

WEST
World Environmental
Services & Technology

Any site plan showing location of soil samples. S.M. is looking for one

828 Mission Avenue, 2nd Floor
San Rafael, California 94901
415/460-6770
Fax 415/460-6771

Ask if add'l info avail on site. What are MW-MI? Any other subsurface investigation at site besides USI removal

FACSIMILE COVER SHEET

At minimum. Need well at end of alley (SW corner) S.M. will check into storm drain, not well!

Date	November 24, 1999
Deliver to	eva chu
Name of Firm	Alameda County Environmental Health Department
Fax Number	510 337-9335
From	Peter Krasnoff

NUMBER OF PAGES: This cover page plus 14 page(s)

Remarks

Dear Ms. chu:

Per our discussion, attached are the analytical results of shallow and surface soil samples collected from the Pacific Galvanizing facility located at 715 46th Avenue in Oakland, California. These samples were reportedly collected within the same general area subsequently investigated by WEST, as presented in the Site Investigation report (WEST, October, 1999).
1-4' bags
Sample collected by WEST in March 1996

Please call me at 415-485-1660 if you have any questions or wish to discuss this further.

WEST re-sampled (using hand-cored methods) at 5' bags in April 1998

Sincerely,

Peter Krasnoff, P.E.
Principal Engineer

1/10/00 Discuss w/ S. Michelson need to collect grab bag (from end of alley for Zn & Pb) Steve says site is one big warehouse w/ concrete on slab floor location contaminated soil in alley may be due to storage of equipment in alley



Curtis & Tompkins, Ltd., Analytical Laboratories, Since 1878

1323 Fifth Street, Berkeley, CA 94710, Phone (510) 486-0900

ANALYTICAL REPORT

Prepared for:

The Earth Technology Corporation
2030 Addison Street
Suite 500
Berkeley, CA 94704

Date: 23-MAR-96
Lab Job Number: 124839
Project ID: 962630.01
Location: Pacific Galv.

WERT Sample
County Prop.

Reviewed by:

[Handwritten Signature]

Reviewed by:

[Handwritten Signature]

This package

Post-It® Fax Note	7871	Date	# of Pages 14
To	RON RENEHART	From	JACK SCHULTZ
Co/Dept.		Co.	PACIFIC GALV
Phone #		Address	COUNTY PROP.
Fax #	916 983-2241	Fax #	



Curtis & Tompkins, Ltd.

LABORATORY NUMBER: 124839-003
 CLIENT: THE EARTH TECHNOLOGY CORPORATION
 PROJECT ID: 962630.01
 LOCATION: PACIFIC GALV.
 SAMPLE ID: COMP SP1-SC-(1,2)

DATE SAMPLED: 03/15/96
 DATE RECEIVED: 03/15/96
 DATE REPORTED: 03/27/96

PARAMETER	RESULT	UNITS	REPORTING LIMIT	METHOD
Reactive Cyanide	ND	mg/Kg	10	SW-846 Section 7.3.3.3
Reactive Sulfide	ND	mg/Kg	10	SW-846 Section 7.3.4.3
Ignitability	Does Not Ignite			SW-846 Section 7.1

ND = Not detected at or above reporting limit.

QA/QC SUMMARY	Analysis Date	RPD, %	RECOVERY, %
Cyanide	03/21/96	<1	70
Sulfide	03/21/96	<1	68
Ignitability	03/21/96	<1	--



Curtis & Tompkins, Ltd

DATE REPORTED: 03/27/96

LABORATORY NUMBER: 124839-METHOD BLANK
CLIENT: THE EARTH TECHNOLOGY CORPORATION
PROJECT ID: 962610.01
LOCATION: PACIFIC GALV.
SAMPLE TO: MB

PARAMETER	RESULT	UNITS	REPORTING LIMIT	METHOD
Reactive Cyanide	ND	mg/kg	10	SW-846 Section 7.3.3.2
Reactive Sulfide	ND	mg/Kg	10	SW-846 Section 7.3.4.2

ND = Not detected at or above reporting limit.

QA/QC SUMMARY	Analysis Date	RPD, %	RECOVERY, %
Cyanide	03/21/96	<1	70
Sulfide	03/21/96	<1	68



Client: The Earth Technology Corporation Laboratory Login Number: 124839

Project Name: Pacific Galv. Report Date: 18 April 98
Project Number: 757501.01

ANALYSIS: pH

Lab ID	Sample ID	Matrix	Sampled	Received	Analyzed	Results	Units	Method	Analyst	QC Batch
124839-003	COMP SP1-SC-(1,2)	Soil	15-MAR-96	15-MAR-96	10-MAR-96	7.1	RII	EPA 8045	DLP	26506

Soil pH measured in 0.01 M CaCl2



Q C B a t c h R e p o r t

Client: The Earth Technology Corporation
 Project Name: Pacific Calv.
 Project Number: 25500.01

Laboratory Log'n Number: 124839
 Report Date: 15 April 96

ANALYSIS: pH

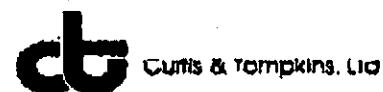
QC Batch Number: 25506

Calibration Verification Results

Sample	Result	TV	Difference	Limit	Analyzed
ICV	6.97	7.00	.03	< 0.10	19-MAR-96
CCV	7.01	7.00	.01	< 0.10	19-MAR-96

Sample Duplicate Results

Sample	Duplicate	RPD	Analyzed
5.79	5.80	.2%	19-MAR-96



SAMPLE ID: COMP ~~EPI~~-SC-(5,6)
 LAB ID: 124839-009
 CLIENT: The Earth Technology Corporation
 PROJECT ID: 962650.01
 LOCATION: Pacific Galv.
 MATRIX: Soil

DATE SAMPLED: 03/15/96
 DATE RECEIVED: 03/15/96
 DATE REPORTED: 04/15/96

California TITLE 26 Metals

Compound	Result (mg/Kg)	Reporting Limit (mg/Kg)	IDF	QC Batch	Method	Analysis Date
Antimony	ND	2.9	1	26485	EPA 6010A	03/19/96
Arsenic	3.0	0.25	1	26485	EPA 6010A	03/19/96
Barium	91	0.49	1	26485	EPA 6010A	03/19/96
Beryllium	0.33	0.098	1	26485	EPA 6010A	03/19/96
Cadmium	1.1	0.049	1	26485	EPA 6010A	03/20/96
Chromium (total)	30	0.49	1	26485	EPA 6010A	03/19/96
Cobalt	2.1	0.98	1	26485	EPA 6010A	03/19/96
Copper	16	0.49	1	26485	EPA 6010A	03/19/96
Lead	68	0.15	1	26485	EPA 6010A	03/19/96
Mercury	0.13	0.080	1	26510	EPA 7471	03/20/96
Molybdenum	ND	0.98	1	26485	EPA 6010A	03/19/96
Nickel	37	0.98	1	26485	EPA 6010A	03/19/96
Selenium	ND	0.25	1	26485	EPA 6010A	03/20/96
Silver	ND	0.49	1	26485	EPA 6010A	03/19/96
Thallium	ND	0.25	1	26485	EPA 6010A	03/19/96
Vanadium	17	0.49	1	26485	EPA 6010A	03/19/96
Zinc	1400	980	1000	26485	EPA 6010A	03/22/96

ND = Not detected at or above reporting limit



Curtis & Tompkins, Ltd

SAMPLE ID: COMP SP1-SC-(1,2)
 LAB ID: 124839-003
 CLIENT: The Earth Technology Corporation
 PROJECT ID: 962630.01
 LOCATION: Pacific Galv.
 MATRIX: Soil

DATE SAMPLED: 03/15/96
 DATE RECEIVED: 03/15/96
 DATE REPORTED: 04/15/96

California TITLE 26 Metals

Compound	Result (mg/Kg)	Reporting Limit (mg/Kg)	IDF	QC Batch	Method	Analysis Date
Antimony	ND	2.9	1	26485	EPA 6010A	03/19/96
Arsenic	8.6	0.24	1	26485	EPA 6010A	03/19/96
Barium	120	0.49	1	26485	EPA 6010A	03/19/96
Beryllium	0.41	0.008	1	26485	EPA 6010A	03/19/96
Cadmium	23	0.049	1	26485	EPA 6010A	03/20/96
Chromium (total)	71	0.49	1	26485	EPA 6010A	03/19/96
Cobalt	7.2	0.98	1	26485	EPA 6010A	03/19/96
Copper	73	0.49	1	26485	EPA 6010A	03/19/96
Lead	1300	0.15	1	26485	EPA 6010A	03/19/96
Mercury	0.26	0.091	1	26518	EPA 7471	03/20/96
Molybdenum	6.3	0.98	1	26485	EPA 6010A	03/19/96
Nickel	36	0.98	1	26485	EPA 6010A	03/19/96
Selenium	ND	0.24	1	26485	EPA 6010A	03/20/96
Silver	ND	0.49	1	26485	EPA 6010A	03/19/96
Thallium	ND	0.24	1	26485	EPA 6010A	03/19/96
Vanadium	22	0.49	1	26485	EPA 6010A	03/19/96
Zinc	10000	980	1000	26485	EPA 6010A	03/22/96

ND - Not detected at or above reporting limit



SAMPLE ID: COM1-SMT-SC-(1,2)
 LAB ID: 124839-002
 CLIENT: The Earth Technology Corporation
 PROJECT ID: 962600.01
 LOCATION: Pacific Galv.
 MATRIX: TCLP Leachate

DATE SAMPLED: 03/15/96
 DATE RECEIVED: 03/15/96
 DATE REPORTED: 04/15/96

TCLP Metals

Compound	Result (ug/L)	Reporting Limit (ug/L)	IDF	QC Batch	Method	Analysis Date
Arsenic	ND	50	10	26534	EPA 6010A	03/22/96
Barium	210	100	10	26534	EPA 6010A	03/22/96
Cadmium	500	50	10	26534	EPA 6010A	03/22/96
Chromium (total)	ND	100	10	26534	EPA 6010A	03/22/96
Lead	2500	30	10	26534	EPA 6010A	03/22/96
Mercury	ND	2.0	1	26619	EPA 7470	03/28/96
Selenium	ND	50	10	26534	EPA 6010A	03/22/96
Silver	ND	50	10	26534	EPA 6010A	03/22/96

All values are reported as ug/L unless otherwise noted.



SAMPLE ID: COMP SP1-SC-(3,4)
 LAB ID: 124839-006
 CLIENT: The Earth Technology Corporation
 PROJECT ID: 962630.01
 LOCATION: Pacific Galv.
 MATRIX: Soil

DATE SAMPLED: 03/15/96
 DATE RECEIVED: 03/15/96
 DATE REPORTED: 04/15/96

EPA Priority Pollutant Metals

11/2

Compound	Result (mg/Kg)	Reporting Limit (mg/Kg)	IDF	QC Batch	Method	Analysis Date
Antimony	ND	2.9	1	26485	EPA 6010A	03/19/96
Arsenic	9.1	0.24	1	26485	EPA 6010A	03/19/96
Beryllium	0.48	0.008	1	26485	EPA 6010A	03/19/96
Cadmium	22	0.049	1	26485	EPA 6010A	03/20/96
Chromium (total)	81	0.49	1	26485	EPA 6010A	03/19/96
Copper	81	0.49	1	26485	EPA 6010A	03/19/96
Lead	1900	0.15	1	26485	EPA 6010A	03/19/96
Mercury	0.33	0.080	1	26518	EPA 7471	03/20/96
Nickel	44	0.98	1	26485	EPA 6010A	03/19/96
Selenium	ND	0.24	1	26485	EPA 6010A	03/20/96
Silver	ND	0.49	1	26485	EPA 6010A	03/19/96
Thallium	ND	0.24	1	26485	EPA 6010A	03/19/96
Zinc	15000	200	1000	26485	EPA 6010A	03/20/96

ND - Not detected at or above reporting limit



SAMPLE ID: COMP SP1-SC-(5,6)
 LAB ID: 124859-069
 CLIENT: The Earth Technology Corporation
 PROJECT ID: 962630.01
 LOCATION: Pacific Galv.
 MATRIX: TCLP Leachate

DATE SAMPLED: 03/15/96
 DATE RECEIVED: 03/15/96
 DATE REPORTED: 04/15/96

TCLP Metals

Compound	Result (ug/L)	Reporting Limit (ug/L)	IDF	QC Batch	Method	Analysis Date
Arsenic	ND	50	10	26534	EPA 6010A	03/22/96
Barium	ND	100	10	26534	EPA 6010A	03/22/96
Cadmium	ND	20	10	26534	EPA 6010A	03/22/96
Chromium (total)	110	100	10	26534	EPA 6010A	03/22/96
Lead	ND	30	10	26534	EPA 6010A	03/22/96
Mercury	ND	2.0	1	26619	EPA 7470	03/26/96
Selenium	ND	50	10	26534	EPA 6010A	03/22/96
Silver	ND	50	10	26534	EPA 6010A	03/22/96

ND = Not detected at or above reporting limit



CLIENT: The Earth Technology Corporation
 JOB NUMBER: 124839

DATE REPORTED: 04/15/96

**BATCH QC REPORT
 PREP BLANK**

Compound	Result	Reporting Limit	Units	IDF	QC Batch	Method	Analysis Date
Antimony	ND	3	mg/Kg	1	26485	EPA 6010A	03/19/96
Arsenic	ND	0.25	mg/Kg	1	26485	EPA 6010A	03/19/96
Arsenic	ND	50	ug/L	10	26534	EPA 6010A	03/21/96
Barium	ND	0.5	mg/Kg	1	26485	EPA 6010A	03/19/96
Barium	ND	100	ug/L	10	26534	EPA 6010A	03/21/96
Beryllium	ND	0.1	mg/Kg	1	26485	EPA 6010A	03/19/96
Cadmium	ND	0.05	mg/Kg	1	26485	EPA 6010A	03/20/96
Cadmium	ND	20	ug/L	10	26534	EPA 6010A	03/21/96
Chromium (total)	ND	0.5	mg/Kg	1	26485	EPA 6010A	03/19/96
Chromium (total)	ND	100	ug/L	10	26534	EPA 6010A	03/21/96
Cobalt	ND	1	mg/Kg	1	26485	EPA 6010A	03/19/96
Copper	ND	0.5	mg/Kg	1	26485	EPA 6010A	03/19/96
Lead	ND	0.15	mg/Kg	1	26485	EPA 6010A	03/19/96
Lead	ND	30	ug/L	10	26534	EPA 6010A	03/21/96
Mercury	ND	0.08	mg/Kg	1	26518	EPA 7471	03/20/96
Mercury	ND	2	ug/L	1	26619	EPA 7470	03/26/96
Molybdenum	ND	1	mg/Kg	1	26485	EPA 6010A	03/19/96
Nickel	ND	1	mg/Kg	1	26485	EPA 6010A	03/19/96
Selenium	ND	0.25	mg/Kg	1	26485	EPA 6010A	03/20/96
Selenium	ND	50	ug/L	10	26534	EPA 6010A	03/21/96
Silver	ND	0.5	mg/Kg	1	26485	EPA 6010A	03/19/96
Silver	ND	50	ug/L	10	26534	EPA 6010A	03/21/96
Thallium	ND	0.25	mg/Kg	1	26485	EPA 6010A	03/19/96
Vanadium	ND	0.5	mg/Kg	1	26485	EPA 6010A	03/19/96
Zinc	ND	1	mg/Kg	1	26485	EPA 6010A	03/19/96

ND = Not Detected at or above reporting limit



CLIENT: The Earth Technology Corporation
 JOB NUMBER: 124839

DATE REPORTED: 04/15/96

BATCH QC REPORT
BLANK SPIRE / BLANK SPIRE DUPLICATE

Compound	Spike Amount	DD Result	DD Result	Units	89% Rec.	93% Rec.	Rec. Limits	RPD %	RPD Limit	QC Batch	Method	Analysis Date
Antimony	500	509	507	ug/L	102	101	80-120	0	20	26485	EPA 6010A	03/19/96
Arsenic	2000	1970	1960	ug/L	99	98	80-120	1	20	26485	EPA 6010A	03/19/96
Arsenic	2000	1980	19500	ug/L	99	98	80-120	2	20	26534	EPA 6010A	03/21/96
Barium	2000	2110	2130	ug/L	108	107	80-120	1	20	26485	EPA 6010A	03/19/96
Barium	2000	2090	20600	ug/L	105	103	80-120	1	20	26534	EPA 6010A	03/21/96
Beryllium	50	52.8	53	ug/L	106	106	80-120	0	20	26485	EPA 6010A	03/19/96
Cadmium	50	52.4	52	ug/L	99	104	80-120	5	20	26485	EPA 6010A	03/20/96
Cadmium	50	520	515	ug/L	104	103	80-120	1	20	26534	EPA 6010A	03/21/96
Chromium (total)	200	195	194	ug/L	98	97	80-120	1	20	26485	EPA 6010A	03/19/96
Chromium (total)	200	1950	1960	ug/L	98	98	80-120	0	20	26534	EPA 6010A	03/21/96
Cobalt	500	490	484	ug/L	98	97	80-120	1	20	26485	EPA 6010A	03/19/96
Copper	250	249	251	ug/L	100	100	80-120	1	20	26485	EPA 6010A	03/19/96
Lead	500	495	488	ug/L	99	98	80-120	1	20	26485	EPA 6010A	03/19/96
Lead	500	4910	4910	ug/L	98	98	80-120	0	20	26534	EPA 6010A	03/21/96
Mercury	50	4.446	4.307	ug/L	89	86	80-120	3	20	26619	EPA 7470	03/26/96
Mercury	500	500	500	ug/L	100	100	80-120	0	20	26485	EPA 6010A	03/19/96
Nickel	500	500	500	ug/L	102	101	80-120	1	20	26485	EPA 6010A	03/20/96
Selenium	2000	1850	1950	ug/L	94	98	80-120	4	20	26485	EPA 6010A	03/21/96
Selenium	2000	1900	19400	ug/L	98	97	80-120	1	20	26534	EPA 6010A	03/21/96
Silver	100	102	102	ug/L	102	102	80-120	0	20	26485	EPA 6010A	03/19/96
Silver	100	105	1050	ug/L	105	105	80-120	0	20	26534	EPA 6010A	03/21/96
Thallium	500	497	497	ug/L	100	99	80-120	0	20	26485	EPA 6010A	03/19/96
Vanadium	500	495	497	ug/L	100	99	80-120	0	20	26485	EPA 6010A	03/19/96
Zinc	500	495	483	ug/L	97	97	80-120	1	20	26485	EPA 6010A	03/19/96



Curtis & Tompkins, Ltd

CLIENT: The Earth Technology Corporation
JOB NUMBER: 124870

DATE REPORTED: 04/15/96

**BATCH QC REPORT
LABORATORY CONTROL SAMPLE**

Compound	Spike Amt	Result	Units	% Rec.	QC Batch	Method	Analysis Date
Mercury	5	5.004	ug/l.	100	26518	EPA 7470	03/20/96

PLAN - STANDARD

124839

The Earth Technology Corporation

Chain of Custody Record

Lab (job) no.: 962631.01
Date: 3/15/96
Page: 1 of 1

LCT
 Laboratory: 233-2323 St. Method Shipment: IF TO LAB
 Address: BERKELEY Shipport No: WA
 Client: E Tech Account: NA
 Address: 2030 ADDISON ST Project Manager: J. PLAM
BERKELEY CA 94704 Telephone No: (510) 510-6914
 Project Name: PACIFIC GULL Fax: 510-510-7496
 Project Number: 962631.01 Sample: (Signature) [Signature]

Planned / No. of Constituents	Analysis Required	Remarks
TCLP EPA TMA REACTIVITY		

Field Sample Number	Latitude/Depth	Date	Time	Sample Type	Initials/Notes	Preservation		No.	Analysis			Remarks
						Temp.	Chemical		TCLP	EPA	TMA	
76-SPI-SC1	1'	3/15/96	12:00	S	902 GUS	4C	N/A	NO	X	X	X	COMPOSITE SC1
76-SPI-SC2	3'	"	12:30	S	"	4C	"	1				AND SC2; SC2
76-SPI-SC3	9'	"	12:45	S	"	4C	"	1	X			SC3 and
76-SPI-SC4	21'	"	13:00	S	"	4C	"	1				SC-4; SC Sand
76-SPI-SC5	4'	"	13:00	S	WASTE BAG	4C	"	1	X	X		SC 6
76-SPI-SC6	4'	"	15:00	S	WASTE BAG	4C	"	1				
						4C						
						4C						
						4C						
						4C						
						4C						
						4C						

Submitted by: <u>[Signature]</u> Date: <u>3/15/96</u> Printed: <u>Mike M. Wood</u> Company: <u>ET</u> Reason: <u>Delivery</u>	Received by: <u>[Signature]</u> Date: <u>3/15/96</u> Printed: <u>Mike M. Wood</u> Company: <u>ET</u>	Returned by: _____ Date: _____ Printed: _____ Company: _____	Received by: _____ Date: _____ Printed: _____ Company: _____
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Comments: See remarks on composite