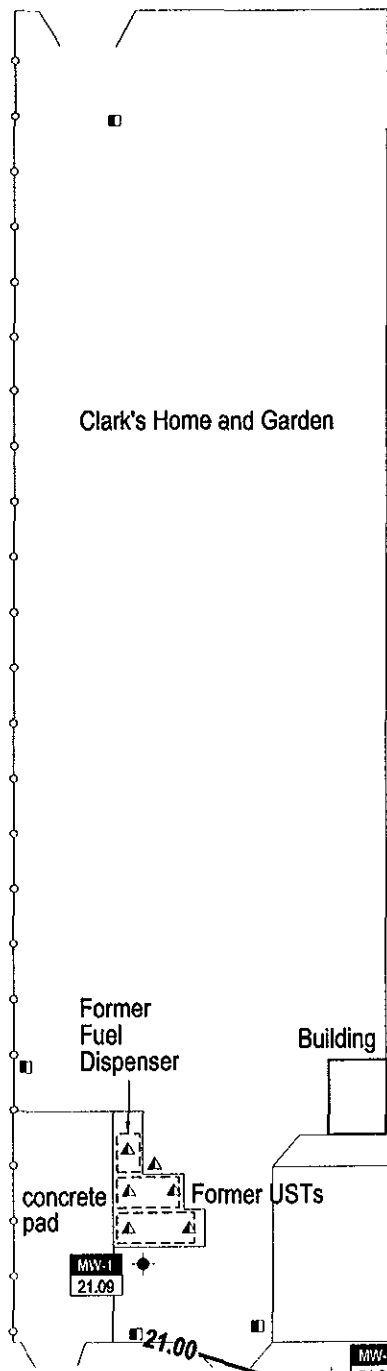


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Vicinity Map

FIGURE
1

H:\CLARKS H&G\FIGURES\11000GW.DWG



EXPLANATION

- Monitoring Well Location
- Soil Sample Location (Kaprealian Engineering, Inc.)
- Grab Groundwater sample collected 11/22/95
- Grab Groundwater Sample collected 02/19/97
- Well Designation and Elevation
- 20.80 — Groundwater Elevation Contour
- Groundwater Flow Direction and Gradient

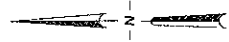
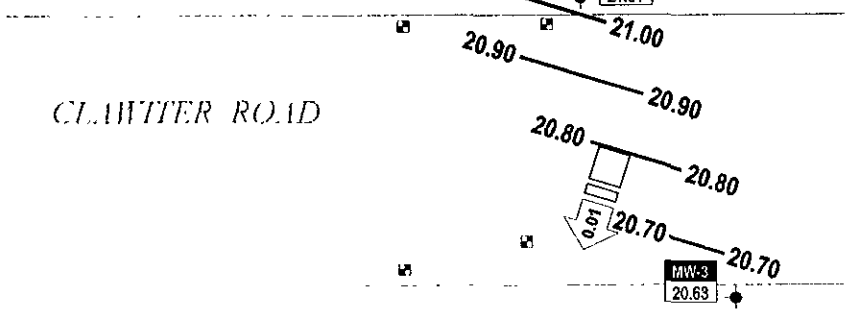


FIGURE
2

Clark's Home and Garden
 23040 Clawtter Road
 Hayward, California



C A M B R I A

Groundwater Contour Map

January 25, 2000

CAMBRIA

Table 1. Groundwater Analytical Data - Clark's Home and Garden, 23040 Clawiter Road, Hayward, California

Well ID TOC (ft)	Date	Depth to Groundwater (ft)	Groundwater Elevation (ft*)	TPHg	TPHd	Benzene	←----- (µg/L) -----→			MTBE
							Toluene	Ethylbenzene	Xylenes	
MW-1 35 30	8/7/91	na	na	5,900	7,100	45	<25	130	520	na
	9/5/91	na	na	47,000	2,800	<50	<50	230	660	na
	10/15/91	na	na	24,000	13,000	<50	<50	<50	390	na
	1/7/92	na	na	23,000	9,000	<50	<50	270	800	na
	4/8/92	na	na	8,100	3,500	19	<5	350	210	na
	7/7/92	na	na	7,000	6,300	<5	<5	190	170	na
	11/23/93	na	na	2,400	1,600	1.5	3.7	41	24	na
	1/31/94	na	na	3,900	1,900	1.9	4.2	56	49	na
	4/11/94	na	na	2,200	3,000	1.2	4.6	11	11	na
	7/27/94	na	na	6,200	4,400	<1	<1	50	74	na
	10/31/94	na	na	1,700	1,800	2.1	4.9	20	42	na
	10/9/95	na	na	870	1,300	<0.5	<0.5	12	10.4	na
	1/17/96	na	na	1,800	1,800	10	<5	16	19.8	na
	4/25/96	na	na	1,700	1,500	11	5.7	26	25	na
	2/19/97	na	na	2,800	430	9	6	33	50	na
10/15/99	14.45	20.85	1,000 ^a	1,400	3.3	5	4.6	6.7	<5.0	
1/25/00	14.21	21.09	2,200 ^{a,b}	1,400 ^{b,d,g}	3.3	1.7	4.6	7.4	<5.0	

CAMBRIA

Table 1. Groundwater Analytical Data - Clark's Home and Garden, 23040 Clawiter Road, Hayward, California

Well ID TOC (ft)	Date	Depth to Groundwater (ft)	Groundwater Elevation (ft*)	TPHg	TPHd	Benzene	Toluene Ethylbenzene Xylenes				MTBE
							←-----(µg/L)----->				
MW-2	10/15/99	13.86	20.76	4300 ^{g,j}	3.100	<1	6.7	11	11	<5.0	
34-62	1/25/00	13.61	21.01	2,300 ^{b,g,h}	2,900 ^{b,d,g}	<0.5	2.3	2.2	2	<5.0	
MW-3	10/15/99	14.88	20.42	<50	99	<0.5	<0.5	<0.5	<0.5	<5.0	
35-30	1/25/00	14.67	20.63	<50	98 ^g	<0.5	<0.5	<0.5	<0.5	<5.0	
TB	10/15/99	na	na	<50	--	<0.5	<0.5	<0.5	<0.5	<5.0	

Abbreviations and Methods

TPHg = Total petroleum hydrocarbons as gasoline by modified EPA Method 8015
 Benzene, toluene, ethylbenzene, and xylenes by EPA Method 8020
 MTBE = Methyl tert-butyl ether by EPA Method 8020
 MTBE (8260) = Methyl tert-butyl ether by EPA Method 8260
 µg/L = micrograms per liter

Notes:

- a - unmodified or weakly modified gasoline is significant.
- b - lighter than water immiscible sheen is present.
- c - heavier gasoline range compounds are significant (aged gasoline?)

Abbreviations and Methods (Cont'd)

TOC = top of casing elevation
 TB = trip blank
 na = not applicable
 -- = not available, not analyzed, or does not apply

- d - gasoline range compounds are significant
- g - strongly aged gasoline or diesel range compounds are significant
- j - no recognizable pattern

ATTACHMENT A

Field Data Sheets

WELL SAMPLING FORM

Project Name: Clark's Home & Garden	Cambria Mgr: DCE	Well ID: MW-1
Project Number: 189-1517-009	Date: 1/25/00	Well Yield: —
Site Address: 23040 Clawiter Road Hayward, CA.	Sampling Method:	Well Diameter: 2 " pvc
	Disposable bailer	Technician(s): ME
Initial Depth to Water: 14.21'	Total Well Depth: 23.481'	Water Column Height: 9.27'
Volume/ft: 0.16	1 Casing Volume: 1.48 gal	3 Casing Volumes: 4.45 gal
Purging Device: disposable bailer	Did Well Dewater?: NO.	Total Gallons Purged: 4.59 gal
Start Purge Time: 3:09	Stop Purge Time: 3:18	Total Time: 9 min

DO: PRE 2.31 POST 5.24 mg/L

1 Casing Volume = Water column height x Volume/ft.

ORP: PRE -108 POST -129 mV

Well Diam	Volume/ft (gallons)
2"	0.16
4"	0.65
6"	1.47

Time	Casing Volume	Temp. °C	pH	Cond. <i>MS</i>	Comments
3:10	1	18.5	6.3	601	
3:13	2	18.5	6.7	617	
3:17	3	18.5	6.3	479	

Fe: 0.8 mg/L

Sample ID	Date	Time	Container Type	Preservative	Analytes	Analytic Method
MW-1	1/25/00	3:20	4 voa's	HCL	TPHg, BTEX, MTBE* * MTBE (Confirm hits)	8020 8015 8260
MW-1	1/25/00	3:20	1L plastic	None	Nitrate, Sulfate, Alk.	
MW-1	1/25/00	3:20	1L plastic	None	TPHd	8015

WELL SAMPLING FORM

Project Name: Clark's Home & Garden	Cambria Mgr: DCE	Well ID: MW-2
Project Number: 189-1517-009	Date: 1/25/00	Well Yield: —
Site Address: 23040 Clawiter Road Hayward, CA.	Sampling Method: Disposable bailer	Well Diameter: 2" pvc
		Technician(s): ME
Initial Depth to Water: 13.61'	Total Well Depth: 25.12'	Water Column Height: 11.51'
Volume/ft: 0.16	1 Casing Volume: 1.84 gal	3 Casing Volumes: 5.52 gal
Purging Device: disposable bailer	Did Well Dewater?: NO	Total Gallons Purged: 6.94 gal
Start Purge Time: 2:31	Stop Purge Time: 2:42	Total Time: 11 min

DO; PRE 0.31 POST 0.81 mg/L

DRP; PRE -130 POST -146 mv.

Well Diam.	Volume/ft (gallons)
2"	0.16
4"	0.65
6"	1.47

1 Casing Volume = Water column height x Volume/ft.

Time	Casing Volume	Temp. °C	pH	Cond.	Comments
2:33	1	18.0	7.0	NS 537	
2:36	2	18.2	6.8	555	
2:41	3	18.2	7.5	550	

Fe: 0.0 - 0.3 mg/L

Sample ID	Date	Time	Container Type	Preservative	Analytes	Analytic Method
MW-2	1/25/00	2:55	4 voa's	HCL	TPHg, BTEX, MTBE* * MTBE (Confirm hits)	8020 8015 8260
MW-2	1/25/00	2:55	1L plastic	None	Nitrate, Sulfate, Alk.	
MW-2	1/25/00	2:55	1L plastic	None	TPHd	8015

WELL SAMPLING FORM

Project Name: Clark's Home & Garden	Cambria Mgr: DCE	Well ID: MW-3
Project Number: 189-1517-009	Date: 1/25/00	Well Yield: —
Site Address: 23040 Clawiter Road Hayward, CA.	Sampling Method:	Well Diameter: 2" pvc
	Disposable bailer	Technician(s): ME
Initial Depth to Water: 14.67'	Total Well Depth: 29.25'	Water Column Height: 14.58'
Volume/ft: 0.16	1 Casing Volume: 2.33 gal	3 Casing Volumes: 7 gal
Purging Device: disposable bailer	Did Well Dewater?: NO	Total Gallons Purged: 7.5 gal
Start Purge Time: 1:45	Stop Purge Time: 2:00	Total Time: 15 min.

DO; PRE 0.46 post. 0.66 mg/L

1 Casing Volume = Water column height x Volume/ft.

ORP; PRE -37 FAST. 62 mv

Well Diam.	Volume/ft (gallons)
2"	0.16
4"	0.65
6"	1.47

Time	Casing Volume	Temp. °C	pH	Cond.	Comments
1:46	1	19.1	7.2	592	brownish - silty
1:52	2	19.0	6.5	587	"
1:59	3	18.6	7.6	594	"

Fe; 0.0 - 0.2 mg/L

Sample ID	Date	Time	Container Type	Preservative	Analytes	Analytic Method
MW-3	1/25/00	2:15	4 voa's	HCL	TPHg, BTEX, MTBE* * MTBE (Confirm hits)	8020 8015 8260
MW-3	1/25/00	2:15	1L plastic	None	Nitrate, Sulfate, Alk.	
MW-3	1/25/00	2:15	1L plastic	None	TPHd	8015

ATTACHMENT B

Analytical Laboratory Report



McCAMPBELL ANALYTICAL INC.

110 2nd Avenue South, #D7, Pacheco, CA 94553-5560
 Telephone : 925-798-1620 Fax : 925-798-1622
<http://www.mccampbell.com> E-mail: main@mccampbell.com

Cambria Environmental Technology 1144 65 th Street, Suite C Oakland, CA 94608	Client Project ID: #189-1517; Clark's H&G	Date Sampled: 01/25/00
	Client Contact: Mark Erickson	Date Received: 01/26/00
	Client P.O:	Date Extracted: 01/26-01/27/00
		Date Analyzed: 01/26-01/27/00

Gasoline Range (C6-C12) Volatile Hydrocarbons as Gasoline*, with Methyl tert-Butyl Ether* & BTEX*

EPA methods 5030, modified 8015, and 8020 or 602; California RWQCB (SF Bay Region) method GCFID(5030)

Lab ID	Client ID	Matrix	TPH(g) ⁺	MTBE	Benzene	Toluene	Ethylbenzene	Xylenes	% Recovery Surrogate
29687	MW-1	W	2200,a,h	ND	3.3	1.7	4.6	7.4	---#
29688	MW-2	W	2300,b,j,h	ND	ND	2.3	2.2	2.0	---#
29689	MW-3	W	ND	ND	ND	ND	ND	ND	102
Reporting Limit unless otherwise stated; ND means not detected above the reporting limit	W		50 ug/L	5.0	0.5	0.5	0.5	0.5	
	S		1.0 mg/kg	0.05	0.005	0.005	0.005	0.005	

* water and vapor samples are reported in ug/L, wipe samples in ug/wipe, soil and sludge samples in mg/kg, and all TCLP and SPLP extracts in ug/l.

* cluttered chromatogram; sample peak coelutes with surrogate peak

*The following descriptions of the TPH chromatogram are cursory in nature and McCampbell Analytical is not responsible for their interpretation: a) unmodified or weakly modified gasoline is significant, b) heavier gasoline range compounds are significant(aged gasoline?), c) lighter gasoline range compounds (the most mobile fraction) are significant; d) gasoline range compounds having broad chromatographic peaks are significant; biologically altered gasoline?; e) TPH pattern that does not appear to be derived from gasoline (?); f) one to a few isolated peaks present; g) strongly aged gasoline or diesel range compounds are significant; h) lighter than water immiscible sheen is present; i) liquid sample that contains greater than ~5 vol % sediment, j) no recognizable pattern



McCAMPBELL ANALYTICAL INC.

110 2nd Avenue South, #D7, Pacheco, CA 94553-5560
 Telephone : 925-798-1620 Fax : 925-798-1622
<http://www.mccampbell.com> E-mail: main@mccampbell.com

Cambria Environmental Technology 1144 65 th Street, Suite C Oakland, CA 94608	Client Project ID: #189-1517; Clark's H&G	Date Sampled: 01/25/00
	Client Contact: Mark Erickson	Date Received: 01/26/00
	Client P.O:	Date Extracted: 01/26-02/02/00
		Date Analyzed: 01/26-02/02/00

Diesel Range (C10-C23) Extractable Hydrocarbons as Diesel *

EPA methods modified 8015, and 3550 or 3510; California RWQCB (SF Bay Region) method GCFID(3550) or GCFID(3510)

Lab ID	Client ID	Matrix	TPH(d) [†]	% Recovery Surrogate
29687	MW-1	W	1400,d,b,h	101
29688	MW-2	W	2900,d,b,h	98
29689	MW-3	W	98,b	102
Reporting Limit unless otherwise stated; ND means not detected above the reporting limit	W		50 ug/L	
	S		1.0 mg/kg	

* water and vapor samples are reported in ug/L, wipe samples in ug/wipe, soil and sludge samples in mg/kg, and all TCLP / STLC / SPLP extracts in ug/L.
[†] cluttered chromatogram resulting in coeluted surrogate and sample peaks, or; surrogate peak is on elevated baseline, or; surrogate has been diminished by dilution of original extract
 *The following descriptions of the TPH chromatogram are cursory in nature and McCampbell Analytical is not responsible for their interpretation: a) unmodified or weakly modified diesel is significant; b) diesel range compounds are significant; no recognizable pattern, c) aged diesel? is significant), d) gasoline range compounds are significant, e) medium boiling point pattern that does not match diesel (?), f) one to a few isolated peaks present; g) oil range compounds are significant, h) lighter than water immiscible sheen is present, i) liquid sample that contains greater than ~5 vol. % sediment.



QC REPORT

Date: 01/26/00 Matrix: Water

Extraction: N/A

Compound	Concentration: ug/L				%Recovery		RPD
	Sample	MS	MSD	Amount Spiked	MS	MSD	

SampleID: 12600

Instrument: GC-3

Surrogate1	0.000	101.0	100.0	100.00	101	100	1.0
Xylenes	0.000	274.0	281.0	300.00	91	94	2.5
Ethyl Benzene	0.000	91.0	93.0	100.00	91	93	2.2
Toluene	0.000	94.0	96.0	100.00	94	96	2.1
Benzene	0.000	98.0	101.0	100.00	98	101	3.0
MTBE	0.000	98.0	96.0	100.00	98	96	2.1
GAS	0.000	938.6	926.8	1000.00	94	93	1.3

SampleID: 12800

Instrument: GC-11 A

Surrogate1	0.000	112.0	116.0	100.00	112	116	3.5
TPH (diesel)	0.000	336.0	334.0	300.00	112	111	0.6

SampleID: 12600

Instrument: IR-1

Surrogate1	0.000	97.3	94.4	100.00	97	94	3.0
TRPH	0.000	28.1	27.3	23.70	119	115	2.9

$$\% \text{ Recovery} = \frac{(MS - \text{Sample})}{\text{Amount Spiked}} \cdot 100$$

$$RPD = \frac{(MS - MSD)}{(MS + MSD)} \cdot 2 \cdot 100$$

RPD means Relative Percent Deviation

GeoAnalytical Laboratories, Inc.

1405 Kansas Avenue Modesto, CA 95351 Phone (209) 572-0900 Fax (209) 572-0916

CERTIFICATE OF ANALYSIS

Report # L027-05

Date: 2/03/00

McCampbell Analytical
110 2nd Avenue South
Pacheco CA 94553

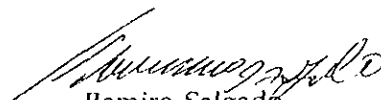
Project: 18714 Cambria

PO#

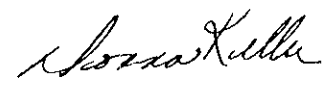
Date Rec'd: 1/27/00
Date Started: 1/28/00
Date Completed: 1/31/00

Date Sampled: 1/25/00
Time:
Sampler:

Sample ID	Lab ID	PQL	MDL	Method	Analyte	Results	Units
MW-1	L30889	1.0	300		Nitrate (NO3)	3	mg/L
		1.0	300		Sulfate	30	mg/L
		10	310.1		Total Alkalinity	720	mg/L
MW-2	L30890	1.0	300		Nitrate (NO3)	20	mg/L
		1.0	300		Sulfate	42	mg/L
		10	310.1		Total Alkalinity	520	mg/L
MW-3	L30891	1.0	300		Nitrate (NO3)	69	mg/L
		1.0	300		Sulfate	66	mg/L
		10	310.1		Total Alkalinity	470	mg/L


Ramiro Salgado
Chemist

Certification # 1157


Donna Keller
Laboratory Director

GeoAnalytical Laboratories, Inc.

1405 Kansas Avenue Modesto, CA 95351

Phone (209) 572-0900

Fax (209) 572-0916

Report# L027-05

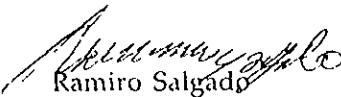
QC REPORT

McC Campbell Analytical
110 2nd Avenue South
Pacheco

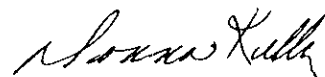
CA 94553

Dates Analyzed 1/28/00-1/31/00

Analyte	Batch #	Method	MS % Recovery	MSD % Recovery	RPD	Blank
Nitrate (NO3)	I00600	300	108.0	108.0	0.0	ND
Sulfate	I00521	300	104.0	101.4	2.5	ND
Total Alkalinity	I00522	310.1	100.0	112.5	11.8	ND


Ramiro Salgado
Chemist

Certification # 1157


Donna Keller
Laboratory Director

ATTACHMENT C

Waste Manifest

Keller Canyon Sanitary Landfill
 901 Bailey Road
 Pittsburg, CA 94565
 Phone (925) 458-9800
 Fax (925) 458-9891

Ox Mountain Sanitary Landfill
 12310 San Mateo Road
 Half Moon Bay, CA 94019
 Phone (650) 726-1819
 Fax (650) 726-9183

Newby Island Sanitary Landfill
 1601 Dixon Landing Road
 Milpitas, CA 95035
 Phone (408) 945-2800
 Fax (408) 262-2871

Forward Landfill
 9999 S. Austin Rd
 Manteca, CA 95330
 Phone (209) 982-
 Fax (209) 982-100

NON-HAZARDOUS WASTE MANIFEST

GENERATOR		WASTE ACCEPTANCE NO.																						
Clark's Home & Garden		922 - 500																						
MAILING ADDRESS		REQUIRED PERSONAL PROTECTIVE EQUIPMENT																						
23040 Clawiter Rd		<input type="checkbox"/> GLOVES <input type="checkbox"/> GOGGLES <input type="checkbox"/> RESPIRATOR <input type="checkbox"/> HARD HAT <input type="checkbox"/> TY-VEK <input type="checkbox"/> OTHER																						
CITY, STATE, ZIP		SPECIAL HANDLING PROCEDURES:																						
Hayward Ca		19																						
PHONE		RECEIVING FACILITY																						
CONTACT PERSON																								
SIGNATURE OF AUTHORIZED AGENT / TITLE																								
* Douglas Kinslow																								
DATE																								
GENERATOR'S CERTIFICATION: I hereby certify that the above named material is not a hazardous waste as defined by 40 CFR Part 261 or title 22 of the California code of regulations, has been properly described, classified and packaged, and is in proper condition for transportation according to applicable regulations; AND, if the waste is a treatment residue of a previously restricted hazardous waste subject to the Land Disposal Restrictions, I certify and warrant that the waste has been treated in accordance with the requirements of 40 CFR Part 268 and is no longer a hazardous waste as defined by 40 CFR Part 261.																								
WASTE TYPE:																								
<input type="checkbox"/> DISPOSAL <input type="checkbox"/> CONSTRUCTION <input type="checkbox"/> DEBRIS <input type="checkbox"/> SPECIAL WASTE		<input type="checkbox"/> SLUDGE <input type="checkbox"/> WOOD <input type="checkbox"/> OTHER																						
GENERATING FACILITY																								
Clark's Home & Garden 23040 Clawiter Rd - Hayward																								
TRANSPORTER		NOTES:																						
Den Beste Transportation		JA CP38116 Disposal 189-1517-013																						
ADDRESS		VEHICLE LICENSE NUMBER																						
1705 Conde Ln.		16																						
CITY, STATE, ZIP		TRUCK NUMBER																						
Windsor Ca 95092																								
PHONE		END DUMP																						
707-238-1407		<input type="checkbox"/> BOTTOM DUMP <input type="checkbox"/> TRANSFER																						
SIGNATURE OF AUTHORIZED AGENT OR DRIVER		ROLL-OFF(S)																						
* [Signature]		<input type="checkbox"/> FLAT-BED <input type="checkbox"/> VAN <input checked="" type="checkbox"/> DRUM																						
DATE		(4-550AL - 359A1)																						
2/21/02																								
I hereby certify that the above named material has been accepted and to the best of my knowledge the foregoing is true and accurate.		CUBIC YARDS																						
		(4) 55 gal / (3) 59 gal																						
REMARKS		DISPOSAL METHOD: (TO BE COMPLETED BY LANDFILL)																						
		<table border="1"> <tr> <th></th> <th>DISPOSE</th> <th>OTHER</th> </tr> <tr> <td><input checked="" type="checkbox"/> SOIL</td> <td></td> <td></td> </tr> <tr> <td><input type="checkbox"/> CONSTRUCTION DEBRIS</td> <td></td> <td></td> </tr> <tr> <td><input type="checkbox"/> NON-FRIABLE ASBESTOS</td> <td></td> <td></td> </tr> <tr> <td><input type="checkbox"/> WOOD</td> <td></td> <td></td> </tr> <tr> <td><input type="checkbox"/> ASH</td> <td></td> <td></td> </tr> <tr> <td><input type="checkbox"/> SPECIAL OTHER</td> <td></td> <td></td> </tr> </table>			DISPOSE	OTHER	<input checked="" type="checkbox"/> SOIL			<input type="checkbox"/> CONSTRUCTION DEBRIS			<input type="checkbox"/> NON-FRIABLE ASBESTOS			<input type="checkbox"/> WOOD			<input type="checkbox"/> ASH			<input type="checkbox"/> SPECIAL OTHER		
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FACILITY TICKET NUMBER																								
SIGNATURE OF AUTHORIZED AGENT																								
* [Signature]																								
DATE																								
2/21/02																								

SCHEDULING MUST BE MADE PRIOR TO 3:00 P.M. THE DAY PRIOR TO EXPECTED ARRIVAL • ANY UNSCHEDULED LOADS ARE SUBJECT TO REFUSAL UPON ARRIVAL. ONGOING DAILY DELIVERIES MUST BE SCHEDULED WITH THE LANDFILL THE DAY PRIOR TO ARRIVAL.