

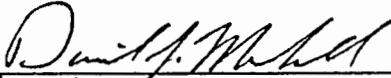
ENTERED

CORE LABORATORIES
ANALYTICAL REPORT

Job Number: 930072
Prepared For:

PERMA-FIX OF NEW MEXICO, INC.
TIMOTHY L. KIMBALL
7928 RANCHITOS LOOP NE
ALBUQUERQUE, NM 87113

Date: 02/24/93


Signature

2-26-93
Date:

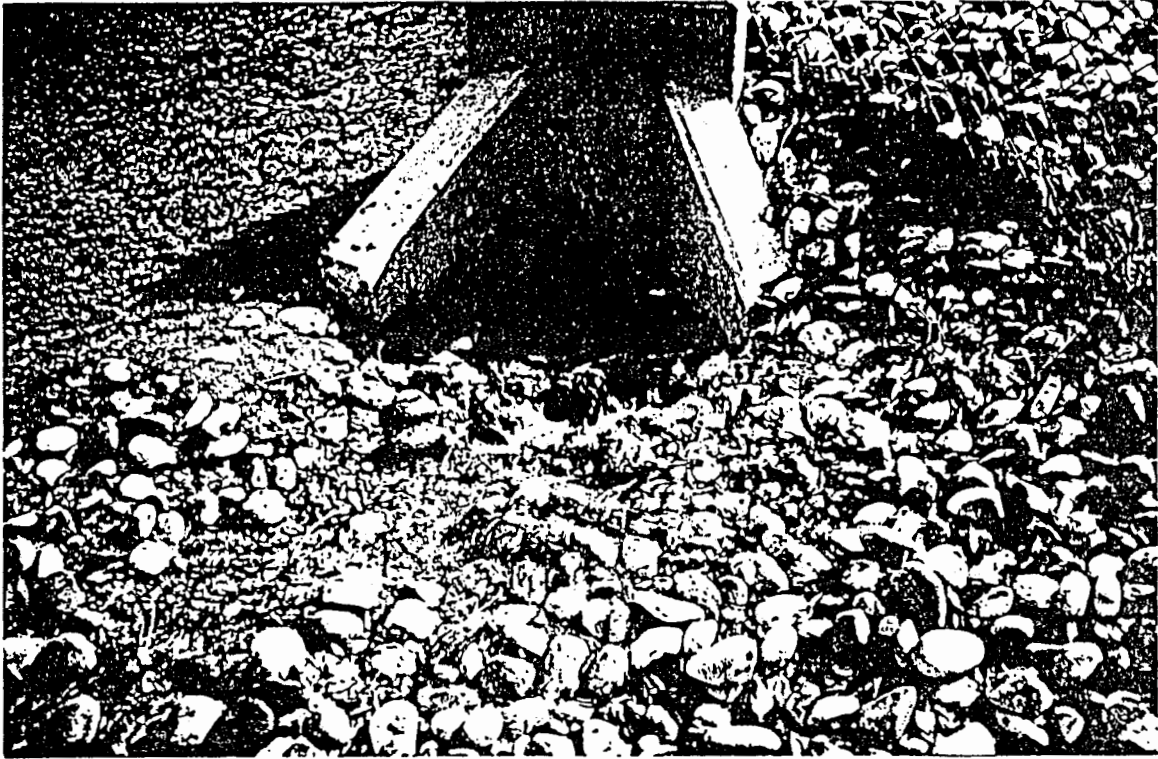
Name: David J. Marshall

Core Laboratories
10703 East Bethany Drive
Aurora, CO 80014

Title: PROJECT MANAGER

KAFB1286





LABORATORY TESTS RESULTS
02/24/93

JOB NUMBER: 930072

CUSTOMER: PERMA-FIX OF NEW MEXICO, INC.

ATTN: TIMOTHY L. KIMBALL

CLIENT I.D.: KAFB-CSB-NW OUTFALL
DATE SAMPLED: 01/19/93
TIME SAMPLED: 12:45
WORK DESCRIPTION: 1

LABORATORY I.D.: 930072-0001
DATE RECEIVED: 01/20/93
TIME RECEIVED: 09:30
REMARKS:

Generally consistent with '91 sampling

TEST DESCRIPTION	FINAL RESULT	LIMITS/*DILUTION	UNITS OF MEASURE	TEST METHOD	DATE	TECHN
Benzene	ND	5	ug/Kg			
Bromodichloromethane	ND	5	ug/Kg			
Bromoform	ND	5	ug/Kg			
Bromomethane	ND	10	ug/Kg			
Carbon Disulfide	ND	5	ug/Kg			
Carbon tetrachloride	ND	5	ug/Kg			
Chlorobenzene	ND	5	ug/Kg			
Chloroethane	ND	10	ug/Kg			
Chloroform	ND	5	ug/Kg			
Chloromethane	ND	5	ug/Kg			
Chloroprene	ND	5	ug/Kg			
Dibromochloromethane	ND	5	ug/Kg			
1,2-Dibromo-3-Chloropropane	ND	20	ug/Kg			
1,2-Dibromoethane	ND	20	ug/Kg			
Dibromomethane	ND	5	ug/Kg			
trans-1,4-Dichloro-2-butene	ND	50	ug/Kg			
1,1-Dichloroethane	ND	10	ug/Kg			
1,2-Dichloroethane	ND	5	ug/Kg			
1,1-Dichloroethane	ND	5	ug/Kg			
1,2-Dichloroethane (total)	ND	5	ug/Kg			
Dichloromethane	ND	5	ug/Kg			
1,2-Dichloropropane	ND	5	ug/Kg			
cis-1,3-Dichloropropene	ND	5	ug/Kg			
trans-1,3-Dichloropropene	ND	5	ug/Kg			
Ethyl Benzene	ND	5	ug/Kg			
Ethyl methacrylate	ND	5	ug/Kg			
2-Hexanone	ND	50	ug/Kg			
Iodomethane	ND	5	ug/Kg			
Isobutyl alcohol	ND	50	ug/Kg			
Methylacrylonitrile	ND	50	ug/Kg			
2-Butanone	ND	100	ug/Kg			
Methyl isobutyl ketone	ND	50	ug/Kg			
Methyl methacrylate	ND	5	ug/Kg			
Propionitrile	ND	100	ug/Kg			
Styrene	ND	5	ug/Kg			
1,1,1,2-Tetrachloroethane	ND	5	ug/Kg			
1,1,2,2-Tetrachloroethane	ND	5	ug/Kg			
Tetrachloroethane	ND	5	ug/Kg			
Toluene	ND	5	ug/Kg			
1,1,1-Trichloroethane	ND	5	ug/Kg			
1,1,2-Trichloroethane	ND	5	ug/Kg			
Trichloroethane	ND	5	ug/Kg			
Trichlorofluoromethane	ND	5	ug/Kg			
1,2,3-Trichloropropane	ND	5	ug/Kg			

Lower metals

*Only hit -
I've queried lab
(47 ug/Kg very low) -
No info on detection
levels of '91 sample.
Core duplicated
analyses but no TCLP
Metals. I've requested
run from existing samples,
if adequate; we'll re-sample
if not.*

*Tim Kimball
3/2/93*

10703 East Bethany Drive
Aurora, CO 80014
(303) 751-1780

Sample Delivery Group Narrative

February 24, 1993

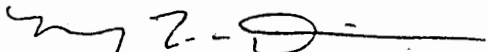
Customer: Perma-Fix of New Mexico, Inc.
Project: KAFB-CSB-NW Outfall
Core Laboratories Project Number: 930072

On January 20, 1993 Core Laboratories received 1 sample for analysis. The sample was collected January 19, 1993. The following information is pertinent to the interpretation of the data package:

CHLOROPHENOXYACID HERBICIDES ANALYSIS:

The sample was analyzed for chlorophenoxyacid herbicides according to EPA Method 8150. All daily QA/QC was acceptable per method criteria. The only difficulty associated with this analysis was related to surrogate recoveries. The entire extraction batch (method blank, all samples, spiked blank, and spiked blank duplicate) exhibited very low surrogate recoveries. Method 8150 does not require the use of surrogates, nor does it specify acceptance limits for such. However, we use 1,2-dichlorophenylacetic acid as a surrogate for monitoring purposes. Even though the spiked blank and spiked blank duplicate exhibited extremely poor surrogate recovery, the recoveries for the spiked analytes were good, indicating that the extraction process was acceptable. This batch of samples was extracted with a new surrogate spiking solution, and it appears that there was a problem with the solution. The surrogate solution will be remade and tested prior to the extraction of any future samples for herbicides analysis.


Linda L. Benkers
QA/QC Coordinator


Mary L. Davis
Laboratory Supervisor



CORE LABORATORIES

LABORATORY TESTS RESULTS 02/24/93

JOB NUMBER: 930072 CUSTOMER: PERMA-FIX OF NEW MEXICO, INC. ATTN: TIMOTHY L. KIMBALL

CLIENT I.D.: KAFB-CSB-NW OUTFALL LABORATORY I.D.: 930072-0001
 DATE SAMPLED: 01/19/93 DATE RECEIVED: 01/20/93
 TIME SAMPLED: 12:45 TIME RECEIVED: 09:30
 WORK DESCRIPTION: 1 REMARKS:

TEST DESCRIPTION	FINAL RESULT	LIMITS/*DILUTION	UNITS OF MEASURE	TEST METHOD	DATE	TECHN
Cyanide, Total	1.7	0.2	mg/Kg	335.2 (1)	01/28/93	MRC
Sulfide, Total	<5	5	mg/Kg	376.1 (1) Modified	02/10/93	MRC
Antimony, Total (Sb)	<10	10	mg/Kg	6010 (2)	01/25/93	WGL
Arsenic, Total (As)	<5	5	mg/Kg	6010 (2)	01/25/93	WGL
Barium, Total (Ba)	130	1	mg/Kg	6010 (2)	01/25/93	WGL
Beryllium, Total (Be)	<0.5	0.5	mg/Kg	6010 (2)	01/25/93	WGL
Cadmium, Total (Cd)	2.9	0.5	mg/Kg	6010 (2)	01/25/93	WGL
Chromium, Total (Cr)	8	1	mg/Kg	6010 (2)	01/25/93	WGL
Cobalt, Total (Co)	3	3	mg/Kg	6010 (2)	01/25/93	WGL
Copper, Total (Cu)	8	1	mg/Kg	6010 (2)	01/25/93	WGL
Lead, Total (Pb)	15	5	mg/Kg	6010 (2)	01/25/93	WGL
Mercury, Total (Hg)	<0.15	0.15	mg/Kg	7471 (2)	01/28/93	GAG
Nickel, Total (Ni)	7	4	mg/Kg	6010 (2)	01/25/93	WGL
Selenium, Total (Se)	<10	10	mg/Kg	6010 (2)	01/25/93	WGL
Silver, Total (Ag)	<1	1	mg/Kg	6010 (2)	01/25/93	WGL
Thallium, Total (Tl)	<10	10	mg/Kg	6010 (2)	01/25/93	WGL
Tin, Total (Sn)	<5	5	mg/Kg	6010 (2)	01/26/93	WGL
Vanadium, Total (V)	18	5	mg/Kg	6010 (2)	01/25/93	WGL
Zinc, Total (Zn)	35	1	mg/Kg	6010 (2)	01/25/93	WGL
APPENDIX IX VOLATILE ORGANICS		*1		8240 (2)	02/01/93	MRC
Acetone	ND	100	ug/Kg			
Acetonitrile	ND	100	ug/Kg			
Acrolein	ND	50	ug/Kg			
Acrylonitrile	ND	20	ug/Kg			
Allyl chloride	ND	20	ug/Kg			

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LABORATORY TESTS RESULTS 02/24/93

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REMARKS.....:

TEST DESCRIPTION	FINAL RESULT	LIMITS/*DILUTION	UNITS OF MEASURE	TEST METHOD	DATE	TECHN
Benzene	ND	5	ug/Kg			
Bromodichloromethane	ND	5	ug/Kg			
Bromoform	ND	5	ug/Kg			
Bromomethane	ND	10	ug/Kg			
Carbon Disulfide	ND	5	ug/Kg			
Carbon tetrachloride	ND	5	ug/Kg			
Chlorobenzene	ND	5	ug/Kg			
Chloroethane	ND	10	ug/Kg			
Chloroform	ND	5	ug/Kg			
Chloromethane	ND	5	ug/Kg			
Chloroprene	ND	5	ug/Kg			
Dibromochloromethane	ND	5	ug/Kg			
1,2 Dibromo-3-Chloropropane	ND	20	ug/Kg			
1,2 Dibromoethane	ND	20	ug/Kg			
Dibromomethane	ND	5	ug/Kg			
trans-1,4-Dichloro-2-butene	ND	50	ug/Kg			
Dichlorodifluoromethane	ND	10	ug/Kg			
1,1-Dichloroethane	ND	5	ug/Kg			
1,2-Dichloroethane	ND	5	ug/Kg			
1,1-Dichloroethene	ND	5	ug/Kg			
1,2-Dichloroethene (total)	ND	5	ug/Kg			
Dichloromethane	ND	5	ug/Kg			
1,2-Dichloropropane	ND	5	ug/Kg			
cis-1,3-Dichloropropene	ND	5	ug/Kg			
trans-1,3-Dichloropropene	ND	5	ug/Kg			
Ethyl Benzene	ND	5	ug/Kg			
Ethyl methacrylate	ND	5	ug/Kg			
2-Hexanone	ND	50	ug/Kg			
Iodomethane	ND	5	ug/Kg			
Isobutyl alcohol	ND	50	ug/Kg			
Methylacrylonitrile	ND	50	ug/Kg			
2-Butanone	ND	100	ug/Kg			
Methyl isobutyl ketone	ND	50	ug/Kg			
Methyl methacrylate	47	5	ug/Kg			
Propionitrile	ND	100	ug/Kg			
Styrene	ND	5	ug/Kg			
1,1,1,2-Tetrachlorethane	ND	5	ug/Kg			
1,1,2,2-Tetrachloroethane	ND	5	ug/Kg			
Tetrachloroethene	ND	5	ug/Kg			
Toluene	ND	5	ug/Kg			
1,1,1-Trichloroethane	ND	5	ug/Kg			
1,1,2-Trichloroethane	ND	5	ug/Kg			
Trichloroethene	ND	5	ug/Kg			
Trichlorofluoromethane	ND	5	ug/Kg			
1,2,3-Trichloropropane	ND	5	ug/Kg			

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LABORATORY TESTS RESULTS
02/24/93

JOB NUMBER: 930072 CUSTOMER: PERMA-FIX OF NEW MEXICO, INC. ATTN: TIMOTHY L. KIMBALL

CLIENT I.D.....: KAFB-CSB-NW OUTFALL LABORATORY I.D....: 930072-0001
 DATE SAMPLED.....: 01/19/93 DATE RECEIVED.....: 01/20/93
 TIME SAMPLED.....: 12:45 TIME RECEIVED.....: 09:30
 WORK DESCRIPTION...: 1 REMARKS.....:

TEST DESCRIPTION	FINAL RESULT	LIMITS/*DILUTION	UNITS OF MEASURE	TEST METHOD	DATE	TECHN
Vinyl Acetate	ND	10	ug/Kg			
Vinyl chloride	ND	10	ug/Kg			
Xylenes-total	ND	5	ug/Kg			
APPENDIX IX BASE/NEUTRAL ORGANICS		*1		8270 (2)	01/29/93	JMC
Acenaphthene	ND	330	ug/Kg			
Acenaphthylene	ND	330	ug/Kg			
2-Acetylaminofluorene	ND	330	ug/Kg			
Acetophenone	ND	330	ug/Kg			
4-Aminobiphenyl	ND	330	ug/Kg			
Aniline	ND	330	ug/Kg			
Anthracene	ND	330	ug/Kg			
Aramite	ND	330	ug/Kg			
Benzo(a)anthracene	ND	330	ug/Kg			
benzo(b)fluoranthene	ND	330	ug/Kg			
Benzo(k)fluoranthene	ND	330	ug/Kg			
Benzo(a)pyrene	ND	330	ug/Kg			
Benzo(ghi)perylene	ND	330	ug/Kg			
Benzyl Alcohol	ND	660	ug/Kg			
Bis(2-chloroethoxy)methane	ND	330	ug/Kg			
Bis(2-chloroethyl)ether	ND	330	ug/Kg			
Bis(2-chloro-1-methylethyl)ether	ND	330	ug/Kg			
Bis(2-ethylhexyl)phthalate	ND	330	ug/Kg			
4-Bromophenyl phenyl ether	ND	330	ug/Kg			
Butyl benzyl phthalate	ND	330	ug/Kg			
4-Chloroaniline	ND	660	ug/Kg			
2-Chloronaphthalene	ND	330	ug/Kg			
4-Chlorophenyl phenyl ether	ND	330	ug/Kg			
Chrysene	ND	330	ug/Kg			
Dibenzo(a,h)anthracene	ND	330	ug/Kg			
Dibenzofuran	ND	330	ug/Kg			
Di-n-butyl phthalate	ND	330	ug/Kg			
1,2-Dichlorobenzene	ND	330	ug/Kg			
1,3-Dichlorobenzene	ND	330	ug/Kg			
1,4-Dichlorobenzene	ND	330	ug/Kg			
3,3-Dichlorobenzidine	ND	660	ug/Kg			
Diethyl phthalate	ND	330	ug/Kg			
p-Dimethylaminoazobenzene	ND	330	ug/Kg			
7,12-Dimethylbenz(a)anthracene	ND	330	ug/Kg			
3,3-Dimethylbenzidine	ND	330	ug/Kg			
alpha,alpha-Dimethylphenethylamine	ND	330	ug/Kg			
Dimethyl phthalate	ND	330	ug/Kg			
m-Dinitrobenzene	ND	330	ug/Kg			
2,4-Dinitrotoluene	ND	330	ug/Kg			

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TEST DESCRIPTION	FINAL RESULT	LIMITS/*DILUTION	UNITS OF MEASURE	TEST METHOD	DATE	TECHN
2,6-Dinitrotoluene	ND	330	ug/Kg			
Di-n-octyl phthalate	ND	330	ug/Kg			
Diphenylamine	ND	330	ug/Kg			
Fluoranthene	ND	330	ug/Kg			
Fluorene	ND	330	ug/Kg			
Hexachlorobenzene	ND	330	ug/Kg			
Hexachlorobutadiene	ND	330	ug/Kg			
Hexachlorocyclopentadiene	ND	330	ug/Kg			
Hexachloroethane	ND	330	ug/Kg			
Hexachloropropene	ND	330	ug/Kg			
Indeno(1,2,3-cd)pyrene	ND	330	ug/Kg			
Isodrin	ND	330	ug/Kg			
Isophorone	ND	330	ug/Kg			
Isosafrole	ND	330	ug/Kg			
epone	ND	1650	ug/Kg			
athapyrilene	ND	330	ug/Kg			
3-Methylcholanthrene	ND	330	ug/Kg			
2-Methylnaphthalene	ND	330	ug/Kg			
Naphthalene	ND	330	ug/Kg			
1,4-Naphthoquinone	ND	330	ug/Kg			
1-Naphthylamine	ND	330	ug/Kg			
2-Naphthylamine	ND	330	ug/Kg			
o-Nitroaniline	ND	1650	ug/Kg			
m-Nitroaniline	ND	1650	ug/Kg			
p-Nitroaniline	ND	1650	ug/Kg			
Nitrobenzene	ND	330	ug/Kg			
4-Nitroquinoline 1-oxide	ND	330	ug/Kg			
N-Nitrosodi-n-butylamine	ND	330	ug/Kg			
N-Nitrosodiethylamine	ND	330	ug/Kg			
N-Nitrosodimethylamine	ND	330	ug/Kg			
N-Nitrosodiphenylamine	ND	330	ug/Kg			
N-Nitrosodipropylamine	ND	330	ug/Kg			
N-Nitrosomethylethylamine	ND	330	ug/Kg			
N-Nitrosomorpholine	ND	330	ug/Kg			
N-Nitrosopiperidine	ND	330	ug/Kg			
N-Nitrosopyrrolidine	ND	330	ug/Kg			
5-Nitro-o-toluidine	ND	330	ug/Kg			
Pentachlorobenzene	ND	330	ug/Kg			
Pentachloroethane	ND	330	ug/Kg			
Pentachloronitrobenzene	ND	330	ug/Kg			
Phenacetin	ND	330	ug/Kg			
p-Phenylenediamine	ND	330	ug/Kg			
Phenanthrene	ND	330	ug/Kg			
2-Picoline	ND	330	ug/Kg			
Pronamide	ND	330	ug/Kg			

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 WORK DESCRIPTION...: 1 REMARKS.....:

TEST DESCRIPTION	FINAL RESULT	LIMITS/*DILUTION	UNITS OF MEASURE	TEST METHOD	DATE	TECHN
Pyrene	ND	330	ug/Kg			
Pyridine	ND	330	ug/Kg			
Safrole	ND	330	ug/Kg			
1,2,4,5 Tetrachlorobenzene	ND	330	ug/Kg			
o-Toluidine	ND	330	ug/Kg			
1,2,4-Trichlorobenzene	ND	330	ug/Kg			
sym-Trinitrobenzene	ND	330	ug/Kg			
APPENDIX IX ACID ORGANICS		*1		8270 (2)	01/29/93	JMC
Chlorobenzilate	ND	330	ug/Kg			
4-Chloro-3-methylphenol	ND	660	ug/Kg			
2-Chlorophenol	ND	330	ug/Kg			
o-Cresol (2-Methylphenol)	ND	330	ug/Kg			
m & p-Cresol (3 & 4-Methylphenol)	ND	330	ug/Kg			
Salicylate	ND	330	ug/Kg			
2,4-Dichlorophenol	ND	330	ug/Kg			
2,6-Dichlorophenol	ND	330	ug/Kg			
2,4-Dimethylphenol	ND	330	ug/Kg			
4,6-Dinitro-o-cresol	ND	1650	ug/Kg			
2,4-Dinitrophenol	ND	1650	ug/Kg			
Ethyl methanesulfonate	ND	330	ug/Kg			
Hexachlorophene	ND	6600	ug/Kg			
Methyl methanesulfonate	ND	330	ug/Kg			
2-Nitrophenol	ND	330	ug/Kg			
4-Nitrophenol	ND	1650	ug/Kg			
Pentachlorophenol	ND	1650	ug/Kg			
Phenol	ND	330	ug/Kg			
2,3,4,6-Tetrachlorophenol	ND	330	ug/Kg			
2,4,5-Trichlorophenol	ND	330	ug/Kg			
2,4,6-Trichlorophenol	ND	330	ug/Kg			
APPENDIX IX ORGANOCHLORINE PEST		*10		8080 (2)	01/31/93	KRB
Aldrin	ND	0.040	ug/L			
alpha-BHC	ND	0.030	ug/L			
beta-BHC	ND	0.060	ug/L			
delta-BHC	ND	0.090	ug/L			
gamma-BHC	ND	0.040	ug/L			
Chlordane	ND	0.140	ug/L			
4,4'-DDD	ND	0.110	ug/L			
4,4'-DDE	ND	0.040	ug/L			
4,4'-DDT	ND	0.120	ug/L			
Dieldrin	ND	0.020	ug/L			
Endosulfan I	ND	0.140	ug/L			

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REMARKS:

TEST DESCRIPTION	FINAL RESULT	LIMITS/*DILUTION	UNITS OF MEASURE	TEST METHOD	DATE	TECHN
Endosulfan II	ND	0.040	ug/L			
Endosulfan sulfate	ND	0.660	ug/L			
Endrin	ND	0.060	ug/L			
Endrin aldehyde	ND	0.230	ug/L			
Heptachlor	ND	0.030	ug/L			
Heptachlor epoxide	ND	0.830	ug/L			
Methoxychlor	ND	1.8	ug/L			
Toxaphene	ND	2.4	ug/L			
Aroclor 1016	ND	0.50	ug/L			
Aroclor 1221	ND	0.50	ug/L			
Aroclor 1232	ND	0.50	ug/L			
Aroclor 1242	ND	0.50	ug/L			
Aroclor 1248	ND	0.50	ug/L			
Aroclor 1254	ND	0.50	ug/L			
Aroclor 1260	ND	0.50	ug/L			
APPENDIX IX HERBICIDES		*1		8150 (2)	02/03/93	KRB
2,4-D	ND	1.2	ug/L			
Dinoseb (DNBP)	ND	0.07	ug/L			
2,4,5-TP (Silvex)	ND	0.17	ug/L			
2,4,5-T	ND	0.20	ug/L			
8140 - ORGANOPHOSPHOROUS PESTICIDES		*10		8140 (2)	01/27/93	KRB
Dimethoate	ND	0.30	ug/L			
Disulfoton	ND	0.30	ug/L			
Famphur	ND	0.30	ug/L			
Methyl Parathion	ND	0.20	ug/L			
Ethyl Parathion	ND	0.10	ug/L			
Phorate	ND	0.10	ug/L			
Sulfotepp	ND	0.10	ug/L			
Thionazin	ND	0.20	ug/L			
o,o,o-Triethyl phosphorothioate	ND	0.20	ug/L			

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(303) 751-1780



CORE LABORATORIES
ANALYTICAL REPORT

Job Number: 930072
Prepared For:

PERMA-FIX OF NEW MEXICO, INC.
TIMOTHY L. KIMBALL
7928 RANCHITOS LOOP NE
ALBUQUERQUE, NM 87113

Date: 04/13/93


Signature

4.13.93
Date:

Name: David J. Marshall

Core Laboratories
10703 East Bethany Drive
Aurora, CO 80014

Title: PROJECT MANAGER



CORE LABORATORIES

ANALYTICAL REPORT
04/13/93

CUSTOMER: PERMA-FIX OF NEW MEXICO, INC.

File No.: 930072

TCLP WASTE CHARACTERIZATION REPORT

Client Sample I.D..... 1
 Remark/Project..... KAFB-CSB-NW OUTFALL
 Date/Time Sampled..... 01-19-93 1245
 Date/Time Received..... 01-20-93 0930
 Laboratory Sample I.D.... 930072-1

TOXICITY CHARACTERISTIC LEACHING PROCEDURE - METALS
 Aqueous Phase QA Batch Number 930312

Sample Type - As Received

% Liquid <0.5
 % Solid 100.0

TCLP Metals - Extract Type

% Aqueous Phase 100.0
 % Non-Aqueous Phase <0.5

Parameter	Aqueous Phase Result mg/L
Arsenic (As)	<0.05
Barium (Ba)	1.6
Cadmium (Cd)	0.02
Chromium (Cr)	<0.01
Lead (Pb)	<0.05
Mercury (Hg)	<0.003
Selenium (Se)	<0.1
Silver (Ag)	<0.01

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The analyses, opinions or interpretations contained in this report are based upon observations and material supplied by the client for whose exclusive and confidential use this report has been made. The interpretations or opinions expressed represent the best judgment of Core Laboratories. Core Laboratories, however, assumes no responsibility and makes no warranty or representations, express or implied, as to the productivity, proper operations, or profitability of any oil, gas, coal or other mineral, property, well or sand in connection with which such report is used or relied upon for any reason whatsoever. This report shall not be reproduced except in its entirety, without the written approval of Core Laboratories.



QUALITY ASSURANCE REPORT
04/13/93

CUSTOMER: PERMA-FIX OF NEW MEXICO, INC.

File No.: 930072

TCLP WASTE CHARACTERIZATION REPORT

METHOD REFERENCES - METALS

TOXICITY CHARACTERISTIC LEACHING PROCEDURE

<u>Parameter</u>	<u>Method</u>
TCLP Extraction Procedure	1311 (1)
Aqueous Phase Metals Digestion	7760 (2)
Non-Aqueous Phase Metals Digestion	3040 (2)
Arsenic (As)	6010 (2)
Barium (Ba)	6010 (2)
Cadmium (Cd)	6010 (2)
Chromium (Cr)	6010 (2)
Lead (Pb)	6010 (2)
Mercury - Aqueous Phase (Hg)	7470 (2)
Mercury - Non-Aqueous Phase (Hg)	7471 (2)
Selenium (Se)	6010 (2)
Silver (Ag)	6010 (2)

(1) 40 CFR, Part 261, Appendix 2, March 29, 1990.

(2) EPA SW-846, Test Methods For Evaluating Solid Waste, Third Edition, September 1986.

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TCLP WASTE CHARACTERIZATION REPORT

RCRA MAXIMUM CONTAMINANT LEVELS

TOXICITY CHARACTERISTIC LEACHING PROCEDURE - METALS

<u>Parameter</u>	<u>RCRA Regulatory Level (mg/L)</u>
Arsenic (As)	5.0
Barium (Ba)	100.0
Cadmium (Cd)	1.0
Chromium (Cr)	5.0
Lead (Pb)	5.0
Mercury (Hg)	0.2
Selenium (Se)	1.0
Silver (Ag)	5.0

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TOXICITY CHARACTERISTIC LEACHING PROCEDURE - METALS
 Aqueous Phase QA Batch Number 930312

Sample Type - As Received

% Liquid <0.5
 % Solid 100.0

TCLP Metals - Extract Type

% Aqueous Phase 100.0
 % Non-Aqueous Phase <0.5

TCLP AQUEOUS PHASE MATRIX SPIKE ANALYSIS

Parameter	Sample Result mg/L	Spike Added mg/L	Spike Result mg/L	Percent Recovery
Arsenic (As)	<0.05	1.00	0.93	93.0
Barium (Ba)	1.6	5.0	6.3	94.0
Cadmium (Cd)	0.02	1.00	0.93	91.0
Chromium (Cr)	<0.01	1.00	0.90	90.0
Lead (Pb)	<0.05	1.00	0.90	90.0
Mercury (Hg)	<0.003	0.050	0.048	96.0
Selenium (Se)	<0.1	1.0	1.2	120.0
Silver (Ag)	<0.01	1.00	0.78	78.0

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TCLP WASTE CHARACTERIZATION REPORT

TOXICITY CHARACTERISTIC LEACHING PROCEDURE - METALS

Aqueous Phase QA Batch Number 930312

TCLP AQUEOUS PHASE REFERENCE STANDARD ANALYSIS

Parameter	True Value mg/L	Analyzed Value mg/L	Percent Recovery
Arsenic (As)	2.00	2.01	100.5
Barium (Ba)	2.0	2.0	100.0
Cadmium (Cd)	2.00	2.10	105.0
Chromium (Cr)	2.00	2.08	104.0
Lead (Pb)	2.00	2.05	102.5
Mercury (Hg)	0.400	0.360	90.0
Selenium (Se)	2.0	1.9	95.0
Silver (Ag)	2.00	1.97	98.5

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TCLP WASTE CHARACTERIZATION REPORT

TOXICITY CHARACTERISTIC LEACHING PROCEDURE - METALS
Aqueous Phase QA Batch Number 930312

Extraction Duplicate - Laboratory I.D. 930375-1
Digestion Duplicate - Laboratory I.D. 930375-1

TCLP AQUEOUS PHASE EXTRACTION DUPLICATE ANALYSIS

Parameter	Original Result (A) mg/L	Duplicate Result (B) mg/L	RPD or (A-B)
Arsenic (As)	<0.05	<0.05	NC
Barium (Ba)	1.3	1.5	(0.2)
Cadmium (Cd)	<0.01	<0.01	NC
Chromium (Cr)	<0.01	<0.01	NC
Lead (Pb)	<0.05	<0.05	NC
Mercury (Hg)	<0.003	<0.003	NC
Selenium (Se)	0.3	0.4	(0.1)
Silver (Ag)	<0.01	<0.01	NC

TCLP AQUEOUS PHASE DIGESTION DUPLICATE ANALYSIS

Parameter	Original Result (A) mg/L	Duplicate Result (B) mg/L	RPD or (A-B)
Arsenic (As)	<0.05	<0.05	NC
Barium (Ba)	1.3	1.3	(0.0)
Cadmium (Cd)	<0.01	<0.01	NC
Chromium (Cr)	<0.01	<0.01	NC
Lead (Pb)	<0.05	<0.05	NC
Mercury (Hg)	<0.003	<0.003	NC
Selenium (Se)	0.3	0.3	(0.0)
Silver (Ag)	<0.01	<0.01	NC

NC = Not Calculable Due To Value(s) Lower Than The Detection Limit

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File No.: 930072

TCLP WASTE CHARACTERIZATION REPORT

TOXICITY CHARACTERISTIC LEACHING PROCEDURE - METALS

Aqueous Phase QA Batch Number 930312

TCLP AQUEOUS PHASE EXTRACTION BLANK ANALYSIS

Parameter	Result mg/L
Arsenic (As)	<0.05
Barium (Ba)	<0.5
Cadmium (Cd)	<0.01
Chromium (Cr)	<0.01
Lead (Pb)	<0.05
Mercury (Hg)	<0.003
Selenium (Se)	<0.1
Silver (Ag)	<0.01

TCLP AQUEOUS PHASE DIGESTION BLANK ANALYSIS

Parameter	Result mg/L
Arsenic (As)	<0.05
Barium (Ba)	<0.5
Cadmium (Cd)	<0.01
Chromium (Cr)	<0.01
Lead (Pb)	<0.05
Mercury (Hg)	<0.003
Selenium (Se)	<0.1
Silver (Ag)	<0.01

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CHAIN OF CUSTODY RECORD

COMPANY NAME: Kirtland Air Force Base
CONTACT PERSON: Walter Darr
ADDRESS:

Charge to:
Perma-Fix, Inc
7928 Ranchitos Loop
Albuquerque, NM 87113

LAB SAMPLE NUMBER: KAFB 9301191245 - KAFB-CSB-NW Outfall

Note: Sample contains 2.5% leaves and weeds - present at sample location - water from recent rain & snowmelt.

TYPE OF SAMPLE OR FIELD INFORMATION (Circle applicable item or add information):

FLASH 8240 418.1 VOC TRPH PCB'S

TCLP - ALL METALS OR JUST: _____

OTHER: See Attached - Appendix IX -

COLLECTOR'S NAME: Tim Kimball

DATE AND TIME OF SAMPLE: 1/19/93

DATE RECEIVED IN LAB:

CHAIN OF POSSESSION:

	SIGNATURE	TITLE	INCLUSIVE DATES	
			FROM	TO
1)	<u>Tim Kimball</u>	<u>Env Sci/PFI</u>	<u>1/19/93</u>	<u>1/19/93</u>
2)	<u>(To FedEx</u>	<u>2665910236)</u>	<u>1/19/93</u>	
3)	<u>both Chism</u>	<u>- sample Custodian</u>	<u>1-20-93</u>	<u>/9:30</u>