teg

TRANSGLOBAL
ENVIRONMENTAL
GEOCHEMISTRY

17 November 2003

Mr. Bruce Lewis
ERM
2525 Natomas Park Drive, Suite 350
Sacramento CA 95833

SUBJECT: DATA REPORT - ERM Project # 4921.03
Aerojet / Rancho Cordova, California

TEG Project # 31105E

Mr. Lewis:

Please find enclosed a data report for the samples analyzed from the above referenced project for ERM. The samples were analyzed on site in TEG's DHS certified mobile laboratory. TEG conducted a total of 29 analyses on 29 soil vapor samples.

-- 29 analyses on soil vapors for volatile organic hydrocarbons by EPA method 8260B.

The results of the analyses are summarized in the enclosed tables. Applicable detection limits and calibration data are included in the tables.

TEG appreciates the opportunity to have provided analytical services to ERM on this project. If you have any further questions relating to these data or report, please do not hesitate to contact us.

Sincerely,

Mark Jerpbak
Director, TEG-Northern California

11350 Monier Park Place, Rancho Cordova, CA 95742 Phone: (916) 853-8010 Fax: (916) 853-8020

TEG Project #31105E

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ERM Project # 4921.03
Areojet - Rancho Cordova, California

EPA METHOD 8260B ANALYSES OF SOIL VAPOR in ug/L of Vapor

SAMPLE NUMBER:	BLANK	BLANK	BLANK	33D-SP05-5	33D-SP07-10	33D-SP07-20
DEPTH (feet):				5.0	10.0	20.0
COLLECTION DATE:	11/05/03	11/06/03	11/07/03	11/07/03	11/07/03	11/07/03
COLLECTION TIME:	9:04	8:58	7:47	9:52	13:05	13:37
DILUTION FACTOR:	1	1	1	1	1	1
Dichlorodifluoromethane	nd	nd	nd	nd	nd	nd
Chloromethane	nd	nd	nd	nd	nd	nd
Vinyl Chloride	nd	nd	nd	nd	nd	nd
Bromomethane	nd	nd	nd	nd	nd	nd
Chloroethane	nd	nd	nd	nd	nd	nd
Trichlorofluoromethane	nd	nd	nd	nd	nd	nd
1,1-Dichloroethene	nd	nd	nd	nd	nd	nd
Methylene Chloride	nd	nd	nd	nd	nd	nd
trans-1,2-Dichloroethene	nd	nd	nd	nd	nd	nd
1,1-Dichloroethane	nd	nd	nd	nd	nd	nd
2,2-Dichloropropane	nd	nd	nd	nd	nd	nd
cis-1,2-Dichloroethene	nd	nd	nd	nd	nd	nd
Chloroform	nd	nd	nd	0.24	nd	nd
Bromochloromethane	nd	nd	nd	nd	nd	nd
1,1,1-Trichloroethane	nd	nd	nd	nd	nd	nd
1,1-Dichloropropene	nd	nd	nd	nd	nd	nd
Carbon Tetrachloride	nd	nd	nd	nd	nd	nd
1,2-Dichloroethane	nd	nd	nd	nd	nd	nd
Benzene	nd	nd	nd	nd	nd	0.26
Trichloroethene	nd	nd	nd	2.8	nd	0.12
1,2-Dichloropropane	nd	nd	nd	nd	nd	nd
Bromodichloromethane	nd	nd	nd	nd	nd	nd
Dibromomethane	nd	nd	nd	nd	nd	nd
trans-1,3-Dichloropropene	nd	nd	nd	nd	nd	nd
Toluene	nd	nd	nd	nd	nd	1.6
cis-1,3-Dichloropropene	nd	nd	nd	nd	nd	nd
1,1,2-Trichloroethane	nd	nd	nd	nd	nd	nd
1,2-Dibromoethane	nd	nd	nd	nd	nd	nd
1,3-Dichloropropane	nd	nd	nd	nd	nd	nd
Tetrachloroethene	nd	nd	nd	nd	nd	nd
Dibromochloromethane	nd	nd	nd	nd	nd	nd
Chlorobenzene	nd	nd	nd	nd	nd	nd
Ethylbenzene	nd	nd	nd	nd	nd	0.28
1,1,1,2-Tetrachloroethane	nd	nd	nd	nd	nd	nd
m,p-Xylene	nd	nd	nd	nd	nd	0.89
o-Xylene	nd	nd	nd	nd	nd	0.32
Styrene	nd	nd	nd	nd	nd	nd
Bromoform	nd	nd	nd	nd	nd	nd
Isopropylbenzene	nd	nd	nd	nd	nd	nd
1,1,2,2-Tetrachloroethane	nd	nd	nd	nd	nd	nd
1,2,3-Trichloropropane	nd	nd	nd	nd	nd	nd
n-propylbenzene	nd	nd	nd	nd	nd	nd
Bromobenzene	nd	nd	nd	nd	nd	nd
1,3,5-Trimethylbenzene	nd	nd	nd	nd	nd	nd
2-Chlorotoluene	nd	nd	nd	nd	nd	nd
4-Chlorotoluene	nd	nd	nd	nd	nd	nd
tert-Butylbenzene	nd	nd	nd	nd	nd	nd
1,2,4-Trimethylbenzene	nd	nd	nd	nd	nd	0.15
sec-Butylbenzene	nd	nd	nd	nd	nd	nd
p-Isopropyltoluene	nd	nd	nd	nd	nd	nd
1,3-Dichlorobenzene	nd	nd	nd	nd	nd	nd
1,4-Dichlorobenzene	nd	nd	nd	nd	nd	nd
n-Butylbenzene	nd	nd	nd	nd	nd	nd
1,2-Dichlorobenzene	nd	nd	nd	nd	nd	nd
1,2-Dibromo-3-chloropropane	nd	nd	nd	nd	nd	nd
1,2,4-Trichlorobenzene	nd	nd	nd	nd	nd	nd
Hexachlorobutadiene	nd	nd	nd	nd	nd	nd
Naphthalene	nd	nd	nd	nd	nd	nd
1,2,3-Trichlorobenzene	nd	nd	nd	nd	nd	nd
Surrogate Recovery (DBFM)	102%	104%	104%	104%	106%	100%
Surrogate Recovery (1,2-DCA-d4)	84%	84%	83%	87%	92%	91%
Surrogate Recovery (Toluene-d8)	114%	116%	113%	114%	112%	114%

REPORTING LIMITS FOR ABOVE COMPOUNDS = 0.1 ug/L of Vapor

'nd' NOT DETECTED AT LISTED REPORTING LIMITS ANALYSES PERFORMED by: Christina Leonard

11350 Monier Park Place, Rancho Cordova, CA 95742 Phone: (916) 853-8010 Fax: (916) 853-8020

TEG Project #31105E

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ERM Project # 4921.03
Areojet - Rancho Cordova, California

EPA METHOD 8260B ANALYSES OF SOIL VAPOR in ug/L of Vapor

SAMPLE NUMBER:	33D-SP08-10	33D-SP08-20	33D-SP09-10	33D-SP09-20	33D-SP10-10	34D-SP09-10
DEPTH (feet):	10.0	20.0	10.0	20.0	10.0	10.0
COLLECTION DATE:	11/07/03	11/07/03	11/07/03	11/07/03	11/07/03	11/07/03
COLLECTION TIME:	15:35	16:00	8:17	9:14	10:37	14:24
DILUTION FACTOR:	1	1	1	1	1	1
Dichlorodifluoromethane	nd	nd	nd	nd	nd	nd
Chloromethane	nd	nd	nd	nd	nd	nd
Vinyl Chloride	nd	nd	nd	nd	nd	nd
Bromomethane	nd	nd	nd	nd	nd	nd
Chloroethane	nd	nd	nd	nd	nd	nd
Trichlorofluoromethane	nd	nd	nd	nd	nd	nd
1,1-Dichloroethene	nd	nd	nd	nd	nd	0.21
Methylene Chloride	nd	nd	nd	nd	nd	nd
trans-1,2-Dichloroethene	nd	nd	nd	nd	nd	nd
1,1-Dichloroethane	nd	nd	nd	nd	nd	nd
2,2-Dichloropropane	nd	nd	nd	nd	nd	nd
cis-1,2-Dichloroethene	nd	nd	nd	nd	nd	nd
Chloroform	nd	nd	6.0	6.0	0.32	nd
Bromochloromethane	nd	nd	nd	nd	nd	nd
1,1,1-Trichloroethane	nd	nd	nd	nd	nd	0.50
1,1-Dichloropropene	nd	nd	nd	nd	nd	nd
Carbon Tetrachloride	nd	nd	nd	nd	nd	nd
1,2-Dichloroethane	nd	nd	nd	nd	nd	nd
Benzene	nd	0.29	nd	nd	nd	nd
Trichloroethene	nd	nd	1.1	2.6	1.3	3.9
1,2-Dichloropropane	nd	nd	nd	nd	nd	nd
Bromodichloromethane	nd	nd	nd	nd	nd	nd
Dibromomethane	nd	nd	nd	nd	nd	nd
trans-1,3-Dichloropropene	nd	nd	nd	nd	nd	nd
Toluene	nd	1.9	nd	nd	nd	nd
cis-1,3-Dichloropropene	nd	nd	nd	nd	nd	nd
1,1,2-Trichloroethane	nd	nd	nd	nd	nd	nd
1,2-Dibromoethane	nd	nd	nd	nd	nd	nd
1,3-Dichloropropane	nd	nd	nd	nd	nd	nd
Tetrachloroethene	nd	nd	nd	nd	nd	0.22
Dibromochloromethane	nd	nd	nd	nd	nd	nd
Chlorobenzene	nd	nd	nd	nd	nd	nd
Ethylbenzene	nd	0.35	nd	nd	nd	nd
1,1,1,2-Tetrachloroethane	nd	nd	nd	nd	nd	nd
m,p-Xylene	nd	1.2	nd	nd	nd	nd
o-Xylene	nd	0.43	nd	nd	nd	nd
Styrene	nd	nd	nd	nd	nd	nd
Bromoform	nd	nd	nd	nd	nd	nd
Isopropylbenzene	nd	nd	nd	nd	nd	nd
1,1,2,2-Tetrachloroethane	nd	nd	nd	nd	nd	nd
1,2,3-Trichloropropane	nd	nd	nd	nd	nd	nd
n-propylbenzene	nd	nd	nd	nd	nd	nd
Bromobenzene	nd	nd	nd	nd	nd	nd
1,3,5-Trimethylbenzene	nd	0.11	nd	nd	nd	nd
2-Chlorotoluene	nd	nd	nd	nd	nd	nd
4-Chlorotoluene	nd	nd	nd	nd	nd	nd
tert-Butylbenzene	nd	nd	nd	nd	nd	nd
1,2,4-Trimethylbenzene	nd	0.23	nd	nd	nd	nd
sec-Butylbenzene	nd	nd	nd	nd	nd	nd
p-Isopropyltoluene	nd	nd	nd	nd	nd	nd
1,3-Dichlorobenzene	nd	nd	nd	nd	nd	nd
1,4-Dichlorobenzene	nd	nd	nd	nd	nd	nd
n-Butylbenzene	nd	nd	nd	nd	nd	nd
1,2-Dichlorobenzene	nd	nd	nd	nd	nd	nd
1,2-Dibromo-3-chloropropane	nd	nd	nd	nd	nd	nd
1,2,4-Trichlorobenzene	nd	nd	nd	nd	nd	nd
Hexachlorobutadiene	nd	nd	nd	nd	nd	nd
Naphthalene	nd	nd	nd	nd	nd	nd
1,2,3-Trichlorobenzene	nd	nd	nd	nd	nd	nd
Surrogate Recovery (DBFM)	101%	104%	102%	105%	103%	104%
Surrogate Recovery (1,2-DCA-d4)	92%	91%	85%	87%	89%	90%
Surrogate Recovery (Toluene-d8)	113%	113%	114%	116%	115%	112%

REPORTING LIMITS FOR ABOVE COMPOUNDS = 0.1 ug/L of Vapor

'nd' NOT DETECTED AT LISTED REPORTING LIMITS ANALYSES PERFORMED by: Christina Leonard

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TEG Project #31105E

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Areojet - Rancho Cordova, California

EPA METHOD 8260B ANALYSES OF SOIL VAPOR in ug/L of Vapor

SAMPLE NUMBER:	34D-SP09-20	36D-SP16-10	36D-SP17-10	36D-SP17-5	36D-SP21-10	36D-SP21-20
DEPTH (feet):	20.0	10.0	10.0	5.0	10.0	20.0
COLLECTION DATE:	11/07/03	11/05/03	11/05/03	11/05/03	11/06/03	11/06/03
COLLECTION TIME:	14:54	14:09	15:10	14:44	12:38	13:07
DILUTION FACTOR:	1	1	1	1	1	1
Dichlorodifluoromethane	nd	nd	nd	nd	nd	nd
Chloromethane	nd	nd	nd	nd	nd	nd
Vinyl Chloride	nd	nd	nd	nd	nd	nd
Bromomethane	nd	nd	nd	nd	nd	nd
Chloroethane	nd	nd	nd	nd	nd	nd
Trichlorofluoromethane	nd	0.28	nd	nd	nd	nd
1,1-Dichloroethene	0.15	nd	nd	nd	nd	nd
Methylene Chloride	nd	nd	nd	nd	nd	nd
trans-1,2-Dichloroethene	nd	nd	nd	nd	nd	nd
1,1-Dichloroethane	nd	nd	nd	nd	nd	nd
2,2-Dichloropropane	nd	nd	nd	nd	nd	nd
cis-1,2-Dichloroethene	nd	nd	nd	nd	nd	nd
Chloroform	nd	nd	nd	nd	nd	nd
Bromochloromethane	nd	nd	nd	nd	nd	nd
1,1,1-Trichloroethane	0.27	nd	nd	nd	nd	nd
1,1-Dichloropropene	nd	nd	nd	nd	nd	nd
Carbon Tetrachloride	nd	nd	nd	nd	nd	nd
1,2-Dichloroethane	nd	nd	nd	nd	nd	nd
Benzene	nd	nd	nd	0.13	nd	nd
Trichloroethene	3.8	0.98	3.2	0.38	nd	nd
1,2-Dichloropropane	nd	nd	nd	nd	nd	nd
Bromodichloromethane	nd	nd	nd	nd	nd	nd
Dibromomethane	nd	nd	nd	nd	nd	nd
trans-1,3-Dichloropropene	nd	nd	nd	nd	nd	nd
Toluene	nd	nd	0.18	nd	nd	0.16
cis-1,3-Dichloropropene	nd	nd	nd	nd	nd	nd
1,1,2-Trichloroethane	nd	nd	nd	nd	nd	nd
1,2-Dibromoethane	nd	nd	nd	nd	nd	nd
1,3-Dichloropropane	nd	nd	nd	nd	nd	nd
Tetrachloroethene	0.28	0.65	0.20	nd	nd	nd
Dibromochloromethane	nd	nd	nd	nd	nd	nd
Chlorobenzene	nd	nd	nd	nd	nd	nd
Ethylbenzene	nd	nd	nd	nd	nd	nd
1,1,1,2-Tetrachloroethane	nd	nd	nd	nd	nd	nd
m,p-Xylene	nd	nd	0.19	0.12	nd	nd
o-Xylene	nd	nd	nd	nd	nd	nd
Styrene	nd	nd	nd	nd	nd	nd
Bromoform	nd	nd	nd	nd	nd	nd
Isopropylbenzene	nd	nd	nd	nd	nd	nd
1,1,2,2-Tetrachloroethane	nd	nd	nd	nd	nd	nd
1,2,3-Trichloropropane	nd	nd	nd	nd	nd	nd
n-propylbenzene	nd	nd	nd	nd	nd	nd
Bromobenzene	nd	nd	nd	nd	nd	nd
1,3,5-Trimethylbenzene	nd	nd	nd	nd	nd	nd
2-Chlorotoluene	nd	nd	nd	nd	nd	nd
4-Chlorotoluene	nd	nd	nd	nd	nd	nd
tert-Butylbenzene	nd	nd	nd	nd	nd	nd
1,2,4-Trimethylbenzene	nd	nd	0.12	nd	nd	nd
sec-Butylbenzene	nd	nd	nd	nd	nd	nd
p-Isopropyltoluene	nd	nd	nd	nd	nd	nd
1,3-Dichlorobenzene	nd	nd	nd	nd	nd	nd
1,4-Dichlorobenzene	nd	nd	nd	nd	nd	nd
n-Butylbenzene	nd	nd	nd	nd	nd	nd
1,2-Dichlorobenzene	nd	nd	nd	nd	nd	nd
1,2-Dibromo-3-chloropropane	nd	nd	nd	nd	nd	nd
1,2,4-Trichlorobenzene	nd	nd	nd	nd	nd	nd
Hexachlorobutadiene	nd	nd	nd	nd	nd	nd
Naphthalene	nd	nd	nd	nd	nd	nd
1,2,3-Trichlorobenzene	nd	nd	nd	nd	nd	nd
Surrogate Recovery (DBFM)	105%	108%	103%	103%	104%	105%
Surrogate Recovery (1,2-DCA-d4)	93%	92%	94%	92%	91%	92%
Surrogate Recovery (Toluene-d8)	114%	116%	115%	114%	114%	116%

REPORTING LIMITS FOR ABOVE COMPOUNDS = 0.1 ug/L of Vapor

'nd' NOT DETECTED AT LISTED REPORTING LIMITS ANALYSES PERFORMED by: Christina Leonard

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Areojet - Rancho Cordova, California

EPA METHOD 8260B ANALYSES OF SOIL VAPOR in ug/L of Vapor

SAMPLE NUMBER:	36D-SP21-20D	37D-SP08-5	37D-SP08-20	37D-SP13-10	38D-SP26-10	38D-SP27-10
DEPTH (feet):	20.0	5.0	20.0	10.0	10.0	10.0
COLLECTION DATE:	11/06/03	11/06/03	11/06/03	11/06/03	11/06/03	11/07/03
COLLECTION TIME:	13:08	13:52	14:24	15:04	16:20	12:23
DILUTION FACTOR:	1	1	1	1	1	1
Dichlorodifluoromethane	nd	nd	nd	nd	nd	nd
Chloromethane	nd	nd	nd	nd	nd	nd
Vinyl Chloride	nd	nd	nd	nd	nd	nd
Bromomethane	nd	nd	nd	nd	nd	nd
Chloroethane	nd	nd	nd	nd	nd	nd
Trichlorofluoromethane	nd	nd	nd	nd	nd	nd
1,1-Dichloroethene	nd	nd	nd	nd	nd	0.12
Methylene Chloride	nd	nd	nd	nd	nd	nd
trans-1,2-Dichloroethene	nd	nd	nd	nd	nd	nd
1,1-Dichloroethane	nd	nd	nd	nd	nd	nd
2,2-Dichloropropane	nd	nd	nd	nd	nd	nd
cis-1,2-Dichloroethene	nd	nd	nd	nd	nd	1.5
Chloroform	nd	nd	nd	nd	nd	nd
Bromochloromethane	nd	nd	nd	nd	nd	nd
1,1,1-Trichloroethane	nd	0.36	0.17	nd	nd	0.27
1,1-Dichloropropene	nd	nd	nd	nd	nd	nd
Carbon Tetrachloride	nd	nd	nd	nd	nd	nd
1,2-Dichloroethane	nd	nd	nd	nd	nd	nd
Benzene	nd	nd	0.14	nd	nd	nd
Trichloroethene	nd	0.11	0.14	nd	2.5	13
1,2-Dichloropropane	nd	nd	nd	nd	nd	nd
Bromodichloromethane	nd	nd	nd	nd	nd	nd
Dibromomethane	nd	nd	nd	nd	nd	nd
trans-1,3-Dichloropropene	nd	nd	nd	nd	nd	nd
Toluene	0.10	nd	0.80	nd	nd	nd
cis-1,3-Dichloropropene	nd	nd	nd	nd	nd	nd
1,1,2-Trichloroethane	nd	nd	nd	nd	nd	nd
1,2-Dibromoethane	nd	nd	nd	nd	nd	nd
1,3-Dichloropropane	nd	nd	nd	nd	nd	nd
Tetrachloroethene	nd	nd	nd	nd	nd	0.42
Dibromochloromethane	nd	nd	nd	nd	nd	nd
Chlorobenzene	nd	nd	nd	nd	nd	nd
Ethylbenzene	nd	nd	0.15	nd	nd	nd
1,1,1,2-Tetrachloroethane	nd	nd	nd	nd	nd	nd
m,p-Xylene	nd	nd	0.53	nd	nd	nd
o-Xylene	nd	nd	0.20	nd	nd	nd
Styrene	nd	nd	nd	nd	nd	nd
Bromoform	nd	nd	nd	nd	nd	nd
Isopropylbenzene	nd	nd	nd	nd	nd	nd
1,1,2,2-Tetrachloroethane	nd	nd	nd	nd	nd	nd
1,2,3-Trichloropropane	nd	nd	nd	nd	nd	nd
n-propylbenzene	nd	nd	nd	nd	nd	nd
Bromobenzene	nd	nd	nd	nd	nd	nd
1,3,5-Trimethylbenzene	nd	nd	nd	nd	nd	nd
2-Chlorotoluene	nd	nd	nd	nd	nd	nd
4-Chlorotoluene	nd	nd	nd	nd	nd	nd
tert-Butylbenzene	nd	nd	nd	nd	nd	nd
1,2,4-Trimethylbenzene	nd	nd	0.12	nd	nd	nd
sec-Butylbenzene	nd	nd	nd	nd	nd	nd
p-Isopropyltoluene	nd	nd	nd	nd	nd	nd
1,3-Dichlorobenzene	nd	nd	nd	nd	nd	nd
1,4-Dichlorobenzene	nd	nd	nd	nd	nd	nd
n-Butylbenzene	nd	nd	nd	nd	nd	nd
1,2-Dichlorobenzene	nd	nd	nd	nd	nd	nd
1,2-Dibromo-3-chloropropane	nd	nd	nd	nd	nd	nd
1,2,4-Trichlorobenzene	nd	nd	nd	nd	nd	nd
Hexachlorobutadiene	nd	nd	nd	nd	nd	nd
Naphthalene	nd	nd	nd	nd	nd	nd
1,2,3-Trichlorobenzene	nd	nd	nd	nd	nd	nd
Surrogate Recovery (DBFM)	101%	103%	104%	105%	107%	104%
Surrogate Recovery (1,2-DCA-d4)	93%	90%	93%	89%	89%	92%
Surrogate Recovery (Toluene-d8)	115%	113%	117%	113%	112%	113%

REPORTING LIMITS FOR ABOVE COMPOUNDS = 0.1 ug/L of Vapor

'nd' NOT DETECTED AT LISTED REPORTING LIMITS ANALYSES PERFORMED by: Christina Leonard

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Areojet - Rancho Cordova, California

EPA METHOD 8260B ANALYSES OF SOIL VAPOR in ug/L of Vapor

SAMPLE NUMBER:	38D-SP28-10	ST11-SP04-20	ST22-SP02-20	ST22-SP03-10 1 Purge Volume	ST22-SP03-10 3 Purge Volume	ST22-SP03-10 7 Purge Volume
DEPTH (feet):	10.0	20.0	20.0	10.0	10.0	10.0
COLLECTION DATE:	11/05/03	11/05/03	11/05/03	11/05/03	11/05/03	11/05/03
COLLECTION TIME:	13:31	15:51	12:34	9:27	9:50	10:12
DILUTION FACTOR:	1	1	1	1	1	1
Dichlorodifluoromethane	nd	nd	nd	nd	nd	nd
Chloromethane	nd	nd	nd	nd	nd	nd
Vinyl Chloride	nd	nd	nd	nd	nd	nd
Bromomethane	nd	nd	nd	nd	nd	nd
Chloroethane	nd	nd	nd	nd	nd	nd
Trichlorofluoromethane	nd	nd	nd	nd	nd	nd
1,1-Dichloroethene	nd	nd	nd	nd	nd	nd
Methylene Chloride	nd	nd	nd	nd	nd	nd
trans-1,2-Dichloroethene	nd	nd	nd	nd	nd	nd
1,1-Dichloroethane	nd	nd	nd	nd	nd	nd
2,2-Dichloropropane	nd	nd	nd	nd	nd	nd
cis-1,2-Dichloroethene	nd	nd	nd	nd	nd	nd
Chloroform	nd	0.18	nd	nd	nd	nd
Bromochloromethane	nd	nd	nd	nd	nd	nd
1,1,1-Trichloroethane	nd	nd	nd	nd	nd	nd
1,1-Dichloropropene	nd	nd	nd	nd	nd	nd
Carbon Tetrachloride	nd	nd	nd	nd	nd	nd
1,2-Dichloroethane	nd	nd	nd	nd	nd	nd
Benzene	nd	nd	nd	0.24	0.42	0.42
Trichloroethene	0.36	0.45	0.41	0.59	0.60	0.61
1,2-Dichloropropane	nd	nd	nd	nd	nd	nd
Bromodichloromethane	nd	nd	nd	nd	nd	nd
Dibromomethane	nd	nd	nd	nd	nd	nd
trans-1,3-Dichloropropene	nd	nd	nd	nd	nd	nd
Toluene	nd	nd	nd	1.4	2.2	2.3
cis-1,3-Dichloropropene	nd	nd	nd	nd	nd	nd
1,1,2-Trichloroethane	nd	nd	nd	nd	nd	nd
1,2-Dibromoethane	nd	nd	nd	nd	nd	nd
1,3-Dichloropropane	nd	nd	nd	nd	nd	nd
Tetrachloroethene	0.63	0.11	nd	nd	nd	nd
Dibromochloromethane	nd	nd	nd	nd	nd	nd
Chlorobenzene	nd	nd	nd	nd	nd	nd
Ethylbenzene	nd	nd	nd	0.19	0.28	0.30
1,1,1,2-Tetrachloroethane	nd	nd	nd	nd	nd	nd
m,p-Xylene	nd	nd	nd	0.63	0.89	0.98
o-Xylene	nd	nd	nd	0.22	0.30	0.33
Styrene	nd	nd	nd	nd	nd	nd
Bromoform	nd	nd	nd	nd	nd	nd
Isopropylbenzene	nd	nd	nd	nd	nd	nd
1,1,2,2-Tetrachloroethane	nd	nd	nd	nd	nd	nd
1,2,3-Trichloropropane	nd	nd	nd	nd	nd	nd
n-propylbenzene	nd	nd	nd	nd	nd	nd
Bromobenzene	nd	nd	nd	nd	nd	nd
1,3,5-Trimethylbenzene	nd	nd	nd	nd	nd	nd
2-Chlorotoluene	nd	nd	nd	nd	nd	nd
4-Chlorotoluene	nd	nd	nd	nd	nd	nd
tert-Butylbenzene	nd	nd	nd	nd	nd	nd
1,2,4-Trimethylbenzene	nd	nd	nd	nd	0.10	0.11
sec-Butylbenzene	nd	nd	nd	nd	nd	nd
p-Isopropyltoluene	nd	nd	nd	nd	nd	nd
1,3-Dichlorobenzene	nd	nd	nd	nd	nd	nd
1,4-Dichlorobenzene	nd	nd	nd	nd	nd	nd
n-Butylbenzene	nd	nd	nd	nd	nd	nd
1,2-Dichlorobenzene	nd	nd	nd	nd	nd	nd
1,2-Dibromo-3-chloropropane	nd	nd	nd	nd	nd	nd
1,2,4-Trichlorobenzene	nd	nd	nd	nd	nd	nd
Hexachlorobutadiene	nd	nd	nd	nd	nd	nd
Naphthalene	nd	nd	nd	nd	nd	nd
1,2,3-Trichlorobenzene	nd	nd	nd	nd	nd	nd
Surrogate Recovery (DBFM)	106%	102%	104%	104%	100%	103%
Surrogate Recovery (1,2-DCA-d4)	90%	91%	93%	87%	83%	88%
Surrogate Recovery (Toluene-d8)	114%	114%	116%	116%	115%	114%

REPORTING LIMITS FOR ABOVE COMPOUNDS = 0.1 ug/L of Vapor

'nd' NOT DETECTED AT LISTED REPORTING LIMITS ANALYSES PERFORMED by: Christina Leonard

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TEG Project #31105E

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ERM Project # 4921.03
Areojet - Rancho Cordova, California

EPA METHOD 8260B ANALYSES OF SOIL VAPOR in ug/L of Vapor

SAMPLE NUMBER:	ST22-SP04-10	ST22-SP05-10
DEPTH (feet):	10.0	10.0
COLLECTION DATE:	11/05/03	11/05/03
COLLECTION TIME:	11:37	11:01
DILUTION FACTOR:	1	1
Dichlorodifluoromethane	nd	nd
Chloromethane	nd	nd
Vinyl Chloride	nd	nd
Bromomethane	nd	nd
Chloroethane	nd	nd
Trichlorofluoromethane	nd	nd
1,1-Dichloroethene	nd	nd
Methylene Chloride	nd	nd
trans-1,2-Dichloroethene	nd	nd
1,1-Dichloroethane	nd	nd
2,2-Dichloropropane	nd	nd
cis-1,2-Dichloroethene	nd	nd
Chloroform	nd	nd
Bromochloromethane	nd	nd
1,1,1-Trichloroethane	nd	nd
1,1-Dichloropropene	nd	nd
Carbon Tetrachloride	nd	nd
1,2-Dichloroethane	nd	nd
Benzene	nd	nd
Trichloroethene	0.53	nd
1,2-Dichloropropane	nd	nd
Bromodichloromethane	nd	nd
Dibromomethane	nd	nd
trans-1,3-Dichloropropene	nd	nd
Toluene	nd	nd
cis-1,3-Dichloropropene	nd	nd
1,1,2-Trichloroethane	nd	nd
1,2-Dibromoethane	nd	nd
1,3-Dichloropropane	nd	nd
Tetrachloroethene	nd	nd
Dibromochloromethane	nd	nd
Chlorobenzene	nd	nd
Ethylbenzene	nd	nd
1,1,1,2-Tetrachloroethane	nd	nd
m,p-Xylene	nd	nd
o-Xylene	nd	nd
Styrene	nd	nd
Bromoform	nd	nd
Isopropylbenzene	nd	nd
1,1,2,2-Tetrachloroethane	nd	nd
1,2,3-Trichloropropane	nd	nd
n-propylbenzene	nd	nd
Bromobenzene	nd	nd
1,3,5-Trimethylbenzene	nd	nd
2-Chlorotoluene	nd	nd
4-Chlorotoluene	nd	nd
tert-Butylbenzene	nd	nd
1,2,4-Trimethylbenzene	nd	nd
sec-Butylbenzene	nd	nd
p-Isopropyltoluene	nd	nd
1,3-Dichlorobenzene	nd	nd
1,4-Dichlorobenzene	nd	nd
n-Butylbenzene	nd	nd
1,2-Dichlorobenzene	nd	nd
1,2-Dibromo-3-chloropropane	nd	nd
1,2,4-Trichlorobenzene	nd	nd
Hexachlorobutadiene	nd	nd
Naphthalene	nd	nd
1,2,3-Trichlorobenzene	nd	nd
Surrogate Recovery (DBFM)	102%	102%
Surrogate Recovery (1,2-DCA-d4)	88%	86%
Surrogate Recovery (Toluene-d8)	115%	114%

REPORTING LIMITS FOR ABOVE COMPOUNDS = 0.1 ug/L of Vapor

'nd' NOT DETECTED AT LISTED REPORTING LIMITS ANALYSES PERFORMED by: Christina Leonard

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TEG Project #31105E

CALIBRATION DATA - Calibration Check Compounds

	Vinyl Cl	1,1 DCE	Cl-Form	1,2 DCP	Toluene	Ethylbenzene
Midpoint	0.224	0.188	0.409	0.227	0.622	0.523
Continuing Calibration - Midpoint						
11/05/03	0.238	0.225	0.428	0.261	0.739	0.615
	106.3%	119.7%	104.6%	115.0%	118.8%	117.6%
11/06/03	0.230	0.196	0.376	0.231	0.644	0.537
	102.7%	104.3%	91.9%	101.8%	103.5%	102.7%
11/07/03	0.268	0.219	0.395	0.238	0.685	0.551
	119.6%	116.5%	96.6%	104.8%	110.1%	105.4%

ANALYSES PERFORMED BY: Christina Leonard

teg

TRANSGLOBAL
ENVIRONMENTAL
GEOCHEMISTRY

17 November 2003

Mr. Bruce Lewis
ERM
2525 Natomas Park Drive, Suite 350
Sacramento CA 95833

SUBJECT: DATA REPORT - ERM Project # 4921.99
Aerojet / Rancho Cordova, California

TEG Project # 31106E

Mr. Lewis:

Please find enclosed a data report for the samples analyzed from the above referenced project for ERM. The samples were analyzed on site in TEG's DHS certified mobile laboratory. TEG conducted a total of 4 analyses on 4 soil vapor samples.

-- 4 analyses on soil vapors for volatile organic hydrocarbons by EPA method 8260B.

The results of the analyses are summarized in the enclosed tables. Applicable detection limits and calibration data are included in the tables.

TEG appreciates the opportunity to have provided analytical services to ERM on this project. If you have any further questions relating to these data or report, please do not hesitate to contact us.

Sincerely,

Mark Jerpbak
Director, TEG-Northern California

TEG Project #31106E

ERM Project # 4921.99
Areojet - Rancho Cordova, California

teg

EPA METHOD 8260B ANALYSES OF SOIL VAPOR in ug/L of Vapor

SAMPLE NUMBER:	Blank	GW145-SP01-5	GW1469-SP01-5	GW3179-SP01-5	GW3179-SP01-5D
DEPTH (feet):		5.0	5.0	5.0	5.0
COLLECTION DATE:	11/06/03	11/06/03	11/06/03	11/06/03	11/06/03
COLLECTION TIME:	8:58	11:28	9:17	10:25	15:45
DILUTION FACTOR:	1	1	1	1	1
Dichlorodifluoromethane	nd	nd	nd	nd	nd
Chloromethane	nd	nd	nd	nd	nd
Vinyl Chloride	nd	nd	nd	nd	nd
Bromomethane	nd	nd	nd	nd	nd
Chloroethane	nd	nd	nd	nd	nd
Trichlorofluoromethane	nd	nd	nd	nd	nd
1,1-Dichloroethene	nd	nd	nd	nd	nd
Methylene Chloride	nd	nd	nd	nd	nd
trans-1,2-Dichloroethene	nd	nd	nd	nd	nd
1,1-Dichloroethane	nd	nd	nd	nd	nd
2,2-Dichloropropane	nd	nd	nd	nd	nd
cis-1,2-Dichloroethene	nd	nd	nd	nd	nd
Chloroform	nd	nd	nd	nd	nd
Bromochloromethane	nd	nd	nd	nd	nd
1,1,1-Trichloroethane	nd	nd	nd	nd	nd
1,1-Dichloropropene	nd	nd	nd	nd	nd
Carbon Tetrachloride	nd	nd	nd	nd	nd
1,2-Dichloroethane	nd	nd	nd	nd	nd
Benzene	nd	nd	0.10	nd	nd
Trichloroethene	nd	nd	nd	nd	nd
1,2-Dichloropropane	nd	nd	nd	nd	nd
Bromodichloromethane	nd	nd	nd	nd	nd
Dibromomethane	nd	nd	nd	nd	nd
trans-1,3-Dichloropropene	nd	nd	nd	nd	nd
Toluene	nd	nd	nd	0.28	nd
cis-1,3-Dichloropropene	nd	nd	nd	nd	nd
1,1,2-Trichloroethane	nd	nd	nd	nd	nd
1,2-Dibromoethane	nd	nd	nd	nd	nd
1,3-Dichloropropane	nd	nd	nd	nd	nd
Tetrachloroethene	nd	nd	nd	nd	nd
Dibromochloromethane	nd	nd	nd	nd	nd
Chlorobenzene	nd	nd	nd	nd	nd
Ethylbenzene	nd	nd	nd	nd	nd
1,1,1,2-Tetrachloroethane	nd	nd	nd	nd	nd
m,p-Xylene	nd	nd	nd	nd	nd
o-Xylene	nd	nd	nd	nd	nd
Styrene	nd	nd	nd	nd	nd
Bromoform	nd	nd	nd	nd	nd
Isopropylbenzene	nd	nd	nd	nd	nd
1,1,2,2-Tetrachloroethane	nd	nd	nd	nd	nd
1,2,3-Trichloropropane	nd	nd	nd	nd	nd
n-propylbenzene	nd	nd	nd	nd	nd
Bromobenzene	nd	nd	nd	nd	nd
1,3,5-Trimethylbenzene	nd	nd	nd	nd	nd
2-Chlorotoluene	nd	nd	nd	nd	nd
4-Chlorotoluene	nd	nd	nd	nd	nd
tert-Butylbenzene	nd	nd	nd	nd	nd
1,2,4-Trimethylbenzene	nd	nd	nd	nd	nd
sec-Butylbenzene	nd	nd	nd	nd	nd
p-Isopropyltoluene	nd	nd	nd	nd	nd
1,3-Dichlorobenzene	nd	nd	nd	nd	nd
1,4-Dichlorobenzene	nd	nd	nd	nd	nd
n-Butylbenzene	nd	nd	nd	nd	nd
1,2-Dichlorobenzene	nd	nd	nd	nd	nd
1,2-Dibromo-3-chloropropane	nd	nd	nd	nd	nd
1,2,4-Trichlorobenzene	nd	nd	nd	nd	nd
Hexachlorobutadiene	nd	nd	nd	nd	nd
Naphthalene	nd	nd	nd	nd	nd
1,2,3-Trichlorobenzene	nd	nd	nd	nd	nd
Surrogate Recovery (DBFM)	104%	106%	108%	106%	99%
Surrogate Recovery (1,2-DCA-d4)	84%	89%	86%	90%	86%
Surrogate Recovery (Toluene-d8)	116%	117%	117%	115%	112%

REPORTING LIMITS FOR ABOVE COMPOUNDS = 0.1 ug/L of Vapor

'nd' NOT DETECTED AT LISTED REPORTING LIMITS ANALYSES PERFORMED by: Christina Leonard

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TEG Project #31106E

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11/06/03	0.230	0.196	0.376	0.231	0.644	0.537
	102.7%	104.3%	91.9%	101.8%	103.5%	102.7%

ANALYSES PERFORMED BY: Christina Leonard