2462-00163

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Lockheed Martin Corporation
Corporate Environment, Safety & Health
7921 Southpark Plaza, Suite 210 Littleton, CO 80120

COPY

LOCKHEED MARTIN

August 31, 2000

Mr. Gerard J. Thibeault
Executive Officer
California Regional Water Quality Control Board
Santa Ana Region
3737 Main Street, Suite 500
Riverside, California 92501-3339

Dear Mr. Thibeault:

I am writing to report analytical results for water discharges for the month of July 2000, as required under NPDES permit CAG998001 and subsequent modifications to this permit.

Permitted discharges occurred during July 2000, and were associated with perchlorate pilot treatment system operation at the "Gage New 6" well. 40,850 gallons of groundwater were discharged from July 1, through July 31, 2000.

Attachment 1 summarizes daily discharges and analytical results. All water was discharged within permit limits. The water was discharged to a dry portion of the Santa Ana Wash east of Tippecanoe Avenue. The discharged water completely percolated into soil, never reaching any flowing portion of the Santa Ana River.

Attachment 2 summarizes the related laboratory analytical data. Please contact me at 303.971.1880 if you or your staff have any questions.

Sincerely,

Stephen Evanoff
Manager, Redlands Project

SE:eh

Attachments

c: See distribution

Distribution

Kevin Mayer (SFD-73)
U.S. Environmental Protection Agency
75 Hawthorne Street
San Francisco, CA 94105

Susan Beeson
California Regional Quality Control Board
Santa Ana Region

Kamron Saremi
California Regional Quality Control Board
Santa Ana Region

James H. O'Brien (w/o attachments)
Vice President
Lockheed Martin Corporation
7921 Southpark Plaza, Suite 210
Littleton, CO 80120

ATTACHMENT 1

Table 1.

NPDES Summary--July 2000[1]

Constituent/Date	7/1/00 - 7/26/00	7/27/00	7/28/00	7/31/00
Flow (gallons/day)	***No Discharges***	8000	14400	18450
Oil and Grease (mg/l)		<5	<5	<5
Sulfides (mg/l)		<0.1	<0.1	<0.1
TPH (mg/l)		<0.2	<0.2	<0.2
TCE (ug/l)[2]		<1	<1	<1
pH (Effluent)		7.8	7.1	7.6
Perchlorate (ug/l)		ND	ND	ND
Nitrate as NO_3 (mg/l)		41	44	44
DBCP (ug/l)		ND	ND	ND
TSS (mg/l)		ND	ND	ND

Notes:

1. The pilot perchlorate treatment plant did not operate on dates not listed; and/or no discharges occurre
2. All method volatile organic constituents ND (non-detect).

ATTACHMENT 2

Weck Laboratories, Inc.
Environmental and Analytical Services - Since 1964

Report Date: *Friday, August 18, 2000*
Received Date: *Thursday, July 27, 2000*
Log By: mr
Log Time: 12:17

Client: Earth Tech, Inc.
100 West Broadway, Suite 200
Long Beach, CA 90802-4443
Attn.: Barry Molnaa

Phone: (562) 951-2129
FAX: (562) 951-2086

Project: LMC POP

P.O. #: 2000S-0086-LB9
Turnaround Time: Normal

CERTIFICATE OF ANALYSIS

Lab#: A005316-001 **Sample ID:** Discharge **Matrix:** Ground Water
Sampled By: T.P. **Date:** 7/27/00 **Time:** 8:30

Parameter	Result	Flag	Units	Dilution Factor	RL	Method	Analyzed		Worksheet #
Nitrate as NO3	41		mg/L	1	0.20	EPA 300.0	7/27/00	kk	WS16329
Prep. SPE									
Oil & Grease	ND		mg/L	1	5	EPA 1664	8/4/00	sl	WS16555
Prep. EPA 3510C									
Diesel range hydrocarbons (C10-C23)	ND		mg/L	1	0.10	EPA 8015B	7/31/00	wm	WS16843
Prep. P&T									
Gasoline range hydrocarbons (C6-C10)	ND		mg/L	1	0.10	EPA 8015B	8/1/00	wm	WS16524
Sulfide, dissolved	ND		mg/L	1	0.10	SM 4500S2 D	8/1/00	hn	WS16530
Total Suspended Solids	ND		mg/L	1	5	EPA 160.2	7/28/00	aw	WS16298
Prep. Direct Inj.									
Perchlorate	ND		ug/L	1	4.0	EPA 314	8/14/00	dc	WS16760
Prep. P&T									
Dichlorodifluoromethane	ND		ug/L	1	1.0	EPA 524.2	7/28/00	rt	WS16536
Chloromethane	ND		ug/L	1	0.50	EPA 524.2	7/28/00	rt	WS16536
Vinyl Chloride	ND		ug/L	1	0.50	EPA 524.2	7/28/00	rt	WS16536
Bromomethane	ND		ug/L	1	0.50	EPA 524.2	7/28/00	rt	WS16536
Chloroethane	ND		ug/L	1	0.50	EPA 524.2	7/28/00	rt	WS16536
Trichlorofluoromethane (Freon 11)	ND		ug/L	1	5.0	EPA 524.2	7/28/00	rt	WS16536
Trichlorotrifluoroethane (Freon 113)	ND		ug/L	1	10	EPA 524.2	7/28/00	rt	WS16536
1,1-Dichloroethene	ND		ug/L	1	0.50	EPA 524.2	7/28/00	rt	WS16536
Methylene chloride (Dichloromethane)	ND		ug/L	1	0.50	EPA 524.2	7/28/00	rt	WS16536
trans-1,2-Dichloroethene	ND		ug/L	1	0.50	EPA 524.2	7/28/00	rt	WS16536
Methyl tert-Butyl Ether	ND		ug/L	1	1.0	EPA 524.2	7/28/00	rt	WS16536
1,1-Dichloroethane	ND		ug/L	1	0.50	EPA 524.2	7/28/00	rt	WS16536
2-Butanone (Methyl ethyl ketone)	ND		ug/L	1	5.0	EPA 524.2	7/28/00	rt	WS16536
2,2-Dichloropropane	ND		ug/L	1	0.50	EPA 524.2	7/28/00	rt	WS16536
cis-1,2-Dichloroethene	ND		ug/L	1	0.50	EPA 524.2	7/28/00	rt	WS16536
Bromochloromethane	ND		ug/L	1	0.50	EPA 524.2	7/28/00	rt	WS16536
Chloroform	ND		ug/L	1	0.50	EPA 524.2	7/28/00	rt	WS16536
1,1,1-Trichloroethane	ND		ug/L	1	0.50	EPA 524.2	7/28/00	rt	WS16536
Carbon Tetrachloride	ND		ug/L	1	0.50	EPA 524.2	7/28/00	rt	WS16536
1,1-Dichloropropene	ND		ug/L	1	0.50	EPA 524.2	7/28/00	rt	WS16536

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www.wecklabs.com

Weck Laboratories, Inc.
Environmental and Analytical Services - Since 1964

Client: Earth Tech, Inc.
Project Name: LMC POP

Report Date: *Friday, August 18, 2000*

CERTIFICATE OF ANALYSIS

Lab#: A005316-001 **Sample ID:** Discharge **Matrix:** Ground Water
Sampled By: T.P. **Date:** 7/27/00 **Time:** 8:30

Parameter	Result	Flag	Units	Dilution Factor	RL	Method	Analyzed	Worksheet #
Benzene	ND		ug/L	1	0.50	EPA 524.2	7/28/00 rt	WS16536
1,2-Dichloroethane	ND		ug/L	1	0.50	EPA 524.2	7/28/00 rt	WS16536
Trichloroethene (TCE)	ND		ug/L	1	0.50	EPA 524.2	7/28/00 rt	WS16536
1,2-Dichloropropane	ND		ug/L	1	0.50	EPA 524.2	7/28/00 rt	WS16536
Dibromomethane	ND		ug/L	1	0.50	EPA 524.2	7/28/00 rt	WS16536
Bromodichloromethane	ND		ug/L	1	0.50	EPA 524.2	7/28/00 rt	WS16536
cis-1,3-Dichloropropene	ND		ug/L	1	0.50	EPA 524.2	7/28/00 rt	WS16536
4-Methyl-2-pentanone (MiBK)	ND		ug/L	1	5.0	EPA 524.2	7/28/00 rt	WS16536
2-chloroethylvinyl Ether	ND		ug/L	1	1.0	EPA 524.2	7/28/00 rt	WS16536
Toluene	ND		ug/L	1	0.50	EPA 524.2	7/28/00 rt	WS16536
trans-1,3-Dichloropropene	ND		ug/L	1	0.50	EPA 524.2	7/28/00 rt	WS16536
1,1,2-Trichloroethane	ND		ug/L	1	0.50	EPA 524.2	7/28/00 rt	WS16536
Tetrachloroethene (PCE)	ND		ug/L	1	0.50	EPA 524.2	7/28/00 rt	WS16536
1,3-Dichloropropane	ND		ug/L	1	0.50	EPA 524.2	7/28/00 rt	WS16536
Dibromochloromethane	ND		ug/L	1	0.50	EPA 524.2	7/28/00 rt	WS16536
1,2-Dibromoethane (EDB)	ND		ug/L	1	0.50	EPA 524.2	7/28/00 rt	WS16536
Chlorobenzene	ND		ug/L	1	0.50	EPA 524.2	7/28/00 rt	WS16536
Ethyl benzene	ND		ug/L	1	0.50	EPA 524.2	7/28/00 rt	WS16536
m/p-Xylenes	ND		ug/L	1	0.50	EPA 524.2	7/28/00 rt	WS16536
o-Xylene	ND		ug/L	1	0.50	EPA 524.2	7/28/00 rt	WS16536
Styrene	ND		ug/L	1	0.50	EPA 524.2	7/28/00 rt	WS16536
Bromoform	ND		ug/L	1	0.50	EPA 524.2	7/28/00 rt	WS16536
isopropylbenzene	ND		ug/L	1	0.50	EPA 524.2	7/28/00 rt	WS16536
Bromobenzene	ND		ug/L	1	0.50	EPA 524.2	7/28/00 rt	WS16536
1,1,2,2-Tetrachloroethane	ND		ug/L	1	0.50	EPA 524.2	7/28/00 rt	WS16536
1,2,3-Trichloropropane	ND		ug/L	1	0.50	EPA 524.2	7/28/00 rt	WS16536
n-Propyl benzene	ND		ug/L	1	0.50	EPA 524.2	7/28/00 rt	WS16536
2-chlorotoluene	ND		ug/L	1	0.50	EPA 524.2	7/28/00 rt	WS16536
4-Chlorotoluene	ND		ug/L	1	0.50	EPA 524.2	7/28/00 rt	WS16536
1,3,5-Trimethylbenzene	ND		ug/L	1	0.50	EPA 524.2	7/28/00 rt	WS16536
tert-Butyl benzene	ND		ug/L	1	0.50	EPA 524.2	7/28/00 rt	WS16536
1,2,4-Trimethylbenzene	ND		ug/L	1	0.50	EPA 524.2	7/28/00 rt	WS16536
bis(2-Chloroethyl) Ether	ND		ug/L	1	5.0	EPA 524.2	7/28/00 rt	WS16536
sec-Butyl benzene	ND		ug/L	1	0.50	EPA 524.2	7/28/00 rt	WS16536
1,3-Dichlorobenzene	ND		ug/L	1	0.50	EPA 524.2	7/28/00 rt	WS16536
4-isopropyltoluene	ND		ug/L	1	0.50	EPA 524.2	7/28/00 rt	WS16536
1,4-Dichlorobenzene	ND		ug/L	1	0.50	EPA 524.2	7/28/00 rt	WS16536
1,2-Dichlorobenzene	ND		ug/L	1	0.50	EPA 524.2	7/28/00 rt	WS16536
n-Butyl benzene	ND		ug/L	1	0.50	EPA 524.2	7/28/00 rt	WS16536
1,2-Dibromo-3-chloropropane (DBCP)	ND		ug/L	1	1.0	EPA 524.2	7/28/00 rt	WS16536
1,2,4-Trichlorobenzene	ND		ug/L	1	0.50	EPA 524.2	7/28/00 rt	WS16536
Hexachlorobutadiene	ND		ug/L	1	0.50	EPA 524.2	7/28/00 rt	WS16536
Naphthalene	ND		ug/L	1	0.50	EPA 524.2	7/28/00 rt	WS16536
1,2,3-Trichlorobenzene	ND		ug/L	1	0.50	EPA 524.2	7/28/00 rt	WS16536
Total 1,3-Dichloropropene	ND		ug/L	1	0.50	EPA 524.2	7/28/00 rt	WS16536

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Weck Laboratories, Inc.
Environmental and Analytical Services - Since 1964

Client: Earth Tech, Inc.
Project Name: LMC POP

Report Date: *Friday, August 18, 2000*

CERTIFICATE OF ANALYSIS

Lab#: A005316-001 **Sample ID:** Discharge **Matrix:** Ground Water
Sampled By: T.P. **Date:** 7/27/00 **Time:** 8:30

Parameter	Result	Flag	Units	Dilution Factor	RL	Method	Analyzed	Worksheet #
Tert-amyl Methyl Ether	ND		ug/L	1	3.0	EPA 524.2	7/28/00 rt	WS16536
Ethyl tert-Butyl Ether	ND		ug/L	1	3.0	EPA 524.2	7/28/00 rt	WS16536
1,1,1,2-Tetrachloroethane	ND		ug/L	1	0.5	EPA 524.2	7/28/00 rt	WS16536

Authorized Signature

ELAP # 1132
LACSD # 10143
AZ0526

Flags for Data Qualifiers:

B = Compound detected in the blank. Sample result equal or less than 5 times the concentration in the blank.
J = Estimated value, detected but below the reporting limit.
H = Estimated value, result over the calibration range
R = Result is suspect, LCS recovery greater than the upper control limit.
L = Result is suspect, LCS recovery lower than the control limit.
Q = QC result out of acceptance limits.
T = Trace detection, detected but below the reporting limit.

Notes:

Any remaining sample(s) for testing will be disposed of one month from the final report date unless other arrangements are made in advance.
All results are expressed on wet weight basis unless specified.
RL = Reporting Limit.
ND = Not detected, below the reporting limit.
Sub = Subcontracted analysis, original report enclosed.

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Weck Laboratories, Inc.
Environmental and Analytical Services - Since 1964

Report Date: *Tuesday, August 22, 2000*
Received Date: *Friday, July 28, 2000*
Log By: tn
Log Time: 11:39

Client: Earth Tech, Inc.
100 West Broadway, Suite 200
Long Beach, CA 90802-4443
Attn.: Barry Molnaa

Phone: (562) 951-2129
FAX: (562) 951-2086

Project: LMC POP

P.O. #: 2000S-0086-LB9
Turnaround Time: Normal

CERTIFICATE OF ANALYSIS

Lab#: A005348-001 **Sample ID:** Discharge **Matrix:** Ground Water
Sampled By: TP **Date:** 7/28/00 **Time:** 7:30

Parameter	Result	Flag	Units	Dilution Factor	RL	Method	Analyzed		Worksheet #
Nitrate as NO3	44		mg/L	1	0.20	EPA 300.0	7/28/00	kk	WS16496
Prep. SPE									
Oil & Grease	ND		mg/L	1	5	EPA 1664	8/4/00	sl	WS16555
Sulfide, dissolved	ND		mg/L	1	0.10	SM 4500S2 D	8/1/00	hn	WS16530
Total Suspended Solids	ND		mg/L	1	5	EPA 160.2	8/3/00	aw	WS16448
Prep. Direct Inj.									
Perchlorate	ND		ug/L	1	4.0	EPA 314	8/17/00	dc	WS16906
Prep. EPA 3510C									
Diesel range hydrocarbons (C10-C23)	ND		mg/L	1	0.10	EPA 8015B	7/31/00	wm	WS16843
Prep. P&T									
Gasoline range hydrocarbons (C6-C10)	ND		mg/L	1	0.10	EPA 8015B	8/1/00	wm	WS16524
Prep. P&T									
Dichlorodifluoromethane	ND		ug/L	1	1.0	EPA 524.2	7/28/00	rt	WS16536
Chloromethane	ND		ug/L	1	0.50	EPA 524.2	7/28/00	rt	WS16536
Vinyl Chloride	ND		ug/L	1	0.50	EPA 524.2	7/28/00	rt	WS16536
Bromomethane	ND		ug/L	1	0.50	EPA 524.2	7/28/00	rt	WS16536
Chloroethane	ND		ug/L	1	0.50	EPA 524.2	7/28/00	rt	WS16536
Trichlorofluoromethane (Freon 11)	ND		ug/L	1	5.0	EPA 524.2	7/28/00	rt	WS16536
Trichlorotrifluoroethane (Freon 113)	ND		ug/L	1	10	EPA 524.2	7/28/00	rt	WS16536
1,1-Dichloroethene	ND		ug/L	1	0.50	EPA 524.2	7/28/00	rt	WS16536
Methylene chloride (Dichloromethane)	ND		ug/L	1	0.50	EPA 524.2	7/28/00	rt	WS16536
trans-1,2-Dichloroethene	ND		ug/L	1	0.50	EPA 524.2	7/28/00	rt	WS16536
Methyl tert-Butyl Ether	ND		ug/L	1	1.0	EPA 524.2	7/28/00	rt	WS16536
1,1-Dichloroethane	ND		ug/L	1	0.50	EPA 524.2	7/28/00	rt	WS16536
2-Butanone (Methyl ethyl ketone)	ND		ug/L	1	5.0	EPA 524.2	7/28/00	rt	WS16536
2,2-Dichloropropane	ND		ug/L	1	0.50	EPA 524.2	7/28/00	rt	WS16536
cis-1,2-Dichloroethene	ND		ug/L	1	0.50	EPA 524.2	7/28/00	rt	WS16536
Bromochloromethane	ND		ug/L	1	0.50	EPA 524.2	7/28/00	rt	WS16536
Chloroform	ND		ug/L	1	0.50	EPA 524.2	7/28/00	rt	WS16536
1,1,1-Trichloroethane	ND		ug/L	1	0.50	EPA 524.2	7/28/00	rt	WS16536
Carbon Tetrachloride	ND		ug/L	1	0.50	EPA 524.2	7/28/00	rt	WS16536
1,1-Dichloropropene	ND		ug/L	1	0.50	EPA 524.2	7/28/00	rt	WS16536

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Weck Laboratories, Inc.
Environmental and Analytical Services - Since 1964

Client: Earth Tech, Inc.
Project Name: LMC POP

Report Date: *Tuesday, August 22, 2000*

CERTIFICATE OF ANALYSIS

Lab#: A005348-001 Sample ID: Discharge Matrix: Ground Water
Sampled By: TP Date: 7/28/00 Time: 7:30

Parameter	Result	Flag	Units	Dilution Factor	RL	Method	Analyzed	Worksheet #
Benzene	ND		ug/L	1	0.50	EPA 524.2	7/28/00 rt	WS16536
1,2-Dichloroethane	ND		ug/L	1	0.50	EPA 524.2	7/28/00 rt	WS16536
Trichloroethene (TCE)	ND		ug/L	1	0.50	EPA 524.2	7/28/00 rt	WS16536
1,2-Dichloropropane	ND		ug/L	1	0.50	EPA 524.2	7/28/00 rt	WS16536
Dibromomethane	ND		ug/L	1	0.50	EPA 524.2	7/28/00 rt	WS16536
Bromodichloromethane	ND		ug/L	1	0.50	EPA 524.2	7/28/00 rt	WS16536
cis-1,3-Dichloropropene	ND		ug/L	1	0.50	EPA 524.2	7/28/00 rt	WS16536
4-Methyl-2-pentanone (MIBK)	ND		ug/L	1	5.0	EPA 524.2	7/28/00 rt	WS16536
2-chloroethylvinyl Ether	ND		ug/L	1	1.0	EPA 524.2	7/28/00 rt	WS16536
Toluene	ND		ug/L	1	0.50	EPA 524.2	7/28/00 rt	WS16536
trans-1,3-Dichloropropene	ND		ug/L	1	0.50	EPA 524.2	7/28/00 rt	WS16536
1,1,2-Trichloroethane	ND		ug/L	1	0.50	EPA 524.2	7/28/00 rt	WS16536
Tetrachloroethene (PCE)	ND		ug/L	1	0.50	EPA 524.2	7/28/00 rt	WS16536
1,3-Dichloropropane	ND		ug/L	1	0.50	EPA 524.2	7/28/00 rt	WS16536
Dibromochloromethane	ND		ug/L	1	0.50	EPA 524.2	7/28/00 rt	WS16536
1,2-Dibromoethane (EDB)	ND		ug/L	1	0.50	EPA 524.2	7/28/00 rt	WS16536
Chlorobenzene	ND		ug/L	1	0.50	EPA 524.2	7/28/00 rt	WS16536
Ethyl benzene	ND		ug/L	1	0.50	EPA 524.2	7/28/00 rt	WS16536
m/p-Xylenes	ND		ug/L	1	0.50	EPA 524.2	7/28/00 rt	WS16536
o-Xylene	ND		ug/L	1	0.50	EPA 524.2	7/28/00 rt	WS16536
Styrene	ND		ug/L	1	0.50	EPA 524.2	7/28/00 rt	WS16536
Bromoform	ND		ug/L	1	0.50	EPA 524.2	7/28/00 rt	WS16536
isopropylbenzene	ND		ug/L	1	0.50	EPA 524.2	7/28/00 rt	WS16536
Bromobenzene	ND		ug/L	1	0.50	EPA 524.2	7/28/00 rt	WS16536
1,1,2,2-Tetrachloroethane	ND		ug/L	1	0.50	EPA 524.2	7/28/00 rt	WS16536
1,2,3-Trichloropropane	ND		ug/L	1	0.50	EPA 524.2	7/28/00 rt	WS16536
n-Propyl benzene	ND		ug/L	1	0.50	EPA 524.2	7/28/00 rt	WS16536
2-chlorotoluene	ND		ug/L	1	0.50	EPA 524.2	7/28/00 rt	WS16536
4-Chlorotoluene	ND		ug/L	1	0.50	EPA 524.2	7/28/00 rt	WS16536
1,3,5-Trimethylbenzene	ND		ug/L	1	0.50	EPA 524.2	7/28/00 rt	WS16536
tert-Butyl benzene	ND		ug/L	1	0.50	EPA 524.2	7/28/00 rt	WS16536
1,2,4-Trimethylbenzene	ND		ug/L	1	0.50	EPA 524.2	7/28/00 rt	WS16536
bis(2-Chloroethyl) Ether	ND		ug/L	1	5.0	EPA 524.2	7/28/00 rt	WS16536
sec-Butyl benzene	ND		ug/L	1	0.50	EPA 524.2	7/28/00 rt	WS16536
1,3-Dichlorobenzene	ND		ug/L	1	0.50	EPA 524.2	7/28/00 rt	WS16536
4-Isopropyltoluene	ND		ug/L	1	0.50	EPA 524.2	7/28/00 rt	WS16536
1,4-Dichlorobenzene	ND		ug/L	1	0.50	EPA 524.2	7/28/00 rt	WS16536
1,2-Dichlorobenzene	ND		ug/L	1	0.50	EPA 524.2	7/28/00 rt	WS16536
n-Butyl benzene	ND		ug/L	1	0.50	EPA 524.2	7/28/00 rt	WS16536
1,2-Dibromo-3-chloropropane (DBCP)	ND		ug/L	1	1.0	EPA 524.2	7/28/00 rt	WS16536
1,2,4-Trichlorobenzene	ND		ug/L	1	0.50	EPA 524.2	7/28/00 rt	WS16536
Hexachlorobutadiene	ND		ug/L	1	0.50	EPA 524.2	7/28/00 rt	WS16536
Naphthalene	ND		ug/L	1	0.50	EPA 524.2	7/28/00 rt	WS16536
1,2,3-Trichlorobenzene	ND		ug/L	1	0.50	EPA 524.2	7/28/00 rt	WS16536
Total 1,3-Dichloropropene	ND		ug/L	1	0.50	EPA 524.2	7/28/00 rt	WS16536

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AUG-23-2000 16:33 FROM:WECK LABS INC

Weck Laboratories, Inc.
Environmental and Analytical Services - Since 1964

Client: Earth Tech, Inc.
Project Name: LMC POP

Report Date: *Tuesday, August 22, 2000*

CERTIFICATE OF ANALYSIS

Lab#: A005348-001 **Sample ID:** Discharge **Matrix:** Ground Water
Sampled By: TP **Date:** 7/28/00 **Time:** 7:30

Parameter	Result	Flag	Units	Dilution Factor	RL	Method	Analyzed	Worksheet #
Tert-amyl Methyl Ether	ND		ug/L	1	3.0	EPA 524.2	7/28/00 rt	WS16536
Ethyl tert-Butyl Ether	ND		ug/L	1	3.0	EPA 524.2	7/28/00 rt	WS16536
1,1,1,2-Tetrachloroethane	ND		ug/L	1	0.5	EPA 524.2	7/28/00 rt	WS16536

Authorized Signature

ELAP # 1132
LACSD # 10143
AZ0526

Flags for Data Qualifiers:

B = Compound detected in the blank. Sample result equal or less than 5 times the concentration in the blank.
J = Estimated value, detected but below the reporting limit.
H = Estimated value, result over the calibration range
R = Result is suspect. LCS recovery greater than the upper control limit.
L = Result is suspect, LCS recovery lower than the control limit.
Q = QC result out of acceptance limits.
T = Trace detection, detected but below the reporting limit.

Notes:

Any remaining sample(s) for testing will be disposed of one month from the final report date unless other arrangements are made in advance.
All results are expressed on wet weight basis unless specified.
RL = Reporting Limit.
ND = Not detected, below the reporting limit.
Sub = Subcontracted analysis, original report enclosed.

14859 East Clark Avenue, City of Industry, California 91745-1396 (626) 336-2139 FAX (626) 336-2634
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AUG-23-2000 16:33 FROM:WECK LABS INC

Weck Laboratories, Inc.

Environmental and Analytical Services - Since 1964

Report Date: *Tuesday, August 22, 2000*
Received Date: *Monday, July 31, 2000*
Log By: tn
Log Time: 11:30

Client: Earth Tech, Inc.
100 West Broadway, Suite 200
Long Beach, CA 90802-4443

Phone: (562) 951-2129
FAX: (562) 951-2086

Attn.: Barry Molnaa

Project: LMC POP

P.O. #: 2000S-0086-LB9
Turnaround Time: Normal

CERTIFICATE OF ANALYSIS

Lab#: A005375-001 Sample ID: Discharge Matrix: Ground Water
Sampled By: KM Date: 7/31/00 Time: 8:00

Parameter	Result	Flag	Units	Dilution Factor	RL	Method	Analyzed		Worksheet #
Nitrate as NO3	44		mg/L	1	0.20	EPA 300.0	7/31/00	kk	WS16499
Prep. SPE									
Oil & Grease	ND		mg/L	1	5	EPA 1664	8/4/00	sl	WS16555
Sulfide, dissolved	ND		mg/L	1	0.10	SM 4500S2 D	8/1/00	hn	WS16530
Total Suspended Solids	ND		mg/L	1	5	EPA 160.2	8/3/00	aw	WS16448
Prep. Direct Inj.									
Perchlorate	ND		ug/L	1	4.0	EPA 314	8/17/00	dc	WS16906
Prep. EPA 3510C									
Diesel range hydrocarbons (C10-C23)	ND		mg/L	1	0.10	EPA 8015B	8/3/00	rr	WS16517
Prep. P&T									
Gasoline range hydrocarbons (C6-C10)	ND		mg/L	1	0.10	EPA 8015B	8/1/00	wm	WS16524
Prep. P&T									
Dichlorodifluoromethane	ND		ug/L	1	1.0	EPA 524.2	8/5/00	rt	WS16559
Chloromethane	ND		ug/L	1	0.50	EPA 524.2	8/5/00	rt	WS16559
Vinyl Chloride	ND		ug/L	1	0.50	EPA 524.2	8/5/00	rt	WS16559
Bromomethane	ND		ug/L	1	0.50	EPA 524.2	8/5/00	rt	WS16559
Chloroethane	ND		ug/L	1	0.50	EPA 524.2	8/5/00	rt	WS16559
Trichlorofluoromethane (Freon 11)	ND		ug/L	1	5.0	EPA 524.2	8/5/00	rt	WS16559
Trichlorotrifluoroethane (Freon 113)	ND		ug/L	1	10	EPA 524.2	8/5/00	rt	WS16559
1,1-Dichloroethene	ND		ug/L	1	0.50	EPA 524.2	8/5/00	rt	WS16559
Methylene chloride (Dichloromethane)	ND		ug/L	1	0.50	EPA 524.2	8/5/00	rt	WS16559
trans-1,2-Dichloroethene	ND		ug/L	1	0.50	EPA 524.2	8/5/00	rt	WS16559
Methyl tert-Butyl Ether	ND		ug/L	1	1.0	EPA 524.2	8/5/00	rt	WS16559
1,1-Dichloroethane	ND		ug/L	1	0.50	EPA 524.2	8/5/00	rt	WS16559
2-Butanone (Methyl ethyl ketone)	ND		ug/L	1	5.0	EPA 524.2	8/5/00	rt	WS16559
2,2-Dichloropropane	ND		ug/L	1	0.50	EPA 524.2	8/5/00	rt	WS16559
cis-1,2-Dichloroethene	ND		ug/L	1	0.50	EPA 524.2	8/5/00	rt	WS16559
Bromochloromethane	ND		ug/L	1	0.50	EPA 524.2	8/5/00	rt	WS16559
Chloroform	ND		ug/L	1	0.50	EPA 524.2	8/5/00	rt	WS16559
1,1,1-Trichloroethane	ND		ug/L	1	0.50	EPA 524.2	8/5/00	rt	WS16559
Carbon Tetrachloride	ND		ug/L	1	0.50	EPA 524.2	8/5/00	rt	WS16559
1,1-Dichloropropene	ND		ug/L	1	0.50	EPA 524.2	8/5/00	rt	WS16559

Lab#: *A005375*

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AUG-23-2000 16:03 FROM:WECK LABS INC 6263362634 10:36E 35:12000 P.001/006

Weck Laboratories, Inc.
Environmental and Analytical Services - Since 1964

Client: Earth Tech, Inc.
Project Name: LMC POP

Report Date: *Tuesday, August 22, 2000*

CERTIFICATE OF ANALYSIS

Lab#: A005375-001 Sample ID: Discharge Matrix: Ground Water
Sampled By: KM Date: 7/31/00 Time: 8:00

Parameter	Result	Flag	Units	Dilution Factor	RL	Method	Analyzed	Worksheet #
Benzene	ND		ug/L	1	0.50	EPA 524.2	8/5/00 rt	WS16559
1,2-Dichloroethane	ND		ug/L	1	0.50	EPA 524.2	8/5/00 rt	WS16559
Trichloroethene (TCE)	ND		ug/L	1	0.50	EPA 524.2	8/5/00 rt	WS16559
1,2-Dichloropropane	ND		ug/L	1	0.50	EPA 524.2	8/5/00 rt	WS16559
Dibromomethane	ND		ug/L	1	0.50	EPA 524.2	8/5/00 rt	WS16559
Bromodichloromethane	ND		ug/L	1	0.50	EPA 524.2	8/5/00 rt	WS16559
cis-1,3-Dichloropropene	ND		ug/L	1	0.50	EPA 524.2	8/5/00 rt	WS16559
4-Methyl-2-pentanone (MIBK)	ND		ug/L	1	5.0	EPA 524.2	8/5/00 rt	WS16559
2-chloroethylvinyl Ether	ND		ug/L	1	1.0	EPA 524.2	8/5/00 rt	WS16559
Toluene	ND		ug/L	1	0.50	EPA 524.2	8/5/00 rt	WS16559
trans-1,3-Dichloropropene	ND		ug/L	1	0.50	EPA 524.2	8/5/00 rt	WS16559
1,1,2-Trichloroethane	ND		ug/L	1	0.50	EPA 524.2	8/5/00 rt	WS16559
Tetrachloroethene (PCE)	ND		ug/L	1	0.50	EPA 524.2	8/5/00 rt	WS16559
1,3-Dichloropropane	ND		ug/L	1	0.50	EPA 524.2	8/5/00 rt	WS16559
Dibromochloromethane	ND		ug/L	1	0.50	EPA 524.2	8/5/00 rt	WS16559
1,2-Dibromoethane (EDB)	ND		ug/L	1	0.50	EPA 524.2	8/5/00 rt	WS16559
Chlorobenzene	ND		ug/L	1	0.50	EPA 524.2	8/5/00 rt	WS16559
Ethyl benzene	ND		ug/L	1	0.50	EPA 524.2	8/5/00 rt	WS16559
m/p-Xylenes	ND		ug/L	1	0.50	EPA 524.2	8/5/00 rt	WS16559
o-Xylene	ND		ug/L	1	0.50	EPA 524.2	8/5/00 rt	WS16559
Styrene	ND		ug/L	1	0.50	EPA 524.2	8/5/00 rt	WS16559
Bromoform	ND		ug/L	1	0.50	EPA 524.2	8/5/00 rt	WS16559
isopropylbenzene	ND		ug/L	1	0.50	EPA 524.2	8/5/00 rt	WS16559
Bromobenzene	ND		ug/L	1	0.50	EPA 524.2	8/5/00 rt	WS16559
1,1,2,2-Tetrachloroethane	ND		ug/L	1	0.50	EPA 524.2	8/5/00 rt	WS16559
1,2,3-Trichloropropane	ND		ug/L	1	0.50	EPA 524.2	8/5/00 rt	WS16559
n-Propyl benzene	ND		ug/L	1	0.50	EPA 524.2	8/5/00 rt	WS16559
2-chlorotoluene	ND		ug/L	1	0.50	EPA 524.2	8/5/00 rt	WS16559
4-Chlorotoluene	ND		ug/L	1	0.50	EPA 524.2	8/5/00 rt	WS16559
1,3,5-Trimethylbenzene	ND		ug/L	1	0.50	EPA 524.2	8/5/00 rt	WS16559
tert-Butyl benzene	ND		ug/L	1	0.50	EPA 524.2	8/5/00 rt	WS16559
1,2,4-Trimethylbenzene	ND		ug/L	1	0.50	EPA 524.2	8/5/00 rt	WS16559
bis(2-Chloroethyl) Ether	ND		ug/L	1	5.0	EPA 524.2	8/5/00 rt	WS16559
sec-Butyl benzene	ND		ug/L	1	0.50	EPA 524.2	8/5/00 rt	WS16559
1,3-Dichlorobenzene	ND		ug/L	1	0.50	EPA 524.2	8/5/00 rt	WS16559
4-Isopropyltoluene	ND		ug/L	1	0.50	EPA 524.2	8/5/00 rt	WS16559
1,4-Dichlorobenzene	ND		ug/L	1	0.50	EPA 524.2	8/5/00 rt	WS16559
1,2-Dichlorobenzene	ND		ug/L	1	0.50	EPA 524.2	8/5/00 rt	WS16559
n-Butyl benzene	ND		ug/L	1	0.50	EPA 524.2	8/5/00 rt	WS16559
1,2-Dibromo-3-chloropropane (DBCP)	ND		ug/L	1	1.0	EPA 524.2	8/5/00 rt	WS16559
1,2,4-Trichlorobenzene	ND		ug/L	1	0.50	EPA 524.2	8/5/00 rt	WS16559
Hexachlorobutadiene	ND		ug/L	1	0.50	EPA 524.2	8/5/00 rt	WS16559
Naphthalene	ND		ug/L	1	0.50	EPA 524.2	8/5/00 rt	WS16559
1,2,3-Trichlorobenzene	ND		ug/L	1	0.50	EPA 524.2	8/5/00 rt	WS16559
Total 1,3-Dichloropropene	ND		ug/L	1	0.50	EPA 524.2	8/5/00 rt	WS16559

Lab#: *A005375*

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AUG-23-2000 16:04 FROM:WECK LABS INC 6266362634 10:36E 3312000 P.000/000

Weck Laboratories, Inc.
Environmental and Analytical Services - Since 1964

Client: Earth Tech, Inc.
Project Name: LMC POP

Report Date: *Tuesday, August 22, 2000*

CERTIFICATE OF ANALYSIS

Lab#: A005375-001 **Sample ID:** Discharge **Matrix:** Ground Water
Sampled By: KM **Date:** 7/31/00 **Time:** 8:00

Parameter	Result	Flag	Units	Dilution Factor	RL	Method	Analyzed	Worksheet #
Tert-amyl Methyl Ether	ND		ug/L	1	3.0	EPA 524.2	8/5/00 rt	WS16559
Ethyl tert-Butyl Ether	ND		ug/L	1	3.0	EPA 524.2	8/5/00 rt	WS16559
1,1,1,2-Tetrachloroethane	ND		ug/L	1	0.5	EPA 524.2	8/5/00 rt	WS16559

Authorized Signature

ELAP # 1132
LACSD # 10143
AZ0526

Flags for Data Qualifiers:

B = Compound detected in the blank. Sample result equal or less than 5 times the concentration in the blank.
J = Estimated value, detected but below the reporting limit.
H = Estimated value, result over the calibration range
R = Result is suspect, LCS recovery greater than the upper control limit.
L = Result is suspect, LCS recovery lower than the control limit.
Q = QC result out of acceptance limits.
T = Trace detection, detected but below the reporting limit.

Notes:

Any remaining sample(s) for testing will be disposed of one month from the final report date unless other arrangements are made in advance.
All results are expressed on wet weight basis unless specified.
RL = Reporting Limit.
ND = Not detected, below the reporting limit.
Sub = Subcontracted analysis, original report enclosed.

14859 East Clark Avenue, City of Industry, California 91745-1396 (626) 336-2139 FAX (626) 336-2634
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AUG-23-2000 16:04 FROM:WECK LABS INC 6263362634 TO:562 9512086 P.003/006

DAILY MONITORING LOG

General Parameters

Date 7/6/00

Parameter	Location/ID#	Reading	Time	Units
pH @ Discharge	Discharge	7.6	1330	
GAC Influent	PI-01	0		psi
GAC Midpoint	PI-02	0		psi
GAC Effluent	PI-03	0		psi
Bag Filter Influent	PI-04	0		psi
Bag Filter Effluent	PI-05	0		psi
Influent Manifold Pressure	PI-06			psi
Electrical Usage Meter A	Electric Meter	4807		KW-Hours
Electrical Usage Meter B	Electric Meter	731		KW-Hours

pump off

57 10 44 50

Col. 3-B regen. only thing running.

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DAILY MONITORING LOG

General Parameters

Date 7/7/00

Parameter	Location/ID#	Reading	Time	Units
pH @ Discharge	Discharge	7.6	1530	
GAC Influent	PI-01	0		psi
GAC Midpoint	PI-02	0		psi
GAC Effluent	PI-03	0		psi
Bag Filter Influent	PI-04	0		psi
Bag Filter Effluent	PI-05	0		psi
Influent Manifold Pressure	PI-06			psi
Electrical Usage Meter A	Electric Meter	4807		KW-Hours
Electrical Usage Meter B	Electric Meter	736		KW-Hours

60 10 45 52

Only col. 3 & regen operating

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DAILY MONITORING LOG

General Parameters

Date 7/10/00

Parameter	Location/ID#	Reading	Time	Units
pH @ Discharge	Discharge	7.7	1600	
GAC Influent	PI-01	0		psi
GAC Midpoint	PI-02	0		psi
GAC Effluent	PI-03	0		psi
Bag Filter Influent	PI-04	0		psi
Bag Filter Effluent	PI-05	0		psi
Influent Manifold Pressure	PI-06			psi
Electrical Usage Meter A	Electric Meter	4807		KW-Hours
Electrical Usage Meter B	Electric Meter	745		KW-Hours

59 9 40 35

Only column B in operation

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DAILY MONITORING LOG
General Parameters

Date ~~[illegible]~~ 7/11

Parameter	Location/ID#	Reading	Time	Units
pH @ Discharge	Discharge	7.7	1720	
GAC Influent	PI-01	0		psi
GAC Midpoint	PI-02	0		psi
GAC Effluent	PI-03	0		psi
Bag Filter Influent	PI-04	0		psi
Bag Filter Effluent	PI-05	0		psi
Influent Manifold Pressure	PI-06			psi
Electrical Usage Meter A	Electric Meter	4808		KW-Hours
Electrical Usage Meter B	Electric Meter	749		KW-Hours

60+ 9 40 36

• Col. 3B regen only

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DAILY MONITORING LOG

General Parameters

Date 7/13

Parameter	Location/ID#	Reading	Time	Units
pH @ Discharge	Discharge	7.9	1645	
GAC Influent	PI-01	0		psi
GAC Midpoint	PI-02	0		psi
GAC Effluent	PI-03	0		psi
Bag Filter Influent	PI-04	0		psi
Bag Filter Effluent	PI-05	0		psi
Influent Manifold Pressure	PI-06			psi
Electrical Usage Meter A	Electric Meter	4809		KW-Hours
Electrical Usage Meter B	Electric Meter	756		KW-Hours

60+ 45 22 16

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DAILY MONITORING LOG
General Parameters

Date ~~[illegible]~~ 7/14

Parameter	Location/ID#	Reading	Time	Units
pH @ Discharge	Discharge	7.8	1310	
GAC Influent	PI-01	0		psi
GAC Midpoint	PI-02	0		psi
GAC Effluent	PI-03	0		psi
Bag Filter Influent	PI-04	0		psi
Bag Filter Effluent	PI-05	0		psi
Influent Manifold Pressure	PI-06			psi
Electrical Usage Meter A	Electric Meter	4809		KW-Hours
Electrical Usage Meter B	Electric Meter	760		KW-Hours

60+ 38 21 18

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DAILY MONITORING LOG
General Parameters

Date 7/18/00

Parameter	Location/ID#	Reading	Time	Units
pH @ Discharge	Discharge	7.9	1345	
GAC Influent	PI-01	0		psi
GAC Midpoint	PI-02	0		psi
GAC Effluent	PI-03	0		psi
Bag Filter Influent	PI-04	0		psi
Bag Filter Effluent	PI-05	0		psi
Influent Manifold Pressure	PI-06			psi
Electrical Usage Meter A	Electric Meter	4811		KW-Hours
Electrical Usage Meter B	Electric Meter	769		KW-Hours

604 46 25 14

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FROM : EARTH TECH FAX NO. : 909 478 3960

DAILY MONITORING LOG
General Parameters

Date 7/19/00

Parameter	Location/ID#	Reading	Time	Units
pH @ Discharge	Discharge	7.8	1105	
GAC Influent	PI-01	0		psi
GAC Midpoint	PI-02	0		psi
GAC Effluent	PI-03	0		psi
Bag Filter Influent	PI-04	0		psi
Bag Filter Effluent	PI-05	0		psi
Influent Manifold Pressure	PI-06			psi
Electrical Usage Meter A	Electric Meter	4811		KW-Hours
Electrical Usage Meter B	Electric Meter	772		KW-Hours

60+ 60+ 24 13

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DAILY MONITORING LOG

General Parameters

Date 7/25/00

Parameter	Location/ID#	Reading	Time	Units
pH @ Discharge	Discharge	7.8	1620	
GAC Influent	PI-01	0		psi
GAC Midpoint	PI-02	0		psi
GAC Effluent	PI-03	0		psi
Bag Filter Influent	PI-04	0		psi
Bag Filter Effluent	PI-05	0		psi
Influent Manifold Pressure	PI-06			psi
Electrical Usage Meter A	Electric Meter	4812		KW-Hours
Electrical Usage Meter B	Electric Meter	786		KW-Hours

60+ 60+ 42 11

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DAILY MONITORING LOG

General Parameters

Date 7/26/00

Parameter	Location/ID#	Reading	Time	Units
pH @ Discharge	Discharge	7.8	1650	
GAC Influent	PI-01	0		psi
GAC Midpoint	PI-02	0		psi
GAC Effluent	PI-03	0		psi
Bag Filter Influent	PI-04	0		psi
Bag Filter Effluent	PI-05	0		psi
Influent Manifold Pressure	PI-06			psi
Electrical Usage Meter A	Electric Meter	4812		KW-Hours
Electrical Usage Meter B	Electric Meter	788		KW-Hours

60+ 60+ 42 11

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DAILY MONITORING LOG

General Parameters

Date 7/27/00

Parameter	Location/ID#	Reading	Time	Units
pH @ Discharge	Discharge	7.8	1520	
GAC Influent	PI-01	3		psi
GAC Midpoint	PI-02	0		psi
GAC Effluent	PI-03	0		psi
Bag Filter Influent	PI-04	51		psi
Bag Filter Effluent	PI-05	50		psi
Influent Manifold Pressure	PI-06			psi
Electrical Usage Meter A	Electric Meter	4814		KW-Hours
Electrical Usage Meter B	Electric Meter	791		KW-Hours

60+ 52 52 52

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DAILY MONITORING LOG

General Parameters

Date 7-28-00

Parameter	Location/ID#	Reading	Time	Units
pH @ Discharge	Discharge	7.1	3:30	
GAC Influent	PI-01	0		psi
GAC Midpoint	PI-02	3		psi
GAC Effluent	PI-03	1		psi
Bag Filter Influent	PI-04	5.4		psi
Bag Filter Effluent	PI-05	53		psi
Influent Manifold Pressure	PI-06	52		psi
Electrical Usage Meter A	Electric Meter	4822		KW-Hours
Electrical Usage Meter B	Electric Meter	4000		KW-Hours

DAILY MONITORING LOG
General Parameters

Date 7-31-00

Parameter	Location/ID#	Reading	Time	Units
pH @ Discharge	Discharge	7.6	0845	
GAC Influent	PI-01	3		psi
GAC Midpoint	PI-02	0.5		psi
GAC Effluent	PI-03	0.5		psi
Bag Filter Influent	PI-04	52		psi
Bag Filter Effluent	PI-05	50		psi
Influent Manifold Pressure	PI-06	52		psi
Electrical Usage Meter A	Electric Meter	4842		KW-Hours
Electrical Usage Meter B	Electric Meter	~~4000~~ 802		KW-Hours

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