

1R - 266

REPORTS

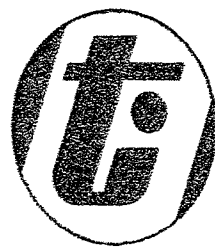
DATE:

12/15/2000

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DEC 15 2000

ENVIRONMENTAL BUREAU
OIL CONSERVATION DIVISION



Tipperary
CORPORATION

**Tipperary Corporation
Tatum Pit Closure Project
Monitor Wells
Sampling Results
For Year 2000**



Whole Earth Environmental
19606 San Gabriel
Houston, Tx. 77084

Bagley Field Water Sampling Results Summary

Iva COM

Monitor Wells # 1, 2

BTEX concentrations within the source well remain on a decline curve. They are approximately one half of the initial concentrations and one fifth of the peak concentrations. Monitor Well # 1 continues to show no criteria contaminant concentration exceeding NMWQCC standards however Monitor Well # 2 presented us with an unusual spike in the toluene and xylene concentrations. I'm certain that this is the result of cross contamination within the pump and tubing from Monitor Well # 3.

Mable COM

Monitor Wells # 3, 4

The BTEX concentrations within the source well continue to climb indicating that we are drawing free product. Monitor well # 3 pumped approximately 40% free product. We need to install a sock in the well bore to remove as much free oil as possible. Monitor Well # 4 shows the result of cross contamination from the Iva well # 3.

Bell

Monitor Wells # 6, 13, 14, 25

All wells within the Bell sample matrix continue to show a decline in BTEX concentrations. Two of the four wells are presently at acceptable levels and the other two very near. If this trend continues, we should show all four wells being at acceptable concentrations next year.

NBF

Monitor Wells # 8, 15, 16, 26

Well no. 8 (immediately adjacent to the pit site) continues to show acceptable concentrations. Wells # 15 & 26 have absorbent socks within the bores and resultantly showed a decline in BTEX concentrations of 58% over the last sampling round. Well # 16 shows large amounts of iron sulfide. I recommend that all three outlying wells be equipped with new absorbent socks.

Sohio State # 1

Monitor Wells # 10, 17, 18, 28, 30

Well # 10 continues to show modest declines over the last three sampling periods. Wells # 17 & 18 both have absorbent socks but still contain free product within the samples. I believe that the socks are now saturated beyond their useful lives and should be replaced. The two outermost wells both showed very significant reductions in concentrations. I hope that this is due to the upstream placement of the socks.

Sohio State "A"

Monitor Well # 11, 19, 20, 27, 31

The four nearest monitor wells show a 63% reduction in BTEX concentrations over the last sampling period. These four wells also showed the largest drop in the level of the water table. Only Well # 20 contains an absorbent sock but it registered an 87% reduction in BTEX concentrations. The outermost well, # 31 showed an increase in all BTEX concentrations.

GS State # 1

Monitor Wells # 12, 21, 22, 29

Wells # 12, 21, & 22 all contain absorbent socks and all showed a dramatic reduction in BTEX. Each well continues to contain free product and iron sulfide within the sample fluids. The outermost well, No. 29, also show a significant decline in concentrations over the previous sampling round.

Satellite # 4

Monitor Wells # 9, 23, 24

The Benzene concentrations within each of the three wells remain close to but above the water quality standards. Like Bell, we should have acceptable results next year.

**Tipperary Corporation
Tatum Pit Closure Project
Depth to Water**

Well Name	Monitor Well No.	Water Depth @ Drill Date	Water Depth 8/9/99	Water Depth 10/21/99	Water Depth 1/8/00	Water Depth 4/13/00	Water Depth 7/20/00	Water Depth 9/26/00
Iva	1	54.9	48.8	51.8	51.7	51.6	51.7	51.8
	2	53.0	49.2	51.5	51.4	51.5	51.6	51.7
Mable	3	52.0	48.8	52.5	52.4	53.7	53.7	53.7
	4	52.0	48.6	51.8	51.6	52.8	51.8	51.8
Bell	6	51.0	42.1	43.0	43.7	44.3	44.4	44.5
	13	47.8	40.8	43.7	44.2	44.0	43.9	44.0
	14	48.3	43.0	43.5	43.9	44.2	44.3	44.2
	25	47.4	43.5	43.5	43.9	44.0	44.0	44.0
NBF	8	48.0	35.8	35.8	36.1	37.1	35.6	35.9
	15	47.0	34.8	37.0	37.1	37.9	37.5	36.3
	16	47.1	36.0	36.1	36.2	36.2	36.2	36.2
	26	43.0	34.8	34.6	34.9	35.9	35.1	35.2
Sohio 1	10	50.0	44.5	44.9	43.9	44.2	45.0	44.9
	17	49.4	44.0	44.5	44.4	44.7	44.5	44.7
	18	48.6	43.8	44.1	45.4	46.4	45.7	45.4
	28	46.3	35.0	44.2	45.8	44.9	44.9	45.1
	30	45.3	45.3	44.1	44.2	44.8	44.3	44.3
Sohio A	11	50.0	38.3	38.5	37.8	38.3	38.3	38.8
	19	48.7	32.5	35.2	37.9	38.2	38.3	38.4
	20	49.5	38.0	38.7	38.0	38.4	38.5	38.4
	27	40.0	36.8	38.2	37.9	38.2	38.1	38.6
	31	37.5	37.5	38.9	39.7	38.5	38.5	38.1
G.S. State	12	48.0	42.8	42.9	44.1	43.2	44.7	44.2
	21	48.0	43.3	43.7	43.9	44.0	44.2	44.3
	22	47.5	43.5	43.9	44.0	44.0	44.0	44.1
	29	49.1	44.0	44.3	44.2	44.3	44.7	44.7
Sat. 4	9	31.0	26.2	26.8	26.8	27.1	27.0	27.0
	23	28.0	26.3	27.2	27.4	27.2	27.2	27.3
	24	28.9	26.1	26.5	26.8	26.9	26.8	26.8

ENVIRONMENTAL LAB OF , INC.

"Don't Treat Your Soil Like Dirt!"

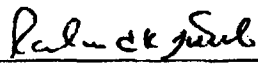
TIPPERARY
ATTN: VICTOR A. VICE
P.O. BOX 857
TATUM, N.M. 88267
FAX: 505-398-6510
FAX: 281-646-8996

SampleType: Water
Sample Condition: Intact/ Iced/ HCl/ -2 deg. C
Project #: None Given
Project Name: None Given
Project Location: Tatum, N.M.

Sampling Date: 09/26/00
Receiving Date: 09/28/00
Analysis Date: 10/06/00

ELT#	FIELD CODE	BENZENE mg/L	TOLUENE mg/L	ETHYLBENZENE mg/L	m,p-XYLENE mg/L	o-XYLENE mg/L
31487	MW 13	0.003	0.004	0.003	0.011	0.004
31488	MW 14	0.024	<0.001	0.006	0.011	0.004
31489	MW 25	0.001	<0.001	0.003	0.010	0.004
31490	MW 8	<0.001	<0.001	0.002	0.008	0.003
31491	MW 15	2.89	1.55	0.239	0.750	2.42
31492	MW 16	2.12	0.092	0.099	0.143	0.063
31493	MW 26	0.053	0.022	0.008	0.019	0.010
31494	Iva Source	0.865	0.495	0.080	0.833	0.636
31495	Mable Source	0.980	1.45	0.141	2.36	1.53
31496	G. S. Source	0.415	0.136	0.070	0.391	0.185
31497	MW 21	0.017	0.011	0.014	0.026	0.013
31498	MW 22	0.171	0.022	0.062	0.051	0.099
31499	MW 29	0.016	0.008	0.006	0.020	0.011
31500	MW 9	0.017	0.008	0.004	0.017	0.010
31501	MW 23	0.014	0.007	0.003	0.014	0.008
31502	MW 24	0.009	0.005	0.003	0.012	0.007
% IA		95	95	96	100	92
% EA		92	90	89	95	85
BLANK		<0.001	<0.001	<0.001	<0.001	<0.001

METHODS: SW 846-8021B,5030


Ralnd K. Tuttle

10-13-00
Date

ENVIRONMENTAL LAB OF , INC.

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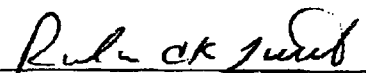
SampleType: Water
Sample Condition: Intact/ Iced/ HCl/ -2 deg. C
Project #: None Given
Project Name: None Given
Project Location: Tatum, N.M.

Sampling Date: 09/26/00
Receiving Date: 09/28/00
Analysis Date: 10/06/00

ELT#	FIELD CODE	BENZENE mg/L	TOLUENE mg/L	ETHYLBENZENE mg/L	m,p-XYLENE mg/L	o-XYLENE mg/L
31503	MW 1	<0.001	0.003	0.006	0.020	0.008
31504	MW 2	<0.010	0.088	<0.010	0.072	0.019
31505	MW 3	<0.200	6.81	1.21	6.38	12.6
31506	MW 4	0.129	2.95	<0.005	1.76	<0.005
31507	MW 6	0.016	<0.001	0.010	0.006	0.002
31508	MW 10	1.62	0.036	0.127	0.308	0.109
31509	MW 17	1.30	0.291	0.165	0.610	0.324
31510	MW 18	2.46	0.432	0.201	0.920	0.544
31511	MW 28	0.076	0.041	0.014	0.186	0.111
31512	MW 30	0.026	0.016	0.010	0.025	0.019
31513	MW 11	0.043	0.009	0.007	0.013	0.008

% IA	109	110	110	111	111
% FA	103	94	99	94	93
BLANK	<0.001	<0.001	<0.001	<0.001	<0.001

METHODS: SW 846-8021B,5030


Roland K. Tuttle

10-13-00
Date

ENVIRONMENTAL LAB OF , INC.

"Don't Treat Your Soil Like Dirt!"

TIPPERARY
ATTN: VICTOR A. VICE
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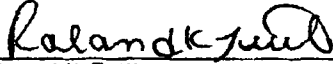
SampleType: Water
Sample Condition: Intact/ Iced/ HCl/ -2 deg. C
Project #: None Given
Project Name: None Given
Project Location: Tatum, N.M.

Sampling Date: 09/26/00
Receiving Date: 09/28/00
Analysis Date: 10/06/00

ELT#	FIELD CODE	BENZENE mg/L	TOLUENE mg/L	ETHYLBENZENE mg/L	m,p-XYLENE mg/L	o-XYLENE mg/L
31514	MW 19	0.229	0.005	0.003	0.011	0.004
31515	MW 20	0.008	0.005	0.004	0.012	0.007
31516	MW 27	0.249	0.004	0.003	0.023	0.010
31517	MW 31	0.118	0.004	0.004	0.010	0.004
31518	MW 12	0.820	0.066	0.354	1.48	0.365

% IA	109	110	110	111	111
% EA	102	101	104	103	102
BLANK	<0.001	<0.001	<0.001	<0.001	<0.001

METHODS: SW 846-8021B,5030


Raland K. Tuttle

10-13-00
Date

Environmental Lab of Texas, Inc. 12600 West I-20 East Odessa, Texas 79763
(915) 563-1800 FAX (915) 563-1713

CHAIN-OF-CUSTODY RECORD AND ANALYSIS REQUEST

Project Manager:		Phone #:		FAX #:		ANALYSIS REQUEST	
Company Name & Address:		Project Name:		Sampler Signature:		TCLP Metals Ag As Ba Cd Cr Pb Hg Se TCLP Metals Ag As Ba Cd Cr Pb Hg Se TCLP Volatiles TCLP Semi Volatiles TCLP TOC HCL	
Whole Earth Inc.		Tipoverway Quarterly Sampling		M. G. F.			
Project #:		Project Location:					
LAB # (LAB USE ONLY)	FIELD CODE	# CONTAINERS	VOLUME/AMOUNT	MATRIX	PRESERVATIVE METHOD	DATE	TIME
				WATER			
				AIR			
				SLUDGE			
				OTHER			
				HCL			
				OTHER			
				ICE			
				HOPE			
				OTHER			
31508	MW 10	2	✓	✓	✓	9-20	✓
31509	" 17						
31510	" 18						
31511	" 28						
31512	" 30						
31513	MW 11						
31514	19						
31515	20						
31516	27						
31517	31						
31518	12						
Relinquished by:		Date:	Time:	Received by:		REMARKS	
M. G. F.		9-28	0910	J. M. M.		Rec. -2°C	
Relinquished by:		Date:	Time:	Received by:			
Relinquished by:		Date:	Time:	Received by Laboratory:			

CHAIN-OF-CUSTODY RECORD AND ANALYSIS REQUEST

[illegible]

ENVIRONMENTAL LAB OF , INC.

"Don't Treat Your Soil Like Dirt!"

TIPPERARY
ATTN: MR. VICTOR A. VICE
P.O. BOX 857
TATUM, NM 88267
FAX: 505-398-8510
FAX: 281-646-8996

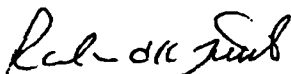
Sample Type: Water
Sample Condition: Intact/ Iced/ HCl/ 34 deg. F
Project #: Monitoring Well Quarterly Sampling
Project Name: None Given
Project Location: Tatum

Sampling Date: 07/20/00
Receiving Date: 07/21/00
Analysis Date: 07/24/00

ELT#	FIELD CODE	BENZENE (mg/L)	TOLUENE (mg/L)	ETHYLBENZENE (mg/L)	m,p-XYLENE (mg/L)	o-XYLENE (mg/L)
28434	MW-9	0.047	0.081	0.026	0.126	0.061
28435	MW-4	0.002	0.006	0.008	0.028	0.016
28436	MW-2	<0.001	0.003	0.002	0.006	0.003
28437	MW-16	2.62	0.278	0.149	0.424	0.178
28438	MW-3	<0.001	<0.001	0.107	0.790	0.380
28439	MW-1	<0.001	<0.001	0.004	0.018	0.008
28440	MW-6	0.048	0.002	0.015	0.006	0.002
28441	MW-10	1.86	0.099	0.132	0.391	0.186
28442	MW-11	0.070	0.075	0.026	0.144	0.055
28443	MW-13	0.002	0.002	0.001	0.004	0.002
28444	MW-14	0.038	0.002	0.003	0.005	0.002
28445	MW-15	2.63	4.32	0.655	3.86	6.66
28446	MW-17	1.28	0.203	0.150	0.546	0.294
28447	MW-18	2.18	0.643	0.204	1.10	0.683
28448	MW-19	0.377	0.052	0.017	0.076	0.031
28449	MW-20	0.038	0.074	0.023	0.106	0.042
28450	MW-21	0.084	0.122	0.067	0.236	0.076
28451	MW-22	0.275	0.122	0.088	0.282	0.103
28452	MW-23	0.031	0.058	0.020	0.097	0.048

% IA	94	94	94	104	96
% EA	92	99	89	110	92
BLANK	<0.001	<0.001	<0.001	<0.001	<0.001

METHODS: SW 846-8021B,5030


Roland K. Tuttle

7-26-00
Date

ENVIRONMENTAL LAB OF , INC.

"Don't Treat Your Soil Like Dirt!"

TIPPERARY
ATTN: MR. VICTOR A. VICE
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FAX: 505-398-6510
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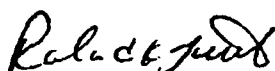
Sample Type: Water
Sample Condition: Intact/ Iced/ HCl/ 34 deg. F
Project #: Monitoring Well Quarterly Sampling
Project Name: None Given
Project Location: Tatum

Sampling Date: 07/20/00
Receiving Date: 07/21/00
Analysis Date: 07/25/00

ELT#	FIELD CODE	BENZENE (mg/L)	TOLUENE (mg/L)	ETHYLBENZENE (mg/L)	m,p-XYLENE (mg/L)	o-XYLENE (mg/L)
28453	MW-24	0.021	0.046	0.018	0.083	0.041
28454	MW-25	<0.001	0.001	0.002	0.005	0.002
28455	MW-26	0.177	0.230	0.036	0.128	0.075
28456	MW-27	0.385	0.048	0.017	0.092	0.038
28457	WM-28	0.219	0.180	0.042	0.233	0.128
28458	MW-29	0.045	0.080	0.027	0.121	0.053
28459	MW-30	0.080	0.100	0.028	0.133	0.075
28460	MW-31	0.137	0.046	0.017	0.078	0.032
28461	GS Source	0.481	0.153	0.083	0.378	0.188
28462	MW-12	1.09	<0.025	1.37	10.5	2.28
28463	MW-8	0.002	0.003	0.002	0.008	0.003
28464	IVA Source	1.00	0.815	0.104	0.866	0.676
28465	Mabel Source	0.552	0.622	0.168	1.67	1.01

% IA	94	94	94	104	96
% EA	92	99	89	110	92
BLANK	<0.001	<0.001	<0.001	<0.001	<0.001

METHODS: SW 846-8021B,5030


Raland K. Tuttle

7-26-00
Date

CHAIN-OF-CUSTODY RECORD AND ANALYSIS REQUEST

Rec 34° E

Environmental Lab of Texas, Inc. 12600 West I-20 East Odessa, Texas 79763 (915) 563-1800 FAX (915) 563-1713

CHAIN-OF-CUSTODY RECORD AND ANALYSIS REQUEST

Project Manager: Elliot Werner (806) 854-4354		Phase #:		ANALYSIS REQUEST		Pg 2 of 3	
Company Name & Address: Whole Earth/Support		Project Name:		TPM 418.1		Total Metals Ag As Ba Cd Cr Pb Hg Se	
Project #:		Project Location:		BTEX #026/5030		TCLP Metals Ag As Ba Cd Cr Pb Hg Se	
Project Location:		Sampler Signature:		TCLP Volatiles		TCLP Semi Volatiles	
Field Code		Matrix		Preservative Method		HCL	
LAB # (LAB USE ONLY)		# CONTAINERS		Volume/Amount		TIME	
		WATER		SOIL		AIR	
		SLUDGE		OTHER		HCL	
		NONE		ICE		OTHER	
		DATE		DATE		DATE	
		MW-15		MW-17		MW-18	
		MW-19		MW-20		MW-21	
		MW-22		MW-23		MW-24	
		MW-25		MW-26			
Requisitioned by:		Date:		Time:		Received by:	
Requisitioned by:		Date:		Time:		Received by:	
Requisitioned by:		Date:		Time:		Received by Laboratory:	

Rec 340F

CHAIN-OF-CUSTODY RECORD AND ANALYSIS REQUEST

[illegible]

ENVIRONMENTAL LAB OF , INC.

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TIPPERARY
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TATUM, NM 88267
FAX: 505-398-6510
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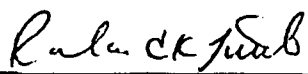
Sample Type: Water
Sample Condition: Intact/Iced/HCl
Project #: Tatum Water Samples
Project Name: None Given
Project Location: None Given

Sampling Date: See Below
Receiving Date: 04/19/00
Analysis Date: 04/25/00

ELT#	FIELD CODE	BENZENE (mg/L)	TOLUENE (mg/L)	ETHYLBENZENE (mg/L)	m,p-XYLENE (mg/L)	o-XYLENE (mg/L)	Sample Date
25151	MW # 11	0.087	0.039	0.014	0.070	0.043	04/18/00
25152	MW #19	0.408	0.041	0.014	0.070	0.040	04/18/00
25153	MW #31	0.602	0.067	0.020	0.121	0.070	04/18/00
25154	MW #10	2.36	0.263	0.195	0.421	0.216	04/18/00
25155	MW #17	1.77	0.209	0.176	0.616	0.344	04/18/00
25156	MW #18 <i>Extra (low)</i>	3.10	3.11	0.723	4.82	2.95	04/18/00
25157	MW #28	0.055	0.026	<0.010	0.033	0.011	04/18/00
25158	MW #30	0.003	0.005	0.003	0.010	0.004	04/18/00
25159	MW #2A	<0.001	0.011	0.005	0.014	0.006	04/13/00
25160	MW #20	0.025	0.030	0.012	0.057	0.033	04/18/00
25161	Mable Source	0.485	0.342	0.048	0.978	0.685	04/13/00
25162	MW #3	<0.001	0.030	0.022	0.062	0.023	04/13/00
25163	MW #4	0.006	0.009	0.004	0.011	0.005	04/13/00

% IA	99	96	96	103	96
% EA	103	94	98	112	97
BLANK	<0.001	<0.001	<0.001	<0.001	<0.001

METHODS: SW 846-8021B.5030


Raland K. Tuttle

4-27-00
Date

ENVIRONMENTAL LAB OF , INC.

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TIPPERARY
ATTN: MR. VICTOR A. VICE
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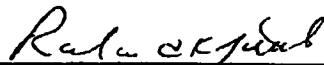
Sample Type: Water
Sample Condition: Intact/Iced/HCl
Project #: Tatum Water Samples
Project Name: None Given
Project Location: None Given

Sampling Date: See Below
Receiving Date: 04/19/00
Analysis Date: 04/24/00

ELT#	FIELD CODE	BENZENE (mg/L)	TOLUENE (mg/L)	ETHYLBENZENE (mg/L)	m,p-XYLENE (mg/L)	o-XYLENE (mg/L)	Sample Date
25140	MW #15	2.40	1.78	0.254	1.08	0.540	04/13/00
25141	MW #16	3.05	0.226	0.153	0.473	0.203	04/13/00
25142	MW #26	0.092	0.108	0.024	0.090	0.048	04/13/00
25143	MW #9	0.048	0.065	0.016	0.054	0.030	04/13/00
25144	MW #23	0.030	0.056	0.014	0.051	0.027	04/13/00
25145	MW #24	0.020	0.041	0.012	0.043	0.022	04/13/00
25146	G.S. Source	0.763	0.184	0.068	0.434	0.189	04/14/00
25147	MW #12	0.871	0.162	0.246	0.932	0.261	04/14/00
25148	MW #21	0.085	0.009	0.054	0.015	0.006	04/14/00
25149	MW #22	0.413	0.057	0.017	0.082	0.048	04/14/00
25150	MW #29	0.006	0.008	0.003	0.016	0.018	04/18/00

% IA	96	95	95	98	93
% EA	102	98	89	88	83
BLANK	<0.001	<0.001	<0.001	<0.001	<0.001

METHODS: SW 846-8021B,5030


Raland K. Tuttle

4-27-00
Date

ENVIRONMENTAL LAB OF , INC.

"Don't Treat Your Soil Like Dirt!"

TIPPERARY
ATTN: MR. VICTOR A. VICE
P.O. BOX 857
TATUM, NM 88267
FAX: 505-398-6510
FAX: 281-646-8996

Sample Type: Water
Sample Condition: Intact/Iced/HCl
Project #: Tatum Water Samples
Project Name: None Given
Project Location: None Given

Sampling Date: 04/13/00
Receiving Date: 04/19/00
Analysis Date: 04/26/00

ELT#	FIELD CODE	BENZENE (mg/L)	TOLUENE (mg/L)	ETHYLBENZENE (mg/L)	m,p-XYLENE (mg/L)	o-XYLENE (mg/L)
25164	Iva Source	1.43	1.51	0.176	1.52	1.10
25165	MW #1	<0.001	0.006	0.005	0.015	0.007
25166	MW #2	<0.001	0.007	0.005	0.016	0.006
25167	MW #6	0.208	0.007	0.020	0.022	0.005
25168	MW #13	0.004	0.002	0.002	0.006	0.002
25169	MW #14	0.195	0.004	0.004	0.009	0.003
25170	MW #25	0.002	0.002	0.002	0.005	0.002
25171	MW #8	0.002	0.002	0.002	0.003	0.001
25172	Sohio B (Blank)	<0.001	0.001	<0.001	0.001	<0.001

% IA	100	98	100	107	99
% EA	102	97	98	106	95
BLANK	<0.001	<0.001	<0.001	<0.001	<0.001

METHODS: SW 846-8021B, 5030


Raland K. Tuttle

4-27-00
Date

Environmental Lab of Texas, Inc. 12600 West 1-20 East Odessa, Texas 79763
(915) 563-1800 FAX (915) 563-1713

CHAIN-OF-CUSTODY RECORD AND ANALYSIS REQUEST

Project Manager:

M. G. H. in

Phone #: (800) 854-4358

FAX #: (281) 646-8996

Company Name & Address:

Whole Earth Environmental

Project #:

Tatum Water Sampling

Project Name:

Project Location:

Sampler Signature:

LAB # (LAB USE ONLY)	FIELD CODE	# CONTAINERS	Volume/Amount	MATRIX				PRESERVATIVE METHOD				SAMPLING	
				WATER	SOIL	AIR	SLUDGE	OTHER	HCL	HNO3	ICE	NONE	OTHER
25161	Mable Source	✓	✓	✓					✓	✓			
25162	MW 3	✓											
25163	" 4	✓											
25164	Iva Source	✓											
25165	MW 1	✓											
25166	" 2	✓											
25167	" 6	✓											
25168	" 13	✓											
25169	" 14	✓											
25170	" 25	✓											
25171	" 8	✓											

Relinquished by:

M. G. H. in

Date:

4-19-00

Time:

6:04 PM

Received by:

L. L. Chapman

REMARKS

Relinquished by:

Date:

Time:

Received by:

Relinquished by:

Date:

Time:

Received by Laboratory:

ANALYSIS REQUEST

TPH 418.1
BTEX NH2O/SO3O
TCLP Metals Ag As Ba Cd Cr Pb Hg Se
Total Metals Ag As Ba Cd Cr Pb Hg Se
TCLP Volatiles
TCLP Semi Volatiles
TDS
RCI

CHAIN-OF-CUSTODY RECORD AND ANALYSIS REQUEST

FILE: 1281646-8886

Sampler Signature:

REMARKS Can't run Chlorides on sample
because of HCl preservative
MW-27 - Damaged in transport
as per Mike 4/24/00

* ALSO Fax Tipperary @ 303-291-0398 Attn: Larry Sugano

Environmental Lab of Texas, Inc. 12600 West 1-20 East Odessa, Texas 79763
(915) 563-1800 FAX (915) 563-1713

CHAIN-OF-CUSTODY RECORD AND ANALYSIS REQUEST

Project Manager:

M. Griffin

Phone #: (800) 854-4358

FAX #: (981) 646-8996

Company Name & Address:

Whole Earth Environmental

Project #:

Project Name:

Tatum Water Sampling

Project Location:

Sampler Signature:

M. Griffin

LAB # (LAB USE ONLY)	FIELD CODE	# CONTAINERS	Volume/Amount	MATRIX						PRESERVATIVE METHOD				SAMPLING	
				WATER	SOIL	AIR	SLUDGE	OTHER	HCL	HNO3	ICE	NONE	OTHER	DATE	TIME
25140	MW # 15	✓ 1	✓	✓					✓	✓				4-13	2:31
25141	MW # 16	✓		✓										✓	2:47
25142	" 26	✓		✓										✓	3:05
25143	" 9	✓		✓										✓	3:28
25144	" 23	✓		✓										✓	3:44
25145	" 24	✓		✓										4-13	4:08
25146	65. Sample	✓		✓										4-14	8:15
25147	MW # 12	✓		✓										✓	9:15
25148	" 21	✓		✓										✓	8:40
25149	" 22	✓		✓										✓	9:48
25150	" 24	✓		✓										4-18	8:15

Relinquished by:

M. Griffin

Date:

4-19-00

Times:

1810

Received by:

Robert Judd

REMARKS

Missing Sample MW 27 & 28

Relinquished by:

Date:

Times:

Received by:

Received by Laboratory:

Relinquished by:

Date:

Times:

Received by:

Received by Laboratory:

CHAIN-OF-CUSTODY RECORD AND ANALYSIS REQUEST

1

REMARKS #2A same as MID-2A as per Mike
7/24/00

2/24/00
#2118

ENVIRONMENTAL LAB OF , INC.

"Don't Treat Your Soil Like Dirt!"

TIPPERARY
ATTN: MR. VICTOR A. VICE
P.O. BOX 857
TATUM, NM 88267
FAX: 505-398-6510
FAX: 281-646-8996

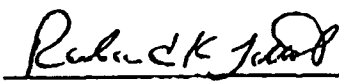
Sample Type: Water
Sample Condition: Intact/Iced/HCl
Project #: None Given
Project Name: None Given
Project Location: Tatum, N.M.

Sampling Date: 01/08/00
Receiving Date: 01/13/00
Analysis Date: 01/16/00

ELT#	FIELD CODE	BENZENE (mg/L)	TOLUENE (mg/L)	ETHYLBENZENE (mg/L)	m,p-XYLENE (mg/L)	o-XYLENE (mg/L)
22776	#30	0.088	0.095	0.024	0.104	0.063
22777	#23	0.019	0.031	0.019	0.083	0.033
22778	#24	0.016	0.030	0.016	0.071	0.030
22779	#13	0.056	0.005	0.004	0.008	0.004
22780	#4 SOH# 27	0.080	0.056	0.016	0.064	0.038
22781	#28	1.32	0.954	0.227	1.04	0.822
22782	G.S. SW	0.804	0.348	0.139	0.925	0.484
22783	#22	0.204	0.058	0.108	0.294	0.083
22784	#25	0.002	0.001	0.001	0.004	0.002
22785	#21	0.089	0.041	0.091	0.131	0.046
22786	#19	0.355	0.055	0.016	0.070	0.042
22787	#31	0.383	0.044	0.013	0.072	0.040
22788	#26	0.140	0.158	0.030	0.119	0.064
22789	MW-2	0.002	0.002	0.001	0.004	0.002
22790	#17	1.87	0.353	0.221	0.782	0.429

% IA	92	90	86	88	86
% EA	90	86	86	84	85
BLANK	<0.001	<0.001	<0.001	<0.001	<0.001

METHODS: SW 846-8021B,5030


Rajand K. Tuttle

1-19-00
Date

ENVIRONMENTAL LAB OF , INC.

"Don't Treat Your Soil Like Dirt!"

TIPPERARY
ATTN: MR. VICTOR A. VICE
P.O. BOX 857
TATUM, NM 88267
FAX: 505-398-8510
FAX: 281-646-8996

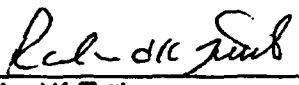
Sample Type: Water
Sample Condition: Intact/ Iced/ HCl/ 34 deg. F
Project #: Monitoring Well Quarterly Sampling
Project Name: None Given
Project Location: Tatum

Sampling Date: 07/20/00
Receiving Date: 07/21/00
Analysis Date: 07/24/00

ELT#	FIELD CODE	BENZENE (mg/L)	TOLUENE (mg/L)	ETHYLBENZENE (mg/L)	m,p-XYLENE (mg/L)	o-XYLENE (mg/L)
28434	MW-9	0.047	0.081	0.026	0.126	0.061
28435	MW-4	0.002	0.006	0.008	0.028	0.016
28436	MW-2	<0.001	0.003	0.002	0.006	0.003
28437	MW-16	2.62	0.278	0.149	0.424	0.178
28438	MW-3	<0.001	<0.001	0.107	0.790	0.380
28439	MW-1	<0.001	<0.001	0.004	0.018	0.006
28440	MW-6	0.048	0.002	0.015	0.006	0.002
28441	MW-10	1.86	0.099	0.132	0.391	0.186
28442	MW-11	0.070	0.075	0.026	0.144	0.055
28443	MW-13	0.002	0.002	0.001	0.004	0.002
28444	MW-14	0.038	0.002	0.003	0.005	0.002
28445	MW-15	2.63	4.32	0.655	3.86	6.66
28446	MW-17	1.28	0.203	0.150	0.546	0.294
28447	MW-18	2.18	0.643	0.204	1.10	0.683
28448	MW-19	0.377	0.052	0.017	0.076	0.031
28449	MW-20	0.038	0.074	0.023	0.106	0.042
28450	MW-21	0.084	0.122	0.067	0.236	0.076
28451	MW-22	0.275	0.122	0.088	0.292	0.103
28452	MW-23	0.031	0.058	0.020	0.097	0.048

% IA	94	94	94	104	96
% EA	92	99	89	110	92
BLANK	<0.001	<0.001	<0.001	<0.001	<0.001

METHODS: SW 846-8021B.5030


Roland K. Tuttle

7-26-00
Date

ENVIRONMENTAL LAB OF , INC.

"Don't Treat Your Soil Like Dirt!"

TIPPERARY
ATTN: MR. VICTOR A. VICE
P.O. BOX 857
TATUM, NM 88267
FAX: 505-398-6510
FAX: 281-646-8896

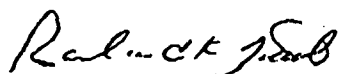
Sample Type: Water
Sample Condition: Intact/Iced/HCl
Project #: None Given
Project Name: None Given
Project Location: Tatum, N.M.

Sampling Date: 01/08/00
Receiving Date: 01/13/00
Analysis Date: 01/16/00

ELT#	FIELD CODE	BENZENE (mg/L)	TOLUENE (mg/L)	ETHYLBENZENE (mg/L)	m,p-XYLENE (mg/L)	o-XYLENE (mg/L)
22759	#15	3.25	2.55	0.335	1.24	0.854
22760	#18	0.334	0.186	0.074	0.257	0.149
22761	#8	0.007	0.008	0.007	0.015	0.008
22762	#10	2.35	0.520	0.187	0.588	0.329
22763	#11	0.088	0.075	0.035	0.086	0.054
22764	#12	1.03	0.336	1.24	8.03	2.09
22765	#6	0.170	0.007	0.026	0.022	0.008
22766	MW-3	0.022	0.032	0.046	0.215	0.131
22767	MW-1	0.002	0.002	<0.001	0.003	0.002
22768	MW-4	0.004	0.004	0.004	0.011	0.004
22769	#20	0.064	0.064	0.019	0.075	0.044
22770	#14	0.003	0.002	0.002	0.006	0.002
22771	G.S. Last #29	0.032	0.034	0.024	0.104	0.043
22772	#16	1.17	0.122	0.068	0.163	0.083
22773	#9	0.030	0.036	0.021	0.088	0.036
22774	IVA Source	2.35	3.78	0.458	3.21	1.91
22775	Mable Source	0.534	0.548	0.136	1.03	0.946

% IA	92	90	88	88	86
% EA	90	86	86	94	85
BLANK	<0.001	<0.001	<0.001	<0.001	<0.001

METHODS: SW 846-8021B,5030

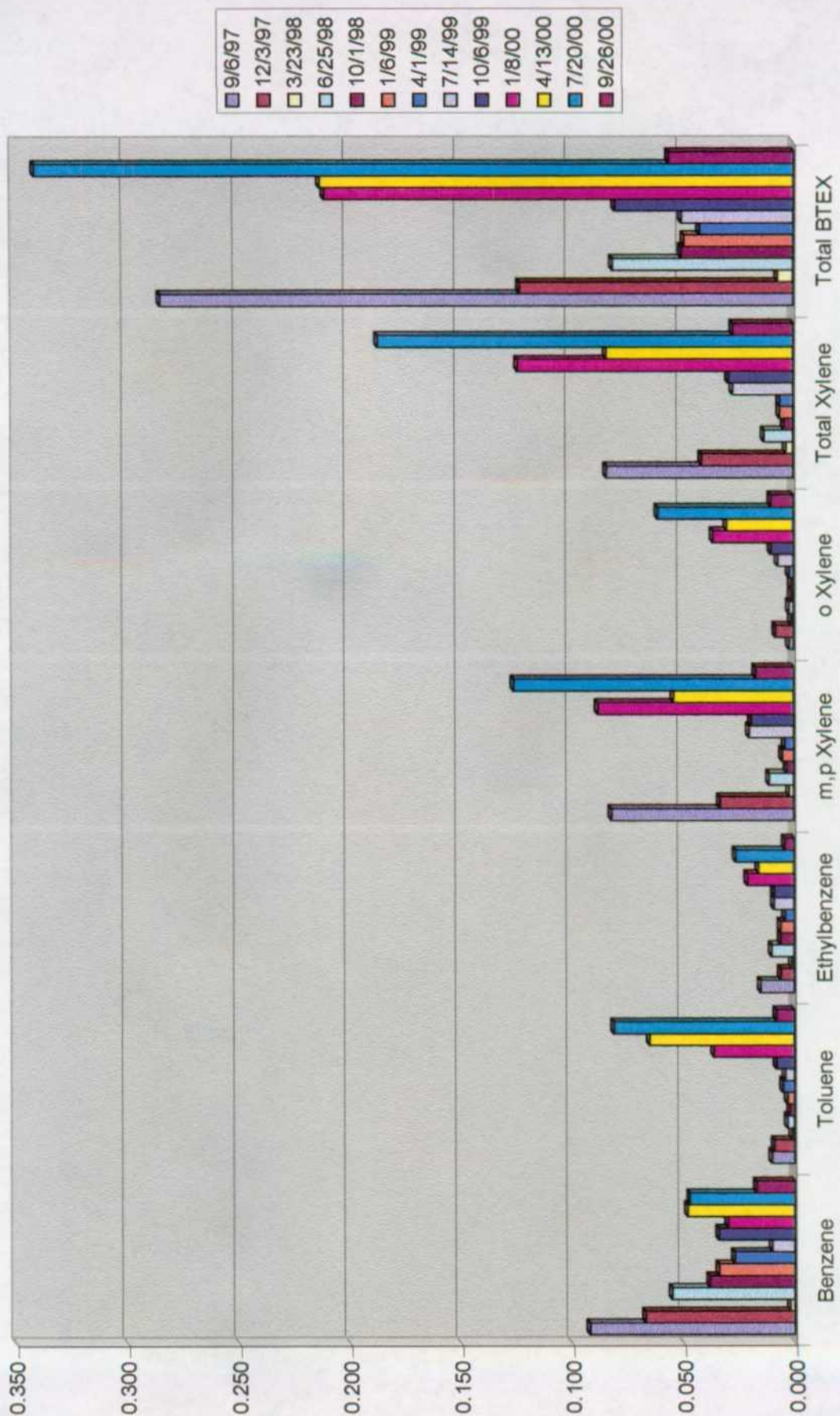

Roland K. Tuttle

1-19-00
Date

Monitor Well # 9
Satellite # 4
Sampling Results

Lab. #	12485	13191	14065	14664	15596	16603	17448	18598	20604	22773	22773	28434	31500
Sample Date	9/6/97	12/3/97	3/23/98	6/25/98	10/1/98	1/6/99	4/1/99	7/14/99	10/6/99	1/8/00	4/13/00	7/20/00	9/26/00
Benzene	0.092	0.067	0.002	0.055	0.038	0.034	0.027	0.010	0.034	0.030	0.048	0.047	0.017
Toluene	0.010	0.009	0.001	0.003	0.002	0.003	0.005	0.004	0.008	0.036	0.065	0.081	0.008
Ethylbenzene	0.015	0.006	0.001	0.010	0.006	0.006	0.004	0.009	0.009	0.021	0.016	0.026	0.004
m,p Xylene	0.082	0.033	0.002	0.011	0.003	0.005	0.004	0.020	0.019	0.088	0.054	0.126	0.017
o Xylene	0.002	0.008	0.001	0.002	0.001	0.001	0.002	0.007	0.010	0.036	0.030	0.061	0.010
Total Xylene	0.084	0.041	0.003	0.013	0.004	0.006	0.006	0.027	0.029	0.124	0.084	0.187	0.027
Total BTEX	0.285	0.123	0.007	0.081	0.050	0.049	0.042	0.050	0.080	0.211	0.213	0.341	0.056

Monitor Well # 9



[illegible]

Monitor Well # 23
Satellite # 4
Sampling Results

Lab. #	12727	13192	14045	14677	15603	16593	17449	18613	20626	22777	25144	28452	31501
Sample Date	10/2/97	12/3/97	3/23/98	6/25/98	10/1/98	1/6/99	4/1/99	7/14/99	10/6/99	1/8/00	4/13/00	7/20/00	9/26/00
Benzene	0.001	0.040	0.071	0.002	0.048	0.004	0.004	0.003	0.007	0.019	0.030	0.031	0.014
Toluene	0.001	0.012	0.004	0.001	0.023	0.003	0.004	0.002	0.009	0.031	0.056	0.058	0.007
Ethylbenzene	0.001	0.009	0.012	0.001	0.001	0.001	0.001	0.002	0.006	0.019	0.014	0.02	0.003
m,p Xylene	0.002	0.042	0.017	0.003	0.004	0.004	0.003	0.008	0.019	0.083	0.051	0.097	0.014
o Xylene	0.001	0.019	0.002	0.001	0.002	0.002	0.002	0.003	0.010	0.033	0.027	0.048	0.008
Total Xylene	0.003	0.061	0.019	0.004	0.006	0.006	0.005	0.011	0.029	0.116	0.078	0.145	0.022
Total BTEX	0.009	0.122	0.106	0.008	0.078	0.014	0.014	0.018	0.051	0.185	0.178	0.254	0.046

Monitor Well # 24

Satellite # 4

Sampling Results

Lab. #	12728	13193	14046	14678	15612	16594	20627	22778	25145	28453	31502
Sample Date	10/2/97	12/3/97	3/23/98	6/25/98	10/1/98	1/6/99	10/6/99	1/8/00	4/13/00	7/20/00	9/26/00
Benzene	0.001	0.017	0.001	0.003	0.002	0.004	0.011	0.016	0.020	0.021	0.009
Toluene	0.001	0.006	0.001	0.003	0.001	0.003	0.011	0.030	0.041	0.046	0.005
Ethylbenzene	0.001	0.005	0.001	0.002	0.001	0.001	0.006	0.016	0.012	0.018	0.003
m,p Xylene	0.002	0.025	0.003	0.006	0.002	0.002	0.021	0.071	0.043	0.083	0.012
o Xylene	0.001	0.011	0.001	0.003	0.001	0.001	0.012	0.030	0.022	0.041	0.007
Total Xylene	0.003	0.036	0.004	0.009	0.003	0.003	0.033	0.101	0.065	0.124	0.019
Total BTEX	0.009	0.064	0.007	0.017	0.007	0.011	0.061	0.163	0.138	0.209	0.036

