REPORT
OF
ANALYTICAL RESULTS

Project No.:
5912031 0100

Prepared For:
Woodward-Clyde Consultants
Maryland Heights, MO 63043

Submitted By:
St. Louis Chemistry Laboratory
Environmental Science &
Engineering, Inc.

July 31, 1992

Environmental
Science &
Engineering, Inc.

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Environmental
Science &
Engineering, Inc.

July 31, 1992
ESE No. 5912031 0100

Ms. Cynthia Pavelka
Woodward-Clyde Consultants
2318 Millpark Dr.
Maryland Heights, MO 63043

RE: Report of Analytical Chemistry Results,
Woodward-Clyde Consultants - Report 6
NL/Taracorp Project

Dear Ms. Pavelka:

Enclosed is the complete report of results for nine hundred and ninety-five (995) soil samples received in the ESE St. Louis Laboratory between April 14, and May 7, 1992. The samples were analyzed in accordance with the approved EPA methods as indicated in the report.

The QC results are composed of two parts, precision and accuracy. The % recovery is used to assess the accuracy of the analytical method. The % recovery limits for each of the control compounds are tabulated in the following report along with the actual % recovery for the spiked sample. The difference of the recoveries of the duplicate samples are calculated as replicate % difference which is used to measure the precision of the analytical method. Both % recovery limits and replicate % difference limits used in this analysis are set forth by the United States Environmental Protection Agency as the criteria of laboratory quality control for this type of analysis.

The QC results have been reviewed by the analysts and the Laboratory Manager. Explanations for QC results that did not fall within the QC criteria are provided in the summary.

We appreciate the opportunity to be of technical service to you. If there are any questions with regard to this report, please feel free to call.

Sincerely,

ENVIRONMENTAL SCIENCE & ENGINEERING, INC.

John F. Gemoules

John F. Gemoules
Laboratory Project Manager

JFG/pl/REPORT/WWC5.RP1

Enclosures

11005 Lilburn Park Road St. Louis, MO 63146-3535 Phone (314) 567-4600 Fax (314) 567-5030

FINAL REPORT
APPENDIX A
VOLUME II

NL/TARACORP SUPERFUND SITE GRANITE CITY, ILLINOIS

Prepared for

U.S. Envrionmental Protection Agency
Region V
77 West Jackson Boulevard
Chicago, Illinois 60604-3590

March, 1993

U.S. Department of the Army
Corps of Engineers, Omaha District
Omaha, Nebraska

FINAL REPORT
APPENDIX A
VOLUME II

NL/TARACORP SUPERFUND SITE GRANITE CITY, ILLINOIS

Prepared for

U.S. Department of the Army
Corps of Engineers, Omaha District
Omaha, Nebraska

March, 1993

Woodward-Clyde

Woodward-Clyde Consultants
2318 Millpark Drive
St. Louis, Missouri 63043

WCC Project No. 89MC114V

METALS/WET CHEMISTRY DATA ASSESSMENT

PROJECT NO. 89MC114V
LABORATORY ESE
LAB PROJECT NO. 5912031 0100
NO. OF SAMPLES/
MATRIX 179/SCT

SITE NL/TARACORP SUPERFUND SITE

REVIEWER Wendy Rembolt
REVIEWER'S NAME WENDY REMBOLT
COMPLETION DATE 9/18/92

DATA ASSESSMENT SUMMARY

	ICP	AA	Hg	CN	OTHER
1. HOLDING TIMES					
2. BLANKS					
3. CCV					
4. STANDARD MATRIX SPIKE					
5. MATRIX SPIKE					
6. OTHER QC					
7. OVERALL ASSESSMENT					

NOT APPLICABLE

O = Data had no problems/or qualified due to minor problems.
M = Data qualified due to major problems.
Z = Data unacceptable.
X = Problems, but do not affect data.

ACTION ITEMS:

COMMENTS: REVIEW OF MOISTURE CALCULATIONS - ALL OF THE ATTACHED CALCULATIONS (21% OF TOTAL) WERE CHECKED FOR ACCURACY. WWC5# 495, WWC5# 466, WWC5# 459, WWC5# 452, WWC5# 717 WERE CORRECTED AND WERE NOTIFIED. NO OTHER ERRORS WERE FOUND.

Wendy Rembolt

Environmental Science & Engineering, Inc.

Letter of Transmittal

11665 Lilburn Park Rd
St. Louis, MO 63146
(314) 567-4600
FAX: 314-567-5030

8230 Marshall Dr
Lenexa, KS 66214
(913) 492-6554
FAX: 913-492-9256

701 E. 2nd St.
Des Moines, IA 50309
(515) 282-9607
FAX: 515-282-9610

DATE 9-11-92 JOB NO

ATTENTION Wendy Reinholt

RE: Report Corrections & Moisture Raw Data.

WE ARE SENDING YOU ☐ Attached ☐ Under separate cover via _____ the following items

☐ Shop drawings ☐ Prints ☐ Plans ☐ Samples ☐ Specifications

☐ Copy of letter ☐ Change order ☐ _____

COPIES	LATEST DATE	NO.	DESCRIPTION
		1.	3/18/92 QC Data for SPM's WWC3.
			– Please replace current copies with this update.
		2.	Moisture Data for WWC5 & WWC6.

THESE ARE TRANSMITTED as checked below:

☐ For approval ☐ No exception taken ☐ Revise and submit ___ copies

☐ For your use ☐ Make corrections noted ☐ Submit ___ copies for distribution

☐ As requested ☐ Rejected ☐ Return ___ corrected prints

☐ For review and comment ☐ _____

☐ FOR BIDS DUE _____ 19___ ☐ PRINTS RETURNED AFTER LOAN TO US

REMARKS Wendy,

Per our phone conversation Thursday 9-10-92:

– In WWC3 Report, the date 3/18/92 corresponds to batch S7169 for MB, CLV & SP Summaries. Computer error caused this date to be missed along with SPM data. The missing SPM data is included in this package.

DELIVERED 9/11/92 WR

COPY TO: File

Signed: ECL

PERCENT MOISTURE DETERMINATION S7746

Notebook: 2075 Page#: 66

Date Start: 6/4	Chem. Int.: HAW	Date End:	Chem. Int:	Method:

	Sample ID	Location	Homogenous	Method of Homogenation	Sample Description	Container Weight (g) A	Sample Weight (g) B	Dry Sample & Container C	* Moisture *	
1	WWC5#662	3	N	Stir	brown w/grass	1.38	6.59	6.64	20.2	✓
2	663	3	N	Stir	"	1.38	5.04	5.62	15.[illegible]9	✓
3	664		N		"	1.38	5.87	6.34	15.5	✓
4	665		N		brown, rocky grass	1.38	6.46	6.71	17.5	✓
5	666		N		brown	1.38	6.51	6.73	17.8	✓
6	667		N		brown, rocky grass	1.38	5.98	—	—	re
7	668		N		brown w/ grass	1.37	6.28	6.30	21.5	✓
8	669		Y		dk. brown	1.35	5.70	6.13	16.1	✓
9	670		N		brown w/ grass	1.35	5.39	6.12	11.5	✓
10	671		N		" (mud)	1.36	5.47	5.60	22.5	✓
11	672		N		"	1.36	6.43	6.56	19.1	✓
12	673		N		brown w/grass	1.36	5.99	6.75	10.0	✓
13	674		N		brown w/ rocks, sprouts	1.36	5.36	5.90	15.3	✓
14	675		Y		brown w/roots	1.36	5.89	6.34	15.4	✓
15	676		N		dk. brown w/roots	1.36	8.36	8.24	17.7	✓
16	677		N		"	1.36	6.21	6.69	14.2	✓
17	678		N		"	1.37	8.07	8.29	14.2	✓
18	679		N		"	1.37	7.13	7.48	14.3	✓
19	680		N		brown w/grass	1.37	5.95	6.34	16.5	✓
20	681		N	↓	"	1.38	7.14	7.28	17.4	✓
21	MB		—	—	—	1.34	ø	1.34	ø	✓
22	RP	↓	N	Stir	brown w/ grass	1.35	6.41	6.65	17.3	✓

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$* \; [1-(\frac{C-A}{B})] * 100 = \%MOISTURE$

location 5

#23 WWC5#667 1.34 5.96 6.23 18.0%

redone

17.95% ✓

PERCENT MOISTURE DETERMINATION

57740

Notebook: 2075 Page#: 67

Date Start: 6/4	Chem. Int.: HAW	Date End:	Chem. Int:	Method:

Sample ID	Location	Homogenous	Method of Homogenation	Sample Description	Container Weight A (g)	Sample Weight B (g)	Dry sample & Container C	% Moisture *	
WWCS * 682	6	N	Stir	dk. brown w/roots	1.35	5.84	6.14	18.0	✓
683		N		brown w/ grass	1.35	6.38	6.35	21.6	✓
684		N		"	1.37	5.39	5.64	20.8	✓
685		Y		dk. brown w/roots	1.37	5.88	6.04	20.6	✓
686		N		"	1.37	5.54	5.74	21.1	✓
687		N		"	1.36	6.00	6.19	19.5	✓
688		N		"	1.36	7.72	7.64	18.6	✓
689		N		brown w/ grass	1.35	6.47	6.67	17.8	✓
690		Y		dk. brown	1.35	6.54	6.71	18.0	✓
691		N		brown w/ rocks, roots	1.35	6.01	6.28	18.0	✓
692		N		lt. brown roots, rocks	1.35	8.20	8.77	9.5	✓
693		N		lt. brown roots	1.35	5.50	6.08	14.0	✓
694		N		"	1.36	8.09	8.23	15.1	✓
695		N		"	1.37	7.22	7.27	18.3	✓
696		Y		lt. brown	1.37	6.04	6.36	17.4	✓
697		N		lt. brown roots	1.37	5.97	6.28	17.8	✓
698		N		lt. brown, roots, grass	1.36	6.50	7.00	11.7	✓
699		N		sand w/ roots	1.35	6.14	6.95	8.8	✓
700		N		"	1.25	6.91	7.30	13.9	✓
701		N		lt. brown w/ grass	1.36	5.19	6.03	10.0	✓
MB		—	—	—	1.36	0	1.36	0	✓
DP 701		N	Stir	lt. brown w/ grass	1.36	5.24	6.08	9.9	✓

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$$* \ [1-(\frac{C-A}{B})]*100=\%MOISTURE$$

PERCENT MOISTURE DETERMINATION 57770

Notebook: 2075 Page#: 68

Date Start: 6/4 Chem. Int.: HAW | Date End: Chem. Int: | Method:

	Sample ID	Location	Homogenous	Method of Homogenation	Sample Description	Container Weight (g) A	Sample Weight (g) B	Dry Sample & Container C	% Moisture *	
1	WWCS * 702	5	N	Stir	lt brown w/roots	1.34	6.92	7.46	11.6	✓
	703		N		SAND w/roots	1.34	7.69	8.35	8.8	✓
3	704		N		black w/ grass	1.34	5.18	5.50	19.7	✓
	705		N		"	1.36	6.43	7.00	12.3	✓
5	706		Y		black	1.35	6.55	7.48	6.4	✓
	707		N		rocks, brown w/ roots	1.35	5.47	5.81	18.5	✓
	708		N		"	1.36	5.21	5.76	15.5	✓
	709		N		"	1.34	5.57	5.97	16.9	✓
	710		N		"	1.36	6.42	7.29	7.6	✓
	711		N		"	1.36	7.58	8.03	12.0	✓
	712		N		dk brown w/roots, rocks	1.35	6.25	6.34	20.2	✓
	713		N		brown w/roots	1.37	5.96	6.72	10.2	✓
	714		N		brown w/ roots, rocks	1.36	5.42	6.42	6.6	✓
	715		N		brown, roots	1.36	7.05	7.70	10.1	✓
	716		N		rocks, "	1.36	7.01	7.84	8.2	
	717		N		sand, rocks brown, roots	1.37	6.97	7.90	21.9	6.3
	718		N		"	1.37	8.36	9.25	5.7	✓
	719		Y		SAND w/ roots	1.37	6.55	7.28	9.8	✓
	720		N		SAND, roots rocks	1.36	5.53	6.51	6.9	✓
	721		N		"	1.36	5.27	6.02	11.6	redo
MB			—	—	—	1.38	Ø	1.38	Ø	✓
RP	721			Stir	SAND, rocks, roots	1.37	6.72	7.49	8.9	red

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loc. 5

$* [1-(\frac{C-A}{B})]*100=\%MOISTURE$

24	WWCS * 721	1.35	7.22	8.04	7.3% ✓
25	RP * 721	1.35	5.74	6.68	7.1% ✓

PERCENT MOISTURE DETERMINATION

Notebook: 2075 Page#: 69

Date Start: 6/5 Chem. Int.: HAW | Date End: Chem. Int: | Method:

	Sample ID	Location	Homogenous	Method of Homogenation	Sample Description	Container Weight (g) A	Sample Weight (g) B	Dry Sample & Container C	% Moisture *	
1	WWCS# 722	5	N	Stir	brown w/ grass	1.32	7.08	7.42	13.8	✓
2	723		Y		brown w/ roots	1.31	6.04	6.42	15.4	✓
3	724		N		dk. brown, roots	1.30	6.02	6.45	14.4	✓
4	WWCS# 1		Y		dk. brown, roots	1.30	9.54	9.40	15.1	✓
5	2		N		"	1.31	5.61	6.00	16.4	✓
6	3		N		"	1.31	6.15	6.45	16.4	✓
7	4		N		dk. brown, roots, grass	1.32	6.41	6.87	13.4	✓
8	5		N		"	1.33	5.04	5.83	10.7	✓
9	6		N		+ roots "	1.33	5.65	6.12	15.2	✓
10	7		N		dk. brown, grass	1.35	5.50	6.04	14.7	✓
11	8		N		"	1.36	6.70	6.98	16.1	✓
12	9		N		dk. brown, roots, sand	1.37	6.75	7.11	15.0	✓
13	10		N		brown, grass, roots	1.36	6.12	7.01	7.7	✓
14	11		N		"	1.36	6.55	7.25	10.1	✓
15	12		N		"	1.36	8.72	8.93	13.2	✓
16	13		N		"	1.36	6.68	6.92	16.8	✓
17	14		N		"	1.36	6.34	6.58	17.7	✓
18	15		Y		dk. brown, roots	1.36	6.43	5.85	17.3	✓
19	16		N		dk. brown, plant	1.37	6.56	6.93	15.2	✓
20	17		N	↓	"	1.36	7.45	7.55	16.9	✓
21	MB		—	—	—	1.36	0	1.36	Ø	✓
22	RP 17	↓	N	Stir	dk. brown, plant	1.36	5.71	6.08	17.3	✓

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$$* \; [1-(\frac{C-A}{B})]*100 = \%MOISTURE$$

Notebook: 2075 Page#: 71

Date Start: 6/17 Chem. Int.: 2 | Date End: 6/18 Chem. Int: 2 | Method:

Sample ID	Location	Homogenous	Method of Homogenation	Sample Description	Container Weight (g) A	Sample Weight (g) B	Dry Sample & Container C	% Moisture *	
WWC5 * 412	5	N	Mix	dk clay	1.38	6.11	5.91	25.86	✓
413				dk clay	1.37	8.02	7.48	23.82	✓
414				dk clay w/roots	1.38	6.94	6.87	20.89	✓
415				"	1.38	7.29	7.55	20.80	✓
416				"	1.38	7.51	6.95	25.83	✓
417				dk clay	1.38	6.68	6.59	22.01	✓
418				dk clay w/roots	1.38	7.07	6.66	25.32	✓
419				dk clay	1.37	6.53	6.45	22.21	✓
420				dk clay w/roots	1.38	6.71	6.74	20.12	✓
421				"	1.38	6.15	6.29	20.16	✓
422				dk w/roots	1.38	8.30	~~6.80~~		
423				"	1.34	6.87	6.20	20.52	✓
424				dk g rocky	1.35	6.76	6.50	23.87	✓
425				sandy w/roots	1.36	7.06	7.33	15.44	✓
426				dk w/roots	1.36	6.60	6.58	20.91	✓
427				"	1.35	7.43	7.48	17.50	✓
428				brown w/roots	1.35	5.99	6.31	17.19	✓
429				dk w/roots	1.35	9.05	9.12	14.14	✓
430				"	1.35	5.28	6.73		redo
431				brown w/roots	1.35	6.46	6.87	14.24	✓
					1.35	7.46	1.35	—	✓
WWC5 * 431				brown w/roots	1.36	7.34	7.61	14.35	✓

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$$* \ [1-(\frac{C-A}{B})] \cdot 100 = \%MOISTURE$$

PERCENT MOISTURE DETERMINATION

S7900

Notebook: 2075 Page#: 92

te Start: 6/18 Chem. Int.: 2 | Date End: 6/18 Chem. Int.: 2 | Method:

Sample ID	Location	Homogenous	Method of Homogenation	Sample Description	Container Weight (g) A	Sample Weight (g) B	Dry Sample & Container C	% Moisture *	
WWC5 * 432	1	N	Mol	dk w/roots	1.39	7.01	7.13	18.12	✓
433				dk brown w/roots	1.41	7.18	7.52	14.90	✓
434				"	1.41	6.51	6.92	15.36	✓
435				dk w/roots	1.39	6.20	6.17	22.90	✓
436				dk w/roots	1.39	7.52	9.47	19.15	✓
437				dk w/roots	1.39	7.18	7.28	17.97	✓
438				brown w/roots	1.40	6.90	6.98	19.13	✓
439				dk brown w/roots	1.40	8.36	8.16	19.14	✓
440				dk w/roots	1.39	6.30	6.43	20.00	✓
441				" w/roots	1.40	8.24	7.94	20.63	✓
442				dk w/roots	1.39	9.27	8.91	19.05	✓
443				dk w/roots	1.39	6.21	6.52	17.39	✓
444				brown w/roots	1.38	5.89	5.99	21.73	✓
445				dk brown w/roots	1.40	6.12	6.98	19.36	✓
446				dk brown	1.38	7.21	7.10	20.67	✓
447				dk w/roots	1.38	7.50	7.50	18.40	✓
448				" + rocks	1.38	7.08	7.30	16.38	✓
449				dk w/roots rocks	1.38	6.29	6.64	16.37	✓
450				dk brown w/roots	1.38	7.08	7.34	15.82	✓
451				dk w/roots	1.39	6.57	6.84	17.05	✓
B					1.38		1.38	—	✓
P WWC5 * 451				dk w/roots	1.39	6.84	7.09	16.67	✓

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$$* \ [1-(\frac{C-A}{B})]*100=\%MOISTURE$$

PERCENT MOISTURE DETERMINATION

S7906

Notebook: 2075 Page#: 93

Date Start: 6/17/92 Chem. Int.: ET | Date End: 6/18 Chem. Int: ET | Method:

Sample ID	Location	Homogenous	Method of Homogenation	Sample Description	Container Weight (g) A	Sample Weight (g) B	Dry Sample & Container C	% Moisture *	
WWCS#452	2	N	Mc24	dk w/ roots	1.32	9.22	8.87	18.90	18.
453	2			" + rock	1.34	8.72	8.74	14.94	✓
454	2			dk w/ roots	1.33	6.70	6.81	18.21	✓
455	2			"	1.33	7.13	7.12	18.79	✓
456	2			dk w/ roots	1.33	7.41	7.33	19.03	✓
457	2			"	1.37	7.15	7.10	19.86	✓
458	2			" + rocks	1.34	7.29	7.36	17.42	✓
459				dk w/ rocks	1.32	8.26	8.17	17.68	17.
460				"	1.36	6.09	6.37	17.73	✓
461				dk w/ roots	1.36	8.10	8.00	18.03	✓
462				"	1.36	7.24	7.20	19.34	✓
463				"	1.34	5.67	5.73	22.38	✓
464				dk w/ roots	1.35	6.12	6.16	21.28	✓
465				dk w/ roots	1.34	7.33	7.24	19.31	✓
466				"	1.39	7.04	7.19	16.10	17.
467				"	1.39	9.60	9.41	16.46	✓
468				brown w/ roots	1.38	8.29	8.02	17.85	8.
469				dk w/ roots	1.37	7.44	7.43	18.55	✓
470				"	1.37	8.85	9.04	13.30	✓
471				"	1.37	7.86	7.61	20.61	✓
MB					1.38	1.38 →			✓
RP WWCS 471				dk w/ roots	1.38	6.21	6.37	19.65	✓

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$* \; [1-(\frac{C-A}{B})]*100 = \%MOISTURE$

PERCENT MOISTURE DETERMINATION

S7906

Notebook: 2075 Page#: 94

Date Start: 6/18 Chem. Int: E. | Date End: 6/18 Chem. Int: E. | Method:

Sample ID	Location	Homogenous	Method of Homogenation	Sample Description	Container Weight (g) A	Sample Weight (g) B	Dry Sample & Container C	% Moisture *	
WWC5*472	3	N	Mix	dk w/ roots	1.35	6.18	6.30	19.90	✓
473				dk w/ roots and rocks	1.36	8.69	9.04	11.62	✓
474				"	1.34	8.83	9.48	7.81	✓
475				dk ~~brown~~ roots & rocks	1.35	7.74	7.84	16.15	✓
476				~~dk brown & rocks~~	1.35	8.50	8.24	19.29	brown clay + roots ✓
477				brown clay	1.36	6.93	6.94	19.48	✓
478				brown clay + roots	1.36	7.11	7.06	19.83	✓
479				"	1.36	6.55	6.82	16.64	✓
480				"	1.37	8.23	8.20	17.01	✓
481				dk clay w/ roots	1.37	7.36	7.96	10.46	✓
482				dk clay w/ roots	1.36	6.45	6.46	20.93	✓
483				"	1.36	6.79	6.93	17.97	✓
484				"	1.36	5.82	6.21	16.67	✓
485				" + rock	1.37	6.43	6.61	18.51	✓
487				"	1.37	8.25	8.13	18.06	✓
486				dk clay + roots	1.37	6.30	6.62	16.67	✓
488				dk clay	1.37	8.22	8.16	17.40	✓
489				"	1.37	7.20	7.29	17.78	✓
490				dk clay + roots	1.37	8.34			recho pg 97
491				dk clay w/ roots	1.37	7.27	7.33	18.02	✓
MB					1.36		1.36		✓
P				dk clay w/ roots	1.37	6.42	6.66	17.60	✓

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$$* \left[1-\left(\frac{C-A}{B}\right)\right]*100=\%MOISTURE$$

PERCENT MOISTURE DETERMINATION

S7106

Notebook: 2075 Page#: 95

Date Start: 6/18 Chem. Int.: [illegible] Date End: 6/19 Chem. Int.: [illegible] Method:

Sample ID	Location	Homogenous	Method of Homogenation	Sample Description	Container Weight (g) A	Sample Weight (g) B	Dry Sample & Container C	% Moisture *	
WWC5 #492	2	N	Mix	dk clay w/ roots	1.34	7.88	7.56	14.56	✓ B:
493				dk clay	1.34	7.02	7.35	14.26	✓
494				dk clay + roots	1.34	6.52	6.55	20.09	✓
495				"	1.39	6.66	6.77	19.22	18.92 ✓
496				"	1.39	6.25	6.42	19.52	✓
497				brown clay w/ roots	1.34	8.06	7.81	19.73	✓
498				"	1.34	8.06	7.93	18.24	✓
499				"	1.39	8.24	8.14	18.08	✓
500				dk clay w/ roots	1.39	7.88	7.50	22.46	✓
501				"	1.38	6.46	6.62	18.88	✓
502				"	1.38	6.76	6.69	21.45	✓
503				"	1.39	5.55	5.95	17.84	✓
504				dk clay	1.39	5.99	6.19	19.87	✓
505				dk clay w/ roots	1.39	6.76	6.55	23.67	✓
506				"	1.39	7.41	7.43	18.49	✓
507				" + rocks	1.39	8.84	8.54	19.12	✓
508				dk clay	1.39	6.59	6.78	18.97	✓
509				brown w/ roots	1.39	5.15	[illegible]	26.21	✓ 5.19
510				"	1.38	6.55	6.69	18.93	✓ B=6.5
511				" + rocks	1.38	6.84	7.13	15.94	✓
3					1.38		1.38		✓
WWC5 511				brown w/ roots + rocks	1.38	6.01	6.31	17.97	✓

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$$* \; [1-(\frac{C-A}{B})] \cdot 100 = \%MOISTURE$$

METALS/WET CHEMISTRY DATA ASSESSMENT

PROJECT NO. 89MC114V
LABORATORY ESE
LAB PROJECT NO. 5912031 C100
NO. OF SAMPLES/
MATRIX 10/SOIL

ANALYSIS DATE: 5/15/92

SITE NL/TARACORP SUPERFUND SITE

REVIEWER [illegible]
REVIEWER'S NAME WENDY REINBOLT
COMPLETION DATE 8/2/92

DATA ASSESSMENT SUMMARY

	ICP	AA	Hg	CN	OTHER
1. HOLDING TIMES		✓			
2. BLANKS		✓			
3. CCV		✓			
4. STANDARD MATRIX SPIKE		✓			
5. MATRIX SPIKE		(1)			
6. OTHER QC		N/A			
7. OVERALL ASSESSMENT		X			

O = Data had no problems/or qualified due to minor problems.
M = Data qualified due to major problems.
Z = Data unacceptable.
X = Problems, but do not affect data.

ACTION ITEMS:

COMMENTS: (1) WWC4*949 HAD A VERY LOW RECOVERY PERCENTAGE AND A VERY HIGH RPD. LAB ATTRIBUTED TO FAILURE TO SPIKE MATRIX. NO ACTION NEEDED.

METALS/WET CHEMISTRY DATA ASSESSMENT

PROJECT NO. 89MC114V
LABORATORY ESE
LAB PROJECT NO. 5912031 C100
NO. OF SAMPLES/
MATRIX 60/SOIL

ANALYSIS DATE: 5/19/92

SITE NL/TARACORP SUPERFUND SITE

REVIEWER [illegible]
REVIEWER'S NAME [illegible]
COMPLETION DATE 8/7/92

DATA ASSESSMENT SUMMARY

	ICP	AA	Hg	CN	OTHER
1. HOLDING TIMES		✓			
2. BLANKS		✓			
3. CCV		✓			
4. STANDARD MATRIX SPIKE		✓			
5. MATRIX SPIKE		(1)			
6. OTHER QC		NA			
7. OVERALL ASSESSMENT		X			

O = Data had no problems/or qualified due to minor problems.
M = Data qualified due to major problems.
Z = Data unacceptable.
X = Problems, but do not affect data.

ACTION ITEMS:

COMMENTS: (1) LWCS#50, AND LWCS#70 RPD AND RECOVERY % OUTSIDE OF CONTROL RANGE; LAB ATTRIBUTES TO SPIKING ERROR. NO ACTION NECESSARY

METALS/WET CHEMISTRY DATA ASSESSMENT

PROJECT NO. 89MC114V
LABORATORY ESE
LAB PROJECT NO. 5912031 0100
NO. OF SAMPLES/
MATRIX 12C/SOIL
ANALYSIS DATE: 6/2/92

SITE NL/TARACORP SUPERFUND SITE
REVIEWER [illegible]
REVIEWER'S NAME [illegible]
COMPLETION DATE 8/7/92

DATA ASSESSMENT SUMMARY

	ICP	AA	Hg	CN	OTHER
1. HOLDING TIMES		✓			
2. BLANKS		✓			
3. CCV		✓			
4. STANDARD MATRIX SPIKE		(1)			
5. MATRIX SPIKE		(2)(3)			
6. OTHER QC		NA			
7. OVERALL ASSESSMENT		M			

O = Data had no problems/or qualified due to minor problems.
M = Data qualified due to major problems.
Z = Data unacceptable.
X = Problems, but do not affect data.

ACTION ITEMS: (2) WLC5*91, WLC5*111, WLC5*130; RPD AND SAMPLE RECOVERY OUTSIDE CONTROL RANGE. LAB ATTRIBUTES TO SAMPLE INHOMOGENEITY. DATA QUALIFIED AS ESTIMATED (J).

COMMENTS: (1) SPIKE RECOVERY SLIGHTLY HIGHER THAN CONTROL RANGE. NO ACTION NEEDED.
(3) WLC5*150; RPD AND SAMPLE RECOVERY OUTSIDE CONTROL RANGE. LAB ATTRIBUTES TO SPIKING ERROR. NO ACTION NEEDED.

METALS/WET CHEMISTRY DATA ASSESSMENT

PROJECT NO. 89MC114V
LABORATORY ESE
LAB PROJECT NO. 5912091 [illegible]
NO. OF SAMPLES/
MATRIX 120/SOIL

SITE NL/TARACORP SUPERFUND SITE

REVIEWER [illegible]
REVIEWER'S NAME WENDY REDINGER
COMPLETION DATE 8/7/92

ANALYSIS DATE: 6/13/92

DATA ASSESSMENT SUMMARY

	ICP	AA	Hg	CN	OTHER
1. HOLDING TIMES		✓			
2. BLANKS		✓			
3. CCV		✓			
4. STANDARD MATRIX SPIKE		✓			
5. MATRIX SPIKE		(1)(2)			
6. OTHER QC		N/A			
7. OVERALL ASSESSMENT		O/m			

O = Data had no problems/or qualified due to minor problems.
M = Data qualified due to major problems.
Z = Data unacceptable.
X = Problems, but do not affect data.

ACTION ITEMS: (2) WCC5*290; RPD AND SAMPLE RECOVERY OUTSIDE CONTROL RANGE. LAB ATTRIBUTES TO SAMPLE HOMOGENEITY. DATA QUALIFIED AS ESTIMATED (J).

COMMENTS: (1) WCC5*210; SAMPLE RECOVERY OUTSIDE CONTROL RANGE; LAB ATTRIBUTES TO SPIKING ERROR. NO ACTION NEEDED.

METALS/WET CHEMISTRY DATA ASSESSMENT

PROJECT NO. 89MC114V
LABORATORY ESE
LAB PROJECT NO. 5912031 C1GC
NO. OF SAMPLES/
MATRIX 12C/SCTZ
ANALYSIS DATE: 6/4/92

SITE NL/TARACORP SUPERFUND SITE

REVIEWER [illegible]
REVIEWER'S NAME [illegible]
COMPLETION DATE 8/7/92

DATA ASSESSMENT SUMMARY

	ICP	AA	Hg	CN	OTHER
1. HOLDING TIMES		✓			
2. BLANKS		✓			
3. CCV		✓			
4. STANDARD MATRIX SPIKE		✓			
5. MATRIX SPIKE		(1)(2)			
6. OTHER QC		NA			
7. OVERALL ASSESSMENT		O/M			

O = Data had no problems/or qualified due to minor problems.
M = Data qualified due to major problems.
Z = Data unacceptable.
X = Problems, but do not affect data.

ACTION ITEMS: (2) WIC5*39C, RPD AND SAMPLE RECOVERY OUTSIDE CONTROL RANGE. LAB ATTRIBUTES TO SAMPLE INHOMOGENEITY. DATA QUALIFIED AS ESTIMATED (J).

COMMENTS: (1) WIC5*33C SAMPLE RECOVERY SIGNIFICANTLY ABOVE CONTROL RANGE. NO ACTION REQUIRED. WIC5*35C NEGATIVE SAMPLE RECOVERY. LAB ATTRIBUTES TO TARGET BEING 4 TIMES SPIKING CONCENTRATION IN THE SAMPLE. NO ACTION TAKEN.

METALS/WET CHEMISTRY DATA ASSESSMENT

PROJECT NO. 89MC114V
LABORATORY ESE
LAB PROJECT NO. 5912031 0100
NO. OF SAMPLES/
MATRIX 119/SOIL

ANALYSIS DATE: 6/8/92

SITE NL/TARACORP SUPERFUND SITE

REVIEWER [illegible]
REVIEWER'S NAME WENDY REDBOLT
COMPLETION DATE 8/7/92

DATA ASSESSMENT SUMMARY

	ICP	AA	Hg	CN	OTHER
1. HOLDING TIMES		✓			
2. BLANKS		✓			
3. CCV		✓			
4. STANDARD MATRIX SPIKE		(1)			
5. MATRIX SPIKE		(2)(3)			
6. OTHER QC		NA			
7. OVERALL ASSESSMENT		O/M			

O = Data had no problems/or qualified due to minor problems.
M = Data qualified due to major problems.
Z = Data unacceptable.
X = Problems, but do not affect data.

ACTION ITEMS: (2) WWC5*450 NEGATIVE SAMPLE RECOVERY AND RPD OUTSIDE CONTROL RANGE. LAB ATTRIBUTES TO SAMPLE INHOMOGENEITY. DATA QUALIFIED AS ESTIMATED (J).

COMMENTS: (1) SP*NONE*2 AND SP*NONE*10 SAMPLE RECOVERY OUTSIDE CONTROL LIMITS; LAB ATTRIBUTES TO SPIKING ERRORS NO ACTION TAKEN.
(3) WWC5*549 SAMPLE RECOVERY OUTSIDE CONTROL RANGE. LAB ATTRIBUTES TO SPIKING ERROR. NO ACTION TAKEN.

METALS/WET CHEMISTRY DATA ASSESSMENT

PROJECT NO. 89MC114V
LABORATORY ESE
LAB PROJECT NO. 5912031 0100
NO. OF SAMPLES/
MATRIX 12C/SOIL

ANALYSIS DATE 6/9/92

SITE NL/TARACORP SUPERFUND SITE

REVIEWER [signature]
REVIEWER'S NAME WENDY REINBOLT
COMPLETION DATE 8/7/92

DATA ASSESSMENT SUMMARY

	ICP	AA	Hg	CN	OTHER
1. HOLDING TIMES		✓			
2. BLANKS		✓			
3. CCV		✓			
4. STANDARD MATRIX SPIKE		(1)			
5. MATRIX SPIKE		(2)(3)			
6. OTHER QC					
7. OVERALL ASSESSMENT					

O = Data had no problems/or qualified due to minor problems.
M = Data qualified due to major problems.
Z = Data unacceptable.
X = Problems, but do not affect data.

ACTION ITEMS: (2) WWC5*569, WWC5*629, WWC5*669 - RPD AND SAMPLE RECOVERY OUTSIDE CONTROL RANGE. LAB ATTRIBUTES TO SAMPLE INHOMOGENEITY AND SAMPLE MATRIX INTERFERENCE. DATA QUALIFIED AS ESTIMATED (J).

COMMENTS: (1) SP*NONE*4 SAMPLE RECOVERY OUTSIDE CONTROL RANGE; LAB ATTRIBUTES TO SPIKING ERRORS. NO ACTION TAKEN.
(3) WWC5*669 RPD AND SAMPLE RECOVERY OUTSIDE CONTROL RANGE LAB ATTRIBUTES TO SPIKING ERROR. NO ACTION TAKEN.

METALS/WET CHEMISTRY DATA ASSESSMENT

PROJECT NO. 89MC114V
LABORATORY ESE
LAB PROJECT NO. 5912031 0100
NO. OF SAMPLES/
MATRIX 240/SOIL
ANALYSIS DATE: 6/11/92

SITE NL/TARACORP SUPERFUND SITE
REVIEWER Wendy Reinbolt
REVIEWER'S NAME WENDY REINBOLT
COMPLETION DATE 8/7/92

DATA ASSESSMENT SUMMARY

	ICP	AA	Hg	CN	OTHER
1. HOLDING TIMES		✓			
2. BLANKS		✓			
3. CCV		✓			
4. STANDARD MATRIX SPIKE		✓			
5. MATRIX SPIKE		(1)(2)(3)			
6. OTHER QC		NA			
7. OVERALL ASSESSMENT		M/X			

O = Data had no problems/or qualified due to minor problems.
M = Data qualified due to major problems.
Z = Data unacceptable.
X = Problems, but do not affect data.

ACTION ITEMS: (2) WWC5*809, WWC5*869, WWC5*909, - SAMPLE RECOVERY AND RPD OUTSIDE CONTROL RANGE. LAB ATTRIBUTES TO SAMPLE INHOMOGENEITY AND MATRIX INTERFERENCE. DATA QUALIFIED AS ESTIMATED (J).

COMMENTS: (1) WWC5*749 SAMPLE RECOVERY SLIGHTLY HIGHER THAN CONTROL RANGE. NO ACTION TAKEN AND WWC5*869
(3) WWC5*789 - SAMPLE RECOVERY AND RPD OUTSIDE CONTROL RANGE. LAB ATTRIBUTES TO SPIKING ERRORS. NO ACTION TAKEN.

METALS/WET CHEMISTRY DATA ASSESSMENT

PROJECT NO. 89MC114V
LABORATORY ESE
LAB PROJECT NO. 5912031 C100
NO. OF SAMPLES/
MATRIX 90/SOIL
ANALYSIS DATE: 6/12/92

SITE NL/TARACORP SUPERFUND SITE

REVIEWER Wendy Reinbolt
REVIEWER'S NAME WENDY REINBOLT
COMPLETION DATE 8/7/92

DATA ASSESSMENT SUMMARY

	ICP	AA	Hg	CN	OTHER
1. HOLDING TIMES		✓			
2. BLANKS		✓			
3. CCV		✓			
4. STANDARD MATRIX SPIKE		✓			
5. MATRIX SPIKE		(1)			
6. OTHER QC		NA			
7. OVERALL ASSESSMENT		O/m			

O = Data had no problems/or qualified due to minor problems.
M = Data qualified due to major problems.
Z = Data unacceptable.
X = Problems, but do not affect data.

ACTION ITEMS: (1) WITH LOW SAMPLE RECOVERY AND RPD OUTSIDE CONTROL RANGE, LAB DOES NOT EXPLAIN. DATA QUALIFIED AS ESTIMATED (J).

COMMENTS:

MOISTURE

Pages 1 - 24

Environmental Science & Engineering, Inc.

St. Louis Chemistry Laboratory

11665 Lilburn Park Road
St. Louis, Missouri 63146-3535

Phone (314) 567-4600
Fax (314) 567-5030

Analytical Chemistry Results

STATUS: FINAL

PROJECT NAME: NL/TARACORP SUPERFUND SITE PREDESIGN FIELD INVESTIGATION, WWC89MC114V

PROJECT NUMBER: 5912031 0100 **REPORT DATE:** 07-30-92

SAMPLE MATRIX: SOIL **LAB MANAGER/QC REVIEW:** JEFFREY W. SIRIA

PROJECT MANAGER: JOHN F. GEMOULES **REPORT APPROVED BY:** FRANCIS Y. HUANG

SAMPLE I.D.	LABORATORY I.D.	COLLECTION DATE	RECEIVED DATE	MOISTURE, %WET WT METHOD: PB215192	EXTRACT. DATE	ANALYSIS DATE	CHEM. INIT.
SDE2133100A00L	WWC5*1	04/14/92	04/14/92	15.1		06/05/92	SGB
SDE2133100B00L	WWC5*2	04/14/92	04/14/92	16.4		06/05/92	SGB
SDE2133100C00L	WWC5*3	04/14/92	04/14/92	16.4		06/05/92	SGB
SDE2133200A00L	WWC5*4	04/14/92	04/14/92	13.4		06/05/92	SGB
SDE2133200B00L	WWC5*5	04/14/92	04/14/92	10.7		06/05/92	SGB
SDE2133200C00L	WWC5*6	04/14/92	04/14/92	15.2		06/05/92	SGB
SDE2154100A00L	WWC5*7	04/14/92	04/14/92	14.7		06/05/92	SGB
SDE2154100B00L	WWC5*8	04/14/92	04/14/92	16.1		06/05/92	SGB
SDE2154100C00L	WWC5*9	04/14/92	04/14/92	15.0		06/05/92	SGB
SDE2154200A00L	WWC5*10	04/14/92	04/14/92	7.7		06/05/92	SGB
SDE2154200B00L	WWC5*11	04/14/92	04/14/92	10.1		06/05/92	SGB
SDE2154200C00L	WWC5*12	04/14/92	04/14/92	13.2		06/05/92	SGB
SCL2116100A00L	WWC5*13	04/15/92	04/15/92	16.8		06/05/92	SGB
SCL2116100B00L	WWC5*14	04/15/92	04/15/92	17.7		06/05/92	SGB
SCL2116100C00L	WWC5*15	04/15/92	04/15/92	17.3		06/05/92	SGB
SCL2116200A00L	WWC5*16	04/15/92	04/15/92	15.2		06/05/92	SGB
SCL2116200B00L	WWC5*17	04/15/92	04/15/92	16.9		06/05/92	SGB
SCL2116200C00L	WWC5*18	04/15/92	04/15/92	17.3		06/05/92	SGB
SCL2133100A00L	WWC5*19	04/15/92	04/15/92	12.2		06/05/92	SGB
SCL2133100B00L	WWC5*20	04/15/92	04/15/92	16.3		06/05/92	SGB
SCL2133100C00L	WWC5*21	04/15/92	04/15/92	14.6		06/05/92	SGB
SCL2133200A00L	WWC5*22	04/15/92	04/15/92	10.6		06/05/92	SGB
SCL2133200B00L	WWC5*23	04/15/92	04/15/92	11.6		06/05/92	SGB
SCL2133200C00L	WWC5*24	04/15/92	04/15/92	13.1		06/05/92	SGB
SCL2134100A00L	WWC5*25	04/15/92	04/15/92	15.6		06/05/92	SGB
SCL2134100B00L	WWC5*26	04/15/92	04/15/92	17.0		06/05/92	SGB
SCL2134100C00L	WWC5*27	04/15/92	04/15/92	17.6		06/05/92	SGB
SCL2134200A00L	WWC5*28	04/15/92	04/15/92	15.9		06/05/92	SGB
SCL2134200B00L	WWC5*29	04/15/92	04/15/92	16.9		06/05/92	SGB
SCL2134200C00L	WWC5*30	04/15/92	04/15/92	18.3		06/05/92	SGB
SCL2138100A00L	WWC5*31	04/15/92	04/15/92	14.4		06/05/92	SGB
SCL2138100B00L	WWC5*32	04/15/92	04/15/92	18.0		06/05/92	SGB
SCL2138100C00L	WWC5*33	04/15/92	04/15/92	19.1		06/05/92	SGB
SCL2138200A00L	WWC5*34	04/15/92	04/15/92	15.5		06/05/92	SGB
SCL2138200B00L	WWC5*35	04/15/92	04/15/92	15.6		06/05/92	SGB
SCL2138200C00L	WWC5*36	04/15/92	04/15/92	15.5		06/05/92	SGB
SCL2141100A00L	WWC5*37	04/15/92	04/15/92	12.8		06/05/92	SGB
SCL2141100B00L	WWC5*38	04/15/92	04/15/92	12.7		06/05/92	SGB
SCL2141100C00L	WWC5*39	04/15/92	04/15/92	13.9		06/05/92	SGB
SCL2141200A00L	WWC5*40	04/15/92	04/15/92	12.9		06/05/92	SGB
SCL2141200B00L	WWC5*41	04/15/92	04/15/92	14.3		06/05/92	SGB
SCL2141200C00L	WWC5*42	04/15/92	04/15/92	15.4		06/05/92	SGB

Environmental Science & Engineering, Inc.

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Analytical Chemistry Res

STATUS: FINAL

PROJECT NAME: NL/TARACORP SUPERFUND SITE PREDESIGN FIELD INVESTIGATION, WWC89MC114V

PROJECT NUMBER: 5912031 0100 **REPORT DATE:** 07-30-92

SAMPLE MATRIX: SOIL **LAB MANAGER/QC REVIEW:** JEFFREY W. SIRIA

PROJECT MANAGER: JOHN F. GEMOULES **REPORT APPROVED BY:** FRANCIS Y. HUANG

SAMPLE I.D.	LABORATORY I.D.	COLLECTION DATE	RECEIVED DATE	MOISTURE, %WET WT METHOD: PB215192	EXTRACT. DATE	ANALYSIS DATE	CHEM. INIT.
SCL2158100A00L	WWC5*43	04/15/92	04/15/92	14.1		06/05/92	SGB
SCL2158100B00L	WWC5*44	04/15/92	04/15/92	15.4		06/05/92	SGB
SCL2158100C00L	WWC5*45	04/15/92	04/15/92	17.7		06/05/92	SGB
SCL2158200A00L	WWC5*46	04/15/92	04/15/92	20.2		06/05/92	SGB
SCL2158200B00L	WWC5*47	04/15/92	04/15/92	19.4		06/05/92	SGB
SCL2158200C00L	WWC5*48	04/15/92	04/15/92	19.1		06/05/92	SGB
SDE1633100A00L	WWC5*49	04/15/92	04/15/92	16.1		06/05/92	SGB
SDE1633100B00L	WWC5*50	04/15/92	04/15/92	16.8		06/05/92	SGB
SDE1633100C00L	WWC5*51	04/15/92	04/15/92	16.1		06/05/92	SGB
SDE1633200A00L	WWC5*52	04/15/92	04/15/92	16.3		06/05/92	SGB
SDE1633200B00L	WWC5*53	04/15/92	04/15/92	17.1		06/05/92	SGB
SDE1633200C00L	WWC5*54	04/15/92	04/15/92	17.1		06/05/92	SGB
SED1708100A00L	WWC5*55	04/15/92	04/15/92	22.4		06/05/92	SGB
SED1708100B00L	WWC5*56	04/15/92	04/15/92	21.5		06/05/92	SGB
SED1708100C00L	WWC5*57	04/15/92	04/15/92	23.6		06/05/92	SGB
SED1708200A00L	WWC5*58	04/15/92	04/15/92	12.3		06/05/92	SGB
SED1708200B00L	WWC5*59	04/15/92	04/15/92	17.7		06/05/92	SGB
SED1708200C00L	WWC5*60	04/15/92	04/15/92	19.2		06/05/92	SGB
SAD1940100A00L	WWC5*61	04/15/92	04/15/92	14.9		06/05/92	SGB
SAD1940100B00L	WWC5*62	04/15/92	04/15/92	10.7		06/05/92	SGB
SAD1940100C00L	WWC5*63	04/15/92	04/15/92	13.6		06/05/92	SGB
SAD1940200A00L	WWC5*64	04/15/92	04/15/92	7.9		06/05/92	SGB
SAD1940200B00L	WWC5*65	04/15/92	04/15/92	9.6		06/05/92	SGB
SAD1940200C00L	WWC5*66	04/15/92	04/15/92	12.9		06/10/92	CAG
SED2052100A00L	WWC5*67	04/15/92	04/15/92	12.7		06/05/92	SGB
SED2052100B00L	WWC5*68	04/15/92	04/15/92	13.8		06/05/92	SGB
SED2052100C00L	WWC5*69	04/15/92	04/15/92	14.7		06/05/92	SGB
SED2052200A00L	WWC5*70	04/15/92	04/15/92	7.1		06/05/92	SGB
SED2052200B00L	WWC5*71	04/15/92	04/15/92	9.2		06/05/92	SGB
SED2052200C00L	WWC5*72	04/15/92	04/15/92	20.0		06/05/92	SGB
SST2256200A00L	WWC5*73	04/15/92	04/15/92	7.8		06/05/92	SGB
SST2256200B00L	WWC5*74	04/15/92	04/15/92	11.9		06/05/92	SGB
SST2256200C00L	WWC5*75	04/15/92	04/15/92	15.1		06/05/92	SGB
SBE2101100A00L	WWC5*76	04/16/92	04/16/92	17.8		06/05/92	SGB
SBE2101100B00L	WWC5*77	04/16/92	04/16/92	11.6		06/05/92	SGB
SBE2101100C00L	WWC5*78	04/16/92	04/16/92	22.0		06/08/92	CAG
SBE2101200A00L	WWC5*79	04/16/92	04/16/92	18.6		06/08/92	CAG
SBE2101200B00L	WWC5*80	04/16/92	04/16/92	12.4		06/08/92	CAG
SBE2101200C00L	WWC5*81	04/16/92	04/16/92	14.0		06/08/92	CAG
SBE2119100A00L	WWC5*82	04/16/92	04/16/92	17.9		06/08/92	CAG
SBE2119100B00L	WWC5*83	04/16/92	04/16/92	13.4		06/08/92	CAG
SBE2119100C00L	WWC5*84	04/16/92	04/16/92	13.8		06/08/92	CAG

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Analytical Chemistry Results

STATUS: FINAL

PROJECT NAME: NL/TARACORP SUPERFUND SITE PREDESIGN FIELD INVESTIGATION, WWC89MC114V

PROJECT NUMBER: 5912031 0100 **REPORT DATE:** 07-30-92

SAMPLE MATRIX: SOIL **LAB MANAGER/QC REVIEW:** JEFFREY W. SIRIA

PROJECT MANAGER: JOHN F. GEMOULES **REPORT APPROVED BY:** FRANCIS Y. HUANG

SAMPLE I.D.	LABORATORY I.D.	COLLECTION DATE	RECEIVED DATE	MOISTURE, %WET WT METHOD: PB215192	EXTRACT. DATE	ANALYSIS DATE	CHEM. INIT.
SBE2119200A00L	WWC5*85	04/16/92	04/16/92	18.1		06/08/92	CAG
SBE2119200B00L	WWC5*86	04/16/92	04/16/92	18.3		06/08/92	CAG
SBE2119200C00L	WWC5*87	04/16/92	04/16/92	19.0		06/08/92	CAG
SBE2119100A0LD	WWC5*88	04/16/92	04/16/92	16.3		06/08/92	CAG
SBE2119100B0LD	WWC5*89	04/16/92	04/16/92	13.2		06/08/92	CAG
SBE2119100C0LD	WWC5*90	04/16/92	04/16/92	14.1		06/08/92	CAG
SBE1934100A00L	WWC5*91	04/16/92	04/16/92	13.1		06/08/92	CAG
SBE1934100B00L	WWC5*92	04/16/92	04/16/92	9.8		06/08/92	CAG
SBE1934100C00L	WWC5*93	04/16/92	04/16/92	9.4		06/16/92	CAG
SBE1934200A00L	WWC5*94	04/16/92	04/16/92	14.3		06/16/92	CAG
SBE1934200A00L	WWC5*95	04/16/92	04/16/92	13.3		06/16/92	CAG
SBE1934200C00L	WWC5*96	04/16/92	04/16/92	11.5		06/08/92	CAG
SBE1920100A00L	WWC5*97	04/16/92	04/16/92	14.3		06/08/92	CAG
SBE1920100B00L	WWC5*98	04/16/92	04/16/92	9.4		06/09/92	CAG
SBE1920100C00L	WWC5*99	04/16/92	04/16/92	7.4		06/09/92	CAG
SBE1920200A00L	WWC5*100	04/16/92	04/16/92	15.5		06/09/92	CAG
SBE1920200B00L	WWC5*101	04/16/92	04/16/92	10.7		06/09/92	CAG
SBE1920200C00L	WWC5*102	04/16/92	04/16/92	8.3		06/09/92	CAG
SBE1931100A00L	WWC5*103	04/16/92	04/16/92	12.6		06/09/92	CAG
SBE1931100B00L	WWC5*104	04/16/92	04/16/92	12.1		06/09/92	CAG
SBE1931100C00L	WWC5*105	04/16/92	04/16/92	10.8		06/09/92	CAG
SBE1931200A00L	WWC5*106	04/16/92	04/16/92	13.6		06/09/92	CAG
SBE1931200B00L	WWC5*107	04/16/92	04/16/92	14.7		06/09/92	CAG
SBE1931200C00L	WWC5*108	04/16/92	04/16/92	13.0		06/09/92	CAG
SMA1415100A00L	WWC5*109	04/16/92	04/16/92	15.1		06/09/92	CAG
SMA1415100B00L	WWC5*110	04/16/92	04/16/92	15.6		06/09/92	CAG
SMA1415100C00L	WWC5*111	04/16/92	04/16/92	20.7		06/09/92	CAG
SMA1415200A00L	WWC5*112	04/16/92	04/16/92	17.9		06/09/92	CAG
SMA1415200B00L	WWC5*113	04/16/92	04/16/92	17.7		06/09/92	CAG
SMA1415200C00L	WWC5*114	04/16/92	04/16/92	12.7		06/09/92	CAG
SIO1421100A00L	WWC5*115	04/16/92	04/16/92	19.2		06/09/92	CAG
SIO1421100B00L	WWC5*116	04/16/92	04/16/92	16.8		06/09/92	CAG
SIO1421100C00L	WWC5*117	04/16/92	04/16/92	10.7		06/09/92	CAG
SIO1421200A00L	WWC5*118	04/16/92	04/16/92	11.6		06/09/92	CAG
SIO1421200B00L	WWC5*119	04/16/92	04/16/92	35.4		06/09/92	CAG
SIO1421200C00L	WWC5*120	04/16/92	04/16/92	21.0		06/09/92	CAG
SIO1421100A0LD	WWC5*121	04/16/92	04/16/92	17.8		06/09/92	CAG
SIO1421100B0LD	WWC5*122	04/16/92	04/16/92	17.0		06/09/92	CAG
SIO1421100C0LD	WWC5*123	04/16/92	04/16/92	15.6		06/09/92	CAG
SIO1423100A00L	WWC5*124	04/16/92	04/16/92	19.2		06/09/92	CAG
SIO1423100B00L	WWC5*125	04/16/92	04/16/92	18.8		06/09/92	CAG
SIO1423100C00L	WWC5*126	04/16/92	04/16/92	17.6		06/09/92	CAG

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Analytical Chemistry R

STATUS: FINAL

PROJECT NAME: NL/TARACORP SUPERFUND SITE PREDESIGN FIELD INVESTIGATION, WWC89MC114V

PROJECT NUMBER: 5912031 0100 **REPORT DATE:** 07-30-92

SAMPLE MATRIX: SOIL **LAB MANAGER/QC REVIEW:** JEFFREY W. SIRIA

PROJECT MANAGER: JOHN F. GEMOULES **REPORT APPROVED BY:** FRANCIS Y. HUANG

SAMPLE I.D.	LABORATORY I.D.	COLLECTION DATE	RECEIVED DATE	MOISTURE, %WET WT METHOD: PB215192	EXTRACT. DATE	ANALYSIS DATE	CHE INI
SIO1423200A00L	WWC5*127	04/16/92	04/16/92	20.4		06/09/92	CA
SIO1423200B00L	WWC5*128	04/16/92	04/16/92	17.6		06/09/92	CA
SIO1423200C00L	WWC5*129	04/16/92	04/16/92	18.6		06/09/92	CA
SMA1420100A00L	WWC5*130	04/16/92	04/16/92	20.2		06/09/92	CA
SMA1420100B00L	WWC5*131	04/16/92	04/16/92	13.7		06/09/92	CA
SMA1420100C00L	WWC5*132	04/16/92	04/16/92	17.3		06/09/92	CA
SMA1420200A00L	WWC5*133	04/16/92	04/16/92	20.9		06/09/92	CA
SMA1420200B00L	WWC5*134	04/16/92	04/16/92	18.0		06/09/92	CA
SMA1420200C00L	WWC5*135	04/16/92	04/16/92	14.5		06/09/92	CA
SGR2167100A00L	WWC5*136	04/16/92	04/16/92	14.1		06/09/92	CA
SGR2167100B00L	WWC5*137	04/16/92	04/16/92	9.9		06/09/92	CA
SGR2167100C00L	WWC5*138	04/16/92	04/16/92	8.2		06/09/92	CA
SGR2167200A00L	WWC5*139	04/16/92	04/16/92	21.5		06/09/92	CA
SGR2167200B00L	WWC5*140	04/16/92	04/16/92	16.9		06/09/92	CA
SGR2167200C00L	WWC5*141	04/16/92	04/16/92	16.7		06/09/92	CA
SGR2151100A00L	WWC5*142	04/16/92	04/16/92	19.7		06/09/92	CA
SGR2151100B00L	WWC5*143	04/16/92	04/16/92	17.6		06/09/92	CA
SGR2151100C00L	WWC5*144	04/16/92	04/16/92	15.2		06/09/92	CA
SGR2151200A00L	WWC5*145	04/16/92	04/16/92	13.1		06/09/92	CA
SGR2151200B00L	WWC5*146	04/16/92	04/16/92	10.1		06/09/92	CA
SGR2151200C00L	WWC5*147	04/16/92	04/16/92	11.7		06/09/92	CA
SBE2264100A00L	WWC5*148	04/17/92	04/17/92	20.2		06/09/92	CA
SBE2264100B00L	WWC5*149	04/17/92	04/17/92	17.9		06/09/92	CA
SBE2264100C00L	WWC5*150	04/17/92	04/17/92	15.6		06/09/92	CA
SBE2264200A00L	WWC5*151	04/17/92	04/17/92	14.4		06/09/92	CA
SBE2264200B00L	WWC5*152	04/17/92	04/17/92	12.3		06/09/92	CAG
SBE2264200C00L	WWC5*153	04/17/92	04/17/92	10.4		06/09/92	CAG
SBE2252200A00L	WWC5*154	04/17/92	04/17/92	20.0		06/09/92	CAG
SBE2252200B00L	WWC5*155	04/17/92	04/17/92	18.1		06/09/92	CAG
SBE2252200C00L	WWC5*156	04/17/92	04/17/92	18.0		06/09/92	CAG
SGR2251100A00L	WWC5*157	04/17/92	04/17/92	19.3		06/11/92	CAG
SGR2251100B00L	WWC5*158	04/17/92	04/17/92	17.3		06/10/92	RLW
SGR2251100C00L	WWC5*159	04/17/92	04/17/92	12.7		06/10/92	RL
SGR2251200A00L	WWC5*160	04/17/92	04/17/92	20.2		06/10/92	RL
SGR2251200B00L	WWC5*161	04/17/92	04/17/92	19.7		06/10/92	RL
SGR2251200C00L	WWC5*162	04/17/92	04/17/92	19.7		06/10/92	RL
SGR2253100A00L	WWC5*163	04/17/92	04/17/92	19.8		06/10/92	RL
SGR2253100B00L	WWC5*164	04/17/92	04/17/92	18.9		06/10/92	RL
SGR2253100C00L	WWC5*165	04/17/92	04/17/92	13.2		06/10/92	RL
SGR2253200A00L	WWC5*166	04/17/92	04/17/92	24.2		06/10/92	RL
SGR2253200B00L	WWC5*167	04/17/92	04/17/92	17.5		06/10/92	RL
SGR2253200C00L	WWC5*168	04/17/92	04/17/92	16.1		06/10/92	RL

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STATUS: FINAL

PROJECT NAME: NL/TARACORP SUPERFUND SITE PREDESIGN FIELD INVESTIGATION, WWC89MC114V

PROJECT NUMBER: 5912031 0100 **REPORT DATE:** 07-30-92

SAMPLE MATRIX: SOIL **LAB MANAGER/QC REVIEW:** JEFFREY W. SIRIA

PROJECT MANAGER: JOHN F. GEMOULES **REPORT APPROVED BY:** FRANCIS Y. HUANG

SAMPLE I.D.	LABORATORY I.D.	COLLECTION DATE	RECEIVED DATE	MOISTURE, %WET WT METHOD: PB215192	EXTRACT. DATE	ANALYSIS DATE	CHEM. INIT.
SCL2250100A00L	WWC5*169	04/21/92	04/21/92	22.6		06/10/92	RLW
SCL2250100B00L	WWC5*170	04/21/92	04/21/92	20.6		06/10/92	RLW
SCL2250100C00L	WWC5*171	04/21/92	04/21/92	19.2		06/10/92	RLW
SCL2250200A00L	WWC5*172	04/21/92	04/21/92	23.0		06/10/92	RLW
SCL2250200B00L	WWC5*173	04/21/92	04/21/92	20.3		06/10/92	RLW
SCL2250200C00L	WWC5*174	04/21/92	04/21/92	19.8		06/10/92	RLW
SCL2257100A00L	WWC5*175	04/21/92	04/21/92	27.1		06/10/92	RLW
SCL2257100B00L	WWC5*176	04/21/92	04/21/92	22.6		06/10/92	RLW
SCL2257100C00L	WWC5*177	04/21/92	04/21/92	19.6		06/10/92	RLW
SCL2257200A00L	WWC5*178	04/21/92	04/21/92	22.9		06/10/92	RLW
SCL2257200B00L	WWC5*179	04/21/92	04/21/92	22.5		06/10/92	RLW
SCL2257200C00L	WWC5*180	04/21/92	04/21/92	19.5		06/10/92	RLW
SCL2258100A00L	WWC5*181	04/21/92	04/21/92	20.5		06/10/92	RLW
SCL2258100B00L	WWC5*182	04/21/92	04/21/92	17.8		06/10/92	RLW
SCL2258100C00L	WWC5*183	04/21/92	04/21/92	18.5		06/10/92	RLW
SCL2258200A00L	WWC5*184	04/21/92	04/21/92	24.3		06/10/92	RLW
SCL2258200B00L	WWC5*185	04/21/92	04/21/92	19.7		06/10/92	RLW
SCL2258200C00L	WWC5*186	04/21/92	04/21/92	19.9		06/10/92	RLW
SCL2262100A00L	WWC5*187	04/21/92	04/21/92	27.0		06/10/92	RLW
SCL2262100B00L	WWC5*188	04/21/92	04/21/92	24.1		06/10/92	RLW
SCL2262100C00L	WWC5*189	04/21/92	04/21/92	19.4		06/10/92	RLW
SCL2262100A0LD	WWC5*190	04/21/92	04/21/92	24.2		06/10/92	RLW
SCL2262100B0LD	WWC5*191	04/21/92	04/21/92	22.0		06/10/92	RLW
SCL2262100C0LD	WWC5*192	04/21/92	04/21/92	19.9		06/10/92	RLW
SCL2262200A00L	WWC5*193	04/21/92	04/21/92	21.5		06/10/92	RLW
SCL2262200B00L	WWC5*194	04/21/92	04/21/92	20.1		06/10/92	RLW
SCL2262200C00L	WWC5*195	04/21/92	04/21/92	20.8		06/10/92	RLW
SCL2214100A00L	WWC5*196	04/21/92	04/21/92	21.3		06/10/92	RLW
SCL2214100B00L	WWC5*197	04/21/92	04/21/92	19.7		07/10/92	RLW
SCL2214100C00L	WWC5*198	04/21/92	04/21/92	18.2		07/10/92	RLW
SCL2214200A00L	WWC5*199	04/21/92	04/21/92	23.9		07/10/92	RLW
SCL2214200B00L	WWC5*200	04/21/92	04/21/92	21.7		07/10/92	RLW
SCL2214200C00L	WWC5*201	04/21/92	04/21/92	19.0		07/10/92	RLW
SCL2225100A00L	WWC5*202	04/21/92	04/21/92	26.4		07/10/92	RLW
SCL2225100B00L	WWC5*203	04/21/92	04/21/92	22.7		07/10/92	RLW
SCL2225100C00L	WWC5*204	04/21/92	04/21/92	18.6		07/10/92	RLW
SCL2225200A00L	WWC5*205	04/21/92	04/21/92	24.0		07/10/92	RLW
SCL2225200B00L	WWC5*206	04/21/92	04/21/92	21.4		07/10/92	RLW
SCL2225200C00L	WWC5*207	04/21/92	04/21/92	21.0		07/10/92	RLW
SED2117100A00L	WWC5*208	04/21/92	04/21/92	20.0		07/10/92	RLW
SED2117100B00L	WWC5*209	04/21/92	04/21/92	16.7		07/10/92	RLW
SED2117100C00L	WWC5*210	04/21/92	04/21/92	14.4		06/10/92	CAG

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Analytical Chemistry Res

STATUS: FINAL

PROJECT NAME: NL/TARACORP SUPERFUND SITE PREDESIGN FIELD INVESTIGATION, WWC89MC114V

PROJECT NUMBER: 5912031 0100 **REPORT DATE:** 07-30-92

SAMPLE MATRIX: SOIL **LAB MANAGER/QC REVIEW:** JEFFREY W. SIRIA

PROJECT MANAGER: JOHN F. GEMOULES **REPORT APPROVED BY:** FRANCIS Y. HUANG

SAMPLE I.D.	LABORATORY I.D.	COLLECTION DATE	RECEIVED DATE	MOISTURE, %WET WT METHOD: PB215192	EXTRACT. DATE	ANALYSIS DATE	CHEM. INIT.
SED2117100A0LD	WWC5*211	04/21/92	04/21/92	22.1		06/10/92	CAG
SED2117100B0LD	WWC5*212	04/21/92	04/21/92	17.9		06/10/92	CAG
SED2117100C0LD	WWC5*213	04/21/92	04/21/92	14.9		06/10/92	CAG
SED2118200A00L	WWC5*214	04/21/92	04/21/92	17.5		06/10/92	CAG
SED2118200B00L	WWC5*215	04/21/92	04/21/92	15.8		06/10/92	CAG
SED2118200C00L	WWC5*216	04/21/92	04/21/92	13.5		06/10/92	CAG
SDE2259100A00L	WWC5*217	04/21/92	04/21/92	20.6		06/10/92	CAG
SDE2259100B00L	WWC5*218	04/21/92	04/21/92	20.2		06/10/92	CAG
SDE2259100C00L	WWC5*219	04/21/92	04/21/92	19.7		06/10/92	CAG
SDE2259200A00L	WWC5*220	04/21/92	04/21/92	21.6		06/10/92	CAG
SDE2259200B00L	WWC5*221	04/21/92	04/21/92	19.0		06/10/92	CAG
SDE2259200C00L	WWC5*222	04/21/92	04/21/92	19.6		06/10/92	CAG
SED2138100A00L	WWC5*223	04/21/92	04/21/92	19.5		06/10/92	CAG
SED2138100B00L	WWC5*224	04/21/92	04/21/92	19.2		06/10/92	CAG
SED2138100C00L	WWC5*225	04/21/92	04/21/92	17.0		06/10/92	CAG
SED2138200A00L	WWC5*226	04/21/92	04/21/92	17.5		06/11/92	CAG
SED2138200B00L	WWC5*227	04/21/92	04/21/92	22.5		06/11/92	CAG
SED2138200C00L	WWC5*228	04/21/92	04/21/92	19.6		06/11/92	CAG
SED2142100A00L	WWC5*229	04/21/92	04/21/92	19.0		06/11/92	CAG
SED2142100B00L	WWC5*230	04/21/92	04/21/92	17.4		06/11/92	CAG
SED2142100C00L	WWC5*231	04/21/92	04/21/92	17.2		06/11/92	CAG
SED2142100A0LD	WWC5*232	04/21/92	04/21/92	18.7		06/11/92	CAG
SED2142100B0LD	WWC5*233	04/21/92	04/21/92	17.9		06/11/92	CAG
SED2142100C0LD	WWC5*234	04/21/92	04/21/92	16.1		06/11/92	CAG
SED2142200A00L	WWC5*235	04/21/92	04/21/92	26.0		06/11/92	CAG
SED2142200B00L	WWC5*236	04/21/92	04/21/92	25.8		06/11/92	CAG
SED2142200C00L	WWC5*237	04/21/92	04/21/92	23.1		06/11/92	CAG
SDE2222100A00L	WWC5*238	04/21/92	04/21/92	21.8		06/11/92	CAG
SDE2222100B00L	WWC5*239	04/21/92	04/21/92	21.6		06/11/92	CAG
DE→ SDE2222100C00L	WWC5*240	04/21/92	04/21/92	20.2		06/11/92	CAG
SDE2222200A00L	WWC5*241	04/21/92	04/21/92	20.8		06/11/92	CAG
SDE2222200B00L	WWC5*242	04/21/92	04/21/92	19.8		06/11/92	CAG
SDE2222200C00L	WWC5*243	04/21/92	04/21/92	18.7		06/11/92	CAG
SMA2025100A00L	WWC5*244	04/22/92	04/22/92	23.3		06/11/92	CAG
SMA2025100B00L	WWC5*245	04/22/92	04/22/92	20.9		06/11/92	CAG
SMA2025100C00L	WWC5*246	04/22/92	04/22/92	19.4		06/11/92	CAG
SMA2025200A00L	WWC5*247	04/22/92	04/22/92	6.8		06/11/92	CAG
SMA2025200B00L	WWC5*248	04/22/92	04/22/92	9.0		06/11/92	CAG
SMA2025200C00L	WWC5*249	04/22/92	04/22/92	16.0		06/11/92	CAG
SST2157100A00L	WWC5*250	04/22/92	04/22/92	21.3		06/11/92	CAG
SST2157100B00L	WWC5*251	04/22/92	04/22/92	20.4		06/11/92	CAG
SST2157100C00L	WWC5*252	04/22/92	04/22/92	17.9		06/11/92	CAG

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Analytical Chemistry Results

STATUS: FINAL

PROJECT NAME: NL/TARACORP SUPERFUND SITE PREDESIGN FIELD INVESTIGATION, WWC89MC114V

PROJECT NUMBER: 5912031 0100 **REPORT DATE:** 07-30-92

SAMPLE MATRIX: SOIL **LAB MANAGER/QC REVIEW:** JEFFREY W. SIRIA

PROJECT MANAGER: JOHN F. GEMOULES **REPORT APPROVED BY:** FRANCIS Y. HUANG

SAMPLE I.D.	LABORATORY I.D.	COLLECTION DATE	RECEIVED DATE	MOISTURE, %WET WT METHOD: PB215192	EXTRACT. DATE	ANALYSIS DATE	CHEM. INIT.
SST2157200A00L	WWC5*253	04/22/92	04/22/92	23.1		06/11/92	CAG
SST2157200B00L	WWC5*254	04/22/92	04/22/92	19.8		06/11/92	CAG
SST2157200C00L	WWC5*255	04/22/92	04/22/92	20.2		06/11/92	CAG
SCL2230100A00L	WWC5*256	04/22/92	04/22/92	19.4		06/11/92	CAG
SCL2230100B00L	WWC5*257	04/22/92	04/22/92	19.4		06/11/92	CAG
SCL2230100C00L	WWC5*258	04/22/92	04/22/92	18.6		06/11/92	CAG
SCL2230200A00L	WWC5*259	04/22/92	04/22/92	20.9		06/11/92	CAG
SCL2230200B00L	WWC5*260	04/22/92	04/22/92	19.1		06/11/92	CAG
SCL2230200C00L	WWC5*261	04/22/92	04/22/92	18.7		06/11/92	CAG
SMA1429100A00L	WWC5*262	04/22/92	04/22/92	22.9		06/11/92	CAG
SMA1429100B00L	WWC5*263	04/22/92	04/22/92	24.8		06/11/92	CAG
SMA1429100C00L	WWC5*264	04/22/92	04/22/92	22.9		06/11/92	CAG
SMA1429200A00L	WWC5*265	04/22/92	04/22/92	21.9		06/11/92	CAG
SMA1429200B00L	WWC5*266	04/22/92	04/22/92	18.3		06/11/92	EAJ
SMA1429200C00L	WWC5*267	04/22/92	04/22/92	21.7		06/11/92	EAJ
SMA1439100A00L	WWC5*268	04/22/92	04/22/92	19.0		06/11/92	EAJ
SMA1439100B00L	WWC5*269	04/22/92	04/22/92	17.9		06/11/92	EAJ
SMA1439100C00L	WWC5*270	04/22/92	04/22/92	17.1		06/11/92	EAJ
SST2247100A00L	WWC5*275	04/22/92	04/22/92	17.8		06/11/92	EAJ
SST2247100B00L	WWC5*276	04/22/92	04/22/92	18.5		06/11/92	EAJ
SST2247100C00L	WWC5*277	04/22/92	04/22/92	19.7		06/11/92	EAJ
SST2247200A00L	WWC5*278	04/22/92	04/22/92	16.0		06/11/92	EAJ
SST2247200B00L	WWC5*279	04/22/92	04/22/92	17.7		06/11/92	EAJ
SST2247200C00L	WWC5*280	04/22/92	04/22/92	17.8		06/11/92	EAJ
SST2228100A00L	WWC5*281	04/22/92	04/22/92	24.4		06/11/92	EAJ
SST2228100B00L	WWC5*282	04/22/92	04/22/92	20.5		06/11/92	EAJ
SST2228100C00L	WWC5*283	04/22/92	04/22/92	18.8		06/11/92	EAJ
SST2228200A00L	WWC5*284	04/22/92	04/22/92	18.6		06/11/92	EAJ
SST2228200B00L	WWC5*285	04/22/92	04/22/92	17.1		06/11/92	EAJ
SST2228200C00L	WWC5*286	04/22/92	04/22/92	21.0		06/11/92	EAJ
SST2230100A00L	WWC5*287	04/22/92	04/22/92	23.2		06/11/92	EAJ
SST2230100B00L	WWC5*288	04/22/92	04/22/92	22.5		06/11/92	EAJ
SST2230100C00L	WWC5*289	04/22/92	04/22/92	20.7		06/11/92	EAJ
SST2230200A00L	WWC5*290	04/22/92	04/22/92	21.4		06/11/92	EAJ
SST2230200B00L	WWC5*291	04/22/92	04/22/92	21.8		06/11/92	EAJ
SST2230200C00L	WWC5*292	04/22/92	04/22/92	22.2		06/11/92	EAJ
SAD2124100A00L	WWC5*293	04/23/92	04/23/92	18.5		06/11/92	EAJ
SAD2124100B00L	WWC5*294	04/23/92	04/23/92	18.6		06/11/92	EAJ

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Analytical Chemistry Re:

STATUS: FINAL

PROJECT NAME: NL/TARACORP SUPERFUND SITE PREDESIGN FIELD INVESTIGATION, WWC89MC114V

PROJECT NUMBER: 5912031 0100 **REPORT DATE:** 07-30-92

SAMPLE MATRIX: SOIL **LAB MANAGER/QC REVIEW:** JEFFREY W. SIRIA

PROJECT MANAGER: JOHN F. GEMOULES **REPORT APPROVED BY:** FRANCIS Y. HUANG

SAMPLE I.D.	LABORATORY I.D.	COLLECTION DATE	RECEIVED DATE	MOISTURE, %WET WT METHOD: PB215192	EXTRACT. DATE	ANALYSIS DATE	CHEM. INIT.
SAD2124100C00L	WWC5*295	04/23/92	04/23/92	19.1		06/11/92	EAJ
SAD2124200A00L	WWC5*296	04/23/92	04/23/92	18.8		06/11/92	EAJ
SAD2124200B00L	WWC5*297	04/23/92	04/23/92	16.7		06/11/92	EAJ
SAD2124200C00L	WWC5*298	04/23/92	04/23/92	14.0		06/11/92	EAJ
SGR2246200A00L	WWC5*299	04/23/92	04/23/92	29.6		06/11/92	EAJ
SGR2246200B00L	WWC5*300	04/23/92	04/23/92	18.4		06/11/92	EAJ
SGR2246200C00L	WWC5*301	04/23/92	04/23/92	14.9		06/11/92	EAJ
SGR1714200A00L	WWC5*302	04/23/92	04/23/92	22.9		06/11/92	EAJ
SGR1714200B00L	WWC5*303	04/23/92	04/23/92	20.6		06/11/92	EAJ
SGR1714200C00L	WWC5*304	04/23/92	04/23/92	20.3		06/11/92	EAJ
SGR1401100A00L	WWC5*305	04/23/92	04/23/92	19.5		06/11/92	EAJ
SGR1401100B00L	WWC5*306	04/23/92	04/23/92	15.8		06/12/92	EAJ
SGR1401100C00L	WWC5*307	04/23/92	04/23/92	16.3		06/12/92	EAJ
SGR1401200A00L	WWC5*308	04/23/92	04/23/92	16.6		06/12/92	EAJ
SGR1401200B00L	WWC5*309	04/23/92	04/23/92	11.8		06/12/92	EAJ
SGR1401200C00L	WWC5*310	04/23/92	04/23/92	16.3		06/12/92	EAJ
SGR1415100A00L	WWC5*311	04/23/92	04/23/92	23.5		06/12/92	EAJ
SGR1415100B00L	WWC5*312	04/23/92	04/23/92	18.0		06/12/92	EAJ
SGR1415100C00L	WWC5*313	04/23/92	04/23/92	19.4		06/12/92	EAJ
SGR1415200A00L	WWC5*314	04/23/92	04/23/92	26.4		06/12/92	EAJ
SGR1415200B00L	WWC5*315	04/23/92	04/23/92	20.1		06/12/92	EAJ
SGR1415200C00L	WWC5*316	04/23/92	04/23/92	20.5		06/12/92	EAJ
SGR2224200B00L	WWC5*317	04/23/92	04/23/92	19.2		06/12/92	EAJ
SGR2224200C00L	WWC5*318	04/23/92	04/23/92	18.6		06/12/92	EAJ
SGR2220100A00L	WWC5*319	04/23/92	04/23/92	25.3		06/15/92	EAJ
SGR2220100B00L	WWC5*320	04/23/92	04/23/92	22.6		06/15/92	EAJ
SGR2220100C00L	WWC5*321	04/23/92	04/23/92	18.4		06/15/92	EAJ
SGR2220200A00L	WWC5*322	04/23/92	04/23/92	22.6		06/15/92	EAJ
SGR2220200B00L	WWC5*323	04/23/92	04/23/92	20.3		06/15/92	EAJ
SGR2220200C00L	WWC5*324	04/23/92	04/23/92	22.4		06/15/92	EAJ
SGR2216100A00L	WWC5*325	04/23/92	04/23/92	21.6		06/15/92	EAJ
SGR2216100B00L	WWC5*326	04/23/92	04/23/92	19.8		06/15/92	EAJ
SGR2216100C00L	WWC5*327	04/23/92	04/23/92	17.8		06/15/92	EAJ
SGR2216200A00L	WWC5*328	04/23/92	04/23/92	22.7		06/15/92	EAJ
SGR2216200B00L	WWC5*329	04/23/92	04/23/92	21.0		06/15/92	EAJ
SGR2216200C00L	WWC5*330	04/23/92	04/23/92	19.6		06/15/92	EAJ
SGR2247100A00L	WWC5*331	04/23/92	04/23/92	17.4		06/15/92	EAJ
SGR2247100B00L	WWC5*332	04/23/92	04/23/92	17.6		06/15/92	EAJ
SGR2247100C00L	WWC5*333	04/23/92	04/23/92	14.0		06/15/92	EAJ
SGR2247200A00L	WWC5*334	04/23/92	04/23/92	18.8		06/15/92	EAJ
SGR2247200B00L	WWC5*335	04/23/92	04/23/92	17.7		06/15/92	EAJ
SGR2247200C00L	WWC5*336	04/23/92	04/23/92	17.1		06/15/92	EAJ

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Analytical Chemistry Results

STATUS: FINAL

PROJECT NAME: NL/TARACORP SUPERFUND SITE PREDESIGN FIELD INVESTIGATION, WWC89MC114V

PROJECT NUMBER: 5912031 0100 **REPORT DATE:** 07-30-92

SAMPLE MATRIX: SOIL **LAB MANAGER/QC REVIEW:** JEFFREY W. SIRIA

PROJECT MANAGER: JOHN F. GEMOULES **REPORT APPROVED BY:** FRANCIS Y. HUANG

SAMPLE I.D.	LABORATORY I.D.	COLLECTION DATE	RECEIVED DATE	MOISTURE, %WET WT METHOD: PB215192	EXTRACT. DATE	ANALYSIS DATE	CHEM. INIT.
SGR2246100A00L	WWC5*337	04/23/92	04/23/92	20.7		06/15/92	EAJ
SGR2246100B00L	WWC5*338	04/23/92	04/23/92	18.0		06/15/92	EAJ
SGR2246100C00L	WWC5*339	04/23/92	04/23/92	17.7		06/15/92	EAJ
SGR2204100A00L	WWC5*340	04/23/92	04/23/92	20.4		06/15/92	EAJ
SGR2204100B00L	WWC5*341	04/23/92	04/23/92	17.4		06/15/92	EAJ
SGR2204100C00L	WWC5*342	04/23/92	04/23/92	17.8		06/15/92	EAJ
SGR2204200A00L	WWC5*343	04/23/92	04/23/92	20.4		06/15/92	EAJ
SGR2204200B00L	WWC5*344	04/23/92	04/23/92	18.0		06/15/92	EAJ
SGR2204200C00L	WWC5*345	04/23/92	04/23/92	17.9		06/15/92	EAJ
SGR2204100A0LD	WWC5*346	04/23/92	04/23/92	20.0		06/15/92	EAJ
SGR2204100B0LD	WWC5*347	04/23/92	04/23/92	19.0		06/15/92	EAJ
SGR2204100C0LD	WWC5*348	04/23/92	04/23/92	19.4		06/15/92	EAJ
SGR2206100A00L	WWC5*349	04/23/92	04/23/92	20.1		06/15/92	EAJ
SGR2206100B00L	WWC5*350	04/23/92	04/23/92	32.6		06/15/92	EAJ
SGR2206100C00L	WWC5*351	04/23/92	04/23/92	18.5		06/15/92	EAJ
SGR2206200A00L	WWC5*352	04/23/92	04/23/92	22.1		06/15/92	EAJ
SGR2206200B00L	WWC5*353	04/23/92	04/23/92	19.6		06/15/92	EAJ
SGR2206200C00L	WWC5*354	04/23/92	04/23/92	17.6		06/15/92	EAJ
SGR2224100A00L	WWC5*355	04/23/92	04/23/92	17.6		06/15/92	EAJ
SGR2224100B00L	WWC5*356	04/23/92	04/23/92	19.3		06/15/92	EAJ
SGR2224100C00L	WWC5*357	04/23/92	04/23/92	19.0		06/15/92	EAJ
SGR2224200A00L	WWC5*358	04/23/92	04/23/92	20.6		06/15/92	EAJ
SCL2036100A00L	WWC5*359	04/24/92	04/24/92	17.1		06/16/92	EAJ
SCL2036100B00L	WWC5*360	04/24/92	04/24/92	16.4		06/16/92	EAJ
SCL2036100C00L	WWC5*361	04/24/92	04/24/92	16.9		06/16/92	EAJ
SCL2036200A00L	WWC5*362	04/24/92	04/24/92	22.0		06/16/92	EAJ
SCL2036200B00L	WWC5*363	04/24/92	04/24/92	21.0		06/16/92	EAJ
SCL2036200C00L	WWC5*364	04/24/92	04/24/92	18.6		06/16/92	EAJ
SCL2020100A00L	WWC5*365	04/24/92	04/24/92	23.4		06/16/92	EAJ
SCL2020100B00L	WWC5*366	04/24/92	04/24/92	18.5		06/16/92	EAJ
SCL2020100C00L	WWC5*367	04/24/92	04/24/92	15.9		06/16/92	EAJ
SCL2020200A00L	WWC5*368	04/24/92	04/24/92	19.1		06/16/92	EAJ
SCL2020200B00L	WWC5*369	04/24/92	04/24/92	21.9		06/16/92	EAJ
SCL2020200C00L	WWC5*370	04/24/92	04/24/92	13.0		06/16/92	EAJ
SCL1940100A00L	WWC5*371	04/24/92	04/24/92	20.5		06/16/92	EAJ
SCL1940100B00L	WWC5*372	04/24/92	04/24/92	15.6		06/16/92	EAJ
SCL1940100C00L	WWC5*373	04/24/92	04/24/92	16.6		06/16/92	EAJ
SCL1940200A00L	WWC5*374	04/24/92	04/24/92	20.2		06/16/92	EAJ
SCL1940200B00L	WWC5*375	04/24/92	04/24/92	17.6		06/16/92	EAJ
SCL1940200C00L	WWC5*376	04/24/92	04/24/92	13.4		06/16/92	EAJ
SCL2140100A00L	WWC5*377	04/24/92	04/24/92	20.2		06/16/92	EAJ
SCL2140100B00L	WWC5*378	04/24/92	04/24/92	16.9		07/10/92	RLW

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Analytical Chemistry R

STATUS: FINAL

PROJECT NAME: NL/TARACORP SUPERFUND SITE PREDESIGN FIELD INVESTIGATION, WWC89MC114V

PROJECT NUMBER: 5912031 0100 **REPORT DATE:** 07-30-92

SAMPLE MATRIX: SOIL **LAB MANAGER/QC REVIEW:** JEFFREY W. SIRIA

PROJECT MANAGER: JOHN F. GEMOULES **REPORT APPROVED BY:** FRANCIS Y. HUANG

SAMPLE I.D.	LABORATORY I.D.	COLLECTION DATE	RECEIVED DATE	MOISTURE, %WET WT METHOD: PB215192	EXTRACT. DATE	ANALYSIS DATE	CHEM INIT
SCL2140100C00L	WWC5*379	04/24/92	04/24/92	18.3	"	07/10/92	RLW
SCL2140200A00L	WWC5*380	04/24/92	04/24/92	15.8		07/10/92	RLW
SCL2140200B00L	WWC5*381	04/24/92	04/24/92	11.9		07/10/92	RLW
SCL2140200C00L	WWC5*382	04/24/92	04/24/92	12.6		07/10/92	RLW
SDE2163100A00L	WWC5*383	04/24/92	04/24/92	20.0		07/10/92	RLW
SDE2163100B00L	WWC5*384	04/24/92	04/24/92	16.9		07/10/92	RLW
SDE2163100C00L	WWC5*385	04/24/92	04/24/92	17.1		07/10/92	RLW
SDE2163200A00L	WWC5*386	04/24/92	04/24/92	19.1		07/10/92	RLW
SDE2163200B00L	WWC5*387	04/24/92	04/24/92	17.0		07/10/92	RLW
SDE2163200C00L	WWC5*388	04/24/92	04/24/92	16.3		07/10/92	RLW
SGR2249100A00L	WWC5*389	04/24/92	04/24/92	19.5		07/10/92	RLW
SGR2249100B00L	WWC5*390	04/24/92	04/24/92	16.3		07/10/92	RLW
SGR2249100C00L	WWC5*391	04/24/92	04/24/92	15.5		07/10/92	RLW
SGR2249200A00L	WWC5*392	04/24/92	04/24/92	20.0		07/10/92	RLW
SGR2249200B00L	WWC5*393	04/24/92	04/24/92	14.3		07/10/92	RLW
SGR2249200C00L	WWC5*394	04/24/92	04/24/92	13.5		07/10/92	RLW
SGR2258100A00L	WWC5*395	04/24/92	04/24/92	22.7		07/10/92	RLW
SGR2258100B00L	WWC5*396	04/24/92	04/24/92	18.4		07/10/92	RLW
SGR2258100C00L	WWC5*397	04/24/92	04/24/92	18.0		07/10/92	RLW
SGR2258200A00L	WWC5*398	04/24/92	04/24/92	19.9		07/10/92	RLW
SGR2258200B00L	WWC5*399	04/24/92	04/24/92	16.2		07/10/92	RLW
SGR2258200C00L	WWC5*400	04/24/92	04/24/92	16.6		07/10/92	RLW
SLE2021100A00L	WWC5*401	04/24/92	04/24/92	19.7		07/10/92	RLW
SLE2021100B00L	WWC5*402	04/24/92	04/24/92	20.0		07/10/92	RLW
SLE2021100C00L	WWC5*403	04/24/92	04/24/92	21.1		07/10/92	RLW
SLE2021200A00L	WWC5*404	04/24/92	04/24/92	18.1		07/10/92	RLW
SLE2021200B00L	WWC5*405	04/24/92	04/24/92	17.5		07/10/92	RLW
SLE2021200C00L	WWC5*406	04/24/92	04/24/92	23.3		07/10/92	RLW
SIO2247100A00L	WWC5*407	04/24/92	04/24/92	39.3		07/10/92	RLW
SIO2247100B00L	WWC5*408	04/24/92	04/24/92	24.0		07/10/92	RLW
SIO2247100C00L	WWC5*409	04/24/92	04/24/92	21.6		07/10/92	RLW
SIO2247200A00L	WWC5*410	04/24/92	04/24/92	29.9		07/10/92	RLW
SIO2247200B00L	WWC5*411	04/24/92	04/24/92	25.2		07/10/92	RLW
SIO2247200C00L	WWC5*412	04/24/92	04/24/92	25.9		06/17/92	EAJ
SIO2251100A00L	WWC5*413	04/24/92	04/24/92	23.8		06/17/92	EAJ
SIO2251100B00L	WWC5*414	04/24/92	04/24/92	20.9		06/17/92	EAJ
SIO2251100C00L	WWC5*415	04/24/92	04/24/92	20.8		06/17/92	EAJ
SIO2251200A00L	WWC5*416	04/24/92	04/24/92	25.8		06/17/92	EAJ
SIO2251200B00L	WWC5*417	04/24/92	04/24/92	22.0		06/17/92	EAJ
SIO2251200C00L	WWC5*418	04/24/92	04/24/92	25.3		06/17/92	EAJ
SIO2209100A00L	WWC5*419	04/24/92	04/24/92	22.2		06/17/92	EAJ
SIO2209100B00L	WWC5*420	04/24/92	04/24/92	20.1		06/17/92	EAJ

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Analytical Chemistry Results

STATUS: FINAL

PROJECT NAME: NL/TARACORP SUPERFUND SITE PREDESIGN FIELD INVESTIGATION, WWC89MC114V

PROJECT NUMBER: 5912031 0100 **REPORT DATE:** 07-30-92

SAMPLE MATRIX: SOIL **LAB MANAGER/QC REVIEW:** JEFFREY W. SIRIA

PROJECT MANAGER: JOHN F. GEMOULES **REPORT APPROVED BY:** FRANCIS Y. HUANG

SAMPLE I.D.	LABORATORY I.D.	COLLECTION DATE	RECEIVED DATE	MOISTURE, %WET WT METHOD: P8215192	EXTRACT. DATE	ANALYSIS DATE	CHEM. INIT.
SIO2209100C00L	WWC5*421	04/24/92	04/24/92	20.2		06/17/92	EAJ
SIO2209200A00L	WWC5*422	04/24/92	04/24/92	20.6		06/19/92	EAJ
SIO2209200B00L	WWC5*423	04/24/92	04/24/92	20.5		06/17/92	EAJ
SIO2209200C00L	WWC5*424	04/24/92	04/24/92	23.8		06/17/92	EAJ
SBE2024100C00L	WWC5*425	04/27/92	04/27/92	15.4		06/17/92	EAJ
SBE2024200A00L	WWC5*426	04/27/92	04/27/92	20.9		06/17/92	EAJ
SBE2024200B00L	WWC5*427	04/27/92	04/27/92	17.5		06/17/92	EAJ
SBE2024200C00L	WWC5*428	04/27/92	04/27/92	17.2		06/17/92	EAJ
SDE1641100A00L	WWC5*429	04/27/92	04/27/92	14.1		06/17/92	EAJ
SDE1641100B00L	WWC5*430	04/27/92	04/27/92	14.4		07/10/92	RLW
SDE1641100C00L	WWC5*431	04/27/92	04/27/92	14.2		06/17/92	EAJ
SDE1641200A00L	WWC5*432	04/27/92	04/27/92	18.1		06/17/92	EAJ
SDE1641200B00L	WWC5*433	04/27/92	04/27/92	14.9		06/17/92	EAJ
SDE1641200C00L	WWC5*434	04/27/92	04/27/92	15.4		06/17/92	EAJ
SCL1634100A00L	WWC5*435	04/27/92	04/27/92	22.9		06/17/92	EAJ
SCL1634100B00L	WWC5*436	04/27/92	04/27/92	19.2		06/17/92	EAJ
SCL1634100C00L	WWC5*437	04/27/92	04/27/92	18.0		06/17/92	EAJ
SCL1634200A00L	WWC5*438	04/27/92	04/27/92	19.1		06/17/92	EAJ
SCL1634200B00L	WWC5*439	04/27/92	04/27/92	19.1		06/17/92	EAJ
SCL1634200C00L	WWC5*440	04/27/92	04/27/92	20.0		06/17/92	EAJ
SCL1640100A00L	WWC5*441	04/27/92	04/27/92	20.6		06/17/92	EAJ
SCL1640100B00L	WWC5*442	04/27/92	04/27/92	19.1		06/17/92	EAJ
SCL1640100C00L	WWC5*443	04/27/92	04/27/92	17.4		06/17/92	EAJ
SCL1640200A00L	WWC5*444	04/27/92	04/27/92	21.7		06/17/92	EAJ
SCL1640200B00L	WWC5*445	04/27/92	04/27/92	19.4		06/17/92	EAJ
SCL1640200C00L	WWC5*446	04/27/92	04/27/92	20.7		06/17/92	EAJ
SST1408100A00L	WWC5*447	04/27/92	04/27/92	18.4		06/17/92	EAJ
SNI0938100A00L	WWC5*448	04/27/92	04/27/92	16.4		06/17/92	EAJ
SNI0938100B00L	WWC5*449	04/27/92	04/27/92	16.4		06/17/92	EAJ
SNI0938100C00L	WWC5*450	04/27/92	04/27/92	15.8		06/17/92	EAJ
SNI0809100A00L	WWC5*451	04/27/92	04/27/92	17.1		06/17/92	EAJ
SNI0809100B00L	WWC5*452	04/27/92	04/27/92	18.9		06/17/92	EAJ
SNI0809100C00L	WWC5*453	04/27/92	04/27/92	14.9		06/17/92	EAJ
SNI0809200A00L	WWC5*454	04/27/92	04/27/92	18.2		06/17/92	EAJ
SNI0809200B00L	WWC5*455	04/27/92	04/27/92	18.8		06/17/92	EAJ
SNI0809200C00L	WWC5*456	04/27/92	04/27/92	19.0		06/17/92	EAJ
STS1215100A00L	WWC5*457	04/27/92	04/27/92	19.9		06/17/92	EAJ
STS1215100B00L	WWC5*458	04/27/92	04/27/92	17.4		06/17/92	EAJ
STS1215100C00L	WWC5*459	04/27/92	04/27/92	17.7		06/17/92	EAJ
STS1215200A00L	WWC5*460	04/27/92	04/27/92	17.7		06/17/92	EAJ
STS1215200B00L	WWC5*461	04/27/92	04/27/92	18.0		06/17/92	EAJ
STS1215200C00L	WWC5*462	04/27/92	04/27/92	19.3		06/17/92	EAJ

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Analytical Chemistry R

STATUS: FINAL

PROJECT NAME: NL/TARACORP SUPERFUND SITE PREDESIGN FIELD INVESTIGATION, WWC89MC114V

PROJECT NUMBER: 5912031 0100 **REPORT DATE:** 07-30-92

SAMPLE MATRIX: SOIL **LAB MANAGER/QC REVIEW:** JEFFREY W. SIRIA

PROJECT MANAGER: JOHN F. GEMOULES **REPORT APPROVED BY:** FRANCIS Y. HUANG

SAMPLE I.D.	LABORATORY I.D.	COLLECTION DATE	RECEIVED DATE	MOISTURE, %WET WT METHOD: PB215192	EXTRACT. DATE	ANALYSIS DATE	CHE INI
SST2041100A00L	WWC5*463	04/27/92	04/27/92	22.6		06/17/92	EA
SST2041100B00L	WWC5*464	04/27/92	04/27/92	21.3		06/17/92	EA
SST2041100C00L	WWC5*465	04/27/92	04/27/92	19.5		06/17/92	EA
SST2041200A00L	WWC5*466	04/27/92	04/27/92	16.1		06/17/92	EA
SST2041200B00L	WWC5*467	04/27/92	04/27/92	16.5		06/17/92	EA
SST2041200C00L	WWC5*468	04/27/92	04/27/92	17.9		06/17/92	EA
SBE2024100A00L	WWC5*469	04/27/92	04/27/92	18.6		06/17/92	EA
SBE2024100B00L	WWC5*470	04/27/92	04/27/92	13.3		06/17/92	EA
SST1408100B00L	WWC5*471	04/27/92	04/27/92	20.6		06/17/92	EA
SST1408100C00L	WWC5*472	04/27/92	04/27/92	19.9		06/18/92	EA
SST1408200A00L	WWC5*473	04/27/92	04/27/92	11.6		06/18/92	EA
SST1408200B00L	WWC5*474	04/27/92	04/27/92	7.8		06/18/92	EA
SST1408200C00L	WWC5*475	04/27/92	04/27/92	16.2		06/18/92	EA
SST1310100A00L	WWC5*476	04/28/92	04/28/92	19.3		06/18/92	EAJ
SST1310100B00L	WWC5*477	04/28/92	04/28/92	19.5		06/18/92	EAJ
SST1310100C00L	WWC5*478	04/28/92	04/28/92	19.8		06/18/92	EAJ
SST1310200A00L	WWC5*479	04/28/92	04/28/92	16.6		06/18/92	EAJ
SST1310200B00L	WWC5*480	04/28/92	04/28/92	17.0		06/18/92	EAJ
SST1310200C00L	WWC5*481	04/28/92	04/28/92	10.5		06/18/92	EAJ
SST1320100A00L	WWC5*482	04/28/92	04/28/92	20.9		06/18/92	EAJ
SST1320100B00L	WWC5*483	04/28/92	04/28/92	18.0		06/18/92	EAJ
SST1320100C00L	WWC5*484	04/28/92	04/28/92	16.7		06/18/92	EAJ
SST1322100A00L	WWC5*485	04/28/92	04/28/92	18.5		06/18/92	EAJ
SST1322100B00L	WWC5*486	04/28/92	04/28/92	16.7		06/18/92	EAJ
SST1322100C00L	WWC5*487	04/28/92	04/28/92	18.1		06/18/92	EAJ
SIO0822100A00L	WWC5*488	04/28/92	04/28/92	17.4		06/18/92	EAJ
SIO0822100B00L	WWC5*489	04/28/92	04/28/92	17.8		06/18/92	EAJ
SIO0822100C00L	WWC5*490	04/28/92	04/28/92	16.4		06/19/92	EAJ
SIO0822200A00L	WWC5*491	04/28/92	04/28/92	18.0		06/18/92	EAJ
SIO0822200B00L	WWC5*492	04/28/92	04/28/92	14.6		06/18/92	EAJ
SIO0822200C00L	WWC5*493	04/28/92	04/28/92	14.3		06/18/92	EAJ
SST1022100A00L	WWC5*494	04/28/92	04/28/92	20.1		06/18/92	EAJ
SST1022100B00L	WWC5*495	04/28/92	04/28/92	19.2		06/18/92	EAJ
SST1022100C00L	WWC5*496	04/28/92	04/28/92	19.5		06/18/92	EAJ
SST1022200A00L	WWC5*497	04/28/92	04/28/92	19.7		06/18/92	EAJ
SST1022200B00L	WWC5*498	04/28/92	04/28/92	18.2		06/18/92	EAJ
SST1022200C00L	WWC5*499	04/28/92	04/28/92	18.1		06/18/92	EAJ
SST1022100A0LD	WWC5*500	04/28/92	04/28/92	22.5		06/18/92	EAJ
SST1022100B0LD	WWC5*501	04/28/92	04/28/92	18.9		06/18/92	EAJ
SST1022100C0LD	WWC5*502	04/28/92	04/28/92	21.5		06/18/92	EAJ
SWS1003100A00L	WWC5*503	04/28/92	04/28/92	17.8		06/18/92	EAJ
SWS1003100B00L	WWC5*504	04/28/92	04/28/92	19.9		06/18/92	EAJ

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Analytical Chemistry Results

STATUS: FINAL

PROJECT NAME: NL/TARACORP SUPERFUND SITE PREDESIGN FIELD INVESTIGATION, WWC89MC114V

PROJECT NUMBER: 5912031 0100 **REPORT DATE:** 07-30-92

SAMPLE MATRIX: SOIL **LAB MANAGER/QC REVIEW:** JEFFREY W. SIRIA

PROJECT MANAGER: JOHN F. GEMOULES **REPORT APPROVED BY:** FRANCIS Y. HUANG

SAMPLE I.D.	LABORATORY I.D.	COLLECTION DATE	RECEIVED DATE	MOISTURE, %WET WT METHOD: PB215192	EXTRACT. DATE	ANALYSIS DATE	CHEM. INIT.
SWS1003100C00L	WWC5*505	04/28/92	04/28/92	23.7		06/18/92	EAJ
SWS1003100A0LD	WWC5*506	04/28/92	04/28/92	18.5		06/18/92	EAJ
SWS1003100B0LD	WWC5*507	04/28/92	04/28/92	19.1		06/18/92	EAJ
SWS1003100C0LD	WWC5*508	04/28/92	04/28/92	19.0		06/18/92	EAJ
SWS1215100A00L	WWC5*509	04/28/92	04/28/92	26.2		06/18/92	EAJ
SWS1215100B00L	WWC5*510	04/28/92	04/28/92	18.9		06/18/92	EAJ
SWS1215100C00L	WWC5*511	04/28/92	04/28/92	15.9		06/18/92	EAJ
SWS1215200A00L	WWC5*512	04/28/92	04/28/92	22.7		06/18/92	EAJ
SWS1215200B00L	WWC5*513	04/28/92	04/28/92	15.7		06/18/92	EAJ
SWS1215200C00L	WWC5*514	04/28/92	04/28/92	3.6		06/18/92	EAJ
SWS1235100A00L	WWC5*515	04/28/92	04/28/92	23.2		06/18/92	EAJ
SWS1235100B00L	WWC5*516	04/28/92	04/28/92	19.0		06/18/92	EAJ
SWS1235100C00L	WWC5*517	04/28/92	04/28/92	14.9		06/18/92	EAJ
SWS1235200A00L	WWC5*518	04/28/92	04/28/92	20.2		06/18/92	EAJ
SWS1235200B00L	WWC5*519	04/28/92	04/28/92	16.1		06/18/92	EAJ
SWS1235200C00L	WWC5*520	04/28/92	04/28/92	15.5		06/18/92	EAJ
SWS1405100A00L	WWC5*521	04/28/92	04/28/92	19.1		06/18/92	EAJ
SWS1405100B00L	WWC5*522	04/28/92	04/28/92	17.8		06/18/92	EAJ
SWS1405100C00L	WWC5*523	04/28/92	04/28/92	17.2		06/18/92	EAJ
SWS1405200A00L	WWC5*524	04/28/92	04/28/92	22.4		06/18/92	EAJ
SWS1405200B00L	WWC5*525	04/28/92	04/28/92	19.8		06/18/92	EAJ
SWS1405200C00L	WWC5*526	04/28/92	04/28/92	18.2		06/18/92	EAJ
SWS1402100A00L	WWC5*527	04/28/92	04/28/92	17.6		06/18/92	EAJ
SWS1402100B00L	WWC5*528	04/28/92	04/28/92	17.7		06/18/92	EAJ
SWS1402100C00L	WWC5*529	04/28/92	04/28/92	23.8		06/23/92	EAJ
SWS1402100A0LD	WWC5*530	04/28/92	04/28/92	17.2		06/23/92	EAJ
SWS1402100B0LD	WWC5*531	04/28/92	04/28/92	17.6		06/23/92	EAJ
SWS1402100C0LD	WWC5*532	04/28/92	04/28/92	17.2		06/23/92	EAJ
SWS1402200A00L	WWC5*533	04/28/92	04/28/92	6.9		06/23/92	EAJ
SWS1402200B00L	WWC5*534	04/28/92	04/28/92	9.0		06/23/92	EAJ
SWS1402200C00L	WWC5*535	04/28/92	04/28/92	7.2		06/23/92	EAJ
SED2236100A00L	WWC5*536	04/28/92	04/28/92	15.6		06/23/92	EAJ
SED2236100B00L	WWC5*537	04/28/92	04/28/92	14.3		06/23/92	EAJ
SED2236100C00L	WWC5*538	04/28/92	04/28/92	14.8		06/23/92	EAJ
SED2236200A00L	WWC5*539	04/28/92	04/28/92	22.1		06/23/92	EAJ
SED2236200B00L	WWC5*540	04/28/92	04/28/92	18.0		06/23/92	EAJ
SED2236200C00L	WWC5*541	04/28/92	04/28/92	14.9		06/23/92	EAJ
SED2224100A00L	WWC5*542	04/28/92	04/28/92	14.2		06/23/92	EAJ
SED2224100B00L	WWC5*543	04/28/92	04/28/92	14.2		06/23/92	EAJ
SED2224100C00L	WWC5*544	04/28/92	04/28/92	14.1		06/23/92	EAJ
SED2224200A00L	WWC5*545	04/28/92	04/28/92	17.9		06/23/92	EAJ
SED2224200B00L	WWC5*546	04/28/92	04/28/92	15.5		06/23/92	EAJ

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Analytical Chemistry Res

STATUS: FINAL

PROJECT NAME: NL/TARACORP SUPERFUND SITE PREDESIGN FIELD INVESTIGATION, WWC89MC114V

PROJECT NUMBER: 5912031 0100 **REPORT DATE:** 07-30-92

SAMPLE MATRIX: SOIL **LAB MANAGER/QC REVIEW:** JEFFREY W. SIRIA

PROJECT MANAGER: JOHN F. GEMOULES **REPORT APPROVED BY:** FRANCIS Y. HUANG

SAMPLE I.D.	LABORATORY I.D.	COLLECTION DATE	RECEIVED DATE	MOISTURE, %WET WT METHOD: PB215192	EXTRACT. DATE	ANALYSIS DATE	CHEM. INIT.
SED2224200C00L	WWC5*547	04/28/92	04/28/92	14.9		06/23/92	EAJ
SED2208100A00L	WWC5*548	04/28/92	04/28/92	19.7		06/23/92	EAJ
SED2208100B00L	WWC5*549	04/28/92	04/28/92	16.8		06/23/92	EAJ
SED2208100C00L	WWC5*550	04/28/92	04/28/92	15.5		06/23/92	EAJ
SED2208200A00L	WWC5*551	04/28/92	04/28/92	20.0		06/23/92	EAJ
SED2208200B00L	WWC5*552	04/28/92	04/28/92	18.3		06/23/92	EAJ
SED2208200C00L	WWC5*553	04/28/92	04/28/92	14.1		06/23/92	EAJ
SED2204100A00L	WWC5*554	04/28/92	04/28/92	18.4		06/23/92	EAJ
SED2204100B00L	WWC5*555	04/28/92	04/28/92	14.8		06/23/92	EAJ
SED2204100C00L	WWC5*556	04/28/92	04/28/92	17.3		06/23/92	EAJ
SED2204200A00L	WWC5*557	04/28/92	04/28/92	14.5		06/23/92	EAJ
SED2204200B00L	WWC5*558	04/28/92	04/28/92	15.7		06/23/92	EAJ
SED2204200C00L	WWC5*559	04/28/92	04/28/92	12.2		06/23/92	EAJ
SGW1136100A00L	WWC5*560	04/29/92	04/29/92	22.2		06/23/92	EAJ
SGW1136100B00L	WWC5*561	04/29/92	04/29/92	19.8		06/23/92	EAJ
SGW1136100C00L	WWC5*562	04/29/92	04/29/92	18.5		06/23/92	EAJ
SGW1136200A00L	WWC5*563	04/29/92	04/29/92	23.3		06/23/92	EAJ
SGW1136200B00L	WWC5*564	04/29/92	04/29/92	18.7		06/23/92	EAJ
SGW1136200C00L	WWC5*565	04/29/92	04/29/92	17.3		06/23/92	EAJ
SGW1112100A00L	WWC5*566	04/29/92	04/29/92	17.2		06/23/92	EAJ
SGW1112100B00L	WWC5*567	04/29/92	04/29/92	21.1		06/23/92	EAJ
SGW1112100C00L	WWC5*568	04/29/92	04/29/92	18.6		06/23/92	EAJ
SGW1112200A00L	WWC5*569	04/29/92	04/29/92	18.1		06/23/92	EAJ
SGW1112200B00L	WWC5*570	04/29/92	04/29/92	16.6		06/23/92	EAJ
SGW1112200C00L	WWC5*571	04/29/92	04/29/92	18.8		06/23/92	EAJ
SGW1111100A00L	WWC5*572	04/29/92	04/29/92	19.1		06/23/92	EAJ
SGW1111100B00L	WWC5*573	04/29/92	04/29/92	14.0		06/23/92	EAJ
SGW1111100C00L	WWC5*574	04/29/92	04/29/92	16.7		06/23/92	EAJ
SGW1111200A00L	WWC5*575	04/29/92	04/29/92	21.4		06/23/92	EAJ
SGW1111200B00L	WWC5*576	04/29/92	04/29/92	17.0		06/23/92	EAJ
SGW1111200C00L	WWC5*577	04/29/92	04/29/92	13.4		06/23/92	EAJ
SGR1238200A00L	WWC5*578	04/29/92	04/29/92	22.4		06/23/92	EAJ
SGR1238200B00L	WWC5*579	04/29/92	04/29/92	1.0		06/23/92	EAJ
SGR1238200C00L	WWC5*580	04/29/92	04/29/92	22.0		06/23/92	EAJ
SGR1018100A00L	WWC5*581	04/29/92	04/29/92	20.8		06/23/92	EAJ
SGR1018100B00L	WWC5*582	04/29/92	04/29/92	18.9		06/23/92	EAJ
SGR1018100C00L	WWC5*583	04/29/92	04/29/92	19.8		06/23/92	EAJ
SGR1018200A00L	WWC5*584	04/29/92	04/29/92	24.1		06/23/92	EAJ
SGR1018200B00L	WWC5*585	04/29/92	04/29/92	18.2		06/23/92	EAJ
SGR1018200C00L	WWC5*586	04/29/92	04/29/92	11.1		06/23/92	EAJ
SGR1012100A00L	WWC5*587	04/29/92	04/29/92	17.3		06/23/92	EAJ
SGR1012100B00L	WWC5*588	04/29/92	04/29/92	17.2		06/23/92	EAJ

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Analytical Chemistry Results

STATUS: FINAL

PROJECT NAME: NL/TARACORP SUPERFUND SITE PREDESIGN FIELD INVESTIGATION, WWC89MC114V

PROJECT NUMBER: 5912031 0100

REPORT DATE: 07-30-92

SAMPLE MATRIX: SOIL

LAB MANAGER/QC REVIEW: JEFFREY W. SIRIA

PROJECT MANAGER: JOHN F. GEMOULES

REPORT APPROVED BY: FRANCIS Y. HUANG

SAMPLE I.D.	LABORATORY I.D.	COLLECTION DATE	RECEIVED DATE	MOISTURE, %WET WT METHOD: PB215192	EXTRACT. DATE	ANALYSIS DATE	CHEM. INIT.
SGR1012100C00L	WWC5*589	04/29/92	04/29/92	18.8		06/23/92	EAJ
SGR1012200A00L	WWC5*590	04/29/92	04/29/92	27.9		06/23/92	EAJ
SGR1012200B00L	WWC5*591	04/29/92	04/29/92	20.5		06/23/92	EAJ
SGR1012200C00L	WWC5*592	04/29/92	04/29/92	17.7		06/23/92	EAJ
SIO1217100A00L	WWC5*593	04/29/92	04/29/92	15.3		06/23/92	EAJ
SIO1217100B00L	WWC5*594	04/29/92	04/29/92	18.1		06/23/92	EAJ
SIO1217100C00L	WWC5*595	04/29/92	04/29/92	13.8		06/23/92	EAJ
SIO1217200A00L	WWC5*596	04/29/92	04/29/92	25.2		06/23/92	EAJ
SIO1217200B00L	WWC5*597	04/29/92	04/29/92	20.5		06/23/92	EAJ
SIO1217200C00L	WWC5*598	04/29/92	04/29/92	20.6		06/23/92	EAJ
SDE2254200A00L	WWC5*599	04/30/92	04/30/92	17.7		06/23/92	EAJ
SDE2254200B00L	WWC5*600	04/30/92	04/30/92	17.8		06/23/92	EAJ
SDE2254200C00L	WWC5*601	04/30/92	04/30/92	18.0		06/23/92	EAJ
SRE0930100A00L	WWC5*602	04/30/92	04/30/92	19.0		06/23/92	EAJ
SRE0930100B00L	WWC5*603	04/30/92	04/30/92	18.1		06/23/92	EAJ
SRE0930100C00L	WWC5*604	04/30/92	04/30/92	17.3		06/23/92	EAJ
SRE0930100A0LD	WWC5*605	04/30/92	04/30/92	18.3		06/23/92	EAJ
SRE0930100B0LD	WWC5*606	04/30/92	04/30/92	17.1		06/23/92	EAJ
SRE0930100C0LD	WWC5*607	04/30/92	04/30/92	18.3		06/23/92	EAJ
SRE0930200A00L	WWC5*608	04/30/92	04/30/92	13.8		06/23/92	EAJ
SRE0930200B00L	WWC5*609	04/30/92	04/30/92	13.7		06/23/92	EAJ
SRE0930200C00L	WWC5*610	04/30/92	04/30/92	15.2		06/23/92	EAJ
SMC0911100A00L	WWC5*611	04/30/92	04/30/92	19.3		06/23/92	EAJ
SMC0911100B00L	WWC5*612	04/30/92	04/30/92	15.3		06/23/92	EAJ
SMC0911100C00L	WWC5*613	04/30/92	04/30/92	15.1		06/23/92	EAJ
SMC0911200A00L	WWC5*614	04/30/92	04/30/92	15.3		06/23/92	EAJ
SMC0911200B00L	WWC5*615	04/30/92	04/30/92	14.8		06/23/92	EAJ
SMC0911200C00L	WWC5*616	04/30/92	04/30/92	14.6		06/23/92	EAJ
SRE0928100A00L	WWC5*617	04/30/92	04/30/92	21.8		06/23/92	EAJ
SRE0928100B00L	WWC5*618	04/30/92	04/30/92	19.6		06/23/92	EAJ
SRE0928100C00L	WWC5*619	04/30/92	04/30/92	20.2		06/23/92	EAJ
SRE0928200A00L	WWC5*620	04/30/92	04/30/92	15.9		06/23/92	EAJ
SRE0928200B00L	WWC5*621	04/30/92	04/30/92	24.1		06/23/92	EAJ
SRE0928200C00L	WWC5*622	04/30/92	04/30/92	19.0		06/23/92	EAJ
SMC0913100A00L	WWC5*623	04/30/92	04/30/92	10.5		06/23/92	EAJ
SMC0913100B00L	WWC5*624	04/30/92	04/30/92	18.5		06/23/92	EAJ
SMC0913100C00L	WWC5*625	04/30/92	04/30/92	29.8		06/23/92	EAJ
SMC0913200A00L	WWC5*626	04/30/92	04/30/92	8.9		06/23/92	EAJ
SMC0913200B00L	WWC5*627	04/30/92	04/30/92	8.7		07/06/92	EAJ
SMC0913200C00L	WWC5*628	04/30/92	04/30/92	16.6		07/06/92	EAJ
SMA0814100A00L	WWC5*629	04/30/92	04/30/92	33.1		06/23/92	EAJ
SMA0814100B00L	WWC5*630	04/30/92	04/30/92	19.7		06/23/92	EAJ

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Analytical Chemistry Re

STATUS: FINAL

PROJECT NAME: NL/TARACORP SUPERFUND SITE PREDESIGN FIELD INVESTIGATION, WWC89MC114V

PROJECT NUMBER: 5912031 0100 **REPORT DATE:** 07-30-92

SAMPLE MATRIX: SOIL **LAB MANAGER/QC REVIEW:** JEFFREY W. SIRIA

PROJECT MANAGER: JOHN F. GEMOULES **REPORT APPROVED BY:** FRANCIS Y. HUANG

SAMPLE I.D.	LABORATORY I.D.	COLLECTION DATE	RECEIVED DATE	MOISTURE, %WET WT METHOD: PB215192	EXTRACT. DATE	ANALYSIS DATE	CHEM. INIT.
SMA0814100C00L	WWC5*631	04/30/92	04/30/92	13.3		06/23/92	EAJ
SMA0814200A00L	WWC5*632	04/30/92	04/30/92	15.7		07/06/92	EAJ
SMA0814200B00L	WWC5*633	04/30/92	04/30/92	33.5		06/23/92	EAJ
SMA0814200C00L	WWC5*634	04/30/92	04/30/92	12.7		06/23/92	EAJ
SDE1729200A00L	WWC5*635	04/30/92	04/30/92	16.7		06/23/92	EAJ
SDE1729200B00L	WWC5*636	04/30/92	04/30/92	21.5		06/23/92	EAJ
SDE1729200C00L	WWC5*637	04/30/92	04/30/92	16.7		06/23/92	EAJ
SKE1714100A00L	WWC5*638	04/30/92	04/30/92	25.2		06/23/92	EAJ
SKE1714100B00L	WWC5*639	04/30/92	04/30/92	18.1		06/23/92	EAJ
SKE1714100C00L	WWC5*640	04/30/92	04/30/92	19.5		06/24/92	EAJ
SKE1714200A00L	WWC5*641	04/30/92	04/30/92	18.0		06/24/92	EAJ
SKE1714200B00L	WWC5*642	04/30/92	04/30/92	17.2		06/24/92	EAJ
SKE1714200C00L	WWC5*643	04/30/92	04/30/92	16.6		06/24/92	EAJ
SAL1014100A00L	WWC5*644	04/30/92	04/30/92	11.4		06/24/92	EAJ
SAL1014100B00L	WWC5*645	04/30/92	04/30/92	12.7		06/24/92	EAJ
SAL1014100C00L	WWC5*646	04/30/92	04/30/92	13.2		06/24/92	EAJ
SAL1014200A00L	WWC5*647	04/30/92	04/30/92	13.4		06/24/92	EAJ
SAL1014200B00L	WWC5*648	04/30/92	04/30/92	11.5		06/24/92	EAJ
SAL1014200C00L	WWC5*649	04/30/92	04/30/92	12.1		06/24/92	EAJ
SGR1106100A00L	WWC5*650	04/30/92	04/30/92	13.5		06/24/92	EAJ
SGR1106100B00L	WWC5*651	04/30/92	04/30/92	12.0		06/24/92	EAJ
SGR1106100C00L	WWC5*652	04/30/92	04/30/92	16.1		06/24/92	EAJ
SGR1106200A00L	WWC5*653	04/30/92	04/30/92	15.5		06/24/92	EAJ
SGR1106200B00L	WWC5*654	04/30/92	04/30/92	15.2		06/24/92	EAJ
SGR1106200C00L	WWC5*655	04/30/92	04/30/92	19.8		06/24/92	EAJ
SGR1320100A00L	WWC5*656	04/30/92	04/30/92	12.1		06/24/92	EAJ
SGR1320100B00L	WWC5*657	04/30/92	04/30/92	6.1		06/24/92	EAJ
SGR1320100C00L	WWC5*658	04/30/92	04/30/92	9.8		06/24/92	EAJ
SGR1320200A00L	WWC5*659	04/30/92	04/30/92	15.1		06/24/92	EAJ
SGR1320200B00L	WWC5*660	04/30/92	04/30/92	12.0		06/24/92	EAJ
SGR1320200C00L	WWC5*661	04/30/92	04/30/92	12.7		06/24/92	EAJ
SNI1319100A00L	WWC5*662	05/01/92	05/01/92	20.2		06/04/92	SGB
SNI1319100B00L	WWC5*663	05/01/92	05/01/92	15.9		06/04/92	SGB
SNI1319100C00L	WWC5*664	05/01/92	05/01/92	15.5		06/04/92	SGB
SNI1319200A00L	WWC5*665	05/01/92	05/01/92	17.5		06/04/92	SGB
SNI1319200B00L	WWC5*666	05/01/92	05/01/92	17.8		06/04/92	SGB
SNI1319200C00L	WWC5*667	05/01/92	05/01/92	18.0		06/04/92	SGB
SNI1319300A00L	WWC5*668	05/01/92	05/01/92	21.5		06/04/92	SGB
SNI1319300B00L	WWC5*669	05/01/92	05/01/92	16.1		06/04/92	SGB
SNI1319300C00L	WWC5*670	05/01/92	05/01/92	11.5		06/04/92	SGB
SNI1319400A00L	WWC5*671	05/01/92	05/01/92	22.5		06/04/92	SGB
SNI1319400B00L	WWC5*672	05/01/92	05/01/92	19.1		06/04/92	SGB

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Analytical Chemistry Results

STATUS: FINAL

PROJECT NAME: NL/TARACORP SUPERFUND SITE PREDESIGN FIELD INVESTIGATION, WWC89MC114V

PROJECT NUMBER: 5912031 0100 **REPORT DATE:** 07-30-92

SAMPLE MATRIX: SOIL **LAB MANAGER/QC REVIEW:** JEFFREY W. SIRIA

PROJECT MANAGER: JOHN F. GEMOULES **REPORT APPROVED BY:** FRANCIS Y. HUANG

SAMPLE I.D.	LABORATORY I.D.	COLLECTION DATE	RECEIVED DATE	MOISTURE, %WET WT METHOD: PB215192	EXTRACT. DATE	ANALYSIS DATE	CHEM. INIT.
SNI1319400C00L	WWC5*673	05/01/92	05/01/92	10.0		06/04/92	SGB
SNI1319500A00L	WWC5*674	05/01/92	05/01/92	15.3		06/04/92	SGB
SNI1319500B00L	WWC5*675	05/01/92	05/01/92	15.4		06/04/92	SGB
SNI1319500C00L	WWC5*676	05/01/92	05/01/92	17.7		06/04/92	SGB
SDE2001100A00L	WWC5*677	05/01/92	05/01/92	14.2		06/04/92	SGB
SDE2001100B00L	WWC5*678	05/01/92	05/01/92	14.2		06/04/92	SGB
SDE2001100C00L	WWC5*679	05/01/92	05/01/92	14.3		06/04/92	SGB
SDE2001200A00L	WWC5*680	05/01/92	05/01/92	16.5		06/04/92	SGB
SDE2001200B00L	WWC5*681	05/01/92	05/01/92	17.4		06/04/92	SGB
SDE2001200C00L	WWC5*682	05/01/92	05/01/92	18.0		06/04/92	SGB
ED SDE2000100A00L	WWC5*683	05/01/92	05/01/92	21.6		06/04/92	SGB
SED2000100B00L	WWC5*684	05/01/92	05/01/92	20.8		06/04/92	SGB
SED2000100C00L	WWC5*685	05/01/92	05/01/92	20.6		06/04/92	SGB
SED2000200A00L	WWC5*686	05/01/92	05/01/92	21.1		06/04/92	SGB
SED2000200B00L	WWC5*687	05/01/92	05/01/92	19.5		06/04/92	SGB
SED2000200C00L	WWC5*688	05/01/92	05/01/92	18.6		06/04/92	SGB
SED2000300A00L	WWC5*689	05/01/92	05/01/92	17.8		06/04/92	SGB
SED2000300B00L	WWC5*690	05/01/92	05/01/92	18.0		06/04/92	SGB
SED2000300C00L	WWC5*691	05/01/92	05/01/92	18.0		06/04/92	SGB
SNI1241100A00L	WWC5*692	05/01/92	05/01/92	9.5		06/04/92	SGB
SNI1241100B00L	WWC5*693	05/01/92	05/01/92	14.0		06/04/92	SGB
SNI1241100C00L	WWC5*694	05/01/92	05/01/92	15.1		06/04/92	SGB
N SNI1241200A00L	WWC5*695	05/01/92	05/01/92	18.3		06/04/92	SGB
SNI1241200B00L	WWC5*696	05/01/92	05/01/92	17.4		06/04/92	SGB
SNI1241200C00L	WWC5*697	05/01/92	05/01/92	17.8		06/04/92	SGB
SNI1300100A00L	WWC5*698	05/01/92	05/01/92	11.7		06/04/92	SGB
SNI1300100B00L	WWC5*699	05/01/92	05/01/92	8.8		06/04/92	SGB
SNI1300100C00L	WWC5*700	05/01/92	05/01/92	13.9		06/04/92	SGB
SNI1300200A00L	WWC5*701	05/01/92	05/01/92	10.0		06/04/92	SGB
SNI1300200B00L	WWC5*702	05/01/92	05/01/92	11.6		06/04/92	SGB
SNI1300200C00L	WWC5*703	05/01/92	05/01/92	8.8		06/04/92	SGB
SNI0822300A00L	WWC5*704	05/01/92	05/01/92	19.7		06/04/92	SGB
SNI0822300B00L	WWC5*705	05/01/92	05/01/92	12.3		06/04/92	SGB
SNI0822300C00L	WWC5*706	05/01/92	05/01/92	6.4		06/04/92	SGB
SNI0822400A00L	WWC5*707	05/01/92	05/01/92	18.5		06/04/92	SGB
SNI0822400B00L	WWC5*708	05/01/92	05/01/92	15.5		06/04/92	SGB
SNI0822400C00L	WWC5*709	05/01/92	05/01/92	16.9		06/04/92	SGB
SNI0840100A00L	WWC5*710	05/01/92	05/01/92	7.6		06/04/92	SGB
SNI0840100B00L	WWC5*711	05/01/92	05/01/92	11.6		07/23/92	RLW
SNI0840100C00L	WWC5*712	05/01/92	05/01/92	20.2		06/04/92	SGB
SNI0840200A00L	WWC5*713	05/01/92	05/01/92	10.2		06/04/92	SGB
SNI0840200B00L	WWC5*714	05/01/92	05/01/92	6.6		06/04/92	SGB

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Analytical Chemistry Resu

STATUS: FINAL

PROJECT NAME: NL/TARACORP SUPERFUND SITE PREDESIGN FIELD INVESTIGATION, WWC89MC114V

PROJECT NUMBER: 5912031 0100 **REPORT DATE:** 07-30-92

SAMPLE MATRIX: SOIL **LAB MANAGER/QC REVIEW:** JEFFREY W. SIRIA

PROJECT MANAGER: JOHN F. GEMOULES **REPORT APPROVED BY:** FRANCIS Y. HUANG

SAMPLE I.D.	LABORATORY I.D.	COLLECTION DATE	RECEIVED DATE	MOISTURE, %WET WT METHOD: PB215192	EXTRACT. DATE	ANALYSIS DATE	CHEM. INIT.
SNI0840200C00L	WWC5*715	05/01/92	05/01/92	10.1		06/04/92	SGB
SNI0840300A00L	WWC5*716	05/01/92	05/01/92	8.2		06/04/92	SGB
SNI0840300B00L	WWC5*717	05/01/92	05/01/92	21.9		06/04/92	SGB
SNI0840300C00L	WWC5*718	05/01/92	05/01/92	5.7		06/04/92	SGB
SNI0840400A00L	WWC5*719	05/01/92	05/01/92	9.8		06/04/92	SGB
SNI0840400B00L	WWC5*720	05/01/92	05/01/92	6.9		06/04/92	SGB
SNI0840400C00L	WWC5*721	05/01/92	05/01/92	7.3		06/04/92	SGB
SNI0822500A00L	WWC5*722	05/01/92	05/01/92	13.8		06/05/92	SGB
SNI0822500B00L	WWC5*723	05/01/92	05/01/92	15.4		06/05/92	SGB
SNI0822500C00L	WWC5*724	05/01/92	05/01/92	14.4		06/05/92	SGB
SLE2019100A00L	WWC5*725	05/04/92	05/04/92	14.0		07/23/92	RLW
SLE2019100B00L	WWC5*726	05/04/92	05/04/92	13.0		07/23/92	RLW
SLE2019100C00L	WWC5*727	05/04/92	05/04/92	14.3		07/23/92	RLW
SLE2119100A00L	WWC5*728	05/04/92	05/04/92	13.5		07/23/92	RLW
SLE2119100B00L	WWC5*729	05/04/92	05/04/92	13.5		07/23/92	RLW
SLE2119100C00L	WWC5*730	05/04/92	05/04/92	15.9		07/23/92	RLW
SLE2119200A00L	WWC5*731	05/04/92	05/04/92	12.1		07/23/92	RLW
SLE2119200B00L	WWC5*732	05/04/92	05/04/92	14.8		07/23/92	RLW
SLE2119200C00L	WWC5*733	05/04/92	05/04/92	15.3		07/23/92	RLW
SMP1737100A00L	WWC5*734	05/04/92	05/04/92	15.0		07/23/92	RLW
SMP1737100B00L	WWC5*735	05/04/92	05/04/92	15.2		07/23/92	RLW
SMP1737100C00L	WWC5*736	05/04/92	05/04/92	16.3		07/23/92	RLW
SMP1737200A00L	WWC5*737	05/04/92	05/04/92	13.4		07/23/92	RLW
SMP1737200B00L	WWC5*738	05/04/92	05/04/92	13.2		07/23/92	RLW
SMP1737200C00L	WWC5*739	05/04/92	05/04/92	17.0		07/23/92	RLW
SMP1727100A00L	WWC5*740	05/04/92	05/04/92	14.5		07/23/92	RLW
SMP1727100B00L	WWC5*741	05/04/92	05/04/92	20.8		07/23/92	RLW
SMP1727100C00L	WWC5*742	05/04/92	05/04/92	16.6		07/23/92	RLW
SMP1727200A00L	WWC5*743	05/04/92	05/04/92	14.0		07/23/92	RLW
SMP1727200B00L	WWC5*744	05/04/92	05/04/92	13.3		07/23/92	RLW
SMP1727200C00L	WWC5*745	05/04/92	05/04/92	18.6		07/23/92	RLW
SMP1729100A00L	WWC5*746	05/04/92	05/04/92	13.9		07/23/92	RLW
SMP1729100B00L	WWC5*747	05/04/92	05/04/92	14.2		07/23/92	RLW
SMP1729100C00L	WWC5*748	05/04/92	05/04/92	14.6		07/23/92	RLW
SMP1748100A00L	WWC5*749	05/04/92	05/04/92	11.7		07/23/92	RLW
SMP1748100B00L	WWC5*750	05/04/92	05/04/92	11.5		07/23/92	RLW
SMP1748100C00L	WWC5*751	05/04/92	05/04/92	14.7		07/23/92	RLW
SMP1748200A00L	WWC5*752	05/04/92	05/04/92	14.3		07/23/92	RLW
SMP1748200B00L	WWC5*753	05/04/92	05/04/92	13.9		07/23/92	RLW
SMP1748200C00L	WWC5*754	05/04/92	05/04/92	12.6		07/23/92	RLW
SMP1733100A00L	WWC5*755	05/04/92	05/04/92	13.0		07/23/92	RLW
SMP1733100B00L	WWC5*756	05/04/92	05/04/92	12.4		07/23/92	RLW

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STATUS: FINAL

PROJECT NAME: NL/TARACORP SUPERFUND SITE PREDESIGN FIELD INVESTIGATION, WWC89MC114V

PROJECT NUMBER: 5912031 0100 **REPORT DATE:** 07-30-92

SAMPLE MATRIX: SOIL **LAB MANAGER/QC REVIEW:** JEFFREY W. SIRIA

PROJECT MANAGER: JOHN F. GEMOULES **REPORT APPROVED BY:** FRANCIS Y. HUANG

SAMPLE I.D.	LABORATORY I.D.	COLLECTION DATE	RECEIVED DATE	MOISTURE, %WET WT METHOD: PB215192	EXTRACT. DATE	ANALYSIS DATE	CHEM. INIT.
SMP1733100C00L	WWC5*757	05/04/92	05/04/92	14.4		07/23/92	RLW
SMP1733200A00L	WWC5*758	05/04/92	05/04/92	19.2		07/23/92	RLW
SMP1733200B00L	WWC5*759	05/04/92	05/04/92	17.3		07/23/92	RLW
SMP1733200C00L	WWC5*760	05/04/92	05/04/92	17.4		07/23/92	RLW
SMP1708100A00L	WWC5*761	05/04/92	05/04/92	12.8		07/23/92	RLW
SMP1708100B00L	WWC5*762	05/04/92	05/04/92	13.6		07/23/92	RLW
SMP1708100C00L	WWC5*763	05/04/92	05/04/92	13.9		07/23/92	RLW
SMP1708200A00L	WWC5*764	05/04/92	05/04/92	13.9		07/23/92	RLW
SMP1708200B00L	WWC5*765	05/04/92	05/04/92	14.2		07/23/92	RLW
SMP1708200C00L	WWC5*766	05/04/92	05/04/92	17.6		07/23/92	RLW
2 SWS2015100A00L	WWC5*767	05/04/92	05/04/92	10.4		07/23/92	RLW
SWS2015100B00L	WWC5*768	05/04/92	05/04/92	12.0		07/23/92	RLW
SWS2015100C00L	WWC5*769	05/04/92	05/04/92	13.7		07/23/92	RLW
SWS2015100A0LD	WWC5*770	05/04/92	05/04/92	10.6		07/10/92	RLW
SWS2015100B0LD	WWC5*771	05/04/92	05/04/92	13.2		07/10/92	RLW
SWS2015100C0LD	WWC5*772	05/04/92	05/04/92	14.7		07/10/92	RLW
SWS2015200A00L	WWC5*773	05/04/92	05/04/92	9.2		07/10/92	RLW
SWS2015200B00L	WWC5*774	05/04/92	05/04/92	13.0		07/10/92	RLW
SWS2015200C00L	WWC5*775	05/04/92	05/04/92	14.4		07/10/92	RLW
SWS2108100A00L	WWC5*776	05/04/92	05/04/92	9.2		07/10/92	RLW
SWS2108100B00L	WWC5*777	05/04/92	05/04/92	9.2		07/10/92	RLW
SWS2108100C00L	WWC5*778	05/04/92	05/04/92	11.1		07/10/92	RLW
SWS2108200A00L	WWC5*779	05/04/92	05/04/92	15.3		07/10/92	RLW
SWS2108200B00L	WWC5*780	05/04/92	05/04/92	15.4		07/10/92	RLW
SWS2108200C00L	WWC5*781	05/04/92	05/04/92	17.0		07/10/92	RLW
STT1510100A00L	WWC5*782	05/04/92	05/04/92	12.7		07/10/92	RLW
STT1510100B00L	WWC5*783	05/04/92	05/04/92	12.6		07/10/92	RLW
STT1510100C00L	WWC5*784	05/04/92	05/04/92	14.0		07/10/92	RLW
STT1510100A0LD	WWC5*785	05/04/92	05/04/92	12.0		07/10/92	RLW
STT1510100B0LD	WWC5*786	05/04/92	05/04/92	12.7		07/10/92	RLW
STT1510100C0LD	WWC5*787	05/04/92	05/04/92	14.4		07/10/92	RLW
STT1510200A00L	WWC5*788	05/04/92	05/04/92	9.9		07/10/92	RLW
STT1510200B00L	WWC5*789	05/04/92	05/04/92	11.3		07/10/92	RLW
STT1510200C00L	WWC5*790	05/04/92	05/04/92	13.4		07/23/92	RLW
SST2239100A00L	WWC5*791	05/04/92	05/04/92	15.2		07/23/92	RLW
SST2239100B00L	WWC5*792	05/04/92	05/04/92	14.1		07/23/92	RLW
SST2239100C00L	WWC5*793	05/04/92	05/04/92	14.9		07/23/92	RLW
SST2239200A00L	WWC5*794	05/04/92	05/04/92	18.3		06/30/92	RLW
SST2239200B00L	WWC5*795	05/04/92	05/04/92	17.5		07/23/92	RLW
SST2239200C00L	WWC5*796	05/04/92	05/04/92	17.1		07/23/92	RLW
SST2232100A00L	WWC5*797	05/04/92	05/04/92	16.1		07/23/92	RLW
SST2232100B00L	WWC5*798	05/04/92	05/04/92	16.7		07/23/92	RLW

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Analytical Chemistry Res

STATUS: FINAL

PROJECT NAME: NL/TARACORP SUPERFUND SITE PREDESIGN FIELD INVESTIGATION, WWC89MC114V

PROJECT NUMBER: 5912031 0100 **REPORT DATE:** 07-30-92

SAMPLE MATRIX: SOIL **LAB MANAGER/QC REVIEW:** JEFFREY W. SIRIA

PROJECT MANAGER: JOHN F. GEMOULES **REPORT APPROVED BY:** FRANCIS Y. HUANG

SAMPLE I.D.	LABORATORY I.D.	COLLECTION DATE	RECEIVED DATE	MOISTURE, %WET WT METHOD: PB215192	EXTRACT. DATE	ANALYSIS DATE	CHEM. INIT.
SST2232100C00L	WWC5*799	05/04/92	05/04/92	17.5		07/23/92	RLW
SST2232200A00L	WWC5*800	05/04/92	05/04/92	14.8		07/23/92	RLW
SST2232200B00L	WWC5*801	05/04/92	05/04/92	13.1		07/23/92	RLW
SST2232200C00L	WWC5*802	05/04/92	05/04/92	14.9		07/23/92	RLW
SDE1627100A00L	WWC5*803	05/05/92	05/05/92	17.9		06/30/92	RLW
SDE1627100B00L	WWC5*804	05/05/92	05/05/92	11.4		06/30/92	RLW
SDE1627100C00L	WWC5*805	05/05/92	05/05/92	14.5		06/30/92	RLW
SDE1627200A00L	WWC5*806	05/05/92	05/05/92	17.7		06/30/92	RLW
SDE1627200B00L	WWC5*807	05/05/92	05/05/92	18.0		06/30/92	RLW
SDE1627200C00L	WWC5*808	05/05/92	05/05/92	18.6		06/30/92	RLW
SDE1700100A00L	WWC5*809	05/05/92	05/05/92	7.8		06/30/92	RLW
SDE1700100B00L	WWC5*810	05/05/92	05/05/92	9.6		06/30/92	RLW
SDE1700100C00L	WWC5*811	05/05/92	05/05/92	10.9		06/30/92	RLW
SDE1700200A00L	WWC5*812	05/05/92	05/05/92	9.5		06/30/92	RLW
SDE1700200B00L	WWC5*813	05/05/92	05/05/92	14.5		06/30/92	RLW
SDE1700200C00L	WWC5*814	05/05/92	05/05/92	15.5		06/30/92	RLW
SDE1723100A00L	WWC5*815	05/05/92	05/05/92	18.7		06/30/92	RLW
SDE1723100B00L	WWC5*816	05/05/92	05/05/92	16.8		06/30/92	RLW
SDE1723100C00L	WWC5*817	05/05/92	05/05/92	18.0		06/30/92	RLW
SDE1723200A00L	WWC5*818	05/05/92	05/05/92	12.2		06/30/92	RLW
SDE1723200B00L	WWC5*819	05/05/92	05/05/92	12.9		06/30/92	RLW
3 SDE1723200C00L	WWC5*820	05/05/92	05/05/92	15.2		06/30/92	RLW
SDE2160100A00L	WWC5*821	05/05/92	05/05/92	11.6		06/30/92	RLW
SDE2160100B00L	WWC5*822	05/05/92	05/05/92	13.4		06/30/92	RLW
SDE2160100C00L	WWC5*823	05/05/92	05/05/92	13.9		06/30/92	RLW
SDE2160200A00L	WWC5*824	05/05/92	05/05/92	13.6		06/30/92	RLW
SDE2160200B00L	WWC5*825	05/05/92	05/05/92	13.3		06/30/92	RLW
SDE2160200C00L	WWC5*826	05/05/92	05/05/92	15.5		06/30/92	RLW
SDE2134100A00L	WWC5*827	05/05/92	05/05/92	8.5		06/30/92	RLW
SDE2134100B00L	WWC5*828	05/05/92	05/05/92	8.8		06/30/92	RLW
SDE2134100C00L	WWC5*829	05/05/92	05/05/92	9.2		06/30/92	RLW
SDE2134200A00L	WWC5*830	05/05/92	05/05/92	9.8		06/30/92	RLW
SDE2134200B00L	WWC5*831	05/05/92	05/05/92	9.4		06/30/92	RLW
SDE2134200C00L	WWC5*832	05/05/92	05/05/92	12.2		06/30/92	RLW
SDE2130100A00L	WWC5*833	05/05/92	05/05/92	14.1		06/30/92	RLW
SDE2130100B00L	WWC5*834	05/05/92	05/05/92	14.7		06/30/92	RLW
SDE2130100C00L	WWC5*835	05/05/92	05/05/92	13.4		06/30/92	RLW
SDE2130200A00L	WWC5*836	05/05/92	05/05/92	13.4		06/30/92	RLW
SDE2130200B00L	WWC5*837	05/05/92	05/05/92	14.0		06/30/92	RLW
SDE2130200C00L	WWC5*838	05/05/92	05/05/92	10.7		06/30/92	RLW
SCL2053100A00L	WWC5*839	05/05/92	05/05/92	10.6		06/30/92	RLW
SCL2053100B00L	WWC5*840	05/05/92	05/05/92	11.8		06/30/92	RLW

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Analytical Chemistry Results

STATUS: FINAL

PROJECT NAME: NL/TARACORP SUPERFUND SITE PREDESIGN FIELD INVESTIGATION, WWC89MC114V

PROJECT NUMBER: 5912031 0100

REPORT DATE: 07-30-92

SAMPLE MATRIX: SOIL

LAB MANAGER/QC REVIEW: JEFFREY W. SIRIA

PROJECT MANAGER: JOHN F. GEMOULES

REPORT APPROVED BY: FRANCIS Y. HUANG

SAMPLE I.D.	LABORATORY I.D.	COLLECTION DATE	RECEIVED DATE	MOISTURE, %WET WT METHOD: PB215192	EXTRACT. DATE	ANALYSIS DATE	CHEM. INIT.
SCL2053100C00L	WWC5*841	05/05/92	05/05/92	12.4		06/30/92	RLW
SCL2053200A00L	WWC5*842	05/05/92	05/05/92	16.2		06/30/92	RLW
SCL2053200B00L	WWC5*843	05/05/92	05/05/92	15.7		06/30/92	RLW
SCL2053200C00L	WWC5*844	05/05/92	05/05/92	15.9		06/30/92	RLW
SBE2218100A00L	WWC5*845	05/05/92	05/05/92	7.5		06/30/92	RLW
SBE2218100B00L	WWC5*846	05/05/92	05/05/92	8.4		06/30/92	RLW
SBE2218100C00L	WWC5*847	05/05/92	05/05/92	8.1		06/30/92	RLW
SBE2218200A00L	WWC5*848	05/05/92	05/05/92	13.3		06/30/92	RLW
SBE2218200B00L	WWC5*849	05/05/92	05/05/92	13.3		06/30/92	RLW
SBE2218200C00L	WWC5*850	05/05/92	05/05/92	10.5		06/30/92	RLW
SBE2222100A00L	WWC5*851	05/05/92	05/05/92	11.2		06/30/92	RLW
SBE2222100B00L	WWC5*852	05/05/92	05/05/92	8.8		06/30/92	RLW
SBE2222100C00L	WWC5*853	05/05/92	05/05/92	9.8		06/30/92	RLW
SBE2222200A00L	WWC5*854	05/05/92	05/05/92	4.9		06/30/92	RLW
SBE2222200B00L	WWC5*855	05/05/92	05/05/92	6.8		06/30/92	RLW
SBE2222200C00L	WWC5*856	05/05/92	05/05/92	11.9		06/30/92	RLW
SCL1736100A00L	WWC5*857	05/05/92	05/05/92	15.4		06/30/92	RLW
SCL1736100B00L	WWC5*858	05/05/92	05/05/92	16.3		06/30/92	RLW
SCL1736100C00L	WWC5*859	05/05/92	05/05/92	15.3		06/30/92	RLW
SCL1736200A00L	WWC5*860	05/05/92	05/05/92	19.4		06/30/92	RLW
SCL1736200B00L	WWC5*861	05/05/92	05/05/92	18.7		06/30/92	RLW
SCL1736200C00L	WWC5*862	05/05/92	05/05/92	18.2		06/30/92	RLW
SCL1728100A00L	WWC5*863	05/05/92	05/05/92	12.3		06/30/92	RLW
SCL1728100B00L	WWC5*864	05/05/92	05/05/92	12.7		06/30/92	RLW
SCL1728100C00L	WWC5*865	05/05/92	05/05/92	14.5		06/30/92	RLW
SCL1728200A00L	WWC5*866	05/05/92	05/05/92	11.8		06/30/92	RLW
SCL1728200B00L	WWC5*867	05/05/92	05/05/92	14.2		06/30/92	RLW
SCL1728200C00L	WWC5*868	05/05/92	05/05/92	15.8		06/30/92	RLW
SCL1720100A00L	WWC5*869	05/05/92	05/05/92	6.6		06/30/92	RLW
SCL1720100B00L	WWC5*870	05/05/92	05/05/92	7.3		06/30/92	RLW
SCL1720100C00L	WWC5*871	05/05/92	05/05/92	10.9		06/30/92	RLW
SCL1720200A00L	WWC5*872	05/05/92	05/05/92	6.0		06/30/92	RLW
SCL1720200B00L	WWC5*873	05/05/92	05/05/92	6.0		06/30/92	RLW
SCL1720200C00L	WWC5*874	05/05/92	05/05/92	9.5		06/30/92	RLW
SBE2103100A00L	WWC5*875	05/05/92	05/05/92	10.2		06/30/92	RLW
SBE2103100B00L	WWC5*876	05/05/92	05/05/92	10.7		06/30/92	RLW
SBE2103100C00L	WWC5*877	05/05/92	05/05/92	12.9		06/30/92	RLW
SBE2103200A00L	WWC5*878	05/05/92	05/05/92	10.9		06/30/92	RLW
SBE2103200B00L	WWC5*879	05/05/92	05/05/92	8.0		06/30/92	RLW
SBE2103200C00L	WWC5*880	05/05/92	05/05/92	13.1		06/30/92	RLW
SCL1630100A00L	WWC5*881	05/05/92	05/05/92	11.9		06/30/92	RLW
SCL1630100B00L	WWC5*882	05/05/92	05/05/92	11.5		06/30/92	RLW

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Analytical Chemistry Res

STATUS: FINAL

PROJECT NAME: NL/TARACORP SUPERFUND SITE PREDESIGN FIELD INVESTIGATION, WWC89MC114V

PROJECT NUMBER: 5912031 0100 **REPORT DATE:** 07-30-92

SAMPLE MATRIX: SOIL **LAB MANAGER/QC REVIEW:** JEFFREY W. SIRIA

PROJECT MANAGER: JOHN F. GEMOULES **REPORT APPROVED BY:** FRANCIS Y. HUANG

SAMPLE I.D.	LABORATORY I.D.	COLLECTION DATE	RECEIVED DATE	MOISTURE, %WET WT METHOD: PB215192	EXTRACT. DATE	ANALYSIS DATE	CHEM. INIT.
SCL1630100C00L	WWC5*883	05/05/92	05/05/92	13.5		06/30/92	RLW
SCL1630200A00L	WWC5*884	05/05/92	05/05/92	15.4		06/30/92	RLW
SCL1630200B00L	WWC5*885	05/05/92	05/05/92	19.2		06/30/92	RLW
SCL1630200C00L	WWC5*886	05/05/92	05/05/92	17.2		06/30/92	RLW
SED1718100A00L	WWC5*887	05/06/92	05/06/92	17.8		06/30/92	RLW
SED1718100B00L	WWC5*888	05/06/92	05/06/92	15.0		06/30/92	RLW
SED1718100C00L	WWC5*889	05/06/92	05/06/92	15.9		06/30/92	RLW
SED1718200A00L	WWC5*890	05/06/92	05/06/92	9.0		06/30/92	RLW
SED1718200B00L	WWC5*891	05/06/92	05/06/92	9.7		06/30/92	RLW
SED1718200C00L	WWC5*892	05/06/92	05/06/92	9.3		06/30/92	RLW
SED1733100A00L	WWC5*893	05/06/92	05/06/92	15.7		06/30/92	RLW
SED1733100B00L	WWC5*894	05/06/92	05/06/92	10.8		06/30/92	RLW
SED1733100C00L	WWC5*895	05/06/92	05/06/92	14.6		06/30/92	RLW
SED1733200A00L	WWC5*896	05/06/92	05/06/92	17.5		06/30/92	RLW
SED1733200B00L	WWC5*897	05/06/92	05/06/92	16.1		06/30/92	RLW
SED1733200C00L	WWC5*898	05/06/92	05/06/92	16.8		06/30/92	RLW
SED1729100A00L	WWC5*899	05/06/92	05/06/92	10.5		06/30/92	RLW
SED1729100B00L	WWC5*900	05/06/92	05/06/92	9.8		06/30/92	RLW
SED1729100C00L	WWC5*901	05/06/92	05/06/92	13.4		06/30/92	RLW
SED1729200A00L	WWC5*902	05/06/92	05/06/92	12.2		06/30/92	RLW
SED1729200B00L	WWC5*903	05/06/92	05/06/92	11.9		06/30/92	RLW
SED1729200C00L	WWC5*904	05/06/92	05/06/92	13.5		06/30/92	RLW
SED1726100A00L	WWC5*905	05/06/92	05/06/92	14.7		06/30/92	RLW
SED1726100B00L	WWC5*906	05/06/92	05/06/92	13.6		06/30/92	RLW
SED1726100C00L	WWC5*907	05/06/92	05/06/92	13.7		06/30/92	RLW
SED1726200A00L	WWC5*908	05/06/92	05/06/92	13.9		06/30/92	RLW
SED1726200B00L	WWC5*909	05/06/92	05/06/92	12.7		06/30/92	RLW
SED1726200C00L	WWC5*910	05/06/92	05/06/92	14.3		06/30/92	RLW
SGR1734100A00L	WWC5*911	05/06/92	05/06/92	15.2		06/30/92	RLW
SGR1734100B00L	WWC5*912	05/06/92	05/06/92	11.5		06/30/92	RLW
SGR1734100C00L	WWC5*913	05/06/92	05/06/92	12.0		06/30/92	RLW
SGR1734200A00L	WWC5*914	05/06/92	05/06/92	15.6		06/30/92	RLW
SGR1734200B00L	WWC5*915	05/06/92	05/06/92	11.3		06/30/92	RLW
SGR1734200C00L	WWC5*916	05/06/92	05/06/92	15.7		07/02/92	RLW
SED1643100A00L	WWC5*917	05/06/92	05/06/92	17.8		07/02/92	RLW
SED1643100B00L	WWC5*918	05/06/92	05/06/92	16.0		07/02/92	RLW
3 SED1647100C00L	WWC5*919	05/06/92	05/06/92	16.8		07/02/92	RLW
SED1643200A00L	WWC5*920	05/06/92	05/06/92	10.4		07/02/92	RLW
SED1643200B00L	WWC5*921	05/06/92	05/06/92	11.5		07/02/92	RLW
SED1643200C00L	WWC5*922	05/06/92	05/06/92	12.6		07/02/92	RLW
SED1638100A00L	WWC5*923	05/06/92	05/06/92	11.7		07/02/92	RLW
SED1638100B00L	WWC5*924	05/06/92	05/06/92	11.1		07/02/92	RLW

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PROJECT NUMBER: 5912031 0100 **REPORT DATE:** 07-30-92

SAMPLE MATRIX: SOIL **LAB MANAGER/QC REVIEW:** JEFFREY W. SIRIA

PROJECT MANAGER: JOHN F. GEMOULES **REPORT APPROVED BY:** FRANCIS Y. HUANG

SAMPLE I.D.	LABORATORY I.D.	COLLECTION DATE	RECEIVED DATE	MOISTURE, %WET WT METHOD: PB215192	EXTRACT. DATE	ANALYSIS DATE	CHEM. INIT.
SED1638100C00L	WWC5*925	05/06/92	05/06/92	13.9		07/02/92	RLW
SED1638200A00L	WWC5*926	05/06/92	05/06/92	10.8		07/02/92	RLW
SED1638200B00L	WWC5*927	05/06/92	05/06/92	11.9		07/02/92	RLW
SED1638200C00L	WWC5*928	05/06/92	05/06/92	15.3		07/02/92	RLW
SED1621100A00L	WWC5*929	05/06/92	05/06/92	13.2		07/02/92	RLW
SED1621100B00L	WWC5*930	05/06/92	05/06/92	16.4		07/02/92	RLW
SED1621100C00L	WWC5*931	05/06/92	05/06/92	17.2		07/02/92	RLW
SED1621200A00L	WWC5*932	05/06/92	05/06/92	7.9		07/02/92	RLW
SED1621200B00L	WWC5*933	05/06/92	05/06/92	8.2		07/02/92	RLW
SED1621200C00L	WWC5*934	05/06/92	05/06/92	13.2		07/02/92	RLW
SSP1610100A00L	WWC5*935	05/06/92	05/06/92	11.7		07/02/92	RLW
SSP1610100B00L	WWC5*936	05/06/92	05/06/92	12.3		07/02/92	RLW
SSP1610100C00L	WWC5*937	05/06/92	05/06/92	16.1		07/02/92	RLW
SSP1610200A00L	WWC5*938	05/06/92	05/06/92	15.9		07/02/92	RLW
SSP1610200B00L	WWC5*939	05/06/92	05/06/92	15.2		07/02/92	RLW
SSP1610200C00L	WWC5*940	05/06/92	05/06/92	16.8		07/02/92	RLW
SOL1738100A00L	WWC5*941	05/06/92	05/06/92	10.3		07/02/92	RLW
SOL1738100B00L	WWC5*942	05/06/92	05/06/92	11.2		07/02/92	RLW
SOL1738100C00L	WWC5*943	05/06/92	05/06/92	13.6		07/02/92	RLW
SOL1738200A00L	WWC5*944	05/06/92	05/06/92	10.0		07/02/92	RLW
SOL1738200B00L	WWC5*945	05/06/92	05/06/92	13.1		07/02/92	RLW
SOL1738200C00L	WWC5*946	05/06/92	05/06/92	16.5		07/02/92	RLW
SOL1747100A00L	WWC5*947	05/06/92	05/06/92	11.4		07/02/92	RLW
SOL1747100B00L	WWC5*948	05/06/92	05/06/92	10.1		07/02/92	RLW
SOL1747100C00L	WWC5*949	05/06/92	05/06/92	12.0		07/02/92	RLW
SOL1747200A00L	WWC5*950	05/06/92	05/06/92	6.4		07/02/92	RLW
SOL1747200B00L	WWC5*951	05/06/92	05/06/92	4.9		07/02/92	RLW
SOL1747200C00L	WWC5*952	05/06/92	05/06/92	4.7		07/02/92	RLW
SOL1751100A00L	WWC5*953	05/06/92	05/06/92	4.6		07/02/92	RLW
SOL1751100B00L	WWC5*954	05/06/92	05/06/92	9.9		07/02/92	RLW
SOL1751100C00L	WWC5*955	05/06/92	05/06/92	3.9		07/02/92	RLW
SOL1751200A00L	WWC5*956	05/06/92	05/06/92	9.4		07/02/92	RLW
SOL1751200B00L	WWC5*957	05/06/92	05/06/92	9.6		07/02/92	RLW
SOL1751200C00L	WWC5*958	05/06/92	05/06/92	9.8		07/02/92	RLW
SOL1651100A00L	WWC5*959	05/06/92	05/06/92	8.8		07/02/92	RLW
SOL1651100B00L	WWC5*960	05/06/92	05/06/92	7.5		07/02/92	RLW
SOL1651100C00L	WWC5*961	05/06/92	05/06/92	6.4		07/02/92	RLW
SOL1651200A00L	WWC5*962	05/06/92	05/06/92	6.9		07/02/92	RLW
SOL1651200B00L	WWC5*963	05/06/92	05/06/92	5.9		07/02/92	RLW
SOL1651200C00L	WWC5*964	05/06/92	05/06/92	6.1		07/02/92	RLW
SSP1646100A00L	WWC5*965	05/06/92	05/06/92	8.6		07/02/92	RLW
SSP1646100B00L	WWC5*966	05/06/92	05/06/92	12.9		07/02/92	RLW

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St. Louis Chemistry Laboratory

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Analytical Chemistry Res

STATUS: FINAL

PROJECT NAME: NL/TARACORP SUPERFUND SITE PREDESIGN FIELD INVESTIGATION, WWC89MC114V

PROJECT NUMBER: 5912031 0100 **REPORT DATE:** 07-30-92

SAMPLE MATRIX: SOIL **LAB MANAGER/QC REVIEW:** JEFFREY W. SIRIA

PROJECT MANAGER: JOHN F. GEMOULES **REPORT APPROVED BY:** FRANCIS Y. HUANG

SAMPLE I.D.	LABORATORY I.D.	COLLECTION DATE	RECEIVED DATE	MOISTURE, %WET WT METHOD: PB215192	EXTRACT. DATE	ANALYSIS DATE	CHEM. INIT.
SSP1646100C00L	WWC5*967	05/06/92	05/06/92	14.4		07/02/92	RLW
SSP1646200A00L	WWC5*968	05/06/92	05/06/92	11.7		07/02/92	RLW
SSP1646200B00L	WWC5*969	05/06/92	05/06/92	11.8		07/02/92	RLW
SWT2610100A00L	WWC5*970	05/07/92	05/07/92	8.0		07/02/92	RLW
SWT2610100B00L	WWC5*971	05/07/92	05/07/92	9.1		07/02/92	RLW
SWT2610100C00L	WWC5*972	05/07/92	05/07/92	11.0		07/02/92	RLW
SWT2610200A00L	WWC5*973	05/07/92	05/07/92	15.0		07/02/92	RLW
SWT2610200B00L	WWC5*974	05/07/92	05/07/92	17.2		07/02/92	RLW
SWT2610200C00L	WWC5*975	05/07/92	05/07/92	17.5		07/02/92	RLW
SWT2610100A0LD	WWC5*976	05/07/92	05/07/92	8.0		07/02/92	RLW
SWT2610100B0LD	WWC5*977	05/07/92	05/07/92	8.6		07/02/92	RLW
SWT2610100C0LD	WWC5*978	05/07/92	05/07/92	10.9		07/02/92	RLW
SMP1649100A00L	WWC5*979	05/07/92	05/07/92	9.8		07/02/92	RLW
SMP1649100B00L	WWC5*980	05/07/92	05/07/92	14.7		07/02/92	RLW
SMP1649100C00L	WWC5*981	05/07/92	05/07/92	16.7		07/02/92	RLW
SMP1649200A00L	WWC5*982	05/07/92	05/07/92	15.6		07/02/92	RLW
SMP1649200B00L	WWC5*983	05/07/92	05/07/92	24.9		07/02/92	RLW
SMP1649200C00L	WWC5*984	05/07/92	05/07/92	21.9		07/02/92	RLW
SMP1637100A00L	WWC5*985	05/07/92	05/07/92	12.5		07/02/92	RLW
SMP1637100B00L	WWC5*986	05/07/92	05/07/92	10.5		07/02/92	RLW
SMP1637100C00L	WWC5*987	05/07/92	05/07/92	10.3		07/02/92	RLW
SMP1637200A00L	WWC5*988	05/07/92	05/07/92	12.8		07/02/92	RLW
SMP1637200B00L	WWC5*989	05/07/92	05/07/92	14.2		07/02/92	RLW
SMP1637200C00L	WWC5*990	05/07/92	05/07/92	17.7		07/02/92	RLW
SMP1627100A00L	WWC5*991	05/07/92	05/07/92	10.4		07/02/92	RLW
SMP1627100B00L	WWC5*992	05/07/92	05/07/92	10.5		07/02/92	RLW
SMP1627100C00L	WWC5*993	05/07/92	05/07/92	11.2		07/02/92	RLW
SMP1627200A00L	WWC5*994	05/07/92	05/07/92	16.1		07/02/92	RLW
SMP1627200B00L	WWC5*995	05/07/92	05/07/92	15.0		07/02/92	RLW
SMP1627200C00L	WWC5*996	05/07/92	05/07/92	14.7		07/02/92	RLW
SMP1611100A00L	WWC5*997	05/07/92	05/07/92	12.2		07/02/92	RLW
SMP1611100B00L	WWC5*998	05/07/92	05/07/92	11.6		07/02/92	RLW
SMP1611100C00L	WWC5*999	05/07/92	05/07/92	13.9		07/02/92	RLW

LEAD ANALYSIS

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St. Louis Chemistry Laboratory

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Analytical Chemistry Resu

STATUS: FINAL

PROJECT NAME: NL/TARACORP SUPERFUND SITE PREDESIGN FIELD INVESTIGATION, WWC89MC114V

PROJECT NUMBER: 5912031 0100 **REPORT DATE:** 07-31-92

SAMPLE MATRIX: SOIL **LAB MANAGER/QC REVIEW:** JEFFREY W. SIRIA

PROJECT MANAGER: JOHN F. GEMOULES **REPORT APPROVED BY:** FRANCIS Y. HUANG

SAMPLE I.D.	LABORATORY I.D.	COLLECTION DATE	RECEIVED DATE	LEAD(FAA), MG/KG-DRY METHOD: 3051/7420	MDL	EXTRACT. DATE	ANALYSIS DATE	CHEM. INIT.
SDE2133100A00L	WWC5*1	04/14/92	04/14/92	535	5.8	05/12/92	05/18/92	PW
SDE2133100B00L	WWC5*2	04/14/92	04/14/92	323	5.5	05/12/92	05/18/92	PW
SDE2133100C00L	WWC5*3	04/14/92	04/14/92	235	5.6	05/12/92	05/18/92	PW
SDE2133200A00L	WWC5*4	04/14/92	04/14/92	777	5.5	05/12/92	05/18/92	PW
SDE2133200B00L	WWC5*5	04/14/92	04/14/92	399	5.4	05/12/92	05/18/92	PW
SDE2133200C00L	WWC5*6	04/14/92	04/14/92	220	5.7	05/12/92	05/18/92	PW
SDE2154100A00L	WWC5*7	04/14/92	04/14/92	407	5.5	05/12/92	05/18/92	PW
SDE2154100B00L	WWC5*8	04/14/92	04/14/92	318	5.8	05/12/92	05/18/92	PW
SDE2154100C00L	WWC5*9	04/14/92	04/14/92	211	5.6	05/12/92	05/18/92	PW
SDE2154200A00L	WWC5*10	04/14/92	04/14/92	537	5.3	05/12/92	05/18/92	PW
SDE2154200B00L	WWC5*11	04/14/92	04/14/92	257	5.2	05/12/92	05/19/92	PW
SDE2154200C00L	WWC5*12	04/14/92	04/14/92	265	5.5	05/12/92	05/19/92	PW
SCL2116100A00L	WWC5*13	04/15/92	04/15/92	606	5.8	05/12/92	05/19/92	PW
SCL2116100B00L	WWC5*14	04/15/92	04/15/92	594	5.5	05/12/92	05/19/92	PW
SCL2116100C00L	WWC5*15	04/15/92	04/15/92	299	5.9	05/12/92	05/19/92	PW
SCL2116200A00L	WWC5*16	04/15/92	04/15/92	262	5.8	05/12/92	05/19/92	PW
SCL2116200B00L	WWC5*17	04/15/92	04/15/92	211	5.7	05/12/92	05/19/92	PW
SCL2116200C00L	WWC5*18	04/15/92	04/15/92	279	5.9	05/12/92	05/19/92	PW
SCL2133100A00L	WWC5*19	04/15/92	04/15/92	368	5.2	05/12/92	05/19/92	PW
SCL2133100B00L	WWC5*20	04/15/92	04/15/92	333	5.8	05/12/92	05/19/92	PW
SCL2133100C00L	WWC5*21	04/15/92	04/15/92	161	5.5	05/12/92	05/19/92	PW
SCL2133200A00L	WWC5*22	04/15/92	04/15/92	364	5.3	05/12/92	05/19/92	PW
SCL2133200B00L	WWC5*23	04/15/92	04/15/92	333	5.3	05/12/92	05/19/92	PW
SCL2133200C00L	WWC5*24	04/15/92	04/15/92	177	5.6	05/12/92	05/19/92	PW
SCL2134100A00L	WWC5*25	04/15/92	04/15/92	478	5.8	05/12/92	05/19/92	PW
SCL2134100B00L	WWC5*26	04/15/92	04/15/92	256	5.9	05/12/92	05/19/92	PW
SCL2134100C00L	WWC5*27	04/15/92	04/15/92	204	5.7	05/12/92	05/19/92	PW
SCL2134200A00L	WWC5*28	04/15/92	04/15/92	447	5.5	05/12/92	05/19/92	PW
SCL2134200B00L	WWC5*29	04/15/92	04/15/92	440	5.5	05/12/92	05/19/92	PW
SCL2134200C00L	WWC5*30	04/15/92	04/15/92	199	5.6	05/12/92	05/19/92	PW
SCL2138100A00L	WWC5*31	04/15/92	04/15/92	383	5.5	05/12/92	05/19/92	PW
SCL2138100B00L	WWC5*32	04/15/92	04/15/92	292	6.1	05/12/92	05/19/92	PW
SCL2138100C00L	WWC5*33	04/15/92	04/15/92	121	5.8	05/12/92	05/19/92	PW
SCL2138200A00L	WWC5*34	04/15/92	04/15/92	499	5.8	05/12/92	05/19/92	PW
SCL2138200B00L	WWC5*35	04/15/92	04/15/92	505	5.8	05/12/92	05/19/92	PW
SCL2138200C00L	WWC5*36	04/15/92	04/15/92	412	5.7	05/12/92	05/19/92	PW
SCL2141100A00L	WWC5*37	04/15/92	04/15/92	414	5.5	05/12/92	05/19/92	PW
SCL2141100B00L	WWC5*38	04/15/92	04/15/92	224	5.4	05/12/92	05/19/92	PW
SCL2141100C00L	WWC5*39	04/15/92	04/15/92	117	5.5	05/12/92	05/19/92	PW
SCL2141200A00L	WWC5*40	04/15/92	04/15/92	328	5.5	05/12/92	05/19/92	PW
SCL2141200B00L	WWC5*41	04/15/92	04/15/92	243	5.4	05/12/92	05/19/92	PW
SCL2141200C00L	WWC5*42	04/15/92	04/15/92	123	5.7	05/12/92	05/19/92	PW

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Analytical Chemistry Results

STATUS: FINAL

PROJECT NAME: NL/TARACORP SUPERFUND SITE PREDESIGN FIELD INVESTIGATION, WWC89MC114V

PROJECT NUMBER: 5912031 0100 **REPORT DATE:** 07-31-92

SAMPLE MATRIX: SOIL **LAB MANAGER/QC REVIEW:** JEFFREY W. SIRIA

PROJECT MANAGER: JOHN F. GEMOULES **REPORT APPROVED BY:** FRANCIS Y. HUANG

SAMPLE I.D.	LABORATORY I.D.	COLLECTION DATE	RECEIVED DATE	LEAD(FAA), MG/KG-DRY METHOD: 3051/7420	MDL	EXTRACT. DATE	ANALYSIS DATE	CHEM. INIT.
SCL2158100A00L	WWC5*43	04/15/92	04/15/92	368	5.5	05/12/92	05/19/92	PW
SCL2158100B00L	WWC5*44	04/15/92	04/15/92	371	5.8	05/12/92	05/19/92	PW
SCL2158100C00L	WWC5*45	04/15/92	04/15/92	290	5.6	05/12/92	05/19/92	PW
SCL2158200A00L	WWC5*46	04/15/92	04/15/92	542	6.1	05/12/92	05/19/92	PW
SCL2158200B00L	WWC5*47	04/15/92	04/15/92	507	5.9	05/12/92	05/19/92	PW
SCL2158200C00L	WWC5*48	04/15/92	04/15/92	303	5.6	05/12/92	05/19/92	PW
SDE1633100A00L	WWC5*49	04/15/92	04/15/92	2260	5.6	05/12/92	05/19/92	PW
SDE1633100B00L	WWC5*50	04/15/92	04/15/92	1400	5.5	05/12/92	05/19/92	PW
SDE1633100C00L	WWC5*51	04/15/92	04/15/92	427	5.9	05/15/92	05/19/92	PW
SDE1633200A00L	WWC5*52	04/15/92	04/15/92	1890	5.8	05/15/92	05/19/92	PW
SDE1633200B00L	WWC5*53	04/15/92	04/15/92	1080	6.0	05/15/92	05/19/92	PW
SDE1633200C00L	WWC5*54	04/15/92	04/15/92	367	5.9	05/15/92	05/19/92	PW
SED1708100A00L	WWC5*55	04/15/92	04/15/92	1290	6.2	05/15/92	05/19/92	PW
SED1708100B00L	WWC5*56	04/15/92	04/15/92	137	6.2	05/15/92	05/19/92	PW
SED1708100C00L	WWC5*57	04/15/92	04/15/92	310	6.5	05/15/92	05/19/92	PW
SED1708200A00L	WWC5*58	04/15/92	04/15/92	743	5.3	05/15/92	05/19/92	PW
SED1708200B00L	WWC5*59	04/15/92	04/15/92	486	6.1	05/15/92	05/19/92	PW
SED1708200C00L	WWC5*60	04/15/92	04/15/92	581	5.8	05/15/92	05/19/92	PW
SAD1940100A00L	WWC5*61	04/15/92	04/15/92	260	5.6	05/15/92	05/19/92	PW
SAD1940100B00L	WWC5*62	04/15/92	04/15/92	103	5.5	05/15/92	05/19/92	PW
SAD1940100C00L	WWC5*63	04/15/92	04/15/92	107	5.8	05/15/92	05/19/92	PW
SAD1940200A00L	WWC5*64	04/15/92	04/15/92	63.4	5.3	05/15/92	05/19/92	PW
SAD1940200B00L	WWC5*65	04/15/92	04/15/92	114	5.5	05/15/92	05/19/92	PW
SAD1940200C00L	WWC5*66	04/15/92	04/15/92	164	5.5	05/15/92	05/19/92	PW
SED2052100A00L	WWC5*67	04/15/92	04/15/92	466	5.7	05/15/92	05/19/92	PW
SED2052100B00L	WWC5*68	04/15/92	04/15/92	282	5.5	05/15/92	05/19/92	PW
SED2052100C00L	WWC5*69	04/15/92	04/15/92	165	5.5	05/15/92	05/19/92	PW
SED2052200A00L	WWC5*70	04/15/92	04/15/92	189	5.1	05/12/92	05/19/92	PW
SED2052200B00L	WWC5*71	04/15/92	04/15/92	1190	5.3	05/15/92	06/02/92	PW
SED2052200C00L	WWC5*72	04/15/92	04/15/92	1420	6.2	05/18/92	06/02/92	PW
SST2256200A00L	WWC5*73	04/15/92	04/15/92	292	5.3	05/18/92	06/02/92	PW
SST2256200B00L	WWC5*74	04/15/92	04/15/92	494	5.4	05/18/92	06/02/92	PW
SST2256200C00L	WWC5*75	04/15/92	04/15/92	554	5.8	05/18/92	06/02/92	PW
SBE2101100A00L	WWC5*76	04/16/92	04/16/92	382	6.0	05/18/92	06/02/92	PW
SBE2101100B00L	WWC5*77	04/16/92	04/16/92	331	5.6	05/18/92	06/02/92	PW
SBE2101100C00L	WWC5*78	04/16/92	04/16/92	266	6.2	05/18/92	06/02/92	PW
SBE2101200A00L	WWC5*79	04/16/92	04/16/92	642	6.0	05/18/92	06/02/92	PW
SBE2101200B00L	WWC5*80	04/16/92	04/16/92	441	5.7	05/18/92	06/02/92	PW
SBE2101200C00L	WWC5*81	04/16/92	04/16/92	308	5.4	05/18/92	06/02/92	PW
SBE2119100A00L	WWC5*82	04/16/92	04/16/92	323	6.1	05/18/92	06/02/92	PW
SBE2119100B00L	WWC5*83	04/16/92	04/16/92	316	5.8	05/18/92	06/02/92	PW
SBE2119100C00L	WWC5*84	04/16/92	04/16/92	116	5.6	05/18/92	06/02/92	PW

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Analytical Chemistry Resu

PROJECT NAME: NL/TARACORP SUPERFUND SITE PREDESIGN FIELD INVESTIGATION, WWC89MC114V

PROJECT NUMBER: 5912031 0100 **REPORT DATE:** 07-31-92

SAMPLE MATRIX: SOIL **LAB MANAGER/QC REVIEW:** JEFFREY W. SIRIA

PROJECT MANAGER: JOHN F. GEMOULES **REPORT APPROVED BY:** FRANCIS Y. HUANG

SAMPLE I.D.	LABORATORY I.D.	COLLECTION DATE	RECEIVED DATE	LEAD(FAA), MG/KG-DRY METHOD: 3051/7420		MDL	EXTRACT. DATE	ANALYSIS DATE	CHEM. INIT.
SBE2119200A00L	WWC5*85	04/16/92	04/16/92	188		5.6	05/18/92	06/02/92	PW
SBE2119200B00L	WWC5*86	04/16/92	04/16/92	542		6.0	05/18/92	06/02/92	PW
SBE2119200C00L	WWC5*87	04/16/92	04/16/92	621		6.1	05/18/92	06/02/92	PW
SBE2119100A0LD	WWC5*88	04/16/92	04/16/92	303		5.4	05/18/92	06/02/92	PW
SBE2119100B0LD	WWC5*89	04/16/92	04/16/92	218		5.4	05/18/92	06/02/92	PW
SBE2119100C0LD	WWC5*90	04/16/92	04/16/92	31.5		5.6	05/18/92	06/02/92	PW
SBE1934100A00L	WWC5*91	04/16/92	04/16/92	185	J	5.7	05/18/92	06/02/92	PW
SBE1934100B00L	WWC5*92	04/16/92	04/16/92	877		5.3	05/18/92	06/02/92	PW
SBE1934100C00L	WWC5*93	04/16/92	04/16/92	257		5.3	05/18/92	06/02/92	PW
SBE1934200A00L	WWC5*94 B	04/16/92	04/16/92	520		5.7	05/18/92	06/02/92	PW
SBE1934200A00L	WWC5*95	04/16/92	04/16/92	404		5.5	05/18/92	06/02/92	PW
SBE1934200C00L	WWC5*96	04/16/92	04/16/92	318		5.4	05/18/92	06/02/92	PW
SBE1920100A00L	WWC5*97	04/16/92	04/16/92	639		5.7	05/18/92	06/02/92	PW
SBE1920100B00L	WWC5*98	04/16/92	04/16/92	300		5.5	05/18/92	06/02/92	PW
SBE1920100C00L	WWC5*99	04/16/92	04/16/92	53.4		5.3	05/18/92	06/02/92	PW
SBE1920200A00L	WWC5*100	04/16/92	04/16/92	686		5.7	05/18/92	06/02/92	PW
SBE1920200B00L	WWC5*101	04/16/92	04/16/92	335		5.4	05/18/92	06/02/92	PW
SBE1920200C00L	WWC5*102	04/16/92	04/16/92	117		5.1	05/18/92	06/02/92	PW
SBE1931100A00L	WWC5*103	04/16/92	04/16/92	111		5.6	05/18/92	06/02/92	PW
SBE1931100B00L	WWC5*104	04/16/92	04/16/92	26.8		5.4	05/18/92	06/02/92	PW
SBE1931100C00L	WWC5*105	04/16/92	04/16/92	34.5		5.6	05/18/92	06/02/92	PW
SBE1931200A00L	WWC5*106	04/16/92	04/16/92	552		5.8	05/18/92	06/02/92	PW
SBE1931200B00L	WWC5*107	04/16/92	04/16/92	608		5.6	05/18/92	06/02/92	PW
SBE1931200C00L	WWC5*108	04/16/92	04/16/92	354		5.7	05/18/92	06/02/92	PW
SMA1415100A00L	WWC5*109	04/16/92	04/16/92	1620		5.8	05/18/92	06/02/92	PW
SMA1415100B00L	WWC5*110	04/16/92	04/16/92	681		5.8	05/18/92	06/02/92	PW
SMA1415100C00L	WWC5*111	04/16/92	04/16/92	446	J	5.8	05/18/92	06/02/92	PW
SMA1415200A00L	WWC5*112	04/16/92	04/16/92	1300		5.9	05/15/92	06/02/92	PW
SMA1415200B00L	WWC5*113	04/16/92	04/16/92	1110		5.9	05/15/92	06/02/92	PW
SMA1415200C00L	WWC5*114	04/16/92	04/16/92	688		5.6	05/15/92	06/02/92	PW
SIO1421100A00L	WWC5*115	04/16/92	04/16/92	804		5.8	05/15/92	06/02/92	PW
SIO1421100B00L	WWC5*116	04/16/92	04/16/92	731		6.0	05/15/92	06/02/92	PW
SIO1421100C00L	WWC5*117	04/16/92	04/16/92	232		5.6	05/15/92	06/02/92	PW
SIO1421200A00L	WWC5*118	04/16/92	04/16/92	1970		5.5	05/15/92	06/02/92	PW
SIO1421200B00L	WWC5*119	04/16/92	04/16/92	1690		7.4	05/15/92	06/02/92	PW
SIO1421200C00L	WWC5*120	04/16/92	04/16/92	985		5.9	05/15/92	06/02/92	PW
SIO1421100A0LD	WWC5*121	04/16/92	04/16/92	823		5.6	05/15/92	06/02/92	PW
SIO1421100B0LD	WWC5*122	04/16/92	04/16/92	653		5.7	05/15/92	06/02/92	PW
SIO1421100C0LD	WWC5*123	04/16/92	04/16/92	346		5.9	05/18/92	06/02/92	PW
SIO1423100A00L	WWC5*124	04/16/92	04/16/92	824		6.2	05/15/92	06/02/92	PW
SIO1423100B00L	WWC5*125	04/16/92	04/16/92	816		5.9	05/15/92	06/02/92	PW
SIO1423100C00L	WWC5*126	04/16/92	04/16/92	398		6.0	05/15/92	06/02/92	PW

Environmental Science & Engineering, Inc.

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Analytical Chemistry Results

STATUS: FINAL

PROJECT NAME: NL/TARACORP SUPERFUND SITE PREDESIGN FIELD INVESTIGATION, WWC89MC114V

PROJECT NUMBER: 5912031 0100 **REPORT DATE:** 07-31-92

SAMPLE MATRIX: SOIL **LAB MANAGER/QC REVIEW:** JEFFREY W. SIRIA

PROJECT MANAGER: JOHN F. GEMOULES **REPORT APPROVED BY:** FRANCIS Y. HUANG

SAMPLE I.D.	LABORATORY I.D.	COLLECTION DATE	RECEIVED DATE	LEAD(FAA), MG/KG-DRY METHOD: 3051/7420		MDL	EXTRACT. DATE	ANALYSIS DATE	CHEM. INIT.
SIO1423200A00L	WWC5*127	04/16/92	04/16/92	687		6.2	05/15/92	06/02/92	PW
SIO1423200B00L	WWC5*128	04/16/92	04/16/92	824		6.0	05/15/92	06/02/92	PW
SIO1423200C00L	WWC5*129	04/16/92	04/16/92	751		5.6	05/15/92	06/02/92	PW
SMA1420100A00L	WWC5*130	04/16/92	04/16/92	2200	J	6.2	05/15/92	06/02/92	PW
SMA1420100B00L	WWC5*131	04/16/92	04/16/92	941		5.7	05/19/92	06/02/92	PW
SMA1420100C00L	WWC5*132	04/16/92	04/16/92	486		5.5	05/19/92	06/02/92	PW
SMA1420200A00L	WWC5*133	04/16/92	04/16/92	1050		6.2	05/19/92	06/02/92	PW
SMA1420200B00L	WWC5*134	04/16/92	04/16/92	600		6.0	05/19/92	06/02/92	PW
SMA1420200C00L	WWC5*135	04/16/92	04/16/92	366		5.5	05/19/92	06/02/92	PW
SGR2167100A00L	WWC5*136	04/16/92	04/16/92	432		5.7	05/19/92	06/02/92	PW
SGR2167100B00L	WWC5*137	04/16/92	04/16/92	358		5.2	05/19/92	06/02/92	PW
SGR2167100C00L	WWC5*138	04/16/92	04/16/92	89.7		5.3	05/19/92	06/02/92	PW
SGR2167200A00L	WWC5*139	04/16/92	04/16/92	280		6.2	05/19/92	06/02/92	PW
SGR2167200B00L	WWC5*140	04/16/92	04/16/92	220		6.0	05/19/92	06/02/92	PW
SGR2167200C00L	WWC5*141	04/16/92	04/16/92	167		5.7	05/19/92	06/02/92	PW
SGR2151100A00L	WWC5*142	04/16/92	04/16/92	456		5.7	05/19/92	06/02/92	PW
SGR2151100B00L	WWC5*143	04/16/92	04/16/92	416		5.9	05/19/92	06/02/92	PW
SGR2151100C00L	WWC5*144	04/16/92	04/16/92	182		5.7	05/19/92	06/02/92	PW
SGR2151200A00L	WWC5*145	04/16/92	04/16/92	420		5.5	05/19/92	06/02/92	PW
SGR2151200B00L	WWC5*146	04/16/92	04/16/92	20100	D	53.9	05/19/92	06/02/92	PW
SGR2151200C00L	WWC5*147	04/16/92	04/16/92	885		5.5	05/19/92	06/02/92	PW
SBE2264100A00L	WWC5*148	04/17/92	04/17/92	282		6.2	05/19/92	06/02/92	PW
SBE2264100B00L	WWC5*149	04/17/92	04/17/92	202		5.7	05/19/92	06/02/92	PW
SBE2264100C00L	WWC5*150	04/17/92	04/17/92	82.2		5.6	05/15/92	06/02/92	PW
SBE2264200A00L	WWC5*151	04/17/92	04/17/92	426		5.8	05/19/92	06/02/92	PW
SBE2264200B00L	WWC5*152	04/17/92	04/17/92	355		5.4	05/19/92	06/02/92	PW
SBE2264200C00L	WWC5*153	04/17/92	04/17/92	276		5.3	05/19/92	06/02/92	PW
SBE2252200A00L	WWC5*154	04/17/92	04/17/92	274		6.2	05/19/92	06/02/92	PW
SBE2252200B00L	WWC5*155	04/17/92	04/17/92	33.2		5.7	05/19/92	06/02/92	PW
SBE2252200C00L	WWC5*156	04/17/92	04/17/92	604		6.0	05/19/92	06/02/92	PW
SGR2251100A00L	WWC5*157	04/17/92	04/17/92	439		6.2	05/15/92	06/02/92	PW
SGR2251100B00L	WWC5*158	04/17/92	04/17/92	359		5.9	05/15/92	06/02/92	PW
SGR2251100C00L	WWC5*159	04/17/92	04/17/92	161		5.6	05/19/92	06/02/92	PW
SGR2251200A00L	WWC5*160	04/17/92	04/17/92	1310		5.9	05/19/92	06/02/92	PW
SGR2251200B00L	WWC5*161	04/17/92	04/17/92	999		6.1	05/19/92	06/02/92	PW
SGR2251200C00L	WWC5*162	04/17/92	04/17/92	815		5.8	05/19/92	06/02/92	PW
SGR2253100A00L	WWC5*163	04/17/92	04/17/92	281		6.2	05/19/92	06/02/92	PW
SGR2253100B00L	WWC5*164	04/17/92	04/17/92	219		5.9	05/19/92	06/02/92	PW
SGR2253100C00L	WWC5*165	04/17/92	04/17/92	75.2		5.5	05/19/92	06/02/92	PW
SGR2253200A00L	WWC5*166	04/17/92	04/17/92	429		6.5	05/19/92	06/02/92	PW
SGR2253200B00L	WWC5*167	04/17/92	04/17/92	172		5.9	05/19/92	06/02/92	PW
SGR2253200C00L	WWC5*168	04/17/92	04/17/92	56.3		5.5	05/19/92	06/02/92	PW

D - Sample was diluted for this parameter

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Analytical Chemistry Resu

STATUS: FINAL

PROJECT NAME: NL/TARACORP SUPERFUND SITE PREDESIGN FIELD INVESTIGATION, WWC89MC114V

PROJECT NUMBER: 5912031 0100 **REPORT DATE:** 07-31-92

SAMPLE MATRIX: SOIL **LAB MANAGER/QC REVIEW:** JEFFREY W. SIRIA

PROJECT MANAGER: JOHN F. GEMOULES **REPORT APPROVED BY:** FRANCIS Y. HUANG

SAMPLE I.D.	LABORATORY I.D.	COLLECTION DATE	RECEIVED DATE	LEAD(FAA), MG/KG-DRY METHOD: 3051/7420	MDL	EXTRACT. DATE	ANALYSIS DATE	CHEM. INIT.
SCL2250100A00L	WWC5*169	04/21/92	04/21/92	509	6.3	05/19/92	06/02/92	PW
SCL2250100B00L	WWC5*170	04/21/92	04/21/92	336	6.2	05/19/92	06/02/92	PW
SCL2250100C00L	WWC5*171	04/21/92	04/21/92	172	5.9	05/20/92	06/02/92	PW
SCL2250200A00L	WWC5*172	04/21/92	04/21/92	358	5.9	05/20/92	06/02/92	PW
SCL2250200B00L	WWC5*173	04/21/92	04/21/92	381	5.7	05/20/92	06/02/92	PW
SCL2250200C00L	WWC5*174	04/21/92	04/21/92	264	6.0	05/20/92	06/02/92	PW
SCL2257100A00L	WWC5*175	04/21/92	04/21/92	644	6.3	05/20/92	06/02/92	PW
SCL2257100B00L	WWC5*176	04/21/92	04/21/92	259	5.9	05/20/92	06/02/92	PW
SCL2257100C00L	WWC5*177	04/21/92	04/21/92	80.7	5.9	05/20/92	06/02/92	PW
SCL2257200A00L	WWC5*178	04/21/92	04/21/92	214	6.4	05/20/92	06/02/92	PW
SCL2257200B00L	WWC5*179	04/21/92	04/21/92	196	5.9	05/20/92	06/02/92	PW
SCL2257200C00L	WWC5*180	04/21/92	04/21/92	87.1	5.7	05/20/92	06/02/92	PW
SCL2258100A00L	WWC5*181	04/21/92	04/21/92	299	6.1	05/20/92	06/02/92	PW
SCL2258100B00L	WWC5*182	04/21/92	04/21/92	448	5.5	05/20/92	06/02/92	PW
SCL2258100C00L	WWC5*183	04/21/92	04/21/92	186	5.9	05/20/92	06/02/92	PW
SCL2258200A00L	WWC5*184	04/21/92	04/21/92	624	6.5	05/20/92	06/02/92	PW
SCL2258200B00L	WWC5*185	04/21/92	04/21/92	255	6.0	05/20/92	06/02/92	PW
SCL2258200C00L	WWC5*186	04/21/92	04/21/92	285	5.7	05/20/92	06/02/92	PW
SCL2262100A00L	WWC5*187	04/21/92	04/21/92	315	6.8	05/20/92	06/02/92	PW
SCL2262100B00L	WWC5*188	04/21/92	04/21/92	195	6.2	05/20/92	06/02/92	PW
SCL2262100C00L	WWC5*189	04/21/92	04/21/92	80.5	5.9	05/20/92	06/02/92	PW
SCL2262100A0LD	WWC5*190	04/21/92	04/21/92	283	6.4	05/20/92	06/02/92	PW
SCL2262100B0LD	WWC5*191	04/21/92	04/21/92	195	6.0	05/20/92	06/03/92	PW
SCL2262100C0LD	WWC5*192	04/21/92	04/21/92	101	6.1	05/20/92	06/03/92	PW
SCL2262200A00L	WWC5*193	04/21/92	04/21/92	295	6.1	05/20/92	06/03/92	PW
SCL2262200B00L	WWC5*194	04/21/92	04/21/92	178	5.9	05/20/92	06/03/92	PW
SCL2262200C00L	WWC5*195	04/21/92	04/21/92	112	6.1	05/20/92	06/03/92	PW
SCL2214100A00L	WWC5*196	04/21/92	04/21/92	773	5.9	05/20/92	06/03/92	PW
SCL2214100B00L	WWC5*197	04/21/92	04/21/92	494	5.7	05/20/92	06/03/92	PW
SCL2214100C00L	WWC5*198	04/21/92	04/21/92	382	5.6	05/20/92	06/03/92	PW
SCL2214200A00L	WWC5*199	04/21/92	04/21/92	699	6.1	05/20/92	06/03/92	PW
SCL2214200B00L	WWC5*200	04/21/92	04/21/92	565	6.3	05/20/92	06/03/92	PW
SCL2214200C00L	WWC5*201	04/21/92	04/21/92	400	5.6	05/20/92	06/03/92	PW
SCL2225100A00L	WWC5*202	04/21/92	04/21/92	435	6.7	05/20/92	06/03/92	PW
SCL2225100B00L	WWC5*203	04/21/92	04/21/92	366	6.4	05/20/92	06/03/92	PW
SCL2225100C00L	WWC5*204	04/21/92	04/21/92	212	5.8	05/20/92	06/03/92	PW
SCL2225200A00L	WWC5*205	04/21/92	04/21/92	594	6.2	05/20/92	06/03/92	PW
SCL2225200B00L	WWC5*206	04/21/92	04/21/92	622	6.3	05/20/92	06/03/92	PW
SCL2225200C00L	WWC5*207	04/21/92	04/21/92	537	6.1	05/20/92	06/03/92	PW
SED2117100A00L	WWC5*208	04/21/92	04/21/92	396	6.1	05/20/92	06/03/92	PW
SED2117100B00L	WWC5*209	04/21/92	04/21/92	269	5.6	05/20/92	06/03/92	PW
SED2117100C00L	WWC5*210	04/21/92	04/21/92	127	5.6	05/20/92	06/03/92	PW

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Analytical Chemistry Results

STATUS: FINAL

PROJECT NAME: NL/TARACORP SUPERFUND SITE PREDESIGN FIELD INVESTIGATION, WWC89MC114V

PROJECT NUMBER: 5912031 0100 **REPORT DATE:** 07-31-92

SAMPLE MATRIX: SOIL **LAB MANAGER/QC REVIEW:** JEFFREY W. SIRIA

PROJECT MANAGER: JOHN F. GEMOULES **REPORT APPROVED BY:** FRANCIS Y. HUANG

SAMPLE I.D.	LABORATORY I.D.	COLLECTION DATE	RECEIVED DATE	LEAD(FAA), MG/KG-DRY METHOD: 3051/7420	MDL	EXTRACT. DATE	ANALYSIS DATE	CHEM. INIT.
SED2117100A0LD	WWC5*211	04/21/92	04/21/92	422	6.1	05/20/92	06/03/92	PW
SED2117100B0LD	WWC5*212	04/21/92	04/21/92	255	5.7	05/20/92	06/03/92	PW
SED2117100C0LD	WWC5*213	04/21/92	04/21/92	136	5.8	05/20/92	06/03/92	PW
SED2118200A00L	WWC5*214	04/21/92	04/21/92	159	5.8	05/20/92	06/03/92	PW
SED2118200B00L	WWC5*215	04/21/92	04/21/92	485	5.7	05/20/92	06/03/92	PW
SED2118200C00L	WWC5*216	04/21/92	04/21/92	550	5.7	05/20/92	06/03/92	PW
SDE2259100A00L	WWC5*217	04/21/92	04/21/92	576	6.3	05/20/92	06/03/92	PW
SDE2259100B00L	WWC5*218	04/21/92	04/21/92	375	6.2	05/20/92	06/03/92	PW
SDE2259100C00L	WWC5*219	04/21/92	04/21/92	209	6.1	05/20/92	06/03/92	PW
SDE2259200A00L	WWC5*220	04/21/92	04/21/92	373	6.1	05/20/92	06/03/92	PW
SDE2259200B00L	WWC5*221	04/21/92	04/21/92	184	6.0	05/20/92	06/03/92	PW
SDE2259200C00L	WWC5*222	04/21/92	04/21/92	108	6.0	05/20/92	06/03/92	PW
SED2138100A00L	WWC5*223	04/21/92	04/21/92	1160	5.6	05/20/92	06/03/92	PW
SED2138100B00L	WWC5*224	04/21/92	04/21/92	547	6.2	05/20/92	06/03/92	PW
SED2138100C00L	WWC5*225	04/21/92	04/21/92	75.5	6.0	05/20/92	06/03/92	PW
SED2138200A00L	WWC5*226	04/21/92	04/21/92	636	5.9	05/20/92	06/03/92	PW
SED2138200B00L	WWC5*227	04/21/92	04/21/92	696	6.4	05/20/92	06/03/92	PW
SED2138200C00L	WWC5*228	04/21/92	04/21/92	268	5.9	05/20/92	06/03/92	PW
SED2142100A00L	WWC5*229	04/21/92	04/21/92	1270	6.1	05/20/92	06/03/92	PW
SED2142100B00L	WWC5*230	04/21/92	04/21/92	321	6.0	05/20/92	06/03/92	PW
SED2142100C00L	WWC5*231	04/21/92	04/21/92	133	6.0	05/20/92	06/03/92	PW
SED2142100A0LD	WWC5*232	04/21/92	04/21/92	610	5.9	05/20/92	06/03/92	PW
SED2142100B0LD	WWC5*233	04/21/92	04/21/92	308	5.7	05/20/92	06/03/92	PW
SED2142100C0LD	WWC5*234	04/21/92	04/21/92	248	5.5	05/20/92	06/03/92	PW
SED2142200A00L	WWC5*235	04/21/92	04/21/92	566	6.7	05/20/92	06/03/92	PW
SED2142200B00L	WWC5*236	04/21/92	04/21/92	871	6.6	05/20/92	06/03/92	PW
SED2142200C00L	WWC5*237	04/21/92	04/21/92	944	6.3	05/20/92	06/03/92	PW
SDE2222100A00L	WWC5*238	04/21/92	04/21/92	427	6.2	05/20/92	06/03/92	PW
SDE2222100B00L	WWC5*239	04/21/92	04/21/92	392	6.3	05/20/92	06/03/92	PW
SDE2222100C00L	WWC5*240	04/21/92	04/21/92	191	6.2	05/20/92	06/03/92	PW
SDE2222200A00L	WWC5*241	04/21/92	04/21/92	326	5.9	05/20/92	06/03/92	PW
SDE2222200B00L	WWC5*242	04/21/92	04/21/92	313	6.2	05/20/92	06/03/92	PW
SDE2222200C00L	WWC5*243	04/21/92	04/21/92	219	6.0	05/20/92	06/03/92	PW
SMA2025100A00L	WWC5*244	04/22/92	04/22/92	851	6.4	05/20/92	06/03/92	PW
SMA2025100B00L	WWC5*245	04/22/92	04/22/92	544	6.1	05/20/92	06/03/92	PW
SMA2025100C00L	WWC5*246	04/22/92	04/22/92	263	6.1	05/20/92	06/03/92	PW
SMA2025200A00L	WWC5*247	04/22/92	04/22/92	151	5.0	05/20/92	06/03/92	PW
SMA2025200B00L	WWC5*248	04/22/92	04/22/92	262	5.3	05/20/92	06/03/92	PW
SMA2025200C00L	WWC5*249	04/22/92	04/22/92	634	5.7	05/20/92	06/03/92	PW
SST2157100A00L	WWC5*250	04/22/92	04/22/92	439	6.3	05/20/92	06/03/92	PW
SST2157100B00L	WWC5*251	04/22/92	04/22/92	369	6.3	05/20/92	06/03/92	PW
SST2157100C00L	WWC5*252	04/22/92	04/22/92	114	6.0	05/20/92	06/03/92	PW

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St. Louis Chemistry Laboratory

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Analytical Chemistry Res

STATUS: FINAL

PROJECT NAME: NL/TARACORP SUPERFUND SITE PREDESIGN FIELD INVESTIGATION, WWC89MC114V

PROJECT NUMBER: 5912031 0100 **REPORT DATE:** 07-31-92

SAMPLE MATRIX: SOIL **LAB MANAGER/QC REVIEW:** JEFFREY W. SIRIA

PROJECT MANAGER: JOHN F. GEMOULES **REPORT APPROVED BY:** FRANCIS Y. HUANG

SAMPLE I.D.	LABORATORY I.D.	COLLECTION DATE	RECEIVED DATE	LEAD(FAA), MG/KG-DRY METHOD: 3051/7420		MDL	EXTRACT. DATE	ANALYSIS DATE	CHEM. INIT.
SST2157200A00L	WWC5*253	04/22/92	04/22/92	306		6.4	05/20/92	06/03/92	PW
SST2157200B00L	WWC5*254	04/22/92	04/22/92	311		5.9	05/20/92	06/03/92	PW
SST2157200C00L	WWC5*255	04/22/92	04/22/92	262		5.9	05/20/92	06/03/92	PW
SCL2230100A00L	WWC5*256	04/22/92	04/22/92	525		5.8	05/20/92	06/03/92	PW
SCL2230100B00L	WWC5*257	04/22/92	04/22/92	422		6.2	05/20/92	06/03/92	PW
SCL2230100C00L	WWC5*258	04/22/92	04/22/92	148		5.9	05/20/92	06/03/92	PW
SCL2230200A00L	WWC5*259	04/22/92	04/22/92	1020		6.2	05/20/92	06/03/92	PW
SCL2230200B00L	WWC5*260	04/22/92	04/22/92	613		6.1	05/20/92	06/03/92	PW
SCL2230200C00L	WWC5*261	04/22/92	04/22/92	433		6.0	05/20/92	06/03/92	PW
SMA1429100A00L	WWC5*262	04/22/92	04/22/92	1920		6.4	05/20/92	06/03/92	PW
SMA1429100B00L	WWC5*263	04/22/92	04/22/92	1240		6.4	05/20/92	06/03/92	PW
SMA1429100C00L	WWC5*264	04/22/92	04/22/92	1030		6.3	05/20/92	06/03/92	PW
SMA1429200A00L	WWC5*265	04/22/92	04/22/92	1390		6.3	05/20/92	06/03/92	PW
SMA1429200B00L	WWC5*266	04/22/92	04/22/92	818		5.9	05/20/92	06/03/92	PW
SMA1429200C00L	WWC5*267	04/22/92	04/22/92	578		6.2	05/20/92	06/03/92	PW
SMA1439100A00L	WWC5*268	04/22/92	04/22/92	1580		6.2	05/20/92	06/03/92	PW
SMA1439100B00L	WWC5*269	04/22/92	04/22/92	1220		5.7	05/20/92	06/03/92	PW
SMA1439100C00L	WWC5*270	04/22/92	04/22/92	662		6.0	05/20/92	06/03/92	PW
SST2247100A00L	WWC5*275	04/22/92	04/22/92	240		5.9	05/21/92	06/03/92	PW
SST2247100B00L	WWC5*276	04/22/92	04/22/92	559		6.1	05/21/92	06/03/92	PW
SST2247100C00L	WWC5*277	04/22/92	04/22/92	438		5.8	05/21/92	06/03/92	PW
SST2247200A00L	WWC5*278	04/22/92	04/22/92	526		5.7	05/21/92	06/03/92	PW
SST2247200B00L	WWC5*279	04/22/92	04/22/92	717		5.9	05/21/92	06/03/92	PW
SST2247200C00L	WWC5*280	04/22/92	04/22/92	352		5.9	05/21/92	06/03/92	PW
SST2228100A00L	WWC5*281	04/22/92	04/22/92	1000		6.6	05/21/92	06/03/92	PW
SST2228100B00L	WWC5*282	04/22/92	04/22/92	702		6.0	05/21/92	06/03/92	PW
SST2228100C00L	WWC5*283	04/22/92	04/22/92	414		6.0	05/21/92	06/03/92	PW
SST2228200A00L	WWC5*284	04/22/92	04/22/92	60.8		6.0	05/21/92	06/03/92	PW
SST2228200B00L	WWC5*285	04/22/92	04/22/92	789		6.0	05/21/92	06/03/92	PW
SST2228200C00L	WWC5*286	04/22/92	04/22/92	470		6.2	05/21/92	06/03/92	PW
SST2230100A00L	WWC5*287	04/22/92	04/22/92	281		6.5	05/21/92	06/03/92	PW
SST2230100B00L	WWC5*288	04/22/92	04/22/92	259		6.0	05/21/92	06/03/92	PW
SST2230100C00L	WWC5*289	04/22/92	04/22/92	152		5.7	05/21/92	06/03/92	PW
SST2230200A00L	WWC5*290	04/22/92	04/22/92	582	J	6.0	05/21/92	06/03/92	PW
SST2230200B00L	WWC5*291	04/22/92	04/22/92	444		6.3	05/21/92	06/03/92	PW
SST2230200C00L	WWC5*292	04/22/92	04/22/92	377		6.3	05/21/92	06/03/92	PW
SAD2124100A00L	WWC5*293	04/23/92	04/23/92	322		6.0	05/21/92	06/03/92	PW
SAD2124100B00L	WWC5*294	04/23/92	04/23/92	172		6.1	05/21/92	06/03/92	PW

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Analytical Chemistry Results

STATUS: FINAL

PROJECT NAME: NL/TARACORP SUPERFUND SITE PREDESIGN FIELD INVESTIGATION, WWC89MC114V

PROJECT NUMBER: 5912031 0100 **REPORT DATE:** 07-31-92

SAMPLE MATRIX: SOIL **LAB MANAGER/QC REVIEW:** JEFFREY W. SIRIA

PROJECT MANAGER: JOHN F. GEMOULES **REPORT APPROVED BY:** FRANCIS Y. HUANG

SAMPLE I.D.	LABORATORY I.D.	COLLECTION DATE	RECEIVED DATE	LEAD(FAA), MG/KG-DRY METHOD: 3051/7420	MDL	EXTRACT. DATE	ANALYSIS DATE	CHEM. INIT.
SAD2124100C00L	WWC5*295	04/23/92	04/23/92	92.7	6.2	05/21/92	06/03/92	PW
SAD2124200A00L	WWC5*296	04/23/92	04/23/92	401	5.9	05/21/92	06/03/92	PW
SAD2124200B00L	WWC5*297	04/23/92	04/23/92	337	5.8	05/21/92	06/03/92	PW
SAD2124200C00L	WWC5*298	04/23/92	04/23/92	160	5.8	05/21/92	06/03/92	PW
SGR2246200A00L	WWC5*299	04/23/92	04/23/92	1510	6.6	05/21/92	06/03/92	PW
SGR2246200B00L	WWC5*300	04/23/92	04/23/92	800	5.9	05/21/92	06/03/92	PW
SGR2246200C00L	WWC5*301	04/23/92	04/23/92	101	5.8	05/21/92	06/03/92	PW
SGR1714200A00L	WWC5*302	04/23/92	04/23/92	731	6.2	05/21/92	06/03/92	PW
SGR1714200B00L	WWC5*303	04/23/92	04/23/92	591	6.2	05/21/92	06/03/92	PW
SGR1714200C00L	WWC5*304	04/23/92	04/23/92	552	6.2	05/21/92	06/03/92	PW
SGR1401100A00L	WWC5*305	04/23/92	04/23/92	256	6.1	05/21/92	06/03/92	PW
SGR1401100B00L	WWC5*306	04/23/92	04/23/92	117	5.5	05/21/92	06/03/92	PW
SGR1401100C00L	WWC5*307	04/23/92	04/23/92	34.8	5.4	05/21/92	06/03/92	PW
SGR1401200A00L	WWC5*308	04/23/92	04/23/92	1280	5.6	05/21/92	06/03/92	PW
SGR1401200B00L	WWC5*309	04/23/92	04/23/92	673	5.5	05/21/92	06/03/92	PW
SGR1401200C00L	WWC5*310	04/23/92	04/23/92	478	5.8	05/21/92	06/03/92	PW
SGR1415100A00L	WWC5*311	04/23/92	04/23/92	1640	6.4	05/21/92	06/04/92	PW
SGR1415100B00L	WWC5*312	04/23/92	04/23/92	2050	5.7	05/21/92	06/04/92	PW
SGR1415100C00L	WWC5*313	04/23/92	04/23/92	1010	6.1	05/21/92	06/04/92	PW
SGR1415200A00L	WWC5*314	04/23/92	04/23/92	1100	6.7	05/21/92	06/04/92	PW
SGR1415200B00L	WWC5*315	04/23/92	04/23/92	645	6.0	05/21/92	06/04/92	PW
SGR1415200C00L	WWC5*316	04/23/92	04/23/92	850	6.1	05/21/92	06/04/92	PW
SGR2224200B00L	WWC5*317	04/23/92	04/23/92	371	5.7	05/21/92	06/04/92	PW
SGR2224200C00L	WWC5*318	04/23/92	04/23/92	224	5.8	05/21/92	06/04/92	PW
SGR2220100A00L	WWC5*319	04/23/92	04/23/92	325	6.4	05/21/92	06/04/92	PW
SGR2220100B00L	WWC5*320	04/23/92	04/23/92	256	5.9	05/21/92	06/04/92	PW
SGR2220100C00L	WWC5*321	04/23/92	04/23/92	161	5.9	05/21/92	06/04/92	PW
SGR2220200A00L	WWC5*322	04/23/92	04/23/92	381	6.4	05/21/92	06/04/92	PW
SGR2220200B00L	WWC5*323	04/23/92	04/23/92	485	6.0	05/21/92	06/04/92	PW
SGR2220200C00L	WWC5*324	04/23/92	04/23/92	1010 D	32.0	05/21/92	06/04/92	PW
SGR2216100A00L	WWC5*325	04/23/92	04/23/92	570	6.4	05/21/92	06/04/92	PW
SGR2216100B00L	WWC5*326	04/23/92	04/23/92	381	6.1	05/21/92	06/04/92	PW
SGR2216100C00L	WWC5*327	04/23/92	04/23/92	134	5.9	05/21/92	06/04/92	PW
SGR2216200A00L	WWC5*328	04/23/92	04/23/92	692	6.1	05/21/92	06/04/92	PW
SGR2216200B00L	WWC5*329	04/23/92	04/23/92	692	5.8	05/21/92	06/04/92	PW
SGR2216200C00L	WWC5*330	04/23/92	04/23/92	375	6.2	05/21/92	06/04/92	PW
SGR2247100A00L	WWC5*331	04/23/92	04/23/92	288	5.7	05/22/92	06/04/92	PW
SGR2247100B00L	WWC5*332	04/23/92	04/23/92	193	5.9	05/22/92	06/04/92	PW
SGR2247100C00L	WWC5*333	04/23/92	04/23/92	107	5.6	05/22/92	06/04/92	PW
SGR2247200A00L	WWC5*334	04/23/92	04/23/92	458	6.0	05/22/92	06/04/92	PW
SGR2247200B00L	WWC5*335	04/23/92	04/23/92	377	5.6	05/22/92	06/04/92	PW
SGR2247200C00L	WWC5*336	04/23/92	04/23/92	190	5.7	05/22/92	06/04/92	PW

D - Sample was diluted for this parameter

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Analytical Chemistry Res

STATUS: FINAL

PROJECT NAME: NL/TARACORP SUPERFUND SITE PREDESIGN FIELD INVESTIGATION, WWC89MC114V

PROJECT NUMBER: 5912031 0100

REPORT DATE: 07-31-92

SAMPLE MATRIX: SOIL

LAB MANAGER/QC REVIEW: JEFFREY W. SIRIA

PROJECT MANAGER: JOHN F. GEMOULES

REPORT APPROVED BY: FRANCIS Y. HUANG

SAMPLE I.D.	LABORATORY I.D.	COLLECTION DATE	RECEIVED DATE	LEAD(FAA), MG/KG-DRY METHOD: 3051/7420	MDL	EXTRACT. DATE	ANALYSIS DATE	CHEM. INIT.
SGR2246100A00L	WWC5*337	04/23/92	04/23/92	783	6.0	05/22/92	06/04/92	PW
SGR2246100B00L	WWC5*338	04/23/92	04/23/92	356	6.0	05/22/92	06/04/92	PW
SGR2246100C00L	WWC5*339	04/23/92	04/23/92	162	5.7	05/22/92	06/04/92	PW
SGR2204100A00L	WWC5*340	04/23/92	04/23/92	549	6.2	05/22/92	06/04/92	PW
SGR2204100B00L	WWC5*341	04/23/92	04/23/92	460	5.9	05/22/92	06/04/92	PW
SGR2204100C00L	WWC5*342	04/23/92	04/23/92	236	6.0	05/22/92	06/04/92	PW
SGR2204200A00L	WWC5*343	04/23/92	04/23/92	1790	5.9	05/22/92	06/04/92	PW
SGR2204200B00L	WWC5*344	04/23/92	04/23/92	530	5.8	05/22/92	06/04/92	PW
SGR2204200C00L	WWC5*345	04/23/92	04/23/92	426	5.9	05/22/92	06/04/92	PW
SGR2204100A0LD	WWC5*346	04/23/92	04/23/92	548	6.3	05/22/92	06/04/92	PW
SGR2204100B0LD	WWC5*347	04/23/92	04/23/92	505	5.7	05/22/92	06/04/92	PW
SGR2204100C0LD	WWC5*348	04/23/92	04/23/92	230	6.0	05/22/92	06/04/92	PW
SGR2206100A00L	WWC5*349	04/23/92	04/23/92	980	6.0	05/22/92	06/04/92	PW
SGR2206100B00L	WWC5*350	04/23/92	04/23/92	2980	7.3	05/22/92	06/04/92	PW
SGR2206100C00L	WWC5*351	04/23/92	04/23/92	137	5.9	05/22/92	06/04/92	PW
SGR2206200A00L	WWC5*352	04/23/92	04/23/92	497	6.1	05/22/92	06/04/92	PW
SGR2206200B00L	WWC5*353	04/23/92	04/23/92	563	6.0	05/22/92	06/04/92	PW
SGR2206200C00L	WWC5*354	04/23/92	04/23/92	331	5.9	05/22/92	06/04/92	PW
SGR2224100A00L	WWC5*355	04/23/92	04/23/92	681	5.5	05/22/92	06/04/92	PW
SGR2224100B00L	WWC5*356	04/23/92	04/23/92	520	5.7	05/22/92	06/04/92	PW
SGR2224100C00L	WWC5*357	04/23/92	04/23/92	294	6.1	05/22/92	06/04/92	PW
SGR2224200A00L	WWC5*358	04/23/92	04/23/92	571	6.1	05/22/92	06/04/92	PW
SCL2036100A00L	WWC5*359	04/24/92	04/24/92	445	5.6	05/22/92	06/04/92	PW
SCL2036100B00L	WWC5*360	04/24/92	04/24/92	315	5.6	05/22/92	06/04/92	PW
SCL2036100C00L	WWC5*361	04/24/92	04/24/92	141	5.9	05/22/92	06/04/92	PW
SCL2036200A00L	WWC5*362	04/24/92	04/24/92	836	6.2	05/22/92	06/04/92	PW
SCL2036200B00L	WWC5*363	04/24/92	04/24/92	689	5.9	05/22/92	06/04/92	PW
SCL2036200C00L	WWC5*364	04/24/92	04/24/92	305	6.1	05/22/92	06/04/92	PW
SCL2020100A00L	WWC5*365	04/24/92	04/24/92	982	6.2	05/22/92	06/04/92	PW
SCL2020100B00L	WWC5*366	04/24/92	04/24/92	541	5.9	05/22/92	06/04/92	PW
SCL2020100C00L	WWC5*367	04/24/92	04/24/92	234	5.7	05/22/92	06/04/92	PW
SCL2020200A00L	WWC5*368	04/24/92	04/24/92	678	5.9	05/22/92	06/04/92	PW
SCL2020200B00L	WWC5*369	04/24/92	04/24/92	629	6.3	05/22/92	06/04/92	PW
SCL2020200C00L	WWC5*370	04/24/92	04/24/92	167	5.5	05/22/92	06/04/92	PW
SCL1940100A00L	WWC5*371	04/24/92	04/24/92	447	6.1	05/22/92	06/04/92	PW
SCL1940100B00L	WWC5*372	04/24/92	04/24/92	225	5.7	05/22/92	06/04/92	PW
SCL1940100C00L	WWC5*373	04/24/92	04/24/92	86.3	5.7	05/22/92	06/04/92	PW
SCL1940200A00L	WWC5*374	04/24/92	04/24/92	494	6.0	05/22/92	06/04/92	PW
SCL1940200B00L	WWC5*375	04/24/92	04/24/92	571	5.8	05/22/92	06/04/92	PW
SCL1940200C00L	WWC5*376	04/24/92	04/24/92	197	5.7	05/22/92	06/04/92	PW
SCL2140100A00L	WWC5*377	04/24/92	04/24/92	426	6.2	05/22/92	06/04/92	PW
SCL2140100B00L	WWC5*378	04/24/92	04/24/92	282	6.0	05/22/92	06/04/92	PW

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Analytical Chemistry Results

STATUS: FINAL

PROJECT NAME: NL/TARACORP SUPERFUND SITE PREDESIGN FIELD INVESTIGATION, WWC89MC114V

PROJECT NUMBER: 5912031 0100 **REPORT DATE:** 07-31-92

SAMPLE MATRIX: SOIL **LAB MANAGER/QC REVIEW:** JEFFREY W. SIRIA

PROJECT MANAGER: JOHN F. GEMOULES **REPORT APPROVED BY:** FRANCIS Y. HUANG

SAMPLE I.D.	LABORATORY I.D.	COLLECTION DATE	RECEIVED DATE	LEAD(FAA), MG/KG-DRY METHOD: 3051/7420		MDL	EXTRACT. DATE	ANALYSIS DATE	CHEM. INIT.
SCL2140100C00L	WWC5*379	04/24/92	04/24/92	167		5.8	05/22/92	06/04/92	PW
SCL2140200A00L	WWC5*380	04/24/92	04/24/92	427		5.8	05/22/92	06/04/92	PW
SCL2140200B00L	WWC5*381	04/24/92	04/24/92	1120		5.5	05/22/92	06/04/92	PW
SCL2140200C00L	WWC5*382	04/24/92	04/24/92	646		5.5	05/22/92	06/04/92	PW
SDE2163100A00L	WWC5*383	04/24/92	04/24/92	673		6.2	05/22/92	06/04/92	PW
SDE2163100B00L	WWC5*384	04/24/92	04/24/92	564		5.9	05/22/92	06/04/92	PW
SDE2163100C00L	WWC5*385	04/24/92	04/24/92	286		6.0	05/22/92	06/04/92	PW
SDE2163200A00L	WWC5*386	04/24/92	04/24/92	1420		6.1	05/22/92	06/04/92	PW
SDE2163200B00L	WWC5*387	04/24/92	04/24/92	488		5.8	05/22/92	06/04/92	PW
SDE2163200C00L	WWC5*388	04/24/92	04/24/92	299		5.6	05/22/92	06/04/92	PW
SGR2249100A00L	WWC5*389	04/24/92	04/24/92	257		6.0	05/22/92	06/04/92	PW
SGR2249100B00L	WWC5*390	04/24/92	04/24/92	228	J	5.7	05/22/92	06/04/92	PW
SGR2249100C00L	WWC5*391	04/24/92	04/24/92	106		5.9	05/22/92	06/04/92	PW
SGR2249200A00L	WWC5*392	04/24/92	04/24/92	357		5.7	05/22/92	06/04/92	PW
SGR2249200B00L	WWC5*393	04/24/92	04/24/92	243		5.7	05/22/92	06/04/92	PW
SGR2249200C00L	WWC5*394	04/24/92	04/24/92	114		5.3	05/22/92	06/04/92	PW
SGR2258100A00L	WWC5*395	04/24/92	04/24/92	434		6.3	05/22/92	06/04/92	PW
SGR2258100B00L	WWC5*396	04/24/92	04/24/92	316		5.6	05/22/92	06/04/92	PW
SGR2258100C00L	WWC5*397	04/24/92	04/24/92	208		5.7	05/22/92	06/04/92	PW
SGR2258200A00L	WWC5*398	04/24/92	04/24/92	388		5.7	05/22/92	06/04/92	PW
SGR2258200B00L	WWC5*399	04/24/92	04/24/92	262		5.7	05/22/92	06/04/92	PW
SGR2258200C00L	WWC5*400	04/24/92	04/24/92	192		5.6	05/22/92	06/04/92	PW
SLE2021100A00L	WWC5*401	04/24/92	04/24/92	903		5.8	05/22/92	06/04/92	PW
SLE2021100B00L	WWC5*402	04/24/92	04/24/92	735		5.8	05/22/92	06/04/92	PW
SLE2021100C00L	WWC5*403	04/24/92	04/24/92	424		6.0	05/22/92	06/04/92	PW
SLE2021200A00L	WWC5*404	04/24/92	04/24/92	768		5.7	05/22/92	06/04/92	PW
SLE2021200B00L	WWC5*405	04/24/92	04/24/92	704		5.5	05/22/92	06/04/92	PW
SLE2021200C00L	WWC5*406	04/24/92	04/24/92	523		5.9	05/22/92	06/04/92	PW
SIO2247100A00L	WWC5*407	04/24/92	04/24/92	612		7.7	05/22/92	06/04/92	PW
SIO2247100B00L	WWC5*408	04/24/92	04/24/92	340		6.4	05/22/92	06/04/92	PW
SIO2247100C00L	WWC5*409	04/24/92	04/24/92	187		6.1	05/22/92	06/04/92	PW
SIO2247200A00L	WWC5*410	04/24/92	04/24/92	551		7.0	05/22/92	06/04/92	PW
SIO2247200B00L	WWC5*411	04/24/92	04/24/92	483		6.3	05/26/92	06/04/92	PW
SIO2247200C00L	WWC5*412	04/24/92	04/24/92	251		6.1	05/26/92	06/04/92	PW
SIO2251100A00L	WWC5*413	04/24/92	04/24/92	419		6.0	05/26/92	06/04/92	PW
SIO2251100B00L	WWC5*414	04/24/92	04/24/92	358		5.7	05/26/92	06/04/92	PW
SIO2251100C00L	WWC5*415	04/24/92	04/24/92	212		5.8	05/26/92	06/04/92	PW
SIO2251200A00L	WWC5*416	04/24/92	04/24/92	694		6.2	05/26/92	06/04/92	PW
SIO2251200B00L	WWC5*417	04/24/92	04/24/92	489		5.8	05/26/92	06/04/92	PW
SIO2251200C00L	WWC5*418	04/24/92	04/24/92	206		6.4	05/26/92	06/04/92	PW
SIO2209100A00L	WWC5*419	04/24/92	04/24/92	413		6.1	05/26/92	06/04/92	PW
SIO2209100B00L	WWC5*420	04/24/92	04/24/92	350		5.8	05/26/92	06/04/92	PW

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Analytical Chemistry Resu

STATUS: FINAL

PROJECT NAME: NL/TARACORP SUPERFUND SITE PREDESIGN FIELD INVESTIGATION, WWC89MC114V

PROJECT NUMBER: 5912031 0100 **REPORT DATE:** 07-31-92

SAMPLE MATRIX: SOIL **LAB MANAGER/QC REVIEW:** JEFFREY W. SIRIA

PROJECT MANAGER: JOHN F. GEMOULES **REPORT APPROVED BY:** FRANCIS Y. HUANG

SAMPLE I.D.	LABORATORY I.D.	COLLECTION DATE	RECEIVED DATE	LEAD(FAA), MG/KG-DRY METHOD: 3051/7420		MDL	EXTRACT. DATE	ANALYSIS DATE	CHEM. INIT.
SIO2209100C00L	WWC5*421	04/24/92	04/24/92	213		6.1	05/26/92	06/04/92	PW
SIO2209200A00L	WWC5*422	04/24/92	04/24/92	738		5.7	05/26/92	06/04/92	PW
SIO2209200B00L	WWC5*423	04/24/92	04/24/92	668		6.2	05/26/92	06/04/92	PW
SIO2209200C00L	WWC5*424	04/24/92	04/24/92	431		6.0	05/26/92	06/04/92	PW
SBE2024100C00L	WWC5*425	04/27/92	04/27/92	116		5.8	05/26/92	06/04/92	PW
SBE2024200A00L	WWC5*426	04/27/92	04/27/92	377		6.1	05/26/92	06/04/92	PW
SBE2024200B00L	WWC5*427	04/27/92	04/27/92	409		5.7	05/26/92	06/04/92	PW
SBE2024200C00L	WWC5*428	04/27/92	04/27/92	363		5.6	05/26/92	06/04/92	PW
SDE1641100A00L	WWC5*429	04/27/92	04/27/92	1840		5.7	05/26/92	06/04/92	PW
SDE1641100B00L	WWC5*430	04/27/92	04/27/92	949		5.5	05/26/92	06/04/92	PW
SDE1641100C00L	WWC5*431	04/27/92	04/27/92	357		5.3	05/26/92	06/08/92	PW
SDE1641200A00L	WWC5*432	04/27/92	04/27/92	1100		5.7	05/26/92	06/08/92	PW
SDE1641200B00L	WWC5*433	04/27/92	04/27/92	893		5.6	05/26/92	06/08/92	PW
SDE1641200C00L	WWC5*434	04/27/92	04/27/92	316		5.4	05/26/92	06/08/92	PW
SCL1634100A00L	WWC5*435	04/27/92	04/27/92	2540		6.2	05/26/92	06/08/92	PW
SCL1634100B00L	WWC5*436	04/27/92	04/27/92	1500		5.6	05/26/92	06/08/92	PW
SCL1634100C00L	WWC5*437	04/27/92	04/27/92	404		5.6	05/26/92	06/08/92	PW
SCL1634200A00L	WWC5*438	04/27/92	04/27/92	1850		5.7	05/26/92	06/08/92	PW
SCL1634200B00L	WWC5*439	04/27/92	04/27/92	1160		5.6	05/26/92	06/08/92	PW
SCL1634200C00L	WWC5*440	04/27/92	04/27/92	743		5.9	05/26/92	06/08/92	PW
SCL1640100A00L	WWC5*441	04/27/92	04/27/92	2270		6.2	05/26/92	06/08/92	PW
SCL1640100B00L	WWC5*442	04/27/92	04/27/92	623		6.0	05/26/92	06/08/92	PW
SCL1640100C00L	WWC5*443	04/27/92	04/27/92	463		5.6	05/26/92	06/08/92	PW
SCL1640200A00L	WWC5*444	04/27/92	04/27/92	1180		5.9	05/26/92	06/08/92	PW
SCL1640200B00L	WWC5*445	04/27/92	04/27/92	1100		5.9	05/26/92	06/08/92	PW
SCL1640200C00L	WWC5*446	04/27/92	04/27/92	404		6.0	05/26/92	06/08/92	PW
SST1408100A00L	WWC5*447	04/27/92	04/27/92	1430		6.0	05/26/92	06/08/92	PW
SNI0938100A00L	WWC5*448	04/27/92	04/27/92	1510		5.5	05/26/92	06/08/92	PW
SNI0938100B00L	WWC5*449	04/27/92	04/27/92	758		5.6	05/26/92	06/08/92	PW
SNI0938100C00L	WWC5*450	04/27/92	04/27/92	371	J	5.5	05/26/92	06/08/92	PW
SNI0809100A00L	WWC5*451	04/27/92	04/27/92	273		5.5	05/26/92	06/08/92	PW
SNI0809100B00L	WWC5*452	04/27/92	04/27/92	241		5.7	05/26/92	06/08/92	PW
SNI0809100C00L	WWC5*453	04/27/92	04/27/92	137		5.6	05/26/92	06/08/92	PW
SNI0809200A00L	WWC5*454	04/27/92	04/27/92	376		5.5	05/26/92	06/08/92	PW
SNI0809200B00L	WWC5*455	04/27/92	04/27/92	367		5.6	05/26/92	06/08/92	PW
SNI0809200C00L	WWC5*456	04/27/92	04/27/92	174		5.9	05/26/92	06/08/92	PW
STS1215100A00L	WWC5*457	04/27/92	04/27/92	417		6.2	05/26/92	06/08/92	PW
STS1215100B00L	WWC5*458	04/27/92	04/27/92	397		5.9	05/26/92	06/08/92	PW
STS1215100C00L	WWC5*459	04/27/92	04/27/92	345		5.6	05/26/92	06/08/92	PW
STS1215200A00L	WWC5*460	04/27/92	04/27/92	244		5.9	05/26/92	06/08/92	PW
STS1215200B00L	WWC5*461	04/27/92	04/27/92	246		5.9	05/26/92	06/08/92	PW
STS1215200C00L	WWC5*462	04/27/92	04/27/92	197		5.7	05/26/92	06/08/92	PW

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Analytical Chemistry Results

STATUS: FINAL

PROJECT NAME: NL/TARACORP SUPERFUND SITE PREDESIGN FIELD INVESTIGATION, WWC89MC114V

PROJECT NUMBER: 5912031 0100 **REPORT DATE:** 07-31-92

SAMPLE MATRIX: SOIL **LAB MANAGER/QC REVIEW:** JEFFREY W. SIRIA

PROJECT MANAGER: JOHN F. GEMOULES **REPORT APPROVED BY:** FRANCIS Y. HUANG

SAMPLE I.D.	LABORATORY I.D.	COLLECTION DATE	RECEIVED DATE	LEAD(FAA), MG/KG-DRY METHOD: 3051/7420	MDL	EXTRACT. DATE	ANALYSIS DATE	CHEM. INIT.
SST2041100A00L	WWC5*463	04/27/92	04/27/92	1070	6.0	05/26/92	06/08/92	PW
SST2041100B00L	WWC5*464	04/27/92	04/27/92	1050	6.2	05/26/92	06/08/92	PW
SST2041100C00L	WWC5*465	04/27/92	04/27/92	339	6.1	05/26/92	06/08/92	PW
SST2041200A00L	WWC5*466	04/27/92	04/27/92	713	5.9	05/26/92	06/08/92	PW
SST2041200B00L	WWC5*467	04/27/92	04/27/92	280	5.9	05/26/92	06/08/92	PW
SST2041200C00L	WWC5*468	04/27/92	04/27/92	117	6.0	05/26/92	06/08/92	PW
SBE2024100A00L	WWC5*469	04/27/92	04/27/92	558	6.1	05/26/92	06/08/92	PW
SBE2024100B00L	WWC5*470	04/27/92	04/27/92	265	5.4	05/26/92	06/08/92	PW
SST1408100B00L	WWC5*471	04/27/92	04/27/92	1360	6.1	05/26/92	06/08/92	PW
SST1408100C00L	WWC5*472	04/27/92	04/27/92	721	6.1	05/26/92	06/08/92	PW
SST1408200A00L	WWC5*473	04/27/92	04/27/92	812	5.3	05/26/92	06/08/92	PW
SST1408200B00L	WWC5*474	04/27/92	04/27/92	1070	5.4	05/26/92	06/08/92	PW
SST1408200C00L	WWC5*475	04/27/92	04/27/92	806	5.7	05/26/92	06/08/92	PW
SST1310100A00L	WWC5*476	04/28/92	04/28/92	64.7	6.0	05/26/92	06/08/92	PW
SST1310100B00L	WWC5*477	04/28/92	04/28/92	38.2	5.8	05/26/92	06/08/92	PW
SST1310100C00L	WWC5*478	04/28/92	04/28/92	27.6	6.0	05/26/92	06/08/92	PW
SST1310200A00L	WWC5*479	04/28/92	04/28/92	68.3	5.9	05/26/92	06/08/92	PW
SST1310200B00L	WWC5*480	04/28/92	04/28/92	229	5.5	05/26/92	06/08/92	PW
SST1310200C00L	WWC5*481	04/28/92	04/28/92	487	5.3	05/26/92	06/08/92	PW
SST1320100A00L	WWC5*482	04/28/92	04/28/92	979	6.2	05/26/92	06/08/92	PW
SST1320100B00L	WWC5*483	04/28/92	04/28/92	731	6.0	05/26/92	06/08/92	PW
SST1320100C00L	WWC5*484	04/28/92	04/28/92	307	5.7	05/26/92	06/08/92	PW
SST1322100A00L	WWC5*485	04/28/92	04/28/92	752	6.0	05/26/92	06/08/92	PW
SST1322100B00L	WWC5*486	04/28/92	04/28/92	696	5.9	05/26/92	06/08/92	PW
SST1322100C00L	WWC5*487	04/28/92	04/28/92	585	6.1	05/26/92	06/08/92	PW
SIO0822100A00L	WWC5*488	04/28/92	04/28/92	471	5.8	05/26/92	06/08/92	PW
SIO0822100B00L	WWC5*489	04/28/92	04/28/92	348	5.6	05/26/92	06/08/92	PW
SIO0822100C00L	WWC5*490	04/28/92	04/28/92	226	5.9	05/26/92	06/08/92	PW
SIO0822200A00L	WWC5*491	04/28/92	04/28/92	451	5.9	05/26/92	06/08/92	PW
SIO0822200B00L	WWC5*492	04/28/92	04/28/92	449	5.8	05/26/92	06/08/92	PW
SIO0822200C00L	WWC5*493	04/28/92	04/28/92	294	5.8	05/26/92	06/08/92	PW
SST1022100A00L	WWC5*494	04/28/92	04/28/92	1090	5.8	05/26/92	06/08/92	PW
SST1022100B00L	WWC5*495	04/28/92	04/28/92	1110	5.7	05/26/92	06/08/92	PW
SST1022100C00L	WWC5*496	04/28/92	04/28/92	949	6.2	05/26/92	06/08/92	PW
SST1022200A00L	WWC5*497	04/28/92	04/28/92	477	6.1	05/26/92	06/08/92	PW
SST1022200B00L	WWC5*498	04/28/92	04/28/92	316	5.7	05/26/92	06/08/92	PW
SST1022200C00L	WWC5*499	04/28/92	04/28/92	397	5.8	05/26/92	06/08/92	PW
SST1022100A0LD	WWC5*500	04/28/92	04/28/92	1080	6.3	05/26/92	06/08/92	PW
SST1022100B0LD	WWC5*501	04/28/92	04/28/92	826	5.9	05/26/92	06/08/92	PW
SST1022100C0LD	WWC5*502	04/28/92	04/28/92	745	6.2	05/26/92	06/08/92	PW
SWS1003100A00L	WWC5*503	04/28/92	04/28/92	456	5.9	05/26/92	06/08/92	PW
SWS1003100B00L	WWC5*504	04/28/92	04/28/92	289	6.1	05/26/92	06/08/92	PW

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Analytical Chemistry Res

STATUS: FINAL

PROJECT NAME: NL/TARACORP SUPERFUND SITE PREDESIGN FIELD INVESTIGATION, WWC89MC114V

PROJECT NUMBER: 5912031 0100 **REPORT DATE:** 07-31-92

SAMPLE MATRIX: SOIL **LAB MANAGER/QC REVIEW:** JEFFREY W. SIRIA

PROJECT MANAGER: JOHN F. GEMOULES **REPORT APPROVED BY:** FRANCIS Y. HUANG

SAMPLE I.D.	LABORATORY I.D.	COLLECTION DATE	RECEIVED DATE	LEAD(FAA), MG/KG-DRY METHOD: 3051/7420	MDL	EXTRACT. DATE	ANALYSIS DATE	CHEM. INIT.
SWS1003100C00L	WWC5*505	04/28/92	04/28/92	84.3	6.5	05/26/92	06/08/92	PW
SWS1003100A0LD	WWC5*506	04/28/92	04/28/92	445	6.0	05/26/92	06/08/92	PW
SWS1003100B0LD	WWC5*507	04/28/92	04/28/92	299	5.8	05/26/92	06/08/92	PW
SWS1003100C0LD	WWC5*508	04/28/92	04/28/92	74.4	5.8	05/26/92	06/08/92	PW
SWS1215100A00L	WWC5*509	04/28/92	04/28/92	383	6.5	05/26/92	06/08/92	PW
SWS1215100B00L	WWC5*510	04/28/92	04/28/92	179	6.1	05/26/92	06/08/92	PW
SWS1215100C00L	WWC5*511	04/28/92	04/28/92	210	5.6	05/26/92	06/08/92	PW
SWS1215200A00L	WWC5*512	04/28/92	04/28/92	268	6.3	05/26/92	06/08/92	PW
SWS1215200B00L	WWC5*513	04/28/92	04/28/92	111	5.9	05/26/92	06/08/92	PW
SWS1215200C00L	WWC5*514	04/28/92	04/28/92	32.1	4.9	05/26/92	06/08/92	PW
SWS1235100A00L	WWC5*515	04/28/92	04/28/92	105	6.1	05/26/92	06/08/92	PW
SWS1235100B00L	WWC5*516	04/28/92	04/28/92	23.7	5.6	05/26/92	06/08/92	PW
SWS1235100C00L	WWC5*517	04/28/92	04/28/92	19.8	5.5	05/26/92	06/08/92	PW
SWS1235200A00L	WWC5*518	04/28/92	04/28/92	395	6.3	05/26/92	06/08/92	PW
SWS1235200B00L	WWC5*519	04/28/92	04/28/92	121	5.5	05/26/92	06/08/92	PW
SWS1235200C00L	WWC5*520	04/28/92	04/28/92	106	5.7	05/26/92	06/08/92	PW
SWS1405100A00L	WWC5*521	04/28/92	04/28/92	876	5.8	05/26/92	06/08/92	PW
SWS1405100B00L	WWC5*522	04/28/92	04/28/92	489	5.9	05/26/92	06/08/92	PW
SWS1405100C00L	WWC5*523	04/28/92	04/28/92	307	6.0	05/26/92	06/08/92	PW
SWS1405200A00L	WWC5*524	04/28/92	04/28/92	1010	6.4	05/26/92	06/08/92	PW
SWS1405200B00L	WWC5*525	04/28/92	04/28/92	777	6.1	05/26/92	06/08/92	PW
SWS1405200C00L	WWC5*526	04/28/92	04/28/92	431	6.0	05/26/92	06/08/92	PW
SWS1402100A00L	WWC5*527	04/28/92	04/28/92	1420	5.5	05/26/92	06/08/92	PW
SWS1402100B00L	WWC5*528	04/28/92	04/28/92	539	5.9	05/26/92	06/08/92	PW
SWS1402100C00L	WWC5*529	04/28/92	04/28/92	288	6.2	05/26/92	06/08/92	PW
SWS1402100A0LD	WWC5*530	04/28/92	04/28/92	849	6.0	05/26/92	06/08/92	PW
SWS1402100B0LD	WWC5*531	04/28/92	04/28/92	501	5.8	05/26/92	06/08/92	PW
SWS1402100C0LD	WWC5*532	04/28/92	04/28/92	192	6.0	05/26/92	06/08/92	PW
SWS1402200A00L	WWC5*533	04/28/92	04/28/92	194	5.3	05/26/92	06/08/92	PW
SWS1402200B00L	WWC5*534	04/28/92	04/28/92	266	5.3	05/26/92	06/08/92	PW
SWS1402200C00L	WWC5*535	04/28/92	04/28/92	178	5.1	05/26/92	06/08/92	PW
SED2236100A00L	WWC5*536	04/28/92	04/28/92	516	5.7	05/26/92	06/08/92	PW
SED2236100B00L	WWC5*537	04/28/92	04/28/92	589	5.8	05/26/92	06/08/92	PW
SED2236100C00L	WWC5*538	04/28/92	04/28/92	229	5.8	05/26/92	06/08/92	PW
SED2236200A00L	WWC5*539	04/28/92	04/28/92	289	6.3	05/26/92	06/08/92	PW
SED2236200B00L	WWC5*540	04/28/92	04/28/92	682	6.0	05/26/92	06/08/92	PW
SED2236200C00L	WWC5*541	04/28/92	04/28/92	189	5.8	05/26/92	06/08/92	PW
SED2224100A00L	WWC5*542	04/28/92	04/28/92	569	5.6	05/26/92	06/08/92	PW
SED2224100B00L	WWC5*543	04/28/92	04/28/92	538	5.6	05/26/92	06/08/92	PW
SED2224100C00L	WWC5*544	04/28/92	04/28/92	132	5.6	05/26/92	06/08/92	PW
SED2224200A00L	WWC5*545	04/28/92	04/28/92	314	6.0	05/26/92	06/08/92	PW
SED2224200B00L	WWC5*546	04/28/92	04/28/92	308	5.7	05/26/92	06/08/92	PW

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Analytical Chemistry Results

STATUS: FINAL

PROJECT NAME: NL/TARACORP SUPERFUND SITE PREDESIGN FIELD INVESTIGATION, WWC89MC114V

PROJECT NUMBER: 5912031 0100 **REPORT DATE:** 07-31-92

SAMPLE MATRIX: SOIL **LAB MANAGER/QC REVIEW:** JEFFREY W. SIRIA

PROJECT MANAGER: JOHN F. GEMOULES **REPORT APPROVED BY:** FRANCIS Y. HUANG

SAMPLE I.D.	LABORATORY I.D.	COLLECTION DATE	RECEIVED DATE	LEAD(FAA), MG/KG-DRY METHOD: 3051/7420		MDL	EXTRACT. DATE	ANALYSIS DATE	CHEM. INIT.
SED2224200C00L	WWC5*547	04/28/92	04/28/92	158		5.6	05/26/92	06/08/92	PW
SED2208100A00L	WWC5*548	04/28/92	04/28/92	620		5.9	05/26/92	06/08/92	PW
SED2208100B00L	WWC5*549	04/28/92	04/28/92	432		5.6	05/26/92	06/08/92	PW
SED2208100C00L	WWC5*550	04/28/92	04/28/92	119		5.4	05/27/92	06/09/92	PW
SED2208200A00L	WWC5*551	04/28/92	04/28/92	767		5.9	05/27/92	06/09/92	PW
SED2208200B00L	WWC5*552	04/28/92	04/28/92	688		5.9	05/27/92	06/09/92	PW
SED2208200C00L	WWC5*553	04/28/92	04/28/92	284		5.5	05/27/92	06/09/92	PW
SED2204100A00L	WWC5*554	04/28/92	04/28/92	485		5.8	05/27/92	06/09/92	PW
SED2204100B00L	WWC5*555	04/28/92	04/28/92	92.1		5.8	05/27/92	06/09/92	PW
SED2204100C00L	WWC5*556	04/28/92	04/28/92	592		5.7	05/27/92	06/09/92	PW
SED2204200A00L	WWC5*557	04/28/92	04/28/92	109		5.6	05/27/92	06/09/92	PW
SED2204200B00L	WWC5*558	04/28/92	04/28/92	618		5.5	05/27/92	06/09/92	PW
SED2204200C00L	WWC5*559	04/28/92	04/28/92	470		5.5	05/27/92	06/09/92	PW
SGW1136100A00L	WWC5*560	04/29/92	04/29/92	208		6.4	05/27/92	06/09/92	PW
SGW1136100B00L	WWC5*561	04/29/92	04/29/92	118		6.0	05/27/92	06/09/92	PW
SGW1136100C00L	WWC5*562	04/29/92	04/29/92	29.9		5.7	05/27/92	06/09/92	PW
SGW1136200A00L	WWC5*563	04/29/92	04/29/92	344		6.4	05/27/92	06/09/92	PW
SGW1136200B00L	WWC5*564	04/29/92	04/29/92	210		5.8	05/27/92	06/09/92	PW
SGW1136200C00L	WWC5*565	04/29/92	04/29/92	43.8		5.9	05/27/92	06/09/92	PW
SGW1112100A00L	WWC5*566	04/29/92	04/29/92	220		5.6	05/27/92	06/09/92	PW
SGW1112100B00L	WWC5*567	04/29/92	04/29/92	57.3		6.1	05/27/92	06/09/92	PW
SGW1112100C00L	WWC5*568	04/29/92	04/29/92	85.8		6.1	05/27/92	06/09/92	PW
SGW1112200A00L	WWC5*569	04/29/92	04/29/92	851	J	5.7	05/27/92	06/09/92	PW
SGW1112200B00L	WWC5*570	04/29/92	04/29/92	445		5.6	05/27/92	06/09/92	PW
SGW1112200C00L	WWC5*571	04/29/92	04/29/92	174		6.1	05/27/92	06/09/92	PW
SGW1111100A00L	WWC5*572	04/29/92	04/29/92	164		6.0	05/27/92	06/09/92	PW
SGW1111100B00L	WWC5*573	04/29/92	04/29/92	121		5.7	05/27/92	06/09/92	PW
SGW1111100C00L	WWC5*574	04/29/92	04/29/92	435		5.8	05/27/92	06/09/92	PW
SGW1111200A00L	WWC5*575	04/29/92	04/29/92	112		5.8	05/27/92	06/09/92	PW
SGW1111200B00L	WWC5*576	04/29/92	04/29/92	97.1		5.5	05/27/92	06/09/92	PW
SGW1111200C00L	WWC5*577	04/29/92	04/29/92	150		5.4	05/27/92	06/09/92	PW
SGR1238200A00L	WWC5*578	04/29/92	04/29/92	796		6.1	05/27/92	06/09/92	PW
SGR1238200B00L	WWC5*579	04/29/92	04/29/92	568		4.8	05/27/92	06/09/92	PW
SGR1238200C00L	WWC5*580	04/29/92	04/29/92	517		6.0	05/27/92	06/09/92	PW
SGR1018100A00L	WWC5*581	04/29/92	04/29/92	446		6.0	05/27/92	06/09/92	PW
SGR1018100B00L	WWC5*582	04/29/92	04/29/92	597		5.8	05/27/92	06/09/92	PW
SGR1018100C00L	WWC5*583	04/29/92	04/29/92	409		5.9	05/27/92	06/09/92	PW
SGR1018200A00L	WWC5*584	04/29/92	04/29/92	1170		6.1	05/27/92	06/09/92	PW
SGR1018200B00L	WWC5*585	04/29/92	04/29/92	1320		6.0	05/27/92	06/09/92	PW
SGR1018200C00L	WWC5*586	04/29/92	04/29/92	1210		5.1	05/27/92	06/09/92	PW
SGR1012100A00L	WWC5*587	04/29/92	04/29/92	392		5.6	05/27/92	06/09/92	PW
SGR1012100B00L	WWC5*588	04/29/92	04/29/92	335		5.8	05/27/92	06/09/92	PW

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Analytical Chemistry Resu

STATUS: FINAL

PROJECT NAME: NL/TARACORP SUPERFUND SITE PREDESIGN FIELD INVESTIGATION, WWC89MC114V

PROJECT NUMBER: 5912031 0100 **REPORT DATE:** 07-31-92

SAMPLE MATRIX: SOIL **LAB MANAGER/QC REVIEW:** JEFFREY W. SIRIA

PROJECT MANAGER: JOHN F. GEMOULES **REPORT APPROVED BY:** FRANCIS Y. HUANG

SAMPLE I.D.	LABORATORY I.D.	COLLECTION DATE	RECEIVED DATE	LEAD(FAA), MG/KG-DRY METHOD: 3051/7420	MDL	EXTRACT. DATE	ANALYSIS DATE	CHEM. INIT.
SGR1012100C00L	WWC5*589	04/29/92	04/29/92	279	6.0	05/27/92	06/09/92	PW
SGR1012200A00L	WWC5*590	04/29/92	04/29/92	810	6.5	05/27/92	06/09/92	PW
SGR1012200B00L	WWC5*591	04/29/92	04/29/92	654	6.2	05/27/92	06/09/92	PW
SGR1012200C00L	WWC5*592	04/29/92	04/29/92	1010	5.9	05/27/92	06/09/92	PW
SIO1217100A00L	WWC5*593	04/29/92	04/29/92	569	5.8	05/27/92	06/09/92	PW
SIO1217100B00L	WWC5*594	04/29/92	04/29/92	348	5.7	05/27/92	06/09/92	PW
SIO1217100C00L	WWC5*595	04/29/92	04/29/92	147	5.4	05/27/92	06/09/92	PW
SIO1217200A00L	WWC5*596	04/29/92	04/29/92	441	6.6	05/27/92	06/09/92	PW
SIO1217200B00L	WWC5*597	04/29/92	04/29/92	334	5.9	05/27/92	06/09/92	PW
SIO1217200C00L	WWC5*598	04/29/92	04/29/92	195	6.0	05/27/92	06/09/92	PW
SDE2254200A00L	WWC5*599	04/30/92	04/30/92	18.9	5.9	05/27/92	06/09/92	PW
SDE2254200B00L	WWC5*600	04/30/92	04/30/92	491	5.7	05/27/92	06/09/92	PW
SDE2254200C00L	WWC5*601	04/30/92	04/30/92	282	5.8	05/27/92	06/09/92	PW
SRE0930100A00L	WWC5*602	04/30/92	04/30/92	101	5.9	05/27/92	06/09/92	PW
SRE0930100B00L	WWC5*603	04/30/92	04/30/92	57.1	6.0	05/27/92	06/09/92	PW
SRE0930100C00L	WWC5*604	04/30/92	04/30/92	49.4	5.7	05/27/92	06/09/92	PW
SRE0930100A0LD	WWC5*605	04/30/92	04/30/92	94.4	5.6	05/27/92	06/09/92	PW
SRE0930100B0LD	WWC5*606	04/30/92	04/30/92	71.6	5.7	05/27/92	06/09/92	PW
SRE0930100C0LD	WWC5*607	04/30/92	04/30/92	23.8	6.0	05/27/92	06/09/92	PW
SRE0930200A00L	WWC5*608	04/30/92	04/30/92	69.1	5.5	05/27/92	06/09/92	PW
SRE0930200B00L	WWC5*609	04/30/92	04/30/92	49.0	5.7	05/27/92	06/09/92	PW
SRE0930200C00L	WWC5*610	04/30/92	04/30/92	11.7	5.8	05/27/92	06/09/92	PW
SMC0911100A00L	WWC5*611	04/30/92	04/30/92	42.4	6.1	05/27/92	06/09/92	PW
SMC0911100B00L	WWC5*612	04/30/92	04/30/92	24.9	5.7	05/27/92	06/09/92	PW
SMC0911100C00L	WWC5*613	04/30/92	04/30/92	29.6	5.7	05/27/92	06/09/92	PW
SMC0911200A00L	WWC5*614	04/30/92	04/30/92	149	5.6	05/27/92	06/09/92	PW
SMC0911200B00L	WWC5*615	04/30/92	04/30/92	129	5.8	05/27/92	06/09/92	PW
SMC0911200C00L	WWC5*616	04/30/92	04/30/92	457	5.6	05/27/92	06/09/92	PW
SRE0928100A00L	WWC5*617	04/30/92	04/30/92	177	6.3	05/27/92	06/09/92	PW
SRE0928100B00L	WWC5*618	04/30/92	04/30/92	86.0	5.9	05/27/92	06/09/92	PW
SRE0928100C00L	WWC5*619	04/30/92	04/30/92	25.1	6.0	05/27/92	06/09/92	PW
SRE0928200A00L	WWC5*620	04/30/92	04/30/92	146	5.6	05/27/92	06/09/92	PW
SRE0928200B00L	WWC5*621	04/30/92	04/30/92	45.7	6.3	05/27/92	06/09/92	PW
SRE0928200C00L	WWC5*622	04/30/92	04/30/92	ND	5.9	05/27/92	06/09/92	PW
SMC0913100A00L	WWC5*623	04/30/92	04/30/92	49.2	5.6	05/27/92	06/09/92	PW
SMC0913100B00L	WWC5*624	04/30/92	04/30/92	61.3	6.1	05/27/92	06/09/92	PW
SMC0913100C00L	WWC5*625	04/30/92	04/30/92	187	6.7	05/27/92	06/09/92	PW
SMC0913200A00L	WWC5*626	04/30/92	04/30/92	289	5.3	05/27/92	06/09/92	PW
SMC0913200B00L	WWC5*627	04/30/92	04/30/92	233	5.3	05/27/92	06/09/92	PW
SMC0913200C00L	WWC5*628	04/30/92	04/30/92	120	5.9	05/27/92	06/09/92	PW
SMA0814100A00L	WWC5*629	04/30/92	04/30/92	1140 J	7.2	05/27/92	06/09/92	PW
SMA0814100B00L	WWC5*630	04/30/92	04/30/92	358	6.0	05/28/92	06/09/92	PW

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Analytical Chemistry Results

STATUS: FINAL

PROJECT NAME: NL/TARACORP SUPERFUND SITE PREDESIGN FIELD INVESTIGATION, WWC89MC114V

PROJECT NUMBER: 5912031 0100 **REPORT DATE:** 07-31-92

SAMPLE MATRIX: SOIL **LAB MANAGER/QC REVIEW:** JEFFREY W. SIRIA

PROJECT MANAGER: JOHN F. GEMOULES **REPORT APPROVED BY:** FRANCIS Y. HUANG

SAMPLE I.D.	LABORATORY I.D.	COLLECTION DATE	RECEIVED DATE	LEAD(FAA), MG/KG-DRY METHOD: 3051/7420	MDL	EXTRACT. DATE	ANALYSIS DATE	CHEM. INIT.
SMA0814100C00L	WWC5*631	04/30/92	04/30/92	166	5.5	05/28/92	06/09/92	PW
SMA0814200A00L	WWC5*632	04/30/92	04/30/92	584	5.6	05/28/92	06/09/92	PW
SMA0814200B00L	WWC5*633	04/30/92	04/30/92	689	7.3	05/28/92	06/09/92	PW
SMA0814200C00L	WWC5*634	04/30/92	04/30/92	757	5.2	05/28/92	06/09/92	PW
SDE1729200A00L	WWC5*635	04/30/92	04/30/92	590	5.8	05/28/92	06/09/92	PW
SDE1729200B00L	WWC5*636	04/30/92	04/30/92	397	6.0	05/28/92	06/09/92	PW
SDE1729200C00L	WWC5*637	04/30/92	04/30/92	358	5.5	05/28/92	06/09/92	PW
SKE1714100A00L	WWC5*638	04/30/92	04/30/92	ND	6.5	05/28/92	06/09/92	PW
SKE1714100B00L	WWC5*639	04/30/92	04/30/92	ND	5.6	05/28/92	06/09/92	PW
SKE1714100C00L	WWC5*640	04/30/92	04/30/92	ND	5.9	05/28/92	06/09/92	PW
SKE1714200A00L	WWC5*641	04/30/92	04/30/92	ND	5.7	05/28/92	06/09/92	PW
SKE1714200B00L	WWC5*642	04/30/92	04/30/92	ND	5.9	05/28/92	06/09/92	PW
SKE1714200C00L	WWC5*643	04/30/92	04/30/92	ND	5.6	05/28/92	06/09/92	PW
SAL1014100A00L	WWC5*644	04/30/92	04/30/92	169	5.5	05/28/92	06/09/92	PW
SAL1014100B00L	WWC5*645	04/30/92	04/30/92	131	5.3	05/28/92	06/09/92	PW
SAL1014100C00L	WWC5*646	04/30/92	04/30/92	116	5.5	05/28/92	06/09/92	PW
SAL1014200A00L	WWC5*647	04/30/92	04/30/92	145	5.7	05/28/92	06/09/92	PW
SAL1014200B00L	WWC5*648	04/30/92	04/30/92	102	5.4	05/28/92	06/09/92	PW
SAL1014200C00L	WWC5*649	04/30/92	04/30/92	186	5.5	05/28/92	06/09/92	PW
SGR1106100A00L	WWC5*650	04/30/92	04/30/92	447	5.3	05/28/92	06/09/92	PW
SGR1106100B00L	WWC5*651	04/30/92	04/30/92	377	5.6	05/28/92	06/09/92	PW
SGR1106100C00L	WWC5*652	04/30/92	04/30/92	332	5.8	05/28/92	06/09/92	PW
SGR1106200A00L	WWC5*653	04/30/92	04/30/92	ND	5.5	05/28/92	06/09/92	PW
SGR1106200B00L	WWC5*654	04/30/92	04/30/92	ND	5.5	05/28/92	06/09/92	PW
SGR1106200C00L	WWC5*655	04/30/92	04/30/92	ND	6.2	05/28/92	06/09/92	PW
SGR1320100A00L	WWC5*656	04/30/92	04/30/92	707	5.5	05/28/92	06/09/92	PW
SGR1320100B00L	WWC5*657	04/30/92	04/30/92	197	5.0	05/28/92	06/09/92	PW
SGR1320100C00L	WWC5*658	04/30/92	04/30/92	63.1	4.8	05/28/92	06/09/92	PW
SGR1320200A00L	WWC5*659	04/30/92	04/30/92	362	5.7	05/28/92	06/09/92	PW
SGR1320200B00L	WWC5*660	04/30/92	04/30/92	245	5.2	05/28/92	06/09/92	PW
SGR1320200C00L	WWC5*661	04/30/92	04/30/92	192	5.3	05/28/92	06/09/92	PW
SNI1319100A00L	WWC5*662	05/01/92	05/01/92	115	6.0	05/28/92	06/09/92	PW
SNI1319100B00L	WWC5*663	05/01/92	05/01/92	83.2	5.4	05/28/92	06/09/92	PW
SNI1319100C00L	WWC5*664	05/01/92	05/01/92	255	5.5	05/28/92	06/09/92	PW
SNI1319200A00L	WWC5*665	05/01/92	05/01/92	293	5.9	05/28/92	06/09/92	PW
SNI1319200B00L	WWC5*666	05/01/92	05/01/92	30.6	5.9	05/28/92	06/09/92	PW
SNI1319200C00L	WWC5*667	05/01/92	05/01/92	143	5.9	05/28/92	06/09/92	PW
SNI1319300A00L	WWC5*668	05/01/92	05/01/92	92.2	6.1	05/28/92	06/09/92	PW
SNI1319300B00L	WWC5*669	05/01/92	05/01/92	52.4 J	5.7	05/28/92	06/09/92	PW
SNI1319300C00L	WWC5*670	05/01/92	05/01/92	61.3	5.2	05/28/92	06/11/92	PW
SNI1319400A00L	WWC5*671	05/01/92	05/01/92	202	6.1	05/28/92	06/11/92	PW
SNI1319400B00L	WWC5*672	05/01/92	05/01/92	147	5.9	05/28/92	06/11/92	PW

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Analytical Chemistry Res

STATUS: FINAL

PROJECT NAME: NL/TARACORP SUPERFUND SITE PREDESIGN FIELD INVESTIGATION, WWC89MC114V

PROJECT NUMBER: 5912031 0100 **REPORT DATE:** 07-31-92

SAMPLE MATRIX: SOIL **LAB MANAGER/QC REVIEW:** JEFFREY W. SIRIA

PROJECT MANAGER: JOHN F. GEMOULES **REPORT APPROVED BY:** FRANCIS Y. HUANG

SAMPLE I.D.	LABORATORY I.D.	COLLECTION DATE	RECEIVED DATE	LEAD(FAA), MG/KG-DRY METHOD: 3051/7420	MDL	EXTRACT. DATE	ANALYSIS DATE	CHEM. INIT.
SNI1319400C00L	WWC5*673	05/01/92	05/01/92	59.4	5.0	05/28/92	06/11/92	PW
SNI1319500A00L	WWC5*674	05/01/92	05/01/92	292	5.5	05/28/92	06/11/92	PW
SNI1319500B00L	WWC5*675	05/01/92	05/01/92	195	5.6	05/28/92	06/11/92	PW
SNI1319500C00L	WWC5*676	05/01/92	05/01/92	105	5.9	05/28/92	06/11/92	PW
SDE2001100A00L	WWC5*677	05/01/92	05/01/92	535	5.6	05/28/92	06/11/92	PW
SDE2001100B00L	WWC5*678	05/01/92	05/01/92	264	5.5	05/28/92	06/11/92	PW
SDE2001100C00L	WWC5*679	05/01/92	05/01/92	150	5.5	05/28/92	06/11/92	PW
SDE2001200A00L	WWC5*680	05/01/92	05/01/92	588	5.7	05/28/92	06/11/92	PW
SDE2001200B00L	WWC5*681	05/01/92	05/01/92	1200	6.0	05/28/92	06/11/92	PW
SDE2001200C00L	WWC5*682	05/01/92	05/01/92	263	6.0	05/28/92	06/11/92	PW
ED ~~SDE~~2000100A00L	WWC5*683	05/01/92	05/01/92	739	6.4	05/28/92	06/11/92	PW
SED2000100B00L	WWC5*684	05/01/92	05/01/92	625	5.9	05/28/92	06/11/92	PW
SED2000100C00L	WWC5*685	05/01/92	05/01/92	417	5.8	05/28/92	06/11/92	PW
SED2000200A00L	WWC5*686	05/01/92	05/01/92	700	6.0	05/28/92	06/11/92	PW
SED2000200B00L	WWC5*687	05/01/92	05/01/92	441	5.8	05/28/92	06/11/92	PW
SED2000200C00L	WWC5*688	05/01/92	05/01/92	228	6.0	05/28/92	06/11/92	PW
SED2000300A00L	WWC5*689	05/01/92	05/01/92	840	5.9	05/28/92	06/11/92	PW
SED2000300B00L	WWC5*690	05/01/92	05/01/92	511	6.0	05/28/92	06/11/92	PW
SED2000300C00L	WWC5*691	05/01/92	05/01/92	201	5.6	05/28/92	06/11/92	PW
SNI1241100A00L	WWC5*692	05/01/92	05/01/92	207	5.2	05/28/92	06/11/92	PW
SNI1241100B00L	WWC5*693	05/01/92	05/01/92	102	5.7	05/28/92	06/11/92	PW
SNI1241100C00L	WWC5*694	05/01/92	05/01/92	47.5	5.8	05/28/92	06/11/92	PW
N ~~S~~NI1241200A00L	WWC5*695	05/01/92	05/01/92	90.7	6.0	05/28/92	06/11/92	PW
SNI1241200B00L	WWC5*696	05/01/92	05/01/92	38.7	6.1	05/28/92	06/11/92	PW
SNI1241200C00L	WWC5*697	05/01/92	05/01/92	23.7	5.6	05/28/92	06/11/92	PW
SNT1300100A00L	WWC5*698	05/01/92	05/01/92	133	5.6	05/28/92	06/11/92	PW
SNT1300100B00L	WWC5*699	05/01/92	05/01/92	29.8	5.1	05/28/92	06/11/92	PW
SNT1300100C00L	WWC5*700	05/01/92	05/01/92	26.9	5.6	05/28/92	06/11/92	PW
SNT1300200A00L	WWC5*701	05/01/92	05/01/92	220	5.6	05/28/92	06/11/92	PW
SNT1300200B00L	WWC5*702	05/01/92	05/01/92	65.5	5.6	05/28/92	06/11/92	PW
SNT1300200C00L	WWC5*703	05/01/92	05/01/92	24.9	5.4	05/28/92	06/11/92	PW
SNI0822300A00L	WWC5*704	05/01/92	05/01/92	945	6.2	05/28/92	06/11/92	PW
SNI0822300B00L	WWC5*705	05/01/92	05/01/92	264	5.2	05/28/92	06/11/92	PW
SNI0822300C00L	WWC5*706	05/01/92	05/01/92	63.1	4.9	05/28/92	06/11/92	PW
SNI0822400A00L	WWC5*707	05/01/92	05/01/92	1150	5.9	05/28/92	06/11/92	PW
SNI0822400B00L	WWC5*708	05/01/92	05/01/92	752	5.8	05/28/92	06/11/92	PW
SNI0822400C00L	WWC5*709	05/01/92	05/01/92	387	5.9	05/28/92	06/11/92	PW
SNI0840100A00L	WWC5*710	05/01/92	05/01/92	694	5.2	05/28/92	06/11/92	PW
SNI0840100B00L	WWC5*711	05/01/92	05/01/92	319	5.4	05/28/92	06/11/92	PW
SNI0840100C00L	WWC5*712	05/01/92	05/01/92	319	6.1	05/28/92	06/11/92	PW
SNI0840200A00L	WWC5*713	05/01/92	05/01/92	349	5.5	05/28/92	06/11/92	PW
SNI0840200B00L	WWC5*714	05/01/92	05/01/92	298	4.9	05/28/92	06/11/92	PW

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Analytical Chemistry Results

STATUS: FINAL

PROJECT NAME: NL/TARACORP SUPERFUND SITE PREDESIGN FIELD INVESTIGATION, WWC89MC114V

PROJECT NUMBER: 5912031 0100 **REPORT DATE:** 07-31-92

SAMPLE MATRIX: SOIL **LAB MANAGER/QC REVIEW:** JEFFREY W. SIRIA

PROJECT MANAGER: JOHN F. GEMOULES **REPORT APPROVED BY:** FRANCIS Y. HUANG

SAMPLE I.D.	LABORATORY I.D.	COLLECTION DATE	RECEIVED DATE	LEAD(FAA), MG/KG-DRY METHOD: 3051/7420	MDL	EXTRACT. DATE	ANALYSIS DATE	CHEM. INIT.
SNI0840200C00L	WWC5*715	05/01/92	05/01/92	260	5.4	05/28/92	06/11/92	PW
SNI0840300A00L	WWC5*716	05/01/92	05/01/92	287	5.4	05/28/92	06/11/92	PW
SNI0840300B00L	WWC5*717	05/01/92	05/01/92	382	5.9	05/28/92	06/11/92	PW
SNI0840300C00L	WWC5*718	05/01/92	05/01/92	694	4.9	05/28/92	06/11/92	PW
SNI0840400A00L	WWC5*719	05/01/92	05/01/92	225	5.5	05/28/92	06/11/92	PW
SNI0840400B00L	WWC5*720	05/01/92	05/01/92	174	4.9	05/28/92	06/11/92	PW
SNI0840400C00L	WWC5*721	05/01/92	05/01/92	342	4.9	05/28/92	06/11/92	PW
SNI0822500A00L	WWC5*722	05/01/92	05/01/92	238	5.7	05/28/92	06/11/92	PW
SNI0822500B00L	WWC5*723	05/01/92	05/01/92	115	5.8	05/28/92	06/11/92	PW
SNI0822500C00L	WWC5*724	05/01/92	05/01/92	308	5.6	05/28/92	06/11/92	PW
SLE2019100A00L	WWC5*725	05/04/92	05/04/92	913	5.6	05/28/92	06/11/92	PW
SLE2019100B00L	WWC5*726	05/04/92	05/04/92	854	5.5	05/28/92	06/11/92	PW
SLE2019100C00L	WWC5*727	05/04/92	05/04/92	604	5.8	05/28/92	06/11/92	PW
SLE2119100A00L	WWC5*728	05/04/92	05/04/92	537	5.7	05/28/92	06/11/92	PW
SLE2119100B00L	WWC5*729	05/04/92	05/04/92	477	5.5	05/28/92	06/11/92	PW
SLE2119100C00L	WWC5*730	05/04/92	05/04/92	333	5.8	05/28/92	06/11/92	PW
SLE2119200A00L	WWC5*731	05/04/92	05/04/92	633	5.3	05/28/92	06/11/92	PW
SLE2119200B00L	WWC5*732	05/04/92	05/04/92	736	5.7	05/28/92	06/11/92	PW
SLE2119200C00L	WWC5*733	05/04/92	05/04/92	460	5.7	05/28/92	06/11/92	PW
SMP1737100A00L	WWC5*734	05/04/92	05/04/92	448	5.4	05/28/92	06/11/92	PW
SMP1737100B00L	WWC5*735	05/04/92	05/04/92	324	5.7	05/28/92	06/11/92	PW
SMP1737100C00L	WWC5*736	05/04/92	05/04/92	110	5.6	05/28/92	06/11/92	PW
SMP1737200A00L	WWC5*737	05/04/92	05/04/92	362	5.3	05/28/92	06/11/92	PW
SMP1737200B00L	WWC5*738	05/04/92	05/04/92	324	5.3	05/28/92	06/11/92	PW
SMP1737200C00L	WWC5*739	05/04/92	05/04/92	253	5.6	05/28/92	06/11/92	PW
SMP1727100A00L	WWC5*740	05/04/92	05/04/92	426	5.4	05/28/92	06/11/92	PW
SMP1727100B00L	WWC5*741	05/04/92	05/04/92	304	5.9	05/28/92	06/11/92	PW
SMP1727100C00L	WWC5*742	05/04/92	05/04/92	166	5.5	05/28/92	06/11/92	PW
SMP1727200A00L	WWC5*743	05/04/92	05/04/92	638	5.7	05/28/92	06/11/92	PW
SMP1727200B00L	WWC5*744	05/04/92	05/04/92	632	5.7	05/28/92	06/11/92	PW
SMP1727200C00L	WWC5*745	05/04/92	05/04/92	452	5.9	05/28/92	06/11/92	PW
SMP1729100A00L	WWC5*746	05/04/92	05/04/92	394	5.5	05/28/92	06/11/92	PW
SMP1729100B00L	WWC5*747	05/04/92	05/04/92	239	5.3	05/28/92	06/11/92	PW
SMP1729100C00L	WWC5*748	05/04/92	05/04/92	142	5.3	05/28/92	06/11/92	PW
SMP1748100A00L	WWC5*749	05/04/92	05/04/92	679	5.2	05/28/92	06/11/92	PW
SMP1748100B00L	WWC5*750	05/04/92	05/04/92	458	5.3	05/29/92	06/11/92	PW
SMP1748100C00L	WWC5*751	05/04/92	05/04/92	230	5.8	05/29/92	06/11/92	PW
SMP1748200A00L	WWC5*752	05/04/92	05/04/92	399	5.4	05/29/92	06/11/92	PW
SMP1748200B00L	WWC5*753	05/04/92	05/04/92	339	5.4	05/29/92	06/11/92	PW
SMP1748200C00L	WWC5*754	05/04/92	05/04/92	224	5.5	05/29/92	06/11/92	PW
SMP1733100A00L	WWC5*755	05/04/92	05/04/92	262	5.6	05/29/92	06/11/92	PW
SMP1733100B00L	WWC5*756	05/04/92	05/04/92	315	5.6	05/29/92	06/11/92	PW

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Analytical Chemistry Re

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STATUS: FINAL

PROJECT NAME: NL/TARACORP SUPERFUND SITE PREDESIGN FIELD INVESTIGATION, WWC89MC114V

PROJECT NUMBER: 5912031 0100 **REPORT DATE:** 07-31-92

SAMPLE MATRIX: SOIL **LAB MANAGER/QC REVIEW:** JEFFREY W. SIRIA

PROJECT MANAGER: JOHN F. GEMOULES **REPORT APPROVED BY:** FRANCIS Y. HUANG

SAMPLE I.D.	LABORATORY I.D.	COLLECTION DATE	RECEIVED DATE	LEAD(FAA), MG/KG-DRY METHOD: 3051/7420	MDL	EXTRACT. DATE	ANALYSIS DATE	CHEM. INIT.
SMP1733100C00L	WWC5*757	05/04/92	05/04/92	220	5.5	05/29/92	06/11/92	PW
SMP1733200A00L	WWC5*758	05/04/92	05/04/92	755	5.8	05/29/92	06/11/92	PW
SMP1733200B00L	WWC5*759	05/04/92	05/04/92	720	5.6	05/29/92	06/11/92	PW
SMP1733200C00L	WWC5*760	05/04/92	05/04/92	626	5.7	05/29/92	06/11/92	PW
SMP1708100A00L	WWC5*761	05/04/92	05/04/92	301	5.2	05/29/92	06/11/92	PW
SMP1708100B00L	WWC5*762	05/04/92	05/04/92	285	5.6	05/29/92	06/11/92	PW
SMP1708100C00L	WWC5*763	05/04/92	05/04/92	314	5.3	05/29/92	06/11/92	PW
SMP1708200A00L	WWC5*764	05/04/92	05/04/92	659	5.3	05/29/92	06/11/92	PW
SMP1708200B00L	WWC5*765	05/04/92	05/04/92	673	5.6	05/29/92	06/11/92	PW
SMP1708200C00L	WWC5*766	05/04/92	05/04/92	639	5.9	05/29/92	06/11/92	PW
2 SWS2015100A00L	WWC5*767	05/04/92	05/04/92	128	5.2	05/29/92	06/11/92	PW
SWS2015100B00L	WWC5*768	05/04/92	05/04/92	31.6	5.3	05/29/92	06/11/92	PW
SWS2015100C00L	WWC5*769	05/04/92	05/04/92	16.9	5.6	05/29/92	06/11/92	PW
SWS2015100A0LD	WWC5*770	05/04/92	05/04/92	55.2	5.1	05/29/92	06/11/92	PW
SWS2015100B0LD	WWC5*771	05/04/92	05/04/92	30.6	5.3	05/29/92	06/11/92	PW
SWS2015100C0LD	WWC5*772	05/04/92	05/04/92	28.2	5.6	05/29/92	06/11/92	PW
SWS2015200A00L	WWC5*773	05/04/92	05/04/92	487	5.4	05/29/92	06/11/92	PW
SWS2015200B00L	WWC5*774	05/04/92	05/04/92	836	5.6	05/29/92	06/11/92	PW
SWS2015200C00L	WWC5*775	05/04/92	05/04/92	877	5.6	05/29/92	06/11/92	PW
SWS2108100A00L	WWC5*776	05/04/92	05/04/92	794	5.2	05/29/92	06/11/92	PW
SWS2108100B00L	WWC5*777	05/04/92	05/04/92	284	5.1	05/29/92	06/11/92	PW
SWS2108100C00L	WWC5*778	05/04/92	05/04/92	158	5.2	05/29/92	06/11/92	PW
SWS2108200A00L	WWC5*779	05/04/92	05/04/92	1500	5.6	05/29/92	06/11/92	PW
SWS2108200B00L	WWC5*780	05/04/92	05/04/92	952	5.8	05/29/92	06/11/92	PW
SWS2108200C00L	WWC5*781	05/04/92	05/04/92	668	5.8	05/29/92	06/11/92	PW
STT1510100A00L	WWC5*782	05/04/92	05/04/92	968	5.6	05/29/92	06/11/92	PW
STT1510100B00L	WWC5*783	05/04/92	05/04/92	609	5.2	05/29/92	06/11/92	PW
STT1510100C00L	WWC5*784	05/04/92	05/04/92	573	5.3	05/29/92	06/11/92	PW
STT1510100A0LD	WWC5*785	05/04/92	05/04/92	963	5.5	05/29/92	06/11/92	PW
STT1510100B0LD	WWC5*786	05/04/92	05/04/92	826	5.3	05/29/92	06/11/92	PW
STT1510100C0LD	WWC5*787	05/04/92	05/04/92	683	5.6	05/29/92	06/11/92	PW
STT1510200A00L	WWC5*788	05/04/92	05/04/92	72.2	5.2	05/29/92	06/11/92	PW
STT1510200B00L	WWC5*789	05/04/92	05/04/92	122	5.4	05/29/92	06/11/92	PW
STT1510200C00L	WWC5*790	05/04/92	05/04/92	354	5.6	05/29/92	06/11/92	PW
SST2239100A00L	WWC5*791	05/04/92	05/04/92	119	5.7	05/29/92	06/11/92	PW
SST2239100B00L	WWC5*792	05/04/92	05/04/92	287	5.6	05/29/92	06/11/92	PW
SST2239100C00L	WWC5*793	05/04/92	05/04/92	169	5.7	05/29/92	06/11/92	PW
SST2239200A00L	WWC5*794	05/04/92	05/04/92	653	5.7	05/29/92	06/11/92	PW
SST2239200B00L	WWC5*795	05/04/92	05/04/92	487	5.6	05/29/92	06/11/92	PW
SST2239200C00L	WWC5*796	05/04/92	05/04/92	51.5	5.6	05/29/92	06/11/92	PW
SST2232100A00L	WWC5*797	05/04/92	05/04/92	265	5.7	05/29/92	06/11/92	PW
SST2232100B00L	WWC5*798	05/04/92	05/04/92	207	5.7	05/29/92	06/11/92	PW

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Analytical Chemistry Results

STATUS: FINAL

PROJECT NAME: NL/TARACORP SUPERFUND SITE PREDESIGN FIELD INVESTIGATION, WWC89MC114V

PROJECT NUMBER: 5912031 0100 **REPORT DATE:** 07-31-92

SAMPLE MATRIX: SOIL **LAB MANAGER/QC REVIEW:** JEFFREY W. SIRIA

PROJECT MANAGER: JOHN F. GEMOULES **REPORT APPROVED BY:** FRANCIS Y. HUANG

SAMPLE I.D.	LABORATORY I.D.	COLLECTION DATE	RECEIVED DATE	LEAD(FAA), MG/KG-DRY METHOD: 3051/7420		MDL	EXTRACT. DATE	ANALYSIS DATE	CHEM. INIT.
SST2232100C00L	WWC5*799	05/04/92	05/04/92	153		5.8	05/29/92	06/11/92	PW
SST2232200A00L	WWC5*800	05/04/92	05/04/92	135		5.8	05/29/92	06/11/92	PW
SST2232200B00L	WWC5*801	05/04/92	05/04/92	102		5.7	05/29/92	06/11/92	PW
SST2232200C00L	WWC5*802	05/04/92	05/04/92	283		5.6	05/29/92	06/11/92	PW
SDE1627100A00L	WWC5*803	05/05/92	05/05/92	3490	D	29.7	05/29/92	06/11/92	PW
SDE1627100B00L	WWC5*804	05/05/92	05/05/92	962		5.4	05/29/92	06/11/92	PW
SDE1627100C00L	WWC5*805	05/05/92	05/05/92	455		5.8	05/29/92	06/11/92	PW
SDE1627200A00L	WWC5*806	05/05/92	05/05/92	3110	D	29.3	05/29/92	06/11/92	PW
SDE1627200B00L	WWC5*807	05/05/92	05/05/92	2570		6.0	05/29/92	06/11/92	PW
SDE1627200C00L	WWC5*808	05/05/92	05/05/92	1320		6.1	05/29/92	06/11/92	PW
SDE1700100A00L	WWC5*809	05/05/92	05/05/92	1910	J	5.3	05/29/92	06/11/92	PW
SDE1700100B00L	WWC5*810	05/05/92	05/05/92	2020		5.1	05/29/92	06/11/92	PW
SDE1700100C00L	WWC5*811	05/05/92	05/05/92	606		5.3	05/29/92	06/11/92	PW
SDE1700200A00L	WWC5*812	05/05/92	05/05/92	299		5.2	05/29/92	06/11/92	PW
SDE1700200B00L	WWC5*813	05/05/92	05/05/92	974		5.7	05/29/92	06/11/92	PW
SDE1700200C00L	WWC5*814	05/05/92	05/05/92	914		5.8	05/29/92	06/11/92	PW
SDE1723100A00L	WWC5*815	05/05/92	05/05/92	2030		6.1	05/29/92	06/11/92	PW
SDE1723100B00L	WWC5*816	05/05/92	05/05/92	703		6.0	05/29/92	06/11/92	PW
SDE1723100C00L	WWC5*817	05/05/92	05/05/92	375		5.7	05/29/92	06/11/92	PW
SDE1723200A00L	WWC5*818	05/05/92	05/05/92	1170		5.4	05/29/92	06/11/92	PW
SDE1723200B00L	WWC5*819	05/05/92	05/05/92	906		5.7	05/29/92	06/11/92	PW
SDE1723200C00L	WWC5*820	05/05/92	05/05/92	633		5.6	05/29/92	06/11/92	PW
SDE2160100A00L	WWC5*821	05/05/92	05/05/92	7.4		5.3	05/29/92	06/11/92	PW
SDE2160100B00L	WWC5*822	05/05/92	05/05/92	22.0		5.5	05/29/92	06/11/92	PW
SDE2160100C00L	WWC5*823	05/05/92	05/05/92	18.5		5.8	05/29/92	06/11/92	PW
SDE2160200A00L	WWC5*824	05/05/92	05/05/92	461		5.8	05/29/92	06/11/92	PW
SDE2160200B00L	WWC5*825	05/05/92	05/05/92	287		5.3	05/29/92	06/11/92	PW
SDE2160200C00L	WWC5*826	05/05/92	05/05/92	140		5.8	05/29/92	06/11/92	PW
SDE2134100A00L	WWC5*827	05/05/92	05/05/92	193		5.4	05/29/92	06/11/92	PW
SDE2134100B00L	WWC5*828	05/05/92	05/05/92	283		5.0	05/29/92	06/11/92	PW
SDE2134100C00L	WWC5*829	05/05/92	05/05/92	89.8		5.5	05/29/92	06/11/92	PW
SDE2134200A00L	WWC5*830	05/05/92	05/05/92	422		5.5	05/29/92	06/11/92	PW
SDE2134200B00L	WWC5*831	05/05/92	05/05/92	652		5.5	05/29/92	06/11/92	PW
SDE2134200C00L	WWC5*832	05/05/92	05/05/92	1370		5.3	05/29/92	06/11/92	PW
SDE2130100A00L	WWC5*833	05/05/92	05/05/92	984		5.6	05/29/92	06/11/92	PW
SDE2130100B00L	WWC5*834	05/05/92	05/05/92	1360		5.8	05/29/92	06/11/92	PW
SDE2130100C00L	WWC5*835	05/05/92	05/05/92	418		5.7	05/29/92	06/11/92	PW
SDE2130200A00L	WWC5*836	05/05/92	05/05/92	820		5.6	05/29/92	06/11/92	PW
SDE2130200B00L	WWC5*837	05/05/92	05/05/92	592		5.6	05/29/92	06/11/92	PW
SDE2130200C00L	WWC5*838	05/05/92	05/05/92	331		5.6	05/29/92	06/11/92	PW
SCL2053100A00L	WWC5*839	05/05/92	05/05/92	477		5.3	05/29/92	06/11/92	PW
SCL2053100B00L	WWC5*840	05/05/92	05/05/92	238		5.3	05/29/92	06/11/92	PW

D - Sample was diluted for this parameter

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St. Louis Chemistry Laboratory

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Analytical Chemistry Resu

STATUS: FINAL

PROJECT NAME: NL/TARACORP SUPERFUND SITE PREDESIGN FIELD INVESTIGATION, WWC89MC114V

PROJECT NUMBER: 5912031 0100 **REPORT DATE:** 07-31-92

SAMPLE MATRIX: SOIL **LAB MANAGER/QC REVIEW:** JEFFREY W. SIRIA

PROJECT MANAGER: JOHN F. GEMOULES **REPORT APPROVED BY:** FRANCIS Y. HUANG

SAMPLE I.D.	LABORATORY I.D.	COLLECTION DATE	RECEIVED DATE	LEAD(FAA), MG/KG-DRY METHOD: 3051/7420	MDL	EXTRACT. DATE	ANALYSIS DATE	CHEM. INIT.
SCL2053100C00L	WWC5*841	05/05/92	05/05/92	104	5.7	05/29/92	06/11/92	PW
SCL2053200A00L	WWC5*842	05/05/92	05/05/92	182	5.8	05/29/92	06/11/92	PW
SCL2053200B00L	WWC5*843	05/05/92	05/05/92	11.4	5.7	05/29/92	06/11/92	PW
SCL2053200C00L	WWC5*844	05/05/92	05/05/92	92.6	5.9	05/29/92	06/11/92	PW
SBE2218100A00L	WWC5*845	05/05/92	05/05/92	208	5.1	05/29/92	06/11/92	PW
SBE2218100B00L	WWC5*846	05/05/92	05/05/92	235	5.3	05/29/92	06/11/92	PW
SBE2218100C00L	WWC5*847	05/05/92	05/05/92	63.2	5.2	05/29/92	06/11/92	PW
SBE2218200A00L	WWC5*848	05/05/92	05/05/92	12.5	5.7	05/29/92	06/11/92	PW
SBE2218200B00L	WWC5*849	05/05/92	05/05/92	6.9	5.8	05/29/92	06/11/92	PW
SBE2218200C00L	WWC5*850	05/05/92	05/05/92	490	5.5	05/29/92	06/11/92	PW
SBE2222100A00L	WWC5*851	05/05/92	05/05/92	748	5.6	05/29/92	06/11/92	PW
SBE2222100B00L	WWC5*852	05/05/92	05/05/92	574	5.3	05/29/92	06/11/92	PW
SBE2222100C00L	WWC5*853	05/05/92	05/05/92	226	5.3	05/29/92	06/11/92	PW
SBE2222200A00L	WWC5*854	05/05/92	05/05/92	198	5.2	05/29/92	06/11/92	PW
SBE2222200B00L	WWC5*855	05/05/92	05/05/92	540	5.2	05/29/92	06/11/92	PW
SBE2222200C00L	WWC5*856	05/05/92	05/05/92	365	5.6	05/29/92	06/11/92	PW
SCL1736100A00L	WWC5*857	05/05/92	05/05/92	1060	5.8	05/29/92	06/11/92	PW
SCL1736100B00L	WWC5*858	05/05/92	05/05/92	337	5.7	05/29/92	06/11/92	PW
SCL1736100C00L	WWC5*859	05/05/92	05/05/92	243	5.8	05/29/92	06/11/92	PW
SCL1736200A00L	WWC5*860	05/05/92	05/05/92	1130	6.1	05/29/92	06/11/92	PW
SCL1736200B00L	WWC5*861	05/05/92	05/05/92	647	5.7	05/29/92	06/11/92	PW
SCL1736200C00L	WWC5*862	05/05/92	05/05/92	213	5.8	05/29/92	06/11/92	PW
SCL1728100A00L	WWC5*863	05/05/92	05/05/92	1490	5.3	05/29/92	06/11/92	PW
SCL1728100B00L	WWC5*864	05/05/92	05/05/92	1210	5.5	05/29/92	06/11/92	PW
SCL1728100C00L	WWC5*865	05/05/92	05/05/92	926	5.7	05/29/92	06/11/92	PW
SCL1728200A00L	WWC5*866	05/05/92	05/05/92	2260	5.6	05/29/92	06/11/92	PW
SCL1728200B00L	WWC5*867	05/05/92	05/05/92	1100	5.7	05/29/92	06/11/92	PW
SCL1728200C00L	WWC5*868	05/05/92	05/05/92	485	5.9	05/29/92	06/11/92	PW
SCL1720100A00L	WWC5*869	05/05/92	05/05/92	1560 J	5.1	05/29/92	06/11/92	PW
SCL1720100B00L	WWC5*870	05/05/92	05/05/92	1390	5.3	06/01/92	06/11/92	PW
SCL1720100C00L	WWC5*871	05/05/92	05/05/92	920	5.3	06/01/92	06/11/92	PW
SCL1720200A00L	WWC5*872	05/05/92	05/05/92	1840	4.9	06/01/92	06/11/92	PW
SCL1720200B00L	WWC5*873	05/05/92	05/05/92	508	4.9	06/01/92	06/11/92	PW
SCL1720200C00L	WWC5*874	05/05/92	05/05/92	581	5.2	06/01/92	06/11/92	PW
SBE2103100A00L	WWC5*875	05/05/92	05/05/92	145	5.4	06/01/92	06/11/92	PW
SBE2103100B00L	WWC5*876	05/05/92	05/05/92	293	5.3	06/01/92	06/11/92	PW
SBE2103100C00L	WWC5*877	05/05/92	05/05/92	127	5.7	06/01/92	06/11/92	PW
SBE2103200A00L	WWC5*878	05/05/92	05/05/92	159	5.4	06/01/92	06/11/92	PW
SBE2103200B00L	WWC5*879	05/05/92	05/05/92	149	5.1	06/01/92	06/11/92	PW
SBE2103200C00L	WWC5*880	05/05/92	05/05/92	341	5.7	06/01/92	06/11/92	PW
SCL1630100A00L	WWC5*881	05/05/92	05/05/92	2120	5.6	06/01/92	06/11/92	PW
SCL1630100B00L	WWC5*882	05/05/92	05/05/92	757	5.1	06/01/92	06/11/92	PW

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Analytical Chemistry Results

STATUS: FINAL

PROJECT NAME: NL/TARACORP SUPERFUND SITE PREDESIGN FIELD INVESTIGATION, WWC89MC114V

PROJECT NUMBER: 5912031 0100

REPORT DATE: 07-31-92

SAMPLE MATRIX: SOIL

LAB MANAGER/QC REVIEW: JEFFREY W. SIRIA

PROJECT MANAGER: JOHN F. GEMOULES

REPORT APPROVED BY: FRANCIS Y. HUANG

SAMPLE I.D.	LABORATORY I.D.	COLLECTION DATE	RECEIVED DATE	LEAD(FAA), MG/KG-DRY METHOD: 3051/7420		MDL	EXTRACT. DATE	ANALYSIS DATE	CHEM. INIT.
SCL1630100C00L	WWC5*883	05/05/92	05/05/92	242		5.6	06/01/92	06/11/92	PW
SCL1630200A00L	WWC5*884	05/05/92	05/05/92	1610		5.6	06/01/92	06/11/92	PW
SCL1630200B00L	WWC5*885	05/05/92	05/05/92	629		6.1	06/01/92	06/11/92	PW
SCL1630200C00L	WWC5*886	05/05/92	05/05/92	1170		5.5	06/01/92	06/11/92	PW
SED1718100A00L	WWC5*887	05/06/92	05/06/92	1030		6.0	06/01/92	06/11/92	PW
SED1718100B00L	WWC5*888	05/06/92	05/06/92	1270		5.4	06/01/92	06/11/92	PW
SED1718100C00L	WWC5*889	05/06/92	05/06/92	277		5.6	06/01/92	06/11/92	PW
SED1718200A00L	WWC5*890	05/06/92	05/06/92	ND		5.1	06/01/92	06/11/92	PW
SED1718200B00L	WWC5*891	05/06/92	05/06/92	ND		5.2	06/01/92	06/11/92	PW
SED1718200C00L	WWC5*892	05/06/92	05/06/92	63.9		5.3	06/01/92	06/11/92	PW
SED1733100A00L	WWC5*893	05/06/92	05/06/92	1080		5.8	06/01/92	06/11/92	PW
SED1733100B00L	WWC5*894	05/06/92	05/06/92	381		5.4	06/01/92	06/11/92	PW
SED1733100C00L	WWC5*895	05/06/92	05/06/92	654		5.4	06/01/92	06/11/92	PW
SED1733200A00L	WWC5*896	05/06/92	05/06/92	1530		5.7	06/01/92	06/11/92	PW
SED1733200B00L	WWC5*897	05/06/92	05/06/92	958		5.9	06/01/92	06/11/92	PW
SED1733200C00L	WWC5*898	05/06/92	05/06/92	616		5.9	06/01/92	06/11/92	PW
SED1729100A00L	WWC5*899	05/06/92	05/06/92	1530		5.3	06/01/92	06/11/92	PW
SED1729100B00L	WWC5*900	05/06/92	05/06/92	726		5.4	06/01/92	06/11/92	PW
SED1729100C00L	WWC5*901	05/06/92	05/06/92	1030		5.3	06/01/92	06/11/92	PW
SED1729200A00L	WWC5*902	05/06/92	05/06/92	646		5.5	06/01/92	06/11/92	PW
SED1729200B00L	WWC5*903	05/06/92	05/06/92	600		5.6	06/01/92	06/11/92	PW
SED1729200C00L	WWC5*904	05/06/92	05/06/92	439		5.7	06/01/92	06/11/92	PW
SED1726100A00L	WWC5*905	05/06/92	05/06/92	1230		5.8	06/01/92	06/11/92	PW
SED1726100B00L	WWC5*906	05/06/92	05/06/92	297		5.6	06/01/92	06/11/92	PW
SED1726100C00L	WWC5*907	05/06/92	05/06/92	1350		5.6	06/01/92	06/11/92	PW
SED1726200A00L	WWC5*908	05/06/92	05/06/92	294		5.5	06/01/92	06/11/92	PW
SED1726200B00L	WWC5*909	05/06/92	05/06/92	516	J	5.5	06/01/92	06/11/92	PW
SED1726200C00L	WWC5*910	05/06/92	05/06/92	183		5.5	06/01/92	06/12/92	PW
SGR1734100A00L	WWC5*911	05/06/92	05/06/92	1240		5.9	06/01/92	06/12/92	PW
SGR1734100B00L	WWC5*912	05/06/92	05/06/92	1470		5.5	06/01/92	06/12/92	PW
SGR1734100C00L	WWC5*913	05/06/92	05/06/92	1330		5.5	06/01/92	06/12/92	PW
SGR1734200A00L	WWC5*914	05/06/92	05/06/92	1070		5.6	06/01/92	06/12/92	PW
SGR1734200B00L	WWC5*915	05/06/92	05/06/92	950		5.6	06/01/92	06/12/92	PW
SGR1734200C00L	WWC5*916	05/06/92	05/06/92	894		5.8	06/01/92	06/12/92	PW
SED1643100A00L	WWC5*917	05/06/92	05/06/92	1630		6.0	06/01/92	06/12/92	PW
SED1643100B00L	WWC5*918	05/06/92	05/06/92	1400		5.5	06/01/92	06/12/92	PW
SED1643100C00L	WWC5*919	05/06/92	05/06/92	454		6.0	06/01/92	06/12/92	PW
SED1643200A00L	WWC5*920	05/06/92	05/06/92	1350		5.1	06/01/92	06/12/92	PW
SED1643200B00L	WWC5*921	05/06/92	05/06/92	345		5.3	06/01/92	06/12/92	PW
SED1643200C00L	WWC5*922	05/06/92	05/06/92	262		5.6	06/01/92	06/12/92	PW
SED1638100A00L	WWC5*923	05/06/92	05/06/92	2470	D	28.0	06/01/92	06/12/92	PW
SED1638100B00L	WWC5*924	05/06/92	05/06/92	1490		5.4	06/01/92	06/12/92	PW

D - Sample was diluted for this parameter

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Analytical Chemistry Res

STATUS: FINAL

PROJECT NAME: NL/TARACORP SUPERFUND SITE PREDESIGN FIELD INVESTIGATION, WWC89MC114V

PROJECT NUMBER: 5912031 0100 **REPORT DATE:** 07-31-92

SAMPLE MATRIX: SOIL **LAB MANAGER/QC REVIEW:** JEFFREY W. SIRIA

PROJECT MANAGER: JOHN F. GEMOULES **REPORT APPROVED BY:** FRANCIS Y. HUANG

SAMPLE I.D.	LABORATORY I.D.	COLLECTION DATE	RECEIVED DATE	LEAD(FAA), MG/KG-DRY METHOD: 3051/7420	MDL	EXTRACT. DATE	ANALYSIS DATE	CHEM. INIT.
SED1638100C00L	WWC5*925	05/06/92	05/06/92	922	5.7	06/01/92	06/12/92	PW
SED1638200A00L	WWC5*926	05/06/92	05/06/92	1100	5.3	06/01/92	06/12/92	PW
SED1638200B00L	WWC5*927	05/06/92	05/06/92	1220	5.6	06/01/92	06/12/92	PW
SED1638200C00L	WWC5*928	05/06/92	05/06/92	943	5.5	06/01/92	06/12/92	PW
SED1621100A00L	WWC5*929	05/06/92	05/06/92	2260	5.5	06/01/92	06/12/92	PW
SED1621100B00L	WWC5*930	05/06/92	05/06/92	972	5.9	06/01/92	06/12/92	PW
SED1621100C00L	WWC5*931	05/06/92	05/06/92	498	5.8	06/01/92	06/12/92	PW
SED1621200A00L	WWC5*932	05/06/92	05/06/92	2150	5.4	06/01/92	06/12/92	PW
SED1621200B00L	WWC5*933	05/06/92	05/06/92	2480 D	26.7	06/01/92	06/12/92	PW
SED1621200C00L	WWC5*934	05/06/92	05/06/92	1230	5.7	06/01/92	06/12/92	PW
SSP1610100A00L	WWC5*935	05/06/92	05/06/92	402	5.6	06/01/92	06/12/92	PW
SSP1610100B00L	WWC5*936	05/06/92	05/06/92	255	5.7	06/01/92	06/12/92	PW
SSP1610100C00L	WWC5*937	05/06/92	05/06/92	110	6.0	06/01/92	06/12/92	PW
SSP1610200A00L	WWC5*938	05/06/92	05/06/92	329	5.9	06/01/92	06/12/92	PW
SSP1610200B00L	WWC5*939	05/06/92	05/06/92	250	5.6	06/01/92	06/12/92	PW
SSP1610200C00L	WWC5*940	05/06/92	05/06/92	114	6.0	06/01/92	06/12/92	PW
SOL1738100A00L	WWC5*941	05/06/92	05/06/92	506	5.5	06/01/92	06/12/92	PW
SOL1738100B00L	WWC5*942	05/06/92	05/06/92	500	5.3	06/01/92	06/12/92	PW
SOL1738100C00L	WWC5*943	05/06/92	05/06/92	270	5.8	06/01/92	06/12/92	PW
SOL1738200A00L	WWC5*944	05/06/92	05/06/92	600	5.5	06/01/92	06/12/92	PW
SOL1738200B00L	WWC5*945	05/06/92	05/06/92	642	5.8	06/01/92	06/12/92	PW
SOL1738200C00L	WWC5*946	05/06/92	05/06/92	565	5.8	06/01/92	06/12/92	PW
SOL1747100A00L	WWC5*947	05/06/92	05/06/92	831	5.6	06/01/92	06/12/92	PW
SOL1747100B00L	WWC5*948	05/06/92	05/06/92	406	5.4	06/01/92	06/12/92	PW
SOL1747100C00L	WWC5*949	05/06/92	05/06/92	302	5.7	06/01/92	06/12/92	PW
SOL1747200A00L	WWC5*950	05/06/92	05/06/92	1020	5.2	06/01/92	06/12/92	PW
SOL1747200B00L	WWC5*951	05/06/92	05/06/92	467	5.1	06/01/92	06/12/92	PW
SOL1747200C00L	WWC5*952	05/06/92	05/06/92	413	5.2	06/01/92	06/12/92	PW
SOL1751100A00L	WWC5*953	05/06/92	05/06/92	788	5.2	06/01/92	06/12/92	PW
SOL1751100B00L	WWC5*954	05/06/92	05/06/92	229	5.5	06/01/92	06/12/92	PW
SOL1751100C00L	WWC5*955	05/06/92	05/06/92	103	5.0	06/01/92	06/12/92	PW
SOL1751200A00L	WWC5*956	05/06/92	05/06/92	504	5.4	06/01/92	06/12/92	PW
SOL1751200B00L	WWC5*957	05/06/92	05/06/92	259	5.2	06/01/92	06/12/92	PW
SOL1751200C00L	WWC5*958	05/06/92	05/06/92	149	5.3	06/01/92	06/12/92	PW
SOL1651100A00L	WWC5*959	05/06/92	05/06/92	594	5.3	06/01/92	06/12/92	PW
SOL1651100B00L	WWC5*960	05/06/92	05/06/92	448	5.2	06/01/92	06/12/92	PW
SOL1651100C00L	WWC5*961	05/06/92	05/06/92	133	5.1	06/01/92	06/12/92	PW
SOL1651200A00L	WWC5*962	05/06/92	05/06/92	350	5.1	06/01/92	06/12/92	PW
SOL1651200B00L	WWC5*963	05/06/92	05/06/92	161	5.2	06/01/92	06/12/92	PW
SOL1651200C00L	WWC5*964	05/06/92	05/06/92	194	5.2	06/01/92	06/12/92	PW
SSP1646100A00L	WWC5*965	05/06/92	05/06/92	398	5.2	06/01/92	06/12/92	PW
SSP1646100B00L	WWC5*966	05/06/92	05/06/92	234	5.7	06/01/92	06/12/92	PW

D - Sample was diluted for this parameter

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Analytical Chemistry Results

STATUS: FINAL

PROJECT NAME: NL/TARACORP SUPERFUND SITE PREDESIGN FIELD INVESTIGATION, WWC89MC114V

PROJECT NUMBER: 5912031 0100 **REPORT DATE:** 07-31-92

SAMPLE MATRIX: SOIL **LAB MANAGER/QC REVIEW:** JEFFREY W. SIRIA

PROJECT MANAGER: JOHN F. GEMOULES **REPORT APPROVED BY:** FRANCIS Y. HUANG

SAMPLE I.D.	LABORATORY I.D.	COLLECTION DATE	RECEIVED DATE	LEAD(FAA), MG/KG-DRY METHOD: 3051/7420	MDL	EXTRACT. DATE	ANALYSIS DATE	CHEM. INIT.
SSP1646100C00L	WWC5*967	05/06/92	05/06/92	97.9	5.7	06/01/92	06/12/92	PW
SSP1646200A00L	WWC5*968	05/06/92	05/06/92	746	5.6	06/01/92	06/12/92	PW
SSP1646200B00L	WWC5*969	05/06/92	05/06/92	771	5.6	06/01/92	06/12/92	PW
SWT2610100A00L	WWC5*970	05/07/92	05/07/92	581	5.4	06/01/92	06/12/92	PW
SWT2610100B00L	WWC5*971	05/07/92	05/07/92	423	5.3	06/01/92	06/12/92	PW
SWT2610100C00L	WWC5*972	05/07/92	05/07/92	212	5.5	06/01/92	06/12/92	PW
SWT2610200A00L	WWC5*973	05/07/92	05/07/92	186	5.7	06/01/92	06/12/92	PW
SWT2610200B00L	WWC5*974	05/07/92	05/07/92	187	5.7	06/01/92	06/12/92	PW
SWT2610200C00L	WWC5*975	05/07/92	05/07/92	175	5.7	06/01/92	06/12/92	PW
SWT2610100A0LD	WWC5*976	05/07/92	05/07/92	566	5.2	06/01/92	06/12/92	PW
SWT2610100B0LD	WWC5*977	05/07/92	05/07/92	452	5.2	06/01/92	06/12/92	PW
SWT2610100C0LD	WWC5*978	05/07/92	05/07/92	225	5.4	06/01/92	06/12/92	PW
SMP1649100A00L	WWC5*979	05/07/92	05/07/92	1620	5.2	06/01/92	06/12/92	PW
SMP1649100B00L	WWC5*980	05/07/92	05/07/92	514	5.5	06/01/92	06/12/92	PW
SMP1649100C00L	WWC5*981	05/07/92	05/07/92	413	6.0	06/01/92	06/12/92	PW
SMP1649200A00L	WWC5*982	05/07/92	05/07/92	2040	5.7	06/01/92	06/12/92	PW
SMP1649200B00L	WWC5*983	05/07/92	05/07/92	5240 D	62.6	06/01/92	06/12/92	PW
SMP1649200C00L	WWC5*984	05/07/92	05/07/92	2050	6.2	06/01/92	06/12/92	PW
SMP1637100A00L	WWC5*985	05/07/92	05/07/92	420	5.6	06/01/92	06/12/92	PW
SMP1637100B00L	WWC5*986	05/07/92	05/07/92	397	5.1	06/01/92	06/12/92	PW
SMP1637100C00L	WWC5*987	05/07/92	05/07/92	370	5.4	06/01/92	06/12/92	PW
SMP1637200A00L	WWC5*988	05/07/92	05/07/92	435	5.3	06/01/92	06/12/92	PW
SMP1637200B00L	WWC5*989	05/07/92	05/07/92	489	5.6	06/01/92	06/12/92	PW
SMP1637200C00L	WWC5*990	05/07/92	05/07/92	798	5.9	06/02/92	06/12/92	PW
SMP1627100A00L	WWC5*991	05/07/92	05/07/92	2470	5.5	06/02/92	06/12/92	PW
SMP1627100B00L	WWC5*992	05/07/92	05/07/92	585	5.2	06/02/92	06/12/92	PW
SMP1627100C00L	WWC5*993	05/07/92	05/07/92	283	5.3	06/02/92	06/12/92	PW
SMP1627200A00L	WWC5*994	05/07/92	05/07/92	439	5.8	06/02/92	06/12/92	PW
SMP1627200B00L	WWC5*995	05/07/92	05/07/92	328	5.4	06/02/92	06/12/92	PW
SMP1627200C00L	WWC5*996	05/07/92	05/07/92	228	5.5	06/02/92	06/12/92	PW
SMP1611100A00L	WWC5*997	05/07/92	05/07/92	598	5.4	06/02/92	06/12/92	PW
SMP1611100B00L	WWC5*998	05/07/92	05/07/92	872	5.3	06/02/92	06/12/92	PW
SMP1611100C00L	WWC5*999	05/07/92	05/07/92	268	5.4	06/02/92	06/12/92	PW

D - Sample was diluted for this parameter

CHAIN OF CUSTODY RECORD

WOODWARD-CLYDE CONSULTANTS
2318 MILLPARK DR.
MARYLAND HEIGHTS, MISSOURI 63043
314-429-0100

PROJECT NO.: 89MC114V

PROJECT NAME: NL/TARACORP SUPERFUND SITE PREDESIGN FIELD INVESTIGATION

SAMPLER'S: (Signatures) [signature] [signature]

	DATE	TIME	SAMPLE I.D. NUMBER: Matrix	Location	Boring	Depth	Sample Type		NO. OF CONTAINERS	CONTAINER DESCRIPTION/ ANALYSES REQUESTED: Total Lead 4oz. poly jar Cool to 4°C	TCLP - Lead 4oz. poly jar Cool to 4°C	Geotechnical glass or poly jar	REMARKS
9	4/28	1044	S	WS1235	2	00B	00L	✓	1	✓			
08		1046	S	WS1235	2	00C	00L	✓	1	✓			
1		1115	S	WS1405	1	00A	00L	✓	1	✓			
2		1117	S	WS1405	1	00B	00L	✓	1	✓			
523		1119	S	WS1405	1	00C	00L	✓	1	✓			
4		1122	S	WS1405	2	00A	00L	✓	1	✓			
525		1124	S	WS1405	2	00B	00L	✓	1	✓			
6		1126	S	WS1405	2	00C	00L	✓	1	✓			
527		1133	S	WS1402	1	00A	00L	✓	1	✓			
8		1135	S	WS1402	1	00B	00L	✓	1	✓			
529		1137	S	WS1402	1	00C	00L	✓	1	✓			
3		1133	S	WS1402	1	00A	0LD	✓	1	✓			
1		1135	S	WS1402	1	00B	0LD	✓	1	✓			
532		1137	S	WS1402	1	00C	0LD	✓	1	✓			
3		1139	S	WS1402	2	00A	00L	✓	1	✓			
534		1141	S	WS1402	2	00B	00L	✓	1	✓			
5		1143	S	WS1402	2	00C	00L	✓	1	✓			
536		1346	S	ED2236	1	00A	00L	✓	1	✓			
7		1348	S	ED2236	1	00B	00L	✓	1	✓			
538		1350	S	ED2236	1	00C	00L	✓	1	✓			
9		1352	S	ED2236	2	00A	00L	✓	1	✓			
540		1354	S	ED2236	2	00B	00L	✓	1	✓			
		1356	S	ED2236	3	00C	00L	✓	1	✓			

RELINQUISHED BY: (Signature)	DATE / TIME	RECEIVED BY: (Signature)	DATE / TIME
[signature]	4/28/92 1630	[signature]	4/28/92 1637
RELINQUISHED BY: (Signature)	DATE / TIME	RECEIVED AT LAB BY: (Signature)	DATE / TIME
[signature]	4/28/92 1800	[signature]	4/28/92 1800
METHOD OF SHIPMENT:		AIRBILL NO: (If Applicable)	

CHAIN OF CUSTODY RECORD

WOODWARD-CLYDE CONSULTANTS
2318 MILLPARK DR.
MARYLAND HEIGHTS, MISSOURI 63043
314-429-0100

SHEET 4 of 4

PROJECT NO.: 89MC114V

PROJECT NAME: NL/TARACORP SUPERFUND SITE PREDESIGN FIELD INVESTIGATION

SAMPLER'S: (Signatures) K. [illegible] / M. Wallace

	DATE	TIME	Matrix	Location	Boring	Depth	Sample Type	NO. OF CONTAINERS	Total Lead 4oz. poly jar Cool to 4°C	TCLP - Lead 4oz. poly jar Cool to 4°C	Geotechnical glass or poly jar	REMARKS
542	4/28	1405	S	ED2224	1	00A	00L ✓	1	✓			
543		1407	S	ED2224	1	00B	00L ✓	1	✓			
544		1409	S	ED2224	1	00C	00L ✓	1	✓			
545		1411	S	ED2224	2	00A	00L ✓	1	✓			
546		1413	S	ED2224	2	00B	00L ✓	1	✓			
547		1415	S	ED2224	2	00C	00L ✓	1	✓			
548		1442	S	ED2208	1	00A	00L ✓	1	✓			
549		1444	S	ED2208	1	00B	00L ✓	1	✓			
550		1446	S	ED2208	1	00C	00L ✓	1	✓			
551		1448	S	ED2208	2	00A	00L ✓	1	✓			
552		1450	S	ED2208	2	00B	00L ✓	1	✓			
553		1452	S	ED2208	2	00C	00L ✓	1	✓			
554		1544	S	ED2204	1	00A	00L ✓	1	✓			
555		1546	S	ED2204	1	00B	00L ✓	1	✓			
556		1548	S	ED2204	1	00C	00L ✓	1	✓			
557		1550	S	ED2204	2	00A	00L ✓	1	✓			
558		1552	S	ED2204	2	00B	00L ✓	1	✓			
559		1554	S	ED2204	2	00C	00L ✓	1	✓			
			S									
			S									
			S									
			S									
			S									

RELINQUISHED BY: (Signature)	DATE / TIME	RECEIVED BY: (Signature)	DATE / TIME
Wendy E. [illegible]	4/28/92 1630	[illegible]	4/28/92 1630
RELINQUISHED BY: (Signature)	DATE / TIME	RECEIVED AT LAB BY: (Signature)	DATE / TIME
[illegible]	4/28/92 1800	[illegible]	4/28/92 1800
METHOD OF SHIPMENT:		AIRBILL NO: (If Applicable)	

CHAIN OF CUSTODY RECORD

WOODWARD-CLYDE CONSULTANTS
2318 MILLPARK DR.
MARYLAND HEIGHTS, MISSOURI 63043
314-429-0100

SHEET 1 of 4

PROJECT NO.: 89MC114V

PROJECT NAME: NL/TARACORP SUPERFUND SITE PREDESIGN FIELD INVESTIGATION

SAMPLER'S: (Signatures)

DATE	TIME	SAMPLE I.D. NUMBER (Matrix, Location, Boring, Depth, Sample Type)	NO. OF CONTAINERS	Total Lead 4oz. poly jar Cool to 4°C	TCLP - Lead 4oz. poly jar Cool to 4°C	Geotechnical glass or poly jar	REMARKS
4/16	1610	S LR215L 2 00A 00L ✓	1	X			
4/16	1612	S LR215L 2 00B 00L ✓	1	X			
4/16	1614	S LR215L 2 00C 00L ✓	1	X			

RELINQUISHED BY: (Signature)	DATE / TIME	RECEIVED BY: (Signature)	DATE / TIME
Randy Slabott	4/16/92 1700	[illegible]	4/16 1700
RELINQUISHED BY: (Signature)	DATE / TIME	RECEIVED AT LAB BY: (Signature)	DATE / TIME
[illegible]	4/16 1730	[illegible]	4/16 5:[illegible]
METHOD OF SHIPMENT:		AIRBILL NO: (If Applicable)	

WWC5-* 76-141

COOLER/SAMPLE RECEIPT FORM

Rev.01 10/7/91

ESE Cooler # ✓ 163
Client Cooler # _____
No Cooler _____

Project: Woodward Clyde Date/Time Received: 4-16-92 1730

USE OTHER SIDE OF THIS FORM TO NOTE FURTHER DETAILS CONCERNING CHECK-IN PROBLEMS AND TO SPECIFY AND DESCRIBE ANY ACTION(S) REGARDING THE RESOLUTION(S) OF PROBLEMS. IF SHIPMENT WAS ACCEPTED AND IF REQUESTED, NOTE ON BACK THE ADDRESS WHERE THE EMPTY COOLER WAS RETURNED AND LIKEWISE IF THE SHIPMENT WAS REJECTED.

IF INFORMATION IS MISSING OR THERE ARE PROBLEMS NOTIFY LABORATORY PROJECT MANAGER SO THAT HE CAN NOTIFY THE PROJECT MANAGER IMMEDIATELY.

A. PRELIMINARY EXAMINATION PHASE: Date/Time cooler/sample was opened and checked: 4-17-92 900

by (print) Carol Cash (sign) Carol Cash

1. List courier delivering samples . . . . . Client . . . . . YES NO
2. Did cooler come with a shipping slip (air bill, etc.)? . . . . . YES (NO)
   If YES, attach and enter carrier and air bill number here: _____
3. Were custody seals on outside of cooler? . . . . . (YES) NO
   If YES, how many and where: 1 on front 1 on Back
   If YES, enter the following: seal date: 4-16-92 ; seal name: C. Cage
4. Were custody seals unbroken and intact at the date and time of arrival? . . . . . (YES) NO
5. Was chain-of-custody provided? . . . . . (YES) NO
6. Were custody papers sealed in a Ziploc* bag and taped inside to the lid? . . . . . (YES) NO
7. Were entries on custody papers completed? (YES) NO . If no, give details on back
8. Turnaround time included? . . . . . YES (NO)
9. Did you sign custody papers in the appropriate place? . . . . . (YES) NO
10. Was project identifiable from custody papers? If YES, enter project name at the top of this form. . (YES) NO

B. SAMPLE CHECK-IN PHASE: Date samples were checked-in: 4-17-92 by (all those involved must sign below):
(print) Carol Cash (sign) Carol Cash

11. Describe packing: Samples in Cooler with ice
*12. If required, was enough ice used? (temperature maintained correctly)? . . . . . (YES) NO
13. Were all bottles sealed in separate plastic bags? . . . . . YES (NO)
*14. Did all bottles arrive unbroken and in good condition? . . . . . (YES) NO
15. Were all bottle labels complete (ID, date, time, signature, preservative, etc.)? . . . . . (YES) NO
16. Did all bottle labels agree with custody papers? If NO, indicate discrepancies on back. . . . . (YES) NO
17. Were correct containers used for the tests indicated? . . . . . (YES) NO
*18. Were correct preservatives used when required? . . . . . (YES) NO
*19. pH of samples maintained correctly as required? If NO, list by ID# _____ . (YES) NO
20. Was a sufficient amount of sample sent for tests indicated? . . . . . (YES) NO
*21. Bubbles present in VOA vials? If YES, list by ID#: NA . YES NO
22. Was lab. project manager called and status discussed? If YES, give details on the back of this form. YES NO
23. Who was called? _____ By whom? _____ on (date) _____
24. Second Party Review: _____

* Sample rejection criteria

W:\WP\CHEMCOM\CRF.01

QC SUMMARY

LEGEND

STOR*METH - storet*method code. Used as a unique identification of the analytical parameter.

BATCH - analytical data batch identification.

DATE - analysis date.

FOUND (method blank) - quantitated concentration determined to be in the method blank.

FOUND (continuing calibration verification) - quantitated concentration determined to be in the CCV sample.

FOUND (standard matrix spike) - quantitated concentration determined to be in the standard matrix spike.

FOUND (sample matrix spike) - the difference in the quantitated concentration in the sample matrix spike and the UNSPIKED sample.

UNSPIKED (sample matrix spike) - quantitated concentration determined to be in the sample prior to spike fortification.

R.P.D. - replicate percent difference.

R.P.D. CRITERIA - R.P.D. not to be exceeded.

TARGET - the calculated concentration of the analyte in the spike or QC sample. The TARGET may vary from sample to sample based on sample weight, and moisture content. This concentration is the benchmark to which the FOUND concentrations are compared.

R.P.D.*1 - default reference when RPD cannot be calculated due to the spike sample I.D. used in the data batch.

JFG/pl/REPORT/WWC.LEG

N

Method Blank Sample Summary

NAME	UNITS	STOR*METH	BATCH	SAMPLE	DATE	FOUND	FOOTNOTE
EAD(FAA)	MG/KG-DRY	1051*SFAAS	S7532	MB*NONE*1	05/18/92	0.3	
EAD(FAA)	MG/KG-DRY			MB*NONE*2		0.03	
EAD(FAA)	MG/KG-DRY			MB*NONE*3		0.0	
EAD(FAA)	MG/KG-DRY			MB*NONE*4		0.0	
EAD(FAA)	MG/KG-DRY		S7534	MB*NONE*1	05/19/92	0.2	
EAD(FAA)	MG/KG-DRY			MB*NONE*2		0.2	
EAD(FAA)	MG/KG-DRY			MB*NONE*3		0.2	
EAD(FAA)	MG/KG-DRY		S7704	MB*NONE*1	06/02/92	0.1	
EAD(FAA)	MG/KG-DRY			MB*NONE*2		0.2	
EAD(FAA)	MG/KG-DRY			MB*NONE*3		0.09	
EAD(FAA)	MG/KG-DRY			MB*NONE*4		0.09	
EAD(FAA)	MG/KG-DRY			MB*NONE*5		0.09	
EAD(FAA)	MG/KG-DRY			MB*NONE*6		0.0	
EAD(FAA)	MG/KG-DRY		S7705	MB*NONE*1	06/03/92	0.01	
EAD(FAA)	MG/KG-DRY			MB*NONE*2		0.3	
EAD(FAA)	MG/KG-DRY			MB*NONE*3		0.2	
EAD(FAA)	MG/KG-DRY			MB*NONE*4		0.1	
EAD(FAA)	MG/KG-DRY			MB*NONE*5		0.03	
EAD(FAA)	MG/KG-DRY			MB*NONE*6		0.0	
EAD(FAA)	MG/KG-DRY		S7875	MB*NONE*1	06/04/92	0.2	
EAD(FAA)	MG/KG-DRY			MB*NONE*2		0.3	
EAD(FAA)	MG/KG-DRY			MB*NONE*3		0.4	
EAD(FAA)	MG/KG-DRY			MB*NONE*4		0.5	
EAD(FAA)	MG/KG-DRY			MB*NONE*5		0.4	
EAD(FAA)	MG/KG-DRY			MB*NONE*6		0.5	
EAD(FAA)	MG/KG-DRY		S7878	MB*NONE*1	06/09/92	0.0	
EAD(FAA)	MG/KG-DRY			MB*NONE*2		0.0	
EAD(FAA)	MG/KG-DRY			MB*NONE*3		0.0	
EAD(FAA)	MG/KG-DRY			MB*NONE*4		0.0	
EAD(FAA)	MG/KG-DRY			MB*NONE*5		0.0	
EAD(FAA)	MG/KG-DRY			MB*NONE*6		0.0	
EAD(FAA)	MG/KG-DRY		S7880	MB*NONE*1	06/11/92	0.2	
EAD(FAA)	MG/KG-DRY			MB*NONE*2		0.2	
EAD(FAA)	MG/KG-DRY			MB*NONE*3		0.08	
EAD(FAA)	MG/KG-DRY			MB*NONE*4		0.0	
EAD(FAA)	MG/KG-DRY			MB*NONE*5		0.0	
EAD(FAA)	MG/KG-DRY			MB*NONE*6		0.0	
EAD(FAA)	MG/KG-DRY		S7881	MB*NONE*1		0.0	
EAD(FAA)	MG/KG-DRY			MB*NONE*2		0.0	
EAD(FAA)	MG/KG-DRY			MB*NONE*3		0.0	
EAD(FAA)	MG/KG-DRY			MB*NONE*4		0.0	
EAD(FAA)	MG/KG-DRY			MB*NONE*5		0.0	
EAD(FAA)	MG/KG-DRY			MB*NONE*6		0.0	
EAD(FAA)	MG/KG-DRY		S7949	MB*NONE*1	06/08/92	0.06	
EAD(FAA)	MG/KG-DRY			MB*NONE*2		0.07	
EAD(FAA)	MG/KG-DRY			MB*NONE*3		0.09	
EAD(FAA)	MG/KG-DRY			MB*NONE*4		0.0	
EAD(FAA)	MG/KG-DRY			MB*NONE*5		0.0	
EAD(FAA)	MG/KG-DRY			MB*NONE*6		0.0	
EAD(FAA)	MG/KG-DRY		S7967	MB*NONE*1	06/12/92	0.0	
EAD(FAA)	MG/KG-DRY			MB*NONE*2		0.0	
EAD(FAA)	MG/KG-DRY			MB*NONE*3		0.0	
EAD(FAA)	MG/KG-DRY			MB*NONE*4		0.0	
EAD(FAA)	MG/KG-DRY			MB*NONE*5		0.0	
EAD(FAA)	MG/KG-DRY			MB*NONE*6		0.0	

N

Continuing Calibration Verification Sample Summary

NAME	UNITS	STOR*METH	BATCH	SAMPLE	DATE	TARGET	FOUND	%RECV	RECV CRIT	FOOTNOTE
LEAD(FAA)	MG/KG-DRY	1051*SFAAS	S7532	CCV*NONE*1	05/18/92	5.0	5.0	100.0	75-125	
LEAD(FAA)	MG/KG-DRY			CCV*NONE*2		5.0	5.0	100.0	75-125	
LEAD(FAA)	MG/KG-DRY			CCV*NONE*3		5.0	5.1	102	75-125	
LEAD(FAA)	MG/KG-DRY			CCV*NONE*4		5.0	5.0	100.0	75-125	
LEAD(FAA)	MG/KG-DRY			CCV*NONE*5		5.0	4.9	98.0	75-125	
LEAD(FAA)	MG/KG-DRY			CCV*NONE*6		5.0	4.9	98.0	75-125	
LEAD(FAA)	MG/KG-DRY			CCV*NONE*7		5.0	4.9	98.0	75-125	
LEAD(FAA)	MG/KG-DRY			CCV*NONE*8		5.0	4.8	96.0	75-125	
LEAD(FAA)	MG/KG-DRY			CCV*NONE*9		5.0	4.9	98.0	75-125	
LEAD(FAA)	MG/KG-DRY			CCV*NONE*10		5.0	4.8	96.0	75-125	
LEAD(FAA)	MG/KG-DRY		S7534	CCV*NONE*1	05/19/92	5.0	5.4	108	75-125	
LEAD(FAA)	MG/KG-DRY			CCV*NONE*2		5.0	5.4	108	75-125	
LEAD(FAA)	MG/KG-DRY			CCV*NONE*3		5.0	5.4	108	75-125	
LEAD(FAA)	MG/KG-DRY			CCV*NONE*4		5.0	5.0	100.0	75-125	
LEAD(FAA)	MG/KG-DRY			CCV*NONE*5		5.0	5.1	102	75-125	
LEAD(FAA)	MG/KG-DRY			CCV*NONE*6		5.0	5.0	100.0	75-125	
LEAD(FAA)	MG/KG-DRY			CCV*NONE*7		5.0	5.1	102	75-125	
LEAD(FAA)	MG/KG-DRY			CCV*NONE*8		5.0	5.0	100.0	75-125	
LEAD(FAA)	MG/KG-DRY			CCV*NONE*9		5.0	5.0	100.0	75-125	
LEAD(FAA)	MG/KG-DRY		S7704	CCV*NONE*1	06/02/92	5.0	5.2	104	75-125	
LEAD(FAA)	MG/KG-DRY			CCV*NONE*2		5.0	5.2	104	75-125	
LEAD(FAA)	MG/KG-DRY			CCV*NONE*3		5.0	5.2	104	75-125	
LEAD(FAA)	MG/KG-DRY			CCV*NONE*4		5.0	5.2	104	75-125	
LEAD(FAA)	MG/KG-DRY			CCV*NONE*5		5.0	5.2	104	75-125	
LEAD(FAA)	MG/KG-DRY			CCV*NONE*6		5.0	5.2	104	75-125	
LEAD(FAA)	MG/KG-DRY			CCV*NONE*7		5.0	5.1	102	75-125	
LEAD(FAA)	MG/KG-DRY			CCV*NONE*8		5.0	5.1	102	75-125	
LEAD(FAA)	MG/KG-DRY			CCV*NONE*9		5.0	5.1	102	75-125	
LEAD(FAA)	MG/KG-DRY			CCV*NONE*10		5.0	5.1	102	75-125	
LEAD(FAA)	MG/KG-DRY			CCV*NONE*11		5.0	5.1	102	75-125	
LEAD(FAA)	MG/KG-DRY			CCV*NONE*12		5.0	5.0	100.0	75-125	
LEAD(FAA)	MG/KG-DRY			CCV*NONE*13		5.0	5.0	100.0	75-125	
LEAD(FAA)	MG/KG-DRY			CCV*NONE*14		5.0	4.9	98.0	75-125	
LEAD(FAA)	MG/KG-DRY			CCV*NONE*15		5.0	4.9	98.0	75-125	
LEAD(FAA)	MG/KG-DRY			CCV*NONE*16		5.0	4.9	98.0	75-125	
LEAD(FAA)	MG/KG-DRY			CCV*NONE*17		5.0	4.8	96.0	75-125	
LEAD(FAA)	MG/KG-DRY		S7705	CCV*NONE*1	06/03/92	5.0	5.1	102	75-125	
LEAD(FAA)	MG/KG-DRY			CCV*NONE*2		5.0	5.2	104	75-125	
LEAD(FAA)	MG/KG-DRY			CCV*NONE*3		5.0	5.2	104	75-125	
LEAD(FAA)	MG/KG-DRY			CCV*NONE*4		5.0	5.3	106	75-125	
LEAD(FAA)	MG/KG-DRY			CCV*NONE*5		5.0	5.3	106	75-125	
LEAD(FAA)	MG/KG-DRY			CCV*NONE*6		5.0	5.2	104	75-125	
LEAD(FAA)	MG/KG-DRY			CCV*NONE*7		5.0	5.3	106	75-125	
LEAD(FAA)	MG/KG-DRY			CCV*NONE*8		5.0	5.2	104	75-125	
LEAD(FAA)	MG/KG-DRY			CCV*NONE*9		5.0	5.1	102	75-125	
LEAD(FAA)	MG/KG-DRY			CCV*NONE*10		5.0	5.1	102	75-125	
LEAD(FAA)	MG/KG-DRY			CCV*NONE*11		5.0	5.0	100.0	75-125	
LEAD(FAA)	MG/KG-DRY			CCV*NONE*12		5.0	4.9	98.0	75-125	
LEAD(FAA)	MG/KG-DRY			CCV*NONE*14		5.0	4.9	98.0	75-125	
LEAD(FAA)	MG/KG-DRY			CCV*NONE*15		5.0	4.8	96.0	75-125	
LEAD(FAA)	MG/KG-DRY			CCV*NONE*16		5.0	4.8	96.0	75-125	
LEAD(FAA)	MG/KG-DRY			CCV*NONE*17		5.0	5.4	108	75-125	
LEAD(FAA)	MG/KG-DRY			CCV*NONE*18		5.0	5.3	106	75-125	
LEAD(FAA)	MG/KG-DRY		S7875	CCV*NONE*1	06/04/92	5.0	5.2	104	75-125	
LEAD(FAA)	MG/KG-DRY			CCV*NONE*2		5.0	5.3	106	75-125	
LEAD(FAA)	MG/KG-DRY			CCV*NO[illegible]		5.0	5.4	108	75-125	

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Continuing Calibration Verification Sample Summary

AME	UNITS	STOR*METH	BATCH	SAMPLE	DATE	TARGET	FOUND	%RECV	RECV CRIT	FOOTNOTE
EAD(FAA)	MG/KG-DRY	1051*SFAAS	S7875	CCV*NONE*4	06/04/92	5.0	5.4	108	75-125	
EAD(FAA)	MG/KG-DRY			CCV*NONE*5		5.0	5.4	108	75-125	
EAD(FAA)	MG/KG-DRY			CCV*NONE*6		5.0	5.4	108	75-125	
EAD(FAA)	MG/KG-DRY			CCV*NONE*7		5.0	5.4	108	75-125	
EAD(FAA)	MG/KG-DRY			CCV*NONE*8		5.0	5.4	108	75-125	
EAD(FAA)	MG/KG-DRY			CCV*NONE*9		5.0	5.5	110	75-125	
EAD(FAA)	MG/KG-DRY			CCV*NONE*10		5.0	5.4	108	75-125	
EAD(FAA)	MG/KG-DRY			CCV*NONE*11		5.0	5.5	110	75-125	
EAD(FAA)	MG/KG-DRY			CCV*NONE*12		5.0	5.4	108	75-125	
EAD(FAA)	MG/KG-DRY			CCV*NONE*13		5.0	5.5	110	75-125	
EAD(FAA)	MG/KG-DRY			CCV*NONE*14		5.0	5.4	108	75-125	
EAD(FAA)	MG/KG-DRY			CCV*NONE*15		5.0	5.4	108	75-125	
EAD(FAA)	MG/KG-DRY			CCV*NONE*16		5.0	4.9	98.0	75-125	
EAD(FAA)	MG/KG-DRY			CCV*NONE*17		5.0	4.9	98.0	75-125	
EAD(FAA)	MG/KG-DRY		S7878	CCV*NONE*1	06/09/92	5.0	4.9	98.0	75-125	
EAD(FAA)	MG/KG-DRY			CCV*NONE*2		5.0	4.9	98.0	75-125	
EAD(FAA)	MG/KG-DRY			CCV*NONE*3		5.0	5.0	100.0	75-125	
EAD(FAA)	MG/KG-DRY			CCV*NONE*4		5.0	5.0	100.0	75-125	
EAD(FAA)	MG/KG-DRY			CCV*NONE*5		5.0	4.9	98.0	75-125	
EAD(FAA)	MG/KG-DRY			CCV*NONE*6		5.0	4.8	96.0	75-125	
EAD(FAA)	MG/KG-DRY			CCV*NONE*7		5.0	4.8	96.0	75-125	
EAD(FAA)	MG/KG-DRY			CCV*NONE*8		5.0	4.8	96.0	75-125	
EAD(FAA)	MG/KG-DRY			CCV*NONE*9		5.0	4.7	94.0	75-125	
EAD(FAA)	MG/KG-DRY			CCV*NONE*10		5.0	4.8	96.0	75-125	
EAD(FAA)	MG/KG-DRY			CCV*NONE*11		5.0	4.7	94.0	75-125	
EAD(FAA)	MG/KG-DRY			CCV*NONE*12		5.0	4.7	94.0	75-125	
EAD(FAA)	MG/KG-DRY			CCV*NONE*13		5.0	4.7	94.0	75-125	
EAD(FAA)	MG/KG-DRY			CCV*NONE*14		5.0	4.7	94.0	75-125	
EAD(FAA)	MG/KG-DRY			CCV*NONE*15		5.0	4.7	94.0	75-125	
EAD(FAA)	MG/KG-DRY		S7880	CCV*NONE*1	06/11/92	5.0	5.2	104	75-125	
EAD(FAA)	MG/KG-DRY			CCV*NONE*2		5.0	5.3	106	75-125	
EAD(FAA)	MG/KG-DRY			CCV*NONE*3		5.0	5.2	104	75-125	
EAD(FAA)	MG/KG-DRY			CCV*NONE*4		5.0	5.3	106	75-125	
EAD(FAA)	MG/KG-DRY			CCV*NONE*5		5.0	5.3	106	75-125	
EAD(FAA)	MG/KG-DRY			CCV*NONE*6		5.0	5.3	106	75-125	
EAD(FAA)	MG/KG-DRY			CCV*NONE*7		5.0	5.2	104	75-125	
EAD(FAA)	MG/KG-DRY			CCV*NONE*8		5.0	5.2	104	75-125	
EAD(FAA)	MG/KG-DRY			CCV*NONE*9		5.0	5.2	104	75-125	
EAD(FAA)	MG/KG-DRY			CCV*NONE*10		5.0	5.2	104	75-125	
EAD(FAA)	MG/KG-DRY			CCV*NONE*11		5.0	5.1	102	75-125	
EAD(FAA)	MG/KG-DRY			CCV*NONE*12		5.0	5.2	104	75-125	
EAD(FAA)	MG/KG-DRY			CCV*NONE*13		5.0	5.1	102	75-125	
EAD(FAA)	MG/KG-DRY			CCV*NONE*14		5.0	5.1	102	75-125	
EAD(FAA)	MG/KG-DRY			CCV*NONE*15		5.0	5.1	102	75-125	
EAD(FAA)	MG/KG-DRY			CCV*NONE*16		5.0	5.0	100.0	75-125	
EAD(FAA)	MG/KG-DRY			CCV*NONE*17		5.0	5.0	100.0	75-125	
EAD(FAA)	MG/KG-DRY		S7881	CCV*NONE*1		5.0	5.2	104	75-125	
EAD(FAA)	MG/KG-DRY			CCV*NONE*2		5.0	5.2	104	75-125	
EAD(FAA)	MG/KG-DRY			CCV*NONE*3		5.0	5.2	104	75-125	
EAD(FAA)	MG/KG-DRY			CCV*NONE*4		5.0	5.1	102	75-125	
EAD(FAA)	MG/KG-DRY			CCV*NONE*5		5.0	5.2	104	75-125	
EAD(FAA)	MG/KG-DRY			CCV*NONE*6		5.0	5.1	102	75-125	
EAD(FAA)	MG/KG-DRY			CCV*NONE*7		5.0	5.1	102	75-125	
EAD(FAA)	MG/KG-DRY			CCV*NONE*8		5.0	5.0	100.0	75-125	
EAD(FAA)	MG/KG-DRY			CCV*NONE*9		5.0	5.1	102	75-125	

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Continuing Calibration Verification Sample Summary

NAME	UNITS	STOR*METH	BATCH	SAMPLE	DATE	TARGET	FOUND	%RECV	RECV CRIT FOOTNOTE
LEAD(FAA)	MG/KG-DRY	1051*SFAAS	S7081	CCV*NONE*11	06/11/92	5.0	5.0	100.0	75-125
LEAD(FAA)	MG/KG-DRY			CCV*NONE*12		5.0	5.0	100.0	75-125
LEAD(FAA)	MG/KG-DRY			CCV*NONE*13		5.0	5.0	100.0	75-125
LEAD(FAA)	MG/KG-DRY			CCV*NONE*14		5.0	5.0	100.0	75-125
LEAD(FAA)	MG/KG-DRY			CCV*NONE*15		5.0	4.9	98.0	75-125
LEAD(FAA)	MG/KG-DRY			CCV*NONE*16		5.0	5.2	104	75-125
LEAD(FAA)	MG/KG-DRY		S7949	CCV*NONE*1	06/08/92	5.0	5.2	104	75-125
LEAD(FAA)	MG/KG-DRY			CCV*NONE*2		5.0	5.3	106	75-125
LEAD(FAA)	MG/KG-DRY			CCV*NONE*3		5.0	5.2	104	75-125
LEAD(FAA)	MG/KG-DRY			CCV*NONE*4		5.0	5.2	104	75-125
LEAD(FAA)	MG/KG-DRY			CCV*NONE*5		5.0	5.2	104	75-125
LEAD(FAA)	MG/KG-DRY			CCV*NONE*6		5.0	5.2	104	75-125
LEAD(FAA)	MG/KG-DRY			CCV*NONE*7		5.0	5.2	104	75-125
LEAD(FAA)	MG/KG-DRY			CCV*NONE*8		5.0	5.1	102	75-125
LEAD(FAA)	MG/KG-DRY			CCV*NONE*9		5.0	5.1	102	75-125
LEAD(FAA)	MG/KG-DRY			CCV*NONE*10		5.0	5.1	102	75-125
LEAD(FAA)	MG/KG-DRY			CCV*NONE*11		5.0	5.1	102	75-125
LEAD(FAA)	MG/KG-DRY			CCV*NONE*12		5.0	5.1	102	75-125
LEAD(FAA)	MG/KG-DRY			CCV*NONE*13		5.0	5.1	102	75-125
LEAD(FAA)	MG/KG-DRY			CCV*NONE*14		5.0	5.1	102	75-125
LEAD(FAA)	MG/KG-DRY			CCV*NONE*15		5.0	5.1	102	75-125
LEAD(FAA)	MG/KG-DRY		S7967	CCV*NONE*1	06/12/92	5.0	5.0	100.0	75-125
LEAD(FAA)	MG/KG-DRY			CCV*NONE*2		5.0	5.0	100.0	75-125
LEAD(FAA)	MG/KG-DRY			CCV*NONE*3		5.0	5.0	100.0	75-125
LEAD(FAA)	MG/KG-DRY			CCV*NONE*4		5.0	5.0	100.0	75-125
LEAD(FAA)	MG/KG-DRY			CCV*NONE*5		5.0	5.0	100.0	75-125
LEAD(FAA)	MG/KG-DRY			CCV*NONE*6		5.0	4.9	98.0	75-125
LEAD(FAA)	MG/KG-DRY			CCV*NONE*7		5.0	4.9	98.0	75-125
LEAD(FAA)	MG/KG-DRY			CCV*NONE*8		5.0	4.8	96.0	75-125
LEAD(FAA)	MG/KG-DRY			CCV*NONE*9		5.0	4.8	96.0	75-125
LEAD(FAA)	MG/KG-DRY			CCV*NONE*10		5.0	4.8	96.0	75-125
LEAD(FAA)	MG/KG-DRY			CCV*NONE*11		5.0	4.7	94.0	75-125
LEAD(FAA)	MG/KG-DRY			CCV*NONE*12		5.0	4.7	94.0	75-125
LEAD(FAA)	MG/KG-DRY			CCV*NONE*13		5.0	4.6	92.0	75-125
LEAD(FAA)	MG/KG-DRY			CCV*NONE*14		5.0	4.6	92.0	75-125
LEAD(FAA)	MG/KG-DRY			CCV*NONE*15		5.0	4.6	92.0	75-125
LEAD(FAA)	MG/KG-DRY			CCV*NONE*16		5.0	5.0	100.0	75-125
LEAD(FAA)	MG/KG-DRY			CCV*NONE*17		5.0	5.0	100.0	75-125

N

Standard Matrix Spike Recovery and Replicate Summary

NAME	UNITS	STOR*METH	BATCH	SAMPLE	DATE	TARGET	FOUND	%RECV	RECV CRIT	R.P.D.	R.P.D. CRIT.	FOOTNOTE
EAD(FAA)	MG/KG-DRY	1051*SFAAS	S7532	SP*NONE*1	05/18/92	5.0	5.1	103	75-125		20	
EAD(FAA)	MG/KG-DRY			SP*NONE*2		5.0	5.5	109	75-125		20	
EAD(FAA)	MG/KG-DRY			SP*NONE*3		5.0	5.4	110	75-125		20	
EAD(FAA)	MG/KG-DRY			SP*NONE*4		5.0	5.2	106	75-125		20	
EAD(FAA)	MG/KG-DRY		S7534	SP*NONE*1	05/19/92	5.0	5.2	104	75-125		20	
EAD(FAA)	MG/KG-DRY			SP*NONE*2		5.0	5.5	110	75-125		20	
EAD(FAA)	MG/KG-DRY			SP*NONE*3		5.0	5.2	104	75-125		20	
EAD(FAA)	MG/KG-DRY		S7704	SP*NONE*1	06/02/92	5.0	5.2	103	75-125		20	
EAD(FAA)	MG/KG-DRY			SP*NONE*2		5.0	5.3	106	75-125		20	
EAD(FAA)	MG/KG-DRY			SP*NONE*3		5.0	5.5	110	75-125		20	
EAD(FAA)	MG/KG-DRY			SP*NONE*4		5.0	6.3	126	75-125		20	(1)
EAD(FAA)	MG/KG-DRY			SP*NONE*5		5.0	5.3	106	75-125		20	
EAD(FAA)	MG/KG-DRY			SP*NONE*6		5.0	5.4	109	75-125		20	
EAD(FAA)	MG/KG-DRY		S7705	SP*NONE*1	06/03/92	5.0	5.5	110	75-125		20	
EAD(FAA)	MG/KG-DRY			SP*NONE*2		5.0	5.2	103	75-125		20	
EAD(FAA)	MG/KG-DRY			SP*NONE*3		5.0	5.3	106	75-125		20	
EAD(FAA)	MG/KG-DRY			SP*NONE*4		5.0	5.2	103	75-125		20	
EAD(FAA)	MG/KG-DRY			SP*NONE*5		5.0	5.3	105	75-125		20	
EAD(FAA)	MG/KG-DRY			SP*NONE*6		5.0	5.2	106	75-125		20	
EAD(FAA)	MG/KG-DRY		S7875	SP*NONE*1	06/04/92	5.0	5.4	109	75-125		20	
EAD(FAA)	MG/KG-DRY			SP*NONE*2		5.0	5.2	103	75-125		20	
EAD(FAA)	MG/KG-DRY			SP*NONE*3		5.0	5.1	102	75-125		20	
EAD(FAA)	MG/KG-DRY			SP*NONE*4		5.0	5.1	103	75-125		20	
EAD(FAA)	MG/KG-DRY			SP*NONE*5		5.0	5.4	108	75-125		20	
EAD(FAA)	MG/KG-DRY			SP*NONE*6		5.0	5.2	105	75-125		20	
EAD(FAA)	MG/KG-DRY		S7878	SP*NONE*1	06/09/92	5.0	5.5	110	75-125		20	
EAD(FAA)	MG/KG-DRY			SP*NONE*2		5.0	5.0	102	75-125		20	
EAD(FAA)	MG/KG-DRY			SP*NONE*3		5.0	5.0	102	75-125		20	
EAD(FAA)	MG/KG-DRY			SP*NONE*4		5.0	2.2	49.6	75-125		20	(2)
EAD(FAA)	MG/KG-DRY			SP*NONE*5		5.0	4.9	105	75-125		20	
EAD(FAA)	MG/KG-DRY			SP*NONE*6		5.0	5.1	110	75-125		20	
EAD(FAA)	MG/KG-DRY		S7880	SP*NONE*1	06/11/92	5.0	5.2	105	75-125		20	
EAD(FAA)	MG/KG-DRY			SP*NONE*2		5.0	5.0	100	75-125		20	
EAD(FAA)	MG/KG-DRY			SP*NONE*3		5.0	4.7	94.4	75-125		20	
EAD(FAA)	MG/KG-DRY			SP*NONE*4		5.0	5.3	106	75-125		20	
EAD(FAA)	MG/KG-DRY			SP*NONE*5		5.0	5.3	108	75-125		20	
EAD(FAA)	MG/KG-DRY			SP*NONE*6		5.0	5.5	112	75-125		20	
EAD(FAA)	MG/KG-DRY		S7881	SP*NONE*1		5.0	5.4	109	75-125		20	
EAD(FAA)	MG/KG-DRY			SP*NONE*2		5.0	5.3	107	75-125		20	
EAD(FAA)	MG/KG-DRY			SP*NONE*3		5.0	5.1	104	75-125		20	
EAD(FAA)	MG/KG-DRY			SP*NONE*4		5.0	5.2	106	75-125		20	
EAD(FAA)	MG/KG-DRY			SP*NONE*5		5.0	5.5	113	75-125		20	
EAD(FAA)	MG/KG-DRY			SP*NONE*6		5.0	5.2	106	75-125		20	
EAD(FAA)	MG/KG-DRY		S7949	SP*NONE*1	06/08/92	5.0	5.3	107	75-125		20	
EAD(FAA)	MG/KG-DRY			SP*NONE*2		5.0	0.1	2.6	75-125		20	(3)
EAD(FAA)	MG/KG-DRY			SP*NONE*3		5.0	5.2	104	75-125		20	
EAD(FAA)	MG/KG-DRY			SP*NONE*4		5.0	5.3	108	75-125		20	
EAD(FAA)	MG/KG-DRY			SP*NONE*5		5.0	5.4	109	75-125		20	(4)
EAD(FAA)	MG/KG-DRY			SP*NONE*6		5.0	6.7	135	75-125		20	
EAD(FAA)	MG/KG-DRY		S7967	SP*NONE*1	06/12/92	5.0	4.9	103	75-125		20	
EAD(FAA)	MG/KG-DRY			SP*NONE*2		5.0	5.1	106	75-125		20	
EAD(FAA)	MG/KG-DRY			SP*NONE*3		5.0	5.0	103	75-125		20	
EAD(FAA)	MG/KG-DRY			SP*NONE*4		5.0	4.9	104	75-125		20	
EAD(FAA)	MG/KG-DRY			SP*NONE*5		5.0	5.0	109	75-125		20	
EAD(FAA)	MG/KG-DRY			SP*NONE*6		5.0	4.9	109	75-125		20	

Sample Matrix Spike Recovery Summary

NAME	UNITS	STOR*METH	BATCH	SAMPLE	DATE	TARGET	FOUND	%RECV	RECV CRIT	UNSPIKED	R.P.D.	R.P.D. CRIT.	FOOTNOTE
LEAD(FAA)	MG/KG-DRY	1051*SFAAS	S7532	SPM1*WWC4*949	05/18/92	555	22.0	4.0	75-125	313		20	(3)
LEAD(FAA)	MG/KG-DRY			SPM2*WWC4*949		527	577	110	75-125	313	186	20	
LEAD(FAA)	MG/KG-DRY			SPM1*WWC4*969		560	642	115	75-125	222		20	
LEAD(FAA)	MG/KG-DRY			SPM2*WWC4*969		538	549	102	75-125	222	12.0	20	
LEAD(FAA)	MG/KG-DRY			SPM1*WWC4*989		588	700	119	75-125	69.4		20	
LEAD(FAA)	MG/KG-DRY			SPM2*WWC4*989		569	614	108	75-125	69.4	9.7	20	
LEAD(FAA)	MG/KG-DRY			SPM1*WWC5*10		538	583	108	75-125	537		20	
LEAD(FAA)	MG/KG-DRY			SPM2*WWC5*10		512	493	96.3	75-125	537	11.5	20	
LEAD(FAA)	MG/KG-DRY		S7534	SPM1*WWC5*30	05/19/92	593	647	109	75-125	199		20	
LEAD(FAA)	MG/KG-DRY			SPM2*WWC5*30		574	593	103	75-125	199	5.7	20	
LEAD(FAA)	MG/KG-DRY			SPM1*WWC5*50		568	780	137	75-125	1400		20	(4)
LEAD(FAA)	MG/KG-DRY			SPM2*WWC5*50		593	630	106	75-125	1400	25.5	20	
LEAD(FAA)	MG/KG-DRY			SPM1*WWC5*70		495	881	178	75-125	189		20	(4)
LEAD(FAA)	MG/KG-DRY			SPM2*WWC5*70		536	981	183	75-125	189	2.8	20	(4)
LEAD(FAA)	MG/KG-DRY		S7704	SPM1*WWC5*91	06/02/92	571	773	135	75-125	185		20	(4)
LEAD(FAA)	MG/KG-DRY			SPM2*WWC5*91		561	51.0	9.1	75-125	185	175	20	(3)
LEAD(FAA)	MG/KG-DRY			SPM1*WWC5*111		605	1000	166	75-125	446		20	(5)
LEAD(FAA)	MG/KG-DRY			SPM2*WWC5*111		580	1160	201	75-125	446	19.1	20	(5)
LEAD(FAA)	MG/KG-DRY			SPM1*WWC5*130		624	-40.0	-6.4	75-125	2200		20	(5)
LEAD(FAA)	MG/KG-DRY			SPM1*WWC5*150		566	561	99.0	75-125	82.2		20	
LEAD(FAA)	MG/KG-DRY			SPM2*WWC5*150		584	46.8	8.0	75-125	82.2	170	20	(3)
LEAD(FAA)	MG/KG-DRY			SPM1*WWC5*170		599	664	111	75-125	336		20	
LEAD(FAA)	MG/KG-DRY			SPM2*WWC5*170		583	631	108	75-125	336	2.7	20	
LEAD(FAA)	MG/KG-DRY			SPM1*WWC5*190		622	694	112	75-125	283		20	
LEAD(FAA)	MG/KG-DRY			SPM2*WWC5*190		615	703	114	75-125	283	1.8	20	
LEAD(FAA)	MG/KG-DRY			SPM2*WWC5*130		624	1440	231	75-125	2200	211	20	(5)
LEAD(FAA)	MG/KG-DRY		S7705	SPM1*WWC5*210	06/03/92	581	739	127	75-125	127		20	(1)
LEAD(FAA)	MG/KG-DRY			SPM2*WWC5*210		568	593	104	75-125	127	19.9	20	
LEAD(FAA)	MG/KG-DRY			SPM1*WWC5*230		593	602	101	75-125	321		20	
LEAD(FAA)	MG/KG-DRY			SPM2*WWC5*230		582	641	110	75-125	321	7.5	20	
LEAD(FAA)	MG/KG-DRY			SPM1*WWC5*250		612	661	108	75-125	439		20	
LEAD(FAA)	MG/KG-DRY			SPM2*WWC5*250		590	641	109	75-125	439	0.9	20	
LEAD(FAA)	MG/KG-DRY			SPM1*WWC5*270		574	588	102	75-125	662		20	
LEAD(FAA)	MG/KG-DRY			SPM2*WWC5*270		572	608	106	75-125	662	3.8	20	
LEAD(FAA)	MG/KG-DRY			SPM1*WWC5*290		600	568	94.6	75-125	582		20	
LEAD(FAA)	MG/KG-DRY			SPM2*WWC5*290		622	1040	167	75-125	582	55.3	20	(5)
LEAD(FAA)	MG/KG-DRY			SPM1*WWC5*310		578	672	116	75-125	478		20	
LEAD(FAA)	MG/KG-DRY			SPM2*WWC5*310		591	632	107	75-125	478	8.1	20	
LEAD(FAA)	MG/KG-DRY		S7875	SPM1*WWC5*330	06/04/92	601	765	127	75-125	375		20	(1)
LEAD(FAA)	MG/KG-DRY			SPM2*WWC5*330		621	735	118	75-125	375	7.3	20	
LEAD(FAA)	MG/KG-DRY			SPM1*WWC5*350		691	-1790	-259	75-125	2980		20	(6)
LEAD(FAA)	MG/KG-DRY			SPM2*WWC5*350		715	-1760	-246	75-125	2980		20	(6)
EAD(FAA)	MG/KG-DRY			SPM1*WWC5*370		530	569	107	75-125	167		20	
EAD(FAA)	MG/KG-DRY			SPM2*WWC5*370		568	614	108	75-125	167	0.9	20	
EAD(FAA)	MG/KG-DRY			SPM1*WWC5*390		554	600	108	75-125	228		20	
EAD(FAA)	MG/KG-DRY			SPM2*WWC5*390		583	238	40.8	75-125	228	90.3	20	(5)
EAD(FAA)	MG/KG-DRY			SPM1*WWC5*410		662	709	107	75-125	551		20	
EAD(FAA)	MG/KG-DRY			SPM2*WWC5*410		674	729	108	75-125	551	0.9	20	
EAD(FAA)	MG/KG-DRY			SPM1*WWC5*430		552	571	103	75-125	949		20	
EAD(FAA)	MG/KG-DRY			SPM2*WWC5*430		533	411	77.1	75-125	949	28.8	20	
EAD(FAA)	MG/KG-DRY		S7878	SPM1*WWC5*569	06/09/92	576	849	147	75-125	851		20	(7)
EAD(FAA)	MG/KG-DRY			SPM2*WWC5*569		584	879	151	75-125	851	2.7	20	(7)
EAD(FAA)	MG/KG-DRY			SPM1*WWC5*589		564	563	99.8	75-125	279		20	
EAD(FAA)	MG/KG-DRY			SPM2*WWC5*589		582	677	116	75-125	279	15.0	20	
EAD(FAA)	MG/KG-DRY			SPM1*WWC5*609		532	572	108	75-125	49.0		20	
EAD(FAA)	MG/KG-DRY			SPM2* 609		541	-3.5	-.	75-125	49.0	202	20	(3)

N

Sample Matrix Spike Recovery Summary

NAME	UNITS	STOR*METH	BATCH	SAMPLE	DATE	TARGET	FOUND	%RECV	RECV CRIT	UNSPIKED	R.P.D.	R.P.D. CRIT.	FOOTNOTE
LEAD(FAA)	MG/KG-DRY	1051*SFAAS	S7878	SPM1*WWC5*629	06/09/92	705	560	79.4	75-125	1140		20	
LEAD(FAA)	MG/KG-DRY			SPM2*WWC5*629		700	60.0	8.6	75-125	1140	161	20	(5)
LEAD(FAA)	MG/KG-DRY			SPM1*WWC5*649		543	575	106	75-125	186		20	
LEAD(FAA)	MG/KG-DRY			SPM2*WWC5*649		561	576	103	75-125	186	2.9	20	
LEAD(FAA)	MG/KG-DRY			SPM1*WWC5*669		545	615	113	75-125	52.4		20	
LEAD(FAA)	MG/KG-DRY			SPM2*WWC5*669		555	67.6	12.2	75-125	52.4	161	20	(5)
LEAD(FAA)	MG/KG-DRY		S7880	SPM1*WWC5*689	06/11/92	563	520	92.3	75-125	840		20	
LEAD(FAA)	MG/KG-DRY			SPM2*WWC5*689		606	470	77.6	75-125	840	17.4	20	
LEAD(FAA)	MG/KG-DRY			SPM1*WWC5*709		573	613	107	75-125	387		20	
LEAD(FAA)	MG/KG-DRY			SPM2*WWC5*709		583	623	107	75-125	387	0.0	20	
LEAD(FAA)	MG/KG-DRY			SPM1*WWC5*729		561	593	106	75-125	477		20	
LEAD(FAA)	MG/KG-DRY			SPM2*WWC5*729		549	653	119	75-125	477	11.6	20	
LEAD(FAA)	MG/KG-DRY			SPM1*WWC5*749		539	681	126	75-125	679		20	(1)
LEAD(FAA)	MG/KG-DRY			SPM2*WWC5*749		524	501	95.6	75-125	679	27.4	20	
LEAD(FAA)	MG/KG-DRY			SPM1*WWC5*769		552	661	120	75-125	16.9		20	
LEAD(FAA)	MG/KG-DRY			SPM2*WWC5*769		568	636	112	75-125	16.9	6.9	20	
LEAD(FAA)	MG/KG-DRY			SPM1*WWC5*809		540	380	70.4	75-125	1910		20	(7)
LEAD(FAA)	MG/KG-DRY			SPM2*WWC5*809		522	420	80.4	75-125	1910	13.3	20	
LEAD(FAA)	MG/KG-DRY		S7881	SPM1*WWC5*789		553	611	111	75-125	122		20	
LEAD(FAA)	MG/KG-DRY			SPM2*WWC5*789		552	18.0	3.3	75-125	122	188	20	(3)
LEAD(FAA)	MG/KG-DRY			SPM1*WWC5*829		532	571	107	75-125	89.8		20	
LEAD(FAA)	MG/KG-DRY			SPM2*WWC5*829		543	573	106	75-125	89.8	0.9	20	
LEAD(FAA)	MG/KG-DRY			SPM1*WWC5*849		567	642	113	75-125	6.9		20	
LEAD(FAA)	MG/KG-DRY			SPM2*WWC5*849		572	623	109	75-125	6.9	3.6	20	
LEAD(FAA)	MG/KG-DRY			SPM1*WWC5*869		525	660	126	75-125	1560		20	(1)
LEAD(FAA)	MG/KG-DRY			SPM2*WWC5*869		518	220	42.5	75-125	1560	99.1	20	(5)
LEAD(FAA)	MG/KG-DRY			SPM1*WWC5*889		573	685	120	75-125	277		20	
LEAD(FAA)	MG/KG-DRY			SPM2*WWC5*889		543	620	114	75-125	277	5.1	20	
LEAD(FAA)	MG/KG-DRY			SPM1*WWC5*909		570	-214	-37.5	75-125	516		20	(5)
LEAD(FAA)	MG/KG-DRY			SPM2*WWC5*909		525	276	52.5	75-125	516	1200	20	(5)
LEAD(FAA)	MG/KG-DRY		S7949	SPM1*WWC5*450	06/08/92	538	-101	-18.8	75-125	371		20	(5)
LEAD(FAA)	MG/KG-DRY			SPM2*WWC5*450		550	487	88.6	75-125	371	308	20	
LEAD(FAA)	MG/KG-DRY			SPM1*WWC5*470		574	600	104	75-125	265		20	
LEAD(FAA)	MG/KG-DRY			SPM2*WWC5*470		573	622	109	75-125	265	3.7	20	
LEAD(FAA)	MG/KG-DRY			SPM1*WWC5*490		596	616	103	75-125	226		20	
LEAD(FAA)	MG/KG-DRY			SPM2*WWC5*490		596	697	117	75-125	226	12.7	20	
LEAD(FAA)	MG/KG-DRY			SPM1*WWC5*509		631	687	109	75-125	383		20	
LEAD(FAA)	MG/KG-DRY			SPM2*WWC5*509		678	757	112	75-125	383	2.7	20	
LEAD(FAA)	MG/KG-DRY			SPM1*WWC5*529		600	595	99.2	75-125	288		20	
LEAD(FAA)	MG/KG-DRY			SPM2*WWC5*529		651	642	98.6	75-125	288	0.6	20	
LEAD(FAA)	MG/KG-DRY			SPM1*WWC5*549		567	768	135	75-125	432		20	(4)
LEAD(FAA)	MG/KG-DRY			SPM2*WWC5*549		586	898	153	75-125	432	12.5	20	(4)
LEAD(FAA)	MG/KG-DRY		S7967	SPM1*WWC5*949	06/12/92	553	510	92.3	75-125	302		20	
LEAD(FAA)	MG/KG-DRY			SPM2*WWC5*949		563	546	97.1	75-125	302	5.2	20	
LEAD(FAA)	MG/KG-DRY			SPM1*WWC5*969		544	559	103	75-125	771		20	
LEAD(FAA)	MG/KG-DRY			SPM2*WWC5*969		567	589	104	75-125	771	1.0	20	
LEAD(FAA)	MG/KG-DRY			SPM1*WWC5*989		556	531	95.5	75-125	489		20	
LEAD(FAA)	MG/KG-DRY			SPM2*WWC5*989		532	561	106	75-125	489	10.4	20	
LEAD(FAA)	MG/KG-DRY			SPM1*WWC6*10		584	519	88.8	75-125	951		20	
LEAD(FAA)	MG/KG-DRY			SPM2*WWC6*10		540	379	70.2	75-125	951	23.5	20	
LEAD(FAA)	MG/KG-DRY			SPM1*WWC6*30		534	607	114	75-125	122		20	
LEAD(FAA)	MG/KG-DRY			SPM2*WWC6*30		515	571	111	75-125	122	2.7	20	
LEAD(FAA)	MG/KG-DRY			SPM1*WWC5*929		573	630	110	75-125	2260		20	
LEAD(FAA)	MG/KG-DRY			SPM2*WWC5*929		539	610	113	75-125	2260	2.7	20	

WWC 5 # 10 ...

COOLER/SAMPLE RECEIPT FORM

Rev.01 10/7/91

ESE Cooler # 170
Client Cooler # _____
No Cooler _____

Project: Woodward Clyde Date/Time Received: 4-15-92 1645

USE OTHER SIDE OF THIS FORM TO NOTE FURTHER DETAILS CONCERNING CHECK-IN PROBLEMS AND TO SPECIFY AND DESCRIBE ANY ACTION(S) REGARDING THE RESOLUTION(S) OF PROBLEMS. IF SHIPMENT WAS ACCEPTED AND IF REQUESTED, NOTE ON BACK THE ADDRESS WHERE THE EMPTY COOLER WAS RETURNED AND LIKEWISE IF THE SHIPMENT WAS REJECTED.

IF INFORMATION IS MISSING OR THERE ARE PROBLEMS NOTIFY LABORATORY PROJECT MANAGER SO THAT HE CAN NOTIFY THE PROJECT MANAGER IMMEDIATELY.

A. PRELIMINARY EXAMINATION PHASE: Date/Time cooler/sample was opened and checked: 4-16-92 900

by (print) Carol Cash (sign) Carol Cash

1. List courier delivering samples . . . . . Client . . . . . YES NO
2. Did cooler come with a shipping slip (air bill, etc.)? . . . . . YES NO
   If YES, attach and enter carrier and air bill number here: _____
3. Were custody seals on outside of cooler? . . . . . YES NO
   If YES, how many and where: 1 on front 1 on Back
   If YES, enter the following: seal date: 4-15-92, seal name: Eric Page
4. Were custody seals unbroken and intact at the date and time of arrival? . . . . . YES NO
5. Was chain-of-custody provided? . . . . . YES NO
6. Were custody papers sealed in a Ziplec™ bag and taped inside to the lid? . . . . . YES NO
7. Were entries on custody papers completed? YES NO . If no, give details on back
8. Turnaround time included? . . . . . YES NO
9. Did you sign custody papers in the appropriate place? . . . . . YES NO
10. Was project identifiable from custody papers? If YES, enter project name at the top of this form. . YES NO

B. SAMPLE CHECK-IN PHASE: Date samples were checked-in: 4-16-92 by (all those involved must sign below):
(print) Carol Cash (sign) Carol Cash

11. Describe packing: samples in cooler with ice
*12. If required, was enough ice used? (temperature maintained correctly)? . . . . . YES NO
13. Were all bottles sealed in separate plastic bags? . . . . . YES NO
*14. Did all bottles arrive unbroken and in good condition? . . . . . YES NO
15. Were all bottle labels complete (ID, date, time, signature, preservative, etc.)? . . . . . YES NO
16. Did all bottle labels agree with custody papers? If NO, indicate discrepancies on back. . . . . YES NO
17. Were correct containers used for the tests indicated? . . . . . YES NO
18. Were correct preservatives used when required? . . . . . YES NO
*19. pH of samples maintained correctly as required? If NO, list by ID# _____ . YES NO
20. Was a sufficient amount of sample sent for tests indicated? . . . . . YES NO
21. Bubbles present in VOA vials? If YES, list by ID#: NA . YES NO
22. Was lab. project manager called and status discussed? If YES, give details on the back of this form. YES NO
23. Who was called? _____ By whom? _____ on (date) _____
24. Second Party Review: _____

* Sample rejection criteria

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WWC 5* 76-147

CHAIN OF CUSTODY RECORD

WOODWARD-CLYDE CONSULTANTS
2318 MILLPARK DR.
MARYLAND HEIGHTS, MISSOURI 63043
314-429-0100

SHEET 1 of 4

PROJECT NO.: 89MC114V

PROJECT NAME: NL/TARACORP SUPERFUND SITE PREDESIGN FIELD INVESTIGATION

SAMPLER'S: (Signatures) [signature]

	DATE	TIME	SAMPLE I.D. NUMBER: Matrix	Location	Boring	Depth	Sample Type		NO. OF CONTAINERS	CONTAINER DESCRIPTION/ ANALYSES REQUESTED: Total Lead 4oz. poly jar Cool to 4°C	TCLP - Lead 4oz. poly jar Cool to 4°C	Geotechnical glass or poly jar	REMARKS
6	4/16	846	S	BE2101	1	00A	00L	✓	1	✓			
77		848	S	BE2101	1	00B	00L	✓					
78		850	S	BE2101	1	00C	00L	✓					
79		853	S	BE2101	2	00A	00L	✓					
80		855	S	BE2101	2	00B	00L	✓					
81		857	S	BE2101	2	00C	00L	✓					
82		908	S	BE2119	1	00A	00L	✓					
83		910	S	BE2119	1	00B	00L	✓					
84		912	S	BE2119	1	00C	00L	✓					
85		915	S	BE2119	2	00A	00L	✓					
86		917	S	BE2119	2	00B	00L	✓					
87		919	S	BE2119	2	00C	00L	✓					
88		908	S	BE2119	1	00A	0LD	✓					
89		910	S	BE2119	1	00B	0LD	✓					
90		912	S	BE2119	1	00C	0LD	✓					
91		1000	S	BE1934	1	00A	00L	✓					
92		1002	S	BE1934	1	00B	00L	✓					
93		1004	S	BE1934	1	00C	00L	✓					
94		1008	S	BE1934	2	00A	00L	✓					
95		1010	S	BE1934	2	00B	00L	✓					
96		1012	S	BE1934	2	00C	00L	✓					
97		1020	S	BE1920	1	00A	00L	✓					
98		1022	S	BE1920	1	00B	00L	✓					

RELINQUISHED BY: (Signature)	DATE / TIME	RECEIVED BY: (Signature)	DATE / TIME
[signature]	4/16/92 1700	[signature]	4/16 1700
RELINQUISHED BY: (Signature)	DATE / TIME	RECEIVED AT LAB BY: (Signature)	DATE / TIME
[signature]	4/16 1730	[signature]	4-16 5:30
METHOD OF SHIPMENT:		AIRBILL NO: (If Applicable)	

WWC4*434 - 444

COOLER/SAMPLE RECEIPT FORM

ESE Cooler # ✓ 168
Client Cooler #
No Cooler

Rev.01 10/7/91

Project: Woodward Clyde Date/Time Received: 4-14-92 1515

USE OTHER SIDE OF THIS FORM TO NOTE FURTHER DETAILS CONCERNING CHECK-IN PROBLEMS AND TO SPECIFY AND DESCRIBE ANY ACTION(S) REGARDING THE RESOLUTION(S) OF PROBLEMS. IF SHIPMENT WAS ACCEPTED AND IF REQUESTED, NOTE ON BACK THE ADDRESS WHERE THE EMPTY COOLER WAS RETURNED AND LIKEWISE IF THE SHIPMENT WAS REJECTED.

IF INFORMATION IS MISSING OR THERE ARE PROBLEMS NOTIFY LABORATORY PROJECT MANAGER SO THAT HE CAN NOTIFY THE PROJECT MANAGER IMMEDIATELY.

A. PRELIMINARY EXAMINATION PHASE: Date/Time cooler/sample was opened and checked: 4-15-92 900

by (print) Carol Cash (sign) Carol Cash

1. List courier delivering samples . . . . . Client . . . . . YES NO
2. Did cooler come with a shipping slip (air bill, etc.)? . . . . . YES NO
   If YES, attach and enter carrier and air bill number here:
3. Were custody seals on outside of cooler? . . . . . YES NO
   If YES, how many and where: 1 on Front 1 on Back
   If YES, enter the following: seal date: 4-15-92 , seal name: Carl Cash
4. Were custody seals unbroken and intact at the date and time of arrival? . . . . . YES NO
5. Was chain-of-custody provided? . . . . . YES NO
6. Were custody papers sealed in a Ziplock bag and taped inside to the lid? . . . . . YES NO
7. Were entries on custody papers completed? YES NO . If no, give details on back
8. Turnaround time included? . . . . . YES NO
9. Did you sign custody papers in the appropriate place? . . . . . YES NO
10. Was project identifiable from custody papers? If YES, enter project name at the top of this form. YES NO

B. SAMPLE CHECK-IN PHASE: Date samples were checked-in: 4-15-92 by (all those involved must sign below):

(print) Carol Cash (sign) Carol Cash

11. Describe packing: Samples in Cooler with ice
*12. If required, was enough ice used? (temperature maintained correctly)? . . . . . YES NO
13. Were all bottles sealed in separate plastic bags? . . . . . YES NO
*14. Did all bottles arrive unbroken and in good condition? . . . . . YES NO
15. Were all bottle labels complete (ID, date, time, signature, preservative, etc.)? . . . . . YES NO
16. Did all bottle labels agree with custody papers? If NO, indicate discrepancies on back. . . . . YES NO
17. Were correct containers used for the tests indicated? . . . . . YES NO
*18. Were correct preservatives used when required? . . . . . YES NO
*19. pH of samples maintained correctly as required? If NO, list by ID# . . . . . YES NO
20. Was a sufficient amount of sample sent for tests indicated? . . . . . YES NO
*21. Bubbles present in VOA vials? If YES, list by ID#: NA . YES NO
22. Was lab. project manager called and status discussed? If YES, give details on the back of this form. YES NO
23. Who was called? By whom? on (date)
24. Second Party Review:

* Sample rejection criteria

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WWC5 # 13-75

CHAIN OF CUSTODY RECORD

WOODWARD-CLYDE CONSULTANTS
2318 MILLPARK DR.
MARYLAND HEIGHTS, MISSOURI 63043
314-429-0100

PROJECT NO.: 89MC114V

PROJECT NAME: NL/TARACORP SUPERFUND SITE PREDESIGN FIELD INVESTIGATION

SAMPLER'S: (Signatures) [illegible]

	DATE	TIME	SAMPLE I.D. NUMBER: Matrix	Location	Boring	Depth	Sample Type		NO. OF CONTAINERS	CONTAINER DESCRIPTION/ ANALYSES REQUESTED: Total Lead 4oz. poly jar Cool to 4°C	TCLP - Lead 4oz. poly jar Cool to 4°C	Geotechnical glass or poly jar	REMARKS
13	4/15	758	S	CL2116	1	00A	00L	✓	1	X			
14		800	S	CL2116	1	00B	00L	✓					
15		802	S	CL2116	1	00C	00L	✓					
16		805	S	CL2116	2	00A	00L	✓					
17		807	S	CL2116	2	00B	00L	✓					
18		809	S	CL2116	2	00C	00L	✓					
19		845	S	CL2133	1	00A	00L	✓					
20		847	S	CL2133	1	00B	00L	✓					
21		849	S	CL2133	1	00C	00L	✓					
22		852	S	CL2133	2	00A	00L	✓					
23		854	S	CL2133	2	00B	00L	✓					
24		856	S	CL2133	2	00C	00L	✓					
25		912	S	CL2134	1	00A	00L	✓					
26		914	S	CL2134	1	00B	00L	✓					
27		916	S	CL2134	1	00C	00L	✓					
28		919	S	CL2134	2	00A	00L	✓					
29		921	S	CL2134	2	00B	00L	✓					
30		923	S	CL2134	2	00C	00L	✓					
31		950	S	CL2138	1	00A	00L	✓					
32		952	S	CL2138	1	00B	00L	✓					
33		954	S	CL2138	1	00C	00L	✓					
34		957	S	CL2138	2	00A	00L	✓					
35		959	S	CL2138	2	00B	00L	✓					

RELINQUISHED BY: (Signature)	DATE / TIME	RECEIVED BY: (Signature)	DATE / TIME
[illegible]	4/15/92 1645	[illegible]	4/15 1645
RELINQUISHED BY: (Signature)	DATE / TIME	RECEIVED AT LAB BY: (Signature)	DATE / TIME
[illegible]	4/15 1730	[illegible]	4-15 1645
METHOD OF SHIPMENT:		AIRBILL NO: (If Applicable)	

WWCS 416-559

CHAIN OF CUSTODY RECORD

WOODWARD-CLYDE CONSULTANTS
2318 MILLPARK DR.
MARYLAND HEIGHTS, MISSOURI 63043
314-429-0100

SHEET 1 of 4

PROJECT NO.: 89MC114V

PROJECT NAME: NL/TARACORP SUPERFUND SITE PREDESIGN FIELD INVESTIGATION

SAMPLER'S: (Signatures) [signature] [signature]

	DATE	TIME	SAMPLE I.D. NUMBER: Matrix	Location	Boring	Depth	Sample Type		NO. OF CONTAINERS	CONTAINER DESCRIPTION/ ANALYSES REQUESTED: Total Lead 4oz. poly jar Cool to 4°C	TCLP - Lead 4oz. poly jar Cool to 4°C	Geotechnical glass or poly jar	REMARKS
64	8/28	833	S	ST1310	1	00A	00L	✓	1	✓			
77		835	S	ST1310	1	00B	00L	✓	1	✓			
78		837	S	ST1310	1	00C	00L	✓	1	✓			
79		839	S	ST1310	2	00A	00L	✓	1	✓			
480		841	S	ST1310	2	00B	00L	✓	1	✓			
81		843	S	ST1310	2	00C	00L	✓	1	✓			
482	84	~~852~~	S	ST1320	1	00A	00L	✓	1	✓			
3	84	~~854~~	S	ST1320	1	00B	00L	✓	1	✓			
484	85	~~856~~	S	ST1320	1	00C	00L	✓	1	✓			
15		852	S	ST1322	1	00A	00L	✓	1	✓			
486		854	S	ST1322	1	00B	00L	✓	1	✓			
87		856	S	ST1322	1	00C	00L	✓	1	✓			
8		915	S	I00822	1	00A	00L	✓	1	✓			
489		917	S	I00822	1	00B	00L	✓	1	✓			
90		919	S	I00822	1	00C	00L	✓	1	✓			
491		921	S	I00822	2	00A	00L	✓	1	✓			
2		923	S	I00822	2	00B	00L	✓	1	✓			
493		925	S	I00822	2	00C	00L	✓	1	✓			
4		934	S	ST1022	1	00A	00L	✓	1	✓			
495		936	S	ST1022	1	00B	00L	✓	1	✓			
16		938	S	ST1022	1	00C	00L	✓	1	✓			
447		941	S	ST1022	2	00A	00L	✓	1	✓			
98		943	S	ST1022	2	00B	00L	✓	1	✓			

RELINQUISHED BY: (Signature)	DATE / TIME	RECEIVED BY: (Signature)	DATE / TIME
[signature]	4/28/92 1630	[signature]	4/28/92 1630
RELINQUISHED BY: (Signature)	DATE / TIME	RECEIVED AT LAB BY: (Signature)	DATE / TIME
[signature]	4/28/92 1800	[signature]	4/28/92 1800
METHOD OF SHIPMENT:		AIRBILL NO: (If Applicable)	

CHAIN OF CUSTODY RECORD

WOODWARD-CLYDE CONSULTANTS
2318 MILLPARK DR.
MARYLAND HEIGHTS, MISSOURI 63043
314-429-0100

SHEET 2 of 4

PROJECT NO.: 89MC114V

PROJECT NAME: NL/TARACORP SUPERFUND SITE PREDESIGN FIELD INVESTIGATION

SAMPLER'S: (Signatures) K[illegible] M Wallace

DATE	TIME	SAMPLE I.D. NUMBER: Matrix	Location	Boring	Depth	Sample Type		NO. OF CONTAINERS	Total Lead 4oz. poly jar Cool to 4°C	TCLP - Lead 4oz. poly jar Cool to 4°C	Geotechnical glass or poly jar	REMARKS
4/28	945	S	SI1022	2	00C	00L	✓	1	✓			
	934	S	SI1022	1	00A	0LD	✓	1	✓			
	936	S	SI1022	1	00B	0LD	✓	1	✓			
	938	S	SI1022	1	00C	0LD	✓	1	✓			
	1000	S	WS1003	1	00A	00L	✓	1	✓			
	1003	S	WS1003	1	00B	00L	✓	1	✓			
	1005	S	WS1003	1	00C	00L	✓	1	✓			
	1000	S	WS1003	1	00A	0LD	✓	1	✓			
	1003	S	WS1003	1	00B	0LD	✓	1	✓			
	1005	S	WS1003	1	00C	0LD	✓	1	✓			
		~~S~~	~~WS1003~~	~~2~~	~~00A~~	~~00L~~		~~1~~	~~✓~~			
		~~S~~	~~WS1022~~	~~2~~	~~00B~~	~~00L~~		~~1~~	~~✓~~			
		~~S~~	~~WS1003~~	~~2~~	~~00C~~	~~00L~~		~~1~~	~~✓~~			
	1022	S	WS1215	1	00A	00L	✓	1	✓			
	1024	S	WS1215	1	00B	00L	✓	1	✓			
	1026	S	WS1215	1	00C	00L	✓	1	✓			
	1028	S	WS1215	2	00A	00L	✓	1	✓			
	1030	S	WS1215	2	00B	00L	✓	1	✓			
	1032	S	WS1215	2	00C	00L	✓	1	✓			
	1035	S	WS1235	1	00A	00L	✓	1	✓			
	1037	S	WS1235	1	00B	00L	✓	1	✓			
	1039	S	WS1235	1	00C	00L	✓	1	✓			
	1042	S	WS1235	2	00A	00L	✓	1	✓			

RELINQUISHED BY: (Signature)	DATE / TIME	RECEIVED BY: (Signature)	DATE / TIME
[illegible]	4/28/92 1630	K[illegible]	4/28/92 1630
RELINQUISHED BY: (Signature)	**DATE / TIME**	**RECEIVED AT LAB BY: (Signature)**	**DATE / TIME**
K[illegible]	4/28/92 1800	[illegible]	4/28/92 1800
METHOD OF SHIPMENT:		**AIRBILL NO: (If Applicable)**	

CHAIN OF CUSTODY RECORD

WOODWARD-CLYDE CONSULTANTS
2318 MILLPARK DR.
MARYLAND HEIGHTS, MISSOURI 63043
314-429-0100

SHEET 2 of 3

PROJECT NO.: 89MC114V

PROJECT NAME: NL/TARACORP SUPERFUND SITE PREDESIGN FIELD INVESTIGATION

SAMPLER'S: (Signatures) [signature]

	DATE	TIME	SAMPLE I.D. NUMBER: Matrix	Location	Boring	Depth	Sample Type		NO. OF CONTAINERS	Total Lead 4oz. poly jar Cool to 4°C	TCLP - Lead 4oz. poly jar Cool to 4°C	Geotechnical glass or poly jar	REMARKS
36	4/15	1001	S	CL2138	2	00C	00L	✓	1	X			
37		1016	S	CL2141	1	00A	00L	✓					
38		1016	S	CL2141	1	00B	00L	✓					
39		1020	S	CL2141	1	00C	00L	✓					
40		1024	S	CL2141	2	00A	00L	✓					
41		1026	S	CL2141	2	00B	00L	✓					
42		1028	S	CL2141	2	00C	00L	✓					
43		1043	S	CL2158	1	00A	00L	✓					
44		1045	S	CL2158	1	00B	00L	✓					
45		1047	S	CL2158	1	00C	00L	✓					
46		1050	S	CL2158	2	00A	00L	✓					
47		1052	S	CL2158	2	00B	00L	✓					
48		1054	S	CL2158	2	00C	00L	✓					
49		1133	S	DE1633	1	00A	00L	✓					
50		1135	S	DE1633	1	00B	00L	✓					
51		1137	S	DE1633	1	00C	00L	✓					
52		1140	S	DE1633	2	00A	00L	✓					
53		1142	S	DE1633	2	00B	00L	✓					
54		1144	S	DE1633	2	00C	00L	✓					
55		1321	S	ED1708	1	00A	00L	✓					
56		1323	S	ED1708	1	00B	00L	✓					
57		1325	S	ED1708	1	00C	00L	✓					
58		1328	S	ED1708	2	00A	00L	✓					

RELINQUISHED BY: (Signature)	DATE / TIME	RECEIVED BY: (Signature)	DATE / TIME
[signature]	4/15/92 1145	[signature]	4/15 164:
RELINQUISHED BY: (Signature)	DATE / TIME	RECEIVED AT LAB BY: (Signature)	DATE / TIME
[signature]	4/15 1730	Carol Cash	4/15 164:
METHOD OF SHIPMENT:		AIRBILL NO: (If Applicable)	

CHAIN OF CUSTODY RECORD

WOODWARD-CLYDE CONSULTANTS
2318 MILLPARK DR.
MARYLAND HEIGHTS, MISSOURI 63043
314-429-0100

SHEET 3 of 3

PROJECT NO.: 89MC114V

PROJECT NAME: NL/TARACORP SUPERFUND SITE PREDESIGN FIELD INVESTIGATION

SAMPLER'S: (Signatures)

	DATE	TIME	SAMPLE I.D. NUMBER: Matrix	Location	Boring	Depth	Sample Type		NO. OF CONTAINERS	Total Lead 4oz. poly jar Cool to 4°C	TCLP - Lead 4oz. poly jar Cool to 4°C	Geotechnical glass or poly jar	REMARKS
59	4/15	1330	S	ED1708	2	00B	00L	✓	1	X			
60		1332	S	ED1708	2	00C	00L	✓					
61		1401	S	AD1940	1	00A	00L	✓					
62		1403	S	AD1940	1	00B	00L	✓					
63		1405	S	AD1940	1	00C	00L	✓					
64		1408	S	AD1940	2	00A	00L	✓					
65		1410	S	AD1940	2	00B	00L	✓					
66		1412	S	AD1940	2	00C	00L	✓					
67		1517	S	ED2052	1	00A	00L	✓					
68		1519	S	ED2052	1	00B	00L	✓					
69		1521	S	ED2052	1	00C	00L	✓					
70		1524	S	ED2052	2	00A	00L	✓					
71		1526	S	ED2052	2	00B	00L	✓					
72		1528	S	ED2052	2	00C	00L	✓					
73		1353	S	SI2256	2	00A	00L	✓					
74		1355	S	SI2256	2	00B	00L	✓					
75		1356	S	SI2256	2	00C	00L	✓					
			S										
			S										
			S										
			S										
			S										
			S										

RELINQUISHED BY: (Signature)	DATE / TIME	RECEIVED BY: (Signature)	DATE / TIME
	4/15/92 1645		4/15 1645
RELINQUISHED BY: (Signature)	DATE / TIME	RECEIVED AT LAB BY: (Signature)	DATE / TIME
	4/15 1730		4-15 1645
METHOD OF SHIPMENT:		AIRBILL NO: (If Applicable)	

CHAIN OF CUSTODY RECORD

WOODWARD-CLYDE CONSULTANTS
2318 MILLPARK DR.
MARYLAND HEIGHTS, MISSOURI 63043
314-429-0100

SHEET 2 of 4

PROJECT NO.: 89MC114V

PROJECT NAME: NL/TARACORP SUPERFUND SITE PREDESIGN FIELD INVESTIGATION

SAMPLER'S: (Signatures) [signature]

	DATE	TIME	SAMPLE I.D. NUMBER: Matrix	Location	Boring	Depth	Sample Type		NO. OF CONTAINERS	Total Lead 4oz. poly jar Cool to 4°C	TCLP - Lead 4oz. poly jar Cool to 4°C	Geotechnical glass or poly jar	REMARKS
99	4/16	1024	S	BEL920	1	00C	00L	✓	1	✓			
100		1026	S	BEL920	2	00A	00L	✓					
101		1030	S	BEL920	2	00B	00L	✓					
102		1032	S	BEL920	2	00C	00L	✓					
103		1051	S	BEL931	1	00A	00L	✓					
104		1053	S	BEL931	1	00B	00L	✓					
105		1055	S	BEL931	1	00C	00L	✓					
106		1058	S	BEL931	2	00A	00L	✓					
107		1100	S	BEL931	2	00B	00L	✓					
108		1102	S	BEL931	2	00C	00L	✓					
109		1132	S	MA1415	1	00A	00L	✓					
110		1134	S	MA1415	1	00B	00L	✓					
111		1136	S	MA1415	1	00C	00L	✓					
112		1139	S	MA1415	2	00A	00L	✓					
113		1141	S	MA1415	2	00B	00L	✓					
114		1143	S	MA1415	2	00C	00L	✓					
115		1418	S	LO1421	1	00A	00L	✓					
116		1420	S	LO1421	1	00B	00L	✓					
117		1422	S	LO1421	1	00C	00L	✓					
118		1426	S	LO1421	2	00A	00L	✓					
119		1428	S	LO1421	2	00B	00L	✓					
120		1430	S	LO1421	2	00C	00L	✓					
121		1416	S	LO1421	1	00A	0LD	✓					

RELINQUISHED BY: (Signature)	DATE / TIME	RECEIVED BY: (Signature)	DATE / TIME
[signature]	4/16/92 1700	[signature]	4/16 1700
RELINQUISHED BY: (Signature)	DATE / TIME	RECEIVED AT LAB BY: (Signature)	DATE / TIME
[signature]	4/16 1730	[signature]	4-16 5:30
METHOD OF SHIPMENT:		AIRBILL NO: (If Applicable)	

CHAIN OF CUSTODY RECORD

WOODWARD-CLYDE CONSULTANTS
2318 MILLPARK DR.
MARYLAND HEIGHTS, MISSOURI 63043
314-429-0100

SHEET 3 of 4

PROJECT NO.: 89MC114V

PROJECT NAME: NL/TARACORP SUPERFUND SITE PREDESIGN FIELD INVESTIGATION

SAMPLER'S: (Signatures)

	DATE	TIME	SAMPLE I.D. NUMBER: Matrix	Location	Boring	Depth	Sample Type		NO. OF CONTAINERS	CONTAINER DESCRIPTION/ ANALYSES REQUESTED: Total Lead 4oz. poly jar Cool to 4°C	TCLP - Lead 4oz. poly jar Cool to 4°C	Geotechnical glass or poly jar	REMARKS
22	4/16	1420	S	101421	2	00B	0LD	✓	1	K			
123		1422	S	101421	2	00C	0LD	✓					
124		1437	S	101423	1	00A	00L	✓					
125		1439	S	101423	1	00B	00L	✓					
126		1441	S	101423	1	00C	00L	✓					
127		1444	S	101423	2	00A	00L	✓					
128		1446	S	101423	2	00B	00L	✓					
129		1448	S	101423	2	00C	00L	✓					
130		1511	S	MA1420	1	00A	00L	✓					
131		1513	S	MA1420	1	00B	00L	✓					
132		1515	S	MA1420	1	00C	00L	✓					
133		1516	S	MA1420	2	00A	00L	✓					
134		1520	S	MA1420	2	00B	00L	✓					
135		1522	S	MA1420	2	00C	00L	✓					
136		1543	S	GR2167	1	00A	00L	✓					
137		1545	S	GR2167	1	00B	00L	✓					
138		1547	S	GR2167	1	00C	00L	✓					
139		1550	S	GR2167	2	00A	00L	✓					
140		1552	S	GR2167	2	00B	00L	✓					
141		1554	S	GR2167	2	00C	00L	✓					
142		1603	S	GR2151	1	00A	00L	✓					
143		1605	S	GR2151	1	00B	00L	✓					
144		1607	S	GR2151	1	00C	00L	✓					

RELINQUISHED BY: (Signature)	DATE / TIME	RECEIVED BY: (Signature)	DATE / TIME
[illegible]	4/16/92 1700	[illegible]	4/16 1700
RELINQUISHED BY: (Signature)	DATE / TIME	RECEIVED AT LAB BY: (Signature)	DATE / TIME
[illegible]	4/16 1730	[illegible]	4-16 5:30
METHOD OF SHIPMENT:		AIRBILL NO: (If Applicable)	

CHAIN OF CUSTODY

WWC 5 # 1-12

CHAIN OF CUSTODY RECORD

WOODWARD-CLYDE CONSULTANTS
2318 MILLPARK DR.
MARYLAND HEIGHTS, MISSOURI 63043
314-429-0100

SHEET 4 of 4

PROJECT NO.: 89MC114V

PROJECT NAME: NL/TARACORP SUPERFUND SITE PREDESIGN FIELD INVESTIGATION

SAMPLER'S: (Signatures)

	DATE	TIME	SAMPLE I.D. NUMBER (Matrix / Location / Boring / Depth / Sample Type)	NO. OF CONTAINERS	CONTAINER DESCRIPTION/ ANALYSES REQUESTED: Total Lead 4oz. poly jar Cool to 4°C	TCLP - Lead 4oz. poly jar Cool to 4°C	Geotechnical glass or poly jar	REMARKS
1	4/14	1316	S DEZL33 1 00A00L ✓	1	X			
2		1318	S DEZL23 1 00B00L ✓					
3		1320	S DEZL33 1 00C00L ✓					
4		1323	S DEZ133 2 00A00L ✓					
5		1325	S DEZ133 2 00B00L ✓					
6		1327	S DEZ133 2 00C00L ✓					
7		1332	S DEZ154 1 00A00L ✓					
8		1334	S DEZ154 1 00B00L ✓					
9		1336	S DEZ154 1 00C00L ✓					
10		1339	S DEZ154 2 00A00L ✓					
11		1341	S DEZ154 2 00B00L ✓					
12	↓	1343	S DEZ154 2 00C00L ✓	↓	↓			
			S					
			S					
			S					
			S					
			S					
			S					
			S					
			S					
			S					
			S					
			S					

RELINQUISHED BY: (Signature)	DATE / TIME	RECEIVED BY: (Signature)	DATE / TIME
	4/14/92 1430		4/14 1630
RELINQUISHED BY: (Signature)	DATE / TIME	RECEIVED AT LAB BY: (Signature)	DATE / TIME
	4/14 1515		4/14 1515
METHOD OF SHIPMENT:		AIRBILL NO: (If Applicable)	

WWC - ITO Neb

CHAIN OF CUSTODY RECORD

WOODWARD-CLYDE CONSULTANTS
2318 MILLPARK DR.
MARYLAND HEIGHTS, MISSOURI 63043
314-429-0100

SHEET 1 of 1

PROJECT NO.: 89MC114V

PROJECT NAME: NL/TARACORP SUPERFUND SITE PREDESIGN FIELD INVESTIGATION

SAMPLER'S: (Signatures)

	DATE	TIME	Matrix	Location	Boring	Depth	Sample Type		NO. OF CONTAINERS	Total Lead 4oz. poly jar Cool to 4°C	TCLP - Lead 4oz. poly jar Cool to 4°C	Geotechnical glass or poly jar	REMARKS
148	4/17	740	S	BE2264	L	DDA	DDL	✓	1	X			
149		742	S	BE2264	L	DDB	DDL	✓					
150		744	S	BE2264	1	DDC	DDL	✓					
151		746	S	BE2264	2	DDA	DDL	✓					
152		748	S	BE2264	2	DDB	DDL	✓					
153		750	S	BE2264	2	DDC	DDL	✓					
154		801	S	BE2252	2	DDA	DDL	✓					
155		803	S	BE2252	2	DDB	DDL	✓					
156		805	S	BE2252	2	DDC	DDL	✓					
157		830	S	GR2251	1	DDA	DDL	✓					
158		832	S	GR2251	1	DDB	DDL	✓					
159		834	S	GR2251	1	DDC	DDL	✓					
160		837	S	GR2251	2	DDA	DDL	✓					
161		839	S	GR2251	2	DDB	DDL	✓					
162		841	S	GR2251	2	DDC	DDL	✓					
163		844	S	GR2253	1	DDA	DDL	✓					
164		846	S	GR2253	1	DDB	DDL	✓					
165		848	S	GR2253	1	DDC	DDL	✓					
166		851	S	GR2253	2	DDA	DDL	✓					
167		853	S	GR2253	2	DDB	DDL	✓					
168		855	S	GR2253	2	DDC	DDL	✓					
			S	GR22		DDA	DDL						
			S	GR22		DDB	DDL						

RELINQUISHED BY: (Signature)	DATE / TIME	RECEIVED BY: (Signature)	DATE / TIME
Wesley E. Lubbolt	4/17/92 1340	Kevin Hedges	4/17/92 1340
RELINQUISHED BY: (Signature)	DATE / TIME	RECEIVED AT LAB BY: (Signature)	DATE / TIME
Kevin Hedges	4/17/92 5:10	Ethan C Lacey	4-17 5:10
METHOD OF SHIPMENT:		AIRBILL NO: (If Applicable)	

WWCS *148-168

COOLER/SAMPLE RECEIPT FORM

Rev.01 10/7/91

ESE Cooler # ✓
Client Cooler # _____
No Cooler _____

Project: Woodward Clyde Date/Time Received: 4-17-92 1710

USE OTHER SIDE OF THIS FORM TO NOTE FURTHER DETAILS CONCERNING CHECK-IN PROBLEMS AND TO SPECIFY AND DESCRIBE ANY ACTION(S) REGARDING THE RESOLUTION(S) OF PROBLEMS. IF SHIPMENT WAS ACCEPTED AND IF REQUESTED, NOTE ON BACK THE ADDRESS WHERE THE EMPTY COOLER WAS RETURNED AND LIKEWISE IF THE SHIPMENT WAS REJECTED.

IF INFORMATION IS MISSING OR THERE ARE PROBLEMS NOTIFY LABORATORY PROJECT MANAGER SO THAT HE CAN NOTIFY THE PROJECT MANAGER IMMEDIATELY.

A. PRELIMINARY EXAMINATION PHASE: Date/Time cooler/sample was opened and checked: 4-20-92 900

by (print) Carol Cash (sign) Carol Cash

1. List courier delivering samples . . . . . Client . . . . . YES NO
2. Did cooler come with a shipping slip (air bill, etc.)? . . . . . YES NO
   If YES, attach and enter carrier and air bill number here: _____
3. Were custody seals on outside of cooler? . . . . . YES NO
   If YES, how many and where: 1 on front 1 on Back
   If YES, enter the following: seal date: 4-17-92 ; seal name: Eric Page M Wallace
4. Were custody seals unbroken and intact at the date and time of arrival? . . . . . YES NO
5. Was chain-of-custody provided? . . . . . YES NO
6. Were custody papers sealed in a Ziploc™ bag and taped inside to the lid? . . . . . YES NO
7. Were entries on custody papers completed? YES NO . If no, give details on back
8. Turnaround time included? . . . . . YES NO
9. Did you sign custody papers in the appropriate place? . . . . . YES NO
10. Was project identifiable from custody papers? If YES, enter project name at the top of this form. . YES NO

B. SAMPLE CHECK-IN PHASE: Date samples were checked-in: 4-20-92 by (all those involved must sign below):
(print) Carol Cash (sign) Carol Cash

11. Describe packing: Samples in Cooler with ice
*12. If required, was enough ice used? (temperature maintained correctly)? . . . . . YES NO
13. Were all bottles sealed in separate plastic bags? . . . . . YES NO
*14. Did all bottles arrive unbroken and in good condition? . . . . . YES NO
15. Were all bottle labels complete (ID, date, time, signature, preservative, etc.)? . . . . . YES NO
16. Did all bottle labels agree with custody papers? If NO, indicate discrepancies on back. . . . . YES NO
17. Were correct containers used for the tests indicated? . . . . . YES NO
*18. Were correct preservatives used when required? . . . . . YES NO
*19. pH of samples maintained correctly as required? If NO, list by ID# _____ . YES NO
20. Was a sufficient amount of sample sent for tests indicated? . . . . . YES NO
*21. Bubbles present in VOA vials? If YES, list by ID#: NA . YES NO
22. Was lab. project manager called and status discussed? If YES, give details on the back of this form. YES NO
23. Who was called? _____ By whom? _____ on (date) _____
24. Second Party Review: _____

* Sample rejection criteria

W:\WP\CHEMCOM\CRF.01

WWCS-7 161 a-

CHAIN OF CUSTODY RECORD

WOODWARD-CLYDE CONSULTANTS
2318 MILLPARK DR.
MARYLAND HEIGHTS, MISSOURI 63043
314-429-0100

SHEET 1 of 4

PROJECT NO.: 89MC114V

PROJECT NAME: NL/TARACORP SUPERFUND SITE PREDESIGN FIELD INVESTIGATION

SAMPLER'S: (Signatures) [signature]

	DATE	TIME	SAMPLE I.D. NUMBER: Matrix	Location	Boring	Depth	Sample Type		NO. OF CONTAINERS	CONTAINER DESCRIPTION/ ANALYSES REQUESTED: Total Lead 4oz. poly jar Cool to 4°C	TCLP - Lead 4oz. poly jar Cool to 4°C	Geotechnical glass or poly jar	REMARKS
9	4/21	824	S	CL2250	1	00A	00L	✓	1	✓			
170		826	S	CL2250	1	00B	00L	✓	1	✓			
171		828	S	CL2250	1	00C	00L	✓	1	✓			
12		832	S	CL2250	2	00A	00L	✓	1	✓			
173		834	S	CL2250	2	00B	00L	✓	1	✓			
14		836	S	CL2250	2	00C	00L	✓	1	✓			
175		846	S	CL2257	1	00A	00L	✓	1	✓			
16		848	S	CL2257	1	00B	00L	✓	1	✓			
177		850	S	CL2257	1	00C	00L	✓	1	✓			
18		852	S	CL2257	2	00A	00L	✓	1	✓			
179		854	S	CL2257	2	00B	00L	✓	1	✓			
0		856	S	CL2257	2	00C	00L	✓	1	✓			
81		910	S	CL2258	1	00A	00L	✓	1	✓			
2		912	S	CL2258	1	00B	00L	✓	1	✓			
103		914	S	CL2258	1	00C	00L	✓	1	✓			
184		916	S	CL2258	2	00A	00L	✓	1	✓			
5		918	S	CL2258	2	00B	00L	✓	1	✓			
186		920	S	CL2258	2	00C	00L	✓	1	✓			
7		932	S	CL2262	1	00A	00L	✓	1	✓			
188		934	S	CL2262	1	00B	00L	✓	1	✓			
9		936	S	CL2262	1	00C	00L	✓	1	✓			
140		932	S	CL2262	1	00A	0LD	✓	1	✓			
1		934	S	CL2262	1	00B	0LD	✓	1	✓			

RELINQUISHED BY: (Signature)	DATE / TIME	RECEIVED BY: (Signature)	DATE / TIME
[signature]	4/21/92 1630	[signature]	4/21 1630
RELINQUISHED BY: (Signature)	DATE / TIME	RECEIVED AT LAB BY: (Signature)	DATE / TIME
[signature]	4/21 1715	[signature]	4-21 5:15
METHOD OF SHIPMENT:		AIRBILL NO: (If Applicable)	

CHAIN OF CUSTODY RECORD

WOODWARD-CLYDE CONSULTANTS
2318 MILLPARK DR.
MARYLAND HEIGHTS, MISSOURI 63043
314-429-0100

SHEET 2 of 4

PROJECT NO.: 89MC114V

PROJECT NAME: NL/TARACORP SUPERFUND SITE PREDESIGN FIELD INVESTIGATION

SAMPLER'S: (Signatures)

	DATE	TIME	SAMPLE I.D. NUMBER: Matrix	Location	Boring	Depth	Sample Type		NO. OF CONTAINERS	Total Lead 4oz. Poly jar Cool to 4°C	TCLP - Lead 4oz. Poly jar Cool to 4°C	Geotechnical glass or poly jar	REMARKS
192	4/21	936	S	CL2262	1	00C	00L	✓	1	✓			
193		940	S	CL2262	2	00A	00L	✓	1	✓			
194		942	S	CL2262	2	00B	00L	✓	1	✓			
195		944	S	CL2262	2	00C	00L	✓	1	✓			
196		1028	S	CL2214	1	00A	00L	✓	1	✓			
197		1030	S	CL2214	1	00B	00L	✓	1	✓			
198		1032	S	CL2214	1	00C	00L	✓	1	✓			
199		1034	S	CL2214	2	00A	00L	✓	1	✓			
200		1036	S	CL2214	2	00B	00L	✓	1	✓			
201		1038	S	CL2214	2	00C	00L	✓	1	✓			
202		1048	S	CL2225	1	00A	00L	✓	1	✓			
203		1050	S	CL2225	1	00B	00L	✓	1	✓			
204		1052	S	CL2225	1	00C	00L	✓	1	✓			
205		1055	S	CL2225	2	00A	00L	✓	1	✓			
206		1057	S	CL2225	2	00B	00L	✓	1	✓			
207		1059	S	CL2225	2	00C	00L	✓	1	✓			
208		1128	S	ED2117	1	00A	00L	✓	1	✓			
209		1131	S	ED2117	1	00B	00L	✓	1	✓			
210		1133	S	ED2117	1	00C	00L	✓	1	✓			
211		1128	S	ED2117	1	00A	00LD	✓	1	✓			
212		1131	S	ED2117	1	00B	00LD	✓	1	✓			
213		1133	S	ED2117	1	00C	00LD	✓	1	✓			
214		1141	S	ED2118	2	00A	00L	✓	1	✓			

RELINQUISHED BY: (Signature)	DATE / TIME	RECEIVED BY: (Signature)	DATE / TIME
[illegible]	4/21/92 1630	[illegible]	4/21 1630
RELINQUISHED BY: (Signature)	DATE / TIME	RECEIVED AT LAB BY: (Signature)	DATE / TIME
[illegible]	4/21 1715	[illegible]	4-21 5:15
METHOD OF SHIPMENT:		AIRBILL NO: (If Applicable)	

CHAIN OF CUSTODY RECORD

WOODWARD-CLYDE CONSULTANTS
2318 MILLPARK DR.
MARYLAND HEIGHTS, MISSOURI 63043
314-429-0100

SHEET 3 of 4

PROJECT NO.: 89MC114V

PROJECT NAME: NL/TARACORP SUPERFUND SITE PREDESIGN FIELD INVESTIGATION

SAMPLER'S: (Signatures)

	DATE	TIME	Matrix	Location	Boring	Depth	Sample Type		NO. OF CONTAINERS	Total Lead 4oz. poly jar Cool to 4°C	TCLP - Lead 4oz. poly jar Cool to 4°C	Geotechnical glass or poly jar	REMARKS
		1145											
15	4/21	~~1356~~	S	ED2LL8	2	00B	00L	✓	1	✓			
216	1145	~~1358~~	S	ED2LL8	2	00C	00L	✓	1	✓			
	~~1356~~	~~1400~~	~~S~~	~~ED----~~	~~1~~	~~00A~~	~~00L~~		~~1~~	~~✓~~			
		~~1358~~	~~S~~	~~ED----~~	~~1~~	~~00B~~	~~00L~~		~~1~~	~~✓~~			
		~~1400~~	~~S~~	~~ED----~~	~~1~~	~~00C~~	~~00L~~		~~1~~	~~✓~~			
217	4/21	1356	S	DE2259	1	00A	00L	✓	1	✓			
218		1358	S	DE2259	1	00B	00L	✓	1	✓			
219		1400	S	DE2259	1	00C	00L	✓	1	✓			
220		1405	S	DE2259	2	00A	00L	✓	1	✓			
221		1407	S	DE2259	2	00B	00L	✓	1	✓			
222		1409	S	DE2259	2	00C	00L	✓	1	✓			
223		1439	S	ED2138	1	00A	00L	✓	1	✓			
224		1439	S	ED2138	1	00B	00L	✓	1	✓			
225		[illegible]41	S	ED2138	1	00C	00L	✓	1	✓			
226		1445	S	ED2138	2	00A	00L	✓	1	✓			
227		1447	S	ED2138	2	00B	00L	✓	1	✓			
228		1449	S	ED2138	2	00C	00L	✓	1	✓			
229		1502	S	ED2142	1	00A	00L	✓	1	✓			
230		1504	S	ED2142	1	00B	00L	✓	1	✓			
231		1506	S	ED2142	1	00C	00L	✓	1	✓			
232		1502	S	ED2142	1	00A	0LD	✓	1	✓			
233		1504	S	ED2142	1	00B	0LD	✓	1	✓			
234		1506	S	ED2142	1	00C	0LD	✓	1	✓			

RELINQUISHED BY: (Signature)	DATE / TIME	RECEIVED BY: (Signature)	DATE / TIME
[signature]	4/21/92 1630	[signature]	4/21 1630
RELINQUISHED BY: (Signature)	DATE / TIME	RECEIVED AT LAB BY: (Signature)	DATE / TIME
[signature]	4/21 1715	[signature]	4-21 5:15

METHOD OF SHIPMENT:

AIRBILL NO: (If Applicable)

CHAIN OF CUSTODY RECORD

WOODWARD-CLYDE CONSULTANTS
2318 MILLPARK DR.
MARYLAND HEIGHTS, MISSOURI 63043
314-429-0100

SHEET 4 of 4

PROJECT NO.: 89MC114V

PROJECT NAME: NL/TARACORP SUPERFUND SITE PREDESIGN FIELD INVESTIGATION

SAMPLER'S: (Signatures) [illegible]

	DATE	TIME	SAMPLE I.D. NUMBER: Matrix	Location	Boring	Depth	Sample Type		NO. OF CONTAINERS	Total Lead 4oz. poly jar Cool to 4°C	TCLP - Lead 4oz. poly jar Cool to 4°C	Geotechnical glass or poly jar	REMARKS
35	4/21	1510	S	ED2L42	2	00A	00L	✓	1	✓			
36		1512	S	ED2L42	2	00B	00L	✓	1	✓			
37		1514	S	ED2L42	2	00C	00L	✓	1	✓			
38		1542	S	DE2222	1	00A	00L	✓	1	✓			
39		1544	S	DE2222	1	00B	00L	✓	1	✓			
40		1546	S	DE2222	1	00C	00L	✓	1	✓			
41		1550	S	DE2222	2	00A	00L	✓	1	✓			
42		1552	S	DE2222	2	00B	00L	✓	1	✓			
43		1554	S	DE2222	2	00C	00L	✓	1	✓			
			S										
			S										
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RELINQUISHED BY: (Signature)	DATE / TIME	RECEIVED BY: (Signature)	DATE / TIME
[illegible]	4/21/92 1630	[illegible]	4/21 1630
RELINQUISHED BY: (Signature)	DATE / TIME	RECEIVED AT LAB BY: (Signature)	DATE / TIME
[illegible]	4/21 1715	[illegible]	4-21 5:15pm
METHOD OF SHIPMENT:		AIRBILL NO: (If Applicable)	

WWCS# 162-240

COOLER/SAMPLE RECEIPT FORM

Rev.01 10/7/91

ESE Cooler # 172
Client Cooler #
No Cooler

Project: Woodward Clyde Date/Time Received: 4-22-92 17:15

USE OTHER SIDE OF THIS FORM TO NOTE FURTHER DETAILS CONCERNING CHECK-IN PROBLEMS AND TO SPECIFY AND DESCRIBE ANY ACTION(S) REGARDING THE RESOLUTION(S) OF PROBLEMS. IF SHIPMENT WAS ACCEPTED AND IF REQUESTED, NOTE ON BACK THE ADDRESS WHERE THE EMPTY COOLER WAS RETURNED AND LIKEWISE IF THE SHIPMENT WAS REJECTED.

IF INFORMATION IS MISSING OR THERE ARE PROBLEMS NOTIFY LABORATORY PROJECT MANAGER SO THAT HE CAN NOTIFY THE PROJECT MANAGER IMMEDIATELY.

A. PRELIMINARY EXAMINATION PHASE: Date/Time cooler/sample was opened and checked: 4-22-92 10:00

by (print) James Cash (sign) James Cash

1. List courier delivering samples client ... YES (NO)
2. Did cooler come with a shipping slip (air bill, etc.)? ... YES (NO)
   If YES, attach and enter carrier and air bill number here:
3. Were custody seals on outside of cooler? ... (YES) NO
   If YES, how many and where: 2 on Front & Back
   If YES, enter the following: seal date: 4-21-92 seal name: Capt Read
4. Were custody seals unbroken and intact at the date and time of arrival? ... (YES) NO
5. Was chain-of-custody provided? ... (YES) NO
6. Were custody papers sealed in a Ziplock™ bag and taped inside to the lid? ... (YES) NO
7. Were entries on custody papers completed? (YES) NO . If no, give details on back
8. Turnaround time included? ... YES (NO)
9. Did you sign custody papers in the appropriate place? ... (YES) NO
10. Was project identifiable from custody papers? If YES, enter project name at the top of this form. ... (YES) NO

B. SAMPLE CHECK-IN PHASE: Date samples were checked-in: 4-22-92 by (all those involved must sign below):

(print) James Cash (sign) James Cash

11. Describe packing: Blue ice & stacked on top of each other
*12. If required, was enough ice used? (temperature maintained correctly)? ... (YES) NO
13. Were all bottles sealed in separate plastic bags? ... YES (NO)
*14. Did all bottles arrive unbroken and in good condition? ... (YES) NO
15. Were all bottle labels complete (ID, date, time, signature, preservative, etc.)? ... (YES) NO
16. Did all bottle labels agree with custody papers? If NO, indicate discrepancies on back. ... (YES) NO
17. Were correct containers used for the tests indicated? ... (YES) NO
*18. Were correct preservatives used when required? NA ... YES NO
*19. pH of samples maintained correctly as required? If NO, list by ID# NA ... YES NO
20. Was a sufficient amount of sample sent for tests indicated? ... (YES) NO
*21. Bubbles present in VOA vials? If YES, list by ID#: NA ... YES NO
22. Was lab. project manager called and status discussed? If YES, give details on the back of this form. YES (NO)
23. Who was called? _____ By whom? _____ on (date) _____
24. Second Party Review: _____

* Sample rejection criteria

W:\WP\CHEMCOM\CRF.01

WWCS # 244 - 212

CHAIN OF CUSTODY RECORD

WOODWARD-CLYDE CONSULTANTS
2318 MILLPARK DR.
MARYLAND HEIGHTS, MISSOURI 63043
314-429-0100

SHEET 1 of 3

PROJECT NO.: 89MC114V

PROJECT NAME: NL/TARACORP SUPERFUND SITE PREDESIGN FIELD INVESTIGATION

SAMPLER'S: (Signatures) [illegible]

	DATE	TIME	SAMPLE I.D. NUMBER (Matrix / Location / Boring / Depth / Sample Type)	NO. OF CONTAINERS	Total Lead 4oz. poly jar Cool to 4°C	TCLP - Lead 4oz. poly jar Cool to 4°C	Geotechnical glass or poly jar	REMARKS
244	4/22	754	S MA 2025 1 00A 00L ✓	1	✓			
245		756	S MA 2025 1 00B 00L ✓	1	✓			
246		758	S MA 2025 1 00C 00L ✓	1	✓			
247		801	S MA 2025 2 00A 00L ✓	1	✓			
248		803	S MA 2025 2 00B 00L ✓	1	✓			
249		805	S MA 2025 2 00C 00L ✓	1	✓			
			~~S TS 1422 1 00A 00L~~	1	✓			
			~~S TS 1422 1 00B 00L~~	1	✓			
			~~S TS 1422 1 00C 00L~~	1	✓			
250		856	S ST 2157 1 00A 00L ✓	1	✓			
251		858	S ST 2157 1 00B 00L ✓	1	✓			
252		900	S ST 2157 1 00C 00L ✓	1	✓			
253		903	S ST 2157 2 00A 00L ✓	1	✓			
254		905	S ST 2157 2 00B 00L ✓	1	✓			
255		907	S ST 2157 2 00C 00L ✓	1	✓			
256		952	S CL 2230 1 00A 00L ✓	1	✓			
257		954	S CL 2230 1 00B 00L ✓	1	✓			
258		956	S CL 2230 1 00C 00L ✓	1	✓			
259		959	S CL 2230 2 00A 00L ✓	1	✓			
260		1002	S CL 2230 2 00B 00L ✓	1	✓			
261		1004	S CL 2230 2 00C 00L ✓	1	✓			
			S	1	✓			
			S	1	✓			

RELINQUISHED BY: (Signature)	DATE / TIME	RECEIVED BY: (Signature)	DATE / TIME
[illegible]	4/22/92 1530	[illegible]	4/22/92 1530
RELINQUISHED BY: (Signature)	DATE / TIME	RECEIVED AT LAB BY: (Signature)	DATE / TIME
[illegible]	4/22/92 1740	[illegible]	4/22/92 1740
METHOD OF SHIPMENT:		AIRBILL NO: (If Applicable)	

CHAIN OF CUSTODY RECORD

WOODWARD-CLYDE CONSULTANTS
2318 MILLPARK DR.
MARYLAND HEIGHTS, MISSOURI 63043
314-429-0100

PROJECT NO.: 89MC114V

PROJECT NAME: NL/TARACORP SUPERFUND SITE PREDESIGN FIELD INVESTIGATION

SAMPLER'S: (Signatures)

	DATE	TIME	SAMPLE I.D. NUMBER: Matrix	Location	Boring	Depth	Sample Type	NO. OF CONTAINERS	Total Lead 4oz. poly jar Cool to 4°C	TCLP - Lead 4oz. poly jar Cool to 4°C GRAND SAMPLE	Geotechnical glass or poly jar	REMARKS
262	4/22	1305	S	MA1429	1	00A	00L ✓	1	✓			
263		1307	S	MA1429	1	00B	00L ✓	1	✓			
264		1309	S	MA1429	1	00C	00L ✓	1	✓			
265		1311	S	MA1429	2	00A	00L ✓	1	✓			
266		1313	S	MA1429	2	00B	00L ✓	1	✓			
267		1315	S	MA1429	2	00C	00L ✓	1	✓			
268		1345	S	MA1439	1	00A	00L ✓	1	✓			
269		1347	S	MA1439	1	00B	00L ✓	1	✓			
270		1349	S	MA1439	1	00C	00L ✓	1	✓			
271		1037	S	OR0001	1	00A	00I ✓	1	~~✓~~	✓		GRAND SAMPLE
272		1037	S	OR0001	1	00A	0ID ✓	1	~~✓~~	✓		GRAND SAMPLE
273		1100	S	OR0002	1	00A	00I ✓	1	~~✓~~	✓		GRAND SAMPLE
~~274~~			~~S~~	~~OR0002~~	~~1~~	~~00A~~	~~0ID~~					
274		1120	S	OR0003	1	00A	00I ✓	1		✓		GRAND SAMPLE
275		1420	S	SI2247	1	00A	00L ✓	1	✓			
276		1422	S	SI2247	1	00B	00L ✓	1	✓			
277		1424	S	SI2247	1	00C	00L ✓	1	✓			
278		1428	S	SI2247	2	00A	00L ✓	1	✓			
279		1430	S	SI2247	2	00B	00L ✓	1	✓			
280		1432	S	SI2247	2	00C	00L ✓	1	✓			
281		1442	S	SI2228	1	00A	00L ✓	1	✓			
282		1444	S	SI2228	1	00B	00L ✓	1	✓			
283		1446	S	SI2228	1	00C	00L ✓	1	✓			

RELINQUISHED BY: (Signature)	DATE / TIME	RECEIVED BY: (Signature)	DATE / TIME
Wendy E. Rubott	4/22/92 1530	[illegible]	4/22/92 15
RELINQUISHED BY: (Signature)	DATE / TIME	RECEIVED AT LAB BY: (Signature)	DATE / TIME
[illegible]	4/22/92 1740	[illegible]	4/22/92 174
METHOD OF SHIPMENT:		AIRBILL NO: (If Applicable)	

CHAIN OF CUSTODY RECORD

WOODWARD-CLYDE CONSULTANTS
2318 MILLPARK DR.
MARYLAND HEIGHTS, MISSOURI 63043
314-429-0100

SHEET 3 of 3

PROJECT NO.: 89MC114V

PROJECT NAME: NL/TARACORP SUPERFUND SITE PREDESIGN FIELD INVESTIGATION

SAMPLER'S: (Signatures) [signature] [signature]

	DATE	TIME	SAMPLE I.D. NUMBER: Matrix	Location	Boring	Depth	Sample Type		NO. OF CONTAINERS	CONTAINER DESCRIPTION/ ANALYSES REQUESTED: Total Lead 4oz. poly jar Cool to 4°C	TCLP - Lead 4oz. poly jar Cool to 4°C	Geotechnical glass or poly jar	REMARKS
284	4/22	1449	S	SI2228	2	00A	00L	✓	1	✓			
285	1452	~~1500~~	S	SI2228	2	00B	00L	✓	1	✓			
286		1454	S	SI2228	2	00C	00L	✓	1	✓			
287		1506	S	SI2230	1	00A	00L	✓	1	✓			
288		1508	S	SI2230	1	00B	00L	✓	1	✓			
289		1510	S	SI2230	1	00C	00L	✓	1	✓			
290		1513	S	SI2230	2	00A	00L	✓	1	✓			
291		1515	S	SI2230	2	00B	00L	✓	1	✓			
292		1517	S	SI2230	2	00C	00L	✓	1	✓			
			S										
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RELINQUISHED BY: (Signature)	DATE / TIME	RECEIVED BY: (Signature)	DATE / TIME
[signature]	4/22/92 1530	[signature]	4/22/92 153
RELINQUISHED BY: (Signature)	DATE / TIME	RECEIVED AT LAB BY: (Signature)	DATE / TIME
[signature]	4/22/92 1740	[signature]	4/22/92 1740
METHOD OF SHIPMENT:		AIRBILL NO. (If Applicable)	

WWCS - 244-272

COOLER/SAMPLE RECEIPT FORM

Rev.01 10/7/91

ESE Cooler # 171
Client Cooler #
No Cooler

Project: Woodward Clyde Date/Time Received: 4-22-92 1740

USE OTHER SIDE OF THIS FORM TO NOTE FURTHER DETAILS CONCERNING CHECK-IN PROBLEMS AND TO SPECIFY AND DESCRIBE ANY ACTION(S) REGARDING THE RESOLUTION(S) OF PROBLEMS. IF SHIPMENT WAS ACCEPTED AND IF REQUESTED, NOTE ON BACK THE ADDRESS WHERE THE EMPTY COOLER WAS RETURNED AND LIKEWISE IF THE SHIPMENT WAS REJECTED.

IF INFORMATION IS MISSING OR THERE ARE PROBLEMS NOTIFY LABORATORY PROJECT MANAGER SO THAT HE CAN NOTIFY THE PROJECT MANAGER IMMEDIATELY.

A. PRELIMINARY EXAMINATION PHASE: Date/Time cooler/sample was opened and checked: 4-24-92 0900

by (print) James Cash (sign) James Cash

1. List courier delivering samples . Client . . . . . YES NO
2. Did cooler come with a shipping slip (air bill, etc.)? . . . . . YES NO
   If YES, attach and enter carrier and air bill number here:
3. Were custody seals on outside of cooler? . . . . . YES NO
   If YES, how many and where: 2 ON FRONT & BACK
   If YES, enter the following: seal date: 4-22-92 , seal name: M Wallace
4. Were custody seals unbroken and intact at the date and time of arrival? . . . . . YES NO
5. Was chain-of-custody provided? . . . . . YES NO
6. Were custody papers sealed in a Ziploc™ bag and taped inside to the lid? . . . . . YES NO
7. Were entries on custody papers completed? YES NO . If no, give details on back
8. Turnaround time included? . . . . . YES NO
9. Did you sign custody papers in the appropriate place? . . . . . YES NO
10. Was project identifiable from custody papers? If YES, enter project name at the top of this form. . YES NO

B. SAMPLE CHECK-IN PHASE: Date samples were checked-in: 4-24-92 by (all those involved must sign below):
(print) James Cash (sign) James Cash

11. Describe packing: Blue Ice + samples stacked
*12. If required, was enough ice used? (temperature maintained correctly)? . . . . . YES NO
13. Were all bottles sealed in separate plastic bags? . . . . . YES NO
*14. Did all bottles arrive unbroken and in good condition? . . . . . YES NO
15. Were all bottle labels complete (ID, date, time, signature, preservative, etc.)? . . . . . YES NO
16. Did all bottle labels agree with custody papers? If NO, indicate discrepancies on back. . . . . YES NO
17. Were correct containers used for the tests indicated? . . . . . YES NO
18. Were correct preservatives used when required? NA . . . . . YES NO
19. pH of samples maintained correctly as required? If NO, list by ID# NA . YES NO
20. Was a sufficient amount of sample sent for tests indicated? . . . . . YES NO
21. Bubbles present in VOA vials? If YES, list by ID#: NA . YES NO
22. Was lab. project manager called and status discussed? If YES, give details on the back of this form. YES NO
23. Who was called? By whom? on (date)
24. Second Party Review:

* Sample rejection criteria

U:\WP\CHEMCOM\CRF.01

WWC5 293

CHAIN OF CUSTODY RECORD

WOODWARD–CLYDE CONSULTANTS
2318 MILLPARK DR.
MARYLAND HEIGHTS, MISSOURI 63043
314–429–0100

SHEET 1 of 4

PROJECT NO.: 89MC114V

PROJECT NAME: NL/TARACORP SUPERFUND SITE PREDESIGN FIELD INVESTIGATION

SAMPLER'S: (Signatures)

	DATE	TIME	SAMPLE I.D. NUMBER (Matrix / Location / Boring / Depth / Sample Type)	NO. OF CONTAINERS	Total Lead 4oz. poly jar Cool to 4°C	TCLP – Lead 4oz. poly jar Cool to 4°C	Geotechnical glass or poly jar	REMARKS
	~~4/23~~	~~1520~~	~~S GB21~~					
293	4/23	1508	S AD2124 1 00A00L	1	✓			
294		1510	S AD2124 1 00B00L	1	✓			
295		1512	S AD2124 1 00C00L	1	✓			
296		1516	S AD2124 2 00A00L	1	✓			
297		1518	S AD2124 2 00B00L	1	✓			
298		1520	S AD2124 2 00C00L	1	✓			

4/23/92

RELINQUISHED BY: (Signature)	DATE / TIME	RECEIVED BY: (Signature)	DATE / TIME
	4/23/92 1600		4/23 1640
RELINQUISHED BY: (Signature)	DATE / TIME	RECEIVED AT LAB BY: (Signature)	DATE / TIME
	4/23 1730		4/23 17:30
METHOD OF SHIPMENT:		AIRBILL NO: (If Applicable)	

CHAIN OF CUSTODY RECORD

WOODWARD-CLYDE CONSULTANTS
2318 MILLPARK DR.
MARYLAND HEIGHTS, MISSOURI 63043
314-429-0100

SHEET 2 of 4

PROJECT NO.: 89MC114V

PROJECT NAME: NL/TARACORP SUPERFUND SITE PREDESIGN FIELD INVESTIGATION

SAMPLER'S: (Signatures) [illegible]

	DATE	TIME	SAMPLE I.D. NUMBER (Matrix / Location / Boring / Depth / Sample Type)	NO. OF CONTAINERS	Total Lead 4oz. poly jar Cool to 4°C	TCLP - Lead 4oz. poly jar Cool to 4°C	Geotechnical glass or poly jar	REMARKS
299	4/23	1046	S GR2246 2 00A00L	1	✓			
300		1048	S GR2246 2 00B00L	1	✓			
301		1050	S GR2246 2 00C00L	1	✓			
302		1120	S GR1714 2 00A00L	1	✓			
303		1122	S GR1714 2 00B00L	1	✓			
304		1124	S GR1714 2 00C00L	1	✓			
305		1346	S GR1401 1 00A00L	1	✓			
306		1348	S GR1401 1 00B00L	1	✓			
307		1350	S GR1401 1 00C00L	1	✓			
308		1353	S GR1401 2 00A00L	1	✓			
309		1355	S GR1401 2 00B00L	1	✓			
310		1357	S GR1401 2 00C00L	1	✓			
311		1417	S GR1415 1 00A00L	1	✓			
312		1419	S GR1415 1 00B00L	1	✓			
313		1421	S GR1415 1 00C00L	1	✓			
314		1423	S GR1415 2 00A00L	1	✓			
315		1427	S GR1415 2 00B00L	1	✓			
316		1429	S GR1415 2 00C00L	1	✓			
		~~1508~~	~~S GR2124 1 00A00L~~	1	✓			
		~~1510~~	~~S GR2124 1 00B00L~~	1	✓			
		~~1512~~	~~S GR2124 1 00C00L~~	1	✓			
		~~1514~~	~~S GR2124 2 00A00L~~	1	✓			
		~~1516~~	~~S GR2124 2 00B00L~~	1	✓			

RELINQUISHED BY: (Signature)	DATE / TIME	RECEIVED BY: (Signature)	DATE / TIME
[illegible]	4/23/92 1620	[illegible]	4/23 1640
RELINQUISHED BY: (Signature)	DATE / TIME	RECEIVED AT LAB BY: (Signature)	DATE / TIME
[illegible]	4/23 1730	[illegible]	4/23 17:30
METHOD OF SHIPMENT:		AIRBILL NO: (If Applicable)	

CHAIN OF CUSTODY RECORD

WOODWARD-CLYDE CONSULTANTS
2318 MILLPARK DR.
MARYLAND HEIGHTS, MISSOURI 63043
314-429-0100

PROJECT NO.: 89MC114V

PROJECT NAME: NL/TARACORP SUPERFUND SITE PREDESIGN FIELD INVESTIGATION

SAMPLER'S: (Signatures)

	DATE	TIME	SAMPLE I.D. NUMBER: Matrix	Location	Boring	Depth	Sample Type	NO. OF CONTAINERS	Total Lead 4oz. poly jar Cool to 4°C	TCLP - Lead 4oz. poly jar Cool to 4°C	Geotechnical glass or poly jar	REMARKS
317	4/23	907	S	GB2224	2	00A	00L	1	✓			
318		909	S	GB2224	2	00C	00L	1	✓			
319		915	S	GB2220	1	00A	00L	1	✓			
320		917	S	GB2220	1	00B	00L	1	✓			
321		919	S	GB2220	1	00C	00L	1	✓			
322		927	S	GB2220	2	00A	00L	1	✓			
323		929	S	GB2220	2	00B	00L	1	✓			
324		931	S	GB2220	2	00C	00L	1	✓			
325		944	S	GB2216	1	00A	00L	1	✓			
326		946	S	GB2216	1	00B	00L	1	✓			
327		948	S	GB2216	1	00C	00L	1	✓			
328		950	S	GB2216	2	00A	00L	1	✓			
329		952	S	GB2216	2	00B	00L	1	✓			
330		954	S	GB2216	2	00C	00L	1	✓			
331		1015	S	GB2247	1	00A	00L	1	✓			
332		1017	S	GB2247	1	00B	00L	1	✓			
333		1019	S	GB2247	1	00C	00L	1	✓			
334		1025	S	GB2247	2	00A	00L	1	✓			
335		1027	S	GB2247	2	00B	00L	1	✓			
336		1029	S	GB2247	2	00C	00L	1	✓			
337		1040	S	GB2246	1	00A	00L	1	✓			
338		1042	S	GB2246	1	00B	00L	1	✓			
339		1044	S	GB2246	1	00C	00L	1	✓			

RELINQUISHED BY: (Signature)	DATE / TIME 4/23/92 1630	RECEIVED BY: (Signature)	DATE / TIME 4/23 1640
RELINQUISHED BY: (Signature)	DATE / TIME 4/23 1730	RECEIVED AT LAB BY: (Signature)	DATE / TIME 4/23 17:30
METHOD OF SHIPMENT:		AIRBILL NO: (If Applicable)	

CHAIN OF CUSTODY RECORD

WOODWARD-CLYDE CONSULTANTS
2318 MILLPARK DR.
MARYLAND HEIGHTS, MISSOURI 63043
314-429-0100

SHEET 4 of 4

PROJECT NO.: 89MC114V

PROJECT NAME: NL/TARACORP SUPERFUND SITE PREDESIGN FIELD INVESTIGATION

SAMPLER'S: (Signatures)

	DATE	TIME	SAMPLE I.D. NUMBER (Matrix / Location / Boring / Depth / Sample Type)	NO. OF CONTAINERS	Total Lead 4oz. poly jar Cool to 4°C	TCLP - Lead 4oz. poly jar Cool to 4°C	Geotechnical glass or poly jar	REMARKS
340	4/23	800	S GR2204 1 00A00L	1	✓			
341		803	S GR2204 1 00B00L	1	✓			
342		805	S GR2204 1 00C00L	1	✓			
343		810	S GR2204 2 00A00L	1	✓			
344		812	S GR2204 2 00B00L	1	✓			
345		814	S GR2204 2 00C00L	1	✓			
346		800	S GR2204 1 00A0LD	1	✓			
347		803	S GR2204 1 00B0LD	1	✓			
348		805	S GR2204 1 00C0LD	1	✓			
349		830	S GR2206 1 00A00L	1	✓			
350		832	S GR2206 1 00B00L	1	✓			
351		834	S GR2206 1 00C00L	1	✓			
352		837	S GR2206 2 00A00L	1	✓			
353		839	S GR2206 2 00B00L	1	✓			
354		841	S GR2206 2 00C00L	1	✓			
			~~S GR2216 1 00A00L~~	1	✓			
			~~S GR2216 1 00B00L~~	1	✓			
			~~S GR2216 1 00C00L~~	1	✓			
			~~S GR2216 - ------~~	1	✓			
355		855	S GR2224 1 00A00L	1	✓			
356		857	S GR2224 1 00B00L	1	✓			
357		859	S GR2224 1 00C00L	1	✓			
358		905	S GR2224 2 00A00L	1	✓			

RELINQUISHED BY: (Signature)	DATE / TIME	RECEIVED BY: (Signature)	DATE / TIME
	4/23/92 1635		4/23 1640
RELINQUISHED BY: (Signature)	DATE / TIME	RECEIVED AT LAB BY: (Signature)	DATE / TIME
	4/23 1730	John Gonzalez	4/23 17:2
METHOD OF SHIPMENT:		AIRBILL NO: (If Applicable)	

WWCS 293-350

COOLER/SAMPLE RECEIPT FORM

Rev.01 10/7/91

ESE Cooler # 172
Client Cooler # _____
No Cooler _____

Project: Woodward Clyde Date/Time Received: 4-23-92 17:30

USE OTHER SIDE OF THIS FORM TO NOTE FURTHER DETAILS CONCERNING CHECK-IN PROBLEMS AND TO SPECIFY AND DESCRIBE ANY ACTION(S) REGARDING THE RESOLUTION(S) OF PROBLEMS. IF SHIPMENT WAS ACCEPTED AND IF REQUESTED, NOTE ON BACK THE ADDRESS WHERE THE EMPTY COOLER WAS RETURNED AND LIKEWISE IF THE SHIPMENT WAS REJECTED.

IF INFORMATION IS MISSING OR THERE ARE PROBLEMS NOTIFY LABORATORY PROJECT MANAGER SO THAT HE CAN NOTIFY THE PROJECT MANAGER IMMEDIATELY.

A. PRELIMINARY EXAMINATION PHASE: Date/Time cooler/sample was opened and checked: 4-27-92 10:30

by (print) James Cash (sign) James Cash

1. List courier delivering samples . Client . . . . . YES NO
2. Did cooler come with a shipping slip (air bill, etc.)? . . . . . YES (NO)
   If YES, attach and enter carrier and air bill number here: _____
3. Were custody seals on outside of cooler? . . . . . (YES) NO
   If YES, how many and where: 2 1 on Front & Back
   If YES, enter the following: seal date: 4-23-92, seal name: Capt Reed
4. Were custody seals unbroken and intact at the date and time of arrival? . . . . . (YES) NO
5. Was chain-of-custody provided? . . . . . (YES) NO
6. Were custody papers sealed in a Ziploc™ bag and taped inside to the lid? . . . . . (YES) NO
7. Were entries on custody papers completed? (YES) NO . If no, give details on back
8. Turnaround time included? . . . . . YES (NO)
9. Did you sign custody papers in the appropriate place? . . . . . (YES) NO
10. Was project identifiable from custody papers? If YES, enter project name at the top of this form. (YES) NO

B. SAMPLE CHECK-IN PHASE: Date samples were checked-in: 4-27-92 by (all those involved must sign below):
(print) James Cash (sign) James Cash

11. Describe packing: packed with Blue Ice & stacked
*12. If required, was enough ice used? (temperature maintained correctly)? . . . . . (YES) NO
13. Were all bottles sealed in separate plastic bags? . . . . . YES (NO)
*14. Did all bottles arrive unbroken and in good condition? . . . . . (YES) NO
15. Were all bottle labels complete (ID, date, time, signature, preservative, etc.)? . . . . . (YES) NO
16. Did all bottle labels agree with custody papers? If NO, indicate discrepancies on back. . . . . (YES) NO
17. Were correct containers used for the tests indicated? . . . . . (YES) NO
*18. Were correct preservatives used when required? . . . N.A. . . . . YES NO
*19. pH of samples maintained correctly as required? If NO, list by ID# NA . YES NO
20. Was a sufficient amount of sample sent for tests indicated? . . . . . (YES) NO
*21. Bubbles present in VOA vials? If YES, list by ID#: _____ . YES (NO)
22. Was lab. project manager called and status discussed? If YES, give details on the back of this form. YES (NO)
23. Who was called? _____ By whom? _____ on (date) _____
24. Second Party Review: _____

* Sample rejection criteria

W:\WP\CHEMCOM\CRF.01

WWE5
359-424

CHAIN OF CUSTODY RECORD

WOODWARD-CLYDE CONSULTANTS
2318 MILLPARK DR.
MARYLAND HEIGHTS, MISSOURI 63043
314-429-0100

SHEET 1 of 3

PROJECT NO.: 89MC114V

PROJECT NAME: NL/TARACORP SUPERFUND SITE PREDESIGN FIELD INVESTIGATION

SAMPLER'S: (Signatures) [signature] [signature]

	DATE	TIME	SAMPLE I.D. NUMBER: Matrix	Location	Boring	Depth	Sample Type		NO. OF CONTAINERS	CONTAINER DESCRIPTION/ ANALYSES REQUESTED: Total Lead 4oz. poly jar Cool to 4°C	TCLP - Lead 4oz. poly jar Cool to 4°C	Geotechnical glass or poly jar	REMARKS
59	4/24	8:58	S	CL2036	1	00A	00L	✓	1 ✓	✓			
360		9:00	S	CL2036	1	00B	00L	✓	1 ✓	✓			
361		9:02	S	CL2036	1	00C	00L	✓	1 ✓	✓			
362		9:05	S	CL2036	2	00A	00L	✓	1 ✓	✓			
363		9:07	S	CL2036	2	00B	00L	✓	1	✓			
64		9:09	S	CL2036	2	00C	00L	✓	1	✓			
365		9:18	S	CL2020	1	00A	00L	✓	1	✓			
366		9:20	S	CL2020	1	00B	00L	✓	1	✓			
367		9:22	S	CL2020	1	00C	00L	✓	1	✓			
68		9:25	S	CL2020	2	00A	00L	✓	1	✓			
369		9:27	S	CL2020	2	00B	00L	✓	1	✓			
70		9:29	S	CL2020	2	00C	00L	✓	1	✓			
71		10:02	S	CL1940	1	00A	00L	✓	1	✓			
72		10:04	S	CL1940	1	00B	00L	✓	1	✓			
73		10:06	S	CL1940	1	00C	00L	✓	1	✓			
374		10:09	S	CL1940	2	00A	00L	✓	1	✓			
75		10:11	S	CL1940	2	00B	00L	✓	1	✓			
376		10:13	S	CL1940	2	00C	00L	✓	1	✓			
77		10:35	S	CL2140	1	00A	00L	✓	1	✓			
378		10:37	S	CL2140	1	00B	00L	✓	1	✓			
79		10:39	S	CL2140	1	00C	00L	✓	1	✓			
380		10:42	S	CL2140	2	00A	00L	✓	1	✓			
81		10:44	S	CL2140	2	00B	00L	✓	1	✓			

RELINQUISHED BY: (Signature)	DATE / TIME	RECEIVED BY: (Signature)	DATE / TIME
[signature]	4/24/92 1610	[signature]	4/24/92 1725
RELINQUISHED BY: (Signature)	DATE / TIME	RECEIVED AT LAB BY: (Signature)	DATE / TIME
[signature]	4/24/92 1610	[signature]	4/24 17:2[illegible]
METHOD OF SHIPMENT:		AIRBILL NO: (If Applicable)	

CHAIN OF CUSTODY RECORD

WOODWARD-CLYDE CONSULTANTS
2318 MILLPARK DR.
MARYLAND HEIGHTS, MISSOURI 63043
314-429-0100

SHEET 2 of 3

PROJECT NO.: 89MC114V

PROJECT NAME: NL/TARACORP SUPERFUND SITE PREDESIGN FIELD INVESTIGATION

SAMPLER'S: (Signatures) [signature]

	DATE	TIME	SAMPLE I.D. NUMBER: Matrix	Location	Boring	Depth	Sample Type		NO. OF CONTAINERS	CONTAINER DESCRIPTION/ ANALYSES REQUESTED: Total Lead 4oz. poly jar Cool to 4°C	TCLP - Lead 4oz. poly jar Cool to 4°C	Geotechnical glass or poly jar	REMARKS
82	4/24/92	10:46	S	CL2140	2	00C	00L	✓	1	X			
83		11:05	S	DE2163	1	00A	00L	✓					
384		11:07	S	DE2163	1	00B	00L	✓					
5		11:09	S	DE2163	1	00C	00L	✓					
386		11:12	S	DE2163	2	00A	00L	✓					
7		11:14	S	DE2163	2	00B	00L	✓					
388		11:16	S	DE2163	2	00C	00L	✓					
9		11:50	S	GR2249	1	00A	00L	✓					
390		11:52	S	GR2249	1	00B	00L	✓					
91		11:54	S	GR2249	1	00C	00L	✓					
92		11:43	S	GR2249	2	00A	00L	✓					
3		11:45	S	GR2249	2	00B	00L	✓					
14		11:47	S	GR2249	2	00C	00L	✓					
95		12:05	S	GR2258	1	00A	00L	✓					
6		12:07	S	GR2258	1	00B	00L	✓					
97		12:09	S	GR2258	1	00C	00L	✓					
8		12:12	S	GR2258	2	00A	00L	✓					
99		12:14	S	GR2258	2	00B	00L	✓					
0		12:16	S	GR2258	2	00C	00L	✓					
01		13:35	S	LE2021	1	00A	00L	✓					
2		13:37	S	LE2021	1	00B	00L	✓					
3		13:39	S	LE2021	1	00C	00L	✓					
4		13:42	S	LE2021	2	00A	00L	✓					

RELINQUISHED BY: (Signature)	DATE / TIME	RECEIVED BY: (Signature)	DATE / TIME
[signature]	4/24/92 1610	[signature]	4/24/92 1725
RELINQUISHED BY: (Signature)	DATE / TIME	RECEIVED AT LAB BY: (Signature)	DATE / TIME
[signature]	4/24/92 1610	[signature]	4/24 17:25
METHOD OF SHIPMENT:		AIRBILL NO: (If Applicable)	

CHAIN OF CUSTODY RECORD

WOODWARD-CLYDE CONSULTANTS
2318 MILLPARK DR.
MARYLAND HEIGHTS, MISSOURI 63043
314-429-0100

SHEET 3 of 3

PROJECT NO.: 89MC114V

PROJECT NAME: NL/TARACORP SUPERFUND SITE PREDESIGN FIELD INVESTIGATION

SAMPLER'S: (Signatures)

	DATE	TIME	Matrix	Location	Boring	Depth	Sample Type	NO. OF CONTAINERS	Total Lead 4oz. poly jar Cool to 4°C	TCLP - Lead 4oz. poly jar Cool to 4°C	Geotechnical glass or poly jar	REMARKS
05	4/24/92	13:44	S	LE2021	2	00B	00L	1	X			
T06		13:46	S	LE2021	2	00C	00L					
07		1408	S	I02247	1	00A	00L					
08		14:10	S	I02247	1	00B	00L					
09		14:12	S	I02247	1	00C	00L					
10		14:15	S	I02247	2	00A	00L					
11		14:17	S	I02247	2	00B	00L					
12		14:19	S	I02247	2	00C	00L					
13		14:32	S	I02251	1	00A	00L					
14		14:34	S	I02251	1	00B	00L					
15		14:36	S	I02251	1	00C	00L					
16		14:40	S	I02251	2	00A	00L					
17		14:42	S	I02251	2	00B	00L					
18		14:44	S	I02251	2	00C	00L					
19		15:10	S	I02209	1	00A	00L					
20		15:12	S	I02209	1	00B	00L					
21		15:14	S	I02209	1	00C	00L					
22		15:17	S	I02209	2	00A	00L					
23		15:19	S	I02209	2	00B	00L					
24		15:21	S	I02209	2	00C	00L					
			S									
			S									
			S									

RELINQUISHED BY: (Signature)	DATE / TIME	RECEIVED BY: (Signature)	DATE / TIME
Wendy S Rabbitt	4/24/92 1610	[illegible]	4/24/92 1725
RELINQUISHED BY: (Signature)	DATE / TIME	RECEIVED AT LAB BY: (Signature)	DATE / TIME
[illegible]	4/24/92 1610	[illegible]	4/24 17:25
METHOD OF SHIPMENT:		AIRBILL NO: (If Applicable)	

WWCS - 537 - 727

COOLER/SAMPLE RECEIPT FORM

Rev.01 10/7/91

ESE Cooler # 197
Client Cooler # _____
No Cooler _____

Project: Woodward Clyde Date/Time Received: 4-24-92 17:25

USE OTHER SIDE OF THIS FORM TO NOTE FURTHER DETAILS CONCERNING CHECK-IN PROBLEMS AND TO SPECIFY AND DESCRIBE ANY ACTION(S) REGARDING THE RESOLUTION(S) OF PROBLEMS. IF SHIPMENT WAS ACCEPTED AND IF REQUESTED, NOTE ON BACK THE ADDRESS WHERE THE EMPTY COOLER WAS RETURNED AND LIKEWISE IF THE SHIPMENT WAS REJECTED.

IF INFORMATION IS MISSING OR THERE ARE PROBLEMS NOTIFY LABORATORY PROJECT MANAGER SO THAT HE CAN NOTIFY THE PROJECT MANAGER IMMEDIATELY.

A. PRELIMINARY EXAMINATION PHASE: Date/Time cooler/sample was opened and checked: 4-27-92 14:30

by (print) James Cash (sign) James Cash

1. List courier delivering samples . Client . . . . . YES NO
2. Did cooler come with a shipping slip (air bill, etc.)? . . . . . YES (NO)
   If YES, attach and enter carrier and air bill number here: _____
3. Were custody seals on outside of cooler? . . . . . (YES) NO
   If YES, how many and where: 2 on Front + Back
   If YES, enter the following: seal date: 4-23-92, seal name: Mike Wallace
4. Were custody seals unbroken and intact at the date and time of arrival? . . . . . (YES) NO
5. Was chain-of-custody provided? . . . . . YES NO
6. Were custody papers sealed in a Ziploc™ bag and taped inside to the lid? . . . . . (YES) NO
7. Were entries on custody papers completed? (YES) NO . If no, give details on back
8. Turnaround time included? . . . . . YES (NO)
9. Did you sign custody papers in the appropriate place? . . . . . (YES) NO
10. Was project identifiable from custody papers? If YES, enter project name at the top of this form. . (YES) NO

B. SAMPLE CHECK-IN PHASE: Date samples were checked-in: 4-27-92 by (all those involved must sign below):
(print) James Cash (sign) James Cash

11. Describe packing: Packed in Blue Ice & Samples Stacked
*12. If required, was enough ice used? (temperature maintained correctly)? . . . . . (YES) NO
13. Were all bottles sealed in separate plastic bags? . . . . . YES (NO)
*14. Did all bottles arrive unbroken and in good condition? . . . . . (YES) NO
15. Were all bottle labels complete (ID, date, time, signature, preservative, etc.)? . . . . . (YES) NO
16. Did all bottle labels agree with custody papers? If NO, indicate discrepancies on back. . . . . (YES) NO
17. Were correct containers used for the tests indicated? . . . . . (YES) NO
*18. Were correct preservatives used when required? . . . NA . . . . . YES NO
*19. pH of samples maintained correctly as required? If NO, list by ID# NA . YES NO
20. Was a sufficient amount of sample sent for tests indicated? . . . . . (YES) NO
*21. Bubbles present in VOA vials? If YES, list by ID#: NA . YES NO
22. Was lab. project manager called and status discussed? If YES, give details on the back of this form. YES (NO)
23. Who was called? _____ By whom? _____ on (date) _____
24. Second Party Review: _____

* Sample rejection criteria

W:\WP\CHEMCOM\CRF.01

WWC 5
425-
475

WWCS 400

CHAIN OF CUSTODY RECORD

WOODWARD-CLYDE CONSULTANTS
2318 MILLPARK DR.
MARYLAND HEIGHTS, MISSOURI 63043
314-429-0100

SHEET 1 of 3

PROJECT NO.:	PROJECT NAME:
89MC114V	NL/TARACORP SUPERFUND SITE PREDESIGN FIELD INVESTIGATION

SAMPLER'S: (Signatures) [signature]

	DATE	TIME	SAMPLE I.D. NUMBER: Matrix	Location	Boring	Depth	Sample Type		NO. OF CONTAINERS	CONTAINER DESCRIPTION/ ANALYSES REQUESTED: Total Lead 4oz. poly jar Cool to 4°C	TCLP - Lead 4oz. poly jar Cool to 4°C	Geotechnical glass or poly jar	REMARKS
425	4/27	1054	S	BE2024	1	00C	00L	✓	1	✓			
426		1056	S	BE2024	2	00A	00L	✓	1	✓			
427		1058	S	BE2024	2	00B	00L	✓	1	✓			
428		1100	S	BE2024	2	00C	00L	✓	1	✓			
429		1128	S	DE1641	1	00A	00L	✓	1	✓			
430		1130	S	DE1641	1	00B	00L	✓	1	✓			
431		1132	S	DE1641	1	00C	00L	✓	1	✓			
432		1134	S	DE1641	2	00A	00L	✓	1	✓			
433		1136	S	DE1641	2	00B	00L	✓	1	✓			
434		1138	S	DE1641	2	00C	00L	✓	1	✓			
435		1325	S	CL1634	1	00A	00L	✓	1	✓			
436		1327	S	CL1634	1	00B	00L	✓	1	✓			
437		1329	S	CL1634	1	00C	00L	✓	1	✓			
438		1332	S	CL1634	2	00A	00L	✓	1	✓			
439		1334	S	CL1634	2	00B	00L	✓	1	✓			
440		1336	S	CL1634	2	00C	00L	✓	1	✓			
441		1344	S	CL1640	1	00A	00L	✓	1	✓			
442		1346	S	CL1640	1	00B	00L	✓	1	✓			
443		1348	S	CL1640	1	00C	00L	✓	1	✓			
444		1350	S	CL1640	2	00A	00L	✓	1	✓			
445		1352	S	CL1640	2	00B	00L	✓	1	✓			
446		1354	S	CL1640	2	00C	00L	✓	1	✓			
447		1415	S	ST1408	1	00A	00L	✓	1	✓			

RELINQUISHED BY: (Signature)	DATE / TIME	RECEIVED BY: (Signature)	DATE / TIME
[signature]	4/27/92 1500	[signature]	4/27 1500
RELINQUISHED BY: (Signature)	DATE / TIME	RECEIVED AT LAB BY: (Signature)	DATE / TIME
[signature]	4/27 1600	Carol Cash	4/27 1600
METHOD OF SHIPMENT:		AIRBILL NO: (If Applicable)	

CHAIN OF CUSTODY RECORD

WOODWARD-CLYDE CONSULTANTS
2318 MILLPARK DR.
MARYLAND HEIGHTS, MISSOURI 63043
314-429-0100

PROJECT NO.: 89MC114V

PROJECT NAME: NL/TARACORP SUPERFUND SITE PREDESIGN FIELD INVESTIGATION

SAMPLER'S: (Signatures)

	DATE	TIME	SAMPLE I.D. NUMBER: Matrix	Location	Boring	Depth	Sample Type	NO. OF CONTAINERS	Total Lead 4oz. Poly jar Cool to 4°C	TCLP - Lead 4oz. Poly jar Cool to 4°C	Geotechnical glass or poly jar	REMARKS
18	4/27	827	S	NE0938	1	00A	00L	1	✓			
449		829	S	NE0938	1	00B	00L	1	✓			
50		831	S	NE0938	1	00C	00L	1	✓			
451		851	S	NE0809	1	00A	00L	1	✓			
452		853	S	NE0809	1	00B	00L	1	✓			
53		855	S	NE0809	1	00C	00L	1	✓			
454		857	S	NE0809	2	00A	00L	1	✓			
55		859	S	NE0809	2	00B	00L	1	✓			
456		902	S	NE0809	2	00C	00L	1	✓			
57		949	S	IS1215	1	00A	00L	1	✓			
458		952	S	IS1215	1	00B	00L	1	✓			
59		954	S	IS1215	1	00C	00L	1	✓			
460		956	S	IS1215	2	00A	00L	1	✓			
61		958	S	IS1215	2	00B	00L	1	✓			
62		1000	S	IS1215	2	00C	00L	1	✓			
463		1020	S	SI2041	1	00A	00L	1	✓			
64		1022	S	SI2041	1	00B	00L	1	✓			
465		1024	S	SI2041	1	00C	00L	1	✓			
66		1026	S	SI2041	2	00A	00L	1	✓			
467		1028	S	SI2041	2	00B	00L	1	✓			
68		1030	S	SI2041	2	00C	00L	1	✓			
469		1050	S	BE2024	1	00A	00L	1	✓			
70		1052	S	BE2024	1	00B	00L	1	✓			

RELINQUISHED BY: (Signature)	DATE / TIME 4/27/92 1500	RECEIVED BY: (Signature)	DATE / TIME 4/27 1500
RELINQUISHED BY: (Signature)	DATE / TIME 4/27 1600	RECEIVED AT LAB BY: (Signature)	DATE / TIME 4/27 1600
METHOD OF SHIPMENT:		AIRBILL NO: (If Applicable)	

CHAIN OF CUSTODY RECORD

WOODWARD-CLYDE CONSULTANTS
2318 MILLPARK DR.
MARYLAND HEIGHTS, MISSOURI 63043
314-429-0100

SHEET 3 of 3

PROJECT NO.: 89MC114V

PROJECT NAME: NL/TARACORP SUPERFUND SITE PREDESIGN FIELD INVESTIGATION

SAMPLER'S: (Signatures)

	DATE	TIME	Matrix	Location	Boring	Depth	Sample Type	NO. OF CONTAINERS	Total Lead 4oz. poly jar Cool to 4°C	TCLP - Lead 4oz. poly jar Cool to 4°C	Geotechnical glass or poly jar	REMARKS
171	4/27	1417	S	SI1428	1	00A00L		1	✓			
172		1419	S	SI1428	1	00B00L		1	✓			
173	4/27	1422	S	SI1428	2	00A00L		1	✓			
174		1424	S	SI1428	2	00B00L		1	✓			
175		1426	S	SI1428	2	00C00L		1	✓			

4/27/92

RELINQUISHED BY: (Signature)	DATE / TIME	RECEIVED BY: (Signature)	DATE / TIME
	4/27/92 1500		4/27 1500
RELINQUISHED BY: (Signature)	DATE / TIME	RECEIVED AT LAB BY: (Signature)	DATE / TIME
	4/27 1600		4/27 1600
METHOD OF SHIPMENT:		AIRBILL NO: (If Applicable)	

WWC5-425-415

COOLER/SAMPLE RECEIPT FORM

Rev.01 10/7/91

ESE Cooler # 11
Client Cooler # _____
No Cooler _____

Project: Woodward clyde Date/Time Received: 4-27-92 1600

USE OTHER SIDE OF THIS FORM TO NOTE FURTHER DETAILS CONCERNING CHECK-IN PROBLEMS AND TO SPECIFY AND DESCRIBE ANY ACTION(S) REGARDING THE RESOLUTION(S) OF PROBLEMS. IF SHIPMENT WAS ACCEPTED AND IF REQUESTED, NOTE ON BACK THE ADDRESS WHERE THE EMPTY COOLER WAS RETURNED AND LIKEWISE IF THE SHIPMENT WAS REJECTED.

IF INFORMATION IS MISSING OR THERE ARE PROBLEMS NOTIFY LABORATORY PROJECT MANAGER SO THAT HE CAN NOTIFY THE PROJECT MANAGER IMMEDIATELY.

A. PRELIMINARY EXAMINATION PHASE: Date/Time cooler/sample was opened and checked: 4-28-92 10:00

by (print) James Cash (sign) James Cash

1. List courier delivering samples Client ..... YES NO
2. Did cooler come with a shipping slip (air bill, etc.)? ..... YES NO
   If YES, attach and enter carrier and air bill number here: _____
3. Were custody seals on outside of cooler? ..... YES NO
   If YES, how many and where: 2 on Front & Back
   If YES, enter the following: seal date: 4-27-92 seal name: Mike Wallace
4. Were custody seals unbroken and intact at the date and time of arrival? ..... YES NO
5. Was chain-of-custody provided? ..... YES NO
6. Were custody papers sealed in a Ziploc™ bag and taped inside to the lid? ..... YES NO
7. Were entries on custody papers completed? YES NO . If no, give details on back
8. Turnaround time included? ..... YES NO
9. Did you sign custody papers in the appropriate place? ..... YES NO
10. Was project identifiable from custody papers? If YES, enter project name at the top of this form. YES NO

B. SAMPLE CHECK-IN PHASE: Date samples were checked-in: 4-28-92 by (all those involved must sign below):
(print) James Cash (sign) James Cash

11. Describe packing: Packed in blue ice & stacked
*12. If required, was enough ice used? (temperature maintained correctly)? ..... YES NO
13. Were all bottles sealed in separate plastic bags? ..... YES NO
*14. Did all bottles arrive unbroken and in good condition? ..... YES NO
15. Were all bottle labels complete (ID, date, time, signature, preservative, etc.)? ..... YES NO
16. Did all bottle labels agree with custody papers? If NO, indicate discrepancies on back. ..... YES NO
17. Were correct containers used for the tests indicated? ..... YES NO
*18. Were correct preservatives used when required? NA ..... YES NO
*19. pH of samples maintained correctly as required? If NO, list by ID# NA . YES NO
20. Was a sufficient amount of sample sent for tests indicated? ..... YES NO
*21. Bubbles present in VOA vials? If YES, list by ID#: NA . YES NO
22. Was lab. project manager called and status discussed? If YES, give details on the back of this form. YES NO
23. Who was called? _____ By whom? _____ on (date) _____
24. Second Party Review: _____

* Sample rejection criteria

W:\WP\CHEMCOM\CRF.01

REPORT
OF
ANALYTICAL RESULTS

Project No.:
5912031 0100

Prepared For:
Woodward-Clyde Consultants
Maryland Heights, MO 63043

Submitted By:
St. Louis Chemistry Laboratory
Environmental Science &
Engineering, Inc.

August 17, 1992

Environmental
Science &
Engineering, Inc.

A CILCORP Company

Environmental
Science &
Engineering, Inc.

A CALCORP Company

August 17, 1992
ESE No. 5912031 0100

Ms. Cynthia Pavelka
Woodward-Clyde Consultants
2318 Millpark Dr.
Maryland Heights, MO 63043

RE: **Report of Analytical Chemistry Results,**
Woodward-Clyde Consultants - Report 7
NL/Taracorp Project

Dear Ms. Pavelka:

Enclosed is the complete report of results for nine hundred and fifty-seven (957) soil samples received in the ESE St. Louis Laboratory between May 7, and June 17, 1992. The samples were analyzed in accordance with the approved EPA methods as indicated in the report.

The QC results are composed of two parts, precision and accuracy. The % recovery is used to assess the accuracy of the analytical method. The % recovery limits for each of the control compounds are tabulated in the following report along with the actual % recovery for the spiked sample. The difference of the recoveries of the duplicate samples are calculated as replicate % difference which is used to measure the precision of the analytical method. Both % recovery limits and replicate % difference limits used in this analysis are set forth by the United States Environmental Protection Agency as the criteria of laboratory quality control for this type of analysis.

The QC results have been reviewed by the analysts and the Laboratory Manager. Explanations for QC results that did not fall within the QC criteria are provided in the summary.

We appreciate the opportunity to be of technical service to you. If there are any questions with regard to this report, please feel free to call.

Sincerely,

ENVIRONMENTAL SCIENCE & ENGINEERING, INC.

John F. Gemoules

John F. Gemoules
Laboratory Project Manager

JFG/pl/REPORT/WWC6.RP1

Enclosures

1105 Lilburn Park Road St. Louis, MO 63146-3535 Phone (314) 567-4900 Fax (314) 567-5313

COOLER/SAMPLE RECEIPT FORM

ESE Cooler # 165
Client Cooler # _____
No Cooler _____

Rev.01 10/7/91

WWC5 970 — WWC6 057

Project: Woodward Clyde Date/Time Received: 5-7-92 1850

USE OTHER SIDE OF THIS FORM TO NOTE FURTHER DETAILS CONCERNING CHECK-IN PROBLEMS AND TO SPECIFY AND DESCRIBE ANY ACTION(S) REGARDING THE RESOLUTION(S) OF PROBLEMS. IF SHIPMENT WAS ACCEPTED AND IF REQUESTED, NOTE ON BACK THE ADDRESS WHERE THE EMPTY COOLER WAS RETURNED AND LIKEWISE IF THE SHIPMENT WAS REJECTED.

IF INFORMATION IS MISSING OR THERE ARE PROBLEMS NOTIFY LABORATORY PROJECT MANAGER SO THAT HE CAN NOTIFY THE PROJECT MANAGER IMMEDIATELY.

A. PRELIMINARY EXAMINATION PHASE: Date/Time cooler/sample was opened and checked: 5-7-92 1850

by (print) Marcia Homan (sign) Marcia Homan

1. List courier delivering samples . . . Delivered by Woodward Clyde YES NO
2. Did cooler come with a shipping slip (air bill, etc.)? . . . . . YES (NO)
   If YES, attach and enter carrier and air bill number here: _____
3. Were custody seals on outside of cooler? . . . . . (YES) NO
   If YES, how many and where: 2 Front
   If YES, enter the following: seal date: 5-6-92 ; seal name: M-Wallace
4. Were custody seals unbroken and intact at the date and time of arrival? . . . . . (YES) NO
5. Was chain-of-custody provided? . . . . . (YES) NO
6. Were custody papers sealed in a Ziplock™ bag and taped inside to the lid? . . . . . (YES) NO
7. Were entries on custody papers completed? (YES) NO . If no, give details on back
8. Turnaround time included? . . . . . YES (NO)
9. Did you sign custody papers in the appropriate place? . . . . . (YES) NO
10. Was project identifiable from custody papers? If YES, enter project name at the top of this form. . (YES) NO

B. SAMPLE CHECK-IN PHASE: Date samples were checked-in: 5-11-92 by (all those involved must sign below):

(print) Marcia Homan (sign) Marcia Homan

11. Describe packing: none
12. If required, was enough ice used? (temperature maintained correctly)? . . . . . (YES) NO
13. Were all bottles sealed in separate plastic bags? . . . . . YES (NO)
14. Did all bottles arrive unbroken and in good condition? . . . . . (YES) NO
15. Were all bottle labels complete (ID, date, time, signature, preservative, etc.)? . . . . . (YES) NO
16. Did all bottle labels agree with custody papers? If NO, indicate discrepancies on back. . . . . (YES) NO
17. Were correct containers used for the tests indicated? . . . . . (YES) NO
18. Were correct preservatives used when required? . . . . . NA YES NO
19. pH of samples maintained correctly as required? If NO, list by ID# NA . YES NO
20. Was a sufficient amount of sample sent for tests indicated? . . . . . (YES) NO
21. Bubbles present in VOA vials? If YES, list by ID#: NA . YES NO
22. Was lab. project manager called and status discussed? If YES, give details on the back of this form. YES (NO)
23. Who was called? _____ By whom? _____ on (date) _____
4. Second Party Review: _____

* Sample rejection criteria

W:\WP\CHEMCOM\CRF.01

CHAIN OF CUSTODY RECORD

WOODWARD-CLYDE CONSULTANTS
2318 MILLPARK DR.
MARYLAND HEIGHTS, MISSOURI 63043
314-429-0100

SHEET 3 of 4

PROJECT NO.: 89MC114V

PROJECT NAME: NL/TARACORP SUPERFUND SITE PREDESIGN FIELD INVESTIGATION

SAMPLER'S: (Signatures) [illegible] M Wallace

	DATE	TIME	SAMPLE I.D. NUMBER (Matrix / Location / Boring / Depth / Sample Type)	NO. OF CONTAINERS	Total Lead 4oz. poly jar Cool to 4°C	TCLP - Lead 4oz. poly jar Cool to 4°C	Geotechnical glass or poly jar	REMARKS
	5/7/92	1143	S DE2261 1 00B OLD ✓	1	✓			
018		1145	S DE2261 1 00C OLD ✓	1				
19		1403	S DE2200 1 00A 00L ✓					
20		1405	S DE2200 1 00B 00L ✓					
21		1407	S DE2200 1 00C 00L ✓					
22		1410	S DE2200 2 00A 00L ✓					
023		1412	S DE2200 2 00B 00L ✓					
24		1414	S DE2200 2 00C 00L ✓					
025		1425	S DE2219 1 00A 00L ✓					
26		1427	S DE2219 1 00B 00L ✓					
027		1429	S DE2219 1 00C 00L ✓					
28		1425	S DE2219 1 00A OLD ✓					
29		1427	S DE2219 1 00B OLD ✓					
30		1429	S DE2219 1 00C OLD ✓					
31		1434	S DE2219 2 00A 00L ✓					
032		1436	S DE2219 2 00B 00L ✓					
33		1438	S DE2219 2 00C 00L ✓					
034		1507	S DV2505 1 00A 00L ✓					
35		1509	S DV2505 1 00B 00L ✓					
036		1511	S DV2505 1 00C 00L ✓					
37		1507	S DV2505 1 00A OLD ✓					
038		1509	S DV2505 1 00B OLD ✓					
39		1511	S DV2505 1 00C OLD ✓					

RELINQUISHED BY: (Signature)	DATE / TIME	RECEIVED BY: (Signature)	DATE / TIME
[illegible]	5/7/92 1700	[illegible]	5/7/92 1700
RELINQUISHED BY: (Signature)	DATE / TIME	RECEIVED AT LAB BY: (Signature)	DATE / TIME
[illegible]	5/7/92 1800	[illegible]	5/7/92 1850
METHOD OF SHIPMENT:		AIRBILL NO: (If Applicable)	

CHAIN OF CUSTODY RECORD

WOODWARD-CLYDE CONSULTANTS
2318 MILLPARK DR.
MARYLAND HEIGHTS, MISSOURI 63043
314-429-0100

SHEET 4 of 4

PROJECT NO.: 89MC114V

PROJECT NAME: NL/TARACORP SUPERFUND SITE PREDESIGN FIELD INVESTIGATION

SAMPLER'S: (Signatures) [signature] M Wallace

DATE	TIME	SAMPLE I.D. NUMBER: Matrix	Location	Boring	Depth	Sample Type		NO. OF CONTAINERS	CONTAINER DESCRIPTION/ ANALYSES REQUESTED: Total Lead 4oz. poly jar Cool to 4°C	TCLP - Lead 4oz. poly jar Cool to 4°C	Geotechnical glass or poly jar	REMARKS
5/7	1517	S	DV2505	2	00A	00L	✓	1	✓			
	1519	S	DV2505	2	00B	00L	✓					
	1521	S	DV2505	2	00C	00L	✓					
	1552	S	BR2029	1	00A	00L	✓					
	1554	S	BR2029	1	00B	00L	✓					
	1556	S	BR2029	1	00C	00L	✓					
	1558	S	BR2029	2	00A	00L	✓					
	1600	S	BR2029	2	00B	00L	✓					
	1602	S	BR2029	2	00C	00L	✓					
	1613	S	BR2011	1	00A	00L	✓					
	1615	S	BR2011	1	00B	00L	✓					
	1617	S	BR2011	1	00C	00L	✓					
	1619	S	BR2011	2	00A	00L	✓					
	1621	S	BR2011	2	00B	00L	✓					
	1623	S	BR2011	2	00C	00L	✓					
	1613	S	BR2011	1	00A	OLD	✓					
	1615	S	BR2011	1	00B	OLD	✓					
	1617	S	BR2011	1	00C	OLD	✓					
		S										
		S										
		S										
		S										
		S										

RELINQUISHED BY: (Signature)	DATE / TIME	RECEIVED BY: (Signature)	DATE / TIME
[signature]	5/7/92 1700	[signature]	5/7/92 ~~1850~~ 17 56
RELINQUISHED BY: (Signature)	DATE / TIME	RECEIVED AT LAB BY: (Signature)	DATE / TIME
[signature]	5/7/92 ~~1700~~ 25 1850	[signature]	5/7/92 1850
METHOD OF SHIPMENT:		AIRBILL NO: (If Applicable)	

CHAIN OF CUSTODY RECORD

WOODWARD-CLYDE CONSULTANTS
2318 MILLPARK DR.
MARYLAND HEIGHTS, MISSOURI 63043
314-429-0100

SHEET 1 of 4

WWC5 970-WNC6 057

PROJECT NO.:	PROJECT NAME:
89MC114V	NL/TARACORP SUPERFUND SITE PREDESIGN FIELD INVESTIGATION

SAMPLER'S: (Signatures) [signature] M Wallace

	DATE	TIME	SAMPLE I.D. NUMBER: Matrix	Location	Boring	Depth	Sample Type		NO. OF CONTAINERS	CONTAINER DESCRIPTION/ ANALYSES REQUESTED: Total Lead 4oz. poly jar Cool to 4°C	TCLP - Lead 4oz. poly jar Cool to 4°C	Geotechnical glass or poly jar	REMARKS
10	5/7	819	S	WI2610	1	00A	00L	✓	1	✓			
711		821	S	WI2610	1	00B	00L	✓					
2		823	S	WI2610	1	00C	00L	✓					
3		826	S	WI2610	2	00A	00L	✓					
974		828	S	WI2610	2	00B	00L	✓					
5		830	S	WI2610	2	00C	00L	✓					
976		819	S	WI2610	1	00A	0LD	✓					
7		821	S	WI2610	1	00B	0LD	✓					
978		823	S	WI2610	1	00C	0LD	✓					
9		916	S	MP1649	1	00A	00L	✓					
980		918	S	MP1649	1	00B	00L	✓					
31		920	S	MP1649	1	00C	00L	✓					
82		924	S	MP1649	2	00A	00L	✓					
83		926	S	MP1649	2	00B	00L	✓					
84		928	S	MP1649	2	00C	00L	✓					
985	985	938	S	MP1637	1	00A	00L	✓					
5	986	940	S	MP1637	1	00B	00L	✓					
988	987	942	S	MP1637	1	00C	00L	✓					
9	988	944	S	MP1637	2	00A	00L	✓					
990	989	946	S	MP1637	2	00B	00L	✓					
1	990	948	S	MP1637	2	00C	00L	✓					
992	991	1103	S	MP1627	1	00A	00L	✓					
3	992	1105	S	MP1627	1	00B	00L	✓					

RELINQUISHED BY: (Signature)	DATE / TIME	RECEIVED BY: (Signature)	DATE / TIME
[signature]	5/7/92 1700	[signature]	5/7/92 18[illegible]
RELINQUISHED BY: (Signature)	DATE / TIME	RECEIVED AT LAB BY: (Signature)	DATE / TIME
[signature]	5/7/92 1850	[signature]	5/7/92 18[illegible]
METHOD OF SHIPMENT:		AIRBILL NO: (If Applicable)	

CHAIN OF CUSTODY RECORD

WOODWARD-CLYDE CONSULTANTS
2318 MILLPARK DR.
MARYLAND HEIGHTS, MISSOURI 63043
314-429-0100

SHEET 2 of 4

PROJECT NO.: 89MC114V

PROJECT NAME: NL/TARACORP SUPERFUND SITE PREDESIGN FIELD INVESTIGATION

SAMPLER'S: (Signatures) [signature] M Wallace

DATE	TIME	SAMPLE I.D. NUMBER: Matrix	Location	Boring	Depth	Sample Type		NO. OF CONTAINERS	CONTAINER DESCRIPTION/ ANALYSES REQUESTED: Total Lead 4oz. poly jar Cool to 4°C	TCLP - Lead 4oz. poly jar Cool to 4°C	Geotechnical glass or poly jar	REMARKS
5/7	1107	S	MP1627	1	00C	00L	✓	1	✓			
994	1109	S	MP1627	2	00A	00L	✓					
995	1111	S	MP1627	2	00B	00L	✓					
996	1113	S	MP1627	2	00C	00L	✓					
997	1008	S	MP1611	1	00A	00L	✓					
998	1010	S	MP1611	1	00B	00L	✓					
999	1012	S	MP1611	1	00C	00L	✓					
WNCG 001	1008	S	MP1611	1	00A	0LD	✓					
002	1010	S	MP1611	1	00B	0LD	✓					
003	1012	S	MP1611	1	00C	0LD	✓					
004	1015	S	MP1611	2	00A	00L	✓					
005	1017	S	MP1611	2	00B	00L	✓					
006	1019	S	MP1611	2	00C	00L	✓					
007	1040	S	MP1614	1	00A	00L	✓					
008	1042	S	MP1614	1	00B	00L	✓					
009	1044	S	MP1614	1	00C	00L	✓					
010	1047	S	MP1614	2	00A	00L	✓					
011	1049	S	MP1614	2	00B	00L	✓					
012	1051	S	MP1614	2	00C	00L	✓					
013	1141	S	DE2261	1	00A	00L	✓					
014	1143	S	DE2261	1	00B	00L	✓					
015	1145	S	DE2261	1	00C	00L	✓					
016	1141	S	DE2261	2	00A	0LD	✓					

RELINQUISHED BY: (Signature)	DATE / TIME	RECEIVED BY: (Signature)	DATE / TIME
[signature]	5/7/92 1700	[signature]	5/7/92 1700
RELINQUISHED BY: (Signature)	DATE / TIME	RECEIVED AT LAB BY: (Signature)	DATE / TIME
[signature]	5/7/92 1850	[signature]	5/7/92 1850
METHOD OF SHIPMENT:		AIRBILL NO: (If Applicable)	

CHAIN OF CUSTODY RECORD

WOODWARD-CLYDE CONSULTANTS
2318 MILLPARK DR.
MARYLAND HEIGHTS, MISSOURI 63043
314-429-0100

SHEET 4 of 4

PROJECT NO.: 89MC114V

PROJECT NAME: NL/TARACORP SUPERFUND SITE PREDESIGN FIELD INVESTIGATION

SAMPLER'S: (Signatures) [signature] [signature]

DATE	TIME	SAMPLE I.D. NUMBER: Matrix	Location	Boring	Depth	Sample Type	NO. OF CONTAINERS	CONTAINER DESCRIPTION/ ANALYSES REQUESTED: Total Lead 4oz. poly jar Cool to 4°C	TCLP - Lead 4oz. poly jar Cool to 4°C	Geotechnical glass or poly jar	REMARKS
5/6	1431	S	OL1751	2	00A	00L	1	✓			
	1433	S	OL1751	2	00B	00L					
	1435	S	OL1751	2	00C	00L					
	1511	S	OL1651	1	00A	00L					
	1513	S	OL1651	1	00B	00L					
	1515	S	OL1651	1	00C	00L					
	1517	S	OL1651	2	00A	00L					
	1519	S	OL1651	2	00B	00L					
	1521	S	OL1651	2	00C	00L					
	1540	S	SL1646	1	00A	00L					
	1542	S	SL1646	1	00B	00L					
	1544	S	SL1646	1	00C	00L					
	1546	S	SL1646	2	00A	00L					
	1548	S	SL1646	2	00B	00L					
	1550	S	SL1646	2	00C	00L					
		S									
		S									
		S									
		S									
		S									
		S									
		S									
		S									

C. Pavelka

RELINQUISHED BY: (Signature)	DATE / TIME	RECEIVED BY: (Signature)	DATE / TIME
[signature]	5/6/92 16:45	[signature]	5/6/92 164[illegible]
RELINQUISHED BY: (Signature)	DATE / TIME	RECEIVED AT LAB BY: (Signature)	DATE / TIME
[signature]	5/6/92 1745	[signature]	5/6/92 17:[illegible]
METHOD OF SHIPMENT:		AIRBILL NO: (If Applicable)	

WWC5

COOLER/SAMPLE RECEIPT FORM

Rev.01 10/7/91 887 960

ESE Cooler # 42
Client Cooler #
No Cooler

Project: Woodward Clyde Date/Time Received: 5-6-92 1445

USE OTHER SIDE OF THIS FORM TO NOTE FURTHER DETAILS CONCERNING CHECK-IN PROBLEMS AND TO SPECIFY AND DESCRIBE ANY ACTION(S) REGARDING THE RESOLUTION(S) OF PROBLEMS. IF SHIPMENT WAS ACCEPTED AND IF REQUESTED, NOTE ON BACK THE ADDRESS WHERE THE EMPTY COOLER WAS RETURNED AND LIKEWISE IF THE SHIPMENT WAS REJECTED.

IF INFORMATION IS MISSING OR THERE ARE PROBLEMS NOTIFY LABORATORY PROJECT MANAGER SO THAT HE CAN NOTIFY THE PROJECT MANAGER IMMEDIATELY.

A. PRELIMINARY EXAMINATION PHASE: Date/Time cooler/sample was opened and checked: 5-6-92 1745

by (print) Marcia Homan (sign) Marcia Homan

1. List courier delivering samples Delivered by Woodward Clyde . . . YES NO
2. Did cooler come with a shipping slip (air bill, etc.)? . . . YES NO
   If YES, attach and enter carrier and air bill number here:
3. Were custody seals on outside of cooler? . . . YES NO
   If YES, how many and where: 2 front
   If YES, enter the following: seal date: 5-6-92 ; seal name: Kim ?
4. Were custody seals unbroken and intact at the date and time of arrival? . . . YES NO
5. Was chain-of-custody provided? . . . YES NO
6. Were custody papers sealed in a Ziplock™ bag and taped inside to the lid? . . . YES NO
7. Were entries on custody papers completed? YES NO . If no, give details on back
8. Turnaround time included? . . . YES NO
9. Did you sign custody papers in the appropriate place? . . . YES NO
10. Was project identifiable from custody papers? If YES, enter project name at the top of this form. . YES NO

B. SAMPLE CHECK-IN PHASE: Date samples were checked-in: 5-11-92 by (all those involved must sign below):

(print) Marcia Homan (sign) Marcia Homan

11. Describe packing: none
*12. If required, was enough ice used? (temperature maintained correctly)? . . . YES NO
13. Were all bottles sealed in separate plastic bags? . . . YES NO
*14. Did all bottles arrive unbroken and in good condition? . . . YES NO
15. Were all bottle labels complete (ID, date, time, signature, preservative, etc.)? . . . YES NO
16. Did all bottle labels agree with custody papers? If NO, indicate discrepancies on back. . . . YES NO
17. Were correct containers used for the tests indicated? . . . YES NO
18. Were correct preservatives used when required? . . . N/A YES NO
19. pH of samples maintained correctly as required? If NO, list by ID# N/A . YES NO
20. Was a sufficient amount of sample sent for tests indicated? . . . YES NO
21. Bubbles present in VOA vials? If YES, list by ID#: N/A . YES NO
22. Was lab. project manager called and status discussed? If YES, give details on the back of this form. YES NO
23. Who was called? By whom? on (date)
24. Second Party Review:

* Sample rejection criteria

W:\WP\CHEMCOM\CRF.01

CHAIN OF CUSTODY RECORD

WOODWARD-CLYDE CONSULTANTS
2318 MILLPARK DR.
MARYLAND HEIGHTS, MISSOURI 63043
314-429-0100

SHEET 2 of 4

PROJECT NO.: 89MC114V

PROJECT NAME: NL/TARACORP SUPERFUND SITE PREDESIGN FIELD INVESTIGATION

SAMPLER'S: (Signatures) [signature]

	DATE	TIME	SAMPLE I.D. NUMBER: Matrix	Location	Boring	Depth	Sample Type	NO. OF CONTAINERS	CONTAINER DESCRIPTION/ ANALYSES REQUESTED: Total Lead 4oz. poly jar Cool to 4°C	TCLP - Lead 4oz. poly jar Cool to 4°C	Geotechnical glass or poly jar	REMARKS
910	5/6/92	9:05	S	ED1726	2	00C	00L	1	X			
11		9:18	S	GR1734	1	00A	00L					
912		9:20	S	GR1734	1	00B	00L					
13		9:22	S	GR1734	1	00C	00L					
914		9:24	S	GR1734	2	00A	00L					
15		9:26	S	GR1734	2	00B	00L					
916		9:28	S	GR1734	2	00C	00L					
1		9:40	S	ED1643	1	00A	00L					
918		9:42	S	ED1643	1	00B	00L					
19		9:44	S	ED1643	1	00C	00L					
20		9:46	S	ED1643	2	00A	00L					
921		9:48	S	ED1643	2	00B	00L					
2		9:50	S	ED1643	2	00C	00L					
23		9:57	S	ED1638	1	00A	00L					
4		9:59	S	ED1638	1	00B	00L					
925		10:00	S	ED1638	1	00C	00L					
6		10:01	S	ED1638	2	00A	00L					
927		10:03	S	ED1638	2	00B	00L					
8		10:05	S	ED1638	2	00C	00L					
2		10:46	S	ED1621	1	00A	00L					
3		10:48	S	ED1621	1	00B	00L					
4		10:50	S	ED1621	1	00C	00L					
32		10:52	S	ED1621	2	00A	00L					

RELINQUISHED BY: (Signature)	DATE / TIME	RECEIVED BY: (Signature)	DATE / TIME
[signature]	5/6/92 1645	[signature]	5/6/92 164
RELINQUISHED BY: (Signature)	DATE / TIME	RECEIVED AT LAB BY: (Signature)	DATE / TIME
[signature]	5/6/92 1745	[signature]	5/6/92 174
METHOD OF SHIPMENT:		AIRBILL NO: (If Applicable)	

CHAIN OF CUSTODY RECORD

WOODWARD-CLYDE CONSULTANTS
2318 MILLPARK DR.
MARYLAND HEIGHTS, MISSOURI 63043
314-429-0100

SHEET 3 of 4

PROJECT NO.: 89MC114V

PROJECT NAME: NL/TARACORP SUPERFUND SITE PREDESIGN FIELD INVESTIGATION

SAMPLER'S: (Signatures) M Wallace / K Ilsen

DATE	TIME	SAMPLE I.D. NUMBER: Matrix	Location	Boring	Depth	Sample Type	NO. OF CONTAINERS	CONTAINER DESCRIPTION/ ANALYSES REQUESTED: Total Lead 4oz. poly jar Cool to 4°C	TCLP - Lead 4oz. poly jar Cool to 4°C	Geotechnical glass or poly jar	REMARKS
5/6/92	10:54	S	ED1621	2	00B	00L	1	X			
	10:56	S	ED1621	2	00C	00L					
	11:38	S	SP1610	1	00A	00L					
	11:40	S	SP1610	1	00B	00L					
	11:42	S	SP1610	1	00C	00L					
	11:44	S	SP1610	2	00A	00L					
	11:46	S	SP1610	2	00B	00L					
	11:48	S	SP1610	2	00C	00L					
	13:28	S	OL1738	1	00A	00L					
	13:30	S	OL1738	1	00B	00L					
	13:32	S	OL1738	1	00C	00L					
	13:34	S	OL1738	2	00A	00L					
	13:36	S	OL1738	2	00B	00L					
	13:38	S	OL1738	2	00C	00L					
	13:49	S	OL1747	1	00A	00L					
	13:51	S	OL1747	1	00B	00L					
	13:53	S	OL1747	1	00C	00L					
	13:55	S	OL1747	2	00A	00L					
	13:57	S	OL1747	2	00B	00L					
	13:59	S	OL1747	2	00C	00L					
	1425	S	OL1751	1	00A	00L					
	1427	S	OL1751	1	00B	00L					
	1429	S	OL1751	1	00C	00L					

RELINQUISHED BY: (Signature)	DATE / TIME	RECEIVED BY: (Signature)	DATE / TIME
Cynthia Pavelka	5/6/92 16:45	K Ilsen	5/6/92 1645
RELINQUISHED BY: (Signature)	DATE / TIME	RECEIVED AT LAB BY: (Signature)	DATE / TIME
K Ilsen	5/6/92 1745	Maria J. [illegible]	5/6/92 17:45
METHOD OF SHIPMENT:		AIRBILL NO: (If Applicable)	

CHAIN OF CUSTODY RECORD

WOODWARD-CLYDE CONSULTANTS
2318 MILLPARK DR.
MARYLAND HEIGHTS, MISSOURI 63043
314-429-0100

PROJECT NO.: 89MC114V

PROJECT NAME: NL/TARACORP SUPERFUND SITE PREDESIGN FIELD INVESTIGATION

SAMPLER'S: (Signatures) [signature]

	DATE	TIME	SAMPLE I.D. NUMBER: Matrix	Location	Boring	Depth	Sample Type		NO. OF CONTAINERS	CONTAINER DESCRIPTION/ ANALYSES REQUESTED: Total Lead 4oz. poly jar Cool to 4°C	TCLP - Lead 4oz. poly jar Cool to 4°C	Geotechnical glass or poly jar	REMARKS
72	5/5/93	14:31	S	CL1~~4~~20	2	00A	00L	✓	1	X			
813		14:33	S	CL1~~4~~20	2	00B	00L	✓					
74		14:35	S	CL1~~4~~20	2	00C	00L	✓					
15		14:49	S	BE2103	1	00A	00L	✓					
876		14:51	S	BE2103	1	00B	00L	✓					
17		14:53	S	BE2103	1	00C	00L	✓					
878		14:55	S	BE2103	2	00A	00L	✓					
19		14:57	S	BE2103	2	00B	00L	✓					
880		14:59	S	BE2103	2	00C	00L	✓					
81		16:10	S	CL1630	1	00A	00L	✓					
882		16:12	S	CL1630	1	00B	00L	✓					
33		16:14	S	CL1630	1	00C	00L	✓					
84		16:17	S	CL1630	2	00A	00L	✓					
885		16:19	S	CL1630	2	00B	00L	✓					
86		16:21	S	CL1630	2	00C	00L	✓					
			S										
			S										
			S										
			S										
			S										
			S										
			S										
			S										

[signature]

RELINQUISHED BY: (Signature)	DATE / TIME	RECEIVED BY: (Signature)	DATE / TIME
[signature]	5/5/92 1630	[signature]	5/5/92 163
RELINQUISHED BY: (Signature)	DATE / TIME	RECEIVED AT LAB BY: (Signature)	DATE / TIME
[signature]	5/5/92 1705	[signature]	5-5-92 1705
METHOD OF SHIPMENT:		AIRBILL NO: (If Applicable)	

CHAIN OF CUSTODY RECORD

WOODWARD-CLYDE CONSULTANTS
2318 MILLPARK DR.
MARYLAND HEIGHTS, MISSOURI 63043
314-429-0100

SHEET 1 of 4

PROJECT NO.: 89MC114V

PROJECT NAME: NL/TARACORP SUPERFUND SITE PREDESIGN FIELD INVESTIGATION

SAMPLER'S: (Signatures) [signature] M Wallace

DATE	TIME	SAMPLE I.D. NUMBER: Matrix	Location	Boring	Depth	Sample Type	NO. OF CONTAINERS	CONTAINER DESCRIPTION/ ANALYSES REQUESTED: Total Lead 4oz. poly jar Cool to 4°C	TCLP - Lead 4oz. poly jar Cool to 4°C	Geotechnical glass or poly jar	REMARKS
5/6	8:10	S	ED1718	1	00A	00L	1	✓			
	8:12	S	ED1718	1	00B	00L	1	✓			
	8:14	S	ED1718	1	00C	00L	1	✓			
	8:16	S	ED1718	2	00A	00L	1	✓			
	8:18	S	ED1718	2	00B	00L	1	✓			
	8:20	S	ED1718	2	00C	00L	1	✓			
	8:26	S	ED1733	1	00A	00L	1	✓			
	8:28	S	ED1733	1	00B	00L	1	✓			
	8:30	S	ED1733	1	00C	00L	1	✓			
	8:33	S	ED1733	2	00A	00L	1	✓			
	8:35	S	ED1733	2	00B	00L	1	✓			
	8:37	S	ED1733	2	00C	00L	1	✓			
	8:41	S	ED1729	1	00A	00L	1	✓			
	8:43	S	ED1729	1	00B	00L	1	✓			
	8:45	S	ED1729	1	00C	00L	1	✓			
	8:47	S	ED1729	2	00A	00L	1	✓			
	8:49	S	ED1729	2	00B	00L	1	✓			
	8:51	S	ED1729	2	00C	00L	1	✓			
	8:55	S	ED1726	1	00A	00L	1	✓			
	8:57	S	ED1726	1	00B	00L	1	✓			
	8:59	S	ED1726	1	00C	00L	1	✓			
	9:01	S	ED1726	2	00A	00L	1	✓			
	9:03	S	ED1726	2	00B	00L	1	✓			

RELINQUISHED BY: (Signature)	DATE / TIME	RECEIVED BY: (Signature)	DATE / TIME
Cynthia Pavlik	5/6/92 16:45	[signature]	5/6/92 1645
RELINQUISHED BY: (Signature)	DATE / TIME	RECEIVED AT LAB BY: (Signature)	DATE / TIME
[signature]	5/6/92 1745	[signature]	5/6/92 1745

METHOD OF SHIPMENT:

AIRBILL NO: (If Applicable)

CHAIN OF CUSTODY RECORD

WOODWARD-CLYDE CONSULTANTS
2318 MILLPARK DR.
MARYLAND HEIGHTS, MISSOURI 63043
314-429-0100

PROJECT NO.: 89MC114V

PROJECT NAME: NL/TARACORP SUPERFUND SITE PREDESIGN FIELD INVESTIGATION

SAMPLER'S: (Signatures) [signatures]

	DATE	TIME	SAMPLE I.D. NUMBER: Matrix	Location	Boring	Depth	Sample Type		NO. OF CONTAINERS	CONTAINER DESCRIPTION/ ANALYSES REQUESTED: Total Lead 4oz. poly jar Cool to 4°C	TCLP - Lead 4oz. poly jar Cool to 4°C	Geotechnical glass or poly jar	REMARKS
26	5/5/92	10:08	S	DE2160	2	00C	00L	✓	1	X			
27		10:22	S	DE2134	1	00A	00L	✓					
28		10:24	S	DE2134	1	00B	00L	✓					
29		10:26	S	DE2134	1	00C	00L	✓					
30		10:28	S	DE2134	2	00A	00L	✓					
31		10:30	S	DE2134	2	00B	00L	✓					
32		10:32	S	DE2134	2	00C	00L	✓					
33		10:44	S	DE2130	1	00A	00L	✓					
34		10:46	S	DE2130	1	00B	00L	✓					
35		10:48	S	DE2130	1	00C	00L	✓					
36		10:52	S	DE2130	2	00A	00L	✓					
37		10:54	S	DE2130	2	00B	00L	✓					
38		10:56	S	DE2130	2	00C	00L	✓					
39		11:10	S	CL2053	1	00A	00L	✓					
40		11:12	S	CL2053	1	00B	00L	✓					
41		11:14	S	CL2053	1	00C	00L	✓					
42		11:17	S	CL2053	2	00A	00L	✓					
43		11:19	S	CL2053	2	00B	00L	✓					
44		11:21	S	CL2053	2	00C	00L	✓					
45		13:10	S	BE2218	1	00A	00L	✓					
46		13:12	S	BE2218	1	00B	00L	✓					
47		13:14	S	BE2218	1	00C	00L	✓					
48		13:17	S	BE2218	2	00A	00L	✓					

RELINQUISHED BY: (Signature)	DATE / TIME	RECEIVED BY: (Signature)	DATE / TIME
[signature]	5/5/92 1630	[signature]	5/5/92 1630
RELINQUISHED BY: (Signature)	DATE / TIME	RECEIVED AT LAB BY: (Signature)	DATE / TIME
[signature]	5/5/92 1705	[signature]	5-5-92 1705
METHOD OF SHIPMENT:		AIRBILL NO: (If Applicable)	

CHAIN OF CUSTODY RECORD

WOODWARD-CLYDE CONSULTANTS
2318 MILLPARK DR.
MARYLAND HEIGHTS, MISSOURI 63043
314-429-0100

SHEET 3 of 4

PROJECT NO.: 89MC114V

PROJECT NAME: NL/TARACORP SUPERFUND SITE PREDESIGN FIELD INVESTIGATION

SAMPLER'S: (Signatures) M Wallace / K [illegible]

DATE	TIME	SAMPLE I.D. NUMBER: Matrix	Location	Boring	Depth	Sample Type		NO. OF CONTAINERS	CONTAINER DESCRIPTION/ ANALYSES REQUESTED: Total Lead 4oz. poly jar Cool to 4°C	TCLP - Lead 4oz. poly jar Cool to 4°C	Geotechnical glass or poly jar	REMARKS
5/5/92	13:19	S	BE2218	2	00B	00L	✓	1	✓			
	13:21	S	BE2218	2	00C	00L	✓					
	13:24	S	BE2222	1	00A	00L	✓					
	13:26	S	BE2222	1	00B	00L	✓					
	13:28	S	BE2222	1	00C	00L	✓					
	13:29	S	BE2222	2	00A	00L	✓					
	13:31	S	BE2222	2	00B	00L	✓					
	13:33	S	BE2222	2	00C	00L	✓					
	13:55	S	CL1736	1	00A	00L	✓					
	13:57	S	CL1736	1	00B	00L	✓					
	13:59	S	CL1736	1	00C	00L	✓					
	14:02	S	CL1736	2	00A	00L	✓					
	14:04	S	CL1736	2	00B	00L	✓					
	14:06	S	CL1736	2	00C	00L	✓					
	14:11	S	CL1728	1	00A	00L	✓					
	14:13	S	CL1728	1	00B	00L	✓					
	14:15	S	CL1728	1	00C	00L	✓					
	14:17	S	CL1728	2	00A	00L	✓					
	14:19	S	CL1728	2	00B	00L	✓					
	14:21	S	CL1728	2	00C	00L	✓					
	14:25	S	CL1720	1	00A	00L	✓					
	14:27	S	CL1720	1	00B	00L	✓					
	14:29	S	CL1720	1	00C	00L	✓					

RELINQUISHED BY: (Signature)	DATE / TIME	RECEIVED BY: (Signature)	DATE / TIME
Wendy S Rabbit	5/5/92 1630	K [illegible]	5/5/92 1630
RELINQUISHED BY: (Signature)	DATE / TIME	RECEIVED AT LAB BY: (Signature)	DATE / TIME
K [illegible]	5/5/92 1705	[illegible]	5-5-92 1705
METHOD OF SHIPMENT:		AIRBILL NO: (If Applicable)	

COOLER/SAMPLE RECEIPT FORM

Rev.01 10/7/91

ESE Cooler # 1 86
Client Cooler #
No Cooler

Project: Woodward Clyde Date/Time Received: 5-4-92 1810

USE OTHER SIDE OF THIS FORM TO NOTE FURTHER DETAILS CONCERNING CHECK-IN PROBLEMS AND TO SPECIFY AND DESCRIBE ANY ACTION(S) REGARDING THE RESOLUTION(S) OF PROBLEMS. IF SHIPMENT WAS ACCEPTED AND IF REQUESTED, NOTE ON BACK THE ADDRESS WHERE THE EMPTY COOLER WAS RETURNED AND LIKEWISE IF THE SHIPMENT WAS REJECTED.

IF INFORMATION IS MISSING OR THERE ARE PROBLEMS NOTIFY LABORATORY PROJECT MANAGER SO THAT HE CAN NOTIFY THE PROJECT MANAGER IMMEDIATELY.

A. PRELIMINARY EXAMINATION PHASE: Date/Time cooler/sample was opened and checked: 5-5-92 0630

by (print) James Cash (sign) James Cash

1. List courier delivering samples Client . . . . . YES NO
2. Did cooler come with a shipping slip (air bill, etc.)? . . . . . YES (NO)
   If YES, attach and enter carrier and air bill number here:
3. Were custody seals on outside of cooler? . . . . . (YES) NO
   If YES, how many and where: 2 on Front
   If YES, enter the following: seal date: 5-4-92 ; seal name: can't Read
4. Were custody seals unbroken and intact at the date and time of arrival? . . . . . (YES) NO
5. Was chain-of-custody provided? . . . . . (YES) NO
6. Were custody papers sealed in a Ziplec™ bag and taped inside to the lid? . . . . . (YES) NO
7. Were entries on custody papers completed? (YES) NO . If no, give details on back
8. Turnaround time included? . . . . . YES (NO)
9. Did you sign custody papers in the appropriate place? . . . . . (YES) NO
10. Was project identifiable from custody papers? If YES, enter project name at the top of this form. . (YES) NO

B. SAMPLE CHECK-IN PHASE: Date samples were checked-in: 5-5-92 by (all those involved must sign below):

(print) James Cash (sign) James Cash

11. Describe packing: Packed in Blue Ice & Stacked
*12. If required, was enough ice used? (temperature maintained correctly)? . . . . . (YES) NO
13. Were all bottles sealed in separate plastic bags? . . . . . YES (NO)
*14. Did all bottles arrive unbroken and in good condition? . . . . . (YES) NO
15. Were all bottle labels complete (ID, date, time, signature, preservative, etc.)? . . . . . (YES) NO
16. Did all bottle labels agree with custody papers? If NO, indicate discrepancies on back. . . . . (YES) NO
17. Were correct containers used for the tests indicated? . . . . . (YES) NO
*18. Were correct preservatives used when required? . N.A . . . . . YES NO
*19. pH of samples maintained correctly as required? If NO, list by ID# NA . YES NO
20. Was a sufficient amount of sample sent for tests indicated? . . . . . (YES) NO
*21. Bubbles present in VOA vials? If YES, list by ID#: NA . YES NO
22. Was lab. project manager called and status discussed? If YES, give details on the back of this form. YES (NO)
23. Who was called? By whom? on (date)
24. Second Party Review:

* Sample rejection criteria

W:\WP\CHEMCOM\CRF.01

CHAIN OF CUSTODY RECORD

WOODWARD-CLYDE CONSULTANTS
2318 MILLPARK DR.
MARYLAND HEIGHTS, MISSOURI 63043
314-429-0100

SHEET 1 of 4

PROJECT NO.: 89MC114V

PROJECT NAME: NL/TARACORP SUPERFUND SITE PREDESIGN FIELD INVESTIGATION

SAMPLER'S: (Signatures) M. Wallace / K. [illegible]

	DATE	TIME	SAMPLE I.D. NUMBER: Matrix	Location	Boring	Depth	Sample Type		NO. OF CONTAINERS	CONTAINER DESCRIPTION/ ANALYSES REQUESTED: Total Lead 4oz. poly jar Cool to 4°C	TCLP - Lead 4oz. poly jar Cool to 4°C	Geotechnical glass or poly jar	REMARKS
23	5/5/92	8:38	S	DE1627	1	00A	00L	✓	1	X			
04		8:40	S	DE1627	1	00B	00L	✓					
25		8:42	S	DE1627	1	00C	00L	✓					
06		8:44	S	DE1627	2	00A	00L	✓					
07		8:46	S	DE1627	2	00B	00L	✓					
08		8:48	S	DE1627	2	00C	00L	✓					
309		9:10	S	DE1700	1	00A	00L	✓					
0		9:12	S	DE1700	1	00B	00L	✓					
311		9:14	S	DE1700	1	00C	00L	✓					
2		9:17	S	DE1700	2	00A	00L	✓					
313		9:19	S	DE1700	2	00B	00L	✓					
4		9:21	S	DE1700	2	00C	00L	✓					
5		9:30	S	DE1723	1	00A	00L	✓					
16		9:32	S	DE1723	1	00B	00L	✓					
[illegible]		9:34	S	DE1723	1	00C	00L	✓					
18		9:37	S	DE1723	2	00A	00L	✓					
7		9:39	S	DE1723	2	00B	00L	✓					
20		9:41	S	DE1723	2	00C	00L	✓					
1		9:58	S	DE2160	1	00A	00L	✓					
22		10:00	S	DE2160	1	00B	00L	✓					
3		10:02	S	DE2160	1	00C	00L	✓					
4		10:04	S	DE2160	2	00A	00L	✓					
5		10:06	S	DE2160	2	00B	00L	✓					

RELINQUISHED BY: (Signature)	DATE / TIME	RECEIVED BY: (Signature)	DATE / TIME
Wendy E Rankett	5/5/92 1630	K [illegible]	5/5/92 1630
RELINQUISHED BY: (Signature)	DATE / TIME	RECEIVED AT LAB BY: (Signature)	DATE / TIME
K [illegible]	5/5/92 1705	James [illegible]	5-5-92 1705
METHOD OF SHIPMENT:		AIRBILL NO: (If Applicable)	

CHAIN OF CUSTODY RECORD

WOODWARD-CLYDE CONSULTANTS
2318 MILLPARK DR.
MARYLAND HEIGHTS, MISSOURI 63043
314-429-0100

SHEET 3 of 4

PROJECT NO.: 89MC114V

PROJECT NAME: NL/TARACORP SUPERFUND SITE PREDESIGN FIELD INVESTIGATION

SAMPLER'S: (Signatures)

	DATE	TIME	SAMPLE I.D. NUMBER: Matrix	Location	Boring	Depth	Sample Type		NO. OF CONTAINERS	Total Lead 4oz. poly jar Cool to 4°C	TCLP - Lead 4oz. poly jar Cool to 4°C	Geotechnical glass or poly jar	REMARKS
729	5/4	1408	S	WS20L5	1	00B	00L	✓	1	X			768
730		1410	S	WS20L5	1	00C	00L	✓					769
731		1406	S	WS20L5	1	00A	0LD	✓					770
732		1408	S	WS20L5	1	00B	0LD	✓					771
733		1410	S	WS20L5	1	00C	0LD	✓					772
734		1413	S	WS20L5	2	00A	00L	✓					773
735		1415	S	WS20L5	2	00B	00L	✓					774
736		1417	S	WS20L5	2	00C	00L	✓					775
737		1446	S	WS2108	1	00A	00L	✓					776
738		1450	S	WS2108	1	00B	00L	✓					777
739		1452	S	WS2108	1	00C	00L	✓					778
740		1455	S	WS2108	2	00A	00L	✓					779
741		1457	S	WS2108	2	00B	00L	✓					780
742		1459	S	WS2108	2	00C	00L	✓					781
743		1516	S	II1510	1	00A	00L	✓					782
744		1518	S	II1510	1	00B	00L	✓					783
745		1520	S	II1510	1	00C	00L	✓					784
746		1516	S	II1510	1	00A	0LD	✓					785
747		1518	S	II1510	1	00B	0LD	✓					786
748		1520	S	II1510	1	00C	0LD	✓					787
749		1633	S	II1510	2	00A	00L	✓					788
750		1635	S	II1510	2	00B	00L	✓					789
751		1637	S	II1510	2	00C	00L	✓					790

RELINQUISHED BY: (Signature)	DATE / TIME	RECEIVED BY: (Signature)	DATE / TIME
[illegible]	5/4/92 1720	[illegible]	5/4/92 17
RELINQUISHED BY: (Signature)	DATE / TIME	RECEIVED AT LAB BY: (Signature)	DATE / TIME
[illegible]	5/4 1805	[illegible]	5-4 61[illegible]
METHOD OF SHIPMENT:		AIRBILL NO: (If Applicable)	

CHAIN OF CUSTODY RECORD

WOODWARD-CLYDE CONSULTANTS
2318 MILLPARK DR.
MARYLAND HEIGHTS, MISSOURI 63043
314-429-0100

SHEET 2 of 4

PROJECT NO.: 89MC114V

PROJECT NAME: NL/TARACORP SUPERFUND SITE PREDESIGN FIELD INVESTIGATION

SAMPLER'S: (Signatures)

DATE	TIME	SAMPLE I.D. NUMBER: Matrix	Location	Boring	Depth	Sample Type	NO. OF CONTAINERS	Total Lead 4oz. poly jar Cool to 4°C	TCLP - Lead 4oz. poly jar Cool to 4°C	Geotechnical glass or poly jar	REMARKS
	1545	S	SI2239	1	00A	00A	1	X			791
	1547	S	SI2239	1	00B	00B	1				792
	1549	S	SI2239	1	00C	00C	1				793
	1552	S	SI2239	2	00A	00A	1				794
	1554	S	SI2239	2	00B	00B	1				795
	1556	S	SI2239	2	00C	00C	1				796
	1604	S	SI2232	1	00A	00C	1				797
	1606	S	SI2232	1	00B	00C	1				798
	1608	S	SI2232	1	00C	00C	1				799
	1611	S	SI2232	2	00A	00C	1				800
	1613	S	SI2232	2	00B	00C	1				801
	1615	S	SI2232	2	00C	00C	1	X			802
		S									
		S									
		S									
		S									
		S									
		S									
		S									
		S									
		S									
		S									
		S									
		S									

RELINQUISHED BY: (Signature)	DATE / TIME	RECEIVED BY: (Signature)	DATE / TIME
[signature]	5/4/92 1720	[signature]	5/4/92 1720
RELINQUISHED BY: (Signature)	DATE / TIME	RECEIVED AT LAB BY: (Signature)	DATE / TIME
[signature]	5/4 1805	[signature]	5/4 6:10p
METHOD OF SHIPMENT:		AIRBILL NO: (If Applicable)	

WWC 5
725 - 802

CHAIN OF CUSTODY RECORD

WOODWARD-CLYDE CONSULTANTS
2318 MILLPARK DR.
MARYLAND HEIGHTS, MISSOURI 63043
314-429-0100

SHEET 1 of 4

PROJECT NO.: 89MC114V

PROJECT NAME: NL/TARACORP SUPERFUND SITE PREDESIGN FIELD INVESTIGATION

SAMPLER'S: (Signatures) [signature] M Walker

	DATE	TIME	SAMPLE I.D. NUMBER: Matrix	Location	Boring	Depth	Sample Type		NO. OF CONTAINERS	CONTAINER DESCRIPTION/ ANALYSES REQUESTED: Total Lead 4oz. poly jar Cool to 4°C	TCLP - Lead 4oz. poly jar Cool to 4°C	Geotechnical glass or poly jar	REMARKS
86	5/4	846	S	LE2019	1	00A	00L	✓	1	↑			725
87		848	S	LE2019	1	00B	00L	✓					726
88		850	S	LE2019	1	00C	00L	✓					727
89		~~85~~ 909	S	LE2119	1	00A	00L	✓					728
90		911	S	LE2119	1	00B	00L	✓					729
91		913	S	LE2119	1	00C	00L	✓					730
92		918	S	LE2119	2	00A	00L	✓					731
93		920	S	LE2119	2	00B	00L	✓					732
94		922	S	LE2119	2	00C	00L	✓					733
95		954	S	MP1737	1	00A	00L	✓					734
96		956	S	MP1737	1	00B	00L	✓					735
97		958	S	MP1737	1	00C	00L	✓					736
98		1003	S	MP1737	2	00A	00L	✓					737
99		1005	S	MP1737	2	00B	00L	✓					738
00		1007	S	MP1737	2	00C	00L	✓					739
01		1014	S	MP1727	1	00A	00L	✓					740
02		1016	S	MP1727	1	00B	00L	✓					741
03		1018	S	MP1727	1	00C	00L	✓					742
04		1021	S	MP1727	2	00A	00L	✓					743
05		1023	S	MP1727	2	00B	00L	✓					744
06		1025	S	MP1727	2	00C	00L	✓					745
07		1041	S	MP1729	1	00A	00L	✓					746
08		1043	S	MP1729	1	00B	00L	✓					747

RELINQUISHED BY: (Signature)	DATE / TIME	RECEIVED BY: (Signature)	DATE / TIME
[signature]	5/4/92 1720	[signature]	5/4 1720
RELINQUISHED BY: (Signature)	DATE / TIME	RECEIVED AT LAB BY: (Signature)	DATE / TIME
[signature]	5/4 1800	Ethan Litsey	5-4 [illegible]
METHOD OF SHIPMENT:		AIRBILL NO: (If Applicable)	

CHAIN OF CUSTODY RECORD

WOODWARD-CLYDE CONSULTANTS
2318 MILLPARK DR.
MARYLAND HEIGHTS, MISSOURI 63043
314-429-0100

PROJECT NO.: 89MC114V

PROJECT NAME: NL/TARACORP SUPERFUND SITE PREDESIGN FIELD INVESTIGATION

SAMPLER'S: (Signatures)

	DATE	TIME	Matrix	Location	Boring	Depth	Sample Type		NO. OF CONTAINERS	Total Lead 4oz. Poly jar Cool to 4°C	TCLP - Lead 4oz. poly jar Cool to 4°C	Geotechnical glass or poly jar	REMARKS
99	5/4	1045	S	MP1729	1	00C	00L	✓	1	X			748
			S	MP1729	2	00A	00L						
			S	MP1729	2	00B	00L						
			S	MP1729	2	00C	00L						
10		1057	S	MP1748	1	00A	00L	✓					749
11		1059	S	MP1748	1	00B	00L	✓					750
12		1101	S	MP1748	1	00C	00L	✓					751
13		1104	S	MP1748	2	00A	00L	✓					752
14		1106	S	MP1748	2	00B	00L	✓					753
15		1108	S	MP1748	2	00C	00L	✓					754
16		1118	S	MP1733	1	00A	00L	✓					755
17		1120	S	MP1733	1	00B	00L	✓					756
18		1122	S	MP1733	1	00C	00L	✓					757
19		1125	S	MP1733	2	00A	00L	✓					758
20		1127	S	MP1733	2	00B	00L	✓					759
21		1129	S	MP1733	2	00C	00L	✓					760
22		1148	S	MP1708	1	00A	00L	✓					761
23		1150	S	MP1708	1	00B	00L	✓					762
24		1152	S	MP1708	1	00C	00L	✓					763
25		1155	S	MP1708	2	00A	00L	✓					764
26		1157	S	MP1708	2	00B	00L	✓					765
27		1159	S	MP1708	2	00C	00L	✓					766
28		1406	S	WS1015	1	00A	00L	✓					767

RELINQUISHED BY: (Signature)	DATE / TIME	RECEIVED BY: (Signature)	DATE / TIME
	5/4/92 1720		5/4 1720
RELINQUISHED BY: (Signature)	DATE / TIME	RECEIVED AT LAB BY: (Signature)	DATE / TIME
	5/4 1805		5-4 6/08

METHOD OF SHIPMENT:

AIRBILL NO: (If Applicable)

CHAIN OF CUSTODY RECORD

WOODWARD-CLYDE CONSULTANTS
2318 MILLPARK DR.
MARYLAND HEIGHTS, MISSOURI 63043
314-429-0100

PROJECT NO.: 89MC114V

PROJECT NAME: NL/TARACORP SUPERFUND SITE PREDESIGN FIELD INVESTIGATION

SAMPLER'S: (Signatures) K Sled / M Wallace

DATE	TIME	SAMPLE I.D. NUMBER: Matrix	Location	Boring	Depth	Sample Type	NO. OF CONTAINERS	CONTAINER DESCRIPTION/ ANALYSES REQUESTED: Total Lead 4oz. poly jar Cool to 4°C	TCLP - Lead 4oz. poly jar Cool to 4°C	Geotechnical glass or poly jar	REMARKS
5/1	1406	S	NE0822	4	00B	00L	1	✓			708
	1408	S	NE0822	4	00C	00L	1	✓			709
	1432	S	NE0840	1	00A	00L	1	✓			710
	1434	S	NE0840	1	00B	00L	1	✓			711
	1436	S	NE0840	1	00C	00L	1	✓			712
	1438	S	NE0840	2	00A	00L	1	✓			713
	1440	S	NE0840	2	00B	00L	1	✓			714
	1442	S	NE0840	2	00C	00L	1	✓			715
	1443	S	NE0840	3	00A	00L	1	✓			716
	1445	S	NE0840	3	00B	00L	1	✓			717
	1447	S	NE0840	3	00C	00L	1	✓			718
	1450	S	NE0840	4	00A	00L	1	✓			719
	1452	S	NE0840	4	00B	00L	1	✓			720
	1454	S	NE0840	4	00C	00L	1	✓			721
	1511	S	NE0822	5	00A	00L	1	✓			722
	1513	S	NE0822	5	00B	00L	1	✓			723
	1515	S	NE0822	5	00C	00L	1	✓			724
		S									
		S									
		S									
		S									
		S									
		S									

C. Pavelka

RELINQUISHED BY: (Signature)	DATE / TIME	RECEIVED BY: (Signature)	DATE / TIME
Cynthia Pavelka	5/1/92 16:00	K Sled	5/1/92 1600
RELINQUISHED BY: (Signature)	DATE / TIME	RECEIVED AT LAB BY: (Signature)	DATE / TIME
K Sled	5/1/92 1730	[illegible]	5/1/92 17:3
METHOD OF SHIPMENT:		AIRBILL NO: (If Applicable)	

COOLER/SAMPLE RECEIPT FORM

WWC5 623-685

Rev.01 10/7/91

ESE Cooler # 176
Client Cooler # _____
No Cooler _____

Project: Woodward Clyde Date/Time Received: 5-1-92 17:30

USE OTHER SIDE OF THIS FORM TO NOTE FURTHER DETAILS CONCERNING CHECK-IN PROBLEMS AND TO SPECIFY AND DESCRIBE ANY ACTION(S) REGARDING THE RESOLUTION(S) OF PROBLEMS. IF SHIPMENT WAS ACCEPTED AND IF REQUESTED, NOTE ON BACK THE ADDRESS WHERE THE EMPTY COOLER WAS RETURNED AND LIKEWISE IF THE SHIPMENT WAS REJECTED.

IF INFORMATION IS MISSING OR THERE ARE PROBLEMS NOTIFY LABORATORY PROJECT MANAGER SO THAT HE CAN NOTIFY THE PROJECT MANAGER IMMEDIATELY.

A. PRELIMINARY EXAMINATION PHASE: Date/Time cooler/sample was opened and checked: 5-4-92 1400

by (print) James Cash (sign) James Cash

1. List courier delivering samples Client ..... YES NO
2. Did cooler come with a shipping slip (air bill, etc.)? ..... YES (NO)
   If YES, attach and enter carrier and air bill number here: _____
3. Were custody seals on outside of cooler? ..... (YES) NO
   If YES, how many and where: 2 1 on Front & Back
   If YES, enter the following: seal date: 5-1-92 , seal name: Can't Read it
4. Were custody seals unbroken and intact at the date and time of arrival? ..... (YES) NO
5. Was chain-of-custody provided? ..... (YES) NO
6. Were custody papers sealed in a Ziploc™ bag and taped inside to the lid? ..... (YES) NO
7. Were entries on custody papers completed? (YES) NO . If no, give details on back
8. Turnaround time included? ..... YES (NO)
9. Did you sign custody papers in the appropriate place? ..... (YES) NO
10. Was project identifiable from custody papers? If YES, enter project name at the top of this form. . (YES) NO

B. SAMPLE CHECK-IN PHASE: Date samples were checked-in: 5-4-92 by (all those involved must sign below):
(print) James Cash (sign) James Cash

11. Describe packing: packed in Blue Ice & stacked on each other
*12. If required, was enough ice used? (temperature maintained correctly)? ..... (YES) NO
13. Were all bottles sealed in separate plastic bags? ..... YES (NO)
*14. Did all bottles arrive unbroken and in good condition? ..... (YES) NO
15. Were all bottle labels complete (ID, date, time, signature, preservative, etc.)? ..... (YES) NO
16. Did all bottle labels agree with custody papers? If NO, indicate discrepancies on back. ..... (YES) NO
17. Were correct containers used for the tests indicated? ..... (YES) NO
18. Were correct preservatives used when required? N/A ..... YES NO
*19. pH of samples maintained correctly as required? If NO, list by ID# N/A . YES NO
20. Was a sufficient amount of sample sent for tests indicated? ..... (YES) NO
*21. Bubbles present in VOA vials? If YES, list by ID#: N/A . YES NO
22. Was lab. project manager called and status discussed? If YES, give details on the back of this form. YES (NO)
23. Who was called? _____ By whom? _____ on (date) _____
24. Second Party Review: _____

* Sample rejection criteria

J:\WP\CHEMCOM\CRF.01

WWC6
662-724

CHAIN OF CUSTODY RECORD

WOODWARD-CLYDE CONSULTANTS
2318 MILLPARK DR.
MARYLAND HEIGHTS, MISSOURI 63043
314-429-0100

SHEET 1 of 3

PROJECT NO.: 89MC114V

PROJECT NAME: NL/TARACORP SUPERFUND SITE PREDESIGN FIELD INVESTIGATION

SAMPLER'S: (Signatures) [signature] [signature]

	DATE	TIME	SAMPLE I.D. NUMBER: Matrix	Location	Boring	Depth	Sample Type	NO. OF CONTAINERS	CONTAINER DESCRIPTION/ ANALYSES REQUESTED: Total Lead 4oz. poly jar Cool to 4°C	TCLP - Lead 4oz. poly jar Cool to 4°C	Geotechnical glass or poly jar	REMARKS
623	5/1/92	845	S	NE1319	1	00A	00L	1	✓			662
24		847	S	NE1319	1	00B	00L	1	✓			663
25		849	S	NE1319	1	00C	00L	1	✓			664
26		852	S	NE1319	2	00A	00L	1	✓			665
627		854	S	NE1319	2	00B	00L	1	✓			666
28		856	S	NE1319	2	00C	00L	1	✓			667
629		908	S	NE1319	3	00A	00L	1	✓			668
30		910	S	NE1319	3	00B	00L	1	✓			669
631		912	S	NE1319	3	00C	00L	1	✓			670
32		914	S	NE1319	4	00A	00L	1	✓			671
33		916	S	NE1319	4	00B	00L	1	✓			672
34		918	S	NE1319	4	00C	00L	1	✓			673
35		927	S	NE1319	5	00A	00L	1	✓			674
36		929	S	NE1319	5	00B	00L	1	✓			675
37		931	S	NE1319	5	00C	00L	1	✓			676
638		935	S	DE2001	1	00A	00L	1	✓			677
39		937	S	DE2001	1	00B	00L	1	✓			678
640		939	S	DE2001	1	00C	00L	1	✓			679
11		945	S	DE2001	2	00A	00L	1	✓			680
642		947	S	DE2001	2	00B	00L	1	✓			681
43		949	S	DE2001	2	00C	00L	1	✓			682
44		1039	S	ED2000	1	00A	00L	1	✓			683
45		1042	S	ED2000	1	00B	00L	1	✓			684

RELINQUISHED BY: (Signature)	DATE / TIME	RECEIVED BY: (Signature)	DATE / TIME
Cynthia Pavlika	16:00 5/1/92	[signature]	5/1/92 1655
RELINQUISHED BY: (Signature)	DATE / TIME	RECEIVED AT LAB BY: (Signature)	DATE / TIME
[signature]	5/1/92 1730	[signature]	5/1/92 17:2
METHOD OF SHIPMENT:		AIRBILL NO: (If Applicable)	

CHAIN OF CUSTODY RECORD

WOODWARD-CLYDE CONSULTANTS
2318 MILLPARK DR.
MARYLAND HEIGHTS, MISSOURI 63043
314-429-0100

SHEET 2 of 3

PROJECT NO.: 89MC114V

PROJECT NAME: NL/TARACORP SUPERFUND SITE PREDESIGN FIELD INVESTIGATION

SAMPLER'S: (Signatures) K Llenda / M Wallace

DATE	TIME	SAMPLE I.D. NUMBER: Matrix	Location	Boring	Depth	Sample Type	NO. OF CONTAINERS	CONTAINER DESCRIPTION/ ANALYSES REQUESTED: Total Lead 4oz. poly jar Cool to 4°C	TCLP - Lead 4oz. poly jar Cool to 4°C	Geotechnical glass or poly jar	REMARKS
5/1	1044	S	ED2000	1	00C	00L	1	✓			685
	1046	S	ED2000	2	00A	00L	1	✓			686
	1048	S	ED2000	2	00B	00L	1	✓			687
	1050	S	ED2000	2	00C	00L	1	✓			688
	1053	S	ED2000	3	00A	00L	1	✓			689
	1055	S	ED2000	3	00B	00L	1	✓			690
	1057	S	ED2000	3	00C	00L	1	✓			691
	1132	S	NI1241	1	00A	00L	1	✓			692
	1134	S	NI1241	1	00B	00L	1	✓			693
	1136	S	NI1241	1	00C	00L	1	✓			694
	1138	S	NI1241	2	00A	00L	1	✓			695
	1140	S	NI1241	2	00B	00L	1	✓			696
	1142	S	NI1241	2	00C	00L	1	✓			697
	1318	S	NI1300	1	00A	00L	1	✓			698
	1320	S	NI1300	1	00B	00L	1	✓			699
	1322	S	NI1300	1	00C	00L	1	✓			700
	1324	S	NI1300	2	00A	00L	1	✓			701
	1326	S	NI1300	2	00B	00L	1	✓			702
	1328	S	NI1300	2	00C	00L	1	✓			703
	1358	S	NI0822	3	00A	00L	1	✓			704
	1400	S	NI0822	3	00B	00L	1	✓			705
	1402	S	NI0822	3	00C	00L	1	✓			706
	1404	S	NI0822	4	00A	00L	1	✓			707

RELINQUISHED BY: (Signature)	DATE / TIME	RECEIVED BY: (Signature)	DATE / TIME
Cynthia Pavelka	5/1/92 16:00	K Llenda	5/1/92 16:00
RELINQUISHED BY: (Signature)	DATE / TIME	RECEIVED AT LAB BY: (Signature)	DATE / TIME
K Llenda	5/1/92 ~~1700~~ 1730	[illegible]	5/1/92 17:30

METHOD OF SHIPMENT:

AIRBILL NO: (If Applicable)

CHAIN OF CUSTODY RECORD

WOODWARD-CLYDE CONSULTANTS
2318 MILLPARK DR.
MARYLAND HEIGHTS, MISSOURI 63043
314-429-0100

SHEET 3 of 3

PROJECT NO.: 89MC114V

PROJECT NAME: NL/TARACORP SUPERFUND SITE PREDESIGN FIELD INVESTIGATION

SAMPLER'S: (Signatures) [signature] [signature]

DATE	TIME	SAMPLE I.D. NUMBER: Matrix	Location	Boring	Depth	Sample Type	NO. OF CONTAINERS	CONTAINER DESCRIPTION/ ANALYSES REQUESTED: Total Lead 4oz. poly jar Cool to 4°C	TCLP - Lead 4oz. poly jar Cool to 4°C	Geotechnical glass or poly jar	REMARKS
4/30	1518	S	AL1014	1	00B	00L ✓	1	✓			645
	1520	S	AL1014	1	00C	00L ✓	1	✓			646
	1523	S	AL1014	2	00A	00L ✓	1	✓			647
	1525	S	AL1014	2	00B	00L ✓	1	✓			648
	1527	S	AL1014	2	00C	00L ✓	1	✓			649
	1547	S	GR1106	1	00A	00L ✓	1	✓			650
	1549	S	GR1106	1	00B	00L ✓	1	✓			651
	1552	S	GR1106	1	00C	00L ✓	1	✓			652
	1555	S	GR1106	2	00A	00L ✓	1	✓			653
	1557	S	GR1106	2	00B	00L ✓	1	✓			654
	1559	S	GR1106	2	00C	00L ✓	1	✓			655
	1623	S	GR1320	1	00A	00L ✓	1	✓			656
	1625	S	GR1320	1	00B	00L ✓	1	✓			657
	1627	S	GR1320	1	00C	00L ✓	1	✓			658
	1629	S	GR1320	2	00A	00L ✓	1	✓			659
	1631	S	GR1320	2	00B	00L ✓	1	✓			660
	1633	S	GR1320	2	00C	00L ✓	1	✓			661
		S									
		S									
		S									
		S									
		S									
		S									

RELINQUISHED BY: (Signature)	DATE / TIME	RECEIVED BY: (Signature)	DATE / TIME
[signature]	4/30/92 1720	[signature]	4/30/92 172
RELINQUISHED BY: (Signature)	DATE / TIME	RECEIVED AT LAB BY: (Signature)	DATE / TIME
[signature]	4/30/92 6:00 pm	[signature]	4/30/92 6:00
METHOD OF SHIPMENT:		AIRBILL NO: (If Applicable)	

COOLER/SAMPLE RECEIPT FORM

Rev.01 10/7/91

ESE Cooler # 163
Client Cooler # _____
No Cooler _____

Project: Woodward Clyde Date/Time Received: 4-30-92 1800

USE OTHER SIDE OF THIS FORM TO NOTE FURTHER DETAILS CONCERNING CHECK-IN PROBLEMS AND TO SPECIFY AND DESCRIBE ANY ACTION(S) REGARDING THE RESOLUTION(S) OF PROBLEMS. IF SHIPMENT WAS ACCEPTED AND IF REQUESTED, NOTE ON BACK THE ADDRESS WHERE THE EMPTY COOLER WAS RETURNED AND LIKEWISE IF THE SHIPMENT WAS REJECTED.

IF INFORMATION IS MISSING OR THERE ARE PROBLEMS NOTIFY LABORATORY PROJECT MANAGER SO THAT HE CAN NOTIFY THE PROJECT MANAGER IMMEDIATELY.

A. PRELIMINARY EXAMINATION PHASE: Date/Time cooler/sample was opened and checked: 5-1-92 1000

by (print) James Cash (sign) James Cash

1. List courier delivering samples . . Client . . . . . YES NO
2. Did cooler come with a shipping slip (air bill, etc.)? . . . . . YES (NO)
   If YES, attach and enter carrier and air bill number here: _____
3. Were custody seals on outside of cooler? . . . . . YES (NO)
   If YES, how many and where: _____
   If YES, enter the following: seal date: _____, seal name: _____
4. Were custody seals unbroken and intact at the date and time of arrival? . N.A. . . . . YES NO
5. Was chain-of-custody provided? . . . . . (YES) NO
6. Were custody papers sealed in a Ziplec™ bag and taped inside to the lid? . . . . . (YES) NO
7. Were entries on custody papers completed? (YES) NO . If no, give details on back
8. Turnaround time included? . . . . . YES (NO)
9. Did you sign custody papers in the appropriate place? . . . . . (YES) NO
10. Was project identifiable from custody papers? If YES, enter project name at the top of this form. . (YES) NO

B. SAMPLE CHECK-IN PHASE: Date samples were checked-in: 5-1-92 by (all those involved must sign below):
(print) James Cash (sign) James Cash

11. Describe packing: packed in Blue Ice & stacked
*12. If required, was enough ice used? (temperature maintained correctly)? . . . . . (YES) NO
13. Were all bottles sealed in separate plastic bags? . . . . . YES (NO)
*14. Did all bottles arrive unbroken and in good condition? . . . . . (YES) NO
15. Were all bottle labels complete (ID, date, time, signature, preservative, etc.)? . . . . . (YES) NO
16. Did all bottle labels agree with custody papers? If NO, indicate discrepancies on back. . . . . (YES) NO
17. Were correct containers used for the tests indicated? . . . . . (YES) NO
*18. Were correct preservatives used when required? . N/A . . . . . YES NO
*19. pH of samples maintained correctly as required? If NO, list by ID# NA . YES NO
20. Was a sufficient amount of sample sent for tests indicated? . . . . . (YES) NO
*21. Bubbles present in VOA vials? If YES, list by ID#: NA . YES NO
22. Was lab. project manager called and status discussed? If YES, give details on the back of this form. YES (NO)
23. Who was called? _____ By whom? _____ on (date) _____
24. Second Party Review: _____

* Sample rejection criteria

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WWCS
599-661

CHAIN OF CUSTODY RECORD

WOODWARD-CLYDE CONSULTANTS
2318 MILLPARK DR.
MARYLAND HEIGHTS, MISSOURI 63043
314-429-0100

SHEET 1 of 3

PROJECT NO.: 89MC114V

PROJECT NAME: NL/TARACORP SUPERFUND SITE PREDESIGN FIELD INVESTIGATION

SAMPLER'S: (Signatures) [signature] M Wallace

	DATE	TIME	SAMPLE I.D. NUMBER: Matrix	Location	Boring	Depth	Sample Type		NO. OF CONTAINERS	CONTAINER DESCRIPTION/ ANALYSES REQUESTED: Total Lead 4oz. poly jar Cool to 4°C	TCLP - Lead 4oz. poly jar Cool to 4°C	Geotechnical glass or poly jar	REMARKS
0	4/30	752	S	DE2254	2	00A	00L	✓	1	✓			599
1		754	S	DE2254	2	00B	00L	✓	1	✓			600
2		756	S	DE2254	2	00C	00L	✓	1	✓			601
3		913	S	RE0930	1	00A	00L	✓	1	✓			602
5 04		915	S	RE0930	1	00B	00L	✓	1	✓			603
5		917	S	RE0930	1	00C	00L	✓	1	✓			604
5 66		913	S	RE0930	1	00A	0LD	✓	1	✓			605
7		915	S	RE0930	1	00B	0LD	✓	1	✓			606
5 68		917	S	RE0930	1	00C	0LD	✓	1	✓			607
9		923	S	RE0930	2	00A	00L	✓	1	✓			608
5 70		925	S	RE0930	2	00B	00L	✓	1	✓			609
71		927	S	RE0930	2	00C	00L	✓	1	✓			610
12		951	S	MC091L	1	00A	00L	✓	1	✓			611
73		953	S	MC091L	1	00B	00L	✓	1	✓			612
14		955	S	MC091L	1	00C	00L	✓	1	✓			~~16~~ 613
5 75		1000	S	MC091L	2	00A	00L	✓	1	✓			614
6		1003	S	MC091L	2	00B	00L	✓	1	✓			615
5 77		1005	S	MC091L	2	00C	00L	✓	1	✓			616
8		1016	S	RE0928	1	00A	00L	✓	1	✓			617
5 79		1018	S	RE0928	1	00B	00L	✓	1	✓			618
0		1020	S	RE0928	1	00C	00L	✓	1	✓			619
081		1026	S	RE0928	2	00A	00L	✓	1	✓			620
2		1028	S	RE0928	2	00B	00L	✓	1	✓			621

RELINQUISHED BY: (Signature)	DATE / TIME	RECEIVED BY: (Signature)	DATE / TIME
[signature]	4/30/92 1720	[signature]	4/30/92 1720
RELINQUISHED BY: (Signature)	DATE / TIME	RECEIVED AT LAB BY: (Signature)	DATE / TIME
[signature]	4/30/92 6:00	[signature]	4/30/92 6:00

METHOD OF SHIPMENT:

AIRBILL NO: (If Applicable)

CHAIN OF CUSTODY RECORD

WOODWARD-CLYDE CONSULTANTS
2318 MILLPARK DR.
MARYLAND HEIGHTS, MISSOURI 63043
314-429-0100

SHEET 2 of 3

PROJECT NO.: 89MC114V

PROJECT NAME: NL/TARACORP SUPERFUND SITE PREDESIGN FIELD INVESTIGATION

SAMPLER'S: (Signatures) K [signature] M Wallace

DATE	TIME	SAMPLE I.D. NUMBER: Matrix	Location	Boring	Depth	Sample Type		NO. OF CONTAINERS	CONTAINER DESCRIPTION/ ANALYSES REQUESTED: Total Lead 4oz. poly jar Cool to 4°C	TCLP - Lead 4oz. poly jar Cool to 4°C	Geotechnical glass or poly jar	REMARKS
4/30	1030	S	RE0928	2	00C	00L	✓	1	✓			622
	1056	S	MC0913	1	00A	00L	✓	1	✓			623
	1058	S	MC0913	1	00B	00L	✓	1	✓			624
	1100	S	MC0913	1	00C	00L	✓	1	✓			625
	1105	S	MC0913	2	00A	00L	✓	1	✓			626
	1107	S	MC0913	2	00B	00L	✓	1	✓			627
	1109	S	MC0913	2	00C	00L	✓	1	✓			628
	1155	S	MA0814	1	00A	00L	✓	1	✓			629
	1157	S	MA0814	1	00B	00L	✓	1	✓			630
	1159	S	MA0814	1	00C	00L	✓	1	✓			631
	1203	S	MA0814	2	00A	00L	✓	1	✓			632
	1205	S	MA0814	2	00B	00L	✓	1	✓			633
	1207	S	MA0814	2	00C	00L	✓	1	✓			634
	1400	S	DE1729	2	00A	00L	✓	1	✓			635
	1402	S	DE1729	2	00B	00L	✓	1	✓			636
	1404	S	DE1729	2	00C	00L	✓	1	✓			637
	1434	S	KE1714	1	00A	00L	✓	1	✓			638
	1436	S	KE1714	1	00B	00L	✓	1	✓			639
	1438	S	KE1714	1	00C	00L	✓	1	✓			640
	1443	S	KE1714	2	00A	00L	✓	1	✓			641
	1445	S	KE1714	2	00B	00L	✓	1	✓			642
	1447	S	KE1714	2	00C	00L	✓	1	✓			643
	1516	S	AL1014	1	00A	00L	✓	1	✓			644

RELINQUISHED BY: (Signature)	DATE / TIME	RECEIVED BY: (Signature)	DATE / TIME
Wendy E Rubott	4/30/92 1720	K [signature]	4/30/92 1720
RELINQUISHED BY: (Signature)	DATE / TIME	RECEIVED AT LAB BY: (Signature)	DATE / TIME
Kim Sheridan	4/30/92 6:00 P.M.	[signature]	4/30/92 6:00 P.M.

METHOD OF SHIPMENT:

AIRBILL NO: (If Applicable)

CHAIN OF CUSTODY RECORD

WOODWARD-CLYDE CONSULTANTS
2318 MILLPARK DR.
MARYLAND HEIGHTS, MISSOURI 63043
314-429-0100

SHEET 2 of 2

PROJECT NO.:	PROJECT NAME:
89MC114V	NL/TARACORP SUPERFUND SITE PREDESIGN FIELD INVESTIGATION

SAMPLER'S: (Signatures) [signature] [signature]

	DATE	TIME	SAMPLE I.D. NUMBER: Matrix	Location	Boring	Depth	Sample Type		NO. OF CONTAINERS	CONTAINER DESCRIPTION/ ANALYSES REQUESTED: Total Lead 4oz. poly jar Cool to 4°C	TCLP - Lead 4oz. poly jar Cool to 4°C	Geotechnical glass or poly jar	REMARKS
583	4/29	1339	S	GR1018	1	00C	00L	✓	1	✓			
584		1342	S	GR1018	2	00A	00L	✓	1	✓			
585		1344	S	GR1018	2	00B	00L	✓	1	✓			
586		1346	S	GR1018	2	00C	00L	✓	1	✓			
			S	GR1018					1	✓			
587		1350	S	GR1012	1	00A	00L	✓	1	✓			
588		1352	S	GR1012	1	00B	00L	✓	1	✓			
589		1354	S	GR1012	1	00C	00L	✓	1	✓			
590		1356	S	GR1012	2	00A	00L	✓	1	✓			
591		1358	S	GR1012	2	00B	00L	✓	1	✓			
592		1400	S	GR1012	2	00C	00L	✓	1	✓			
			S	IO1223	1	00A	00L		1	✓			
			S	IO1223	1	00B	00L		1	✓			
			S	IO1223	1	00C	00L		1	✓			
			S	IO1223	2	00A	00L		1	✓			
			S	IO1223	2	00B	00L		1	✓			
			S	IO1223	2	00C	00L		1	✓			
593		1422	S	IO1217	1	00A	00L	✓	1	✓			
594		1424	S	IO1217	1	00B	00L	✓	1	✓			
595		1426	S	IO1217	1	00C	00L	✓	1	✓			
596		1434	S	IO1217	2	00A	00L	✓	1	✓			
597		1436	S	IO1217	2	00B	00L	✓	1	✓			
598		1438	S	IO1217	2	00C	00L	✓	1	✓			

RELINQUISHED BY: (Signature)	DATE / TIME	RECEIVED BY: (Signature)	DATE / TIME
[signature]	4/29/92 1515	[signature]	4/29 1515
RELINQUISHED BY: (Signature)	DATE / TIME	RECEIVED AT LAB BY: (Signature)	DATE / TIME
[signature]	4/29 1600	[signature]	4/29 1600
METHOD OF SHIPMENT:		AIRBILL NO: (If Applicable)	

COOLER/SAMPLE RECEIPT FORM

Rev.01 10/7/91

ESE Cooler # 164
Client Cooler # _____
No Cooler _____

Project: Wood ward Clyde Date/Time Received: 4-29-92 1600

USE OTHER SIDE OF THIS FORM TO NOTE FURTHER DETAILS CONCERNING CHECK-IN PROBLEMS AND TO SPECIFY AND DESCRIBE ANY ACTION(S) REGARDING THE RESOLUTION(S) OF PROBLEMS. IF SHIPMENT WAS ACCEPTED AND IF REQUESTED, NOTE ON BACK THE ADDRESS WHERE THE EMPTY COOLER WAS RETURNED AND LIKEWISE IF THE SHIPMENT WAS REJECTED.

IF INFORMATION IS MISSING OR THERE ARE PROBLEMS NOTIFY LABORATORY PROJECT MANAGER SO THAT HE CAN NOTIFY THE PROJECT MANAGER IMMEDIATELY.

A. PRELIMINARY EXAMINATION PHASE: Date/Time cooler/sample was opened and checked: 4-30-92 0730

by (print) James Cash (sign) James Cash

1. List courier delivering samples . . Client . . . . . YES NO
2. Did cooler come with a shipping slip (air bill, etc.)? . . . . . YES (NO)
   If YES, attach and enter carrier and air bill number here: _____
3. Were custody seals on outside of cooler? . . . . . (YES) NO
   If YES, how many and where: 2 1 on Front & Back
   If YES, enter the following: seal date: 4-29-92 , seal name: Mike Wallace
4. Were custody seals unbroken and intact at the date and time of arrival? . . . . . (YES) NO
5. Was chain-of-custody provided? . . . . . (YES) NO
6. Were custody papers sealed in a Ziploc™ bag and taped inside to the lid? . . . . . (YES) NO
7. Were entries on custody papers completed? YES NO . If no, give details on back
8. Turnaround time included? . . . . . YES (NO)
9. Did you sign custody papers in the appropriate place? . . . . . (YES) NO
10. Was project identifiable from custody papers? If YES, enter project name at the top of this form. (YES) NO

B. SAMPLE CHECK-IN PHASE: Date samples were checked-in: 4-30-92 by (all those involved must sign below):

(print) James Cash (sign) James Cash

11. Describe packing: Packed in Blue Ice & stacked
*12. If required, was enough ice used? (temperature maintained correctly)? . . . . . (YES) NO
13. Were all bottles sealed in separate plastic bags? . . . . . YES (NO)
*14. Did all bottles arrive unbroken and in good condition? . . . . . (YES) NO
15. Were all bottle labels complete (ID, date, time, signature, preservative, etc.)? . . . . . (YES) NO
16. Did all bottle labels agree with custody papers? If NO, indicate discrepancies on back. . . . . (YES) NO
17. Were correct containers used for the tests indicated? . . . . . (YES) NO
*18. Were correct preservatives used when required? N.A. . . . . YES NO
*19. pH of samples maintained correctly as required? If NO, list by ID# N/A . YES NO
20. Was a sufficient amount of sample sent for tests indicated? . . . . . (YES) NO
*21. Bubbles present in VOA vials? If YES, list by ID#: N/A . YES NO
22. Was lab. project manager called and status discussed? If YES, give details on the back of this form. YES (NO)
23. Who was called? _____ By whom? _____ on (date) _____
24. Second Party Review: _____

* Sample rejection criteria

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COOLER/SAMPLE RECEIPT FORM

Rev.01 10/7/91

ESE Cooler # 172
Client Cooler # _____
No Cooler _____

Project: Woodward Clyde Date/Time Received: 4-28-92 1800

USE OTHER SIDE OF THIS FORM TO NOTE FURTHER DETAILS CONCERNING CHECK-IN PROBLEMS AND TO SPECIFY AND DESCRIBE ANY ACTION(S) REGARDING THE RESOLUTION(S) OF PROBLEMS. IF SHIPMENT WAS ACCEPTED AND IF REQUESTED, NOTE ON BACK THE ADDRESS WHERE THE EMPTY COOLER WAS RETURNED AND LIKEWISE IF THE SHIPMENT WAS REJECTED.

IF INFORMATION IS MISSING OR THERE ARE PROBLEMS NOTIFY LABORATORY PROJECT MANAGER SO THAT HE CAN NOTIFY THE PROJECT MANAGER IMMEDIATELY.

A. PRELIMINARY EXAMINATION PHASE: Date/Time cooler/sample was opened and checked: 4-29-92 600

by (print) James Cash (sign) James Cash

1. List courier delivering samples . . . Client . . . YES NO
2. Did cooler come with a shipping slip (air bill, etc.)? . . . YES NO
   If YES, attach and enter carrier and air bill number here: _____
3. Were custody seals on outside of cooler? . . . YES NO
   If YES, how many and where: 2 ON FRONT + BACK
   If YES, enter the following: seal date: 4-28-92 ; seal name: ERK Page
4. Were custody seals unbroken and intact at the date and time of arrival? . . . YES NO
5. Was chain-of-custody provided? . . . YES NO
6. Were custody papers sealed in a Ziploc™ bag and taped inside to the lid? . . . YES NO
7. Were entries on custody papers completed? YES NO . If no, give details on back
8. Turnaround time included? . . . YES NO
9. Did you sign custody papers in the appropriate place? . . . YES NO
10. Was project identifiable from custody papers? If YES, enter project name at the top of this form. . YES NO

B. SAMPLE CHECK-IN PHASE: Date samples were checked-in: 4-29-92 by (all those involved must sign below):

(print) James Cash (sign) James Cash

11. Describe packing: Packed in Blue Ice + Stacked
*12. If required, was enough ice used? (temperature maintained correctly)? . . . YES NO
13. Were all bottles sealed in separate plastic bags? . . . YES NO
*14. Did all bottles arrive unbroken and in good condition? . . . YES NO
15. Were all bottle labels complete (ID, date, time, signature, preservative, etc.)? . . . YES NO
16. Did all bottle labels agree with custody papers? If NO, indicate discrepancies on back. . . . YES NO
17. Were correct containers used for the tests indicated? . . . YES NO
*18. Were correct preservatives used when required? NA . . . YES NO
*19. pH of samples maintained correctly as required? If NO, list by ID# NA . YES NO
20. Was a sufficient amount of sample sent for tests indicated? . . . YES NO
*21. Bubbles present in VOA vials? If YES, list by ID#: NA . YES NO
22. Was lab. project manager called and status discussed? If YES, give details on the back of this form. YES NO
23. Who was called? _____ By whom? _____ on (date) _____
24. Second Party Review: _____

* Sample rejection criteria

W:\WP\CHEMCOM\CRF.01

WWC 5

560–598

CHAIN OF CUSTODY RECORD

WOODWARD–CLYDE CONSULTANTS
2318 MILLPARK DR.
MARYLAND HEIGHTS, MISSOURI 63043
314–429–0100

SHEET 1 of 2

PROJECT NO.: 89MC114V

PROJECT NAME: NL/TARACORP SUPERFUND SITE PREDESIGN FIELD INVESTIGATION

SAMPLER'S: (Signatures)

	DATE	TIME	SAMPLE I.D. NUMBER (Matrix / Location / Boring / Depth / Sample Type)	NO. OF CONTAINERS	Total Lead 4oz. poly jar Cool to 4°C	TCLP – Lead 4oz. poly jar Cool to 4°C	Geotechnical glass or poly jar	REMARKS
560	4/29	1100	S GW1136 1 00A00L ✓	1	✓			
561		1103	S GW1136 1 00B00L ✓	1	✓			
562		1105	S GW1136 1 00C00L ✓	1	✓			
563		1107	S GW1136 2 00A00L ✓	1	✓			
564		1109	S GW1136 2 00B00L ✓	1	✓			
565		1111	S GW1136 2 00C00L ✓	1	✓			
566		1120	S GW1112 1 00A00L ✓	1	✓			
567		1122	S GW1112 1 00B00L ✓	1	✓			
568		1124	S GW1112 1 00C00L ✓	1	✓			
569		1126	S GW1112 2 00A00L ✓	1	✓			
570		1128	S GW1112 2 00B00L ✓	1	✓			
571		1130	S GW1112 2 00C00L ✓	1	✓			
572		1135	S GW1111 1 00A00L ✓	1	✓			
573		1137	S GW1111 1 00B00L ✓	1	✓			
574		1139	S GW1111 1 00C00L ✓	1	✓			
575		1142	S GW1111 2 00A00L ✓	1	✓			
576		1144	S GW1111 2 00B00L ✓	1	✓			
577		1146	S GW1111 2 00C00L ✓	1	✓			
578		1312	S GR1238 2 00A00L ✓	1	✓			
579		1314	S GR1238 2 00B00L ✓	1	✓			
580		1316	S GR1238 2 00C00L ✓	1	✓			
581		1335	S GR1018 1 00A00L ✓	1	✓			
582		1337	S GR1018 1 00B00L ✓	1	✓			

RELINQUISHED BY: (Signature)	DATE / TIME	RECEIVED BY: (Signature)	DATE / TIME
[signature]	4/29 1515	[signature]	4/29 1515
RELINQUISHED BY: (Signature)	DATE / TIME	RECEIVED AT LAB BY: (Signature)	DATE / TIME
[signature]	4/29 1600	[signature]	4/29 1600
METHOD OF SHIPMENT:		AIRBILL NO: (If Applicable)	

METALS/WET CHEMISTRY DATA ASSESSMENT

PROJECT NO. 89MC114V
LABORATORY ESE
LAB PROJECT NO. 5912C31 0104
NO. OF SAMPLES/
MATRIX 199/SOIL

SITE NL/TARACORP SUPERFUND SITE

REVIEWER Wendy Reibolt
REVIEWER'S NAME WENDY REIBOLT
COMPLETION DATE 9/17/92

DATA ASSESSMENT SUMMARY

	ICP	AA	Hg	CN	OTHER
1. HOLDING TIMES					
2. BLANKS					
3. CCV					
4. STANDARD MATRIX SPIKE					
5. MATRIX SPIKE					
6. OTHER QC					
7. OVERALL ASSESSMENT					

NOT APPLICABLE

O = Data had no problems/or qualified due to minor problems.
M = Data qualified due to major problems.
Z = Data unacceptable.
X = Problems, but do not affect data.

ACTION ITEMS:

COMMENTS: REVIEW OF % MOISTURE CALCULATIONS - ALL OF THE ATTACHED CALCULATIONS WERE CHECKED FOR ACCURACY. NO ERRORS WERE FOUND.

Wendy Reibolt

Environmental Science & Engineering, Inc.

Letter of Transmittal

11665 Lilburn Park Rd.
St. Louis, MO 63146
(314) 567-4600
FAX: 314-567-5030

8230 Marshall Dr.
Lenexa, KS 66214
(913) 492-6554
FAX: 913-492-9256

701 E. 2nd St.
Des Moines, IA 50309
(515) 282-9607
FAX: 515-282-9610

DATE 9-11-92 JOB NO

ATTENTION: Wendy Reinholt

RE: Report Corrections & Moisture Raw Data.

WE ARE SENDING YOU ☐ Attached ☐ Under separate cover via _____ the following items:

☐ Shop drawings ☐ Prints ☐ Plans ☐ Samples ☐ Specifications

☐ Copy of letter ☐ Change order ☐ _____

COPIES	LATEST DATE	NO.	DESCRIPTION
		1.	3/18/92 QC Data for SPM's WWC3.
			– Please replace current copies with this
			update.
		2.	Moisture Data for WWC5 & WWC6.

THESE ARE TRANSMITTED as checked below:

☐ For approval ☐ No exception taken ☐ Revise and submit ____ copies

☐ For your use ☐ Make corrections noted ☐ Submit ____ copies for distribution

☐ As requested ☐ Rejected ☐ Return ____ corrected prints

☐ For review and comment ☐ _____

☐ FOR BIDS DUE _____ 19____ ☐ PRINTS RETURNED AFTER LOAN TO US

REMARKS Wendy,

Per our phone conversation Thursday 9-10-92:
In WWC3 Report, the date 3/18/92 corresponds to batch S7169 for MB, CLV & SP Summaries. Computer error caused this date to be missed along with SPM data. The missing SPM data is included in this package.

DELIVERED 9/11/92

COPY TO: File

Signed: ECL

58091

PERCENT MOISTURE DETERMINATION

Notebook: 2083 Page#: 84

Date Start: 7/5/92	Chem. Int.: RLW	Date End:	Chem. Int:	Method:

	Sample ID	Location	Homogenous	Method of Homogenation	Sample Description	Container Weight (g) A	Sample Weight (g) B	Dry Sample & Container C	% Moisture *
1	WWC6* 97	5	N	Mix	Med, roots, stems, rocks	1.36	5.13	5.75	14.42
2	98				"	1.36	5.36	6.02	13.06
3	99				"	1.35	5.79	6.39	12.95
4	100				"	1.35	5.47	6.27	10.05
5	101				Red rocks, stems, roots	1.35	5.60	6.39	10.00
6	102				"	1.38	5.39	6.19	10.76
7	103				Poorly med, rocks	1.38	5.35	6.10	11.78
8	104				"	1.38	5.94	6.72	10.10
9	105				"	1.38	5.37	6.24	9.50
10	106				"	1.38	5.78	6.70	~~0.93~~
11	107				Small rock, roots, dark	1.37	5.57	6.48	8.26
12	108				"	1.38	5.23	6.11	9.56
13	109				"	1.37	5.68	6.47	10.21
14	110				"	1.37	5.55	6.41	9.19
15	111				"	1.37	5.39	6.33	7.98
16	112				Dry rock, bark, rock	1.37	5.70	6.66	7.19
17	113				"	1.37	6.35	7.26	7.24
18	114				dark, roots, rocks, old	1.36	5.55	6.53	6.85
19	115				"	1.36	6.20	7.08	7.74
20	116				"	1.36	5.66	6.64	6.71
21	MB				—	1.36	—	1.36	0
22	RP 116				"	1.36	5.62	6.61	6.58

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$* \; [1-(\frac{C-A}{B})]*100 = \%MOISTURE$

SOU21

PERCENT MOISTURE DETERMINATION

Notebook: 2083 Page#: 85

Date Start: 7/5/92	Chem. Int.: RLW	Date End:	Chem. Int:	Method:

	Sample ID	Location	Homogenous	Method of Homogenation	Sample Description	Container Weight (g) A	Sample Weight (g) B	Dry Sample & Container C	% Moisture *	
1	WWC6* 117	4	N	Mix	mud, roots sandy	1.37	5.28	6.36	5.49	✓
2	118				dark roots rocks	1.35	5.73	6.41	11.69	✓ RLW Redo Pg
3	119				"	1.35	5.30			
4	120				dark, glass rocks, rocks	1.36	5.79	6.44	12.26	✓
5	121				crusty, dark roots	1.36	7.72	8.29	10.23	✓
6	122				"	1.37	6.36	7.19	8.49	✓
7	123				"	1.37	6.05	6.85	9.42	✓
8	124				med, rocks, sticks	1.37	5.15	6.12	7.77	✓
9	125				"	1.33	5.55	6.42	8.29	✓
10	126				"	1.33	5.35	6.17	9.53	✓
11	127				light sticks roots	1.33	6.03	6.98	6.30	✓
12	128				"	1.34	5.63	6.62	6.22	✓
13	129				crusty, light	1.34	6.08	6.79	10.36	✓
14	130				med, roots, rocks	1.34	5.21	5.97	11.13	✓
15	131				"	1.34	6.06	6.73	11.06	✓
16	132				"	1.34	5.64	6.32	11.70	
17	133				"	1.34	5.61	6.34	10.87	✓
18	134				"	1.34	5.82	6.54	10.65	✓
19	135				"	1.34	6.31	6.93	11.41	✓
20	136				light roots rocks	1.34	5.20	5.93	11.73	✓
21	MB				—	1.34	—	1.34	0	✓
22	RP 136	↓	↓	↓	"	1.34	5.16	5.89	11.82	✓

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$$* \left[1-\left(\frac{C-A}{B}\right)\right] * 100 = \%MOISTURE$$

D8U91

PERCENT MOISTURE DETERMINATION

Notebook: 2083 Page#: 810

Date Start: 7/5/92 Chem. Int.: RLW | Date End: Chem. Int: | Method:

	Sample ID	Location	Homogenous	Method of Homogenation	Sample Description	Container Weight (g) A	Sample Weight (g) B	Dry Sample & Container C	% Moisture *
1	WWC6* 137	2	N	Mix	Mud, Roots Crumbly	~~1.36~~ 1.35	5.63	6.28	12.61
2	138				Reddish Roots	1.37	5.52	6.35	9.78
3	139				"	1.37	5.59	6.35	10.91
4	140				"	1.33	8.33	9.01	7.80
5	141				Reddish + Mud, Roots	1.34	5.46	6.07	13.37
6	142				"	1.34	5.21	5.97	11.13
7	143				Reddish, MOS, Roots	1.34	5.49	6.40	7.83
8	144				"	1.34	5.38	6.21	9.48
9	145				Dark, Roots Rocks	1.35	5.34	6.01	12.73
10	146				"	1.35	5.94	6.67	10.44
11	147				"	1.35	6.22	6.83	11.90
12	148				Dark + light Rocks, Roots	1.36	6.00	6.78	9.67
13	149				Crumbly Dark Roots	1.36	5.34	6.02	12.73
14	150				"	1.36	5.06	5.73	13.64
15	151				"	1.32	5.45	6.19	10.64
16	152				"	1.32	6.53	7.27	8.88
17	153				Mud Roots "	1.32	5.77	6.44	11.27
18	154				"	1.33	5.22	6.03	9.96
19	155				"	1.33	5.28	6.15	8.71
20	156				Crumbly, Roots, Mud	1.33	5.27	6.03	10.82
21	MB				—	1.33	—	1.33	0
22	RP 156				"	1.33	6.29	6.98	10.17

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$$* \; [1-(\frac{C-A}{B})]*100 = \%MOISTURE$$

1

38021

PERCENT MOISTURE DETERMINATION

Notebook: 2083 Page#: 87

Date Start: 7/5/92 Chem. Int.: RLW | Date End: Chem. Int: | Method:

	Sample ID	Location	Homogenous	Method of Homogenation	Sample Description	Container Weight (g) A	Sample Weight (g) B	Dry sample & Container C	% Moisture *	
1	WWC6*157	6	N	Mix	Dark, roots rocks	1.34	5.67	6.24	13.58	✓
2	158				"	1.34	6.24	6.69	14.26	✓
3	159				"	1.34	5.84	6.52	11.30	✓
4	160				Dark, roots rocks	1.34	5.17	5.65	16.63	✓
5	161				Lighter, Dark rocks,	1.35	5.23	5.71	16.63	✓
6	162				"	1.36	6.24	6.57	16.51	✓
7	163				"	1.36	5.56	6.10	14.75	✓
8	164				Dark, roots rocks	1.35	5.28	5.91	13.64	✓
9	WWC6 * 119	1	N	MIX	Dark rocks, roots	1.38	5.28	5.99	12.69	Redone from pg. 85 RLW
10	1165	6	N	MIX	Med. roots rocks	1.31	5.52	6.10	13.22	
11	1166				light roots rocks	1.31	5.51	6.24	10.53	✓
12	1167				med roots rocks,	1.32	5.40	6.21	9.44	✓
13	1168				med,	1.31	5.79	6.54	9.67	7/6/92
14	1169				"	1.35	5.21	6.12	8.45	✓
15	170				"	1.34	5.22	6.19	7.09	✓
16	171				Dark, small rocks, roots	1.36	5.14	6.05	8.75	✓
17	172				"	1.36	5.39	6.04	13.17	✓
18	173				"	1.38	5.25	5.98	12.38	✓
19	174				"	1.38	5.47	6.15	12.80	✓
20	175				med roots rocks	1.31	6.34	7.03	9.78	✓
21	MB				—	1.34	—	1.34	0	
22	RP WWC6*175	↓	↓	↓	med roots rocks	1.32	5.46	6.24	9.89	✓

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$$* \ [1-(\frac{C-A}{B})]*100=\%MOISTURE$$

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PERCENT MOISTURE DETERMINATION

Notebook: 2083 Page#: 88

Date Start: 7/6/90 Chem. Int.: RLN | Date End: Chem. Int: | Method:

	Sample ID	Location	Homogenous	Method of Homogenation	Sample Description	Container Weight (g) A	Sample Weight (g) B	Dry Sample & Container C	% Moisture *	
1	WWC6*176	4	N	MIX	med, roots rocks	1.34	5.23	6.07	9.56	✓
2	177				"	1.34	5.55	6.39	9.01	✓
3	178				dark roots, rocks	1.33	5.11	5.43	19.77	✓
4	179				"	1.34	5.39	5.83	16.70	✓
5	180				sandy clay white med roots	1.34	5.87	6.37	14.31	✓
6	181				med roots rocks	1.36	5.44	6.40	7.35	✓
7	182				"	1.35	5.30	6.28	6.98	✓
8	183				"	1.35	5.93	6.78	8.43	✓
9	184				dark roots, roots	1.35	5.27	6.04	11.01	✓
10	185				"	1.35	5.39	6.23	9.46	✓
11	186				"	1.35	5.74	6.41	11.85	✓
12	187				"	1.35	5.05	5.74	13.07	✓
13	188				med roots roots	1.35	5.42	6.21	10.33	✓
14	189				dark, rock roots	1.34	5.34	6.13	10.30	✓
15	190				"	1.34	5.55	6.30	10.63	✓
16	191				"	1.36	5.30	5.93	13.77	✓
17	192				light med roots roots, stems	1.36	6.57	7.08	12.94	✓
18	193				roots "	1.34	5.19	5.96	10.98	✓
19	194				"	1.34	6.30	7.08	8.89	✓
20	195				"	1.35	5.67	6.40	10.93	✓
21	MB				—	1.36	—	1.36	0	
22	RP 195	↓	↓	↓	"	1.34	5.70	6.43	10.70	

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$$* \ [1-(\frac{C-A}{B})]*100=\%MOISTURE$$

58021

PERCENT MOISTURE DETERMINATION

Notebook: 2083 Page#: 89

Date Start: 7/6/92 Chem. Int.: RLW | Date End: Chem. Int: | Method:

	Sample ID	Location	Homogenous	Method of Homogenation	Sample Description	Container Weight (g) A	Sample Weight (g) B	Dry Sample & Container C	% Moisture *	
1	WWC6 * 196	7	N	MIX	light, rocks rocks	1.34	5.82	6.49	8.08	✓
2	197				"	1.33	5.21	6.12	8.06	✓
3	198				"	1.34	5.46	6.35	8.24	✓
4	199				"	1.34	6.81	7.77	5.58	✓
5	200				mud, rocks shorts	1.34	7.10	7.76	9.58	✓
6	201				mud/dark rocks	1.34	5.35	6.27	7.85	✓
7	202				light rocks	1.34	6.09	6.98	7.39	✓
8	203				mud rocks, rocks	1.35	5.103	6.38	10.66	✓
9	204				light, rocks rocks	1.34	5.70	6.50	9.47	✓
10	205				"	1.34	6.49	7.22	9.40	✓
11	206				dark, rocks rocks	1.34	5.70	6.14	15.79	✓
12	207				"	1.34	6.34	6.87	12.78	✓
13	208				"	1.35	5.83	6.52	11.32	✓
14	209				"	1.34	5.80	6.23	15.69	✓
15	210				"	1.34	6.23	6.75	13.16	✓
16	211				"	1.35	5.44	6.10	12.68	✓
17	212				"	1.35	5.34	5.98	13.30	✓
18	213				light, rocks rocks	1.35	5.20	6.05	9.61	✓
19	214				"	1.35	5.42	6.14	11.46	✓
20	215				"	1.35	5.64	6.26	12.94	✓
21	MB				—	1.35	—	1.35	0	✓
22	RP 215	↓	↓	↓	"	1.35	5.83	6.47	12.18	✓

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$$* \ [1-(\frac{C-A}{B})]*100=\%MOISTURE$$

J8U91

PERCENT MOISTURE DETERMINATION

Notebook: 2083 Page#: 90

Date Start: 7/6/92	Chem. Int.: PLW	Date End:	Chem. Int:	Method:

	Sample ID	Location	Homogenous	Method of Homogenation	Sample Description	Container Weight (g) A	Sample Weight (g) B	Dry Sample & Container C	% Moisture *
1	WWC6* 216	5	N	Mix	med, rocks roots	1.35	5.48	6.12	12.96
2	217				"	1.35	6.20	6.99	9.03
3	218				"	1.35	6.85	7.55	9.49
4	219				"	1.35	6.30	6.96	10.95
5	220				med rocks roots	1.35	6.15	6.83	10.89
6	221				"	1.35	5.82	6.55	10.65
7	222				"	1.35	5.60	6.20	13.39
8	223				"	1.36	5.52	6.28	10.87
9	224				"	1.36	5.43	6.26	9.76
10	225				med rocks roots	1.36	5.14	5.97	10.31
11	226				"	1.36	6.44	6.97	12.89
12	227				"	1.35	5.58	6.25	12.19
13	228				Dark rocks roots	1.35	5.30	6.04	11.51
14	229				"	1.35	5.36	6.29	7.84
15	230				med rocks roots	1.35	5.67	6.68	6.00
16	231				"	1.35	5.31	6.22	8.29
17	232				"	1.35	5.31	5.97	12.99
18	233				"	1.35	5.46	6.10	13.00
19	234				"	1.35	5.50	6.16	12.54
20	235				Powdery, dark, rocks	1.35	5.41	6.38	7.02
21	MB				—	1.33	—	1.33	0
22	RP WWC6*235				"	1.32	7.03	7.93	5.97

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* $[1-(\frac{C-A}{B})]*100=\%MOISTURE$

58U21

PERCENT MOISTURE DETERMINATION

Notebook: 2083 Page#: 91

Date Start: 7/6/92 Chem. Int.: RLW | Date End: Chem. Int: | Method:

	Sample ID	Location	Homogenous	Method of Homogenation	Sample Description	Container Weight (g) A	Sample Weight (g) B	Dry Sample & Container C	* Moisture *	
1	WWC16 * 236	3	N	MIX	Dark Roots	1.33	5.87	6.90	5.11	✓
2	237				Rocks, Dark Roots	1.33	5.17	6.19	6.00	✓
3	238				"	1.33	5.47	5.96	15.36	✓
4	239				"	1.34	6.39	6.83	14.08	✓
5	240				"	1.32	5.50	5.99	15.09	✓
6	241				Dark Roots, Rock	1.31	6.56	7.02	12.69	✓
7	242				"	1.32	5.73	6.36	12.04	✓
8	243				"	1.34	6.41	6.95	12.48	✓
9	244				light roots rocks	1.34	5.93	6.72	9.27	✓
10	245				Dark Roots Rocks	1.34	5.33	5.89	14.63	✓
11	246				"	1.33	5.26	5.91	12.93	✓
12	247				"	1.33	5.82	6.87	15.12	✓
13	248				"	1.33	5.53	6.38	8.68	✓
14	249				Dark Roots	1.33	6.28	7.15	7.32	✓
15	250				"	1.33	5.52	6.31	9.78	✓
16	251				"	1.33	5.56	6.12	13.85	
17	252				"	1.33	6.45	6.95	12.87	✓
18	253				Dark Roots,	1.33	6.26	6.56	16.45	✓
19	254				Rock Roots	1.33	5.59	6.06	15.38	✓
20	255				"	1.34	5.48	5.92	16.42	✓
21	MB				—	1.33	—	1.33	0	✓
22	RP 255				"	1.33	5.35	5.79	16.63	✓

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$$* \ [1-(\frac{C-A}{B})]*100=\%MOISTURE$$

PERCENT MOISTURE DETERMINATION

Notebook: 2075 Page#: 98

Date Start: 7/5/92 Chem. Int.: RLW | Date End: Chem. Int: | Method:

	Sample ID	Location	Homogenous	Method of Homogenation	Sample Description	Container Weight (g) A	Sample Weight (g) B	Dry Sample & Container C	% Moisture *
1	WWC6* 057	~~6~~	N	MIX	med rock, roots	1.33	6.29	7.32	4.77
2	058				light, roots rocks	1.33	6.33	7.42	3.79
3	059				"	1.33	6.87	7.98	3.20
4	060				"	1.33	5.59	6.72	3.58
5	061				med/light rocks, roots	1.32	6.06	6.91	7.76
6	062				"	1.32	5.78	6.79	5.36
7	063				Dark roots rocks	1.32	5.16	6.17	6.01
8	064				med, roots etc	1.32	5.14	6.11	6.81
9	065				"	1.33	5.38	6.34	6.88
10	066				"	1.34	5.48	6.31	9.31
11	067				Dark roots.	1.34	6.55	7.29	9.02 ✓
12	068				"	1.35	6.97	7.71	8.75 ✓
13	069				"	1.35	5.22	6.15	8.05 ✓
14	070				Dark roots pouchery	1.36	5.21	6.05	9.98 ✓
15	071				"	1.36	5.31	6.14	9.98 ✓
16	072				"	1.34	5.53	6.21	11.93 ✓
17	073				"	1.34	5.42	6.13	11.62 ✓
18	074				"	1.34	5.41	6.17	10.72 ✓
19	075				Dark roots rounded	1.34	5.76	6.49	10.59 ✓
20	076				med rocks pouchery	1.34	6.04	6.94	7.28 ✓
21	MB				—	1.35	—	1.35	0 ✓
22	RP WWC6* 076				med pouchery roots	1.34	5.07	6.03	7.50 ✓

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$* \; [1-(\frac{C-A}{B})]*100=\%MOISTURE$

PERCENT MOISTURE DETERMINATION

Notebook: 2075 Page#: 99

Start: 7/5/92 Chem. Int.: RLW | Date End: | Chem. Int: | Method:

Sample ID	Location	Homogenous	Method of Homogenation	Sample Description	Container Weight (g) A	Sample Weight (g) B	Dry Sample & Container C	% Moisture *	
WWC6* 077	3	N	MIX	med, red rock, roots	1.34	5.07	6.03	7.50	✓
078				med/light roots, rock	1.34	5.45	6.20	10.83	✓
079				"	1.34	6.24	7.08	8.01	✓
080				"	1.33	5.42	6.32	7.93	✓
081				med, roots, rocks	1.35	5.25	6.05	10.48	✓
082				"	1.35	5.58	6.26	12.01	✓
083				dark, red rocks, roots	1.35	5.86	6.57	10.92	✓
084				med, red rocks, rocks	1.36	5.49	6.23	11.29	✓
085				"	1.36	5.76	6.40	12.50	✓
086				"	1.36	5.22	5.93	12.45	✓
087				med/dark roots	1.35	5.49	6.08	13.84	✓
088				dark, roots, rocks	1.35	5.54	6.30	10.65	✓
089				"	1.35	5.40	6.05	12.96	✓
090				"	1.35	5.65	6.44	9.91	✓
091				light, roots, rocks	1.35	5.13	5.97	9.94	✓
092				med/light roots, rocks	1.35	5.65	6.21	13.98	✓
093				dark, roots, rocks	1.36	5.22	5.78	15.33	✓
094				light, roots, rocks	1.35	5.08	5.88	10.83	✓
095				med, roots, rocks	1.35	5.07	5.77	~~23.66~~ 12.82 RLW	✓
096				"	1.35	5.79	6.31	14.34	✓
				—	1.35	—	1.35	0	✓
WWC6*096				"	1.35	5.71	6.27	13.84	✓

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$$* \left[1-\left(\frac{C-A}{B}\right)\right]*100=\%MOISTURE$$

METALS/WET CHEMISTRY DATA ASSESSMENT

PROJECT NO. 89MC114V
LABORATORY ESE
LAB PROJECT NO. 5912031 0100
NO. OF SAMPLES/
MATRIX 30/SOIL
ANALYSIS DATE: 6/12/92

SITE NL/TARACORP SUPERFUND SITE

REVIEWER [signature]
REVIEWER'S NAME WENDY REINBOLT
COMPLETION DATE 8/24/92

DATA ASSESSMENT SUMMARY

	ICP	AA	Hg	CN	OTHER
1. HOLDING TIMES		✓			
2. BLANKS		✓			
3. CCV		✓			
4. STANDARD MATRIX SPIKE		✓			
5. MATRIX SPIKE		(1)			
6. OTHER QC		NA			
7. OVERALL ASSESSMENT		O/m			

O = Data had no problems/or qualified due to minor problems.
M = Data qualified due to major problems.
Z = Data unacceptable.
X = Problems, but do not affect data.

ACTION ITEMS: (1) WWC 6* 10 EXCEEDS RPD AND % RECOVERY LIMITS. LAB ATTRIBUTES TO SAMPLE INHOMOGENEITY. DATA QUALIFIED AS ESTIMATED (J).

COMMENTS:

METALS/WET CHEMISTRY DATA ASSESSMENT

PROJECT NO. 89MC114V
LABORATORY ESE
LAB PROJECT NO. 5712031 0100
NO. OF SAMPLES/
MATRIX 79/SOIL
ANALYSIS DATE: 6/19/92

SITE NL/TARACORP SUPERFUND SITE

REVIEWER Wendy E Reinbolt
REVIEWER'S NAME WENDY REINBOLT
COMPLETION DATE 8/24/92

DATA ASSESSMENT SUMMARY

	ICP	AA	Hg	CN	OTHER
1. HOLDING TIMES		✓			
2. BLANKS		✓			
3. CCV		✓			
4. STANDARD MATRIX SPIKE		✓			
5. MATRIX SPIKE		(1)			
6. OTHER QC		NA			
7. OVERALL ASSESSMENT		O/M			

O = Data had no problems/or qualified due to minor problems.
M = Data qualified due to major problems.
Z = Data unacceptable.
X = Problems, but do not affect data.

ACTION ITEMS: (1) WWC6*50, WWC6*70, & WWC6*109 EXCEEDS RPD AND % RECOVERY CONTROL LIMITS. LAB ATTRIBUTES TO SAMPLE INHOMOGENEITY. DATA QUALIFIED AS ESTIMATED (J).

COMMENTS:

METALS/WET CHEMISTRY DATA ASSESSMENT

PROJECT NO. 89MC114V
LABORATORY ESE
LAB PROJECT NO. 5912031 0100
NO. OF SAMPLES
MATRIX 120/SOIL
ANALYSIS DATE: 6/26/92

SITE NL/TARACORP SUPERFUND SITE
REVIEWER Wendy E Reinbolt
REVIEWER'S NAME WENDY REINBOLT
COMPLETION DATE 8/24/92

DATA ASSESSMENT SUMMARY

	ICP	AA	Hg	CN	OTHER
1. HOLDING TIMES		✓			
2. BLANKS		✓			
3. CCV		✓			
4. STANDARD MATRIX SPIKE		✓			
5. MATRIX SPIKE		(1)(2)			
6. OTHER QC		NA			
7. OVERALL ASSESSMENT		O/M			

O = Data had no problems/or qualified due to minor problems.
M = Data qualified due to major problems.
Z = Data unacceptable.
X = Problems, but do not affect data.

ACTION ITEMS: (1) WWC6# 169 EXCEEDS RPD AND % RECOVERY CONTROL LIMITS. LAB ATTRIBUTES TO SAMPLE INHOMOGENEITY. DATA QUALIFIED AS ESTIMATED (J).

COMMENTS: (2) WWC6# 209 SHOWS NEGATIVE RECOVERY PERCENTAGE. LAB ATTRIBUTES TO TARGET CONCENTRATION GREATER THAN 4 TIMES SPIKING CONCENTRATION. NO ACTION TAKEN.

METALS/WET CHEMISTRY DATA ASSESSMENT

PROJECT NO. 89MC114V
LABORATORY ESE
LAB PROJECT NO. 5912031 0100
NO. OF SAMPLES/
MATRIX 120/SOIL
ANALYSIS DATE: 7/28/92

SITE NL/TARACORP SUPERFUND SITE

REVIEWER Wendy E. Reinbolt
REVIEWER'S NAME WENDY REINBOLT
COMPLETION DATE 8/24/92

DATA ASSESSMENT SUMMARY

	ICP	AA	Hg	CN	OTHER
1. HOLDING TIMES		✓			
2. BLANKS		(1)			
3. CCV		✓			
4. STANDARD MATRIX SPIKE		(2)			
5. MATRIX SPIKE		(3)			
6. OTHER QC		NA			
7. OVERALL ASSESSMENT		M			

O = Data had no problems/or qualified due to minor problems.
M = Data qualified due to major problems.
Z = Data unacceptable.
X = Problems, but do not affect data.

ACTION ITEMS: (1) WWC6* 230 THROUGH WWC6* 349 CONCENTRATION DETECTED IN METHOD BLANK. ALL RESULTS LESS THAN 5 TIMES DETECTED CONCENTRATION IN BLANK ARE CLASSIFIED AS NON-DETECT (U) (WWC6* 298 & WWC6* 347). ALL RESULTS GREATER THAN 5 TIMES DETECTED CONCENTRATION IN BLANK ARE QUALIFIED AS ESTIMATED (J).

COMMENTS: (2) BATCH 58249 SP*NONE*5 EXCEEDS RECOVERY CONTROL LIMITS. LAB DOES NOT COMMENT. DATA QUALIFIED AS ESTIMATED (J).
(3) WWC6* 329 EXCEEDS RECOVERY CONTROL LIMITS. LAB ATTRIBUTES TO TARGET CONCENTRATION IS GREATER THAN 4 TIMES SPIKING CONCENTRATION. NO ACTION TAKEN.

METALS/WET CHEMISTRY DATA ASSESSMENT

PROJECT NO. 89MC114V
LABORATORY ESE
LAB PROJECT NO. 5912031 0100
NO. OF SAMPLES:
MATRIX 200/SOIL
ANALYSIS DATE: 7/29/92

SITE NL/TARACORP SUPERFUND SITE

REVIEWER Wendy E Reinbolt
REVIEWER'S NAME WENDY REINBOLT
COMPLETION DATE 8/24/92

DATA ASSESSMENT SUMMARY

	ICP	AA	Hg	CN	OTHER
1. HOLDING TIMES		✓			
2. BLANKS		(1)			
3. CCV		✓			
4. STANDARD MATRIX SPIKE		(2)			
5. MATRIX SPIKE		(3)(4)(5)			
6. OTHER QC					
7. OVERALL ASSESSMENT					

O = Data had no problems/or qualified due to minor problems.
M = Data qualified due to major problems.
Z = Data unacceptable.
X = Problems, but do not affect data.

ACTION ITEMS: (1) WWC6# 350 THROUGH WWC6# 549 CONCENTRATION DETECTED IN METHOD BLANK. ALL RESULTS LESS THAN 5 TIMES DETECTED CONCENTRATION IN BLANK ARE QUALIFIED AS NON-DETECT (U). ALL RESULTS GREATER THAN 5 TIMES DETECTED CONCENTRATION IN BLANK ARE QUALIFIED AS ESTIMATED.

COMMENTS: (2) BATCH 58300 SP# NONE# 3 AND SP# NONE# 4 EXCEED RECOVERY CONTROL LIMITS. LAB ATTRIBUTES TO OUT OF CALIBRATION SPIKING POINT. NO ACTION TAKEN.
(3) WWC6# 409, WWC6# 449 EXCEED RECOVERY CONTROL LIMITS. LAB ATTRIBUTES TO SAMPLE INHOMOGENEITY. DATA QUALIFIED AS ESTIMATED (J).

CONTINUED ON FOLLOWING PAGE.

Woodward-Clyde Consultants

Sheet No. 2 Of 2

File 89MC114V

Made by WER Date 8/24/92

Checked by _____ Date _____

FOR NL/TARACORP SUPERFUND SITE

METALS/WET CHEMISTRY DATA ASSESSMENT (CONT.)

ANALYSIS DATE: 7/29/92

ACTION ITEMS:

(4). WWC6* 429 WER EX SHOWS NEGATIVE RECOVERY. LAB ATTRIBUTES TO TARGET CONCENTRATION GREATER THAN 5 TIMES SPIKING CONCENTRATION. NO ACTION TAKEN.

(5). WWC6* 529, & WWC6* 549 SHOWS RECOVERY OUTSIDE CONTROL LIMITS. LAB ATTRIBUTES TO AN OUT-OF-CALIBRATION SPIKING REPORT. NO ACTION TAKEN.

METALS/WET CHEMISTRY DATA ASSESSMENT

PROJECT NO. 89MC114V
LABORATORY ESE
LAB PROJECT NO. 5912031
NO. OF SAMPLES/
MATRIX 100/SOIL
ANALYSIS DATE: 7/30/92

SITE NL/TARACORP SUPERFUND SITE
REVIEWER Wendy E Reinbolt
REVIEWER'S NAME WENDY REINBOLT
COMPLETION DATE 8/24/92

DATA ASSESSMENT SUMMARY

	ICP	AA	Hg	CN	OTHER
1. HOLDING TIMES		✓			
2. BLANKS		✓			
3. CCV		✓			
4. STANDARD MATRIX SPIKE		(1)			
5. MATRIX SPIKE		(2)			
6. OTHER QC		NA			
7. OVERALL ASSESSMENT					

O = Data had no problems/or qualified due to minor problems.
M = Data qualified due to major problems.
Z = Data unacceptable.
X = Problems, but do not affect data.

ACTION ITEMS:

COMMENTS: (1) ALL STANDARD MATRIX SPIKES EXCEED RECOVERY CONTROL LIMITS. LAB ATTRIBUTES TO OUT-OF-CALIBRATION SPIKING PIPET. NO ACTION TAKEN.
(2) ALL SAMPLE MATRIX SPIKES EXCEED RECOVERY CONTROL LIMITS. LAB ATTRIBUTES TO OUT-OF-CALIBRATION SPIKING PIPET. NO ACTION TAKEN.

MOISTURE

Pages 1 - 15

Environmental Science & Engineering, Inc.

St. Louis Chemistry Laboratory

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Analytical Chemistry Re

STATUS: FINAL

PROJECT NAME: NL/TARACORP SUPERFUND SITE PREDESIGN FIELD INVESTIGATION, WWC89MC114V

PROJECT NUMBER: 5912031 0100 **REPORT DATE:** 08-17-92

SAMPLE MATRIX: SOIL **LAB MANAGER/QC REVIEW:** JEFFREY W. SIRIA

PROJECT MANAGER: JOHN F. GEMOULES **REPORT APPROVED BY:** FRANCIS Y. HUANG

SAMPLE I.D.	LABORATORY I.D.	COLLECTION DATE	RECEIVED DATE	MOISTURE, %WET WT METHOD: PB215192	EXTRACT. DATE	ANALYSIS DATE	CHEM. INIT.
SMP1611100A0LD	WWC6*1	05/07/92	05/07/92	4.6		07/02/92	RLW
SMP1611100B0LD	WWC6*2	05/07/92	05/07/92	12.3		07/02/92	RLW
SMP1611100C0LD	WWC6*3	05/07/92	05/07/92	14.1		07/02/92	RLW
SMP1611200A00L	WWC6*4	05/07/92	05/07/92	9.2		07/02/92	RLW
SMP1611200B00L	WWC6*5	05/07/92	05/07/92	9.6		07/02/92	RLW
SMP1611200C00L	WWC6*6	05/07/92	05/07/92	10.4		07/02/92	RLW
SMP1614100A00L	WWC6*7	05/07/92	05/07/92	15.0		07/02/92	RLW
SMP1614100B00L	WWC6*8	05/07/92	05/07/92	16.4		07/02/92	RLW
SMP1614100C00L	WWC6*9	05/07/92	05/07/92	16.1		07/02/92	RLW
SMP1614200A00L	WWC6*10	05/07/92	05/07/92	15.6		07/02/92	RLW
SMP1614200B00L	WWC6*11	05/07/92	05/07/92	15.4		07/02/92	RLW
SMP1614200C00L	WWC6*12	05/07/92	05/07/92	13.6		07/02/92	RLW
SDE2261100A00L	WWC6*13	05/07/92	05/07/92	13.1		07/02/92	RLW
SDE2261100B00L	WWC6*14	05/07/92	05/07/92	13.2		07/02/92	RLW
SDE2261100C00L	WWC6*15	05/07/92	05/07/92	19.0		07/02/92	RLW
SDE2261100A0LD	WWC6*16	05/07/92	05/07/92	12.1		07/02/92	RLW
SDE2261100B0LD	WWC6*17	05/07/92	05/07/92	13.7		07/02/92	TJH
SDE2261100C0LD	WWC6*18	05/07/92	05/07/92	16.0		07/02/92	TJH
SDE2200100A00L	WWC6*19	05/07/92	05/07/92	11.5		07/02/92	TJH
SDE2200100B00L	WWC6*20	05/07/92	05/07/92	11.2		07/02/92	TJH
SDE2200100C00L	WWC6*21	05/07/92	05/07/92	12.7		07/02/92	TJH
SDE2200200A00L	WWC6*22	05/07/92	05/07/92	11.6		07/02/92	TJH
SDE2200200B00L	WWC6*23	05/07/92	05/07/92	10.5		07/02/92	TJH
SDE2200200C00L	WWC6*24	05/07/92	05/07/92	11.2		07/02/92	TJH
SDE2219100A00L	WWC6*25	05/07/92	05/07/92	8.8		07/02/92	TJH
SDE2219100B00L	WWC6*26	05/07/92	05/07/92	9.4		07/02/92	TJH
SDE2219100C00L	WWC6*27	05/07/92	05/07/92	10.7		07/02/92	TJH
SDE2219100A0LD	WWC6*28	05/07/92	05/07/92	8.9		07/02/92	TJH
SDE2219100B0LD	WWC6*29	05/07/92	05/07/92	9.4		07/02/92	TJH
SDE2219100C0LD	WWC6*30	05/07/92	05/07/92	11.5		07/02/92	TJH
SDE2219200A00L	WWC6*31	05/07/92	05/07/92	8.3		07/02/92	TJH
SDE2219200B00L	WWC6*32	05/07/92	05/07/92	8.0		07/02/92	TJH
SDE2219200C00L	WWC6*33	05/07/92	05/07/92	8.5		07/02/92	TJH
5 SDV2505100A00L	WWC6*34	05/07/92	05/07/92	7.5		07/02/92	TJH
SDV2505100B00L	WWC6*35	05/07/92	05/07/92	7.1		07/02/92	TJH
SDV2505100C00L	WWC6*36	05/07/92	05/07/92	9.1		07/02/92	TJH
SDV2505100A0LD	WWC6*37	05/07/92	05/07/92	7.0		07/02/92	TJH
SDV2505100B0LD	WWC6*38	05/07/92	05/07/92	7.3		07/02/92	TJH
SDV2505100C0LD	WWC6*39	05/07/92	05/07/92	9.1		07/02/92	TJH
SDV2505200A00L	WWC6*40	05/07/92	05/07/92	15.0		07/02/92	TJH
SDV2505200B00L	WWC6*41	05/07/92	05/07/92	15.9		07/02/92	TJH
SDV2505200C00L	WWC6*42	05/07/92	05/07/92	15.3		07/02/92	TJH

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Analytical Chemistry Result

STATUS: FINAL

PROJECT NAME: NL/TARACORP SUPERFUND SITE PREDESIGN FIELD INVESTIGATION, WWC89MC114V

PROJECT NUMBER: 5912031 0100

REPORT DATE: 08-17-92

SAMPLE MATRIX: SOIL

LAB MANAGER/QC REVIEW: JEFFREY W. SIRIA

PROJECT MANAGER: JOHN F. GEMOULES

REPORT APPROVED BY: FRANCIS Y. HUANG

SAMPLE I.D.	LABORATORY I.D.	COLLECTION DATE	RECEIVED DATE	MOISTURE, %WET WT METHOD: PB215192	EXTRACT. DATE	ANALYSIS DATE	CHEM. INIT.
SBR2029100A00L	WWC6*43	05/07/92	05/07/92	9.8		07/02/92	TJH
SBR2029100B00L	WWC6*44	05/07/92	05/07/92	13.2		07/02/92	TJH
SBR2029100C00L	WWC6*45	05/07/92	05/07/92	12.4		07/02/92	TJH
SBR2029200A00L	WWC6*46	05/07/92	05/07/92	9.1		07/02/92	TJH
SBR2029200B00L	WWC6*47	05/07/92	05/07/92	9.1		07/08/92	RLW
SBR2029200C00L	WWC6*48	05/07/92	05/07/92	11.1		07/02/92	TJH
SBR2011100A00L	WWC6*49	05/07/92	05/07/92	9.8		07/02/92	TJH
SBR2011100B00L	WWC6*50	05/07/92	05/07/92	6.7		07/02/92	TJH
SBR2011100C00L	WWC6*51	05/07/92	05/07/92	7.1		07/02/92	TJH
SBR2011200A00L	WWC6*52	05/07/92	05/07/92	11.8		07/02/92	TJH
SBR2011200B00L	WWC6*53	05/07/92	05/07/92	10.4		07/02/92	TJH
SBR2011200C00L	WWC6*54	05/07/92	05/07/92	9.6		07/02/92	TJH
SBR2011100A0LD	WWC6*55	05/07/92	05/07/92	9.6		07/02/92	TJH
SBR2011100B0LD	WWC6*56	05/07/92	05/07/92	7.4		07/02/92	TJH
SBR2011100C0LD	WWC6*57	05/07/92	05/07/92	4.8		07/05/92	RLW
SBE1932100A00L	WWC6*58	05/11/92	05/11/92	3.8		07/05/92	RLW
SBE1932100B00L	WWC6*59	05/11/92	05/11/92	3.2		07/05/92	RLW
SBE1932100C00L	WWC6*60	05/11/92	05/11/92	3.6		07/05/92	RLW
SBE1932200A00L	WWC6*61	05/11/92	05/11/92	7.8		07/05/92	RLW
SBE1932200B00L	WWC6*62	05/11/92	05/11/92	5.4		07/05/92	RLW
SBE1932200C00L	WWC6*63	05/11/92	05/11/92	6.0		07/05/92	RLW
SBE2109100A00L	WWC6*64	05/11/92	05/11/92	6.8		07/05/92	RLW
SBE2109100B00L	WWC6*65	05/11/92	05/11/92	6.9		07/05/92	RLW
SBE2109100C00L	WWC6*66	05/11/92	05/11/92	9.3		07/05/92	RLW
SBE2109200A00L	WWC6*67	05/11/92	05/11/92	9.0		07/05/92	RLW
SBE2109200B00L	WWC6*68	05/11/92	05/11/92	8.8		07/05/92	RLW
SBE2109200C00L	WWC6*69	05/11/92	05/11/92	8.1		07/05/92	RLW
SBE2113100A00L	WWC6*70	05/11/92	05/11/92	10.0		07/05/92	RLW
SBE2113100B00L	WWC6*71	05/11/92	05/11/92	10.0		07/05/92	RLW
SBE2113100C00L	WWC6*72	05/11/92	05/11/92	11.9		07/05/92	RLW
SBE2113200A00L	WWC6*73	05/11/92	05/11/92	11.6		07/05/92	RLW
SBE2113200B00L	WWC6*74	05/11/92	05/11/92	10.7		07/05/92	RLW
SBE2113200C00L	WWC6*75	05/11/92	05/11/92	10.6		07/05/92	RLW
SBE2137200A00L	WWC6*76	05/11/92	05/11/92	7.3		07/05/92	RLW
SBE2137200B00L	WWC6*77	05/11/92	05/11/92	7.5		07/05/92	RLW
SBE2137200C00L	WWC6*78	05/11/92	05/11/92	10.8		07/05/92	RLW
SBE2137100A00L	WWC6*79	05/11/92	05/11/92	8.0		07/05/92	RLW
SBE2137100B00L	WWC6*80	05/11/92	05/11/92	7.9		07/05/92	RLW
SBE2137100C00L	WWC6*81	05/11/92	05/11/92	10.5		07/05/92	RLW
SBE2124100A00L	WWC6*82	05/11/92	05/11/92	12.0		07/05/92	RLW
SBE2124100B00L	WWC6*83	05/11/92	05/11/92	10.9		07/05/92	RLW
SBE2124100C00L	WWC6*84	05/11/92	05/11/92	11.3		07/05/92	RLW

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Analytical Chemistry Res

STATUS: FINAL

PROJECT NAME: NL/TARACORP SUPERFUND SITE PREDESIGN FIELD INVESTIGATION, WWC89MC114V

PROJECT NUMBER: 5912031 0100 **REPORT DATE:** 08-17-92

SAMPLE MATRIX: SOIL **LAB MANAGER/QC REVIEW:** JEFFREY W. SIRIA

PROJECT MANAGER: JOHN F. GEMOULES **REPORT APPROVED BY:** FRANCIS Y. HUANG

SAMPLE I.D.	LABORATORY I.D.	COLLECTION DATE	RECEIVED DATE	MOISTURE, %WET WT METHOD: PB215192	EXTRACT. DATE	ANALYSIS DATE	CHEM. INIT.
SBE2250100A00L	WWC6*85	05/11/92	05/11/92	12.5		07/05/92	RLW
SBE2250100B00L	WWC6*86	05/11/92	05/11/92	12.5		07/05/92	RLW
SBE2250100C00L	WWC6*87	05/11/92	05/11/92	13.8		07/05/92	RLW
SBE2250200A00L	WWC6*88	05/11/92	05/11/92	10.7		07/05/92	RLW
SBE2250200B00L	WWC6*89	05/11/92	05/11/92	13.0		07/05/92	RLW
SBE2250200C00L	WWC6*90	05/11/92	05/11/92	9.9		07/05/92	RLW
SST2152100A00L	WWC6*91	05/11/92	05/11/92	9.9		07/05/92	RLW
SST2152100B00L	WWC6*92	05/11/92	05/11/92	14.0		07/05/92	RLW
SST2152100C00L	WWC6*93	05/11/92	05/11/92	15.3		07/05/92	RLW
SST2152200A00L	WWC6*94	05/11/92	05/11/92	10.8		07/05/92	RLW
SST2152200B00L	WWC6*95	05/11/92	05/11/92	12.8		07/05/92	RLW
SST2152200C00L	WWC6*96	05/11/92	05/11/92	14.3		07/05/92	RLW
SST2137100A00L	WWC6*97	05/11/92	05/11/92	14.4		07/05/92	RLW
SST2137100B00L	WWC6*98	05/11/92	05/11/92	13.1		07/05/92	RLW
SST2137100C00L	WWC6*99	05/11/92	05/11/92	13.0		07/05/92	RLW
SST2137200A00L	WWC6*100	05/11/92	05/11/92	10.1		07/05/92	RLW
SST2137200B00L	WWC6*101	05/11/92	05/11/92	10.0		07/05/92	RLW
SST2137200C00L	WWC6*102	05/11/92	05/11/92	10.8		07/05/92	RLW
SBE2040100A00L	WWC6*103	05/11/92	05/11/92	11.8		07/05/92	RLW
SBE2040100B00L	WWC6*104	05/11/92	05/11/92	10.1		07/05/92	RLW
SBE2040100C00L	WWC6*105	05/11/92	05/11/92	9.5		07/05/92	RLW
SBE2040200A00L	WWC6*106	05/11/92	05/11/92	8.0		07/05/92	RLW
SBE2040200B00L	WWC6*107	05/11/92	05/11/92	8.3		07/05/92	RLW
SBE2040200C00L	WWC6*108	05/11/92	05/11/92	9.6		07/05/92	RLW
SST2242100A00L	WWC6*109	05/11/92	05/11/92	10.2		07/05/92	RLW
SST2242100B00L	WWC6*110	05/11/92	05/11/92	9.2		07/05/92	RLW
SST2242100C00L	WWC6*111	05/11/92	05/11/92	8.0		07/05/92	RLW
SST2242200A00L	WWC6*112	05/11/92	05/11/92	7.2		07/05/92	RLW
SST2242200B00L	WWC6*113	05/11/92	05/11/92	7.2		07/05/92	RLW
SST2242200C00L	WWC6*114	05/11/92	05/11/92	6.9		07/05/92	RLW
SST2216100A00L	WWC6*115	05/11/92	05/11/92	7.7		07/05/92	RLW
SST2216100B00L	WWC6*116	05/11/92	05/11/92	6.7		07/05/92	RLW
SST2216100C00L	WWC6*117	05/11/92	05/11/92	5.5		07/05/92	RLW
SST2216200A00L	WWC6*118	05/11/92	05/11/92	11.7		07/05/92	RLW
SST2216200B00L	WWC6*119	05/11/92	05/11/92	12.7		07/05/92	RLW
SST2216200C00L	WWC6*120	05/11/92	05/11/92	12.3		07/05/92	RLW
SST2231100A00L	WWC6*121	05/11/92	05/11/92	10.2		07/05/92	RLW
SST2231100B00L	WWC6*122	05/11/92	05/11/92	8.5		07/05/92	RLW
SST2231100C00L	WWC6*123	05/11/92	05/11/92	9.4		07/05/92	RLW
SST2231200A00L	WWC6*124	05/11/92	05/11/92	7.8		07/05/92	RLW
SST2231200B00L	WWC6*125	05/11/92	05/11/92	8.3		07/05/92	RLW
SST2231200C00L	WWC6*126	05/11/92	05/11/92	9.5		07/05/92	RLW

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Analytical Chemistry Result

STATUS: FINAL

PROJECT NAME: NL/TARACORP SUPERFUND SITE PREDESIGN FIELD INVESTIGATION, WWC89MC114V

PROJECT NUMBER: 5912031 0100 **REPORT DATE:** 08-17-92

SAMPLE MATRIX: SOIL **LAB MANAGER/QC REVIEW:** JEFFREY W. SIRIA

PROJECT MANAGER: JOHN F. GEMOULES **REPORT APPROVED BY:** FRANCIS Y. HUANG

SAMPLE I.D.	LABORATORY I.D.	COLLECTION DATE	RECEIVED DATE	MOISTURE, %WET WT METHOD: PB215192	EXTRACT. DATE	ANALYSIS DATE	CHEM. INIT.
SST1716100A00L	WWC6*127	05/11/92	05/11/92	6.3		07/05/92	RLW
SST1716100B00L	WWC6*128	05/11/92	05/11/92	6.2		07/05/92	RLW
SST1716100C00L	WWC6*129	05/11/92	05/11/92	10.4		07/05/92	RLW
SGR1418100A00L	WWC6*130	05/12/92	05/12/92	11.1		07/05/92	RLW
SGR1418100B00L	WWC6*131	05/12/92	05/12/92	11.1		07/05/92	RLW
SGR1418100C00L	WWC6*132	05/12/92	05/12/92	11.7		07/05/92	RLW
SGR1418100A0LD	WWC6*133	05/12/92	05/12/92	10.9		07/05/92	RLW
SGR1418100B0LD	WWC6*134	05/12/92	05/12/92	10.7		07/05/92	RLW
SGR1418100C0LD	WWC6*135	05/12/92	05/12/92	11.4		07/05/92	RLW
SGR1418200A00L	WWC6*136	05/12/92	05/12/92	11.7		07/05/92	RLW
SGR1418200B00L	WWC6*137	05/12/92	05/12/92	12.6		07/05/92	RLW
SGR1418200C00L	WWC6*138	05/12/92	05/12/92	9.8		07/05/92	RLW
SGR1436100A00L	WWC6*139	05/12/92	05/12/92	10.9		07/05/92	RLW
SGR1436100B00L	WWC6*140	05/12/92	05/12/92	7.8		07/05/92	RLW
SGR1436100C00L	WWC6*141	05/12/92	05/12/92	13.4		07/05/92	RLW
SGR1436200A00L	WWC6*142	05/12/92	05/12/92	11.1		07/05/92	RLW
SGR1436200B00L	WWC6*143	05/12/92	05/12/92	7.8		07/05/92	RLW
SGR1436200C00L	WWC6*144	05/12/92	05/12/92	9.5		07/05/92	RLW
SET1310100A00L	WWC6*145	05/12/92	05/12/92	12.7		07/05/92	RLW
SET1310100B00L	WWC6*146	05/12/92	05/12/92	10.4		07/05/92	RLW
SET1310100C00L	WWC6*147	05/12/92	05/12/92	11.9		07/05/92	RLW
SET1310200A00L	WWC6*148	05/12/92	05/12/92	9.7		07/05/92	RLW
SET1310200B00L	WWC6*149	05/12/92	05/12/92	12.7		07/05/92	RLW
SET1310200C00L	WWC6*150	05/12/92	05/12/92	13.6		07/05/92	RLW
SED2124100A00L	WWC6*151	05/12/92	05/12/92	10.6		07/05/92	RLW
SED2124100B00L	WWC6*152	05/12/92	05/12/92	8.9		07/05/92	RLW
SED2124100C00L	WWC6*153	05/12/92	05/12/92	11.3		07/05/92	RLW
SED2124200A00L	WWC6*154	05/12/92	05/12/92	10.0		07/05/92	RLW
SED2124200B00L	WWC6*155	05/12/92	05/12/92	8.7		07/05/92	RLW
SED2124200C00L	WWC6*156	05/12/92	05/12/92	10.8		07/05/92	RLW
SED2154100A00L	WWC6*157	05/12/92	05/12/92	13.6		07/05/92	RLW
SED2154100B00L	WWC6*158	05/12/92	05/12/92	14.3		07/05/92	RLW
SED2154100C00L	WWC6*159	05/12/92	05/12/92	11.3		07/05/92	RLW
SED2154200A00L	WWC6*160	05/12/92	05/12/92	16.6		07/05/92	RLW
SED2154200B00L	WWC6*161	05/12/92	05/12/92	16.6		07/05/92	RLW
SED2154200C00L	WWC6*162	05/12/92	05/12/92	16.5		07/05/92	RLW
SGR2113100A00L	WWC6*163	05/12/92	05/12/92	14.8		07/05/92	RLW
SGR2113100B00L	WWC6*164	05/12/92	05/12/92	13.6		07/05/92	RLW
SGR2113100C00L	WWC6*165	05/12/92	05/12/92	13.2		07/05/92	RLW
SGR2113200A00L	WWC6*166	05/12/92	05/12/92	10.5		07/05/92	RLW
SGR2113200B00L	WWC6*167	05/12/92	05/12/92	9.4		07/05/92	RLW
SGR2113200C00L	WWC6*168	05/12/92	05/12/92	9.7		07/05/92	RLW

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Analytical Chemistry Res

STATUS: FINAL

PROJECT NAME: NL/TARACORP SUPERFUND SITE PREDESIGN FIELD INVESTIGATION, WWC89MC114V

PROJECT NUMBER: 5912031 0100 **REPORT DATE:** 08-17-92

SAMPLE MATRIX: SOIL **LAB MANAGER/QC REVIEW:** JEFFREY W. SIRIA

PROJECT MANAGER: JOHN F. GEMOULES **REPORT APPROVED BY:** FRANCIS Y. HUANG

SAMPLE I.D.	LABORATORY I.D.	COLLECTION DATE	RECEIVED DATE	MOISTURE, %WET WT METHOD: PB215192	EXTRACT. DATE	ANALYSIS DATE	CHEM. INIT.
SGR2204100A00L	WWC6*169	05/12/92	05/12/92	8.5	"	07/05/92	RLW
SGR2204100B00L	WWC6*170	05/12/92	05/12/92	7.1		07/05/92	RLW
SGR2204100C00L	WWC6*171	05/12/92	05/12/92	8.8		07/05/92	RLW
SGR2204200A00L	WWC6*172	05/12/92	05/12/92	13.2		07/05/92	RLW
SGR2204200B00L	WWC6*173	05/12/92	05/12/92	12.4		07/05/92	RLW
SGR2204200C00L	WWC6*174	05/12/92	05/12/92	12.8		07/05/92	RLW
SGR2218100A00L	WWC6*175	05/12/92	05/12/92	9.8		07/05/92	RLW
SGR2218100B00L	WWC6*176	05/12/92	05/12/92	9.6		07/05/92	RLW
SGR2218100C00L	WWC6*177	05/12/92	05/12/92	9.0		07/05/92	RLW
SGR2218200A00L	WWC6*178	05/12/92	05/12/92	19.8		07/05/92	RLW
SGR2218200B00L	WWC6*179	05/12/92	05/12/92	16.7		07/05/92	RLW
SGR2218200C00L	WWC6*180	05/12/92	05/12/92	14.3		07/05/92	RLW
SGR2241100A00L	WWC6*181	05/12/92	05/12/92	7.4		07/05/92	RLW
SGR2241100B00L	WWC6*182	05/12/92	05/12/92	7.0		07/05/92	RLW
SGR2241100C00L	WWC6*183	05/12/92	05/12/92	8.4		07/05/92	RLW
SGR2241200A00L	WWC6*184	05/12/92	05/12/92	11.0		07/05/92	RLW
SGR2241200B00L	WWC6*185	05/12/92	05/12/92	9.5		07/05/92	RLW
SGR2241200C00L	WWC6*186	05/12/92	05/12/92	11.9		07/05/92	RLW
SWS2035100A00L	WWC6*189	05/13/92	05/13/92	10.3		07/05/92	RLW
SWS2035100B00L	WWC6*190	05/13/92	05/13/92	10.6		07/05/92	RLW
SWS2035100C00L	WWC6*191	05/13/92	05/13/92	13.8		07/05/92	RLW
SMA2100300A00L	WWC6*192	05/13/92	05/13/92	12.9		07/05/92	RLW
SMA2100300B00L	WWC6*193	05/13/92	05/13/92	11.0		07/05/92	RLW
SMA2100300C00L	WWC6*194	05/13/92	05/13/92	8.9		07/05/92	RLW
SWS2140100A00L	WWC6*195	05/13/92	05/13/92	10.9		07/05/92	RLW
SWS2140100B00L	WWC6*196	05/13/92	05/13/92	8.1		07/05/92	RLW
SWS2140100C00L	WWC6*197	05/13/92	05/13/92	8.1		07/05/92	RLW
SWS2140200A00L	WWC6*198	05/13/92	05/13/92	8.2		07/05/92	RLW
SWS2140200B00L	WWC6*199	05/13/92	05/13/92	5.6		07/05/92	RLW
SMA2100100A00L	WWC6*200	05/13/92	05/13/92	9.6		07/05/92	RLW
SMA2100100B00L	WWC6*201	05/13/92	05/13/92	7.9		07/05/92	RLW
SMA2100100C00L	WWC6*202	05/13/92	05/13/92	7.4		07/05/92	RLW
SMA2100200A00L	WWC6*203	05/13/92	05/13/92	10.7		07/05/92	RLW
SMA2100200B00L	WWC6*204	05/13/92	05/13/92	9.5		07/05/92	RLW
SMA2100200C00L	WWC6*205	05/13/92	05/13/92	9.4		07/05/92	RLW
SIO2103100A00L	WWC6*206	05/13/92	05/13/92	15.8		07/05/92	RLW
SIO2103100B00L	WWC6*207	05/13/92	05/13/92	12.8		07/05/92	RLW
SIO2103100C00L	WWC6*208	05/13/92	05/13/92	11.3		07/05/92	RLW
SIO2103200A00L	WWC6*209	05/13/92	05/13/92	15.7		07/05/92	RLW
SIO2103200B00L	WWC6*210	05/13/92	05/13/92	13.2		07/05/92	RLW
SIO2103200C00L	WWC6*211	05/13/92	05/13/92	12.7		07/05/92	RLW
SOR0026100B00L	WWC6*212	05/13/92	05/13/92	13.3		07/05/92	RLW

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STATUS: FINAL

PROJECT NAME: NL/TARACORP SUPERFUND SITE PREDESIGN FIELD INVESTIGATION, WWC89MC114V

PROJECT NUMBER: 5912031 0100

REPORT DATE: 08-17-92

SAMPLE MATRIX: SOIL

LAB MANAGER/QC REVIEW: JEFFREY W. SIRIA

PROJECT MANAGER: JOHN F. GEMOULES

REPORT APPROVED BY: FRANCIS Y. HUANG

SAMPLE I.D.	LABORATORY I.D.	COLLECTION DATE	RECEIVED DATE	MOISTURE, %WET WT METHOD: PB215192	EXTRACT. DATE	ANALYSIS DATE	CHEM. INIT.
SOR0026200A00L	WWC6*213	05/13/92	05/13/92	9.6		07/05/92	RLW
SOR0026200B00L	WWC6*214	05/13/92	05/13/92	11.5		07/05/92	RLW
SOR0026200C00L	WWC6*215	05/13/92	05/13/92	12.9		07/05/92	RLW
SOH2025100A00L	WWC6*217	05/13/92	05/13/92	9.0		07/05/92	RLW
SOH2025100B00L	WWC6*218	05/13/92	05/13/92	9.5		07/05/92	RLW
SOH2025100C00L	WWC6*219	05/13/92	05/13/92	11.0		07/05/92	RLW
SOH2025200A00L	WWC6*220	05/13/92	05/13/92	10.9		07/05/92	RLW
SOH2025200B00L	WWC6*221	05/13/92	05/13/92	10.7		07/05/92	RLW
SOH2025200C00L	WWC6*222	05/13/92	05/13/92	13.4		07/05/92	RLW
SOH2025300A00L	WWC6*223	05/13/92	05/13/92	10.9		07/05/92	RLW
SOH2025300B00L	WWC6*224	05/13/92	05/13/92	9.8		07/05/92	RLW
SOH2025300C00L	WWC6*225	05/13/92	05/13/92	10.3		07/05/92	RLW
SOH2025400A00L	WWC6*226	05/13/92	05/13/92	12.9		07/05/92	RLW
SOH2025400B00L	WWC6*227	05/13/92	05/13/92	12.2		07/05/92	RLW
SOH2025400C00L	WWC6*228	05/13/92	05/13/92	11.5		07/05/92	RLW
SOH2025500A00L	WWC6*229	05/13/92	05/13/92	7.8		07/05/92	RLW
SOH2025500B00L	WWC6*230	05/13/92	05/13/92	6.0		07/05/92	RLW
SOH2025500C00L	WWC6*231	05/13/92	05/13/92	8.3		07/05/92	RLW
SOH2025600A00L	WWC6*232	05/13/92	05/13/92	13.0		07/05/92	RLW
SOH2025600B00L	WWC6*233	05/13/92	05/13/92	13.0		07/05/92	RLW
SOH2025600C00L	WWC6*234	05/13/92	05/13/92	12.5		07/05/92	RLW
SOH2025700A00L	WWC6*235	05/13/92	05/13/92	7.0		07/05/92	RLW
SOH2025700B00L	WWC6*236	05/13/92	05/13/92	5.1		07/05/92	RLW
SOH2025700C00L	WWC6*237	05/13/92	05/13/92	6.0		07/05/92	RLW
SOH2025800A00L	WWC6*238	05/13/92	05/13/92	15.4		07/05/92	RLW
SOH2025800B00L	WWC6*239	05/13/92	05/13/92	14.1		07/05/92	RLW
SOH2025800C00L	WWC6*240	05/13/92	05/13/92	15.1		07/05/92	RLW
SOH2025900A00L	WWC6*241	05/13/92	05/13/92	12.7		07/05/92	RLW
SOH2025900B00L	WWC6*242	05/13/92	05/13/92	12.0		07/05/92	RLW
SOH2025900C00L	WWC6*243	05/13/92	05/13/92	12.5		07/05/92	RLW
SOR0026100A00L	WWC6*244	05/13/92	05/13/92	9.3		07/05/92	RLW
SWS2022100A00L	WWC6*245	05/14/92	05/14/92	14.6		07/05/92	RLW
SWS2022100B00L	WWC6*246	05/14/92	05/14/92	12.9		07/05/92	RLW
SWS2022100C00L	WWC6*247	05/14/92	05/14/92	15.1		07/05/92	RLW
SWS2022200A00L	WWC6*248	05/14/92	05/14/92	8.7		07/05/92	RLW
SWS2022200B00L	WWC6*249	05/14/92	05/14/92	7.3		07/05/92	RLW
SWS2022200C00L	WWC6*250	05/14/92	05/14/92	9.8		07/05/92	RLW
SIO2207100A00L	WWC6*251	05/14/92	05/14/92	13.9		07/05/92	RLW
SIO2207100B00L	WWC6*252	05/14/92	05/14/92	12.9		07/05/92	RLW
SIO2207100C00L	WWC6*253	05/14/92	05/14/92	16.5		07/05/92	RLW
SIO2207200A00L	WWC6*254	05/14/92	05/14/92	15.4		07/05/92	RLW
SIO2207200B00L	WWC6*255	05/14/92	05/14/92	16.4		07/05/92	RLW

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STATUS: FINAL

PROJECT NAME: NL/TARACORP SUPERFUND SITE PREDESIGN FIELD INVESTIGATION, WWC89MC114V

PROJECT NUMBER: 5912031 0100 **REPORT DATE:** 08-17-92

SAMPLE MATRIX: SOIL **LAB MANAGER/QC REVIEW:** JEFFREY W. SIRIA

PROJECT MANAGER: JOHN F. GEMOULES **REPORT APPROVED BY:** FRANCIS Y. HUANG

SAMPLE I.D.	LABORATORY I.D.	COLLECTION DATE	RECEIVED DATE	MOISTURE, %WET WT METHOD: PB215192	EXTRACT. DATE	ANALYSIS DATE	CHEM. INIT.
SIO2207200C00L	WWC6*256	05/14/92	05/14/92	19.4	"	07/07/92	RLW
SIO2263100A00L	WWC6*257	05/14/92	05/14/92	14.6		07/07/92	RLW
SIO2263100B00L	WWC6*258	05/14/92	05/14/92	15.2		07/07/92	RLW
SIO2263100C00L	WWC6*259	05/14/92	05/14/92	16.6		07/07/92	RLW
SIO2263200A00L	WWC6*260	05/14/92	05/14/92	11.6		07/07/92	RLW
SIO2263200B00L	WWC6*261	05/14/92	05/14/92	10.9		07/07/92	RLW
SIO2263200C00L	WWC6*262	05/14/92	05/14/92	14.0		07/07/92	RLW
SLE2135100A00L	WWC6*263	05/14/92	05/14/92	9.4		07/07/92	RLW
SLE2135100B00L	WWC6*264	05/14/92	05/14/92	9.0		07/07/92	RLW
SLE2135100C00L	WWC6*265	05/14/92	05/14/92	12.7		07/07/92	RLW
SLE2135200A00L	WWC6*266	05/14/92	05/14/92	11.7		07/07/92	RLW
SLE2135200B00L	WWC6*267	05/14/92	05/14/92	13.5		07/07/92	RLW
SLE2135200C00L	WWC6*268	05/14/92	05/14/92	15.8		07/07/92	RLW
SDE2112100A00L	WWC6*269	05/14/92	05/14/92	8.2		07/07/92	RLW
SDE2112100B00L	WWC6*270	05/14/92	05/14/92	6.0		07/07/92	RLW
SDE2112100C00L	WWC6*271	05/14/92	05/14/92	5.9		07/07/92	RLW
SDE2112200A00L	WWC6*272	05/14/92	05/14/92	8.8		07/07/92	RLW
SDE2112200B00L	WWC6*273	05/14/92	05/14/92	7.1		07/07/92	RLW
SDE2112200C00L	WWC6*274	05/14/92	05/14/92	9.8		07/07/92	RLW
SCL2110100A00L	WWC6*275	05/14/92	05/14/92	9.2		07/07/92	RLW
SCL2110100B00L	WWC6*276	05/14/92	05/14/92	9.3		07/07/92	RLW
SCL2110100C00L	WWC6*277	05/14/92	05/14/92	9.5		07/07/92	RLW
SCL2110200A00L	WWC6*278	05/14/92	05/14/92	11.1		07/07/92	RLW
SCL2110200B00L	WWC6*279	05/14/92	05/14/92	8.9		07/07/92	RLW
SCL2110200C00L	WWC6*280	05/14/92	05/14/92	8.7		07/07/92	RLW
SED2037100A00L	WWC6*281	05/14/92	05/14/92	6.9		07/07/92	RLW
SED2037100B00L	WWC6*282	05/14/92	05/14/92	5.6		07/07/92	RLW
SED2037100C00L	WWC6*283	05/14/92	05/14/92	5.8		07/07/92	RLW
SED2037200A0LD	WWC6*284	05/14/92	05/14/92	6.7		07/07/92	RLW
SED2037100B0LD	WWC6*285	05/14/92	05/14/92	6.0		07/07/92	RLW
SED2037100C0LD	WWC6*286	05/14/92	05/14/92	6.2		07/07/92	RLW
SED2037200A00L	WWC6*287	05/14/92	05/14/92	13.1		07/07/92	RLW
SED2037200B00L	WWC6*288	05/14/92	05/14/92	8.7		07/07/92	RLW
SED2037200C00L	WWC6*289	05/14/92	05/14/92	8.5		07/07/92	RLW
SWA1741100A00L	WWC6*290	05/15/92	05/15/92	14.7		07/07/92	RLW
SWA1741100B00L	WWC6*291	05/15/92	05/15/92	12.4		07/07/92	RLW
SWA1741100C00L	WWC6*292	05/15/92	05/15/92	10.8		07/07/92	RLW
SWA1741200A00L	WWC6*293	05/15/92	05/15/92	11.0		07/07/92	RLW
SWA1741200B00L	WWC6*294	05/15/92	05/15/92	9.3		07/07/92	RLW
SWA1741200C00L	WWC6*295	05/15/92	05/15/92	9.3		07/07/92	RLW
SWA1747100A00L	WWC6*296	05/15/92	05/15/92	16.7		07/07/92	RLW
SWA1747100B00L	WWC6*297	05/15/92	05/15/92	14.9		07/07/92	RLW

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Analytical Chemistry Results

STATUS: FINAL

PROJECT NAME: NL/TARACORP SUPERFUND SITE PREDESIGN FIELD INVESTIGATION, WWC89MC114V

PROJECT NUMBER: 5912031 0100 **REPORT DATE:** 08-17-92

SAMPLE MATRIX: SOIL **LAB MANAGER/QC REVIEW:** JEFFREY W. SIRIA

PROJECT MANAGER: JOHN F. GEMOULES **REPORT APPROVED BY:** FRANCIS Y. HUANG

SAMPLE I.D.	LABORATORY I.D.	COLLECTION DATE	RECEIVED DATE	MOISTURE, %WET WT METHOD: PB215192	EXTRACT. DATE	ANALYSIS DATE	CHEM. INIT.
SWA1747100C00L	WWC6*298	05/15/92	05/15/92	15.6		07/07/92	RLW
SWA1747200A00L	WWC6*299	05/15/92	05/15/92	10.2		07/07/92	RLW
SWA1747200B00L	WWC6*300	05/15/92	05/15/92	11.6		07/07/92	RLW
SWA1747200C00L	WWC6*301	05/15/92	05/15/92	13.9		07/07/92	RLW
SCH1732100A00L	WWC6*302	05/15/92	05/15/92	9.8		07/07/92	RLW
SCH1732100B00L	WWC6*303	05/15/92	05/15/92	10.5		07/07/92	RLW
SCH1732100C00L	WWC6*304	05/15/92	05/15/92	14.5		07/07/92	RLW
SCH1732200A00L	WWC6*305	05/15/92	05/15/92	14.8		07/07/92	RLW
SCH1732200B00L	WWC6*306	05/15/92	05/15/92	14.8		07/07/92	RLW
SCH1732200C00L	WWC6*307	05/15/92	05/15/92	17.2		07/07/92	RLW
SMA1413100A00L	WWC6*308	05/15/92	05/15/92	12.2		07/07/92	RLW
SMA1413100B00L	WWC6*309	05/15/92	05/15/92	12.0		07/07/92	RLW
SMA1413100C00L	WWC6*310	05/15/92	05/15/92	12.4		07/07/92	RLW
SMA1419100A00L	WWC6*311	05/15/92	05/15/92	13.2		07/07/92	RLW
SMA1419100B00L	WWC6*312	05/15/92	05/15/92	13.6		07/07/92	RLW
SMA1419100C00L	WWC6*313	05/15/92	05/15/92	12.6		07/07/92	RLW
SMA1419200A00L	WWC6*314	05/15/92	05/15/92	14.6		07/07/92	RLW
SMA1419200B00L	WWC6*315	05/15/92	05/15/92	13.5		07/07/92	RLW
SMA1419200C00L	WWC6*316	05/15/92	05/15/92	18.8		07/08/92	RLW
SMA1436100A00L	WWC6*317	05/15/92	05/15/92	14.6		07/08/92	RLW
SMA1436100B00L	WWC6*318	05/15/92	05/15/92	15.2		07/08/92	RLW
SMA1436100C00L	WWC6*319	05/15/92	05/15/92	15.7		07/08/92	RLW
SMA1436200A00L	WWC6*320	05/15/92	05/15/92	19.4		07/08/92	RLW
SMA1436200B00L	WWC6*321	05/15/92	05/15/92	19.2		07/08/92	RLW
SMA1436200C00L	WWC6*322	05/15/92	05/15/92	18.5		07/08/92	RLW
SIO1415100A00L	WWC6*323	05/15/92	05/15/92	11.9		07/08/92	RLW
SIO1415100B00L	WWC6*324	05/15/92	05/15/92	12.8		07/08/92	RLW
SIO1415100C00L	WWC6*325	05/15/92	05/15/92	12.7		07/08/92	RLW
SIO1415200A00L	WWC6*326	05/15/92	05/15/92	12.8		07/08/92	RLW
SIO1415200B00L	WWC6*327	05/15/92	05/15/92	12.2		07/08/92	RLW
SIO1415200C00L	WWC6*328	05/15/92	05/15/92	11.4		07/08/92	RLW
SDE1630100A00L	WWC6*329	05/18/92	05/18/92	16.3		07/08/92	RLW
SDE1630100B00L	WWC6*330	05/18/92	05/18/92	14.4		07/08/92	RLW
SDE1630100C00L	WWC6*331	05/18/92	05/18/92	10.0		07/08/92	RLW
SDE1630200A00L	WWC6*332	05/18/92	05/18/92	19.1		07/08/92	RLW
SDE1630200B00L	WWC6*333	05/18/92	05/18/92	16.8		07/08/92	RLW
SDE1630200C00L	WWC6*334	05/18/92	05/18/92	12.3		07/09/92	RLW
SED2229100A00L	WWC6*335	05/18/92	05/18/92	19.3		07/08/92	RLW
SED2229100B00L	WWC6*336	05/18/92	05/18/92	11.5		07/08/92	RLW
SED2229100C00L	WWC6*337	05/18/92	05/18/92	10.5		07/08/92	RLW
SED2241100A00L	WWC6*338	05/18/92	05/18/92	19.4		07/08/92	RLW
SED2241100B00L	WWC6*339	05/18/92	05/18/92	15.4		07/08/92	RLW

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Analytical Chemistry Res

STATUS: FINAL

PROJECT NAME: NL/TARACORP SUPERFUND SITE PREDESIGN FIELD INVESTIGATION, WWC89MC114V

PROJECT NUMBER: 5912031 0100 **REPORT DATE:** 08-17-92

SAMPLE MATRIX: SOIL **LAB MANAGER/QC REVIEW:** JEFFREY W. SIRIA

PROJECT MANAGER: JOHN F. GEMOULES **REPORT APPROVED BY:** FRANCIS Y. HUANG

SAMPLE I.D.	LABORATORY I.D.	COLLECTION DATE	RECEIVED DATE	MOISTURE, %WET WT METHOD: PB215192	EXTRACT. DATE	ANALYSIS DATE	CHEM. INIT.
SED2241100C00L	WWC6*340	05/18/92	05/18/92	10.5		07/08/92	RLW
SED2241200A00L	WWC6*341	05/18/92	05/18/92	23.3		07/08/92	RLW
SED2241200B00L	WWC6*342	05/18/92	05/18/92	17.6		07/08/92	RLW
SED2241200C00L	WWC6*343	05/18/92	05/18/92	12.6		07/08/92	RLW
SED2259100A00L	WWC6*344	05/18/92	05/18/92	16.0		07/08/92	RLW
SED2259100B00L	WWC6*345	05/18/92	05/18/92	11.7		07/08/92	RLW
SED2259100C00L	WWC6*346	05/18/92	05/18/92	8.8		07/08/92	RLW
SED2259200A00L	WWC6*347	05/18/92	05/18/92	17.4		07/08/92	RLW
SED2259200B00L	WWC6*348	05/18/92	05/18/92	17.6		07/08/92	RLW
SED2259200C00L	WWC6*349	05/18/92	05/18/92	16.9		07/08/92	RLW
SNI0945100A00L	WWC6*350	05/18/92	05/18/92	15.9		07/08/92	RLW
SNI0945100B00L	WWC6*351	05/18/92	05/18/92	9.3		07/08/92	RLW
SNI0945100C00L	WWC6*352	05/18/92	05/18/92	6.5		07/08/92	RLW
SNI0945200A00L	WWC6*353	05/18/92	05/18/92	17.9		07/08/92	RLW
SNI0945200B00L	WWC6*354	05/18/92	05/18/92	16.6		07/09/92	RLW
SNI0945200C00L	WWC6*355	05/18/92	05/18/92	9.3		07/08/92	RLW
SNI0837100A00L	WWC6*356	05/18/92	05/18/92	11.4		07/08/92	RLW
SNI0837100B00L	WWC6*357	05/18/92	05/18/92	5.0		07/08/92	RLW
SNI0837100C00L	WWC6*358	05/18/92	05/18/92	9.1		07/08/92	RLW
SNI0837200A00L	WWC6*359	05/18/92	05/18/92	12.9		07/08/92	RLW
SNI0837200B00L	WWC6*360	05/18/92	05/18/92	11.1		07/08/92	RLW
SNI0837200C00L	WWC6*361	05/18/92	05/18/92	12.2		07/08/92	RLW
SCL2101100A00L	WWC6*362	05/18/92	05/18/92	16.6		07/08/92	RLW
SCL2101100B00L	WWC6*363	05/18/92	05/18/92	9.6		07/08/92	RLW
SCL2101100C00L	WWC6*364	05/18/92	05/18/92	8.3		07/08/92	RLW
SCL2101200A00L	WWC6*365	05/18/92	05/18/92	15.8		07/08/92	RLW
SCL2101200B00L	WWC6*366	05/18/92	05/18/92	12.7		07/08/92	RLW
SCL2101200C00L	WWC6*367	05/18/92	05/18/92	8.9		07/08/92	RLW
SDE2265100A00L	WWC6*368	05/18/92	05/18/92	24.3		07/08/92	RLW
SDE2265100B00L	WWC6*369	05/18/92	05/18/92	14.6		07/08/92	RLW
SDE2265100C00L	WWC6*370	05/18/92	05/18/92	12.6		07/08/92	RLW
SDE2265100A0LD	WWC6*371	05/18/92	05/18/92	20.5		07/08/92	RLW
SDE2265100B0LD	WWC6*372	05/18/92	05/18/92	15.3		07/08/92	RLW
SDE2265100C0LD	WWC6*373	05/18/92	05/18/92	9.9		07/08/92	RLW
SDE2265200A00L	WWC6*374	05/18/92	05/18/92	11.3		07/08/92	RLW
SDE2265200B00L	WWC6*375	05/18/92	05/18/92	17.8		07/08/92	RLW
SDE2265200C00L	WWC6*376	05/18/92	05/18/92	14.6		07/08/92	RLW
SGR1419100A00L	WWC6*377	05/19/92	05/19/92	18.7		07/08/92	RLW
SGR1419100B00L	WWC6*378	05/19/92	05/19/92	19.1		07/08/92	RLW
SGR1419100C00L	WWC6*379	05/19/92	05/19/92	16.8		07/08/92	RLW
SGR1419200A00L	WWC6*380	05/19/92	05/19/92	20.2		07/08/92	RLW
SGR1419200B00L	WWC6*381	05/19/92	05/19/92	18.8		07/08/92	RLW

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STATUS: FINAL

PROJECT NAME: NL/TARACORP SUPERFUND SITE PREDESIGN FIELD INVESTIGATION, WWC89MC114V

PROJECT NUMBER: 5912031 0100

REPORT DATE: 08-17-92

SAMPLE MATRIX: SOIL

LAB MANAGER/QC REVIEW: JEFFREY W. SIRIA

PROJECT MANAGER: JOHN F. GEMOULES

REPORT APPROVED BY: FRANCIS Y. HUANG

SAMPLE I.D.	LABORATORY I.D.	COLLECTION DATE	RECEIVED DATE	MOISTURE, %WET WT METHOD: PB215192	EXTRACT. DATE	ANALYSIS DATE	CHEM. INIT.
SGR1419200C00L	WWC6*382	05/19/92	05/19/92	15.4		07/08/92	RLW
SMC1005100A00L	WWC6*383	05/19/92	05/19/92	23.2		07/08/92	RLW
SMC1005100B00L	WWC6*384	05/19/92	05/19/92	18.5		07/08/92	RLW
SMC1005100C00L	WWC6*385	05/19/92	05/19/92	14.6		07/08/92	RLW
SMC1005200A00L	WWC6*386	05/19/92	05/19/92	15.7		07/08/92	RLW
SMC1005200B00L	WWC6*387	05/19/92	05/19/92	12.4		07/08/92	RLW
SMC1005200C00L	WWC6*388	05/19/92	05/19/92	10.7		07/08/92	RLW
SEL1713100A00L	WWC6*389	05/19/92	05/19/92	19.3		07/08/92	RLW
SEL1713100B00L	WWC6*390	05/19/92	05/19/92	17.7		07/08/92	RLW
SEL1713100C00L	WWC6*391	05/19/92	05/19/92	18.6		07/08/92	RLW
SEL1713100A0LD	WWC6*392	05/19/92	05/19/92	18.7		07/08/92	RLW
SEL1713100B0LD	WWC6*393	05/19/92	05/19/92	18.6		07/08/92	RLW
SEL1713100C0LD	WWC6*394	05/19/92	05/19/92	19.0		07/08/92	RLW
SEL1713200A00L	WWC6*395	05/19/92	05/19/92	15.9		07/08/92	RLW
SEL1713200B00L	WWC6*396	05/19/92	05/19/92	12.9		07/08/92	RLW
SEL1713200C00L	WWC6*397	05/19/92	05/19/92	11.4		07/08/92	RLW
SET1312100A00L	WWC6*398	05/19/92	05/19/92	11.8		07/08/92	RLW
SET1312100B00L	WWC6*399	05/19/92	05/19/92	14.4		07/08/92	RLW
SET1312200A00L	WWC6*400	05/19/92	05/19/92	10.5		07/08/92	RLW
SCA0108100C00L	WWC6*402	05/19/92	05/19/92	19.7		07/08/92	RLW
SCA010820AB00L	WWC6*403	05/19/92	05/19/92	14.5		07/08/92	RLW
SCA0108200C00L	WWC6*404	05/19/92	05/19/92	9.9		07/08/92	RLW
SCA011120AB00L	WWC6*405	05/19/92	05/19/92	9.2		07/08/92	RLW
SCA011110AB00L	WWC6*406	05/19/92	05/19/92	9.1		07/08/92	RLW
SOR0022100B00L	WWC6*407	05/20/92	05/20/92	19.1		07/08/92	RLW
SOR0022100C00L	WWC6*409	05/20/92	05/20/92	20.1		07/08/92	RLW
SOR002310AB00L	WWC6*410	05/20/92	05/20/92	23.5		07/08/92	RLW
SOR0023100C00L	WWC6*412	05/20/92	05/20/92	26.4		07/08/92	RLW
SOR002410AB00L	WWC6*414	05/20/92	05/20/92	23.1		07/08/92	RLW
SOR002410AB0LD	WWC6*415	05/20/92	05/20/92	20.6		07/08/92	RLW
SOR0024100C00L	WWC6*416	05/20/92	05/20/92	22.0		07/08/92	RLW
SOR0024100D00L	WWC6*417	05/20/92	05/20/92	29.8		07/08/92	RLW
STE020310AB00L	WWC6*418	05/20/92	05/20/92	6.1		07/08/92	RLW
STE0203100C00L	WWC6*419	05/20/92	05/20/92	21.6		07/08/92	RLW
STE0203100C00T	WWC6*420	05/20/92	05/20/92	20.7		07/08/92	RLW
STE020310AB00T	WWC6*421	05/20/92	05/20/92	7.4		07/08/92	RLW
STE0203100D00L	WWC6*422	05/20/92	05/20/92	24.6		07/08/92	RLW
STE020320AB00L	WWC6*423	05/20/92	05/20/92	5.3		07/08/92	RLW
STE0203200C00L	WWC6*425	05/20/92	05/20/92	16.7		07/08/92	RLW
STE0203200D00L	WWC6*426	05/20/92	05/20/92	21.5		07/08/92	RLW
STE020330AB00L	WWC6*427	05/20/92	05/20/92	12.9		07/08/92	RLW
STE020330AB0LD	WWC6*428	05/20/92	05/20/92	13.3		07/08/92	RLW

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PROJECT NUMBER: 5912031 0100 **REPORT DATE:** 08-17-92

SAMPLE MATRIX: SOIL **LAB MANAGER/QC REVIEW:** JEFFREY W. SIRIA

PROJECT MANAGER: JOHN F. GEMOULES **REPORT APPROVED BY:** FRANCIS Y. HUANG

SAMPLE I.D.	LABORATORY I.D.	COLLECTION DATE	RECEIVED DATE	MOISTURE, %WET WT METHOD: PB215192	EXTRACT. DATE	ANALYSIS DATE	CHEM. INIT.
STE0203300C00L	WWC6*430	05/20/92	05/20/92	21.0		07/08/92	RLW
STE0203300D00L	WWC6*431	05/20/92	05/20/92	23.5		07/08/92	RLW
STE020340AB00L	WWC6*432	05/20/92	05/20/92	7.5		07/08/92	RLW
STE0203400C00L	WWC6*434	05/20/92	05/20/92	23.4		07/08/92	RLW
STE0203400D00L	WWC6*435	05/20/92	05/20/92	25.2		07/08/92	RLW
SHI010010AB00L	WWC6*436	05/20/92	05/20/92	7.9		07/08/92	RLW
SHI0100100C00L	WWC6*438	05/20/92	05/20/92	16.4		07/08/92	RLW
SHI0100100D00L	WWC6*439	05/20/92	05/20/92	18.8		07/08/92	RLW
SHI010020AB00L	WWC6*440	05/20/92	05/20/92	21.3		07/08/92	RLW
SHI0100200C00L	WWC6*442	05/20/92	05/20/92	20.5		07/08/92	RLW
STE020810AB00L	WWC6*443	05/21/92	05/21/92	21.9		07/08/92	RLW
STE0208100C00L	WWC6*445	05/21/92	05/21/92	21.3		07/09/92	RLW
STE020820AB00L	WWC6*446	05/21/92	05/21/92	23.5		07/09/92	RLW
STE0208200C00L	WWC6*448	05/21/92	05/21/92	21.7		07/09/92	RLW
STE020830AB00L	WWC6*449	05/21/92	05/21/92	26.4		07/09/92	RLW
STE0208300C00L	WWC6*450	05/21/92	05/21/92	19.4		07/09/92	RLW
STE020840AB00L	WWC6*451	05/21/92	05/21/92	22.9		07/09/92	RLW
STE0208400C00L	WWC6*453	05/21/92	05/21/92	20.6		07/09/92	RLW
STE020850AB00L	WWC6*454	05/21/92	05/21/92	24.3		07/09/92	RLW
STE0208500C00L	WWC6*456	05/21/92	05/21/92	16.9		07/09/92	RLW
SHA0205100D00L	WWC6*457	05/21/92	05/21/92	24.8		07/09/92	RLW
SHA0205100E00L	WWC6*458	05/21/92	05/21/92	30.2		07/09/92	RLW
SHA0205200D00L	WWC6*459	05/21/92	05/21/92	18.4		07/09/92	RLW
SHA0205200D0LD	WWC6*460	05/21/92	05/21/92	21.3		07/09/92	RLW
SHA0205200E00L	WWC6*461	05/21/92	05/21/92	28.4		07/09/92	RLW
SHA0205200F00L	WWC6*462	05/21/92	05/21/92	25.9		07/09/92	RLW
SHA0205300D00L	WWC6*463	05/21/92	05/21/92	19.1		07/09/92	RLW
SHA0205300E00L	WWC6*466	05/21/92	05/21/92	29.4		07/09/92	RLW
SHA020530AC00L	WWC6*468	05/21/92	05/21/92	22.2		07/09/92	RLW
SHA020310AC00L	WWC6*469	05/22/92	05/22/92	20.9		07/09/92	RLW
SHA0203100D00L	WWC6*470	05/22/92	05/22/92	27.9		07/09/92	RLW
SHA020320AC00L	WWC6*471	05/22/92	05/22/92	22.1		07/09/92	RLW
SHA0203200D00L	WWC6*472	05/22/92	05/22/92	23.0		07/09/92	RLW
SHA0203300D00L	WWC6*473	05/22/92	05/22/92	24.7		07/09/92	RLW
SHA0203300D0LD	WWC6*474	05/22/92	05/22/92	23.7		07/09/92	RLW
SHA0203300E00L	WWC6*476	05/22/92	05/22/92	29.8		07/09/92	RLW
SHA0203300F00L	WWC6*478	05/22/92	05/22/92	30.8		07/09/92	RLW
SHA020340AC00L	WWC6*479	05/22/92	05/22/92	21.8		07/09/92	RLW
SHA0203400D00L	WWC6*480	05/22/92	05/22/92	34.0		07/09/92	RLW
SHA0203400E00L	WWC6*481	05/22/92	05/22/92	30.8		07/09/92	RLW
SHA0203400F00L	WWC6*482	05/22/92	05/22/92	30.6		07/09/92	RLW
SWS1201100A00L	WWC6*484	05/26/92	05/26/92	19.9		07/09/92	RLW

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St. Louis Chemistry Laboratory

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Analytical Chemistry Results

STATUS: FINAL

PROJECT NAME: NL/TARACORP SUPERFUND SITE PREDESIGN FIELD INVESTIGATION, WWC89MC114V

PROJECT NUMBER: 5912031 0100 **REPORT DATE:** 08-17-92

SAMPLE MATRIX: SOIL **LAB MANAGER/QC REVIEW:** JEFFREY W. SIRIA

PROJECT MANAGER: JOHN F. GEMOULES **REPORT APPROVED BY:** FRANCIS Y. HUANG

SAMPLE I.D.	LABORATORY I.D.	COLLECTION DATE	RECEIVED DATE	MOISTURE, %WET WT METHOD: PB215192	EXTRACT. DATE	ANALYSIS DATE	CHEM. INIT.
SWS1201100B00L	WWC6*485	05/26/92	05/26/92	15.5		07/09/92	RLW
SWS1201100C00L	WWC6*486	05/26/92	05/26/92	16.0		07/09/92	RLW
SWS1201100A0LD	WWC6*487	05/26/92	05/26/92	19.9		07/09/92	RLW
SWS1201100B0LD	WWC6*488	05/26/92	05/26/92	16.0		07/09/92	RLW
SWS1201100C0LD	WWC6*489	05/26/92	05/26/92	15.8		07/09/92	RLW
SWS1201200A00L	WWC6*490	05/26/92	05/26/92	15.2		07/09/92	RLW
SWS1201200B00L	WWC6*491	05/26/92	05/26/92	12.4		07/09/92	RLW
SWS1201200C00L	WWC6*492	05/26/92	05/26/92	13.9		07/09/92	RLW
SWS1201300A00L	WWC6*493	05/26/92	05/26/92	11.2		07/09/92	RLW
SWS1201300B00L	WWC6*494	05/26/92	05/26/92	11.8		07/09/92	RLW
SWS1201300C00L	WWC6*495	05/26/92	05/26/92	11.8		07/09/92	RLW
SWS1201400A00L	WWC6*496	05/26/92	05/26/92	19.4		07/09/92	RLW
SWS1201400B00L	WWC6*497	05/26/92	05/26/92	16.1		07/09/92	RLW
SWS1201400C00L	WWC6*498	05/26/92	05/26/92	14.0		07/09/92	RLW
SWS1201500A00L	WWC6*499	05/26/92	05/26/92	14.3		07/09/92	RLW
SWS1201500B00L	WWC6*500	05/26/92	05/26/92	13.2		07/09/92	RLW
SWS1201500C00L	WWC6*501	05/26/92	05/26/92	13.5		07/09/92	RLW
SWS1201600A00L	WWC6*502	05/26/92	05/26/92	9.2		07/09/92	RLW
SWS1201600B00L	WWC6*503	05/26/92	05/26/92	8.8		07/09/92	RLW
SWS1201600C00L	WWC6*504	05/26/92	05/26/92	8.0		07/09/92	RLW
SWS1201700A00L	WWC6*505	05/26/92	05/26/92	19.2		07/09/92	RLW
SWS1201700B00L	WWC6*506	05/26/92	05/26/92	12.0		07/09/92	RLW
SWS1201700C00L	WWC6*507	05/26/92	05/26/92	11.7		07/09/92	RLW
SWS1201800A00L	WWC6*508	05/26/92	05/26/92	16.4		07/09/92	RLW
SWS1201800B00L	WWC6*509	05/26/92	05/26/92	13.2		07/09/92	RLW
SWS1201800C00L	WWC6*510	05/26/92	05/26/92	13.5		07/09/92	RLW
SWS1201900A00L	WWC6*511	05/26/92	05/26/92	19.6		07/10/92	RLW
SWS1201900B00L	WWC6*512	05/26/92	05/26/92	13.5		07/10/92	RLW
SWS1201900C00L	WWC6*513	05/26/92	05/26/92	9.9		07/10/92	RLW
SWS1201A00A00L	WWC6*514	05/26/92	05/26/92	21.4		07/10/92	RLW
SWS1201A00B00L	WWC6*515	05/26/92	05/26/92	18.9		07/10/92	RLW
SWS1201A00C00L	WWC6*516	05/26/92	05/26/92	11.1		07/10/92	RLW
SWS1201B00A00L	WWC6*517	05/26/92	05/26/92	14.1		07/10/92	RLW
SWS1201B00B00L	WWC6*518	05/26/92	05/26/92	9.9		07/10/92	RLW
SWS1201B00C00L	WWC6*519	05/26/92	05/26/92	12.4		07/10/92	RLW
SWS1201C00A00L	WWC6*520	05/26/92	05/26/92	22.5		07/10/92	RLW
SWS1201C00B00L	WWC6*521	05/26/92	05/26/92	15.8		07/10/92	RLW
SWS1201C00C00L	WWC6*522	05/26/92	05/26/92	14.0		07/10/92	RLW
SWS1201D00A00L	WWC6*523	05/26/92	05/26/92	17.3		07/10/92	RLW
SWS1201D00B00L	WWC6*524	05/26/92	05/26/92	11.8		07/10/92	RLW
SWS1201D00C00L	WWC6*525	05/26/92	05/26/92	10.4		07/10/92	RLW
SWS1201E00A00L	WWC6*526	05/26/92	05/26/92	18.3		07/10/92	RLW

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Analytical Chemistry Res

STATUS: FINAL

PROJECT NAME: NL/TARACORP SUPERFUND SITE PREDESIGN FIELD INVESTIGATION, WWC89MC114V

PROJECT NUMBER: 5912031 0100

REPORT DATE: 08-17-92

SAMPLE MATRIX: SOIL

LAB MANAGER/QC REVIEW: JEFFREY W. SIRIA

PROJECT MANAGER: JOHN F. GEMOULES

REPORT APPROVED BY: FRANCIS Y. HUANG

SAMPLE I.D.	LABORATORY I.D.	COLLECTION DATE	RECEIVED DATE	MOISTURE, %WET WT METHOD: PB215192	EXTRACT. DATE	ANALYSIS DATE	CHEM. INIT.
SWS1201E00B00L	WWC6*527	05/26/92	05/26/92	15.3		07/10/92	RLW
SWS1201E00C00L	WWC6*528	05/26/92	05/26/92	11.8		07/10/92	RLW
SWS1201F00A00L	WWC6*529	05/26/92	05/26/92	17.5		07/10/92	RLW
SWS1201F00B00L	WWC6*530	05/26/92	05/26/92	13.3		07/10/92	RLW
SWS1201F00C00L	WWC6*531	05/26/92	05/26/92	13.7		07/10/92	RLW
SWS1201G00A00L	WWC6*532	05/26/92	05/26/92	16.2		07/10/92	RLW
SWS1201G00B00L	WWC6*533	05/26/92	05/26/92	14.4		07/10/92	RLW
SWS1201G00C00L	WWC6*534	05/26/92	05/26/92	12.5		07/10/92	RLW
SWS1201H00A00L	WWC6*535	05/26/92	05/26/92	10.8		07/10/92	RLW
SWS1201H00B00L	WWC6*536	05/26/92	05/26/92	10.3		07/10/92	RLW
SWS1201H00C00L	WWC6*537	05/26/92	05/26/92	11.3		07/10/92	RLW
SWS1201J00A00L	WWC6*538	05/26/92	05/26/92	19.2		07/10/92	RLW
SWS1201J00B00L	WWC6*539	05/26/92	05/26/92	14.0		07/10/92	RLW
SWS1201J00C00L	WWC6*540	05/26/92	05/26/92	15.6		07/10/92	RLW
SWS1201K00A00L	WWC6*541	05/26/92	05/26/92	19.4		07/10/92	RLW
SWS1201K00B00L	WWC6*542	05/26/92	05/26/92	16.3		07/10/92	RLW
SWS1201K00C00L	WWC6*543	05/26/92	05/26/92	14.2		07/10/92	RLW
SWS1201L00A00L	WWC6*544	05/26/92	05/26/92	15.9		07/10/92	RLW
SWS1201L00B00L	WWC6*545	05/26/92	05/26/92	12.0		07/10/92	RLW
SWS1201L00C00L	WWC6*546	05/26/92	05/26/92	11.1		07/10/92	RLW
SWS1201M00A00L	WWC6*547	05/26/92	05/26/92	18.4		07/10/92	RLW
SWS1201M00B00L	WWC6*548	05/26/92	05/26/92	13.5		07/10/92	RLW
SWS1201M00C00L	WWC6*549	05/26/92	05/26/92	11.1		07/10/92	RLW
SHA020210AB00L	WWC6*550	05/27/92	05/27/92	10.2		07/10/92	RLW
SHA0202100C00L	WWC6*552	05/27/92	05/27/92	23.3		07/10/92	RLW
SHA0202100E00L	WWC6*554	05/27/92	05/27/92	21.1		07/10/92	RLW
SHA020220AB00L	WWC6*555	05/27/92	05/27/92	10.0		07/10/92	RLW
SHA0202200F00L	WWC6*558	05/27/92	05/27/92	22.9		07/10/92	RLW
SHA0202100D00L	WWC6*559	05/27/92	05/27/92	22.1		07/10/92	RLW
SHA0202300C00L	WWC6*560	05/27/92	05/27/92	22.7		07/10/92	RLW
SHA020230AB00L	WWC6*561	05/27/92	05/27/92	9.1		07/10/92	RLW
SHA020230AB0LD	WWC6*562	05/27/92	05/27/92	11.6		07/10/92	RLW
SHA0202300E00L	WWC6*563	05/27/92	05/27/92	28.3		07/10/92	RLW
SHA0202300G00L	WWC6*566	05/27/92	05/27/92	28.3		07/10/92	RLW
SHA020240AB00L	WWC6*567	05/27/92	05/27/92	15.2		07/10/92	RLW
SHA0202400C00L	WWC6*568	05/27/92	05/27/92	19.1		07/10/92	RLW
SRS012810AB00L	WWC6*569	05/27/92	05/27/92	6.4		07/10/92	RLW
SRS0128100C00L	WWC6*570	05/27/92	05/27/92	10.0		07/10/92	RLW
SRS0128100D00L	WWC6*571	05/27/92	05/27/92	21.7		07/10/92	RLW
SRS0128200C00L	WWC6*572	05/27/92	05/27/92	19.5		07/10/92	RLW
SRS0128200D00L	WWC6*573	05/27/92	05/27/92	12.6		07/10/92	RLW
SRS0128200E00L	WWC6*575	05/27/92	05/27/92	22.9		07/10/92	RLW

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Analytical Chemistry Results

STATUS: FINAL

PROJECT NAME: NL/TARACORP SUPERFUND SITE PREDESIGN FIELD INVESTIGATION, WWC89MC114V

PROJECT NUMBER: 5912031 0100 **REPORT DATE:** 08-17-92

SAMPLE MATRIX: SOIL **LAB MANAGER/QC REVIEW:** JEFFREY W. SIRIA

PROJECT MANAGER: JOHN F. GEMOULES **REPORT APPROVED BY:** FRANCIS Y. HUANG

SAMPLE I.D.	LABORATORY I.D.	COLLECTION DATE	RECEIVED DATE	MOISTURE, %WET WT METHOD: PB215192	EXTRACT. DATE	ANALYSIS DATE	CHEM. INIT.
SRS0128300C00L	WWC6*576	05/27/92	05/27/92	13.3		07/10/92	RLW
SRS0128300D00L	WWC6*578	05/27/92	05/27/92	22.6		07/10/92	RLW
SRS0128300E00L	WWC6*580	05/27/92	05/27/92	22.1		07/10/92	RLW
SMA1423100A00L	WWC6*581	05/27/92	05/27/92	11.1		07/10/92	RLW
SMA1423100B00L	WWC6*582	05/27/92	05/27/92	11.7		07/10/92	RLW
SMA1423100C00L	WWC6*583	05/27/92	05/27/92	14.5		07/10/92	RLW
SMA1423100A0LD	WWC6*584	05/27/92	05/27/92	10.8		07/10/92	RLW
SMA1423100B0LD	WWC6*585	05/27/92	05/27/92	12.9		07/10/92	RLW
SMA1423100C0LD	WWC6*586	05/27/92	05/27/92	15.8		07/10/92	RLW
SMA1423200A00L	WWC6*587	05/27/92	05/27/92	14.8		07/10/92	RLW
SMA1423200B00L	WWC6*588	05/27/92	05/27/92	14.4		07/10/92	RLW
SMA1423200C00L	WWC6*589	05/27/92	05/27/92	12.2		07/10/92	RLW
SNI1500100A00L	WWC6*590	05/27/92	05/27/92	12.0		07/09/92	RLW
SNI1500100B00L	WWC6*591	05/27/92	05/27/92	7.4		07/09/92	RLW
SNI1500100C00L	WWC6*592	05/27/92	05/27/92	8.6		07/09/92	RLW
SNI1500200A00L	WWC6*593	05/27/92	05/27/92	14.1		07/09/92	RLW
SNI1500200B00L	WWC6*594	05/27/92	05/27/92	9.1		07/09/92	RLW
SNI1500200C00L	WWC6*595	05/27/92	05/27/92	8.5		07/09/92	RLW
SNI1500300A00L	WWC6*596	05/27/92	05/27/92	18.1		07/09/92	RLW
SNI1500300B00L	WWC6*597	05/27/92	05/27/92	15.4		07/09/92	RLW
SNI1500300C00L	WWC6*598	05/27/92	05/27/92	14.2		07/09/92	RLW
SNI1500400A00L	WWC6*599	05/27/92	05/27/92	15.2		07/09/92	RLW
SNI1500400B00L	WWC6*600	05/27/92	05/27/92	10.0		07/09/92	RLW
SNI1500400C00L	WWC6*601	05/27/92	05/27/92	16.8		07/09/92	RLW
SNI1500500A00L	WWC6*602	05/27/92	05/27/92	12.7		07/09/92	RLW
SNI1500500B00L	WWC6*603	05/27/92	05/27/92	10.8		07/09/92	RLW
SNI1500500C00L	WWC6*604	05/27/92	05/27/92	11.2		07/09/92	RLW
SGR1013100A00L	WWC6*605	05/27/92	05/27/92	17.0		07/09/92	RLW
SGR1013100B00L	WWC6*606	05/27/92	05/27/92	13.3		07/09/92	RLW
SGR1013100C00L	WWC6*607	05/27/92	05/27/92	11.9		07/09/92	RLW
SGR1013100A0LD	WWC6*608	05/27/92	05/27/92	16.3		07/09/92	RLW
SGR1013100B0LD	WWC6*609	05/27/92	05/27/92	12.3		07/09/92	RLW
SGR1013100C0LD	WWC6*610	05/27/92	05/27/92	13.5		07/09/92	RLW
SGR1013200A00L	WWC6*611	05/27/92	05/27/92	14.4		07/09/92	RLW
SGR1013200B00L	WWC6*612	05/27/92	05/27/92	13.9		07/09/92	RLW
SGR1013200C00L	WWC6*613	05/27/92	05/27/92	15.1		07/09/92	RLW
SGR1017100A00L	WWC6*614	05/27/92	05/27/92	14.4		07/09/92	RLW
SGR1017100B00L	WWC6*615	05/27/92	05/27/92	10.9		07/09/92	RLW
SGR1017100C00L	WWC6*616	05/27/92	05/27/92	9.3		07/09/92	RLW
SGR1017200A00L	WWC6*617	05/27/92	05/27/92	16.9		07/09/92	RLW
SGR1017200B00L	WWC6*618	05/27/92	05/27/92	16.2		07/09/92	RLW
SGR1017200C00L	WWC6*619	05/27/92	05/27/92	16.5		07/09/92	RLW

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Analytical Chemistry Re

STATUS: FINAL

PROJECT NAME: NL/TARACORP SUPERFUND SITE PREDESIGN FIELD INVESTIGATION, WWC89MC114V

PROJECT NUMBER: 5912031 0100 **REPORT DATE:** 08-17-92

SAMPLE MATRIX: SOIL **LAB MANAGER/QC REVIEW:** JEFFREY W. SIRIA

PROJECT MANAGER: JOHN F. GEMOULES **REPORT APPROVED BY:** FRANCIS Y. HUANG

SAMPLE I.D.	LABORATORY I.D.	COLLECTION DATE	RECEIVED DATE	MOISTURE, %WET WT METHOD: PB215192	EXTRACT. DATE	ANALYSIS DATE	CHEM. INIT.
SIO1231100A00L	WWC6*620	05/27/92	05/27/92	17.2		07/09/92	RLW
SIO1231100B00L	WWC6*621	05/27/92	05/27/92	16.9		07/09/92	RLW
SIO1231100C00L	WWC6*622	05/27/92	05/27/92	15.7		07/09/92	RLW
SIO1231200A00L	WWC6*623	05/27/92	05/27/92	11.5		07/09/92	RLW
SIO1231200B00L	WWC6*624	05/27/92	05/27/92	13.8		07/09/92	RLW
SIO1231200C00L	WWC6*625	05/27/92	05/27/92	14.7		07/09/92	RLW
SIO1213100A00L	WWC6*626	05/27/92	05/27/92	13.3		07/09/92	RLW
SIO1213100B00L	WWC6*627	05/27/92	05/27/92	12.3		07/09/92	RLW
SIO1213100C00L	WWC6*628	05/27/92	05/27/92	11.4		07/09/92	RLW
SIO1213200A00L	WWC6*629	05/27/92	05/27/92	15.2		07/09/92	RLW
SIO1213200B00L	WWC6*630	05/27/92	05/27/92	14.3		07/09/92	RLW
SIO1213200C00L	WWC6*631	05/27/92	05/27/92	16.2		07/09/92	RLW
STR001110AC00L	WWC6*632	06/08/92	06/10/92	18.8		06/12/92	CAG
STR0011100H00L	WWC6*633	06/08/92	06/10/92	23.8		06/12/92	CAG
STR0011100U00L	WWC6*634	06/08/92	06/10/92	12.9		06/12/92	CAG
STR0011100V00L	WWC6*635	06/09/92	06/10/92	3.7		06/12/92	CAG
STR0011100W00L	WWC6*636	06/09/92	06/10/92	17.7		06/12/92	CAG
STR0011100X00L	WWC6*637	06/09/92	06/10/92	22.5		06/12/92	CAG
SMW108920AC00L	WWC6*638	06/12/92	06/12/92	11.1		07/09/92	RLW
SMW1089200H00L	WWC6*639	06/12/92	06/12/92	27.9		07/09/92	RLW
SMW1089200U00L	WWC6*640	06/12/92	06/12/92	28.9		07/09/92	RLW
SMW1089200V00L	WWC6*641	06/12/92	06/12/92	40.1		07/09/92	RLW
SMW1089200X00L	WWC6*643	06/12/92	06/12/92	24.6		07/09/92	RLW
SMW111920AC00L	WWC6*644	06/16/92	06/17/92	18.8		07/09/92	RLW
SMW1119200H00L	WWC6*645	06/16/92	06/17/92	26.6		07/09/92	RLW
SMW1119200400L	WWC6*646	06/16/92	06/17/92	8.2		07/09/92	RLW
SMW1119200V00L	WWC6*647	06/16/92	06/17/92	4.8		07/09/92	RLW
SMW1119200W00L	WWC6*648	06/16/92	06/17/92	4.9		07/09/92	RLW
SMW1119200X00L	WWC6*649	06/16/92	06/17/92	14.9		07/09/92	RLW

LEAD ANALYSIS

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Analytical Chemistry Res

STATUS: FINAL

PROJECT NAME: NL/TARACORP SUPERFUND SITE PREDESIGN FIELD INVESTIGATION, WWC89MC114V

PROJECT NUMBER: 5912031 0100 **REPORT DATE:** 08-17-92

SAMPLE MATRIX: SOIL **LAB MANAGER/QC REVIEW:** JEFFREY W. SIRIA

PROJECT MANAGER: JOHN F. GEMOULES **REPORT APPROVED BY:** FRANCIS Y. HUANG

SAMPLE I.D.	LABORATORY I.D.	COLLECTION DATE	RECEIVED DATE	LEAD(FAA), MG/KG-DRY METHOD: 3051/7420	MDL	EXTRACT. DATE	ANALYSIS DATE	CHEM. INIT.
SMP1611100A0LD	WWC6*1	05/07/92	05/07/92	677	5.1	06/02/92	06/12/92	PW
SMP1611100B0LD	WWC6*2	05/07/92	05/07/92	709	5.6	06/02/92	06/12/92	PW
SMP1611100C0LD	WWC6*3	05/07/92	05/07/92	272	5.5	06/02/92	06/12/92	PW
SMP1611200A00L	WWC6*4	05/07/92	05/07/92	355	5.1	06/02/92	06/12/92	PW
SMP1611200B00L	WWC6*5	05/07/92	05/07/92	431	5.3	06/02/92	06/12/92	PW
SMP1611200C00L	WWC6*6	05/07/92	05/07/92	362	5.2	06/02/92	06/12/92	PW
SMP1614100A00L	WWC6*7	05/07/92	05/07/92	528	5.8	06/02/92	06/12/92	PW
SMP1614100B00L	WWC6*8	05/07/92	05/07/92	488	5.5	06/02/92	06/12/92	PW
SMP1614100C00L	WWC6*9	05/07/92	05/07/92	197	5.7	06/02/92	06/12/92	PW
SMP1614200A00L	WWC6*10	05/07/92	05/07/92	951 J	5.9	06/02/92	06/12/92	PW
SMP1614200B00L	WWC6*11	05/07/92	05/07/92	391	5.8	06/02/92	06/12/92	PW
SMP1614200C00L	WWC6*12	05/07/92	05/07/92	237	5.4	06/02/92	06/12/92	PW
SDE2261100A00L	WWC6*13	05/07/92	05/07/92	371	5.3	06/02/92	06/12/92	PW
SDE2261100B00L	WWC6*14	05/07/92	05/07/92	121	5.3	06/02/92	06/12/92	PW
SDE2261100C00L	WWC6*15	05/07/92	05/07/92	46.7	5.7	06/02/92	06/12/92	PW
SDE2261100A0LD	WWC6*16	05/07/92	05/07/92	344	5.3	06/02/92	06/12/92	PW
SDE2261100B0LD	WWC6*17	05/07/92	05/07/92	165	5.5	06/02/92	06/12/92	PW
SDE2261100C0LD	WWC6*18	05/07/92	05/07/92	125	5.8	06/02/92	06/12/92	PW
SDE2200100A00L	WWC6*19	05/07/92	05/07/92	461	5.5	06/02/92	06/12/92	PW
SDE2200100B00L	WWC6*20	05/07/92	05/07/92	218	5.3	06/02/92	06/12/92	PW
SDE2200100C00L	WWC6*21	05/07/92	05/07/92	85.6	5.4	06/02/92	06/12/92	PW
SDE2200200A00L	WWC6*22	05/07/92	05/07/92	444	5.5	06/02/92	06/12/92	PW
SDE2200200B00L	WWC6*23	05/07/92	05/07/92	406	5.4	06/02/92	06/12/92	PW
SDE2200200C00L	WWC6*24	05/07/92	05/07/92	254	5.2	06/02/92	06/12/92	PW
SDE2219100A00L	WWC6*25	05/07/92	05/07/92	402	5.0	06/02/92	06/12/92	PW
SDE2219100B00L	WWC6*26	05/07/92	05/07/92	271	5.0	06/02/92	06/12/92	PW
SDE2219100C00L	WWC6*27	05/07/92	05/07/92	120	5.1	06/02/92	06/12/92	PW
SDE2219100A0LD	WWC6*28	05/07/92	05/07/92	354	5.3	06/02/92	06/12/92	PW
SDE2219100B0LD	WWC6*29	05/07/92	05/07/92	314	5.0	06/02/92	06/12/92	PW
SDE2219100C0LD	WWC6*30	05/07/92	05/07/92	122	5.6	06/02/92	06/12/92	PW
SDE2219200A00L	WWC6*31	05/07/92	05/07/92	194	5.1	06/02/92	06/19/92	PW
SDE2219200B00L	WWC6*32	05/07/92	05/07/92	92.4	5.0	06/02/92	06/19/92	PW
SDE2219200C00L	WWC6*33	05/07/92	05/07/92	83.4	5.3	06/02/92	06/19/92	PW
SDV2505100A00L	WWC6*34	05/07/92	05/07/92	631	5.1	06/02/92	06/19/92	PW
SDV2505100B00L	WWC6*35	05/07/92	05/07/92	280	5.3	06/02/92	06/19/92	PW
SDV2505100C00L	WWC6*36	05/07/92	05/07/92	142	5.3	06/02/92	06/19/92	PW
SDV2505100A0LD	WWC6*37	05/07/92	05/07/92	594	5.1	06/02/92	06/19/92	PW
SDV2505100B0LD	WWC6*38	05/07/92	05/07/92	255	5.1	06/02/92	06/19/92	PW
SDV2505100C0LD	WWC6*39	05/07/92	05/07/92	174	5.2	06/02/92	06/19/92	PW
SDV2505200A00L	WWC6*40	05/07/92	05/07/92	630	5.5	06/02/92	06/19/92	PW
SDV2505200B00L	WWC6*41	05/07/92	05/07/92	564	5.9	06/02/92	06/19/92	PW
SDV2505200C00L	WWC6*42	05/07/92	05/07/92	324	5.9	06/02/92	06/19/92	PW

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Analytical Chemistry Results

STATUS: FINAL

PROJECT NAME: NL/TARACORP SUPERFUND SITE PREDESIGN FIELD INVESTIGATION, WWC89MC114V

PROJECT NUMBER: 5912031 0100 **REPORT DATE:** 08-17-92

SAMPLE MATRIX: SOIL **LAB MANAGER/QC REVIEW:** JEFFREY W. SIRIA

PROJECT MANAGER: JOHN F. GEMOULES **REPORT APPROVED BY:** FRANCIS Y. HUANG

SAMPLE I.D.	LABORATORY I.D.	COLLECTION DATE	RECEIVED DATE	LEAD(FAA), MG/KG-DRY METHOD: 3051/7420	MDL	EXTRACT. DATE	ANALYSIS DATE	CHEM. INIT.
SBR2029100A00L	WWC6*43	05/07/92	05/07/92	395	5.4	06/02/92	06/19/92	PW
SBR2029100B00L	WWC6*44	05/07/92	05/07/92	361	5.5	06/02/92	06/19/92	PW
SBR2029100C00L	WWC6*45	05/07/92	05/07/92	348	5.3	06/02/92	06/19/92	PW
SBR2029200A00L	WWC6*46	05/07/92	05/07/92	693	5.3	06/02/92	06/19/92	PW
SBR2029200B00L	WWC6*47	05/07/92	05/07/92	677	5.3	06/02/92	06/19/92	PW
SBR2029200C00L	WWC6*48	05/07/92	05/07/92	531	5.3	06/02/92	06/19/92	PW
SBR2011100A00L	WWC6*49	05/07/92	05/07/92	842	5.3	06/02/92	06/19/92	PW
SBR2011100B00L	WWC6*50	05/07/92	05/07/92	869 J	5.2	06/02/92	06/19/92	PW
SBR2011100C00L	WWC6*51	05/07/92	05/07/92	1140	4.9	06/02/92	06/19/92	PW
SBR2011200A00L	WWC6*52	05/07/92	05/07/92	1090	5.3	06/02/92	06/19/92	PW
SBR2011200B00L	WWC6*53	05/07/92	05/07/92	1290	5.5	06/02/92	06/19/92	PW
SBR2011200C00L	WWC6*54	05/07/92	05/07/92	199	5.1	06/02/92	06/19/92	PW
SBR2011100A0LD	WWC6*55	05/07/92	05/07/92	899	5.2	06/02/92	06/19/92	PW
SBR2011100B0LD	WWC6*56	05/07/92	05/07/92	833	5.3	06/02/92	06/19/92	PW
SBR2011100C0LD	WWC6*57	05/07/92	05/07/92	980	5.0	06/02/92	06/19/92	PW
SBE1932100A00L	WWC6*58	05/11/92	05/11/92	188	4.9	06/02/92	06/19/92	PW
SBE1932100B00L	WWC6*59	05/11/92	05/11/92	256	5.0	06/02/92	06/19/92	PW
SBE1932100C00L	WWC6*60	05/11/92	05/11/92	81.6	4.8	06/02/92	06/19/92	PW
SBE1932200A00L	WWC6*61	05/11/92	05/11/92	312	5.2	06/02/92	06/19/92	PW
SBE1932200B00L	WWC6*62	05/11/92	05/11/92	246	5.1	06/02/92	06/19/92	PW
SBE1932200C00L	WWC6*63	05/11/92	05/11/92	361	5.1	06/02/92	06/19/92	PW
SBE2109100A00L	WWC6*64	05/11/92	05/11/92	431	5.1	06/02/92	06/19/92	PW
SBE2109100B00L	WWC6*65	05/11/92	05/11/92	282	5.1	06/02/92	06/19/92	PW
SBE2109100C00L	WWC6*66	05/11/92	05/11/92	181	5.2	06/02/92	06/19/92	PW
SBE2109200A00L	WWC6*67	05/11/92	05/11/92	690	5.2	06/02/92	06/19/92	PW
SBE2109200B00L	WWC6*68	05/11/92	05/11/92	555	5.3	06/02/92	06/19/92	PW
SBE2109200C00L	WWC6*69	05/11/92	05/11/92	254	5.3	06/02/92	06/19/92	PW
SBE2113100A00L	WWC6*70	05/11/92	05/11/92	472 J	5.1	06/02/92	06/19/92	PW
SBE2113100B00L	WWC6*71	05/11/92	05/11/92	427	5.5	06/02/92	06/19/92	PW
SBE2113100C00L	WWC6*72	05/11/92	05/11/92	291	5.3	06/02/92	06/19/92	PW
SBE2113200A00L	WWC6*73	05/11/92	05/11/92	1380	5.6	06/02/92	06/19/92	PW
SBE2113200B00L	WWC6*74	05/11/92	05/11/92	3100 D	27.2	06/02/92	06/19/92	PW
SBE2113200C00L	WWC6*75	05/11/92	05/11/92	546	5.5	06/02/92	06/19/92	PW
SBE2137200A00L	WWC6*76	05/11/92	05/11/92	621	5.3	06/02/92	06/19/92	PW
SBE2137200B00L	WWC6*77	05/11/92	05/11/92	318	5.3	06/02/92	06/19/92	PW
SBE2137200C00L	WWC6*78	05/11/92	05/11/92	207	5.4	06/02/92	06/19/92	PW
SBE2137100A00L	WWC6*79	05/11/92	05/11/92	326	5.1	06/02/92	06/19/92	PW
SBE2137100B00L	WWC6*80	05/11/92	05/11/92	319	5.3	06/02/92	06/19/92	PW
SBE2137100C00L	WWC6*81	05/11/92	05/11/92	511	5.2	06/02/92	06/19/92	PW
SBE2124100A00L	WWC6*82	05/11/92	05/11/92	399	5.4	06/02/92	06/19/92	PW
SBE2124100B00L	WWC6*83	05/11/92	05/11/92	383	5.4	06/02/92	06/19/92	PW
SBE2124100C00L	WWC6*84	05/11/92	05/11/92	141	5.5	06/02/92	06/19/92	PW

D - Sample was diluted for this parameter

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Analytical Chemistry Res

STATUS: FINAL

PROJECT NAME: NL/TARACORP SUPERFUND SITE PREDESIGN FIELD INVESTIGATION, WWC89MC114V

PROJECT NUMBER: 5912031 0100 **REPORT DATE:** 08-17-92

SAMPLE MATRIX: SOIL **LAB MANAGER/QC REVIEW:** JEFFREY W. SIRIA

PROJECT MANAGER: JOHN F. GEMOULES **REPORT APPROVED BY:** FRANCIS Y. HUANG

SAMPLE I.D.	LABORATORY I.D.	COLLECTION DATE	RECEIVED DATE	LEAD(FAA), MG/KG-DRY METHOD: 3051/7420	MDL	EXTRACT. DATE	ANALYSIS DATE	CHEM. INIT.
SBE2250100A00L	WWC6*85	05/11/92	05/11/92	545	5.5	06/02/92	06/19/92	PW
SBE2250100B00L	WWC6*86	05/11/92	05/11/92	282	5.4	06/02/92	06/19/92	PW
SBE2250100C00L	WWC6*87	05/11/92	05/11/92	63.4	5.4	06/02/92	06/19/92	PW
SBE2250200A00L	WWC6*88	05/11/92	05/11/92	295	5.3	06/02/92	06/19/92	PW
SBE2250200B00L	WWC6*89	05/11/92	05/11/92	162	5.6	06/02/92	06/19/92	PW
SBE2250200C00L	WWC6*90	05/11/92	05/11/92	130	5.4	06/02/92	06/19/92	PW
SST2152100A00L	WWC6*91	05/11/92	05/11/92	222	5.1	06/02/92	06/19/92	PW
SST2152100B00L	WWC6*92	05/11/92	05/11/92	617	5.5	06/02/92	06/19/92	PW
SST2152100C00L	WWC6*93	05/11/92	05/11/92	457	5.8	06/02/92	06/19/92	PW
SST2152200A00L	WWC6*94	05/11/92	05/11/92	347	5.3	06/02/92	06/19/92	PW
SST2152200B00L	WWC6*95	05/11/92	05/11/92	363	5.7	06/02/92	06/19/92	PW
SST2152200C00L	WWC6*96	05/11/92	05/11/92	233	5.5	06/02/92	06/19/92	PW
SST2137100A00L	WWC6*97	05/11/92	05/11/92	832	5.8	06/02/92	06/19/92	PW
SST2137100B00L	WWC6*98	05/11/92	05/11/92	563	5.6	06/02/92	06/19/92	PW
SST2137100C00L	WWC6*99	05/11/92	05/11/92	325	5.7	06/02/92	06/19/92	PW
SST2137200A00L	WWC6*100	05/11/92	05/11/92	808	5.3	06/02/92	06/19/92	PW
SST2137200B00L	WWC6*101	05/11/92	05/11/92	711	5.2	06/02/92	06/19/92	PW
SST2137200C00L	WWC6*102	05/11/92	05/11/92	685	5.5	06/03/92	06/19/92	PW
SBE2040100A00L	WWC6*103	05/11/92	05/11/92	707	5.6	06/03/92	06/19/92	PW
SBE2040100B00L	WWC6*104	05/11/92	05/11/92	752	5.1	06/03/92	06/19/92	PW
SBE2040100C00L	WWC6*105	05/11/92	05/11/92	474	5.3	06/03/92	06/19/92	PW
SBE2040200A00L	WWC6*106	05/11/92	05/11/92	416	5.2	06/03/92	06/19/92	PW
SBE2040200B00L	WWC6*107	05/11/92	05/11/92	479	5.2	06/03/92	06/19/92	PW
SBE2040200C00L	WWC6*108	05/11/92	05/11/92	383	5.4	06/03/92	06/19/92	PW
SST2242100A00L	WWC6*109	05/11/92	05/11/92	394 J	5.3	06/03/92	06/19/92	PW
SST2242100B00L	WWC6*110	05/11/92	05/11/92	434	5.4	06/03/92	06/26/92	PW
SST2242100C00L	WWC6*111	05/11/92	05/11/92	246	5.3	06/03/92	06/26/92	PW
SST2242200A00L	WWC6*112	05/11/92	05/11/92	431	5.2	06/03/92	06/26/92	PW
SST2242200B00L	WWC6*113	05/11/92	05/11/92	408	5.1	06/03/92	06/26/92	PW
SST2242200C00L	WWC6*114	05/11/92	05/11/92	248	5.0	06/03/92	06/26/92	PW
SST2216100A00L	WWC6*115	05/11/92	05/11/92	592	5.3	06/03/92	06/26/92	PW
SST2216100B00L	WWC6*116	05/11/92	05/11/92	306	5.2	06/03/92	06/26/92	PW
SST2216100C00L	WWC6*117	05/11/92	05/11/92	110	5.0	06/03/92	06/26/92	PW
SST2216200A00L	WWC6*118	05/11/92	05/11/92	730	5.4	06/03/92	06/26/92	PW
SST2216200B00L	WWC6*119	05/11/92	05/11/92	562	5.5	06/03/92	06/26/92	PW
SST2216200C00L	WWC6*120	05/11/92	05/11/92	400	5.6	06/03/92	06/26/92	PW
SST2231100A00L	WWC6*121	05/11/92	05/11/92	558	5.3	06/03/92	06/26/92	PW
SST2231100B00L	WWC6*122	05/11/92	05/11/92	571	5.0	06/03/92	06/26/92	PW
SST2231100C00L	WWC6*123	05/11/92	05/11/92	2010	5.3	06/03/92	06/26/92	PW
SST2231200A00L	WWC6*124	05/11/92	05/11/92	1110	5.3	06/03/92	06/26/92	PW
SST2231200B00L	WWC6*125	05/11/92	05/11/92	1010	5.2	06/03/92	06/26/92	PW
SST2231200C00L	WWC6*126	05/11/92	05/11/92	1390	5.3	06/03/92	06/26/92	PW

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Analytical Chemistry Resul

STATUS: FINAL

PROJECT NAME: NL/TARACORP SUPERFUND SITE PREDESIGN FIELD INVESTIGATION, WWC89MC114V

PROJECT NUMBER: 5912031 0100 **REPORT DATE:** 08-17-92

SAMPLE MATRIX: SOIL **LAB MANAGER/QC REVIEW:** JEFFREY W. SIRIA

PROJECT MANAGER: JOHN F. GEMOULES **REPORT APPROVED BY:** FRANCIS Y. HUANG

SAMPLE I.D.	LABORATORY I.D.	COLLECTION DATE	RECEIVED DATE	LEAD(FAA), MG/KG-DRY METHOD: 3051/7420		MDL	EXTRACT. DATE	ANALYSIS DATE	CHEM. INIT.
SST1716100A00L	WWC6*127	05/11/92	05/11/92	477		4.8	06/03/92	06/26/92	PW
SST1716100B00L	WWC6*128	05/11/92	05/11/92	184		5.1	06/03/92	06/26/92	PW
SST1716100C00L	WWC6*129	05/11/92	05/11/92	272		5.1	06/03/92	06/26/92	PW
SGR1418100A00L	WWC6*130	05/12/92	05/12/92	3450	D	27.8	06/04/92	06/26/92	PW
SGR1418100B00L	WWC6*131	05/12/92	05/12/92	1420		5.5	06/04/92	06/26/92	PW
SGR1418100C00L	WWC6*132	05/12/92	05/12/92	836		5.6	06/04/92	06/26/92	PW
SGR1418100A0LD	WWC6*133	05/12/92	05/12/92	3860	D	26.9	06/04/92	06/26/92	PW
SGR1418100B0LD	WWC6*134	05/12/92	05/12/92	1600		5.6	06/04/92	06/26/92	PW
SGR1418100C0LD	WWC6*135	05/12/92	05/12/92	718		5.2	06/04/92	06/26/92	PW
SGR1418200A00L	WWC6*136	05/12/92	05/12/92	739		5.3	06/04/92	06/26/92	PW
SGR1418200B00L	WWC6*137	05/12/92	05/12/92	891		5.7	06/04/92	06/26/92	PW
SGR1418200C00L	WWC6*138	05/12/92	05/12/92	880		5.3	06/04/92	06/26/92	PW
SGR1436100A00L	WWC6*139	05/12/92	05/12/92	1400		5.4	06/04/92	06/26/92	PW
SGR1436100B00L	WWC6*140	05/12/92	05/12/92	1380		5.4	06/04/92	06/26/92	PW
SGR1436100C00L	WWC6*141	05/12/92	05/12/92	620		5.5	06/04/92	06/26/92	PW
SGR1436200A00L	WWC6*142	05/12/92	05/12/92	1120		5.3	06/04/92	06/26/92	PW
SGR1436200B00L	WWC6*143	05/12/92	05/12/92	321		5.2	06/04/92	06/26/92	PW
SGR1436200C00L	WWC6*144	05/12/92	05/12/92	407		5.5	06/04/92	06/26/92	PW
SET1310100A00L	WWC6*145	05/12/92	05/12/92	1280		5.6	06/04/92	06/26/92	PW
SET1310100B00L	WWC6*146	05/12/92	05/12/92	14300	D	54.6	06/04/92	06/26/92	PW
SET1310100C00L	WWC6*147	05/12/92	05/12/92	372		5.5	06/04/92	06/26/92	PW
SET1310200A00L	WWC6*148	05/12/92	05/12/92	546		5.2	06/04/92	06/26/92	PW
SET1310200B00L	WWC6*149	05/12/92	05/12/92	286		5.7	06/04/92	06/26/92	PW
SET1310200C00L	WWC6*150	05/12/92	05/12/92	121		5.7	06/04/92	06/26/92	PW
SED2124100A00L	WWC6*151	05/12/92	05/12/92	901		5.2	06/04/92	06/26/92	PW
SED2124100B00L	WWC6*152	05/12/92	05/12/92	701		5.3	06/04/92	06/26/92	PW
SED2124100C00L	WWC6*153	05/12/92	05/12/92	350		5.2	06/04/92	06/26/92	PW
SED2124200A00L	WWC6*154	05/12/92	05/12/92	736		5.5	06/04/92	06/26/92	PW
SED2124200B00L	WWC6*155	05/12/92	05/12/92	709		5.3	06/04/92	06/26/92	PW
SED2124200C00L	WWC6*156	05/12/92	05/12/92	822		5.5	06/04/92	06/26/92	PW
SED2154100A00L	WWC6*157	05/12/92	05/12/92	663		5.3	06/04/92	06/26/92	PW
SED2154100B00L	WWC6*158	05/12/92	05/12/92	653		5.6	06/04/92	06/26/92	PW
SED2154100C00L	WWC6*159	05/12/92	05/12/92	463		5.1	06/04/92	06/26/92	PW
SED2154200A00L	WWC6*160	05/12/92	05/12/92	1180		5.6	06/04/92	06/26/92	PW
SED2154200B00L	WWC6*161	05/12/92	05/12/92	390		5.6	06/04/92	06/26/92	PW
SED2154200C00L	WWC6*162	05/12/92	05/12/92	459		5.6	06/04/92	06/26/92	PW
SGR2113100A00L	WWC6*163	05/12/92	05/12/92	290		5.4	06/04/92	06/26/92	PW
SGR2113100B00L	WWC6*164	05/12/92	05/12/92	478		5.7	06/04/92	06/26/92	PW
SGR2113100C00L	WWC6*165	05/12/92	05/12/92	415		5.3	06/04/92	06/26/92	PW
SGR2113200A00L	WWC6*166	05/12/92	05/12/92	367		5.3	06/04/92	06/26/92	PW
SGR2113200B00L	WWC6*167	05/12/92	05/12/92	107		5.1	06/04/92	06/26/92	PW
SGR2113200C00L	WWC6*168	05/12/92	05/12/92	313		5.1	06/04/92	06/26/92	PW

D - Sample was diluted for this parameter

Environmental Science & Engineering, Inc.

St. Louis Chemistry Laboratory

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Analytical Chemistry Res

STATUS: FINAL

PROJECT NAME: NL/TARACORP SUPERFUND SITE PREDESIGN FIELD INVESTIGATION, WWC89MC114V

PROJECT NUMBER: 5912031 0100 **REPORT DATE:** 08-17-92

SAMPLE MATRIX: SOIL **LAB MANAGER/QC REVIEW:** JEFFREY W. SIRIA

PROJECT MANAGER: JOHN F. GEMOULES **REPORT APPROVED BY:** FRANCIS Y. HUANG

SAMPLE I.D.	LABORATORY I.D.	COLLECTION DATE	RECEIVED DATE	LEAD(FAA), MG/KG-DRY METHOD: 3051/7420	MDL	EXTRACT. DATE	ANALYSIS DATE	CHEM. INIT.
SGR2204100A00L	WWC6*169	05/12/92	05/12/92	661 J	5.1	06/04/92	06/26/92	PW
SGR2204100B00L	WWC6*170	05/12/92	05/12/92	483	5.3	06/04/92	06/26/92	PW
SGR2204100C00L	WWC6*171	05/12/92	05/12/92	306	5.4	06/04/92	06/26/92	PW
SGR2204200A00L	WWC6*172	05/12/92	05/12/92	429	5.4	06/04/92	06/26/92	PW
SGR2204200B00L	WWC6*173	05/12/92	05/12/92	385	5.7	06/04/92	06/26/92	PW
SGR2204200C00L	WWC6*174	05/12/92	05/12/92	233	5.4	06/04/92	06/26/92	PW
SGR2218100A00L	WWC6*175	05/12/92	05/12/92	479	5.4	06/04/92	06/26/92	PW
SGR2218100B00L	WWC6*176	05/12/92	05/12/92	417	5.3	06/04/92	06/26/92	PW
SGR2218100C00L	WWC6*177	05/12/92	05/12/92	312	5.3	06/04/92	06/26/92	PW
SGR2218200A00L	WWC6*178	05/12/92	05/12/92	968	6.1	06/04/92	06/26/92	PW
SGR2218200B00L	WWC6*179	05/12/92	05/12/92	825	5.9	06/04/92	06/26/92	PW
SGR2218200C00L	WWC6*180	05/12/92	05/12/92	386	5.5	06/04/92	06/26/92	PW
SGR2241100A00L	WWC6*181	05/12/92	05/12/92	316	5.3	06/04/92	06/26/92	PW
SGR2241100B00L	WWC6*182	05/12/92	05/12/92	234	5.3	06/04/92	06/26/92	PW
SGR2241100C00L	WWC6*183	05/12/92	05/12/92	127	5.2	06/04/92	06/26/92	PW
SGR2241200A00L	WWC6*184	05/12/92	05/12/92	680	5.4	06/04/92	06/26/92	PW
SGR2241200B00L	WWC6*185	05/12/92	05/12/92	541	5.3	06/04/92	06/26/92	PW
SGR2241200C00L	WWC6*186	05/12/92	05/12/92	214	5.5	06/04/92	06/26/92	PW
SWS2035100A00L	WWC6*189	05/13/92	05/13/92	837	5.3	06/04/92	06/26/92	PW
SWS2035100B00L	WWC6*190	05/13/92	05/13/92	661	5.5	06/04/92	06/26/92	PW
SWS2035100C00L	WWC6*191	05/13/92	05/13/92	498	5.7	06/04/92	06/26/92	PW
SMA2100300A00L	WWC6*192	05/13/92	05/13/92	68.6	5.4	06/04/92	06/26/92	PW
SMA2100300B00L	WWC6*193	05/13/92	05/13/92	54.5	5.6	06/04/92	06/26/92	PW
SMA2100300C00L	WWC6*194	05/13/92	05/13/92	72.0	5.3	06/04/92	06/26/92	PW
SWS2140100A00L	WWC6*195	05/13/92	05/13/92	81.7	5.5	06/04/92	06/26/92	PW
SWS2140100B00L	WWC6*196	05/13/92	05/13/92	67.1	5.3	06/04/92	06/26/92	PW
SWS2140100C00L	WWC6*197	05/13/92	05/13/92	67.1	5.3	06/04/92	06/26/92	PW
SWS2140200A00L	WWC6*198	05/13/92	05/13/92	71.4	5.2	06/04/92	06/26/92	PW
SWS2140200B00L	WWC6*199	05/13/92	05/13/92	83.2	5.2	06/04/92	06/26/92	PW
SMA2100100A00L	WWC6*200	05/13/92	05/13/92	86.1	5.5	06/04/92	06/26/92	PW
SMA2100100B00L	WWC6*201	05/13/92	05/13/92	77.3	5.3	06/04/92	06/26/92	PW
SMA2100100C00L	WWC6*202	05/13/92	05/13/92	71.0	5.4	06/04/92	06/26/92	PW
SMA2100200A00L	WWC6*203	05/13/92	05/13/92	90.8	5.3	06/04/92	06/26/92	PW
SMA2100200B00L	WWC6*204	05/13/92	05/13/92	64.5	5.1	06/04/92	06/26/92	PW
SMA2100200C00L	WWC6*205	05/13/92	05/13/92	64.4	5.1	06/04/92	06/26/92	PW
SIO2103100A00L	WWC6*206	05/13/92	05/13/92	446	5.7	06/04/92	06/26/92	PW
SIO2103100B00L	WWC6*207	05/13/92	05/13/92	392	5.5	06/04/92	06/26/92	PW
SIO2103100C00L	WWC6*208	05/13/92	05/13/92	203	5.5	06/04/92	06/26/92	PW
SIO2103200A00L	WWC6*209	05/13/92	05/13/92	2200	5.8	06/04/92	06/26/92	PW
SIO2103200B00L	WWC6*210	05/13/92	05/13/92	447	5.6	06/04/92	06/26/92	PW
SIO2103200C00L	WWC6*211	05/13/92	05/13/92	257	5.4	06/04/92	06/26/92	PW
SOR0026100B00L	WWC6*212	05/13/92	05/13/92	11900 D	53.4	06/04/92	06/26/92	PW

D - Sample was diluted for this parameter

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Analytical Chemistry Results

STATUS: FINAL

PROJECT NAME: NL/TARACORP SUPERFUND SITE PREDESIGN FIELD INVESTIGATION, WWC89MC114V

PROJECT NUMBER: 5912031 0100 **REPORT DATE:** 08-17-92

SAMPLE MATRIX: SOIL **LAB MANAGER/QC REVIEW:** JEFFREY W. SIRIA

PROJECT MANAGER: JOHN F. GEMOULES **REPORT APPROVED BY:** FRANCIS Y. HUANG

SAMPLE I.D.	LABORATORY I.D.	COLLECTION DATE	RECEIVED DATE	LEAD(FAA), MG/KG-DRY METHOD: 3051/7420		MDL	EXTRACT. DATE	ANALYSIS DATE	CHEM. INIT.
SOR0026200A00L	WWC6*213	05/13/92	05/13/92	81.1		5.2	06/04/92	06/26/92	PW
SOR0026200B00L	WWC6*214	05/13/92	05/13/92	70.1		5.5	06/04/92	06/26/92	PW
SOR0026200C00L	WWC6*215	05/13/92	05/13/92	64.9		5.5	06/04/92	06/26/92	PW
SOH2025100A00L	WWC6*217	05/13/92	05/13/92	291		5.4	06/04/92	06/26/92	PW
SOH2025100B00L	WWC6*218	05/13/92	05/13/92	241		5.4	06/04/92	06/26/92	PW
SOH2025100C00L	WWC6*219	05/13/92	05/13/92	193		5.5	06/04/92	06/26/92	PW
SOH2025200A00L	WWC6*220	05/13/92	05/13/92	384		5.3	06/04/92	06/26/92	PW
SOH2025200B00L	WWC6*221	05/13/92	05/13/92	331		5.4	06/04/92	06/26/92	PW
SOH2025200C00L	WWC6*222	05/13/92	05/13/92	238		5.5	06/04/92	06/26/92	PW
SOH2025300A00L	WWC6*223	05/13/92	05/13/92	390		5.4	06/04/92	06/26/92	PW
SOH2025300B00L	WWC6*224	05/13/92	05/13/92	354		5.5	06/04/92	06/26/92	PW
SOH2025300C00L	WWC6*225	05/13/92	05/13/92	282		5.5	06/04/92	06/26/92	PW
SOH2025400A00L	WWC6*226	05/13/92	05/13/92	377		5.4	06/04/92	06/26/92	PW
SOH2025400B00L	WWC6*227	05/13/92	05/13/92	303		5.4	06/04/92	06/26/92	PW
SOH2025400C00L	WWC6*228	05/13/92	05/13/92	217		5.5	06/04/92	06/26/92	PW
SOH2025500A00L	WWC6*229	05/13/92	05/13/92	348		5.4	06/04/92	06/26/92	PW
SOH2025500B00L	WWC6*230	05/13/92	05/13/92	298		5.0	06/05/92	07/28/92	PW
SOH2025500C00L	WWC6*231	05/13/92	05/13/92	241		5.4	06/05/92	07/28/92	PW
SOH2025600A00L	WWC6*232	05/13/92	05/13/92	384		5.7	06/05/92	07/28/92	PW
SOH2025600B00L	WWC6*233	05/13/92	05/13/92	308		5.6	06/05/92	07/28/92	PW
SOH2025600C00L	WWC6*234	05/13/92	05/13/92	206		5.6	06/05/92	07/28/92	PW
SOH2025700A00L	WWC6*235	05/13/92	05/13/92	874		5.3	06/05/92	07/28/92	PW
SOH2025700B00L	WWC6*236	05/13/92	05/13/92	200		5.0	06/05/92	07/28/92	PW
SOH2025700C00L	WWC6*237	05/13/92	05/13/92	102		5.1	06/05/92	07/28/92	PW
SOH2025800A00L	WWC6*238	05/13/92	05/13/92	286		5.7	06/05/92	07/28/92	PW
SOH2025800B00L	WWC6*239	05/13/92	05/13/92	268		5.8	06/05/92	07/28/92	PW
SOH2025800C00L	WWC6*240	05/13/92	05/13/92	220		5.8	06/05/92	07/28/92	PW
SOH2025900A00L	WWC6*241	05/13/92	05/13/92	398		5.5	06/05/92	07/28/92	PW
SOH2025900B00L	WWC6*242	05/13/92	05/13/92	411		5.5	06/05/92	07/28/92	PW
SOH2025900C00L	WWC6*243	05/13/92	05/13/92	224		5.6	06/05/92	07/28/92	PW
SOR0026100A00L	WWC6*244	05/13/92	05/13/92	3390	D	26.5	06/05/92	07/28/92	PW
SWS2022100A00L	WWC6*245	05/14/92	05/14/92	697		5.5	06/05/92	07/28/92	PW
SWS2022100B00L	WWC6*246	05/14/92	05/14/92	875		5.7	06/05/92	07/28/92	PW
SWS2022100C00L	WWC6*247	05/14/92	05/14/92	762		5.9	06/05/92	07/28/92	PW
SWS2022200A00L	WWC6*248	05/14/92	05/14/92	895		5.5	06/05/92	07/28/92	PW
SWS2022200B00L	WWC6*249	05/14/92	05/14/92	907		5.2	06/05/92	07/28/92	PW
SWS2022200C00L	WWC6*250	05/14/92	05/14/92	599		5.4	06/05/92	07/28/92	PW
SIO2207100A00L	WWC6*251	05/14/92	05/14/92	777		5.5	06/05/92	07/28/92	PW
SIO2207100B00L	WWC6*252	05/14/92	05/14/92	474		5.5	06/05/92	07/28/92	PW
SIO2207100C00L	WWC6*253	05/14/92	05/14/92	297		5.9	06/05/92	07/28/92	PW
SIO2207200A00L	WWC6*254	05/14/92	05/14/92	414		5.7	06/05/92	07/28/92	PW
SIO2207200B00L	WWC6*255	05/14/92	05/14/92	365		5.5	06/05/92	07/28/92	PW

D - Sample was diluted for this parameter

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Analytical Chemistry Results

STATUS: FINAL

PROJECT NAME: NL/TARACORP SUPERFUND SITE PREDESIGN FIELD INVESTIGATION, WWC89MC114V

PROJECT NUMBER: 5912031 0100 **REPORT DATE:** 08-17-92

SAMPLE MATRIX: SOIL **LAB MANAGER/QC REVIEW:** JEFFREY W. SIRIA

PROJECT MANAGER: JOHN F. GEMOULES **REPORT APPROVED BY:** FRANCIS Y. HUANG

SAMPLE I.D.	LABORATORY I.D.	COLLECTION DATE	RECEIVED DATE	LEAD(FAA), MG/KG-DRY METHOD: 3051/7420		MDL	EXTRACT. DATE	ANALYSIS DATE	CHEM. INIT.
SWA1747100C00L	WWC6*298	05/15/92	05/15/92	79.0	U	5.6	06/08/92	07/28/92	PW
SWA1747200A00L	WWC6*299	05/15/92	05/15/92	668	J	5.4	06/08/92	07/28/92	PW
SWA1747200B00L	WWC6*300	05/15/92	05/15/92	866		5.6	06/08/92	07/28/92	PW
SWA1747200C00L	WWC6*301	05/15/92	05/15/92	831		5.7	06/05/92	07/28/92	PW
SCH1732100A00L	WWC6*302	05/15/92	05/15/92	912		5.5	06/08/92	07/28/92	PW
SCH1732100B00L	WWC6*303	05/15/92	05/15/92	813		5.5	06/08/92	07/28/92	PW
SCH1732100C00L	WWC6*304	05/15/92	05/15/92	137		5.8	06/08/92	07/28/92	PW
SCH1732200A00L	WWC6*305	05/15/92	05/15/92	1100		5.9	06/08/92	07/28/92	PW
SCH1732200B00L	WWC6*306	05/15/92	05/15/92	623		5.8	06/08/92	07/28/92	PW
SCH1732200C00L	WWC6*307	05/15/92	05/15/92	1280		5.9	06/08/92	07/28/92	PW
SMA1413100A00L	WWC6*308	05/15/92	05/15/92	2810	D	28.3	06/08/92	07/28/92	PW
SMA1413100B00L	WWC6*309	05/15/92	05/15/92	1490		5.4	06/05/92	07/28/92	PW
SMA1413100C00L	WWC6*310	05/15/92	05/15/92	899		5.7	06/08/92	07/28/92	PW
SMA1419100A00L	WWC6*311	05/15/92	05/15/92	3200	D	28.7	06/08/92	07/28/92	PW
SMA1419100B00L	WWC6*312	05/15/92	05/15/92	1280		5.4	06/08/92	07/28/92	PW
SMA1419100C00L	WWC6*313	05/15/92	05/15/92	723		5.6	06/08/92	07/28/92	PW
SMA1419200A00L	WWC6*314	05/15/92	05/15/92	1730		5.5	06/08/92	07/28/92	PW
SMA1419200B00L	WWC6*315	05/15/92	05/15/92	936		5.3	06/08/92	07/28/92	PW
SMA1419200C00L	WWC6*316	05/15/92	05/15/92	743		6.2	06/08/92	07/28/92	PW
SMA1436100A00L	WWC6*317	05/15/92	05/15/92	1180		5.7	06/08/92	07/28/92	PW
SMA1436100B00L	WWC6*318	05/15/92	05/15/92	613		5.6	06/08/92	07/28/92	PW
SMA1436100C00L	WWC6*319	05/15/92	05/15/92	503		5.9	06/08/92	07/28/92	PW
SMA1436200A00L	WWC6*320	05/15/92	05/15/92	861		6.0	06/08/92	07/28/92	PW
SMA1436200B00L	WWC6*321	05/15/92	05/15/92	777		6.1	06/08/92	07/28/92	PW
SMA1436200C00L	WWC6*322	05/15/92	05/15/92	506		6.1	06/08/92	07/28/92	PW
SIO1415100A00L	WWC6*323	05/15/92	05/15/92	516		5.3	06/08/92	07/28/92	PW
SIO1415100B00L	WWC6*324	05/15/92	05/15/92	607		5.6	06/08/92	07/28/92	PW
SIO1415100C00L	WWC6*325	05/15/92	05/15/92	548		5.7	06/08/92	07/28/92	PW
SIO1415200A00L	WWC6*326	05/15/92	05/15/92	275		5.7	06/08/92	07/28/92	PW
SIO1415200B00L	WWC6*327	05/15/92	05/15/92	269		5.7	06/08/92	07/28/92	PW
SIO1415200C00L	WWC6*328	05/15/92	05/15/92	307		5.4	06/08/92	07/28/92	PW
SDE1630100A00L	WWC6*329	05/18/92	05/18/92	2280		5.8	06/08/92	07/28/92	PW
SDE1630100B00L	WWC6*330	05/18/92	05/18/92	1460		5.8	06/11/92	07/28/92	PW
SDE1630100C00L	WWC6*331	05/18/92	05/18/92	760		5.5	06/11/92	07/28/92	PW
SDE1630200A00L	WWC6*332	05/18/92	05/18/92	1390		5.9	06/11/92	07/28/92	PW
SDE1630200B00L	WWC6*333	05/18/92	05/18/92	1360		5.8	06/11/92	07/28/92	PW
SDE1630200C00L	WWC6*334	05/18/92	05/18/92	307		5.7	06/11/92	07/28/92	PW
SED2229100A00L	WWC6*335	05/18/92	05/18/92	564		6.1	06/11/92	07/28/92	PW
SED2229100B00L	WWC6*336	05/18/92	05/18/92	411		5.3	06/11/92	07/28/92	PW
SED2229100C00L	WWC6*337	05/18/92	05/18/92	124		5.5	06/11/92	07/28/92	PW
SED2241100A00L	WWC6*338	05/18/92	05/18/92	388		6.0	06/11/92	07/28/92	PW
SED2241100B00L	WWC6*339	05/18/92	05/18/92	340	J	5.9	06/11/92	07/28/92	PW

D - Sample was diluted for this parameter

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Analytical Chemistry Re

STATUS: FINAL

PROJECT NAME: NL/TARACORP SUPERFUND SITE PREDESIGN FIELD INVESTIGATION, WWC89MC114V

PROJECT NUMBER: 5912031 0100

REPORT DATE: 08-17-92

SAMPLE MATRIX: SOIL

LAB MANAGER/QC REVIEW: JEFFREY W. SIRIA

PROJECT MANAGER: JOHN F. GEMOULES

REPORT APPROVED BY: FRANCIS Y. HUANG

SAMPLE I.D.	LABORATORY I.D.	COLLECTION DATE	RECEIVED DATE	LEAD(FAA), MG/KG-DRY METHOD: 3051/7420	MDL	EXTRACT. DATE	ANALYSIS DATE	CHEM. INIT.
SIO2207200C00L	WWC6*256	05/14/92	05/14/92	350 J	6.2	06/05/92	07/28/92	PW
SIO2263100A00L	WWC6*257	05/14/92	05/14/92	171	5.6	06/05/92	07/28/92	PW
SIO2263100B00L	WWC6*258	05/14/92	05/14/92	209	5.5	06/05/92	07/28/92	PW
SIO2263100C00L	WWC6*259	05/14/92	05/14/92	211	5.8	06/05/92	07/28/92	PW
SIO2263200A00L	WWC6*260	05/14/92	05/14/92	288	5.3	06/05/92	07/28/92	PW
SIO2263200B00L	WWC6*261	05/14/92	05/14/92	250	5.2	06/05/92	07/28/92	PW
SIO2263200C00L	WWC6*262	05/14/92	05/14/92	205	5.5	06/05/92	07/28/92	PW
SLE2135100A00L	WWC6*263	05/14/92	05/14/92	166	5.5	06/05/92	07/28/92	PW
SLE2135100B00L	WWC6*264	05/14/92	05/14/92	143	5.2	06/05/92	07/28/92	PW
SLE2135100C00L	WWC6*265	05/14/92	05/14/92	92.7	5.5	06/05/92	07/28/92	PW
SLE2135200A00L	WWC6*266	05/14/92	05/14/92	585	5.4	06/05/92	07/28/92	PW
SLE2135200B00L	WWC6*267	05/14/92	05/14/92	486	5.7	06/05/92	07/28/92	PW
SLE2135200C00L	WWC6*268	05/14/92	05/14/92	344	5.6	06/05/92	07/28/92	PW
SDE2112100A00L	WWC6*269	05/14/92	05/14/92	586	5.4	06/05/92	07/28/92	PW
SDE2112100B00L	WWC6*270	05/14/92	05/14/92	454	5.1	06/05/92	07/28/92	PW
SDE2112100C00L	WWC6*271	05/14/92	05/14/92	266	5.2	06/05/92	07/28/92	PW
SDE2112200A00L	WWC6*272	05/14/92	05/14/92	580	5.3	06/05/92	07/28/92	PW
SDE2112200B00L	WWC6*273	05/14/92	05/14/92	1240	5.1	06/05/92	07/28/92	PW
SDE2112200C00L	WWC6*274	05/14/92	05/14/92	409	5.5	06/05/92	07/28/92	PW
SCL2110100A00L	WWC6*275	05/14/92	05/14/92	353	5.4	06/05/92	07/28/92	PW
SCL2110100B00L	WWC6*276	05/14/92	05/14/92	297	5.4	06/05/92	07/28/92	PW
SCL2110100C00L	WWC6*277	05/14/92	05/14/92	91.2	5.2	06/05/92	07/28/92	PW
SCL2110200A00L	WWC6*278	05/14/92	05/14/92	515	5.6	06/05/92	07/28/92	PW
SCL2110200B00L	WWC6*279	05/14/92	05/14/92	437	5.4	06/05/92	07/28/92	PW
SCL2110200C00L	WWC6*280	05/14/92	05/14/92	272	5.1	06/05/92	07/28/92	PW
SED2037100A00L	WWC6*281	05/14/92	05/14/92	462	5.3	06/05/92	07/28/92	PW
SED2037100B00L	WWC6*282	05/14/92	05/14/92	172	5.2	06/05/92	07/28/92	PW
SED2037100C00L	WWC6*283	05/14/92	05/14/92	98.1	5.0	06/05/92	07/28/92	PW
SED2037200A0LD	WWC6*284	05/14/92	05/14/92	555	5.1	06/05/92	07/28/92	PW
SED2037100B0LD	WWC6*285	05/14/92	05/14/92	167	5.1	06/05/92	07/28/92	PW
SED2037100C0LD	WWC6*286	05/14/92	05/14/92	93.0	5.2	06/05/92	07/28/92	PW
SED2037200A00L	WWC6*287	05/14/92	05/14/92	887	5.5	06/05/92	07/28/92	PW
SED2037200B00L	WWC6*288	05/14/92	05/14/92	424	5.2	06/05/92	07/28/92	PW
SED2037200C00L	WWC6*289	05/14/92	05/14/92	244	5.3	06/05/92	07/28/92	PW
SWA1741100A00L	WWC6*290	05/15/92	05/15/92	933	5.8	06/08/92	07/28/92	PW
SWA1741100B00L	WWC6*291	05/15/92	05/15/92	584	5.6	06/08/92	07/28/92	PW
SWA1741100C00L	WWC6*292	05/15/92	05/15/92	471	5.4	06/08/92	07/28/92	PW
SWA1741200A00L	WWC6*293	05/15/92	05/15/92	467	5.4	06/08/92	07/28/92	PW
SWA1741200B00L	WWC6*294	05/15/92	05/15/92	423	5.5	06/08/92	07/28/92	PW
SWA1741200C00L	WWC6*295	05/15/92	05/15/92	862	5.4	06/08/92	07/28/92	PW
SWA1747100A00L	WWC6*296	05/15/92	05/15/92	424	6.0	06/08/92	07/28/92	PW
SWA1747100B00L	WWC6*297	05/15/92	05/15/92	297 J	5.5	06/08/92	07/28/92	PW

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Analytical Chemistry Resu

STATUS: FINAL

PROJECT NAME: NL/TARACORP SUPERFUND SITE PREDESIGN FIELD INVESTIGATION, WWC89MC114V

PROJECT NUMBER: 5912031 0100 **REPORT DATE:** 08-17-92

SAMPLE MATRIX: SOIL **LAB MANAGER/QC REVIEW:** JEFFREY W. SIRIA

PROJECT MANAGER: JOHN F. GEMOULES **REPORT APPROVED BY:** FRANCIS Y. HUANG

SAMPLE I.D.	LABORATORY I.D.	COLLECTION DATE	RECEIVED DATE	LEAD(FAA), MG/KG-DRY METHOD: 3051/7420	MDL	EXTRACT. DATE	ANALYSIS DATE	CHEM. INIT.
SED2241100C00L	WWC6*340	05/18/92	05/18/92	268 J	5.5	06/11/92	07/28/92	PW
SED2241200A00L	WWC6*341	05/18/92	05/18/92	419	6.4	06/11/92	07/28/92	PW
SED2241200B00L	WWC6*342	05/18/92	05/18/92	317	5.8	06/11/92	07/28/92	PW
SED2241200C00L	WWC6*343	05/18/92	05/18/92	150	5.5	06/11/92	07/28/92	PW
SED2259100A00L	WWC6*344	05/18/92	05/18/92	208	5.9	06/11/92	07/28/92	PW
SED2259100B00L	WWC6*345	05/18/92	05/18/92	213	5.6	06/11/92	07/28/92	PW
SED2259100C00L	WWC6*346	05/18/92	05/18/92	140 J	5.4	06/11/92	07/28/92	PW
SED2259200A00L	WWC6*347	05/18/92	05/18/92	60.1 U	5.6	06/11/92	07/28/92	PW
SED2259200B00L	WWC6*348	05/18/92	05/18/92	334 J	6.0	06/11/92	07/28/92	PW
SED2259200C00L	WWC6*349	05/18/92	05/18/92	544 J	5.9	06/11/92	07/28/92	PW
SNI0945100A00L	WWC6*350	05/18/92	05/18/92	2670 DJ	29.0	06/11/92	07/29/92	PW
SNI0945100B00L	WWC6*351	05/18/92	05/18/92	812	5.3	06/11/92	07/29/92	PW
SNI0945100C00L	WWC6*352	05/18/92	05/18/92	943	5.1	06/11/92	07/29/92	PW
SNI0945200A00L	WWC6*353	05/18/92	05/18/92	3060 D	30.5	06/11/92	07/29/92	PW
SNI0945200B00L	WWC6*354	05/18/92	05/18/92	435	5.9	06/11/92	07/29/92	PW
SNI0945200C00L	WWC6*355	05/18/92	05/18/92	305	5.3	06/11/92	07/29/92	PW
SNI0837100A00L	WWC6*356	05/18/92	05/18/92	1350	5.4	06/11/92	07/29/92	PW
SNI0837100B00L	WWC6*357	05/18/92	05/18/92	621	5.1	06/11/92	07/29/92	PW
SNI0837100C00L	WWC6*358	05/18/92	05/18/92	413	5.1	06/11/92	07/29/92	PW
SNI0837200A00L	WWC6*359	05/18/92	05/18/92	885	5.7	06/11/92	07/29/92	PW
SNI0837200B00L	WWC6*360	05/18/92	05/18/92	1010	5.6	06/11/92	07/29/92	PW
SNI0837200C00L	WWC6*361	05/18/92	05/18/92	585	5.6	06/11/92	07/29/92	PW
SCL2101100A00L	WWC6*362	05/18/92	05/18/92	286	5.8	06/11/92	07/29/92	PW
SCL2101100B00L	WWC6*363	05/18/92	05/18/92	155 J	5.5	06/11/92	07/29/92	PW
SCL2101100C00L	WWC6*364	05/18/92	05/18/92	72.9 U	5.3	06/11/92	07/29/92	PW
SCL2101200A00L	WWC6*365	05/18/92	05/18/92	79.1 U	5.9	06/11/92	07/29/92	PW
SCL2101200B00L	WWC6*366	05/18/92	05/18/92	56.7 U	5.6	06/11/92	07/29/92	PW
SCL2101200C00L	WWC6*367	05/18/92	05/18/92	37.9 U	5.3	06/11/92	07/29/92	PW
SDE2265100A00L	WWC6*368	05/18/92	05/18/92	172 J	6.1	06/11/92	07/29/92	PW
SDE2265100B00L	WWC6*369	05/18/92	05/18/92	126 JU	5.7	06/11/92	07/29/92	PW
SDE2265100C00L	WWC6*370	05/18/92	05/18/92	38.8 U	5.7	06/12/92	07/29/92	PW
SDE2265100A0LD	WWC6*371	05/18/92	05/18/92	387 J	6.2	06/12/92	07/29/92	PW
SDE2265100B0LD	WWC6*372	05/18/92	05/18/92	122 U	5.9	06/12/92	07/29/92	PW
SDE2265100C0LD	WWC6*373	05/18/92	05/18/92	42.6 U	5.5	06/12/92	07/29/92	PW
SDE2265200A00L	WWC6*374	05/18/92	05/18/92	1700 J	5.4	06/12/92	07/29/92	PW
SDE2265200B00L	WWC6*375	05/18/92	05/18/92	1280	5.9	06/12/92	07/29/92	PW
SDE2265200C00L	WWC6*376	05/18/92	05/18/92	226	5.8	06/12/92	07/29/92	PW
SGR1419100A00L	WWC6*377	05/19/92	05/19/92	5910 D	59.6	06/12/92	07/29/92	PW
SGR1419100B00L	WWC6*378	05/19/92	05/19/92	1570	6.1	06/12/92	07/29/92	PW
SGR1419100C00L	WWC6*379	05/19/92	05/19/92	1130	5.9	06/12/92	07/29/92	PW
SGR1419200A00L	WWC6*380	05/19/92	05/19/92	1460	6.0	06/12/92	07/29/92	PW
SGR1419200B00L	WWC6*381	05/19/92	05/19/92	1060 J	6.1	06/12/92	07/29/92	PW

D - Sample was diluted for this parameter

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Analytical Chemistry Results

STATUS: FINAL

PROJECT NAME: NL/TARACORP SUPERFUND SITE PREDESIGN FIELD INVESTIGATION, WWC89MC114V

PROJECT NUMBER: 5912031 0100 **REPORT DATE:** 08-17-92

SAMPLE MATRIX: SOIL **LAB MANAGER/QC REVIEW:** JEFFREY W. SIRIA

PROJECT MANAGER: JOHN F. GEMOULES **REPORT APPROVED BY:** FRANCIS Y. HUANG

SAMPLE I.D.	LABORATORY I.D.	COLLECTION DATE	RECEIVED DATE	LEAD(FAA), MG/KG-DRY METHOD: 3051/7420	MDL	EXTRACT. DATE	ANALYSIS DATE	CHEM. INIT.
SGR1419200C00L	WWC6*382	05/19/92	05/19/92	718 J	5.8	06/12/92	07/29/92	PW
SMC1005100A00L	WWC6*383	05/19/92	05/19/92	217 J	6.4	06/12/92	07/29/92	PW
SMC1005100B00L	WWC6*384	05/19/92	05/19/92	183 J	5.8	06/12/92	07/29/92	PW
SMC1005100C00L	WWC6*385	05/19/92	05/19/92	82.2 U	5.5	06/12/92	07/29/92	PW
SMC1005200A00L	WWC6*386	05/19/92	05/19/92	150 J	5.5	06/12/92	07/29/92	PW
SMC1005200B00L	WWC6*387	05/19/92	05/19/92	134 U	5.6	06/12/92	07/29/92	PW
SMC1005200C00L	WWC6*388	05/19/92	05/19/92	136 U	5.4	06/12/92	07/29/92	PW
SEL1713100A00L	WWC6*389	05/19/92	05/19/92	177 J	6.0	06/12/92	07/29/92	PW
SEL1713100B00L	WWC6*390	05/19/92	05/19/92	245 J	6.0	06/15/92	07/29/92	PW
SEL1713100C00L	WWC6*391	05/19/92	05/19/92	2570 D J	29.4	06/15/92	07/29/92	PW
SEL1713100A0LD	WWC6*392	05/19/92	05/19/92	192 J	5.9	06/15/92	07/29/92	PW
SEL1713100B0LD	WWC6*393	05/19/92	05/19/92	679 J	6.2	06/15/92	07/29/92	PW
SEL1713100C0LD	WWC6*394	05/19/92	05/19/92	680 J	6.1	06/15/92	07/29/92	PW
SEL1713200A00L	WWC6*395	05/19/92	05/19/92	104 U	5.7	06/15/92	07/29/92	PW
SEL1713200B00L	WWC6*396	05/19/92	05/19/92	174 J	5.7	06/15/92	07/29/92	PW
SEL1713200C00L	WWC6*397	05/19/92	05/19/92	128 U	5.6	06/15/92	07/29/92	PW
SET1312100A00L	WWC6*398	05/19/92	05/19/92	515 J	5.5	06/15/92	07/29/92	PW
SET1312100B00L	WWC6*399	05/19/92	05/19/92	261	5.5	06/15/92	07/29/92	PW
SET1312200A00L	WWC6*400	05/19/92	05/19/92	1380	5.5	06/15/92	07/29/92	PW
SCA0108100C00L	WWC6*402	05/19/92	05/19/92	154	6.1	06/15/92	07/29/92	PW
SCA010820AB00L	WWC6*403	05/19/92	05/19/92	4350 D	29.0	06/15/92	07/29/92	PW
SCA0108200C00L	WWC6*404	05/19/92	05/19/92	1810	5.3	06/15/92	07/29/92	PW
SCA011120AB00L	WWC6*405	05/19/92	05/19/92	445	5.2	06/15/92	07/29/92	PW
SCA011110AB00L	WWC6*406	05/19/92	05/19/92	471	5.4	06/15/92	07/29/92	PW
SOR002210AB00L	WWC6*407	05/20/92	05/20/92	1030	5.8	06/15/92	07/29/92	PW
SOR0022100C00L	WWC6*409	05/20/92	05/20/92	318	6.0	06/15/92	07/29/92	PW
SOR002310AB00L	WWC6*410	05/20/92	05/20/92	712 J	6.5	06/15/92	07/29/92	PW
SOR0023100C00L	WWC6*412	05/20/92	05/20/92	98.0 U	6.6	06/15/92	07/29/92	PW
SOR002410AB00L	WWC6*414	05/20/92	05/20/92	7130 D J	31.3	06/15/92	07/29/92	PW
SOR002410AB0LD	WWC6*415	05/20/92	05/20/92	4200 D	29.6	06/15/92	07/29/92	PW
SOR0024100C00L	WWC6*416	05/20/92	05/20/92	3490 D	32.1	06/15/92	07/29/92	PW
SOR0024100D00L	WWC6*417	05/20/92	05/20/92	141	6.8	06/15/92	07/29/92	PW
STE020310AB00L	WWC6*418	05/20/92	05/20/92	45200 D	105	06/15/92	07/29/92	PW
STE0203100C00L	WWC6*419	05/20/92	05/20/92	10100 D	59.7	06/15/92	07/29/92	PW
STE0203100C00T	WWC6*420	05/20/92	05/20/92	5930 D	31.5	06/15/92	07/29/92	PW
STE020310AB00T	WWC6*421	05/20/92	05/20/92	37700 D	108	06/15/92	07/29/92	PW
STE0203100D00L	WWC6*422	05/20/92	05/20/92	292	6.3	06/15/92	07/29/92	PW
STE020320AB00L	WWC6*423	05/20/92	05/20/92	8060 D	26.1	06/15/92	07/29/92	PW
STE0203200C00L	WWC6*425	05/20/92	05/20/92	820 J	5.7	06/15/92	07/29/92	PW
STE0203200D00L	WWC6*426	05/20/92	05/20/92	44.2 U	6.1	06/15/92	07/29/92	PW
STE020330AB00L	WWC6*427	05/20/92	05/20/92	5430 D J	28.1	06/15/92	07/29/92	PW
STE020330AB0LD	WWC6*428	05/20/92	05/20/92	9140 D J	28.5	06/15/92	07/29/92	PW

D - Sample was diluted for this parameter

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Analytical Chemistry Res

STATUS: FINAL

PROJECT NAME: NL/TARACORP SUPERFUND SITE PREDESIGN FIELD INVESTIGATION, WWC89MC114V

PROJECT NUMBER: 5912031 0100 **REPORT DATE:** 08-17-92

SAMPLE MATRIX: SOIL **LAB MANAGER/QC REVIEW:** JEFFREY W. SIRIA

PROJECT MANAGER: JOHN F. GEMOULES **REPORT APPROVED BY:** FRANCIS Y. HUANG

SAMPLE I.D.	LABORATORY I.D.	COLLECTION DATE	RECEIVED DATE	LEAD(FAA), MG/KG-DRY METHOD: 3051/7420		MDL	EXTRACT. DATE	ANALYSIS DATE	CHEM. INIT.
STE0203300C00L	WWC6*430	05/20/92	05/20/92	126	U	6.1	06/15/92	07/29/92	PW
STE0203300D00L	WWC6*431	05/20/92	05/20/92	41.5	U	6.1	06/15/92	07/29/92	PW
STE020340AB00L	WWC6*432	05/20/92	05/20/92	37500 D	J	101	06/15/92	07/29/92	PW
STE0203400C00L	WWC6*434	05/20/92	05/20/92	971	J	6.5	06/15/92	07/29/92	PW
STE0203400D00L	WWC6*435	05/20/92	05/20/92	59.8	U	6.6	06/15/92	07/29/92	PW
SHI010010AB00L	WWC6*436	05/20/92	05/20/92	17900 D	J	51.1	06/15/92	07/29/92	PW
SHI0100100C00L	WWC6*438	05/20/92	05/20/92	1580		5.8	06/15/92	07/29/92	PW
D SHI0100100B00L	WWC6*439	05/20/92	05/20/92	843		6.1	06/15/92	07/29/92	PW
SHI010020AB00L	WWC6*440	05/20/92	05/20/92	360	J	5.8	06/15/92	07/29/92	PW
SHI0100200C00L	WWC6*442	05/20/92	05/20/92	90.2	U	6.2	06/15/92	07/29/92	PW
STE020810AB00L	WWC6*443	05/21/92	05/21/92	2170	J	6.1	06/15/92	07/29/92	PW
STE0208100C00L	WWC6*445	05/21/92	05/21/92	52.0	U	6.1	06/15/92	07/29/92	PW
STE020820AB00L	WWC6*446	05/21/92	05/21/92	474	J	6.2	06/15/92	07/29/92	PW
STE0208200C00L	WWC6*448	05/21/92	05/21/92	88.9	U	6.3	06/15/92	07/29/92	PW
STE020830AB00L	WWC6*449	05/21/92	05/21/92	90.7	U	6.8	06/15/92	07/29/92	PW
STE0208300C00L	WWC6*450	05/21/92	05/21/92	19.4	U	5.7	06/15/92	07/29/92	PW
STE020840AB00L	WWC6*451	05/21/92	05/21/92	2790 D	J	29.7	06/15/92	07/29/92	PW
STE0208400C00L	WWC6*453	05/21/92	05/21/92	2100		6.1	06/15/92	07/29/92	PW
STE020850AB00L	WWC6*454	05/21/92	05/21/92	1180		6.3	06/15/92	07/29/92	PW
STE0208500C00L	WWC6*456	05/21/92	05/21/92	4070 D		27.3	06/15/92	07/29/92	PW
SHA0205100D00L	WWC6*457	05/21/92	05/21/92	1030		6.5	06/15/92	07/29/92	PW
SHA0205100E00L	WWC6*458	05/21/92	05/21/92	223		7.2	06/15/92	07/29/92	PW
SHA0205200D00L	WWC6*459	05/21/92	05/21/92	529		5.9	06/15/92	07/29/92	PW
SHA0205200D0LD	WWC6*460	05/21/92	05/21/92	832		6.1	06/15/92	07/29/92	PW
SHA0205200E00L	WWC6*461	05/21/92	05/21/92	216	J	6.9	06/15/92	07/29/92	PW
SHA0205200F00L	WWC6*462	05/21/92	05/21/92	20.4	U	6.4	06/15/92	07/29/92	PW
SHA0205300D00L	WWC6*463	05/21/92	05/21/92	782	J	5.8	06/15/92	07/29/92	PW
SHA0205300E00L	WWC6*466	05/21/92	05/21/92	500	J	6.8	06/15/92	07/29/92	PW
SHA020530AC00L	WWC6*468	05/21/92	05/21/92	45.0	U	6.1	06/15/92	07/29/92	PW
SHA020310AC00L	WWC6*469	05/22/92	05/22/92	92.9	U	6.1	06/15/92	07/29/92	PW
SHA0203100D00L	WWC6*470	05/22/92	05/22/92	49.8	U	6.6	06/16/92	07/29/92	PW
SHA020320AC00L	WWC6*471	05/22/92	05/22/92	848	J	6.2	06/16/92	07/29/92	PW
SHA0203200D00L	WWC6*472	05/22/92	05/22/92	101	U	6.1	06/16/92	07/29/92	PW
SHA0203300D00L	WWC6*473	05/22/92	05/22/92	1540	J	6.3	06/16/92	07/29/92	PW
SHA0203300D0LD	WWC6*474	05/22/92	05/22/92	1220	J	6.3	06/16/92	07/29/92	PW
SHA0203300E00L	WWC6*476	05/22/92	05/22/92	507	J	6.9	06/16/92	07/29/92	PW
SHA0203300F00L	WWC6*478	05/22/92	05/22/92	95.9	U	6.6	06/16/92	07/29/92	PW
SHA020340AC00L	WWC6*479	05/22/92	05/22/92	186	J	5.9	06/16/92	07/29/92	PW
SHA0203400D00L	WWC6*480	05/22/92	05/22/92	1800		7.1	06/16/92	07/29/92	PW
SHA0203400E00L	WWC6*481	05/22/92	05/22/92	148		7.1	06/16/92	07/29/92	PW
SHA0203400F00L	WWC6*482	05/22/92	05/22/92	178		7.0	06/16/92	07/29/92	PW
SWS1201100A00L	WWC6*484	05/26/92	05/26/92	375	J	6.0	06/16/92	07/29/92	PW

D - Sample was diluted for this parameter

Environmental Science & Engineering, Inc.

St. Louis Chemistry Laboratory

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Analytical Chemistry Result

STATUS: FINAL

PROJECT NAME: NL/TARACORP SUPERFUND SITE PREDESIGN FIELD INVESTIGATION, WWC89MC114V

PROJECT NUMBER: 5912031 0100 **REPORT DATE:** 08-17-92

SAMPLE MATRIX: SOIL **LAB MANAGER/QC REVIEW:** JEFFREY W. SIRIA

PROJECT MANAGER: JOHN F. GEMOULES **REPORT APPROVED BY:** FRANCIS Y. HUANG

SAMPLE I.D.	LABORATORY I.D.	COLLECTION DATE	RECEIVED DATE	LEAD(FAA), MG/KG-DRY METHOD: 3051/7420	MDL	EXTRACT. DATE	ANALYSIS DATE	CHEM. INIT.
SWS1201100B00L	WWC6*485	05/26/92	05/26/92	280 J	5.5	06/16/92	07/29/92	PW
SWS1201100C00L	WWC6*486	05/26/92	05/26/92	388	5.8	06/16/92	07/29/92	PW
SWS1201100A0LD	WWC6*487	05/26/92	05/26/92	384	6.1	06/16/92	07/29/92	PW
SWS1201100B0LD	WWC6*488	05/26/92	05/26/92	264	5.9	06/16/92	07/29/92	PW
SWS1201100C0LD	WWC6*489	05/26/92	05/26/92	377	5.7	06/16/92	07/29/92	PW
SWS1201200A00L	WWC6*490	05/26/92	05/26/92	155 J	5.5	06/16/92	07/29/92	PW
SWS1201200B00L	WWC6*491	05/26/92	05/26/92	85.1 U	5.7	06/16/92	07/29/92	PW
SWS1201200C00L	WWC6*492	05/26/92	05/26/92	49.0 U	5.7	06/16/92	07/29/92	PW
SWS1201300A00L	WWC6*493	05/26/92	05/26/92	126 U	5.2	06/16/92	07/29/92	PW
SWS1201300B00L	WWC6*494	05/26/92	05/26/92	93.2 U	5.3	06/16/92	07/29/92	PW
SWS1201300C00L	WWC6*495	05/26/92	05/26/92	89.8 U	5.6	06/16/92	07/29/92	PW
SWS1201400A00L	WWC6*496	05/26/92	05/26/92	403 J	6.1	06/16/92	07/29/92	PW
SWS1201400B00L	WWC6*497	05/26/92	05/26/92	105 U	5.8	06/16/92	07/29/92	PW
SWS1201400C00L	WWC6*498	05/26/92	05/26/92	66.7 U	5.5	06/16/92	07/29/92	PW
SWS1201500A00L	WWC6*499	05/26/92	05/26/92	141 J	5.3	06/16/92	07/29/92	PW
SWS1201500B00L	WWC6*500	05/26/92	05/26/92	146 J	5.6	06/16/92	07/29/92	PW
SWS1201500C00L	WWC6*501	05/26/92	05/26/92	248 J	5.5	06/16/92	07/29/92	PW
SWS1201600A00L	WWC6*502	05/26/92	05/26/92	93.2 U	5.5	06/16/92	07/29/92	PW
SWS1201600B00L	WWC6*503	05/26/92	05/26/92	116 U	5.4	06/16/92	07/29/92	PW
SWS1201600C00L	WWC6*504	05/26/92	05/26/92	49.5 U	5.3	06/16/92	07/29/92	PW
SWS1201700A00L	WWC6*505	05/26/92	05/26/92	325 J	6.2	06/16/92	07/29/92	PW
SWS1201700B00L	WWC6*506	05/26/92	05/26/92	90.0 U	5.6	06/16/92	07/29/92	PW
SWS1201700C00L	WWC6*507	05/26/92	05/26/92	47.4 U	5.6	06/16/92	07/29/92	PW
SWS1201800A00L	WWC6*508	05/26/92	05/26/92	300 J	5.7	06/16/92	07/29/92	PW
SWS1201800B00L	WWC6*509	05/26/92	05/26/92	213	5.5	06/16/92	07/29/92	PW
SWS1201800C00L	WWC6*510	05/26/92	05/26/92	246	5.5	06/16/92	07/29/92	PW
SWS1201900A00L	WWC6*511	05/26/92	05/26/92	247 J	5.8	06/16/92	07/29/92	PW
SWS1201900B00L	WWC6*512	05/26/92	05/26/92	125 U	5.3	06/16/92	07/29/92	PW
SWS1201900C00L	WWC6*513	05/26/92	05/26/92	64.0 U	5.3	06/16/92	07/29/92	PW
SWS1201A00A00L	WWC6*514	05/26/92	05/26/92	398 J	6.3	06/16/92	07/29/92	PW
SWS1201A00B00L	WWC6*515	05/26/92	05/26/92	314 J	6.1	06/16/92	07/29/92	PW
SWS1201A00C00L	WWC6*516	05/26/92	05/26/92	102 U	5.2	06/16/92	07/29/92	PW
SWS1201B00A00L	WWC6*517	05/26/92	05/26/92	329 J	5.3	06/16/92	07/29/92	PW
SWS1201B00B00L	WWC6*518	05/26/92	05/26/92	108 U	5.4	06/16/92	07/29/92	PW
SWS1201B00C00L	WWC6*519	05/26/92	05/26/92	168 J	5.2	06/16/92	07/29/92	PW
SWS1201C00A00L	WWC6*520	05/26/92	05/26/92	233 J	6.4	06/16/92	07/29/92	PW
SWS1201C00B00L	WWC6*521	05/26/92	05/26/92	131 U	5.6	06/16/92	07/29/92	PW
SWS1201C00C00L	WWC6*522	05/26/92	05/26/92	68.3 U	5.8	06/16/92	07/29/92	PW
SWS1201D00A00L	WWC6*523	05/26/92	05/26/92	397 J	6.0	06/16/92	07/29/92	PW
SWS1201D00B00L	WWC6*524	05/26/92	05/26/92	218 J	5.6	06/16/92	07/29/92	PW
SWS1201D00C00L	WWC6*525	05/26/92	05/26/92	75.8 U	5.3	06/16/92	07/29/92	PW
SWS1201E00A00L	WWC6*526	05/26/92	05/26/92	484 J	6.0	06/16/92	07/29/92	PW

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STATUS: FINAL

PROJECT NAME: NL/TARACORP SUPERFUND SITE PREDESIGN FIELD INVESTIGATION, WWC89MC114V

PROJECT NUMBER: 5912031 0100 **REPORT DATE:** 08-17-92

SAMPLE MATRIX: SOIL **LAB MANAGER/QC REVIEW:** JEFFREY W. SIRIA

PROJECT MANAGER: JOHN F. GEMOULES **REPORT APPROVED BY:** FRANCIS Y. HUANG

SAMPLE I.D.	LABORATORY I.D.	COLLECTION DATE	RECEIVED DATE	LEAD(FAA), MG/KG-DRY METHOD: 3051/7420		MDL	EXTRACT. DATE	ANALYSIS DATE	CHEM. INIT.
SWS1201E00B00L	WWC6*527	05/26/92	05/26/92	376	J	5.8	06/16/92	07/29/92	PW
SWS1201E00C00L	WWC6*528	05/26/92	05/26/92	255		5.5	06/16/92	07/29/92	PW
SWS1201F00A00L	WWC6*529	05/26/92	05/26/92	310		5.7	06/16/92	07/29/92	PW
SWS1201F00B00L	WWC6*530	05/26/92	05/26/92	155		5.6	06/16/92	07/29/92	PW
SWS1201F00C00L	WWC6*531	05/26/92	05/26/92	227		5.8	06/16/92	07/29/92	PW
SWS1201G00A00L	WWC6*532	05/26/92	05/26/92	230		5.9	06/16/92	07/29/92	PW
SWS1201G00B00L	WWC6*533	05/26/92	05/26/92	144	J	5.7	06/16/92	07/29/92	PW
SWS1201G00C00L	WWC6*534	05/26/92	05/26/92	81.8	U	5.7	06/16/92	07/29/92	PW
SWS1201H00A00L	WWC6*535	05/26/92	05/26/92	75.3	U	5.5	06/16/92	07/29/92	PW
SWS1201H00B00L	WWC6*536	05/26/92	05/26/92	74.0	U	5.5	06/16/92	07/29/92	PW
SWS1201H00C00L	WWC6*537	05/26/92	05/26/92	128	U	5.3	06/16/92	07/29/92	PW
SWS1201J00A00L	WWC6*538	05/26/92	05/26/92	126	U	5.9	06/16/92	07/29/92	PW
SWS1201J00B00L	WWC6*539	05/26/92	05/26/92	101	U	5.7	06/16/92	07/29/92	PW
SWS1201J00C00L	WWC6*540	05/26/92	05/26/92	154	J	5.9	06/16/92	07/29/92	PW
SWS1201K00A00L	WWC6*541	05/26/92	05/26/92	201		5.8	06/16/92	07/29/92	PW
SWS1201K00B00L	WWC6*542	05/26/92	05/26/92	206		5.8	06/16/92	07/29/92	PW
SWS1201K00C00L	WWC6*543	05/26/92	05/26/92	158		5.7	06/16/92	07/29/92	PW
SWS1201L00A00L	WWC6*544	05/26/92	05/26/92	395		5.6	06/16/92	07/29/92	PW
SWS1201L00B00L	WWC6*545	05/26/92	05/26/92	281		5.3	06/16/92	07/29/92	PW
SWS1201L00C00L	WWC6*546	05/26/92	05/26/92	183		5.3	06/16/92	07/29/92	PW
SWS1201M00A00L	WWC6*547	05/26/92	05/26/92	280		5.7	06/16/92	07/29/92	PW
SWS1201M00B00L	WWC6*548	05/26/92	05/26/92	154	J	5.6	06/16/92	07/29/92	PW
SWS1201M00C00L	WWC6*549	05/26/92	05/26/92	121	U	5.3	06/16/92	07/29/92	PW
SHA020210AB00L	WWC6*550	05/27/92	05/27/92	68400	D	261	06/17/92	07/30/92	PW
SHA0202100C00L	WWC6*552	05/27/92	05/27/92	2320		6.1	06/12/92	07/30/92	PW
SHA0202100E00L	WWC6*554	05/27/92	05/27/92	198		6.0	06/12/92	07/30/92	PW
SHA020220AB00L	WWC6*555	05/27/92	05/27/92	1240		5.1	06/12/92	07/30/92	PW
SHA0202200F00L	WWC6*558	05/27/92	05/27/92	19.4		6.1	06/12/92	07/30/92	PW
SHA0202100D00L	WWC6*559	05/27/92	05/27/92	103		5.9	06/12/92	07/30/92	PW
SHA0202300C00L	WWC6*560	05/27/92	05/27/92	752		6.1	06/12/92	07/30/92	PW
SHA020230AB00L	WWC6*561	05/27/92	05/27/92	937		5.5	06/12/92	07/30/92	PW
SHA020230AB0LD	WWC6*562	05/27/92	05/27/92	536		5.3	06/12/92	07/30/92	PW
SHA0202300E00L	WWC6*563	05/27/92	05/27/92	622		6.6	06/12/92	07/30/92	PW
SHA0202300G00L	WWC6*566	05/27/92	05/27/92	177		6.9	06/12/92	07/30/92	PW
SHA020240AB00L	WWC6*567	05/27/92	05/27/92	106		5.6	06/12/92	07/30/92	PW
SHA0202400C00L	WWC6*568	05/27/92	05/27/92	151		5.8	06/12/92	07/30/92	PW
SRS012810AB00L	WWC6*569	05/27/92	05/27/92	53.2		5.2	06/12/92	07/30/92	PW
SRS0128100C00L	WWC6*570	05/27/92	05/27/92	197		5.3	06/17/92	07/30/92	PW
SRS0128100D00L	WWC6*571	05/27/92	05/27/92	1670		6.0	06/17/92	07/30/92	PW
SRS0128200C00L	WWC6*572	05/27/92	05/27/92	474		5.9	06/17/92	07/30/92	PW
SRS0128200D00L	WWC6*573	05/27/92	05/27/92	163		5.4	06/17/92	07/30/92	PW
SRS0128200E00L	WWC6*575	05/27/92	05/27/92	60.9		6.0	06/17/92	07/30/92	PW

D - Sample was diluted for this parameter

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Analytical Chemistry Result

STATUS: FINAL

PROJECT NAME: NL/TARACORP SUPERFUND SITE PREDESIGN FIELD INVESTIGATION, WWC89MC114V

PROJECT NUMBER: 5912031 0100 **REPORT DATE:** 08-17-92

SAMPLE MATRIX: SOIL **LAB MANAGER/QC REVIEW:** JEFFREY W. SIRIA

PROJECT MANAGER: JOHN F. GEMOULES **REPORT APPROVED BY:** FRANCIS Y. HUANG

SAMPLE I.D.	LABORATORY I.D.	COLLECTION DATE	RECEIVED DATE	LEAD(FAA), MG/KG-DRY METHOD: 3051/7420	MDL	EXTRACT. DATE	ANALYSIS DATE	CHEM. INIT.
SRS0128300C00L	WWC6*576	05/27/92	05/27/92	745	5.5	06/17/92	07/30/92	PW
SRS0128300D00L	WWC6*578	05/27/92	05/27/92	117	5.9	06/17/92	07/30/92	PW
SRS0128300E00L	WWC6*580	05/27/92	05/27/92	57.2	6.4	06/17/92	07/30/92	PW
SMA1423100A00L	WWC6*581	05/27/92	05/27/92	2040	5.4	06/17/92	07/30/92	PW
SMA1423100B00L	WWC6*582	05/27/92	05/27/92	809	5.4	06/17/92	07/30/92	PW
SMA1423100C00L	WWC6*583	05/27/92	05/27/92	570	5.7	06/17/92	07/30/92	PW
SMA1423100A0LD	WWC6*584	05/27/92	05/27/92	1940	5.2	06/17/92	07/30/92	PW
SMA1423100B0LD	WWC6*585	05/27/92	05/27/92	715	5.5	06/17/92	07/30/92	PW
SMA1423100C0LD	WWC6*586	05/27/92	05/27/92	235	5.6	06/17/92	07/30/92	PW
SMA1423200A00L	WWC6*587	05/27/92	05/27/92	1130	5.7	06/17/92	07/30/92	PW
SMA1423200B00L	WWC6*588	05/27/92	05/27/92	1670	5.7	06/17/92	07/30/92	PW
SMA1423200C00L	WWC6*589	05/27/92	05/27/92	171	5.6	06/17/92	07/30/92	PW
SNI1500100A00L	WWC6*590	05/27/92	05/27/92	649	5.5	06/17/92	07/30/92	PW
SNI1500100B00L	WWC6*591	05/27/92	05/27/92	253	5.3	06/17/92	07/30/92	PW
SNI1500100C00L	WWC6*592	05/27/92	05/27/92	60.6	5.2	06/17/92	07/30/92	PW
SNI1500200A00L	WWC6*593	05/27/92	05/27/92	1070	5.5	06/17/92	07/30/92	PW
SNI1500200B00L	WWC6*594	05/27/92	05/27/92	209	5.2	06/17/92	07/30/92	PW
SNI1500200C00L	WWC6*595	05/27/92	05/27/92	698	5.0	06/17/92	07/30/92	PW
SNI1500300A00L	WWC6*596	05/27/92	05/27/92	671	5.9	06/17/92	07/30/92	PW
SNI1500300B00L	WWC6*597	05/27/92	05/27/92	531	5.7	06/17/92	07/30/92	PW
SNI1500300C00L	WWC6*598	05/27/92	05/27/92	222	5.7	06/17/92	07/30/92	PW
SNI1500400A00L	WWC6*599	05/27/92	05/27/92	935	5.8	06/17/92	07/30/92	PW
SNI1500400B00L	WWC6*600	05/27/92	05/27/92	468	5.4	06/17/92	07/30/92	PW
SNI1500400C00L	WWC6*601	05/27/92	05/27/92	99.8	5.7	06/17/92	07/30/92	PW
SNI1500500A00L	WWC6*602	05/27/92	05/27/92	472	5.6	06/17/92	07/30/92	PW
SNI1500500B00L	WWC6*603	05/27/92	05/27/92	459	5.5	06/17/92	07/30/92	PW
SNI1500500C00L	WWC6*604	05/27/92	05/27/92	276	5.5	06/17/92	07/30/92	PW
SGR1013100A00L	WWC6*605	05/27/92	05/27/92	589	5.7	06/17/92	07/30/92	PW
SGR1013100B00L	WWC6*606	05/27/92	05/27/92	435	5.5	06/17/92	07/30/92	PW
SGR1013100C00L	WWC6*607	05/27/92	05/27/92	335	5.7	06/17/92	07/30/92	PW
SGR1013100A0LD	WWC6*608	05/27/92	05/27/92	613	5.9	06/17/92	07/30/92	PW
SGR1013100B0LD	WWC6*609	05/27/92	05/27/92	387	5.4	06/17/92	07/30/92	PW
SGR1013100C0LD	WWC6*610	05/27/92	05/27/92	386	5.4	06/17/92	07/30/92	PW
SGR1013200A00L	WWC6*611	05/27/92	05/27/92	454	5.6	06/17/92	07/30/92	PW
SGR1013200B00L	WWC6*612	05/27/92	05/27/92	523	5.4	06/17/92	07/30/92	PW
SGR1013200C00L	WWC6*613	05/27/92	05/27/92	737	5.8	06/17/92	07/30/92	PW
SGR1017100A00L	WWC6*614	05/27/92	05/27/92	615	5.6	06/17/92	07/30/92	PW
SGR1017100B00L	WWC6*615	05/27/92	05/27/92	342	5.3	06/17/92	07/30/92	PW
SGR1017100C00L	WWC6*616	05/27/92	05/27/92	232	5.2	06/17/92	07/30/92	PW
SGR1017200A00L	WWC6*617	05/27/92	05/27/92	1320	5.6	06/17/92	07/30/92	PW
SGR1017200B00L	WWC6*618	05/27/92	05/27/92	1180	5.7	06/17/92	07/30/92	PW
SGR1017200C00L	WWC6*619	05/27/92	05/27/92	891	5.9	06/17/92	07/30/92	PW

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Analytical Chemistry Re

STATUS: FINAL

PROJECT NAME: NL/TARACORP SUPERFUND SITE PREDESIGN FIELD INVESTIGATION, WWC89MC114V

PROJECT NUMBER: 5912031 0100 **REPORT DATE:** 08-17-92

SAMPLE MATRIX: SOIL **LAB MANAGER/QC REVIEW:** JEFFREY W. SIRIA

PROJECT MANAGER: JOHN F. GEMOULES **REPORT APPROVED BY:** FRANCIS Y. HUANG

SAMPLE I.D.	LABORATORY I.D.	COLLECTION DATE	RECEIVED DATE	LEAD(FAA), MG/KG-DRY METHOD: 3051/7420	MDL	EXTRACT. DATE	ANALYSIS DATE	CHEM. INIT.
SIO1231100A00L	WWC6*620	05/27/92	05/27/92	615	5.7	06/17/92	07/30/92	PW
SIO1231100B00L	WWC6*621	05/27/92	05/27/92	538	5.8	06/17/92	07/30/92	PW
SIO1231100C00L	WWC6*622	05/27/92	05/27/92	444	5.9	06/17/92	07/30/92	PW
SIO1231200A00L	WWC6*623	05/27/92	05/27/92	284	5.6	06/17/92	07/30/92	PW
SIO1231200B00L	WWC6*624	05/27/92	05/27/92	414	5.5	06/17/92	07/30/92	PW
SIO1231200C00L	WWC6*625	05/27/92	05/27/92	572	5.6	06/17/92	07/30/92	PW
SIO1213100A00L	WWC6*626	05/27/92	05/27/92	500	5.7	06/17/92	07/30/92	PW
SIO1213100B00L	WWC6*627	05/27/92	05/27/92	333	5.6	06/17/92	07/30/92	PW
SIO1213100C00L	WWC6*628	05/27/92	05/27/92	287	5.2	06/17/92	07/30/92	PW
SIO1213200A00L	WWC6*629	05/27/92	05/27/92	360	5.5	06/17/92	07/30/92	PW
SIO1213200B00L	WWC6*630	05/27/92	05/27/92	248	5.7	06/17/92	07/30/92	PW
SIO1213200C00L	WWC6*631	05/27/92	05/27/92	513	5.8	06/17/92	07/30/92	PW
STR001110AC00L	WWC6*632	06/08/92	06/10/92	798	5.8	06/17/92	07/30/92	PW
STR0011100H00L	WWC6*633	06/08/92	06/10/92	66.4	6.3	06/17/92	07/30/92	PW
STR0011100U00L	WWC6*634	06/08/92	06/10/92	14.0	5.4	06/17/92	07/30/92	PW
STR0011100V00L	WWC6*635	06/09/92	06/10/92	12.3	5.1	06/17/92	07/30/92	PW
STR0011100W00L	WWC6*636	06/09/92	06/10/92	ND	6.0	06/17/92	07/30/92	PW
STR0011100X00L	WWC6*637	06/09/92	06/10/92	ND	6.0	06/17/92	07/30/92	PW
SMW108920AC00L	WWC6*638	06/12/92	06/12/92	30900 D	110	06/17/92	07/30/92	PW
SMW1089200H00L	WWC6*639	06/12/92	06/12/92	1190	6.6	06/17/92	07/30/92	PW
SMW1089200U00L	WWC6*640	06/12/92	06/12/92	293	6.9	06/17/92	07/30/92	PW
SMW1089200V00L	WWC6*641	06/12/92	06/12/92	261	8.0	06/17/92	07/30/92	PW
SMW1089200X00L	WWC6*643	06/12/92	06/12/92	18.5	6.6	06/17/92	07/30/92	PW
SMW111920AC00L	WWC6*644	06/16/92	06/17/92	811	6.1	06/17/92	07/30/92	PW
SMW1119200H00L	WWC6*645	06/16/92	06/17/92	29.1	6.6	06/17/92	07/30/92	PW
SMW1119200~~X00L~~	WWC6*646 u	06/16/92	06/17/92	ND	5.0	06/17/92	07/30/92	PW
SMW1119200V00L	WWC6*647	06/16/92	06/17/92	ND	5.2	06/17/92	07/30/92	PW
SMW1119200W00L	WWC6*648	06/16/92	06/17/92	ND	5.1	06/17/92	07/30/92	PW
SMW1119200X00L	WWC6*649	06/16/92	06/17/92	ND	5.9	06/17/92	07/30/92	PW

D - Sample was diluted for this parameter

QC SUMMARY

LEGEND

STOR*METH - storet*method code. Used as a unique identification of the analytical parameter.

BATCH - analytical data batch identification.

DATE - analysis date.

FOUND (method blank) - quantitated concentration determined to be in the method blank.

FOUND (continuing calibration verification) - quantitated concentration determined to be in the CCV sample.

FOUND (standard matrix spike) - quantitated concentration determined to be in the standard matrix spike.

FOUND (sample matrix spike) - the difference in the quantitated concentration in the sample matrix spike and the UNSPIKED sample.

UNSPIKED (sample matrix spike) - quantitated concentration determined to be in the sample prior to spike fortification.

R.P.D. - replicate percent difference.

R.P.D. CRITERIA - R.P.D. not to be exceeded.

TARGET - the calculated concentration of the analyte in the spike or QC sample. The TARGET may vary from sample to sample based on sample weight, and moisture content. This concentration is the benchmark to which the FOUND concentrations are compared.

R.P.D.*1 - default reference when RPD cannot be calculated due to the spike sample I.D. used in the data batch.

JFG/pl/REPORT/WWC.LEG

N

Method Blank Sample Summary

E	UNITS	STOP*METH	BATCH	SAMPLE	DATE	FOUND	FOOTNOTE
D(FAA)	MG/KG-DRY	1051*SFAAS	S7967	MB*NONE*1	06/12/92	0.0	
D(FAA)	MG/KG-DRY			MB*NONE*2		0.0	
D(FAA)	MG/KG-DRY			MB*NONE*3		0.0	
D(FAA)	MG/KG-DRY			MB*NONE*4		0.0	
D(FAA)	MG/KG-DRY			MB*NONE*5		0.0	
D(FAA)	MG/KG-DRY			MB*NONE*6		0.0	
D(FAA)	MG/KG-DRY		S8145	MB*NONE*1	06/19/92	0.08	
D(FAA)	MG/KG-DRY			MB*NONE*2		0.08	
D(FAA)	MG/KG-DRY			MB*NONE*3		0.3	
D(FAA)	MG/KG-DRY			MB*NONE*5		0.2	
D(FAA)	MG/KG-DRY		S8156	MB*NONE*1	06/26/92	0.05	
D(FAA)	MG/KG-DRY			MB*NONE*2		0.2	
D(FAA)	MG/KG-DRY			MB*NONE*3		0.2	
D(FAA)	MG/KG-DRY			MB*NONE*4		0.2	
D(FAA)	MG/KG-DRY			MB*NONE*5		0.3	
D(FAA)	MG/KG-DRY			MB*NONE*6		0.4	
D(FAA)	MG/KG-DRY		S8249	MB*NONE*1	07/28/92	5.0	
D(FAA)	MG/KG-DRY			MB*NONE*2		14.0	
D(FAA)	MG/KG-DRY			MB*NONE*3		10.0	
D(FAA)	MG/KG-DRY			MB*NONE*4		3.0	
D(FAA)	MG/KG-DRY			MB*NONE*5		10.0	
D(FAA)	MG/KG-DRY			MB*NONE*6		9.0	
D(FAA)	MG/KG-DRY		S8290	MB*NONE*1	07/29/92	7.0	
D(FAA)	MG/KG-DRY			MB*NONE*2		7.0	
D(FAA)	MG/KG-DRY			MB*NONE*3		24.0	
D(FAA)	MG/KG-DRY			MB*NONE*4		1.0	
D(FAA)	MG/KG-DRY			MB*NONE*5		8.0	
D(FAA)	MG/KG-DRY			MB*NONE*6		0.0	
D(FAA)	MG/KG-DRY		S8300	MB*NONE*1		18.0	
D(FAA)	MG/KG-DRY			MB*NONE*2		28.0	
D(FAA)	MG/KG-DRY			MB*NONE*3		12.0	
D(FAA)	MG/KG-DRY	1051*SFAAS	S8300	MB*NONE*4	07/29/92	1.0	
D(FAA)	MG/KG-DRY		S8303	MB*NONE*1	07/30/92	0.0	
D(FAA)	MG/KG-DRY			MB*NONE*2		0.0	
D(FAA)	MG/KG-DRY			MB*NONE*3		0.0	
D(FAA)	MG/KG-DRY			MB*NONE*4		0.0	
D(FAA)	MG/KG-DRY			MB*NONE*5		0.0	

N

Continuing Calibration Verification Sample Summary

[	UNITS	STOR*METH	BATCH	SAMPLE	DATE	TARGET	FOUND	%RECV	RECV CRIT	FOOTNOTE
D(FAA)	MG/KG-DRY	1051*SFAAS	S7967	CCV*NONE*1	06/12/92	5.0	5.0	100.0	75-125	
D(FAA)	MG/KG-DRY			CCV*NONE*2		5.0	5.0	100.0	75-125	
D(FAA)	MG/KG-DRY			CCV*NONE*3		5.0	5.0	100.0	75-125	
D(FAA)	MG/KG-DRY			CCV*NONE*4		5.0	5.0	100.0	75-125	
D(FAA)	MG/KG-DRY	1051*SFAAS	S7967	CCV*NONE*5	06/12/92	5.0	5.0	100.0	75-125	
D(FAA)	MG/KG-DRY			CCV*NONE*6		5.0	4.9	98.0	75-125	
D(FAA)	MG/KG-DRY			CCV*NONE*7		5.0	4.9	98.0	75-125	
D(FAA)	MG/KG-DRY			CCV*NONE*8		5.0	4.8	96.0	75-125	
D(FAA)	MG/KG-DRY			CCV*NONE*9		5.0	4.8	96.0	75-125	
D(FAA)	MG/KG-DRY			CCV*NONE*10		5.0	4.8	96.0	75-125	
D(FAA)	MG/KG-DRY			CCV*NONE*11		5.0	4.7	94.0	75-125	
D(FAA)	MG/KG-DRY			CCV*NONE*12		5.0	4.7	94.0	75-125	
D(FAA)	MG/KG-DRY			CCV*NONE*13		5.0	4.6	92.0	75-125	
D(FAA)	MG/KG-DRY			CCV*NONE*14		5.0	4.6	92.0	75-125	
D(FAA)	MG/KG-DRY			CCV*NONE*15		5.0	4.6	92.0	75-125	
D(FAA)	MG/KG-DRY			CCV*NONE*16		5.0	5.0	100.0	75-125	
D(FAA)	MG/KG-DRY			CCV*NONE*17		5.0	5.0	100.0	75-125	
D(FAA)	MG/KG-DRY		S8145	CCV*NONE*1	06/19/92	5.0	5.3	106	75-125	
D(FAA)	MG/KG-DRY			CCV*NONE*2		5.0	5.4	108	75-125	
D(FAA)	MG/KG-DRY			CCV*NONE*3		5.0	5.5	110	75-125	
D(FAA)	MG/KG-DRY			CCV*NONE*4		5.0	5.1	102	75-125	
D(FAA)	MG/KG-DRY			CCV*NONE*5		5.0	5.3	106	75-125	
D(FAA)	MG/KG-DRY			CCV*NONE*6		5.0	5.4	108	75-125	
D(FAA)	MG/KG-DRY			CCV*NONE*7		5.0	5.5	110	75-125	
D(FAA)	MG/KG-DRY			CCV*NONE*8		5.0	5.1	102	75-125	
D(FAA)	MG/KG-DRY			CCV*NONE*9		5.0	5.2	104	75-125	
D(FAA)	MG/KG-DRY			CCV*NONE*10		5.0	5.3	106	75-125	
D(FAA)	MG/KG-DRY			CCV*NONE*11		5.0	5.2	104	75-125	
D(FAA)	MG/KG-DRY			CCV*NONE*12		5.0	5.2	104	75-125	
D(FAA)	MG/KG-DRY			CCV*NONE*13		5.0	5.3	106	75-125	
D(FAA)	MG/KG-DRY			CCV*NONE*14		5.0	5.2	104	75-125	
D(FAA)	MG/KG-DRY			CCV*NONE*15		5.0	5.3	106	75-125	
D(FAA)	MG/KG-DRY		S8156	CCV*NONE*1	06/26/92	5.0	5.3	106	75-125	
D(FAA)	MG/KG-DRY			CCV*NONE*2		5.0	5.3	106	75-125	
D(FAA)	MG/KG-DRY			CCV*NONE*3		5.0	5.2	104	75-125	
D(FAA)	MG/KG-DRY			CCV*NONE*4		5.0	5.3	106	75-125	
D(FAA)	MG/KG-DRY			CCV*NONE*5		5.0	5.2	104	75-125	
D(FAA)	MG/KG-DRY			CCV*NONE*6		5.0	5.3	106	75-125	
D(FAA)	MG/KG-DRY			CCV*NONE*7		5.0	5.3	106	75-125	
D(FAA)	MG/KG-DRY			CCV*NONE*8		5.0	5.2	104	75-125	
D(FAA)	MG/KG-DRY			CCV*NONE*9		5.0	5.3	106	75-125	
D(FAA)	MG/KG-DRY			CCV*NONE*10		5.0	5.3	106	75-125	
D(FAA)	MG/KG-DRY			CCV*NONE*11		5.0	5.2	104	75-125	
D(FAA)	MG/KG-DRY			CCV*NONE*12		5.0	5.3	106	75-125	
D(FAA)	MG/KG-DRY			CCV*NONE*13		5.0	5.4	108	75-125	
D(FAA)	MG/KG-DRY			CCV*NONE*14		5.0	5.4	108	75-125	
D(FAA)	MG/KG-DRY			CCV*NONE*15		5.0	5.3	106	75-125	
D(FAA)	MG/KG-DRY			CCV*NONE*16		5.0	5.1	102	75-125	
D(FAA)	MG/KG-DRY			CCV*NONE*17		5.0	5.2	104	75-125	
D(FAA)	MG/KG-DRY		S8249	CCV*NONE*1	07/28/92	5.0	5.3	106	75-125	
D(FAA)	MG/KG-DRY			CCV*NONE*2		5.0	5.5	110	75-125	
D(FAA)	MG/KG-DRY			CCV*NONE*3		5.0	5.2	104	75-125	
D(FAA)	MG/KG-DRY			CCV*NONE*4		5.0	5.1	102	75-125	
D(FAA)	MG/KG-DRY			CCV*NONE*5		5.0	5.1	102	75-125	
D(FAA)	MG/KG-DRY			CCV*NONE*6		5.0	5.1	102	75-125	

Continuing Calibration Verification Sample Summary

E	UNITS	STOR*METH	BATCH	SAMPLE	DATE	TARGET	FOUND	%RECV	RECV CRIT	FOOTNOTE
D(FAA)	MG/KG-DRY			CCV*NONE*8		5.0	5.1	102	75-125	
D(FAA)	MG/KG-DRY			CCV*NONE*9		5.0	5.2	104	75-125	
D(FAA)	MG/KG-DRY			CCV*NONE*10		5.0	5.1	102	75-125	
D(FAA)	MG/KG-DRY			CCV*NONE*11		5.0	5.1	102	75-125	
D(FAA)	MG/KG-DRY	1051*SFAAS	S8249	CCV*NONE*12	07/28/92	5.0	5.2	104	75-125	
D(FAA)	MG/KG-DRY			CCV*NONE*13		5.0	5.1	102	75-125	
D(FAA)	MG/KG-DRY			CCV*NONE*14		5.0	5.2	104	75-125	
D(FAA)	MG/KG-DRY			CCV*NONE*15		5.0	5.0	100.0	75-125	
D(FAA)	MG/KG-DRY			CCV*NONE*16		5.0	5.1	102	75-125	
D(FAA)	MG/KG-DRY			CCV*NONE*17		5.0	5.4	108	75-125	
D(FAA)	MG/KG-DRY			CCV*NONE*18		5.0	5.3	106	75-125	
D(FAA)	MG/KG-DRY		S8290	CCV*NONE*1	07/29/92	5.0	5.1	102	75-125	
D(FAA)	MG/KG-DRY			CCV*NONE*2		5.0	5.4	108	75-125	
D(FAA)	MG/KG-DRY			CCV*NONE*3		5.0	5.3	106	75-125	
D(FAA)	MG/KG-DRY			CCV*NONE*4		5.0	5.5	110	75-125	
D(FAA)	MG/KG-DRY			CCV*NONE*5		5.0	5.5	110	75-125	
D(FAA)	MG/KG-DRY			CCV*NONE*6		5.0	5.2	104	75-125	
D(FAA)	MG/KG-DRY			CCV*NONE*7		5.0	5.4	108	75-125	
D(FAA)	MG/KG-DRY			CCV*NONE*8		5.0	5.2	104	75-125	
D(FAA)	MG/KG-DRY			CCV*NONE*9		5.0	5.2	104	75-125	
D(FAA)	MG/KG-DRY			CCV*NONE*10		5.0	5.3	106	75-125	
D(FAA)	MG/KG-DRY			CCV*NONE*11		5.0	5.2	104	75-125	
D(FAA)	MG/KG-DRY			CCV*NONE*12		5.0	5.1	102	75-125	
D(FAA)	MG/KG-DRY			CCV*NONE*13		5.0	5.1	102	75-125	
D(FAA)	MG/KG-DRY			CCV*NONE*14		5.0	5.1	102	75-125	
D(FAA)	MG/KG-DRY			CCV*NONE*15		5.0	5.0	100.0	75-125	
D(FAA)	MG/KG-DRY			CCV*NONE*16		5.0	5.0	100.0	75-125	
D(FAA)	MG/KG-DRY			CCV*NONE*17		5.0	5.1	102	75-125	
D(FAA)	MG/KG-DRY			CCV*NONE*18		5.0	5.0	100.0	75-125	
D(FAA)	MG/KG-DRY			CCV*NONE*19		5.0	5.1	102	75-125	
D(FAA)	MG/KG-DRY			CCV*NONE*20		5.0	5.2	104	75-125	
D(FAA)	MG/KG-DRY			CCV*NONE*21		5.0	5.2	104	75-125	
D(FAA)	MG/KG-DRY		S8300	CCV*NONE*1		5.0	5.4	108	75-125	
D(FAA)	MG/KG-DRY			CCV*NONE*2		5.0	5.5	110	75-125	
D(FAA)	MG/KG-DRY			CCV*NONE*3		5.0	5.4	108	75-125	
D(FAA)	MG/KG-DRY			CCV*NONE*4		5.0	5.1	102	75-125	
D(FAA)	MG/KG-DRY			CCV*NONE*5		5.0	5.1	102	75-125	
D(FAA)	MG/KG-DRY			CCV*NONE*6		5.0	5.2	104	75-125	
D(FAA)	MG/KG-DRY			CCV*NONE*7		5.0	5.1	102	75-125	
D(FAA)	MG/KG-DRY			CCV*NONE*8		5.0	5.1	102	75-125	
D(FAA)	MG/KG-DRY			CCV*NONE*9		5.0	5.2	104	75-125	
D(FAA)	MG/KG-DRY			CCV*NONE*10		5.0	5.1	102	75-125	
D(FAA)	MG/KG-DRY			CCV*NONE*11		5.0	5.2	104	75-125	
D(FAA)	MG/KG-DRY		S8303	CCV*NONE*1	07/30/92	5.0	5.4	108	75-125	
D(FAA)	MG/KG-DRY			CCV*NONE*2		5.0	5.4	108	75-125	
D(FAA)	MG/KG-DRY			CCV*NONE*3		5.0	5.4	108	75-125	
D(FAA)	MG/KG-DRY			CCV*NONE*4		5.0	5.5	110	75-125	
D(FAA)	MG/KG-DRY			CCV*NONE*5		5.0	5.1	102	75-125	
D(FAA)	MG/KG-DRY			CCV*NONE*6		5.0	5.1	102	75-125	
D(FAA)	MG/KG-DRY			CCV*NONE*7		5.0	5.1	102	75-125	
D(FAA)	MG/KG-DRY			CCV*NONE*8		5.0	5.1	102	75-125	
D(FAA)	MG/KG-DRY			CCV*NONE*9		5.0	5.1	102	75-125	
D(FAA)	MG/KG-DRY			CCV*NONE*10		5.0	5.1	102	75-125	
D(FAA)	MG/KG-DRY			CCV*NONE*11		5.0	4.9	98.0	75-125	
D(FAA)	MG/KG-DRY			CCV*NONE*12		5.0	5.2	104	75-125	

N

Continuing Calibration Verification Sample Summary

L	UNITS	STOR*METH	BATCH	SAMPLE	DATE	TARGET	FOUND	%RECV	RECV CRIT	FOOTNOTE
D(FAA)	MG/KG-DRY			CCV*NONE*13		5.0	5.0	100.0	75-125	
D(FAA)	MG/KG-DRY			CCV*NONE*14		5.0	5.1	102	75-125	
D(FAA)	MG/KG-DRY			CCV*NONE*15		5.0	5.2	104	75-125	
D(FAA)	MG/KG-DRY			CCV*NONE*16		5.0	5.0	100.0	75-125	

Standard Matrix Spike Recovery and Replicate Summary

E	UNITS	STOR*METH	BATCH	SAMPLE	DATE	TARGET	FOUND	%RECV	RECV CRIT	R.P.D.	R.P.D. CRIT.	FOOTNOTE
D(FAA)	MG/KG-DRY	1051*SFAAS	S7967	SP*NONE*1	06/12/92	5.0	4.9	103	75-125		20	
D(FAA)	MG/KG-DRY			SP*NONE*2		5.0	5.1	106	75-125		20	
D(FAA)	MG/KG-DRY			SP*NONE*3		5.0	5.0	103	75-125		20	
D(FAA)	MG/KG-DRY			SP*NONE*4		5.0	4.9	104	75-125		20	
D(FAA)	MG/KG-DRY			SP*NONE*5		5.0	5.0	109	75-125		20	
D(FAA)	MG/KG-DRY			SP*NONE*6		5.0	4.9	109	75-125		20	
D(FAA)	MG/KG-DRY		S8145	SP*NONE*1	06/19/92	5.0	5.1	102	75-125		20	
D(FAA)	MG/KG-DRY			SP*NONE*2		5.0	5.1	102	75-125		20	
D(FAA)	MG/KG-DRY			SP*NONE*3		5.0	5.2	104	75-125		20	
D(FAA)	MG/KG-DRY			SP*NONE*5		5.0	5.1	101	75-125		20	
D(FAA)	MG/KG-DRY		S8156	SP*NONE*1	06/26/92	5.0	5.3	105	75-125		20	
D(FAA)	MG/KG-DRY			SP*NONE*2		5.0	5.2	103	75-125		20	
D(FAA)	MG/KG-DRY			SP*NONE*3		5.0	5.2	103	75-125		20	
D(FAA)	MG/KG-DRY			SP*NONE*4		5.0	5.1	102	75-125		20	
D(FAA)	MG/KG-DRY			SP*NONE*5		5.0	4.9	97.6	75-125		20	
D(FAA)	MG/KG-DRY			SP*NONE*6		5.0	5.1	102	75-125		20	
D(FAA)	MG/KG-DRY		S8249	SP*NONE*1	07/28/92	500	559	112	75-125		20	
D(FAA)	MG/KG-DRY			SP*NONE*2		500	494	98.8	75-125		20	
D(FAA)	MG/KG-DRY			SP*NONE*3		500	512	102	75-125		20	
D(FAA)	MG/KG-DRY			SP*NONE*4		500	559	112	75-125		20	
D(FAA)	MG/KG-DRY			SP*NONE*5		500	639	128	75-125		20	
D(FAA)	MG/KG-DRY			SP*NONE*6		500	536	107	75-125		20	
D(FAA)	MG/KG-DRY		S8290	SP*NONE*1	07/29/92	500	544	109	75-125		20	
D(FAA)	MG/KG-DRY			SP*NONE*2		500	527	105	75-125		20	
D(FAA)	MG/KG-DRY			SP*NONE*3		500	576	115	75-125		20	
D(FAA)	MG/KG-DRY			SP*NONE*4		500	521	104	75-125		20	
D(FAA)	MG/KG-DRY			SP*NONE*5		500	495	99.0	75-125		20	
D(FAA)	MG/KG-DRY			SP*NONE*6		500	517	104	75-125		20	
D(FAA)	MG/KG-DRY		S8300	SP*NONE*1		500	544	109	75-125		20	
D(FAA)	MG/KG-DRY			SP*NONE*2		500	547	109	75-125		20	
D(FAA)	MG/KG-DRY			SP*NONE*3		500	726	145	75-125		20	(1)
D(FAA)	MG/KG-DRY			SP*NONE*4		500	727	145	75-125		20	(1)
D(FAA)	MG/KG-DRY		S8303	SP*NONE*1	07/30/92	500	681	139	75-125		20	(1)
D(FAA)	MG/KG-DRY			SP*NONE*2		500	709	142	75-125		20	(1)
D(FAA)	MG/KG-DRY			SP*NONE*3		500	696	142	75-125		20	(1)
D(FAA)	MG/KG-DRY			SP*NONE*4		500	727	145	75-125		20	(1)
D(FAA)	MG/KG-DRY			SP*NONE*5		500	691	138	75-125		20	(1)

N

Sample Matrix Spike Recovery Summary

E	UNITS	STOR*METH	BATCH	SAMPLE	DATE	TARGET	FOUND	%RECV	RECV CRIT	UNSPIKED	R.P.D.	R.P.D. CRIT.	FOOTNOTE
D(FAA)	MG/KG-DRY	1051*SFAAS	S7967	SPM1*WWC5*949	06/12/92	553	510	92.3	75-125	302		20	
D(FAA)	MG/KG-DRY			SPM2*WWC5*949		563	546	97.1	75-125	302	5.2	20	
D(FAA)	MG/KG-DRY			SPM1*WWC5*969		544	559	103	75-125	771		20	
D(FAA)	MG/KG-DRY			SPM2*WWC5*969		567	589	104	75-125	771	1.0	20	
D(FAA)	MG/KG-DRY			SPM1*WWC5*989		556	531	95.5	75-125	489		20	
D(FAA)	MG/KG-DRY			SPM2*WWC5*989		532	561	106	75-125	489	10.4	20	
D(FAA)	MG/KG-DRY			SPM1*WWC6*10		584	519	88.8	75-125	951		20	
D(FAA)	MG/KG-DRY			SPM2*WWC6*10		540	379	70.2	75-125	951	23.5	20	(2)
D(FAA)	MG/KG-DRY			SPM1*WWC6*30		534	607	114	75-125	122		20	
D(FAA)	MG/KG-DRY			SPM2*WWC6*30		515	571	111	75-125	122	2.7	20	
D(FAA)	MG/KG-DRY			SPM1*WWC5*929		573	630	110	75-125	2260		20	(3)
D(FAA)	MG/KG-DRY			SPM2*WWC5*929		539	610	113	75-125	2260	2.7	20	(3)
D(FAA)	MG/KG-DRY		S8145	SPM1*WWC6*50	06/19/92	519	791	152	75-125	869		20	(2)
D(FAA)	MG/KG-DRY			SPM2*WWC6*50		507	471	92.8	75-125	869	48.4	20	
D(FAA)	MG/KG-DRY			SPM1*WWC6*70		519	522	101	75-125	472		20	
D(FAA)	MG/KG-DRY			SPM2*WWC6*70		529	1550	293	75-125	472	97.5	20	(2)
D(FAA)	MG/KG-DRY			SPM1*WWC6*89		558	579	104	75-125	162		20	
D(FAA)	MG/KG-DRY			SPM2*WWC6*89		563	603	107	75-125	162	2.8	20	
D(FAA)	MG/KG-DRY			SPM1*WWC6*109		552	726	131	75-125	394		20	(2)
D(FAA)	MG/KG-DRY			SPM2*WWC6*109		548	706	129	75-125	394	2.3	20	(2)
D(FAA)	MG/KG-DRY		S8156	SPM1*WWC6*129	06/26/92	518	604	117	75-125	272		20	
D(FAA)	MG/KG-DRY	1051*SFAAS	S8156	SPM2*WWC6*129	06/26/92	542	476	87.9	75-125	272	28.4	20	
D(FAA)	MG/KG-DRY			SPM1*WWC6*149		539	583	108	75-125	286		20	
D(FAA)	MG/KG-DRY			SPM2*WWC6*149		524	561	107	75-125	286	0.9	20	
D(FAA)	MG/KG-DRY			SPM1*WWC6*169		498	-154	-30.9	75-125	661		20	(2)
D(FAA)	MG/KG-DRY			SPM2*WWC6*169		507	399	78.7	75-125	661	459	20	(2)
D(FAA)	MG/KG-DRY			SPM1*WWC6*189		541	483	89.2	75-125	837		20	
D(FAA)	MG/KG-DRY			SPM2*WWC6*189		552	513	93.0	75-125	837	4.1	20	
D(FAA)	MG/KG-DRY			SPM1*WWC6*209		588	-750	-127	75-125	2200		20	(3)
D(FAA)	MG/KG-DRY			SPM2*WWC6*209		579	-950	-164	75-125	2200		20	(3)
D(FAA)	MG/KG-DRY			SPM1*WWC6*229		527	565	107	75-125	348		20	
D(FAA)	MG/KG-DRY			SPM2*WWC6*229		506	529	105	75-125	348	1.9	20	
D(FAA)	MG/KG-DRY		S8249	SPM1*WWC6*249	07/28/92	526	653	124	75-125	907		20	
D(FAA)	MG/KG-DRY			SPM2*WWC6*249		539	613	114	75-125	907	8.4	20	
D(FAA)	MG/KG-DRY			SPM1*WWC6*269		533	494	92.7	75-125	586		20	
D(FAA)	MG/KG-DRY			SPM2*WWC6*269		538	534	99.2	75-125	586	6.8	20	
D(FAA)	MG/KG-DRY			SPM1*WWC6*289		546	601	110	75-125	244		20	
D(FAA)	MG/KG-DRY			SPM2*WWC6*289		535	592	111	75-125	244	0.9	20	
D(FAA)	MG/KG-DRY			SPM1*WWC6*309		563	490	87.1	75-125	1490		20	
D(FAA)	MG/KG-DRY			SPM2*WWC6*309		564	600	106	75-125	1490	19.7	20	
D(FAA)	MG/KG-DRY			SPM1*WWC6*349		585	626	107	75-125	544		20	
D(FAA)	MG/KG-DRY			SPM2*WWC6*349		575	686	119	75-125	544	10.6	20	
D(FAA)	MG/KG-DRY			SPM1*WWC6*329		587	1410	240	75-125	2280		20	(3)
D(FAA)	MG/KG-DRY			SPM2*WWC6*329		595	1080	182	75-125	2280	27.5	20	(3)
D(FAA)	MG/KG-DRY		S8290	SPM1*WWC6*369	07/29/92	581	659	113	75-125	126		20	
D(FAA)	MG/KG-DRY			SPM2*WWC6*369		544	650	119	75-125	126	5.2	20	
D(FAA)	MG/KG-DRY			SPM1*WWC6*389		588	585	99.5	75-125	177		20	
D(FAA)	MG/KG-DRY			SPM2*WWC6*389		617	652	106	75-125	177	6.3	20	
D(FAA)	MG/KG-DRY			SPM1*WWC6*409		621	269	43.3	75-125	318		20	(2)
D(FAA)	MG/KG-DRY			SPM2*WWC6*409		625	605	96.9	75-125	318	76.5	20	
D(FAA)	MG/KG-DRY			SPM1*WWC6*449		651	1070	164	75-125	90.7		20	(2)
D(FAA)	MG/KG-DRY			SPM2*WWC6*449		663	989	149	75-125	90.7	9.6	20	(2)
D(FAA)	MG/KG-DRY			SPM1*WWC6*469		595	746	125	75-125	92.9		20	
D(FAA)	MG/KG-DRY			SPM2*WWC6*469		619	711	115	75-125	92.9	8.3	20	
D(FAA)	MG/KG-DRY			SPM1*WWC6*429		483	-2400	-497	75-125	19200		20	(3)
D(FAA)	MG/KG-DRY			SPM2*WW 9		490	-1600	-326	-125	19200		20	(3)

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Sample Matrix Spike Recovery Summary

E	UNITS	STOR*METH	BATCH	SAMPLE	DATE	TARGET	FOUND	%RECV	RECV CRIT	UNSPIKED	R.P.D.	R.P.D. CRIT.	FOOTNOTE
D(FAA)	MG/KG-DRY		S8300	SPM1*WWC6*489		562	597	106	75-125	377		20	
D(FAA)	MG/KG-DRY			SPM2*WWC6*489		588	693	118	75-125	377	10.7	20	
D(FAA)	MG/KG-DRY			SPM1*WWC6*509		573	640	112	75-125	213		20	
D(FAA)	MG/KG-DRY			SPM2*WWC6*509		552	612	111	75-125	213	0.9	20	
D(FAA)	MG/KG-DRY			SPM1*WWC6*529		595	880	148	75-125	310		20	(1)
D(FAA)	MG/KG-DRY			SPM2*WWC6*529		593	880	148	75-125	310	0.0	20	(1)
D(FAA)	MG/KG-DRY			SPM1*WWC6*549		547	969	177	75-125	121		20	(1)
D(FAA)	MG/KG-DRY			SPM2*WWC6*549		556	803	144	75-125	121	20.6	20	(1)
D(FAA)	MG/KG-DRY		S8303	SPM1*WWC6*569	07/30/92	505	672	133	75-125	53.2		20	(1)
D(FAA)	MG/KG-DRY			SPM2*WWC6*569		522	735	141	75-125	53.2	5.8	20	(1)
D(FAA)	MG/KG-DRY			SPM1*WWC6*589		558	732	131	75-125	171		20	(1)
D(FAA)	MG/KG-DRY			SPM2*WWC6*589		550	792	144	75-125	171	9.5	20	(1)
D(FAA)	MG/KG-DRY			SPM1*WWC6*609		542	773	143	75-125	387		20	(1)
D(FAA)	MG/KG-DRY			SPM2*WWC6*609		564	813	144	75-125	387	0.7	20	(1)
D(FAA)	MG/KG-DRY			SPM1*WWC6*629		585	750	128	75-125	360		20	(1)
D(FAA)	MG/KG-DRY			SPM2*WWC6*629		585	700	120	75-125	360	6.5	20	(1)
D(FAA)	MG/KG-DRY			SPM1*WWC6*649		554	778	140	75-125	2.3		20	(1)
D(FAA)	MG/KG-DRY			SPM2*WWC6*649		572	837	146	75-125	2.3	4.2	20	(1)

- High spike recoveries attributed to the use of a spiking pipet that was out of calibration. Pipet was recalibrated.
- Spike recoveries not within recovery criteria due to sample inhomogeneity.
- Not applicable, the concentration of the target was found to be greater than 4 times the spiking concentration.

CHAIN OF CUSTODY

CHAIN OF CUSTODY RECORD

WOODWARD-CLYDE CONSULTANTS
2318 MILLPARK DR.
MARYLAND HEIGHTS, MISSOURI 63043
314-429-0100

SHEET 1 of 4

WWC5 970-
WNC6
057

PROJECT NO.:	PROJECT NAME:
89MC114V	NL/TARACORP SUPERFUND SITE PREDESIGN FIELD INVESTIGATION

SAMPLER'S: (Signatures) [signature] M Walker

DATE	TIME	SAMPLE I.D. NUMBER: Matrix	Location	Boring	Depth	Sample Type		NO. OF CONTAINERS	CONTAINER DESCRIPTION/ ANALYSES REQUESTED: Total Lead 4oz. poly jar Cool to 4°C	TCLP - Lead 4oz. poly jar Cool to 4°C	Geotechnical glass or poly jar	REMARKS
5/7	819	S	WT2610	1	00A	00L	✓	1	✓			
	821	S	WT2610	1	00B	00L	✓					
	823	S	WT2610	1	00C	00L	✓					
	826	S	WT2610	2	00A	00L	✓					
	828	S	WT2610	2	00B	00L	✓					
	830	S	WT2610	2	00C	00L	✓					
	819	S	WT2610	1	00A	0LD	✓					
	821	S	WT2610	1	00B	0LD	✓					
	823	S	WT2610	1	00C	0LD	✓					
	916	S	MP1649	1	00A	00L	✓					
	918	S	MP1649	1	00B	00L	✓					
	920	S	MP1649	1	00C	00L	✓					
	924	S	MP1649	2	00A	00L	✓					
	926	S	MP1649	2	00B	00L	✓					
	928	S	MP1649	2	00C	00L	✓					
985	938	S	MP1637	1	00A	00L	✓					
986	940	S	MP1637	1	00B	00L	✓					
987	942	S	MP1637	1	00C	00L	✓					
988	944	S	MP1637	2	00A	00L	✓					
989	946	S	MP1637	2	00B	00L	✓					
990	948	S	MP1637	2	00C	00L	✓					
991	1103	S	MP1627	1	00A	00L	✓					
992	1105	S	MP1627	1	00B	00L	✓					

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[signature]	5/7/92 1700	[signature]	5/7/92 ~~1850~~ 1700
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[signature]	5/7/92 1850	[signature]	5/7/92 1850

METHOD OF SHIPMENT:

AIRBILL NO.: (If Applicable)

CHAIN OF CUSTODY RECORD

WOODWARD-CLYDE CONSULTANTS
2318 MILLPARK DR.
MARYLAND HEIGHTS, MISSOURI 63043
314-429-0100

PROJECT NO.: 89MC114V

PROJECT NAME: NL/TARACORP SUPERFUND SITE PREDESIGN FIELD INVESTIGATION

SAMPLER'S: (Signatures) [illegible] / M Wallace

DATE	TIME	SAMPLE I.D. NUMBER (Matrix / Location / Boring / Depth / Sample Type)	NO. OF CONTAINERS	Total Lead 4oz. poly jar Cool to 4°C	TCLP - Lead 4oz. poly jar Cool to 4°C	Geotechnical glass or poly jar	REMARKS
5/7	1107	S ML1627 1 00C00L ✓	1	✓			
994	1109	S ML1627 2 00A00L ✓					
995	1111	S ML1627 2 00B00L ✓					
996	1113	S ML1627 2 00S00L ✓					
997	1008	S ML1611 1 00A00L ✓					
998	1010	S ML1611 1 00B00L ✓					
999	1012	S ML1611 1 00S00L ✓					
001	1008	S ML1611 1 00A00LD ✓					
002	1010	S ML1611 1 00B00LD ✓					
003	1012	S ML1611 1 00S00LD ✓					
004	1015	S ML1611 2 00A00L ✓					
005	1017	S ML1611 2 00B00L ✓					
006	1019	S ML1611 2 00S00L ✓					
007	1040	S ML1614 1 00A00L ✓					
008	1042	S ML1614 1 00B00L ✓					
009	1044	S ML1614 1 00C00L ✓					
010	1047	S ML1614 2 00A00L ✓					
011	1049	S ML1614 2 00B00L ✓					
012	1051	S ML1614 2 00C00L ✓					
013	1141	S DE2261 1 00A00L ✓					
014	1143	S DE2261 1 00B00L ✓					
015	1145	S DE2261 1 00C00L ✓					
016	1141	S DE2261 2 00A00LD ✓					

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[illegible]	5/7/92 1700	[illegible]	5/7/92 17a
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[illegible]	5/7/92 1850	[illegible]	5/7/92 1850

METHOD OF SHIPMENT:

AIRBILL NO: (If Applicable)

CHAIN OF CUSTODY RECORD

WOODWARD-CLYDE CONSULTANTS
2318 MILLPARK DR.
MARYLAND HEIGHTS, MISSOURI 63043
314-429-0100

SHEET 3 of 4

PROJECT NO.: 89MC114V

PROJECT NAME: NL/TARACORP SUPERFUND SITE PREDESIGN FIELD INVESTIGATION

SAMPLER'S: (Signatures) [illegible] M Walter

DATE	TIME	SAMPLE I.D. NUMBER: Matrix	Location	Boring	Depth	Sample Type	NO. OF CONTAINERS	Total Lead 4oz. poly jar Cool to 4°C	TCLP - Lead 4oz. poly jar Cool to 4°C	Geotechnical glass or poly jar	REMARKS
5/7/92	1143	S	DE2261	1	00B	OLD	1	✓			
18	1145	S	DE2261	1	00C	OLD	1				
19	1403	S	DE2200	1	00A	OOL	✓				
20	1405	S	DE2200	1	00B	OOL	✓				
21	1407	S	DE2200	1	00C	OOL	✓				
22	1410	S	DE2200	2	00A	OOL	✓				
23	1412	S	DE2200	2	00B	OOL	✓				
24	1414	S	DE2200	2	00C	OOL	✓				
25	1425	S	DE2219	1	00A	OOL	✓				
26	1427	S	DE2219	1	00B	OOL	✓				
27	1429	S	DE2219	1	00C	OOL	✓				
28	1425	S	DE2219	1	00A	OLD	✓				
29	1427	S	DE2219	1	00B	OLD	✓				
30	1429	S	DE2219	1	00C	OLD	✓				
31	1434	S	DE2219	2	00A	OOL	✓				
32	1436	S	DE2219	2	00B	OOL	✓				
33	1438	S	DE2219	2	00C	OOL	✓				
34	1507	S	DV2505	1	00A	OOL	✓				
35	1509	S	DV2505	1	00B	OOL	✓				
36	1511	S	DV2505	1	00C	OOL	✓				
37	1507	S	DV2505	1	00A	OLD	✓				
38	1509	S	DV2505	1	00B	OLD	✓				
39	1511	S	DV2505	1	00C	OLD	✓				

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Mark S Rubolt	5/7/92 1700	[illegible]	5/7/92 1700
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[illegible]	5/7/92 ~~1700~~ 1850	[illegible]	5/7/92 1850

METHOD OF SHIPMENT:

AIRBILL NO: (If Applicable)

CHAIN OF CUSTODY RECORD

WOODWARD-CLYDE CONSULTANTS
2318 MILLPARK DR.
MARYLAND HEIGHTS, MISSOURI 63043
314-429-0100

SHEET 4 of 4

PROJECT NO.:	PROJECT NAME:
89MC114V	NL/TARACORP SUPERFUND SITE PREDESIGN FIELD INVESTIGATION

SAMPLER'S: (Signatures) K. [signature] M. Wallace

	DATE	TIME	SAMPLE I.D. NUMBER: Matrix	Location	Boring	Depth	Sample Type		NO. OF CONTAINERS	CONTAINER DESCRIPTION/ ANALYSES REQUESTED: Total Lead 4oz. poly jar Cool to 4°C	TCLP - Lead 4oz. poly jar Cool to 4°C	Geotechnical glass or poly jar	REMARKS
40	5/7	1517	S	DV2505	2	00A	00L	✓	1	✓			
41		1519	S	DV2505	2	00B	00L	✓					
42		1521	S	DV2505	2	00C	00L	✓					
43		1552	S	BR2029	1	00A	00L	✓					
44		1554	S	BR2029	1	00B	00L	✓					
45		1556	S	BR2029	1	00C	00L	✓					
46		1558	S	BR2029	2	00A	00L	✓					
47		1600	S	BR2029	2	00B	00L	✓					
48		1602	S	BR2029	2	00C	00L	✓					
49		1613	S	BR2011	1	00A	00L	✓					
50		1615	S	BR2011	1	00B	00L	✓					
51		1617	S	BR2011	1	00C	00L	✓					
52		1619	S	BR2011	2	00A	00L	✓					
53		1621	S	BR2011	2	00B	00L	✓					
54		1623	S	BR2011	2	00C	00L	✓					
55		1613	S	BR2011	1	00A	OLD	✓					
56		1615	S	BR2011	1	00B	OLD	✓					
57		1617	S	BR2011	1	00C	OLD	✓					
			S										
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[signature]	5/7/92 1700	[signature]	5/7/92 ~~1850~~
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K. [signature]	5/7/92 ~~1700~~ 1850	[signature]	5/7/92 1850
METHOD OF SHIPMENT:		AIRBILL NO: (If Applicable)	

COOLER/SAMPLE RECEIPT FORM

Rev.01 10/7/91

ESE Cooler # 165
Client Cooler # _____
No Cooler _____

WWC5 970 — WWC6 057

Project: Woodward Clyde Date/Time Received: 5-7-92 1850

USE OTHER SIDE OF THIS FORM TO NOTE FURTHER DETAILS CONCERNING CHECK-IN PROBLEMS AND TO SPECIFY AND DESCRIBE ANY ACTION(S) REGARDING THE RESOLUTION(S) OF PROBLEMS. IF SHIPMENT WAS ACCEPTED AND IF REQUESTED, NOTE ON BACK THE ADDRESS WHERE THE EMPTY COOLER WAS RETURNED AND LIKEWISE IF THE SHIPMENT WAS REJECTED.

IF INFORMATION IS MISSING OR THERE ARE PROBLEMS NOTIFY LABORATORY PROJECT MANAGER SO THAT HE CAN NOTIFY THE PROJECT MANAGER IMMEDIATELY.

A. PRELIMINARY EXAMINATION PHASE: Date/Time cooler/sample was opened and checked: 5-7-92 1850

by (print) Marcia Homan (sign) Marcia Homan

1. List courier delivering samples . . . Delivered by Woodward Clyde YES NO
2. Did cooler come with a shipping slip (air bill, etc.)? . . . . . YES (NO)
   If YES, attach and enter carrier and air bill number here: _____
3. Were custody seals on outside of cooler? . . . . . (YES) NO
   If YES, how many and where: 2 front
   If YES, enter the following: seal date: 5-6-92 seal name: M-Wallace
4. Were custody seals unbroken and intact at the date and time of arrival? . . . . . (YES) NO
5. Was chain-of-custody provided? . . . . . (YES) NO
6. Were custody papers sealed in a Ziplec™ bag and taped inside to the lid? . . . . . (YES) NO
7. Were entries on custody papers completed? (YES) NO . If no, give details on back
8. Turnaround time included? . . . . . YES (NO)
9. Did you sign custody papers in the appropriate place? . . . . . (YES) NO
10. Was project identifiable from custody papers? If YES, enter project name at the top of this form. . (YES) NO

B. SAMPLE CHECK-IN PHASE: Date samples were checked-in: 5-11-92 by (all those involved must sign below):

(print) Marcia Homan (sign) Marcia Homan

11. Describe packing: none
*12. If required, was enough ice used? (temperature maintained correctly)? . . . . . (YES) NO
13. Were all bottles sealed in separate plastic bags? . . . . . YES (NO)
*14. Did all bottles arrive unbroken and in good condition? . . . . . (YES) NO
15. Were all bottle labels complete (ID, date, time, signature, preservative, etc.)? . . . . . (YES) NO
16. Did all bottle labels agree with custody papers? If NO, indicate discrepancies on back. . . . . (YES) NO
17. Were correct containers used for the tests indicated? . . . . . (YES) NO
*18. Were correct preservatives used when required? . . . . . NA YES NO
*19. pH of samples maintained correctly as required? If NO, list by ID# NA . YES NO
20. Was a sufficient amount of sample sent for tests indicated? . . . . . (YES) NO
*21. Bubbles present in VOA vials? If YES, list by ID#: NA . YES NO
22. Was lab. project manager called and status discussed? If YES, give details on the back of this form. YES (NO)
23. Who was called? _____ By whom? _____ on (date) _____
24. Second Party Review: _____

* Sample rejection criteria

:\WP\CHEMCOM\CRF.01

WWC6

58-129

CHAIN OF CUSTODY RECORD

WOODWARD-CLYDE CONSULTANTS
2318 MILLPARK DR.
MARYLAND HEIGHTS, MISSOURI 63043
314-429-0100

PROJECT NO.: 89MC114V

PROJECT NAME: NL/TARACORP SUPERFUND SITE PREDESIGN FIELD INVESTIGATION

SAMPLER'S: (Signatures)

	DATE	TIME	SAMPLE I.D. NUMBER: Matrix	Location	Boring	Depth	Sample Type		NO. OF CONTAINERS	Total Lead 4oz. poly jar Cool to 4°C	TCLP - Lead 4oz. poly jar Cool to 4°C	Geotechnical glass or poly jar	REMARKS
58	5/11	823	S	BE1932	1	00A	00L	✓	1	✓			
59		825	S	BE1932	1	00B	00L	✓					
60		827	S	BE1932	1	00C	00L	✓					
61		829	S	BE1932	2	00A	00L	✓					
62		830	S	BE1932	2	00B	00L	✓					
63		831	S	BE1932	2	00C	00L	✓					
64		856	S	BE2109	1	00A	00L	✓					
65		858	S	BE2109	1	00B	00L	✓					
66		900	S	BE2109	1	00C	00L	✓					
67		903	S	BE2109	2	00A	00L	✓					
68		905	S	BE2109	2	00B	00L	✓					
69		907	S	BE2109	2	00C	00L	✓					
70		915	S	BE2113	1	00A	00L	✓					
71		917	S	BE2113	1	00B	00L	✓					
72		919	S	BE2113	1	00C	00L	✓					
73		922	S	BE2113	2	00A	00L	✓					
74		924	S	BE2113	2	00B	00L	✓					
75		926	S	BE2113	2	00C	00L	✓					
76		943	S	BE2137	2	00A	00L	✓					
77		945	S	BE2137	2	00B	00L	✓					
78		947	S	BE2137	2	00C	00L	✓					
79		937	S	BE2137	1	00A	00L	✓					
80		939	S	BE2137	1	00B	00L	✓					

CONTAINER DESCRIPTION/ ANALYSES REQUESTED

RELINQUISHED BY: (Signature)	DATE / TIME	RECEIVED BY: (Signature)	DATE / TIME
[illegible]	5/11/92 1545	[illegible]	5/11/92 154
RELINQUISHED BY: (Signature)	DATE / TIME	RECEIVED AT LAB BY: (Signature)	DATE / TIME
[illegible]	5/11/92 1630	[illegible]	5-11-92 16[illegible]

METHOD OF SHIPMENT:

AIRBILL NO: (If Applicable)

CHAIN OF CUSTODY RECORD

WOODWARD-CLYDE CONSULTANTS
2318 MILLPARK DR.
MARYLAND HEIGHTS, MISSOURI 63043
314-429-0100

SHEET 2 of 4

PROJECT NO.: 89MC114V

PROJECT NAME: NL/TARACORP SUPERFUND SITE PREDESIGN FIELD INVESTIGATION

SAMPLER'S: (Signatures)

	DATE	TIME	Matrix	Location	Boring	Depth	Sample Type	NO. OF CONTAINERS	Total Lead 4oz. poly jar Cool to 4°C	TCLP - Lead 4oz. poly jar Cool to 4°C	Geotechnical glass or poly jar	REMARKS
81	5/11	941	S	BE2137	1	00C	00L	1	✓			
82		957	S	BE2124	1	00A	00L					
83		1000	S	BE2124	1	00B	00L					
84		1003	S	BE2124	1	00C	00L					
85		1022	S	BE2250	1	00A	00L					
86		1024	S	BE2250	1	00B	00L					
87		1026	S	BE2250	1	00C	00L					
88		1033	S	BE2250	2	00A	00L					
89		1035	S	BE2250	2	00B	00L					
90		1037	S	BE2250	2	00C	00L					
91		1106	S	ST2152	1	00A	00L					
92		1108	S	ST2152	1	00B	00L					
93		1110	S	ST2152	1	00C	00L					
94		1112	S	ST2152	2	00A	00L					
95		1114	S	ST2152	2	00B	00L					
96		1116	S	ST2152	2	00C	00L					
97		1123	S	ST2137	1	00A	00L					
98		1125	S	ST2137	1	00B	00L					
99		1127	S	ST2137	1	00C	00L					
100		1130	S	ST2137	2	00A	00L					
101		1133	S	ST2137	2	00B	00L					
102		1135	S	ST2137	2	00C	00L					
103		1154	S	BE2042	1	00A	00L					

RELINQUISHED BY: (Signature)	DATE / TIME	RECEIVED BY: (Signature)	DATE / TIME
[illegible]	5/11/92 1525	[illegible]	5/11/92 1545
RELINQUISHED BY: (Signature)	DATE / TIME	RECEIVED AT LAB BY: (Signature)	DATE / TIME
[illegible]	5/11/92 1630	[illegible]	5-11-92 1630

METHOD OF SHIPMENT:

AIRBILL NO: (If Applicable)

CHAIN OF CUSTODY RECORD

WOODWARD-CLYDE CONSULTANTS
2318 MILLPARK DR.
MARYLAND HEIGHTS, MISSOURI 63043
314-429-0100

SHEET 3 of 4

PROJECT NO.: 89MC114V

PROJECT NAME: NL/TARACORP SUPERFUND SITE PREDESIGN FIELD INVESTIGATION

SAMPLER'S: (Signatures)

	DATE	TIME	SAMPLE I.D. NUMBER: Matrix	Location	Boring	Depth	Sample Type	NO. OF CONTAINERS	Total Lead 4oz. poly jar Cool to 4°C	TCLP - Lead 4oz. poly jar Cool to 4°C	Geotechnical glass or poly jar	REMARKS
1	5/11	1156	S	BE2040	1	00B	00L ✓	1	✓			
5		1158	S	BE2040	1	00C	00L ✓					
.		1200	S	BE2040	2	00A	00L ✓					
07		1201	S	BE2040	2	00B	00L ✓					
1		1203	S	BE2040	2	00C	00L ✓					
09		1403	S	ST2242	1	00A	00L ✓					
7		1405	S	ST2242	1	00B	00L ✓					
1		1407	S	ST2242	1	00C	00L ✓					
3		1409	S	ST2242	2	00A	00L ✓					
3		1411	S	ST2242	2	00B	00L ✓					
14		1413	S	ST2242	2	00C	00L ✓					
		1423	S	ST2216	1	00A	00L ✓					
2		1425	S	ST2216	1	00B	00L ✓					
		1427	S	ST2216	1	00C	00L ✓					
8		1429	S	ST2216	2	00A	00L ✓					
		1431	S	ST2216	2	00B	00L ✓					
1		1433	S	ST2216	2	00C	00L ✓					
2		1444	S	ST2231	1	00A	00L ✓					
		1446	S	ST2231	1	00B	00L ✓					
23		1448	S	ST2221	1	00C	00L ✓					
		1451	S	ST2221	2	00B	00L ✓					
45		1453	S	ST2221	2	00A	00L ✓					
6		1455	S	ST2221	2	00C	00L ✓					

RELINQUISHED BY: (Signature)	DATE / TIME	RECEIVED BY: (Signature)	DATE / TIME
[illegible]	5/11/92 1545	[illegible]	5/11/92 1545
RELINQUISHED BY: (Signature)	DATE / TIME	RECEIVED AT LAB BY: (Signature)	DATE / TIME
[illegible]	5/11/92 1630	[illegible]	5-11-92 1630
METHOD OF SHIPMENT:		AIRBILL NO: (If Applicable)	

CHAIN OF CUSTODY RECORD

WOODWARD–CLYDE CONSULTANTS
2318 MILLPARK DR.
MARYLAND HEIGHTS, MISSOURI 63043
314–429–0100

SHEET 4 of 4

PROJECT NO.: 89MC114V

PROJECT NAME: NL/TARACORP SUPERFUND SITE PREDESIGN FIELD INVESTIGATION

SAMPLER'S: (Signatures)

	DATE	TIME	SAMPLE I.D. NUMBER: Matrix	Location	Boring	Depth	Sample Type	NO. OF CONTAINERS	Total Lead 4oz. poly jar Cool to 4°C	TCLP – Lead 4oz. poly jar Cool to 4°C	Geotechnical glass or poly jar	REMARKS
27	5/11	1518	S	SI1716	1	00A	00L	1	✓			
28		1520	S	SI1716	1	00B	00L	1				
29		1522	S	SI1716	1	00C	00L	1				
			S									
			S									
			S									
			S									
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RELINQUISHED BY: (Signature)	DATE / TIME	RECEIVED BY: (Signature)	DATE / TIME
[illegible]	5/11/92 1545	[illegible]	5/11/92 1545
RELINQUISHED BY: (Signature)	DATE / TIME	RECEIVED AT LAB BY: (Signature)	DATE / TIME
[illegible]	5/11/92 1630	[illegible]	5/11/92 1630

METHOD OF SHIPMENT:

AIRBILL NO: (If Applicable)

COOLER/SAMPLE RECEIPT FORM

Rev.01 10/7/91

ESE Cooler # 22
Client Cooler # _____
No Cooler _____

Project: Woodward Clyde Date/Time Received: 5-11-92 1630

USE OTHER SIDE OF THIS FORM TO NOTE FURTHER DETAILS CONCERNING CHECK-IN PROBLEMS AND TO SPECIFY AND DESCRIBE ANY ACTION(S) REGARDING THE RESOLUTION(S) OF PROBLEMS. IF SHIPMENT WAS ACCEPTED AND IF REQUESTED, NOTE ON BACK THE ADDRESS WHERE THE EMPTY COOLER WAS RETURNED AND LIKEWISE IF THE SHIPMENT WAS REJECTED.

IF INFORMATION IS MISSING OR THERE ARE PROBLEMS NOTIFY LABORATORY PROJECT MANAGER SO THAT HE CAN NOTIFY THE PROJECT MANAGER IMMEDIATELY.

A. PRELIMINARY EXAMINATION PHASE: Date/Time cooler/sample was opened and checked: 5-12-92 1300

by (print) James Cash (sign) James Cash

1. List courier delivering samples Client ..... YES NO
2. Did cooler come with a shipping slip (air bill, etc.)? ..... YES (NO)
   If YES, attach and enter carrier and air bill number here: _____
3. Were custody seals on outside of cooler? ..... (YES) NO
   If YES, how many and where: 2 ON FRONT + BACK
   If YES, enter the following: seal date: 5-11-92 seal name: KAREN JACOBS
4. Were custody seals unbroken and intact at the date and time of arrival? ..... (YES) NO
5. Was chain-of-custody provided? ..... (YES) NO
6. Were custody papers sealed in a Ziploc™ bag and taped inside to the lid? ..... (YES) NO
7. Were entries on custody papers completed? (YES) NO . If no, give details on back
8. Turnaround time included? ..... YES (NO)
9. Did you sign custody papers in the appropriate place? ..... (YES) NO
10. Was project identifiable from custody papers? If YES, enter project name at the top of this form. (YES) NO

B. SAMPLE CHECK-IN PHASE: Date samples were checked-in: 5-12-92 by (all those involved must sign below):
(print) James Cash (sign) James Cash

11. Describe packing: Packed in Blue Ice + Stacked
*12. If required, was enough ice used? (temperature maintained correctly)? ..... (YES) NO
13. Were all bottles sealed in separate plastic bags? ..... YES (NO)
*14. Did all bottles arrive unbroken and in good condition? ..... (YES) NO
15. Were all bottle labels complete (ID, date, time, signature, preservative, etc.)? ..... (YES) NO
16. Did all bottle labels agree with custody papers? If NO, indicate discrepancies on back. ..... (YES) NO
17. Were correct containers used for the tests indicated? ..... (YES) NO
18. Were correct preservatives used when required? ..... N.A. ..... YES NO
*19. pH of samples maintained correctly as required? If NO, list by ID# N.A. ..... YES NO
20. Was a sufficient amount of sample sent for tests indicated? ..... (YES) NO
21. Bubbles present in VOA vials? If YES, list by ID#: N.A. ..... YES NO
22. Was lab. project manager called and status discussed? If YES, give details on the back of this form. YES (NO)
23. Who was called? _____ By whom? _____ on (date) _____
24. Second Party Review: _____

* Sample rejection criteria

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WW36. 130-186

CHAIN OF CUSTODY RECORD

Cooler 167

WOODWARD-CLYDE CONSULTANTS
2318 MILLPARK DR.
MARYLAND HEIGHTS, MISSOURI 63043
314-429-0100

SHEET 1 of 3

PROJECT NO.: 89MC114V

PROJECT NAME: NL/TARACORP SUPERFUND SITE PREDESIGN FIELD INVESTIGATION

SAMPLER'S: (Signatures) [signature]

	DATE	TIME	Matrix	Location	Boring	Depth	Sample Type		NO. OF CONTAINERS	Total Lead 4oz. poly jar Cool to 4°C	TCLP - Lead 4oz. poly jar Cool to 4°C	Geotechnical glass or poly jar	REMARKS
130	5/12	9:37	S	GR1418	1	00A	00L	✓	1	✓			
131		9:39	S	GR1418	1	00B	00L	✓	1	✓			
132		9:41	S	GR1418	1	00C	00L	✓	1	✓			
133		9:37	S	GR1418	1	00A	00E	✓	1	✓			
134		9:39	S	GR1418	1	00B	00E	✓	1	✓			
135		9:41	S	GR1418	1	00C	00E	✓	1	✓			
136		9:44	S	GR1418	2	00A	00L	✓	1	✓			
137		9:46	S	GR1418	2	00B	00L	✓	1	✓			
138		9:48	S	GR1418	2	00C	00L	✓	1	✓			
139		10:00	S	GR1436	1	00A	00L	✓	1	✓			
140		10:02	S	GR1436	1	00B	00L	✓	1	✓			
141		10:04	S	GR1436	1	00C	00L	✓	1	✓			
142		10:06	S	GR1436	2	00A	00L	✓	1	✓			
143		10:08	S	GR1436	2	00B	00L	✓	1	✓			
144		10:10	S	GR1436	2	00C	00L	✓	1	✓			
145		11:06	S	ET1310	1	00A	00L	✓	1	✓			
146		11:08	S	ET1310	1	00B	00L	✓	1	✓			
147		11:10	S	ET1310	1	00C	00L	✓	1	✓			
148		11:12	S	ET1310	2	00A	00L	✓	1	✓			
149		11:14	S	ET1310	2	00B	00L	✓	1	✓			
150		11:16	S	ET1310	2	00C	00L	✓	1	✓			
151		11:40	S	ED2124	1	00A	00L	✓	1	✓			
152	✓	11:24	S	ED2124	1	00B	00L	✓	1	✓			

RELINQUISHED BY: (Signature)	DATE / TIME	RECEIVED BY: (Signature)	DATE / TIME
[signature]	5/12/92 1630	[signature]	5/12/92 1630
RELINQUISHED BY: (Signature)	DATE / TIME	RECEIVED AT LAB BY: (Signature)	DATE / TIME
		[signature]	5/12/92 1457

METHOD OF SHIPMENT:

AIRBILL NO: (If Applicable)

Cooler 167

CHAIN OF CUSTODY RECORD

WOODWARD-CLYDE CONSULTANTS
2318 MILLPARK DR.
MARYLAND HEIGHTS, MISSOURI 63043
314-429-0100

PROJECT NO.: 89MC114V

PROJECT NAME: NL/TARACORP SUPERFUND SITE PREDESIGN FIELD INVESTIGATION

SAMPLER'S: (Signatures)

	DATE	TIME	SAMPLE I.D. NUMBER: Matrix	Location	Boring	Depth	Sample Type		NO. OF CONTAINERS	Total Lead 4oz. poly jar Cool to 4°C	TCLP - Lead 4oz. poly jar Cool to 4°C	Geotechnical glass or poly jar	REMARKS
153	5/2/92	11:46	S	ED2124	1	00C	00L	✓	1	X			
154		11:49	S	ED2124	2	00A	00L	✓					
155		11:51	S	ED2124	2	00B	00L	✓					
156		11:53	S	ED2124	2	00C	00L	✓					
157		12:02	S	ED2154	1	00A	00L	✓					
158		12:04	S	ED2154	1	00B	00L	✓					
159		12:06	S	ED2154	1	00C	00L	✓					
160		12:08	S	ED2154	2	00A	00L	✓					
161		12:10	S	ED2154	2	00B	00L	✓					
162		12:12	S	ED2154	2	00C	00L	✓					
163		1419	S	GR2113	1	00A	00L	✓					
164		1422	S	GR2113	1	00B	00L	✓					
165		1424	S	GR2113	1	00C	00L	✓					
166		1425	S	GR2113	2	00A	00L	✓					
167		1425	S	GR2113	2	00B	00L	✓					
168		1430	S	GR2113	2	00C	00L	✓					
169		1507	S	GR2204	1	00A	00L	✓					
170		1509	S	GR2204	1	00B	00L	✓					
171		1511	S	GR2204	1	00C	00L	✓			per →		
172		1513	S	GR2204	2	00A	00L	✓			[illegible]		
173		1515	S	GR2204	2	00B	00L	✓			[illegible]		
174		1517	S	GR2204	2	00C	00L	✓			WW: [illegible]		GR2218.
175		1530	S	GR2218	1	00A	00L	✓			[illegible]		11.15

RELINQUISHED BY: (Signature)	DATE / TIME	RECEIVED BY: (Signature)	DATE / TIME
[signature]	5/2/92 1630	[signature]	5/2/92 14
RELINQUISHED BY: (Signature)	DATE / TIME	RECEIVED AT LAB BY: (Signature)	DATE / TIME
	[illegible]	[signature]	5/2/92 [illegible]

METHOD OF SHIPMENT:

AIRBILL NO: (If Applicable)

Cover 167

CHAIN OF CUSTODY RECORD

WOODWARD-CLYDE CONSULTANTS
2318 MILLPARK DR.
MARYLAND HEIGHTS, MISSOURI 63043
314-429-0100

SHEET 3 of 3

PROJECT NO.: 89MC114V

PROJECT NAME: NL/TARACORP SUPERFUND SITE PREDESIGN FIELD INVESTIGATION

SAMPLER'S: (Signatures)

	DATE	TIME	SAMPLE I.D. NUMBER (Matrix / Location / Boring / Depth / Sample Type)	NO. OF CONTAINERS	Total Lead 4oz. poly jar Cool to 4°C	TCLP - Lead 4oz. poly jar Cool to 4°C	Geotechnical glass or poly jar	REMARKS
176	5/12	1532	S GB2218 1 00B 00L V	1	✓			
177		1534	S GB2218 1 00C 00L V	1				
178		1536	S GB2218 2 00A 00L V	1				
179		1538	S GB2218 2 00B 00L V	1				
180		1540	S GB2218 2 00C 00L V	1				
181		1545	S GB2241 1 00A 00L V	1				
182		1547	S GB2241 1 00B 00L V	1				
183		1549	S GB2241 1 00C 00L V	1				
184		1551	S GB2241 2 00A 00L V	1				
185		1553	S GB2241 2 00B 00L V	1				
186		1555	S GB2241 2 00C 00L V	1				
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			S					
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RELINQUISHED BY: (Signature)	DATE / TIME	RECEIVED BY: (Signature)	DATE / TIME
[signature]	5/12/92 1630	[signature]	5/12/92 1635
RELINQUISHED BY: (Signature)	DATE / TIME	RECEIVED AT LAB BY: (Signature)	DATE / TIME
		[signature]	5 45 PM
METHOD OF SHIPMENT:		AIRBILL NO: (If Applicable)	5/12/92

COOLER/SAMPLE RECEIPT FORM

Rev.01 10/7/91

WWC# 130-186

ESE Cooler # 167
Client Cooler #
No Cooler

Project: Woodward Clyde Date/Time Received: 5-12-92 1745

USE OTHER SIDE OF THIS FORM TO NOTE FURTHER DETAILS CONCERNING CHECK-IN PROBLEMS AND TO SPECIFY AND DESCRIBE ANY ACTION(S) REGARDING THE RESOLUTION(S) OF PROBLEMS. IF SHIPMENT WAS ACCEPTED AND IF REQUESTED, NOTE ON BACK THE ADDRESS WHERE THE EMPTY COOLER WAS RETURNED AND LIKEWISE IF THE SHIPMENT WAS REJECTED.

IF INFORMATION IS MISSING OR THERE ARE PROBLEMS NOTIFY LABORATORY PROJECT MANAGER SO THAT HE CAN NOTIFY THE PROJECT MANAGER IMMEDIATELY.

A. PRELIMINARY EXAMINATION PHASE: Date/Time cooler/sample was opened and checked: 5-13-92 1440

by (print) James Cash (sign) James Cash

1. List courier delivering samples Client ... YES NO
2. Did cooler come with a shipping slip (air bill, etc.)? ... YES NO
   If YES, attach and enter carrier and air bill number here:
3. Were custody seals on outside of cooler? ... YES NO
   If YES, how many and where: 2 on Front
   If YES, enter the following: seal date: 5-12-92 seal name: Mike Wallace
4. Were custody seals unbroken and intact at the date and time of arrival? ... YES NO
5. Was chain-of-custody provided? ... YES NO
6. Were custody papers sealed in a Ziplock* bag and taped inside to the lid? ... YES NO
7. Were entries on custody papers completed? YES NO . If no, give details on back
8. Turnaround time included? ... YES NO
9. Did you sign custody papers in the appropriate place? ... YES NO
10. Was project identifiable from custody papers? If YES, enter project name at the top of this form. YES NO

SAMPLE CHECK-IN PHASE: Date samples were checked-in: 5-13-92 by (all those involved must sign below):
(print) James Cash (sign) James Cash

11. Describe packing: Packed in blue ice + stacked
12. If required, was enough ice used? (temperature maintained correctly)? ... YES NO
13. Were all bottles sealed in separate plastic bags? ... YES NO
*14. Did all bottles arrive unbroken and in good condition? ... YES NO
15. Were all bottle labels complete (ID, date, time, signature, preservative, etc.)? ... YES NO
16. Did all bottle labels agree with custody papers? If NO, indicate discrepancies on back. ... YES NO
17. Were correct containers used for the tests indicated? ... YES NO
18. Were correct preservatives used when required? N/A ... YES NO
*19. pH of samples maintained correctly as required? If NO, list by ID# NA . YES NO
20. Was a sufficient amount of sample sent for tests indicated? ... YES NO
21. Bubbles present in VOA vials? If YES, list by ID#: NA . YES NO
22. Was lab. project manager called and status discussed? If YES, give details on the back of this form. YES NO
    i. Who was called? By whom? on (date)
    ii. Second Party Review:

* Sample rejection criteria

\\WP\CHEMCOH\CRF.01

187-244

WWC6

CHAIN OF CUSTODY RECORD

WOODWARD-CLYDE CONSULTANTS
2318 MILLPARK DR.
MARYLAND HEIGHTS, MISSOURI 63043
314-429-0100

SHEET 1 of 3

PROJECT NO.: 89MC114V

PROJECT NAME: NL/TARACORP SUPERFUND SITE PREDESIGN FIELD INVESTIGATION

SAMPLER'S: (Signatures)

	DATE	TIME	SAMPLE I.D. NUMBER: Matrix	Location	Boring	Depth	Sample Type	NO. OF CONTAINERS	Total Lead 4oz. poly jar Cool to 4°C	TCLP - Lead 4oz. poly jar Cool to 4°C	Geotechnical glass or poly jar	REMARKS
187	5/13	825	S	DE1628	3	00A	00T		X			Pulverize Sample
188		~~840~~ 835	S	DE1628	4	00A	00T		X			Pulverize Sample
189		926	S	WS2035	1	00A	00L		X		S0R00253A00A00T	
190		928	S	WS2035	1	00B	00L				S0R00254A00A00T	
191		930	S	WS2035	1	00C	00L					
192		957	S	DE2100	3	00A	00L					
193		959	S	DE2100	3	00B	00L					
194		1001	S	DE2100	3	00C	00L					
195		1004	S	WS2140	1	00A	00L					
196		1006	S	WS2140	1	00B	00L					
197		1008	S	WS2140	1	00C	00L					
198		1012	S	WS2140	2	00A	00L					
199		1014	S	WS2140	2	00B	00L					
~~200~~		~~1016~~	~~S~~	~~WS2140~~	~~2~~	~~00C~~	~~00L~~					
~~201~~		1034	S	DE2100	1	00A	00L			200		
~~202~~		1036	S	DE2100	1	00B	00L			201		
~~203~~		1038	S	DE2100	1	00C	00L			202		
~~204~~		1043	S	DE2100	2	00A	00L			203		
~~205~~		1045	S	DE2100	2	00B	00L			204		
		1047	S	DE2100	2	00C	00L			205		
		1115	S	IO2103	L	00A	00L	not yellow		206		
		1117	S	IO2103	L	00B	00L			207		
		1119	S	IO2103	L	00C	00L			208		

RELINQUISHED BY: (Signature)	DATE / TIME	RECEIVED BY: (Signature)	DATE / TIME
[signature]	5/13/92 16:45	[signature]	5/13/92 16:45
RELINQUISHED BY: (Signature)	**DATE / TIME**	**RECEIVED AT LAB BY: (Signature)**	**DATE / TIME**
[signature]	5/13/92 1715	[signature]	5-13-92 5:15

METHOD OF SHIPMENT:

AIRBILL NO: (If Applicable)

CHAIN OF CUSTODY RECORD

WOODWARD–CLYDE CONSULTANTS
2318 MILLPARK DR.
MARYLAND HEIGHTS, MISSOURI 63043
314–429–0100

SHEET 2 of 3

PROJECT NO.: 89MC114V

PROJECT NAME: NL/TARACORP SUPERFUND SITE PREDESIGN FIELD INVESTIGATION

SAMPLER'S: (Signatures)

	DATE	TIME	SAMPLE I.D. NUMBER: Matrix	Location	Boring	Depth	Sample Type	NO. OF CONTAINERS	Total Lead 4oz. poly jar Cool to 4°C	TCLP – Lead 4oz. poly jar Cool to 4°C	Geotechnical glass or poly jar	REMARKS
09	5/13	1124	S	102L03	2	00A	00L	1	X			
10		1126	S	102L03	2	00B	00L					
11		1128	S	102L03	2	00C	00L					
CEP		1311	S	0R0026	1	00A	00L					Take from TCL
12		1313	S	0R0026	1	00B	00L					
CEP		~~1315~~	~~S~~	~~0R0026~~	~~1~~	~~00C~~	~~00L~~					
13		1407	S	0R0026	2	00A	00L					
14		1409	S	0R0026	2	00B	00L					
15		1411	S	0R0026	2	00C	00L					
16	1345	~~1311~~	S	0R0026	1	00A	00T		X	X		Pulverize Sample
217		1523	S	0H2025	1	00A	00L		X			
218		1524	S	0H2025	1	00B	00L		X			
219		1525	S	0H2025	1	00C	00L					
220		1527	S	0H2025	2	00A	00L					
221		1528	S	0H2025	2	00B	00L					
222		1530	S	0H2025	2	00C	00L					
223		1532	S	0H2025	3	00A	00L					
224		1534	S	0H2025	3	00B	00L					
25		1535	S	0H2025	3	00C	00L					
226		1537	S	0H2025	4	00A	00L		~~wrong~~	~~Time~~		
27		1538	S	0H2025	4	00B	00L		~~wrong~~	~~Time~~		
228		1540	S	0H2025	4	00C	00L		~~wrong~~	~~Time~~		
29		1541	S	0H2025	5	00A	00L		~~wrong~~			

RELINQUISHED BY: (Signature)	DATE / TIME	RECEIVED BY: (Signature)	DATE / TIME
[illegible]	5/13/92 11:45	[illegible]	5/13/92 1645
RELINQUISHED BY: (Signature)	DATE / TIME	RECEIVED AT LAB BY: (Signature)	DATE / TIME
[illegible]	5/13/92 1715	[illegible]	5-13-92 [illegible]

METHOD OF SHIPMENT:

AIRBILL NO: (If Applicable)

CHAIN OF CUSTODY RECORD

WOODWARD-CLYDE CONSULTANTS
2318 MILLPARK DR.
MARYLAND HEIGHTS, MISSOURI 63043
314-429-0100

SHEET 3 of 3

PROJECT NO.: 89MC114V

PROJECT NAME: NL/TARACORP SUPERFUND SITE PREDESIGN FIELD INVESTIGATION

SAMPLER'S: (Signatures) C Pavelka / K Olson

	DATE	TIME	SAMPLE I.D. NUMBER: Matrix	Location	Boring	Depth	Sample Type	NO. OF CONTAINERS	CONTAINER DESCRIPTION/ ANALYSES REQUESTED: Total Lead 4oz. poly jar Cool to 4°C	TCLP - Lead 4oz. poly jar Cool to 4°C	Geotechnical glass or poly jar	REMARKS
230	5/13/92	1542	S	OH2025	5	00B	00L	1	X			
231		15:43	S	OH2025	5	00C	00L	1				
232		1545	S	OH2025	6	00A	00L	1				
233		1546	S	OH2025	6	00B	00L	1				
234		1547	S	OH2025	6	00C	00L	1				
235		1548	S	OH2025	7	00A	00L	1				
236		1549	S	OH2025	7	00B	00L	1				
237		1550	S	OH2025	7	00C	00L	1				
238		1551	S	OH2025	8	00A	00L	1				
239		1553	S	OH2025	8	00B	00L	1				
240		1554	S	OH2025	8	00C	00L	1				
241		15:59	S	OH2025	9	00A	00L	1				
242		16:01	S	OH2025	9	00B	00L	1				
243		16:02	S	OH2025	9	00C	00L	1				
244		13:11	S	CR0026	1	00A	00L	1	X			
			S									
			S									
			S									
			S									
			S									
			S									
			S									
			S									

C Pavelka

RELINQUISHED BY: (Signature)	DATE / TIME	RECEIVED BY: (Signature)	DATE / TIME
Cynthia Pavelka	5/13/92 16:45	K. Olson	5/13/92 1645
RELINQUISHED BY: (Signature)	DATE / TIME	RECEIVED AT LAB BY: (Signature)	DATE / TIME
K. Olson	5/13/92 1715	[illegible]	5-13-92 [illegible]
METHOD OF SHIPMENT:		AIRBILL NO: (If Applicable)	

Date: 5/14/92 Time: 9:20 AM/PM	TELEPHONE MEMORANDUM	Project No.: 89MC114V
(To) (From): Sue Wilson ~~Carol Cook~~ / ~~John Genado~~ Company/Location: ESE Phone No.: Recorded by: C. Pavelka Project: NCTSS		Routing File A2.a.3 ESE

Please change ~~on samples~~ Sample ID's on Chain-of-Custody & Sample jars for samples taken on 5/13/92

from: SDE2100 100A00L to SMA2100100A00L
SDE2100 100B00L to SMA2100100B00L
SDE2100 100C00L to SMA2100100C00L
SDE2100 200A00L to SMA2100200A00L
SDE2100 200B00L to SMA2100200B00L
SDE2100 200C00L to SMA2100200C00L
SDE2100 300A00L to SMA2100300A00L
SDE2100 300B00L to SMA2100300B00L
SDE2100 300C00L to SMA2100300C00L

Sent in 3 samples for TCLP please pulverize samples prior to digestion.

Woodward-Clyde

FAX Transmittal

Woodward-Clyde Consultants
2165 Benton
Granite City, Illinois 62040
618/451-1472
FAX: 618/451-1436

Date: 5/14/92

To: Sue Wilson

At: ESE, Inc.

FAX: 314 - 567 - 5030

From: C. Pavelka

At: WCC - Granite

Number of Pages (including this page): 2

Method/Urgency of Delivery:

X **Urgent - notify or hand carry to recipient ASAP**

____ **Recipient already aware of FAX; leave at FAX for pick up**

____ **Other:**

Project Title: NL/Taracorp Superfund Site

Please make the attached changes for 9 samples taken on 5/13/92.

Thanks,
Cynthia P.

If you do not receive all of these pages, please call Cynthia at 618/451-1472

COOLER/SAMPLE RECEIPT FORM

Rev.01 10/7/91

ESE Cooler # 162
Client Cooler # _____
No Cooler _____

Project: Woodward Clyde Date/Time Received: 5-13-92 1715

USE OTHER SIDE OF THIS FORM TO NOTE FURTHER DETAILS CONCERNING CHECK-IN PROBLEMS AND TO SPECIFY AND DESCRIBE ANY ACTION(S) REGARDING THE RESOLUTION(S) OF PROBLEMS. IF SHIPMENT WAS ACCEPTED AND IF REQUESTED, NOTE ON BACK THE ADDRESS WHERE THE EMPTY COOLER WAS RETURNED AND LIKEWISE IF THE SHIPMENT WAS REJECTED.

IF INFORMATION IS MISSING OR THERE ARE PROBLEMS NOTIFY LABORATORY PROJECT MANAGER SO THAT HE CAN NOTIFY THE PROJECT MANAGER IMMEDIATELY.

A. PRELIMINARY EXAMINATION PHASE: Date/Time cooler/sample was opened and checked: 5-14-92 1100

by (print) James Cash (sign) James Cash

1. List courier delivering samples Client ..... YES NO
2. Did cooler come with a shipping slip (air bill, etc.)? ..... YES NO
   If YES, attach and enter carrier and air bill number here: _____
3. Were custody seals on outside of cooler? ..... YES NO
   If YES, how many and where: 2 Lon Front + Back
   If YES, enter the following: seal date: 5-13-92, seal name: Mike Wallace
4. Were custody seals unbroken and intact at the date and time of arrival? ..... YES NO
5. Was chain-of-custody provided? ..... YES NO
6. Were custody papers sealed in a Ziploc™ bag and taped inside to the lid? ..... YES NO
7. Were entries on custody papers completed? YES NO. If no, give details on back
8. Turnaround time included? ..... YES NO
9. Did you sign custody papers in the appropriate place? ..... YES NO
10. Was project identifiable from custody papers? If YES, enter project name at the top of this form. YES NO

B. SAMPLE CHECK-IN PHASE: Date samples were checked-in: 5-14-92 by (all those involved must sign below):
(print) James Cash (sign) James Cash

11. Describe packing: Packed in Blue Ice + Stacked
12. If required, was enough ice used? (temperature maintained correctly)? ..... YES NO
13. Were all bottles sealed in separate plastic bags? ..... YES NO
*14. Did all bottles arrive unbroken and in good condition? ..... YES NO
15. Were all bottle labels complete (ID, date, time, signature, preservative, etc.)? ..... YES NO
16. Did all bottle labels agree with custody papers? If NO, indicate discrepancies on back. ..... YES NO
17. Were correct containers used for the tests indicated? ..... YES NO
18. Were correct preservatives used when required? ..... YES NO
*19. pH of samples maintained correctly as required? If NO, list by ID# _____ YES NO
20. Was a sufficient amount of sample sent for tests indicated? ..... YES NO
21. Bubbles present in VOA vials? If YES, list by ID#: _____ YES NO
22. Was lab. project manager called and status discussed? If YES, give details on the back of this form. YES NO
23. Who was called? _____ By whom? _____ on (date) _____
24. Second Party Review: _____

* Sample rejection criteria

Cynthia Pawelka faxed 9 new field id's to replace some on the C-O-C. See attached fax. Numbers were changed on the sample jars as well.

S:\WP\CHEMCOM\CRF.01

CHAIN OF CUSTODY RECORD

245-289

WWC6

WOODWARD-CLYDE CONSULTANTS
2318 MILLPARK DR.
MARYLAND HEIGHTS, MISSOURI 63043
314-429-0100

SHEET 1 of 1

PROJECT NO.: 89MC114V

PROJECT NAME: NL/TARACORP SUPERFUND SITE PREDESIGN FIELD INVESTIGATION

SAMPLER'S: (Signatures)

	DATE	TIME	SAMPLE I.D. NUMBER (Matrix / Location / Boring / Depth / Sample Type)	NO. OF CONTAINERS	Total Lead 4oz. poly jar Cool to 4°C	TCLP - Lead 4oz. poly jar Cool to 4°C	Geotechnical glass or poly jar	REMARKS
45	5/14	847	S WS2022 1 00A00L	1	✓			
46		849	S WS2022 1 00B00L	1				
47		851	S WS2022 1 00C00L	1				
48		853	S WS2022 2 00A00L	1				
49		855	S WS2022 2 00B00L	1				
50		857	S WS2022 2 00C00L	1				
51		925	S FO2207 1 00A00L	1				
52		927	S FO2207 1 00B00L	1				
53		929	S FO2207 1 00C00L	1				
54		931	S FO2207 2 00A00L	1				
55		933	S FO2207 2 00B00L	1				
56		935	S FO2207 2 00C00L	1				
57		1018	S FO2263 1 00A00L	1				
58		1020	S FO2263 1 00B00L	1				
59		1022	S FO2263 1 00C00L	1				
60		1024	S FO2263 2 00A00L	1				
61		1026	S FO2263 2 00B00L	1				
62		1028	S FO2263 2 00C00L	1				
63		1054	S LE2135 1 00A00L	1				
64		1056	S LE2135 1 00B00L	1				
65		1058	S LE2135 1 00C00L	1				
66		1101	S LE2135 2 00A00L	1				
67		1103	S LE2135 2 00B00L	1				

RELINQUISHED BY: (Signature)	DATE / TIME	RECEIVED BY: (Signature)	DATE / TIME
[illegible]	5/14/92 1500	[illegible]	5/14/92 [illegible]
RELINQUISHED BY: (Signature)	DATE / TIME	RECEIVED AT LAB BY: (Signature)	DATE / TIME
[illegible]	5/14/92 1700	John Demoules	5/14/92 17:00

METHOD OF SHIPMENT:

AIRBILL NO: / (If Applicable)

CHAIN OF CUSTODY RECORD

WOODWARD-CLYDE CONSULTANTS
2318 MILLPARK DR.
MARYLAND HEIGHTS, MISSOURI 63043
314-429-0100

SHEET 2 of 2

PROJECT NO.: 89MC114V

PROJECT NAME: NL/TARACORP SUPERFUND SITE PREDESIGN FIELD INVESTIGATION

SAMPLER'S: (Signatures)

	DATE	TIME	Matrix	Location	Boring	Depth	Sample Type	NO. OF CONTAINERS	Total Lead 4oz. Poly jar Cool to 4°C	TCLP - Lead 4oz. Poly jar Cool to 4°C	Geotechnical glass or poly jar	REMARKS
	5/14	1105	S	LE2135	2	00C	00L	1	✓			
		1130	S	DE2112	1	00A	00L					
		1133	S	DE2112	1	00B	00L					
71		1135	S	DE2112	1	00C	00L					
72		1137	S	DE2112	2	00A	00L					
73		1139	S	DE2112	2	00B	00L					
74		1141	S	DE2112	2	00C	00L					
75		1206	S	CL2110	1	00A	00L					
76		1208	S	CL2110	1	00B	00L					
77		1210	S	CL2110	1	00C	00L					
78		1213	S	CL2110	2	00A	00L					
79		1215	S	CL2110	2	00B	00L					
		1217	S	CL2110	2	00C	00L					
		1347	S	ED2037	1	00A	00L					
82		1349	S	ED2037	1	00B	00L					
83		1351	S	ED2037	1	00C	00L					
84		1347	S	ED2037	1	00A	0LD					
85		1349	S	ED2037	1	00B	0LD					
86		1351	S	ED2037	1	00C	0LD					
87		1353	S	ED2037	2	00A	00L					
88		1355	S	ED2037	2	00B	00L					
89		1357	S	ED2037	2	00C	00L					
			S	ED2037	1	00A	00L					

RELINQUISHED BY: (Signature)	DATE / TIME	RECEIVED BY: (Signature)	DATE / TIME
[illegible]	5/14/92 1300	[illegible]	5/14/92 [illegible]
RELINQUISHED BY: (Signature)	DATE / TIME	RECEIVED AT LAB BY: (Signature)	DATE / TIME
[illegible]	5/14/92 1700	[illegible]	5/14/92 17:[illegible]

METHOD OF SHIPMENT:

AIRBILL NO: / (If Applicable)

COOLER/SAMPLE RECEIPT FORM

Rev.01 10/7/91

ESE Cooler # 167
Client Cooler # _____
No Cooler _____

Project: Woodward Clyde Date/Time Received: 5-14-92 1700

USE OTHER SIDE OF THIS FORM TO NOTE FURTHER DETAILS CONCERNING CHECK-IN PROBLEMS AND TO SPECIFY AND DESCRIBE ANY ACTION(S) REGARDING THE RESOLUTION(S) OF PROBLEMS. IF SHIPMENT WAS ACCEPTED AND IF REQUESTED, NOTE ON BACK THE ADDRESS WHERE THE EMPTY COOLER WAS RETURNED AND LIKEWISE IF THE SHIPMENT WAS REJECTED.

IF INFORMATION IS MISSING OR THERE ARE PROBLEMS NOTIFY LABORATORY PROJECT MANAGER SO THAT HE CAN NOTIFY THE PROJECT MANAGER IMMEDIATELY.

A. PRELIMINARY EXAMINATION PHASE: Date/Time cooler/sample was opened and checked: 5-15-92 845

by (print) James Cash (sign) James Cash

1. List courier delivering samples Client ..... YES NO
2. Did cooler come with a shipping slip (air bill, etc.)? ..... YES (NO)
   If YES, attach and enter carrier and air bill number here: _____
3. Were custody seals on outside of cooler? ..... (YES) NO
   If YES, how many and where: 2 on front
   If YES, enter the following: seal date: 5-14-92, seal name: Mike Wallace
4. Were custody seals unbroken and intact at the date and time of arrival? ..... (YES) NO
5. Was chain-of-custody provided? ..... (YES) NO
6. Were custody papers sealed in a Ziploc™ bag and taped inside to the lid? ..... (YES) NO
7. Were entries on custody papers completed? (YES) NO . If no, give details on back
8. Turnaround time included? ..... YES (NO)
9. Did you sign custody papers in the appropriate place? ..... (YES) NO
10. Was project identifiable from custody papers? If YES, enter project name at the top of this form. . (YES) NO

B. SAMPLE CHECK-IN PHASE: Date samples were checked-in: 5-15-92 by (all those involved must sign below):
(print) James Cash (sign) James Cash

11. Describe packing: Packed in Blue Ice + Stacked
12. If required, was enough ice used? (temperature maintained correctly)? ..... (YES) NO
13. Were all bottles sealed in separate plastic bags? ..... YES (NO)
14. Did all bottles arrive unbroken and in good condition? ..... (YES) NO
15. Were all bottle labels complete (ID, date, time, signature, preservative, etc.)? ..... (YES) NO
16. Did all bottle labels agree with custody papers? If NO, indicate discrepancies on back. ..... (YES) NO
17. Were correct containers used for the tests indicated? ..... (YES) NO
18. Were correct preservatives used when required? . N/A ..... YES NO
19. pH of samples maintained correctly as required? If NO, list by ID# N/A . YES NO
20. Was a sufficient amount of sample sent for tests indicated? ..... (YES) NO
21. Bubbles present in VOA vials? If YES, list by ID#: N/A . YES NO
22. Was lab. project manager called and status discussed? If YES, give details on the back of this form. YES (NO)
23. Who was called? _____ By whom? _____ on (date) _____
24. Second Party Review: _____

* Sample rejection criteria

J:\WP\CHCHCOM\CRF.01

CHAIN OF CUSTODY RECORD

WOODWARD–CLYDE CONSULTANTS
2318 MILLPARK DR.
MARYLAND HEIGHTS, MISSOURI 63043
314–429–0100

SHEET 1 of 2

PROJECT NO.: 89MC114V

PROJECT NAME: NL/TARACORP SUPERFUND SITE PREDESIGN FIELD INVESTIGATION

SAMPLER'S: (Signatures) [illegible] / M Wallace

	DATE	TIME	SAMPLE I.D. NUMBER: Matrix	Location	Boring	Depth	Sample Type	NO. OF CONTAINERS	Total Lead 4oz. poly jar Cool to 4°C	TCLP – Lead 4oz. poly jar Cool to 4°C	Geotechnical glass or poly jar	REMARKS
290	5/15	8:58	S	WA1741	1	00A	00L	1	✓			
291		9:00	S	WA1741	1	00B	00L					
292		9:02	S	WA1741	1	00C	00L					
293		9:04	S	WA1741	2	00A	00L					
294		9:06	S	WA1741	2	00B	00L					
295		9:08	S	WA1741	2	00C	00L					
296		9:22	S	WA1747	1	00A	00L					
297		9:24	S	WA1747	1	00B	00L					
298		9:26	S	WA1747	1	00C	00L					
299		9:28	S	WA1747	2	00A	00L					
300		9:30	S	WA1747	2	00B	00L					
301		9:32	S	WA1741	2	00C	00L					
302		9:54	S	CH1732	1	00A	00L					
303		9:56	S	CH1732	1	00B	00L					
304		9:58	S	CH1732	1	00C	00L					
305		10:01	S	CH1732	2	00A	00L					
306		10:03	S	CH1732	2	00B	00L					
307		10:05	S	CH1732	2	00C	00L					
308		10:30	S	MA1413	1	00A	00L					
309		10:35	S	MA1413	1	00B	00L					
310		10:40	S	MA1413	1	00C	00L					
311		10:44	S	MA1413	1	00A	00L					
312	✓	10:46	S	MA1413	1	00B	00L	✓	✓			

RELINQUISHED BY: (Signature)	DATE / TIME	RECEIVED BY: (Signature)	DATE / TIME
Cynthia Fowler	5/15/92 15:30	[illegible]	5/15/92 15:30
RELINQUISHED BY: (Signature)	DATE / TIME	RECEIVED AT LAB BY: (Signature)	DATE / TIME
[illegible]	5/15/92 1700	[illegible]	5/15/92 [illegible]

METHOD OF SHIPMENT:

AIRBILL NO: (If Applicable)

CHAIN OF CUSTODY RECORD

WOODWARD-CLYDE CONSULTANTS
2318 MILLPARK DR.
MARYLAND HEIGHTS, MISSOURI 63043
314-429-0100

SHEET 2 of 2

PROJECT NO.: 89MC114V

PROJECT NAME: NL/TARACORP SUPERFUND SITE PREDESIGN FIELD INVESTIGATION

SAMPLER'S: (Signatures) M Walker / [illegible]

	DATE	TIME	SAMPLE I.D. NUMBER: Matrix	Location	Boring	Depth	Sample Type	NO. OF CONTAINERS	Total Lead 4oz. poly jar Cool to 4°C	TCLP - Lead 4oz. poly jar Cool to 4°C	Geotechnical glass or poly jar	REMARKS
313	5/15/92	10:48	S	MA1419	1	00C	00L	1	X			
314		10:50	S	MA1419	2	00A	00L					
315		10:52	S	MA1419	2	00B	00L					
316		10:54	S	MA1419	2	00C	00L					
317		11:32	S	MA1436	1	00A	00L					
318		11:34	S	MA1436	1	00B	00L					
319		11:36	S	MA1436	1	00C	00L					
320		11:26	S	MA1436	2	00A	00L					
321		11:28	S	MA1436	2	00B	00L					
322		11:30	S	MA1436	2	00C	00L					
323		11:55	S	IO1415	1	00A	00L					
324		11:57	S	IO1415	1	00B	00L					
325		11:59	S	IO1415	1	00C	00L					
326		12:02	S	IO1415	2	00A	00L					
327		12:04	S	IO1415	2	00B	00L					
328		12:06	S	IO1415	2	00C	00L					
			S			00A	00L					
			S			00B	00L					
			S			00C	00L					
			S			00A	00L					
			S			00B	00L					
			S			00C	00L					
			S			00A	00L					

RELINQUISHED BY: (Signature)	DATE / TIME	RECEIVED BY: (Signature)	DATE / TIME
[illegible]	5/15/92 15:30	[illegible]	5/15/92 15:30
RELINQUISHED BY: (Signature)	DATE / TIME	RECEIVED AT LAB BY: (Signature)	DATE / TIME
[illegible]	5/15/92 1505	[illegible]	5/15/92 1505

METHOD OF SHIPMENT:

AIRBILL NO: (If Applicable)

COOLER/SAMPLE RECEIPT FORM

Rev.01 10/7/91

ESE Cooler # _____
Client Cooler # ✓
No Cooler _____

Project: Woodward Clyde Date/Time Received: 5-15-92 1705

USE OTHER SIDE OF THIS FORM TO NOTE FURTHER DETAILS CONCERNING CHECK-IN PROBLEMS AND TO SPECIFY AND DESCRIBE ANY ACTION(S) REGARDING THE RESOLUTION(S) OF PROBLEMS. IF SHIPMENT WAS ACCEPTED AND IF REQUESTED, NOTE ON BACK THE ADDRESS WHERE THE EMPTY COOLER WAS RETURNED AND LIKEWISE IF THE SHIPMENT WAS REJECTED.

IF INFORMATION IS MISSING OR THERE ARE PROBLEMS NOTIFY LABORATORY PROJECT MANAGER SO THAT HE CAN NOTIFY THE PROJECT MANAGER IMMEDIATELY.

A. PRELIMINARY EXAMINATION PHASE: Date/Time cooler/sample was opened and checked: 5-18-92 930

by (print) James Cash (sign) James Cash

1. List courier delivering samples: Client ..... YES NO
2. Did cooler come with a shipping slip (air bill, etc.)? ..... YES (NO)
   If YES, attach and enter carrier and air bill number here: _____
3. Were custody seals on outside of cooler? ..... (YES) NO
   If YES, how many and where: 2 1 on Front + Back
   If YES, enter the following: seal date: 5-15-92, seal name: Mike Wallace
4. Were custody seals unbroken and intact at the date and time of arrival? ..... (YES) NO
5. Was chain-of-custody provided? ..... (YES) NO
6. Were custody papers sealed in a Ziploc® bag and taped inside to the lid? ..... (YES) NO
7. Were entries on custody papers completed? (YES) NO. If no, give details on back
8. Turnaround time included? ..... YES (NO)
9. Did you sign custody papers in the appropriate place? ..... (YES) NO
10. Was project identifiable from custody papers? If YES, enter project name at the top of this form. (YES) NO

B. SAMPLE CHECK-IN PHASE: Date samples were checked-in: 5-18-92 by (all those involved must sign below):
(print) James Cash (sign) James Cash

11. Describe packing: Packed in Blue Tag + stuffed
12. If required, was enough ice used? (temperature maintained correctly)? ..... (YES) NO
13. Were all bottles sealed in separate plastic bags? ..... YES (NO)
14. Did all bottles arrive unbroken and in good condition? ..... (YES) NO
15. Were all bottle labels complete (ID, date, time, signature, preservative, etc.)? ..... (YES) NO
16. Did all bottle labels agree with custody papers? If NO, indicate discrepancies on back. ..... (YES) NO
17. Were correct containers used for the tests indicated? ..... (YES) NO
18. Were correct preservatives used when required? N/A ..... YES NO
*19. pH of samples maintained correctly as required? If NO, list by ID# N/A ..... YES NO
20. Was a sufficient amount of sample sent for tests indicated? ..... (YES) NO
21. Bubbles present in VOA vials? If YES, list by ID#: N/A ..... YES NO
22. Was lab. project manager called and status discussed? If YES, give details on the back of this form. YES (NO)
23. Who was called? _____ By whom? _____ on (date) _____
24. Second Party Review: _____

* Sample rejection criteria

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CHAIN OF CUSTODY RECORD

WOODWARD-CLYDE CONSULTANTS
2318 MILLPARK DR.
MARYLAND HEIGHTS, MISSOURI 63043
314-429-0100

SHEET 1 of 3

PROJECT NO.: 89MC114V

PROJECT NAME: NL/TARACORP SUPERFUND SITE PREDESIGN FIELD INVESTIGATION

SAMPLER'S: (Signatures) K[illegible] M[illegible]

	DATE	TIME	SAMPLE I.D. NUMBER (Matrix / Location / Boring / Depth / Sample Type)	NO. OF CONTAINERS	Total Lead 4oz. poly jar Cool to 4°C	TCLP - Lead 4oz. poly jar Cool to 4°C	Geotechnical glass or poly jar	REMARKS
329	5/18	909	S DE1630 1 00A00L	1	✓			
330		911	S DE1630 1 00B00L					
331		913	S DE1630 1 00C00L					
332		917	S DE1630 2 00A00L					
333		919	S DE1630 2 00B00L					
334		921	S DE1630 2 00C00L					
335		948	S ED2229 1 00A00L					
336		950	S ED2229 1 00B00L					
337		952	S ED2229 1 00C00L					
338		1003	S ED2241 1 00A00L					
339		1005	S ED2241 1 00B00L					
340		1007	S ED2241 1 00C00L					
341		1010	S ED2241 2 00A00L					
342		1012	S ED2241 2 00B00L					
343		1014	S ED2241 2 00C00L					
344		1022	S ED2251 1 00A00L					
345		1024	S ED2251 1 00B00L					
346		1026	S ED2251 1 00C00L					
347		1040	S ED2251 2 00A00L					
348		1042	S ED2251 2 00B00L					
349		1044	S ED2251 2 00C00L					
350		1115	S NE0745 1 00A00L					
351		1117	S NE0745 1 00B00L					

RELINQUISHED BY: (Signature)	DATE / TIME	RECEIVED BY: (Signature)	DATE / TIME
Cynthia Pavella	5/18/92 16:15	[illegible]	5/18/92 16:15
RELINQUISHED BY: (Signature)	DATE / TIME	RECEIVED AT LAB BY: (Signature)	DATE / TIME
[illegible]	5/18/92 1705	[illegible]	5-18-92 1705

METHOD OF SHIPMENT:

AIRBILL NO: (If Applicable)

CHAIN OF CUSTODY RECORD

WOODWARD-CLYDE CONSULTANTS
2318 MILLPARK DR.
MARYLAND HEIGHTS, MISSOURI 63043
314-429-0100

SHEET 2 of 3

PROJECT NO.: 89MC114V

PROJECT NAME: NL/TARACORP SUPERFUND SITE PREDESIGN FIELD INVESTIGATION

SAMPLER'S: (Signatures) [signature] [signature]

	DATE	TIME	SAMPLE I.D. NUMBER: Matrix	Location	Boring	Depth	Sample Type	NO. OF CONTAINERS	CONTAINER DESCRIPTION/ ANALYSES REQUESTED: Total Lead 4oz. poly jar Cool to 4°C	TCLP - Lead 4oz. poly jar Cool to 4°C	Geotechnical glass or poly jar	REMARKS
352	5/14	1119	S	NF0945	1	00C	00L					
353		1121	S	NF0945	2	00A	00L					
354		1123	S	NF0945	2	00B	00L					
355		1125	S	NF0945	2	00C	00L					
356		1147	S	NF0837	1	00A	00L					
357		1149	S	NF0837	1	00B	00L					
358		1151	S	NF0837	1	00C	00L					
359		1153	S	NF0837	2	00A	00L					
360		1155	S	NF0837	2	00B	00L					
361		1157	S	NF0837	2	00C	00L					
362		1433	S	CL2101	1	00A	00L					
363		1435	S	CL2101	1	00B	00L					
364		1437	S	CL2101	1	00C	00L					
365		1440	S	CL2101	2	00A	00L					
366		1442	S	CL2101	2	00B	00L					
367		1444	S	CL2101	2	00C	00L					
368		1513	S	DE2265	1	00A	00L					
369		1515	S	DE2265	1	00B	00L					
370		1517	S	DE2265	1	00C	00L					
371		1513	S	DE2265	1	00A	0LD					
372		1515	S	DE2265	1	00B	0LD					
373		1517	S	DE2265	1	00C	0LD					
374		1519	S	DE2265	2	00A	00L					

RELINQUISHED BY: (Signature)	DATE / TIME	RECEIVED BY: (Signature)	DATE / TIME
[signature]	5/18/92 1615	[signature]	5/18/92 1615
RELINQUISHED BY: (Signature)	DATE / TIME.	RECEIVED AT LAB BY: (Signature)	DATE / TIME
[signature]	5/18/92 1705	[signature]	5-18-92 5[illegible]
METHOD OF SHIPMENT:		AIRBILL NO: (If Applicable)	

CHAIN OF CUSTODY RECORD

WOODWARD-CLYDE CONSULTANTS
2318 MILLPARK DR.
MARYLAND HEIGHTS, MISSOURI 63043
314-429-0100

SHEET 3 of 3

PROJECT NO.: 89MC114V

PROJECT NAME: NL/TARACORP SUPERFUND SITE PREDESIGN FIELD INVESTIGATION

SAMPLER'S: (Signatures)

DATE	TIME	SAMPLE I.D. NUMBER: Matrix	Location	Boring	Depth	Sample Type	NO. OF CONTAINERS	Total Lead 4oz. Poly jar Cool to 4°C	TCLP - Lead 4oz. Poly jar Cool to 4°C	Geotechnical glass or poly jar	REMARKS
5/18	1521	S	DE2265	2	002	004	1	✓			
	1523	S	DE2265	2	005	006	1				

RELINQUISHED BY: (Signature)	DATE / TIME	RECEIVED BY: (Signature)	DATE / TIME
Cynthia Prudhe	5/18/92 1615	[illegible]	5/18/92 1615
RELINQUISHED BY: (Signature)	DATE / TIME	RECEIVED AT LAB BY: (Signature)	DATE / TIME
[illegible]	5/18/92 1705	[illegible]	5-18-92 5:05 P

METHOD OF SHIPMENT:

AIRBILL NO: (If Applicable)

COOLER/SAMPLE RECEIPT FORM

Rev.01 10/7/91

ESE Cooler # 22
Client Cooler # _____
No Cooler _____

Project: Woodward Clyde Date/Time Received: 5-18-92 1705

USE OTHER SIDE OF THIS FORM TO NOTE FURTHER DETAILS CONCERNING CHECK-IN PROBLEMS AND TO SPECIFY AND DESCRIBE ANY ACTION(S) REGARDING THE RESOLUTION(S) OF PROBLEMS. IF SHIPMENT WAS ACCEPTED AND IF REQUESTED, NOTE ON BACK THE ADDRESS WHERE THE EMPTY COOLER WAS RETURNED AND LIKEWISE IF THE SHIPMENT WAS REJECTED.

IF INFORMATION IS MISSING OR THERE ARE PROBLEMS NOTIFY LABORATORY PROJECT MANAGER SO THAT HE CAN NOTIFY THE PROJECT MANAGER IMMEDIATELY.

A. PRELIMINARY EXAMINATION PHASE: Date/Time cooler/sample was opened and checked: 5-20-92 1300

by (print) James Cash (sign) James Cash

1. List courier delivering samples: Client ..... YES NO
2. Did cooler come with a shipping slip (air bill, etc.)? ..... YES (NO)
   If YES, attach and enter carrier and air bill number here: _____
3. Were custody seals on outside of cooler? ..... (YES) NO
   If YES, how many and where: 2 on Front
   If YES, enter the following: seal date: 5-18-92 seal name: M Wallace
4. Were custody seals unbroken and intact at the date and time of arrival? ..... (YES) NO
5. Was chain-of-custody provided? ..... (YES) NO
6. Were custody papers sealed in a Ziploc™ bag and taped inside to the lid? ..... (YES) NO
7. Were entries on custody papers completed? (YES) NO . If no, give details on back
8. Turnaround time included? ..... YES (NO)
9. Did you sign custody papers in the appropriate place? ..... (YES) NO
10. Was project identifiable from custody papers? If YES, enter project name at the top of this form. . (YES) NO

B. SAMPLE CHECK-IN PHASE: Date samples were checked-in: 5-20-92 by (all those involved must sign below):

(print) James Cash (sign) James Cash

11. Describe packing: Packed in Blue Ice/A Stacked
*12. If required, was enough ice used? (temperature maintained correctly)? ..... (YES) NO
13. Were all bottles sealed in separate plastic bags? ..... YES (NO)
*14. Did all bottles arrive unbroken and in good condition? ..... (YES) NO
15. Were all bottle labels complete (ID, date, time, signature, preservative, etc.)? ..... (YES) NO
16. Did all bottle labels agree with custody papers? If NO, indicate discrepancies on back. ..... (YES) NO
17. Were correct containers used for the tests indicated? ..... (YES) NO
*18. Were correct preservatives used when required? ..N/A..... YES NO
*19. pH of samples maintained correctly as required? If NO, list by ID# N/A . YES NO
20. Was a sufficient amount of sample sent for tests indicated? ..... (YES) NO
*21. Bubbles present in VOA vials? If YES, list by ID#: N/A . YES NO
22. Was lab. project manager called and status discussed? If YES, give details on the back of this form. YES (NO)
23. Who was called? _____ By whom? _____ on (date) _____
24. Second Party Review: _____

* Sample rejection criteria

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CHAIN OF CUSTODY RECORD

WOODWARD–CLYDE CONSULTANTS
2318 MILLPARK DR.
MARYLAND HEIGHTS, MISSOURI 63043
314–429–0100

SHEET 1 of 2

PROJECT NO.: 89MC114V

PROJECT NAME: NL/TARACORP SUPERFUND SITE PREDESIGN FIELD INVESTIGATION

SAMPLER'S: (Signatures) [illegible]

	DATE	TIME	SAMPLE I.D. NUMBER (Matrix / Location / Boring / Depth / Sample Type)	NO. OF CONTAINERS	Total Lead 4oz. poly jar Cool to 4°C	TCLP – Lead 4oz. poly jar Cool to 4°C	Geotechnical glass or poly jar	REMARKS
377	5/19	807	S GR1419 1 00A 00L		✓			
378		810	S GR1419 1 00B 00L					
379		812	S GR1419 1 00C 00L					
380		815	S GR1419 2 00A 00L					
381		817	S GR1419 2 00B 00L					
382		819	S GR1419 2 00C 00L					
383		900	S MC1005 1 00A 00L					
384		903	S MC1005 1 00B 00L					
385		905	S MC1005 1 00C 00L					
386		908	S MC1005 2 00A 00L					
387		910	S MC1005 2 00B 00L					
388		912	S MC1005 2 00C 00L					
389		942	S EL1713 1 00A 00L					
390		944	S EL1713 1 00B 00L					
391		946	S EL1713 1 00C 00L					
392		942	S EL1713 1 00A 01D					
393		944	S EL1713 1 00B 01D					
394		946	S EL1713 1 00C 01D					
395		955	S EL1713 2 00A 00L					
396		957	S EL1713 2 00B 00L					
397		959	S EL1713 2 00C 00L					
~~398~~			~~S EL1213 1 00A 00L~~					
~~399~~			~~S EL1213 1 00B 00L~~					

RELINQUISHED BY: (Signature)	DATE / TIME	RECEIVED BY: (Signature)	DATE / TIME
[illegible]	5/19/92 1100	[illegible]	5/19/92 1100
RELINQUISHED BY: (Signature)	DATE / TIME	RECEIVED AT LAB BY: (Signature)	DATE / TIME
[illegible]	5/19/92 1700	[illegible]	5-19-92 5pm
METHOD OF SHIPMENT:		AIRBILL NO: (If Applicable)	

CHAIN OF CUSTODY RECORD

WOODWARD-CLYDE CONSULTANTS
2318 MILLPARK DR.
MARYLAND HEIGHTS, MISSOURI 63043
314-429-0100

SHEET 2 of 2

PROJECT NO.: 89MC114V

PROJECT NAME: NL/TARACORP SUPERFUND SITE PREDESIGN FIELD INVESTIGATION

SAMPLER'S: (Signatures) M Wallace

	DATE	TIME	SAMPLE I.D. NUMBER: Matrix	Location	Boring	Depth	Sample Type		NO. OF CONTAINERS	CONTAINER DESCRIPTION/ ANALYSES REQUESTED: Total Lead 4oz. poly jar Cool to 4°C	TCLP - Lead 4oz. poly jar Cool to 4°C	Geotechnical glass or poly jar	REMARKS
398	5/19/92	11:05	S	ET1312	1	00A	00L	✓	1	X			
399		11:07	S	ET1312	1	00B	00L	✓	1	X			
400		11:09	S	ET1312	2	00A	00L	✓	1	X			
401		13:50	S	CA0108	1	00A	00T	✓	1		X		
402		13:52	S	CA0108	1	00C	00L	✓	1	X			
403		14:35	S	CA0108	2	0AB	00L	✓	1	X			
404		14:36	S	CA0108	2	00C	00L	✓	1	X			
405		15:17	S	CA0111	2	0AB	00L	✓	1	X			
406		15:19	S	CA0111	1	0AB	00L	✓	1	X			
			S										
			S										
			S										
			S										
			S										
			S										
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			S										
			S										
			S										
			S										
			S										
			S										
			S										

RELINQUISHED BY: (Signature)	DATE / TIME	RECEIVED BY: (Signature)	DATE / TIME
[illegible]	5/19/92 1100	Kim [illegible]	5/19/92 16
RELINQUISHED BY: (Signature)	DATE / TIME	RECEIVED AT LAB BY: (Signature)	DATE / TIME
Kim [illegible]	5/19/92 1700	[illegible]	5-19 JF
METHOD OF SHIPMENT:		AIRBILL NO: (If Applicable)	

3

COOLER/SAMPLE RECEIPT FORM

Rev.01 10/7/91

ESE Cooler # _____
Client Cooler # ✓
No Cooler _____

Project: Woodward Clyde Date/Time Received: 5-19-92 1700

USE OTHER SIDE OF THIS FORM TO NOTE FURTHER DETAILS CONCERNING CHECK-IN PROBLEMS AND TO SPECIFY AND DESCRIBE ANY ACTION(S) REGARDING THE RESOLUTION(S) OF PROBLEMS. IF SHIPMENT WAS ACCEPTED AND IF REQUESTED, NOTE ON BACK THE ADDRESS WHERE THE EMPTY COOLER WAS RETURNED AND LIKEWISE IF THE SHIPMENT WAS REJECTED.

IF INFORMATION IS MISSING OR THERE ARE PROBLEMS NOTIFY LABORATORY PROJECT MANAGER SO THAT HE CAN NOTIFY THE PROJECT MANAGER IMMEDIATELY.

A. PRELIMINARY EXAMINATION PHASE: Date/Time cooler/sample was opened and checked: 5-20-92

by (print) James Cash (sign) James Cash

1. List courier delivering samples: Client ..... YES NO
2. Did cooler come with a shipping slip (air bill, etc.)? ..... YES (NO)
   If YES, attach and enter carrier and air bill number here: _____
3. Were custody seals on outside of cooler? ..... (YES) NO
   If YES, how many and where: 2 on Front
   If YES, enter the following: seal date: 5-19-92 seal name: M Wallace
4. Were custody seals unbroken and intact at the date and time of arrival? ..... (YES) NO
5. Was chain-of-custody provided? ..... (YES) NO
6. Were custody papers sealed in a Ziploc™ bag and taped inside to the lid? ..... (YES) NO
7. Were entries on custody papers completed? (YES) NO . If no, give details on back
8. Turnaround time included? ..... YES (NO)
9. Did you sign custody papers in the appropriate place? ..... (YES) NO
10. Was project identifiable from custody papers? If YES, enter project name at the top of this form. . (YES) NO

B. SAMPLE CHECK-IN PHASE: Date samples were checked-in: 5-20-92 by (all those involved must sign below):
(print) James Cash (sign) James Cash

11. Describe packing: Packed in the Ice & Stacked
*12. If required, was enough ice used? (temperature maintained correctly)? ..... (YES) NO
13. Were all bottles sealed in separate plastic bags? ..... YES (NO)
*14. Did all bottles arrive unbroken and in good condition? ..... (YES) NO
15. Were all bottle labels complete (ID, date, time, signature, preservative, etc.)? ..... (YES) NO
16. Did all bottle labels agree with custody papers? If NO, indicate discrepancies on back. ..... (YES) NO
17. Were correct containers used for the tests indicated? ..... (YES) NO
*18. Were correct preservatives used when required? NA ..... YES NO
*19. pH of samples maintained correctly as required? If NO, list by ID# NA . YES NO
20. Was a sufficient amount of sample sent for tests indicated? ..... (YES) NO
*21. Bubbles present in VOA vials? If YES, list by ID#: NA . YES NO
22. Was lab. project manager called and status discussed? If YES, give details on the back of this form. YES (NO)
23. Who was called? _____ By whom? _____ on (date) _____
24. Second Party Review: _____

* Sample rejection criteria

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CHAIN OF CUSTODY RECORD

WWC5

WOODWARD–CLYDE CONSULTANTS
2318 MILLPARK DR.
MARYLAND HEIGHTS, MISSOURI 63043
314–429–0100

PROJECT NO.: 89MC114V

PROJECT NAME: NL/TARACORP SUPERFUND SITE PREDESIGN FIELD INVESTIGATION

SAMPLER'S: (Signatures)

	DATE	TIME	SAMPLE I.D. NUMBER: Matrix	Location	Boring	Depth	Sample Type		NO. OF CONTAINERS	Total Lead 4oz. poly jar Cool to 4°C	TCLP – Lead 4oz. poly jar Cool to 4°C	Geotechnical glass or poly jar	REMARKS
'07	5/20/92	8:50	S	OR0022	1	0AB	00L	✓	1	X			
'108		8:50	S	OR0022	1	0AB	00T	✓	1		X	WWCR	
'109		8:55	S	OR0022	1	00C	00L	✓	1	X			
'110		9:25	S	OR0023	1	0AB	00L	✓	1	X			
'111		9:25	S	OR0023	1	0AB	00T	✓	1		X		
'112		9:35	S	OR0023	1	00C	00L	✓	1	X			
'113		10:10	S	OR0024	1	0AB	00T	✓	1		X		
	KK	~~10:10~~	~~S~~	~~OR0024~~	~~1~~	~~0AB~~	~~0TR~~		~~1~~		~~X~~		~~MW~~
'114		10:10	S	OR0024	1	0AB	00L	✓	1	X			
'115		10:10	S	OR0024	1	0AB	0LD	✓	1	X			
'116		10:15	S	OR0024	1	00C	00L	✓	1	X			
'117		10:20	S	OR0024	1	00D	00L	✓	1	X			
'118		12:20	S	TE0203	1	0AB	00L	✓	1	X			
'119		12:25	S	TE0203	1	00C	00L	✓	1	X			
'120		12:25	S	TE0203	1	00C	00T	✓	1	X			
'121		12:20	S	TE0203	1	0AB	00T	✓	1	X			
'122		12:30	S	TE0203	1	00D	00L	✓	1	X			
'123		12:50	S	TE0203	2	0AB	00L	✓	1	X			
'124		12:50	S	TE0203	2	0AB	00T	✓	1		X		
'125		13:00	S	TE0203	2	00C	00L	✓	1	X	~~X~~		
'126		13:03	S	TE0203	2	0AB	00L	✓	1	X			
'127		13:15	S	TE0203	3	0AB	00L	✓	1	X			
'128		13:15	S	TE0203	3	0AB	0LD	✓	1	X			

RELINQUISHED BY: (Signature)	DATE / TIME	RECEIVED BY: (Signature)	DATE / TIME
[illegible]	5/20/92 1600	[illegible]	5/20/92 1600
RELINQUISHED BY: (Signature)	DATE / TIME	RECEIVED AT LAB BY: (Signature)	DATE / TIME
		[illegible]	5/20/92 1700
METHOD OF SHIPMENT:		AIRBILL NO: (If Applicable)	

CHAIN OF CUSTODY RECORD

WOODWARD-CLYDE CONSULTANTS
2318 MILLPARK DR.
MARYLAND HEIGHTS, MISSOURI 63043
314-429-0100

SHEET 2 of 2

PROJECT NO.: 89MC114V

PROJECT NAME: NL/TARACORP SUPERFUND SITE PREDESIGN FIELD INVESTIGATION

SAMPLER'S: (Signatures) M Walker

	DATE	TIME	SAMPLE I.D. NUMBER: Matrix	Location	Boring	Depth	Sample Type		NO. OF CONTAINERS	Total Lead 4oz. poly jar Cool to 4°C	TCLP - Lead 4oz. poly jar Cool to 4°C	Geotechnical glass or poly jar	REMARKS
129	5/20/92	13:15	S	IE0203	3	0AB	00T	✓	1		X		
430		13:20	S	IE0203	3	00C	00L	✓	1	X			
131		13:23	S	IE0203	3	00D	00L	✓	1	X			
432		13:45	S	IE0203	4	0AB	00L	✓	1	X			
133		13:45	S	IE0203	4	0AB	00T	✓	1		X		
434		13:50	S	IE0203	4	00C	00L	✓	1	X			
135		13:55	S	IE0203	4	00D	00L	✓	1	X			
136		14:23	S	H10100	1	0AB	00L	✓	1	X			
137		14:23	S	H10100	1	0AB	00T	✓	1		X		
138		14:24	S	H10100	1	00C	00L	✓	1	X			
439		14:25	S	H10100	1	00D	00L	✓	1	X			
140		14:35	S	H10100	2	0AB	00L	✓	1	X			
141		14:35	S	H10100	2	0AB	00T	✓	1		X		
142		14:40	S	H10100	2	00C	00L	✓	1	X			
			S										
			S										
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RELINQUISHED BY: (Signature)	DATE / TIME	RECEIVED BY: (Signature)	DATE / TIME
[illegible]	5/20/92 1600	[illegible]	5/20/92 1600
RELINQUISHED BY: (Signature)	DATE / TIME	RECEIVED AT LAB BY: (Signature)	DATE / TIME
		[illegible]	5-20-92/1700
METHOD OF SHIPMENT:		AIRBILL NO: (If Applicable)	

COOLER/SAMPLE RECEIPT FORM

Rev.01 10/7/91

ESE Cooler # _____
Client Cooler # ✓
No Cooler _____

Project: Woodward Clyde Date/Time Received: 5-20-92 1700

USE OTHER SIDE OF THIS FORM TO NOTE FURTHER DETAILS CONCERNING CHECK-IN PROBLEMS AND TO SPECIFY AND DESCRIBE ANY ACTION(S) REGARDING THE RESOLUTION(S) OF PROBLEMS. IF SHIPMENT WAS ACCEPTED AND IF REQUESTED, NOTE ON BACK THE ADDRESS WHERE THE EMPTY COOLER WAS RETURNED AND LIKEWISE IF THE SHIPMENT WAS REJECTED.

IF INFORMATION IS MISSING OR THERE ARE PROBLEMS NOTIFY LABORATORY PROJECT MANAGER SO THAT HE CAN NOTIFY THE PROJECT MANAGER IMMEDIATELY.

A. PRELIMINARY EXAMINATION PHASE: Date/Time cooler/sample was opened and checked: 5-21-92 1400

by (print) James Cash (sign) James Cash

1. List courier delivering samples Client ... YES NO
2. Did cooler come with a shipping slip (air bill, etc.)? ... YES (NO)
   If YES, attach and enter carrier and air bill number here: _____
3. Were custody seals on outside of cooler? ... (YES) NO
   If YES, how many and where: 2 on Front + Back
   If YES, enter the following: seal date: 5-20-92 seal name: K JACOBS
4. Were custody seals unbroken and intact at the date and time of arrival? ... (YES) NO
5. Was chain-of-custody provided? ... (YES) NO
6. Were custody papers sealed in a Ziploc™ bag and taped inside to the lid? ... (YES) NO
7. Were entries on custody papers completed? (YES) NO . If no, give details on back
8. Turnaround time included? ... YES (NO)
9. Did you sign custody papers in the appropriate place? ... (YES) NO
10. Was project identifiable from custody papers? If YES, enter project name at the top of this form. ... (YES) NO

B. SAMPLE CHECK-IN PHASE: Date samples were checked-in: 5-21-92 by (all those involved must sign below):

(print) James Cash (sign) James Cash

11. Describe packing: Stacked in cooler
*12. If required, was enough ice used? (temperature maintained correctly)? ... YES (NO)
13. Were all bottles sealed in separate plastic bags? ... YES (NO)
*14. Did all bottles arrive unbroken and in good condition? ... (YES) NO
15. Were all bottle labels complete (ID, date, time, signature, preservative, etc.)? ... (YES) NO
16. Did all bottle labels agree with custody papers? If NO, indicate discrepancies on back. ... (YES) NO
17. Were correct containers used for the tests indicated? ... (YES) NO
*18. Were correct preservatives used when required? NA ... YES NO
*19. pH of samples maintained correctly as required? If NO, list by ID# NA . YES NO
20. Was a sufficient amount of sample sent for tests indicated? ... (YES) NO
*21. Bubbles present in VOA vials? If YES, list by ID#: NA . YES NO
22. Was lab. project manager called and status discussed? If YES, give details on the back of this form. YES (NO)
23. Who was called? _____ By whom? _____ on (date) _____
24. Second Party Review: _____

* Sample rejection criteria

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CHAIN OF CUSTODY RECORD

WWC5

WOODWARD-CLYDE CONSULTANTS
2318 MILLPARK DR.
MARYLAND HEIGHTS, MISSOURI 63043
314-429-0100

SHEET 1 of 2

(X) Glass in sample

PROJECT NO.: 89MC114V

PROJECT NAME: NL/TARACORP SUPERFUND SITE PREDESIGN FIELD INVESTIGATION

SAMPLER'S: (Signatures) K Hedr / M Mallie

	DATE	TIME	SAMPLE I.D. NUMBER (Matrix / Location / Boring / Depth / Sample Type)	NO. OF CONTAINERS	Total Lead 4oz. poly jar Cool to 4°C	TCLP - Lead 4oz. poly jar Cool to 4°C	Geotechnical glass or poly jar	REMARKS
43	5/21	845	S IE0208 1 0AB00L ✓	1	✓			
44		845	S IE0208 1 0AB00I ✓			✓		Pulverize Sample
45		847	S IE0208 1 00C00L ✓		✓			
46		907	S IE0208 2 0AB00L ✓		✓			Glass in Sample
47		907	S IE0208 2 0AB0CI ✓			✓		Pulverize Sample
		~~907~~	~~S IE0208 2 0AB0CQ~~					
48		909	S IE0208 2 00C00L ✓		✓			
49		930	S IE0208 3 0AB00L ✓		✓			
50		932	S IE0208 3 00C00L ✓		✓			
51		1020	S IE0208 4 0AB00L ✓		✓			
52		1020	S IE0208 4 0AB0AI ✓			✓		Pulverize Sample
53		1023	S IE0208 4 00C00L ✓		✓			
54		1055	S IE0208 5 0AB00L ✓		✓			
55		1055	S IE0208 5 0AB0AI ✓			✓		Pulverize Sample
56		1057	S IE0208 5 00C00L ✓		✓			
57		1353	S HA0205 1 00D00L ✓		✓			
58		1354	S HA0205 1 00E00L ✓		✓			
59		1437	S HA0205 2 00D00L ✓		✓			
60		1439	S HA0205 2 00D0LD ✓		✓			
61		1434	S HA0205 2 00E00L ✓		✓			
62		1437	S HA0205 2 00F00L ✓		✓			
63		1527	S HA0205 3 00D00L ✓		✓			
64		1527	S HA0205 3 00D0CI ✓			✓		Pulverize Sample

RELINQUISHED BY: (Signature)	DATE / TIME	RECEIVED BY: (Signature)	DATE / TIME
[illegible]	5/21/92 1700	K Hedr	5/21/92 1700
RELINQUISHED BY: (Signature)	DATE / TIME	RECEIVED AT LAB BY: (Signature)	DATE / TIME
K Hedr	5/21/92 1810	[illegible]	5-21-92 [illegible]
METHOD OF SHIPMENT:		AIRBILL NO: (If Applicable)	

CHAIN OF CUSTODY RECORD

WOODWARD-CLYDE CONSULTANTS
2318 MILLPARK DR.
MARYLAND HEIGHTS, MISSOURI 63043
314-429-0100

SHEET 2 of 2

(1) Glass in Sample

PROJECT NO.:	PROJECT NAME:
89MC114V	NL/TARACORP SUPERFUND SITE PREDESIGN FIELD INVESTIGATION

SAMPLER'S: (Signatures) [signature] [signature]

	DATE	TIME	SAMPLE I.D. NUMBER: Matrix	Location	Boring	Depth	Sample Type		NO. OF CONTAINERS	CONTAINER DESCRIPTION/ ANALYSES REQUESTED: Total Lead 4oz. poly jar Cool to 4°C	TCLP - Lead 4oz. poly jar Cool to 4°C	Geotechnical glass or poly jar	REMARKS
65	5/21	1529	S	HA0205	3	00D	0TD	✓	1		✓		(1) pulverize sa
66		1530	S	HA0205	3	00E	00L	✓		✓			(1)
67		1530	S	HA0205	3	00E	00T	✓			✓		(1) pulverize sa
			~~S~~	~~HA0205~~	~~3~~	~~00E~~	~~0LQ~~			✓	KI		
68		1523	S	HA0205	3	0AC	00L	✓		✓			
			S										
			S										
			S										
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RELINQUISHED BY: (Signature)	DATE / TIME	RECEIVED BY: (Signature)	DATE / TIME
[signature]	[illegible]	[signature]	5/21/92 17
RELINQUISHED BY: (Signature)	DATE / TIME	RECEIVED AT LAB BY: (Signature)	DATE / TIME
[signature]	5/21/92 1810	[signature]	5-21-92 6
METHOD OF SHIPMENT:		AIRBILL NO: (If Applicable)	

COOLER/SAMPLE RECEIPT FORM

Rev.01 10/7/91

ESE Cooler # _____
Client Cooler # ✓
No Cooler _____

Project: Woodward Clyde Date/Time Received: 5-27-92 1830

USE OTHER SIDE OF THIS FORM TO NOTE FURTHER DETAILS CONCERNING CHECK-IN PROBLEMS AND TO SPECIFY AND DESCRIBE ANY ACTION(S) REGARDING THE RESOLUTION(S) OF PROBLEMS. IF SHIPMENT WAS ACCEPTED AND IF REQUESTED, NOTE ON BACK THE ADDRESS WHERE THE EMPTY COOLER WAS RETURNED AND LIKEWISE IF THE SHIPMENT WAS REJECTED.

IF INFORMATION IS MISSING OR THERE ARE PROBLEMS NOTIFY LABORATORY PROJECT MANAGER SO THAT HE CAN NOTIFY THE PROJECT MANAGER IMMEDIATELY.

A. PRELIMINARY EXAMINATION PHASE: Date/Time cooler/sample was opened and checked: 5-29-92 1530

by (print) James Cash (sign) James Cash

1. List courier delivering samples Client . . . . . YES NO
2. Did cooler come with a shipping slip (air bill, etc.)? . . . . . YES (NO)
   If YES, attach and enter carrier and air bill number here: _____
3. Were custody seals on outside of cooler? . . . . . YES (NO)
   If YES, how many and where: _____
   If YES, enter the following: seal date: _____ seal name: _____
4. Were custody seals unbroken and intact at the date and time of arrival? N.A. . . . . YES NO
5. Was chain-of-custody provided? . . . . . (YES) NO
6. Were custody papers sealed in a Ziploc™ bag and taped inside to the lid? . . . . . (YES) NO
7. Were entries on custody papers completed? (YES) NO . If no, give details on back
8. Turnaround time included? . . . . . YES (NO)
9. Did you sign custody papers in the appropriate place? . . . . . (YES) NO
10. Was project identifiable from custody papers? If YES, enter project name at the top of this form. . (YES) NO

B. SAMPLE CHECK-IN PHASE: Date samples were checked-in: 5-29-92 by (all those involved must sign below):
(print) James Cash (sign) James Cash

11. Describe packing: Stacked in Cooler
*12. If required, was enough ice used? (temperature maintained correctly)? . . . . . YES (NO)
13. Were all bottles sealed in separate plastic bags? . . . . . YES (NO)
*14. Did all bottles arrive unbroken and in good condition? . . . . . (YES) NO
15. Were all bottle labels complete (ID, date, time, signature, preservative, etc.)? . . . . . (YES) NO
16. Did all bottle labels agree with custody papers? If NO, indicate discrepancies on back. . . . . (YES) NO
17. Were correct containers used for the tests indicated? . . . . . (YES) NO
*18. Were correct preservatives used when required? N.A. . . . . YES NO
*19. pH of samples maintained correctly as required? If NO, list by ID# N.A. . YES NO
20. Was a sufficient amount of sample sent for tests indicated? . . . . . (YES) NO
*21. Bubbles present in VOA vials? If YES, list by ID#: N.A. . YES NO
22. Was lab. project manager called and status discussed? If YES, give details on the back of this form. YES (NO)
23. Who was called? _____ By whom? _____ on (date) _____
24. Second Party Review: _____

* Sample rejection criteria

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CHAIN OF CUSTODY RECORD

WWC5

WOODWARD–CLYDE CONSULTANTS
2318 MILLPARK DR.
MARYLAND HEIGHTS, MISSOURI 63043
314–429–0100

SHEET 1 of 2

PROJECT NO.: 89MC114V

PROJECT NAME: NL/TARACORP SUPERFUND SITE PREDESIGN FIELD INVESTIGATION

SAMPLER'S: (Signatures)

	DATE	TIME	Matrix	Location	Boring	Depth	Sample Type	NO. OF CONTAINERS	Total Lead 4oz. poly jar Cool to 4°C	TCLP – Lead 4oz. poly jar Cool to 4°C	Geotechnical glass or poly jar	REMARKS
34	5/26	10:00	S	WS1201	1	00A	00L	1	✓			
85		1003	S	WS1201	1	00B	00L	1				
86		1005	S	WS1201	1	00C	00L	1				
787		10:02	S	WS1201	1	00A	0LD	1				
88		10:04	S	WS1201	1	00B	0LD	1				
789		1006	S	WS1201	1	00C	0LD	1				
70		1010	S	WS1201	2	00A	00L	1				
71		1012	S	WS1201	2	00B	00L	1				
72		1013	S	WS1201	2	00C	00L	1				
73		1022	S	WS1201	3	00A	00L	1				
794		1024	S	WS1201	3	00B	00L	1				
75	10:26	~~1031~~	S	WS1201	3	00C	00L	1				
76		1031	S	WS1201	4	00A	00L	1				
77		10:32	S	WS1201	4	00B	00L	1				
798		1035	S	WS1201	4	00C	00L	1				
79		1037	S	WS1201	5	00A	00L	1				
00		103[illegible]	S	WS1201	5	00B	00L	1				
1		10:40	S	WS1201	5	00C	00L	1				
2		1045	S	WS1201	6	00A	00L	1				
803		1047	S	WS1201	6	00B	00L	1				
14		1049	S	WS1201	6	00C	00L	1				
805		1052	S	WS1201	7	00A	00L	1				
06		1053	S	WS1201	7	00B	00L	1				

RELINQUISHED BY: (Signature)	DATE / TIME	RECEIVED BY: (Signature)	DATE / TIME
[illegible]	[illegible]	[illegible]	5/[illegible]
RELINQUISHED BY: (Signature)	DATE / TIME	RECEIVED AT LAB BY: (Signature)	DATE / TIME
		James Cook	5-26-92 10:30

METHOD OF SHIPMENT:

AIRBILL NO: (If Applicable)

CHAIN OF CUSTODY RECORD

WOODWARD-CLYDE CONSULTANTS
2318 MILLPARK DR.
MARYLAND HEIGHTS, MISSOURI 63043
314-429-0100

SHEET 2 of 3

PROJECT NO.: 89MC114V

PROJECT NAME: NL/TARACORP SUPERFUND SITE PREDESIGN FIELD INVESTIGATION

SAMPLER'S: (Signatures) C. Pavlik / K. [illegible]

	DATE	TIME	SAMPLE I.D. NUMBER: Matrix	Location	Boring	Depth	Sample Type		NO. OF CONTAINERS	CONTAINER DESCRIPTION/ ANALYSES REQUESTED: Total Lead 4oz. poly jar Cool to 4°C	TCLP - Lead 4oz. poly jar Cool to 4°C	Geotechnical glass or poly jar	REMARKS
07	5/24	10:56	s	WS1201	7	00C	00L	✓	1	X			
508	92	11:05	s	WS1201	8	00A	00L	✓					
09		11:06	s	WS1201	8	00B	00L	✓					
510		11:08	s	WS1201	8	00C	00L	✓					
11		11:11	s	WS1201	9	00A	00L	✓					
512		11:12	s	WS1201	9	00B	00L	✓					
13		1314	s	WS1201	7	00C	00L	✓					
514		1337	s	WS1201	A	00A	00L	✓					
15		1338	s	WS1201	A	00B	00L	✓					
16		1340	s	WS1201	A	00C	00L	✓					
517		1342	s	WS1201	B	00A	00L	✓					
18		1344	s	WS1201	B	00B	00L	✓					
519		1346	s	WS1201	B	00C	00L	✓					
20		1348	s	WS1201	C	00A	00L	✓					
521		1350	s	WS1201	C	00B	00L	✓					
22		1352	s	WS1201	C	00C	00L	✓					
23		1354	s	WS1201	D	00A	00L	✓					
24		1356	s	WS1201	D	00B	00L	✓					
25		1358	s	WS1201	D	00C	00L	✓					
526		1400	s	WS1201	E	00A	00L	✓					
27		1402	s	WS1201	E	00B	00L	✓					
528		1404	s	WS1201	E	00C	00L	✓					
29		1406	s	WS1201	F	00A	00L	✓					

RELINQUISHED BY: (Signature)	DATE / TIME	RECEIVED BY: (Signature)	DATE / TIME
[illegible]	[illegible]	[illegible]	5/26/92 [illegible]
RELINQUISHED BY: (Signature)	DATE / TIME	RECEIVED AT LAB BY: (Signature)	DATE / TIME
		James [illegible]	5-26-92 1630
METHOD OF SHIPMENT:		AIRBILL NO: (If Applicable)	

CHAIN OF CUSTODY RECORD

WOODWARD-CLYDE CONSULTANTS
2318 MILLPARK DR.
MARYLAND HEIGHTS, MISSOURI 63043
314-429-0100

SHEET 3 of 3

PROJECT NO.: 89MC114V

PROJECT NAME: NL/TARACORP SUPERFUND SITE PREDESIGN FIELD INVESTIGATION

SAMPLER'S: (Signatures)

	DATE	TIME	SAMPLE I.D. NUMBER: Matrix	Location	Boring	Depth	Sample Type		NO. OF CONTAINERS	Total Lead 4oz. poly jar Cool to 4°C	TCLP - Lead 4oz. poly jar Cool to 4°C	Geotechnical glass or poly jar	REMARKS
30	5/26/92	1408	S	WS1201	F	00B	00L	✓	1	X			
31		1410	S	WS1201	F	00C	00L	✓	1				
32		1412	S	WS1201	G	00A	00L	✓					
533		1414	S	WS1201	G	00B	00L	✓					
34		1416	S	WS1201	G	00C	00L	✓					
535		1418	S	WS1201	H	00A	00L	✓					
36		1420	S	WS1201	H	00B	00L	✓					
37		1422	S	WS1201	H	00C	00L	✓					
538		1442	S	WS1201	J	00A	00L	✓					
39		1444	S	WS1201	J	00B	00L	✓					
540		1446	S	WS1201	J	00C	00L	✓					
11		1448	S	WS1201	K	00A	00L	✓					
42		1450	S	WS1201	K	00B	00L	✓					
13		1452	S	WS1201	K	00C	00L	✓					
544		1454	S	WS1201	L	00A	00L	✓					
15		1456	S	WS1201	L	00B	00L	✓					
546		1458	S	WS1201	L	00C	00L	✓					
47		1500	S	WS1201	M	00A	00L	✓					
48		1502	S	WS1201	M	00B	00L	✓					
549		1504	S	WS1201	M	00C	00L	✓					
			S										
			S										
			S										

RELINQUISHED BY: (Signature)	DATE / TIME	RECEIVED BY: (Signature)	DATE / TIME
[illegible]	[illegible]	[illegible]	[illegible]
RELINQUISHED BY: (Signature)	DATE / TIME	RECEIVED AT LAB BY: (Signature)	DATE / TIME
		[illegible]	5/26/92 1630
METHOD OF SHIPMENT:		AIRBILL NO: (If Applicable)	

COOLER/SAMPLE RECEIPT FORM

Rev.01 10/7/91

ESE Cooler # _____
Client Cooler # ✓
No Cooler _____

Project: Woodward Clyde Date/Time Received: 5-26-92 1630

USE OTHER SIDE OF THIS FORM TO NOTE FURTHER DETAILS CONCERNING CHECK-IN PROBLEMS AND TO SPECIFY AND DESCRIBE ANY ACTION(S) REGARDING THE RESOLUTION(S) OF PROBLEMS. IF SHIPMENT WAS ACCEPTED AND IF REQUESTED, NOTE ON BACK THE ADDRESS WHERE THE EMPTY COOLER WAS RETURNED AND LIKEWISE IF THE SHIPMENT WAS REJECTED.

IF INFORMATION IS MISSING OR THERE ARE PROBLEMS NOTIFY LABORATORY PROJECT MANAGER SO THAT HE CAN NOTIFY THE PROJECT MANAGER IMMEDIATELY.

A. PRELIMINARY EXAMINATION PHASE: Date/Time cooler/sample was opened and checked: 5-27-92 850

by (print) James Cash (sign) James Cash

1. List courier delivering samples . Client . . . . . YES NO
2. Did cooler come with a shipping slip (air bill, etc.)? . . . . . YES (NO)
   If YES, attach and enter carrier and air bill number here: _____
3. Were custody seals on outside of cooler? . . . . . (YES) NO
   If YES, how many and where: 2 on FRONT
   If YES, enter the following: seal date: 5-26-92 , seal name: Kim
4. Were custody seals unbroken and intact at the date and time of arrival? . . . . . (YES) NO
5. Was chain-of-custody provided? . . . . . (YES) NO
6. Were custody papers sealed in a Ziploc™ bag and taped inside to the lid? . . . . . (YES) NO
7. Were entries on custody papers completed? (YES) NO . If no, give details on back
8. Turnaround time included? . . . . . YES (NO)
9. Did you sign custody papers in the appropriate place? . . . . . (YES) NO
10. Was project identifiable from custody papers? If YES, enter project name at the top of this form. . (YES) NO

B. SAMPLE CHECK-IN PHASE: Date samples were checked-in: 5-27-92 by (all those involved must sign below):
(print) James Cash (sign) James Cash

11. Describe packing: packed in Blue Icet stacked
*12. If required, was enough ice used? (temperature maintained correctly)? . . . . . (YES) NO
13. Were all bottles sealed in separate plastic bags? . . . . . YES (NO)
*14. Did all bottles arrive unbroken and in good condition? . . . . . (YES) NO
15. Were all bottle labels complete (ID, date, time, signature, preservative, etc.)? . . . . . (YES) NO
16. Did all bottle labels agree with custody papers? If NO, indicate discrepancies on back. . . . . (YES) NO
17. Were correct containers used for the tests indicated? . . . . . (YES) NO
*18. Were correct preservatives used when required? N/A . . . . . YES NO
*19. pH of samples maintained correctly as required? If NO, list by ID# N/A . YES NO
20. Was a sufficient amount of sample sent for tests indicated? . . . . . (YES) NO
*21. Bubbles present in VOA vials? If YES, list by ID#: N/A . YES NO
22. Was lab. project manager called and status discussed? If YES, give details on the back of this form. YES (NO)
23. Who was called? _____ By whom? _____ on (date) _____
24. Second Party Review: _____

* Sample rejection criteria

W:\WP\CHEMCOM\CRF.01

CHAIN OF CUSTODY RECORD

WOODWARD-CLYDE CONSULTANTS
2318 MILLPARK DR.
MARYLAND HEIGHTS, MISSOURI 63043
314-429-0100

SHEET 3 of 4

PROJECT NO.: 89MC114V

PROJECT NAME: NL/TARACORP SUPERFUND SITE PREDESIGN FIELD INVESTIGATION

SAMPLER'S: (Signatures)

	DATE	TIME	SAMPLE I.D. NUMBER (Matrix / Location / Boring / Depth / Sample Type)	NO. OF CONTAINERS	CONTAINER DESCRIPTION/ ANALYSES REQUESTED: Total Lead 4oz. Poly jar Cool to 4°C	TCLP - Lead 4oz. Poly jar Cool to 4°C	Geotechnical glass or poly jar	REMARKS
75	5/27	1458	S NF1500 2 02C00L ✓	1	✓			
76		1500	S NF1500 3 02A00L ✓	1	✓			
77		1502	S NF1500 3 02B00L ✓	1	✓			
78		1504	S NF1500 3 02C00L ✓	1	✓			
79		1506	S NF1500 4 02A00L ✓	1	✓			
80		1508	S NF1500 4 02B00L ✓	1	✓			
81		1510	S NF1500 4 02C00L ✓	1	✓			
82		1512	S NF1500 5 02A00L ✓	1	✓			
83		1513	S NF1500 5 02B00L ✓	1	✓			
84		1514	S NF1500 5 02C00L ✓	1	✓			
85		1546	S GS1013 1 00A00L ✓	1	✓			
86		1548	S GS1013 1 00B00L ✓	1	✓			
87		1550	S GS1013 1 00C00L ✓	1	✓			
88		1546	S GS1013 1 00A06D ✓	1	✓			
89		1548	S GS1013 1 00B06D ✓	1	✓			
90		1550	S GS1013 1 00C06D ✓	1	✓			
91		1552	S GS1013 2 02A00L ✓	1	✓			
92		1554	S GS1013 2 02B00L ✓	1	✓			
93		1556	S GS1013 2 02C00L ✓	1	✓			
94		1559	S GS1017 1 00A00L ✓	1	✓			
95		1601	S GS1017 1 00B00L ✓	1	✓			
96		1603	S GS1017 1 00C00L ✓	1	✓			
97		1605	S GS1017 2 02A00L ✓	1	✓			

RELINQUISHED BY: (Signature)	DATE / TIME	RECEIVED BY: (Signature)	DATE / TIME
[illegible]	[illegible]	[illegible]	5/27 1800
RELINQUISHED BY: (Signature)	DATE / TIME	RECEIVED AT LAB BY: (Signature)	DATE / TIME
[illegible]	5/27 1830	[illegible]	5/27 1830
METHOD OF SHIPMENT:		AIRBILL NO: (If Applicable)	

CHAIN OF CUSTODY RECORD

WOODWARD-CLYDE CONSULTANTS
2318 MILLPARK DR.
MARYLAND HEIGHTS, MISSOURI 63043
314-429-0100

SHEET 4 of 4

PROJECT NO.: 89MC114V

PROJECT NAME: NL/TARACORP SUPERFUND SITE PREDESIGN FIELD INVESTIGATION

SAMPLER'S: (Signatures) [illegible] K Clendo C. Parell

	DATE	TIME	SAMPLE I.D. NUMBER: Matrix	Location	Boring	Depth	Sample Type		NO. OF CONTAINERS	CONTAINER DESCRIPTION/ ANALYSES REQUESTED: Total Lead 4oz. poly jar Cool to 4°C	TCLP - Lead 4oz. poly jar Cool to 4°C	Geotechnical glass or poly jar	REMARKS
#18	5/27	1607	S	GR1017	2	00B	00L	✓	1	✓			
#19	9	1609	S	GR1017	2	00C	00L	✓	1	✓			
#20		1650	S	F01231	1	00A	00L	✓		✓			
#21		1651	S	F01231	1	00B	00L	✓					
#22		1653	S	F01231	1	00C	00L	✓					
#23		1656	S	F01231	2	00A	00L	✓					
#24		1657	S	F01231	2	00B	00L	✓					
#25		1659	S	F01231	2	00C	00L	✓					
#26		1704	S	ID1213	1	00A	00L	✓					
#27		1705	S	ID1213	1	00B	00L	✓					
#28		1706	S	ID1213	1	00C	00L	✓					
#29		1708	S	ID1213	2	00A	00L	✓					
#30		1709	S	ID1213	2	00B	00L	✓					
#31	✓	1710	S	ID1213	2	00C	00L	✓	✓	✓			
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RELINQUISHED BY: (Signature)	DATE / TIME	RECEIVED BY: (Signature)	DATE / TIME
[illegible]	[illegible]	[illegible]	5/27 1830
RELINQUISHED BY: (Signature)	DATE / TIME	RECEIVED AT LAB BY: (Signature)	DATE / TIME
[illegible]	5/27 1830	[illegible]	5/27 1830
METHOD OF SHIPMENT:		AIRBILL NO: (If Applicable)	

COOLER/SAMPLE RECEIPT FORM

Rev.01 10/7/91

ESE Cooler # no #
Client Cooler # _____
No Cooler _____

Project: Woodward Clyde Date/Time Received: 5-22-92 1700

USE OTHER SIDE OF THIS FORM TO NOTE FURTHER DETAILS CONCERNING CHECK-IN PROBLEMS AND TO SPECIFY AND DESCRIBE ANY ACTION(S) REGARDING THE RESOLUTION(S) OF PROBLEMS. IF SHIPMENT WAS ACCEPTED AND IF REQUESTED, NOTE ON BACK THE ADDRESS WHERE THE EMPTY COOLER WAS RETURNED AND LIKEWISE IF THE SHIPMENT WAS REJECTED.

IF INFORMATION IS MISSING OR THERE ARE PROBLEMS NOTIFY LABORATORY PROJECT MANAGER SO THAT HE CAN NOTIFY THE PROJECT MANAGER IMMEDIATELY.

A. PRELIMINARY EXAMINATION PHASE: Date/Time cooler/sample was opened and checked: 5-26-92 1430

by (print) James Cash (sign) James Cash

1. List courier delivering samples Client ..... YES NO
2. Did cooler come with a shipping slip (air bill, etc.)? ..... YES (NO)
   If YES, attach and enter carrier and air bill number here: _____
3. Were custody seals on outside of cooler? ..... (YES) NO
   If YES, how many and where: 2 on Front
   If YES, enter the following: seal date: 5-22-92, seal name: Kim ?
4. Were custody seals unbroken and intact at the date and time of arrival? ..... (YES) NO
5. Was chain-of-custody provided? ..... (YES) NO
6. Were custody papers sealed in a Ziploc™ bag and taped inside to the lid? ..... (YES) NO
7. Were entries on custody papers completed? (YES) NO . If no, give details on back
8. Turnaround time included? ..... YES (NO)
9. Did you sign custody papers in the appropriate place? ..... (YES) NO
10. Was project identifiable from custody papers? If YES, enter project name at the top of this form. . (YES) NO

B. SAMPLE CHECK-IN PHASE: Date samples were checked-in: 5-26-92 by (all those involved must sign below):

(print) James Cash (sign) James Cash

11. Describe packing: Back Pad in Blue Ice + strapped
*12. If required, was enough ice used? (temperature maintained correctly)? ..... (YES) NO
13. Were all bottles sealed in separate plastic bags? ..... YES (NO)
*14. Did all bottles arrive unbroken and in good condition? ..... (YES) NO
15. Were all bottle labels complete (ID, date, time, signature, preservative, etc.)? ..... (YES) NO
16. Did all bottle labels agree with custody papers? If NO, indicate discrepancies on back. ..... (YES) NO
17. Were correct containers used for the tests indicated? ..... (YES) NO
*18. Were correct preservatives used when required? ... NA ..... YES NO
*19. pH of samples maintained correctly as required? If NO, list by ID# NA . YES NO
20. Was a sufficient amount of sample sent for tests indicated? ..... (YES) NO
*21. Bubbles present in VOA vials? If YES, list by ID#: NA . YES NO
22. Was lab. project manager called and status discussed? If YES, give details on the back of this form. YES (NO)
23. Who was called? _____ By whom? _____ on (date) _____
24. Second Party Review: _____

* Sample rejection criteria

W:\WP\CHEMCOM\CRF.01

CHAIN OF CUSTODY RECORD

WWC5

WOODWARD-CLYDE CONSULTANTS
2318 MILLPARK DR.
MARYLAND HEIGHTS, MISSOURI 63043
314-429-0100

SHEET 1 of 1

PROJECT NO.: 89MC114V

PROJECT NAME: NL/TARACORP SUPERFUND SITE PREDESIGN FIELD INVESTIGATION

SAMPLER'S: (Signatures) K Olesh, C. Pavelka

	DATE	TIME	SAMPLE I.D. NUMBER: Matrix	Location	Boring	Depth	Sample Type		NO. OF CONTAINERS	CONTAINER DESCRIPTION/ ANALYSES REQUESTED: Total Lead 4oz. poly jar Cool to 4°C	TCLP - Lead 4oz. poly jar Cool to 4°C	Geotechnical glass or poly jar	REMARKS
469	5/22	8:45	S	HA0203	1	0AC	00L	✓	1	X			
470		8:50	S	HA0203	1	00D	00L	✓	1	X			
471		9:25	S	HA0203	2	0AC	00L	✓	1	X			Cinders
472		9:30	S	HA0203	2	00D	00L	✓	1	X			
473		10:15	S	HA0203	3	00D	00L	✓	1	X			Cinders
474		10:15	S	HA0203	3	00D	0LD	✓	1	X			Cinders
475		10:15	S	HA0203	3	00D	00T	✓	1		X		Pulverize Sample - Cinders
476		10:20	S	HA0203	3	00E	00L	✓	1	X			Cinders
477		10:20	S	HA0203	3	00E	00T	✓	1		X		Pulverize Sample, Cinders
478		10:25	S	HA0203	3	00F	00L	✓	1	X			
479		11:10	S	HA0203	4	0AC	00L	✓	1	X			
480		11:13	S	HA0203	4	00D	00L	✓	1	X			Cinders
481		11:15	S	HA0203	4	00E	00L	✓	1	X			
482		11:20	S	HA0203	4	00F	00L	✓	1	X			
483		11:13	S	HA0203	4	00D	00T	✓	1		X		Pulverize, Cinders
			S										
			S										
			S										
			S										
			S										
			S										
			S										
			S										

RELINQUISHED BY: (Signature)	DATE / TIME	RECEIVED BY: (Signature)	DATE / TIME
[illegible]	5/22/92 1330	Kim [illegible]	5/22/92 1330
RELINQUISHED BY: (Signature)	DATE / TIME	RECEIVED AT LAB BY: (Signature)	DATE / TIME

METHOD OF SHIPMENT:

AIRBILL NO: (If Applicable)

COOLER/SAMPLE RECEIPT FORM

Rev.01 10/7/91

ESE Cooler # _____
Client Cooler # 1
No Cooler _____

Project: Woodward Clyde Date/Time Received: 5-21-92 1815

USE OTHER SIDE OF THIS FORM TO NOTE FURTHER DETAILS CONCERNING CHECK-IN PROBLEMS AND TO SPECIFY AND DESCRIBE ANY ACTION(S) REGARDING THE RESOLUTION(S) OF PROBLEMS. IF SHIPMENT WAS ACCEPTED AND IF REQUESTED, NOTE ON BACK THE ADDRESS WHERE THE EMPTY COOLER WAS RETURNED AND LIKEWISE IF THE SHIPMENT WAS REJECTED.

IF INFORMATION IS MISSING OR THERE ARE PROBLEMS NOTIFY LABORATORY PROJECT MANAGER SO THAT WE CAN NOTIFY THE PROJECT MANAGER IMMEDIATELY.

A. PRELIMINARY EXAMINATION PHASE: Date/Time cooler/sample was opened and checked: 5-22 92 915

by (print) James Cash (sign) James Cash

1. List courier delivering samples: Client ..... YES NO
2. Did cooler come with a shipping slip (air bill, etc.)? ..... YES (NO)
   If YES, attach and enter carrier and air bill number here: _____
3. Were custody seals on outside of cooler? ..... (YES) NO
   If YES, how many and where: 2 1 on Front & Back
   If YES, enter the following: seal date: 5-21-92 seal name: Karen Jacobs
4. Were custody seals unbroken and intact at the date and time of arrival? ..... (YES) NO
5. Was chain-of-custody provided? ..... (YES) NO
6. Were custody papers sealed in a Ziploc™ bag and taped inside to the lid? ..... (YES) NO
7. Were entries on custody papers completed? (YES) NO . If no, give details on back
8. Turnaround time included? ..... YES (NO)
9. Did you sign custody papers in the appropriate place? ..... (YES) NO
10. Was project identifiable from custody papers? If YES, enter project name at the top of this form. (YES) NO

B. SAMPLE CHECK-IN PHASE: Date samples were checked-in: 5-22-92 by (all those involved must sign below):
(print) James Cash (sign) James Cash

11. Describe packing: Packed in Blue Ice & Stacked
*12. If required, was enough ice used? (temperature maintained correctly)? ..... (YES) NO
13. Were all bottles sealed in separate plastic bags? ..... YES (NO)
*14. Did all bottles arrive unbroken and in good condition? ..... (YES) NO
15. Were all bottle labels complete (ID, date, time, signature, preservative, etc.)? ..... (YES) NO
16. Did all bottle labels agree with custody papers? If NO, indicate discrepancies on back. ..... (YES) NO
17. Were correct containers used for the tests indicated? ..... (YES) NO
18. Were correct preservatives used when required? N/A ..... YES NO
19. pH of samples maintained correctly as required? If NO, list by ID# N/A . YES NO
20. Was a sufficient amount of sample sent for tests indicated? ..... (YES) NO
21. Bubbles present in VOA vials? If YES, list by ID#: N/A . YES NO
22. Was lab. project manager called and status discussed? If YES, give details on the back of this form. YES (NO)
23. Who was called? _____ By whom? _____ on (date) _____
24. Second Party Review: _____

* Sample rejection criteria

W:\WP\CHEMCOM\CRF.01

CHAIN OF CUSTODY RECORD

WWL5

WOODWARD-CLYDE CONSULTANTS
2318 MILLPARK DR.
MARYLAND HEIGHTS, MISSOURI 63043
314-429-0100

SHEET 1 of 4

PROJECT NO.: 89MC114V

PROJECT NAME: NL/TARACORP SUPERFUND SITE PREDESIGN FIELD INVESTIGATION

SAMPLER'S: (Signatures) K [illegible]

DATE	TIME	SAMPLE I.D. NUMBER (Matrix / Location / Boring / Depth / Sample Type)	NO. OF CONTAINERS	Total Lead 4oz. Poly jar Cool to 4°C	TCLP - Lead 4oz. Poly jar Cool to 4°C	Geotechnical glass or poly jar	REMARKS
5/27	813	s HA0202 1 0AB00L ✓	1	✓			
	813	s HA0202 1 0AB00T ✓		✓	✓		pulverize sd
	818	s HA0202 1 00C00L ✓		✓			
	818	s HA0202 1 00C00T ✓		✓	✓		pulverize sample
	828	s HA0202 1 00E00L ✓		✓			
	853	s HA0202 2 0AB00L ✓	KF	✓			
	853	s HA0202 2 0AB00T ✓			✓		pulverize sample
	854	s HA0202 2 00C00T ✓			✓		pulverize sample
	907	s HA0202 2 00F00L ✓		✓			
5/27	924	s HA0202 18 00D00L ✓		✓			
	945	s HA0202 3 00C00L ✓		✓			
	~~945~~	~~s HA0202 3 00C00T~~			✓		pulverize sample
	943	s HA0202 3 0AB00L ✓		✓			
	943	s HA0202 3 0AB00D ✓		✓			
	945	s HA0202 3 00E00L ✓		✓			
	1010	s HA0202 3 00F00T ✓			✓		pulverize sample
	1013	s HA0202 3 00F00D OTD		KF	✓		pulverize sample
	1015	s HA0202 3 00G00L ✓		✓			
	1105	s HA0202 4 00B00L ✓		✓			
	1110	s HA0202 4 00C00L ✓		✓			
	12:05	s RS0123 1 0AB00L ✓		✓			
	12:08	s RS0123 1 00C00L ✓		✓			
	12:10	s RS0123 1 00D00L ✓		✓			

RELINQUISHED BY: (Signature)	DATE / TIME	RECEIVED BY: (Signature)	DATE / TIME
[illegible]	[illegible] 1800	[illegible]	5/27 1800
RELINQUISHED BY: (Signature)	DATE / TIME	RECEIVED AT LAB BY: (Signature)	DATE / TIME
[illegible]	5/27 1830	[illegible]	5/27 1830
METHOD OF SHIPMENT:		AIRBILL NO. (If Applicable)	

CHAIN OF CUSTODY RECORD

WWC5

WOODWARD-CLYDE CONSULTANTS
2318 MILLPARK DR.
MARYLAND HEIGHTS, MISSOURI 63043
314-429-0100

SHEET 1 of 4

PROJECT NO.:	PROJECT NAME:
89MC114V	NL/TARACORP SUPERFUND SITE PREDESIGN FIELD INVESTIGATION

SAMPLER'S: (Signatures) [signature]

	DATE	TIME	SAMPLE I.D. NUMBER: Matrix	Location	Boring	Depth	Sample Type		NO. OF CONTAINERS	CONTAINER DESCRIPTION/ ANALYSES REQUESTED: Total Lead 4oz. poly jar Cool to 4°C	TCLP - Lead 4oz. poly jar Cool to 4°C	Geotechnical glass or poly jar	REMARKS
50	5/27	813	S	HA0202	1	0AB	00L	✓	1	✓			
51		813	S	HA0202	1	0AB	00T	✓			✓		pulverize sample
52		818	S	HA0202	1	00C	00L	✓		✓			
53		818	S	HA0202	1	00C	00T	✓			✓		pulverize sample
54		828	S	HA0202	1	00E	00L	✓		✓			
55		853	S	HA0202	2	0AB	00L	✓	KF	✓			
56		853	S	HA0202	2	0AB	00T	✓			✓		pulverize sample
57		854	S	HA0202	2	00C	00T	✓			✓		pulverize sample
58		907	S	HA0202	2	00F	00L	✓		✓			
59		8~~8~~24	S	HA0202	1~~2~~	00D	00L	✓		✓			
60		945	S	HA0202	3	00C	00L	✓		✓			
~~61~~		~~945~~	~~S~~	~~HA0202~~	~~3~~	~~00C~~	~~00T~~				✓		~~pulverize sample~~
1		943	S	HA0202	3	0AB	00L	✓		✓			
2		943	S	HA0202	3	0AB	0LD	✓		✓			
63		945	S	HA0202	3	00E	00L	✓		✓			
4		1010	S	HA0202	3	00F	00T	✓			✓		pulverize sample
65		1013	S	HA0202	3	00F	~~0LD~~	OTD		KF	✓		pulverize sample
6		1015	S	HA0202	3	00G	00L	✓		✓			
67		1105	S	HA0202	4	0AB	00L	✓		✓			
8		1110	S	HA0202	4	00C	00L	✓		✓			
9		12:05	S	RS0123	1	0AB	00L	✓		✓			
70		12:08	S	RS0123	1	00C	00L	✓		✓			
1		12:10	S	RS0123	1	00D	00L	✓		✓			

RELINQUISHED BY: (Signature)	DATE / TIME	RECEIVED BY: (Signature)	DATE / TIME
[signature]	5/27/1800	[signature]	5/27 1800
RELINQUISHED BY: (Signature)	DATE / TIME	RECEIVED AT LAB BY: (Signature)	DATE / TIME
[signature]	5/27 1830	[signature]	5/27 1830
METHOD OF SHIPMENT:		AIRBILL NO. (If Applicable)	

CHAIN OF CUSTODY RECORD

WOODWARD-CLYDE CONSULTANTS
2318 MILLPARK DR.
MARYLAND HEIGHTS, MISSOURI 63043
314-429-0100

SHEET 2 of 4

PROJECT NO.: 89MC114V

PROJECT NAME: NL/TARACORP SUPERFUND SITE PREDESIGN FIELD INVESTIGATION

SAMPLER'S: (Signatures)

	DATE	TIME	SAMPLE I.D. NUMBER: Matrix	Location	Boring	Depth	Sample Type		NO. OF CONTAINERS	CONTAINER DESCRIPTION/ ANALYSES REQUESTED: Total Lead 4oz. poly jar Cool to 4°C	TCLP - Lead 4oz. poly jar Cool to 4°C	Geotechnical glass or poly jar	REMARKS
72	5/27/92	12:25	S	RSØ128	2	00C	00L	✓	1	X			
73		12:30	S	RSØ128	2	00D	00L	✓	1	X			
74		12:31	S	RSØ128	2	00D	00T	✓	1		X		Pulverize Samples
575		12:35	S	RSØ128	2	00E	00L	✓	1	X			
76		12:50	S	RSØ128	3	00C	00L	✓	1	X			
77		12:51	S	RSØ128	3	00C	00T	✓	1		X		Pulverize Sample
78		12:55	S	RSØ128	3	00D	00L	✓	1	X			
79		12:56	S	RSØ128	3	00D	00T	✓	1		X		Pulverize Sample
80		12:58	S	RSØ128	3	00E	00L	✓	1	X			
81		1414	S	MA1423	1	00A	00L	✓	1	✓			
582		1416	S	MA1423	1	00B	00L	✓	1	✓			
3		1418	S	MA1423	1	00C	00L	✓	1	✓			
4		1414	S	MA1423	1	00A	0LD	✓	1	✓			
5		1416	S	MA1423	1	00B	0LD	✓	1	✓			
86		1418	S	MA1423	1	00C	0LD	✓	1	✓			
87		1420	S	MA1423	2	00A	00L	✓	1	✓			
88		1422	S	MA1423	2	00B	00L	✓	1	✓			
89		1424	S	MA1423	2	00C	00L	✓	1	✓			
10		1450	S	NF1500	1	00A	00L	✓	1	✓			
91		1452	S	NF1500	1	00B	00L	✓	1	✓			
92		1454	S	NF1500	1	00C	00L	✓	1	✓			
93		1455	S	NF1500	2	00A	00L	✓	1	✓			
94		1457	S	NF1500	2	00B	00L	✓	1	✓			

RELINQUISHED BY: (Signature)	DATE / TIME	RECEIVED BY: (Signature)	DATE / TIME
[signature]	5/27/92 1800	[signature]	5/27 1800
RELINQUISHED BY: (Signature)	DATE / TIME	RECEIVED AT LAB BY: (Signature)	DATE / TIME
[signature]	5/27 1830	[signature]	5/27 1830
METHOD OF SHIPMENT:		AIRBILL NO. (If Applicable)	

CHAIN OF CUSTODY RECORD

WWC6

WOODWARD-CLYDE CONSULTANTS
2318 MILLPARK DR.
MARYLAND HEIGHTS, MISSOURI 63043
314-429-0100

SHEET 1 of 1

PROJECT NO.: 89MC114V

PROJECT NAME: NL/TARACORP SUPERFUND SITE PREDESIGN FIELD INVESTIGATION

SAMPLER'S: (Signatures) [signature] C. Pawelka

	DATE	TIME	SAMPLE I.D. NUMBER: Matrix	Location	Boring	Depth	Sample Type		NO. OF CONTAINERS	CONTAINER DESCRIPTION/ ANALYSES REQUESTED: Total Lead 4oz. poly jar Cool to 4°C	TCLP - Lead 4oz. poly jar Cool to 4°C	Geotechnical glass or poly jar	REMARKS
32	6/8/92	1530	S	TR0011	1	0AC	00L	✓	1	X			
33	6/8/92	15 50	S	TR0011	1	00H	00L		1	X			
34	6/8/92	16 05	S	TR0011	1	00U	00L		1	X			
35	6/9/92	9:00	S	TR0011	1	00V	00L		1	X			
36	6/9/92	9:12	S	TR0011	1	00W	00L		1	X			
37	6/9/92	9:22	S	TR0011	L	00X	00L		1	X			
			S										
			S										
			S										
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			S										

C. Pawelka

RELINQUISHED BY: (Signature)	DATE / TIME	RECEIVED BY: (Signature)	DATE / TIME
Cynthia Pawelka	6/9/92 8:30 am.		
RELINQUISHED BY: (Signature)	DATE / TIME	RECEIVED AT LAB BY: (Signature)	DATE / TIME
[signature]	6/10 830	[signature]	6-10-92 830
METHOD OF SHIPMENT: Personal Carrier to Lab		AIRBILL NO: (If Applicable)	

COOLER/SAMPLE RECEIPT FORM

Rev.01 10/7/91

ESE Cooler # _____
Client Cooler # ✓
No Cooler _____

Project: Woodward Clyde Date/Time Received: 6-10-92 8:30

USE OTHER SIDE OF THIS FORM TO NOTE FURTHER DETAILS CONCERNING CHECK-IN PROBLEMS AND TO SPECIFY AND DESCRIBE ANY ACTION(S) REGARDING THE RESOLUTION(S) OF PROBLEMS. IF SHIPMENT WAS ACCEPTED AND IF REQUESTED, NOTE ON BACK THE ADDRESS WHERE THE EMPTY COOLER WAS RETURNED AND LIKEWISE IF THE SHIPMENT WAS REJECTED.

IF INFORMATION IS MISSING OR THERE ARE PROBLEMS NOTIFY LABORATORY PROJECT MANAGER SO THAT HE CAN NOTIFY THE PROJECT MANAGER IMMEDIATELY.

A. PRELIMINARY EXAMINATION PHASE: Date/Time cooler/sample was opened and checked: 6-10-92 1500

by (print) James Cash (sign) James Cash

1. List courier delivering samples Client . . . . . YES NO
2. Did cooler come with a shipping slip (air bill, etc.)? . . . . . YES (NO)
   If YES, attach and enter carrier and air bill number here: _____
3. Were custody seals on outside of cooler? . . . . . (YES) NO
   If YES, how many and where: 2 ion FRONT + Back
   If YES, enter the following: seal date: 6-8,9,92, seal name: Cynthia Ravella
4. Were custody seals unbroken and intact at the date and time of arrival? . . . . . (YES) NO
5. Was chain-of-custody provided? . . . . . (YES) NO
6. Were custody papers sealed in a Ziploc™ bag and taped inside to the lid? . . . . . YES (NO)
7. Were entries on custody papers completed, including cooler number? YES (NO) - If no, give details on back didnt Fill out The Received By spot
8. Turnaround time included? . . . . . YES (NO)
9. Did you sign custody papers in the appropriate place? . . . . . (YES) NO
10. Was project identifiable from custody papers? If YES, enter project name at the top of this form. . (YES) NO

B. SAMPLE CHECK-IN PHASE: Date samples were checked-in: 6-10-92 by (all those involved must sign below):
(print) James Cash (sign) James Cash

11. Describe packing: packed in Blue Ice + stacked
*12. If required, was enough ice used? (temperature maintained correctly)? . . . . . (YES) NO
13. Were all bottles sealed in separate plastic bags? . . . . . YES (NO)
*14. Did all bottles arrive unbroken and in good condition? . . . . . (YES) NO
15. Were all bottle labels complete (ID, date, time, signature, preservative, etc.)? . . . . . (YES) NO
16. Did all bottle labels agree with custody papers? If NO, indicate discrepancies on back. . . . . (YES) NO
17. Were correct containers used for the tests indicated? . . . . . (YES) NO
*18. Were correct preservatives used when required? . NA . . . . . YES NO
*19. pH of samples maintained correctly as required? If NO, list by ID# NA . . YES NO
20. Was a sufficient amount of sample sent for tests indicated? . . . . . (YES) NO
*21. Bubbles present in VOA vials? If YES, list by ID#: NA . YES (NO)
22. Was lab. project manager called and status discussed? If YES, give details on the back of this form. YES (NO)
23. Who was called? _____ By whom? _____ on (date) _____
24. Second Party Review: _____

* Sample rejection criteria

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CHAIN OF CUSTODY RECORD

SHEET 1 of 1

WOODWARD-CLYDE CONSULTANTS
2318 MILLPARK DR.
MARYLAND HEIGHTS, MISSOURI 63043
314-429-0100

WWC4

PROJECT NO.: 89MC114V

PROJECT NAME: NL/TARACORP SUPERFUND SITE PREDESIGN FIELD INVESTIGATION

SAMPLER'S: (Signatures) C. Powell

	DATE	TIME	SAMPLE I.D. NUMBER: Matrix	Location	Boring	Depth	Sample Type	NO. OF CONTAINERS	Total Lead 4oz. poly jar Cool to 4°C	TCLP - Lead 4oz. poly jar Cool to 4°C	Method 8015, BTEX Geotechnical glass or poly jar-cfp TPH-Infrared	REMARKS
638	6/12/92	10:35	S	MW1089	2	0AC	00L	1	X			
639	6/12/92	11:20	S	MW1089	2	00H	00L	1	X			
640	6/12/92	12:20	S	MW1089	2	00U	00L	1	X			
641	6/12/92	12:32	S	MW1089	2	00V	00L	1	X			
642	6/12/92	12:50	S	MW1089	2	00W	00L	1	X		X	
643	6/12/92	13:05	S	MW1089	2	00X	00L	1	X			
			S									
			S									
			S									
			S									
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			S									

RELINQUISHED BY: (Signature)	DATE / TIME	RECEIVED BY: (Signature)	DATE / TIME
Cynthia Powell	6/12/92	[illegible]	6/12 1520
RELINQUISHED BY: (Signature)	DATE / TIME	RECEIVED AT LAB BY: (Signature)	DATE / TIME
[illegible]	6/12 1520	[illegible]	6/12 5:20

METHOD OF SHIPMENT: Personnel Carrier

AIRBILL NO: (If Applicable)

COOLER/SAMPLE RECEIPT FORM

Rev.01 10/7/91

ESE Cooler # ____
Client Cooler # ✓
No Cooler ____

Project: Woodward Clyde Date/Time Received: 6-12-92 1720

USE OTHER SIDE OF THIS FORM TO NOTE FURTHER DETAILS CONCERNING CHECK-IN PROBLEMS AND TO SPECIFY AND DESCRIBE ANY ACTION(S) REGARDING THE RESOLUTION(S) OF PROBLEMS. IF SHIPMENT WAS ACCEPTED AND IF REQUESTED, NOTE ON BACK THE ADDRESS WHERE THE EMPTY COOLER WAS RETURNED AND LIKEWISE IF THE SHIPMENT WAS REJECTED.

IF INFORMATION IS MISSING OR THERE ARE PROBLEMS NOTIFY LABORATORY PROJECT MANAGER SO THAT HE CAN NOTIFY THE PROJECT MANAGER IMMEDIATELY.

A. PRELIMINARY EXAMINATION PHASE: Date/Time cooler/sample was opened and checked: 6-16-92 940

by (print) James Cash (sign) James Cash

1. List courier delivering samples . Client . . . . . YES NO
2. Did cooler come with a shipping slip (air bill, etc.)? . . . . . YES (NO)
   If YES, attach and enter carrier and air bill number here: ____
3. Were custody seals on outside of cooler? . . . . . (YES) NO
   If YES, how many and where: 2 1 on Front + Back
   If YES, enter the following: seal date: 6-12-92, seal name: Can't Read
4. Were custody seals unbroken and intact at the date and time of arrival? . . . . . (YES) NO
5. Was chain-of-custody provided? . . . . . (YES) NO
6. Were custody papers sealed in a Ziploc™ bag and taped inside to the lid? . . . . . (YES) NO
7. Were entries on custody papers completed, including cooler number? (YES) NO - If no, give details on back
8. Turnaround time included? . . . . . YES (NO)
9. Did you sign custody papers in the appropriate place? . . . . . (YES) NO
10. Was project identifiable from custody papers? If YES, enter project name at the top of this form. . (YES) NO

B. SAMPLE CHECK-IN PHASE: Date samples were checked-in: 6-16-92 by (all those involved must sign below):

(print) James Cash (sign) James Cash

11. Describe packing: Packed in Blue Ice + stacked
*12. If required, was enough ice used? (temperature maintained correctly)? . . . . . (YES) NO
13. Were all bottles sealed in separate plastic bags? . . . . . YES (NO)
*14. Did all bottles arrive unbroken and in good condition? . . . . . (YES) NO
15. Were all bottle labels complete (ID, date, time, signature, preservative, etc.)? . . . . . (YES) NO
16. Did all bottle labels agree with custody papers? If NO, indicate discrepancies on back. . . . . (YES) NO
17. Were correct containers used for the tests indicated? . . . . . (YES) NO
*18. Were correct preservatives used when required? . . . . . NA . . . . . YES NO
*19. pH of samples maintained correctly as required? If NO, list by ID# NA . YES NO
20. Was a sufficient amount of sample sent for tests indicated? . . . . . (YES) NO
*21. Bubbles present in VOA vials? If YES, list by ID#: NA . YES NO
22. Was lab. project manager called and status discussed? If YES, give details on the back of this form. YES (NO)
23. Who was called? ____ By whom? ____ on (date) ____
24. Second Party Review: ____

* Sample rejection criteria

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CHAIN OF CUSTODY RECORD

WWC6

WOODWARD-CLYDE CONSULTANTS
2318 MILLPARK DR.
MARYLAND HEIGHTS, MISSOURI 63043
314-429-0100

SHEET 1 of 1

PROJECT NO.:	PROJECT NAME:
89MC114V	NL/TARACORP SUPERFUND SITE PREDESIGN FIELD INVESTIGATION

SAMPLER'S: (Signatures) C. Rivelko

	DATE	TIME	SAMPLE I.D. NUMBER: Matrix	Location	Boring	Depth	Sample Type	NO. OF CONTAINERS	CONTAINER DESCRIPTION/ ANALYSES REQUESTED: Total Lead 4oz. poly jar Cool to 4°C	TCLP - Lead 4oz. poly jar Cool to 4°C	Geotechnical glass or poly jar	REMARKS
14	6/16/93	14:05	S	MW1119	2	ØAC	ØØL	1	X			
15		14:15	S	MW1119	2	ØØH	ØØL	1	X			
16		14:25	S	MW1119	2	ØØU	ØØL	1	X			
6+7		14:35	S	MW1119	2	ØØV	ØØL	1	X			
16		14:45	S	MW1119	2	ØØW	ØØL	1	X			
6+9	V	14:55	S	MW1119	2	ØØX	ØØL	1	X			
			S									
			S									
			S									
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RELINQUISHED BY: (Signature)	DATE / TIME	RECEIVED BY: (Signature)	DATE / TIME
[signature]	6/16/93 17:00		
RELINQUISHED BY: (Signature)	DATE / TIME	RECEIVED AT LAB BY: (Signature)	DATE / TIME
[signature]	6/17 845 AM	[signature]	6/17 0845
METHOD OF SHIPMENT:		AIRBILL NO: (If Applicable)	

COOLER/SAMPLE RECEIPT FORM

Rev.01 10/7/91

ESE Cooler # ____
Client Cooler # ✓
No Cooler ____

Project: Woodward Clyde Date/Time Received: 6-17-92 845

USE OTHER SIDE OF THIS FORM TO NOTE FURTHER DETAILS CONCERNING CHECK-IN PROBLEMS AND TO SPECIFY AND DESCRIBE ANY ACTION(S) REGARDING THE RESOLUTION(S) OF PROBLEMS. IF SHIPMENT WAS ACCEPTED AND IF REQUESTED, NOTE ON BACK THE ADDRESS WHERE THE EMPTY COOLER WAS RETURNED AND LIKEWISE IF THE SHIPMENT WAS REJECTED.

IF INFORMATION IS MISSING OR THERE ARE PROBLEMS NOTIFY LABORATORY PROJECT MANAGER SO THAT HE CAN NOTIFY THE PROJECT MANAGER IMMEDIATELY.

A. PRELIMINARY EXAMINATION PHASE: Date/Time cooler/sample was opened and checked: 6-17-92 900

by (print) James Cash (sign) James Cash

1. List courier delivering samples Client . . . . . YES NO
2. Did cooler come with a shipping slip (air bill, etc.)? . . . . . YES NO
   If YES, attach and enter carrier and air bill number here: ____
3. Were custody seals on outside of cooler? . . . . . YES NO
   If YES, how many and where: 2 Lon Front + Back
   If YES, enter the following: seal date: 6-16-92, seal name: C Pavelka
4. Were custody seals unbroken and intact at the date and time of arrival? . . . . . YES NO
5. Was chain-of-custody provided? . . . . . YES NO
6. Were custody papers sealed in a Ziploc™ bag and taped inside to the lid? . . . . . YES NO
7. Were entries on custody papers completed, including cooler number? YES NO - If no, give details on back The Received spot wasn't signed
8. Turnaround time included? . . . . . YES NO
9. Did you sign custody papers in the appropriate place? . . . . . YES NO
10. Was project identifiable from custody papers? If YES, enter project name at the top of this form. . YES NO

B. SAMPLE CHECK-IN PHASE: Date samples were checked-in: 6-17-92 by (all those involved must sign below):
(print) James Cash (sign) James Cash

11. Describe packing: Packed in Blue Ice + stacked
*12. If required, was enough ice used? (temperature maintained correctly)? . . . . . YES NO
13. Were all bottles sealed in separate plastic bags? . . . . . YES NO
*14. Did all bottles arrive unbroken and in good condition? . . . . . YES NO
15. Were all bottle labels complete (ID, date, time, signature, preservative, etc.)? . . . . . YES NO
16. Did all bottle labels agree with custody papers? If NO, indicate discrepancies on back. . . . . YES NO
17. Were correct containers used for the tests indicated? . . . . . YES NO
*18. Were correct preservatives used when required? . . . . N/A . . . . . YES NO
*19. pH of samples maintained correctly as required? If NO, list by ID# N/A . YES NO
20. Was a sufficient amount of sample sent for tests indicated? . . . . . YES NO
*21. Bubbles present in VOA vials? If YES, list by ID#: N/A . YES NO
22. Was lab. project manager called and status discussed? If YES, give details on the back of this form. YES NO
23. Who was called? ____ By whom? ____ on (date) ____
24. Second Party Review: ____

* Sample rejection criteria

W:\WP\CHEMCOM\CRF.01

CHAIN OF CUSTODY RECORD

WOODWARD-CLYDE CONSULTANTS
2318 MILLPARK DR.
MARYLAND HEIGHTS, MISSOURI 63043
314-429-0100

SHEET 1 of 1

PROJECT NO.: 89MC114V

PROJECT NAME: NL/TARACORP SUPERFUND SITE PREDESIGN FIELD INVESTIGATION

SAMPLER'S: (Signatures)

	DATE	TIME	SAMPLE I.D. NUMBER: Matrix	Location	Boring	Depth	Sample Type	NO. OF CONTAINERS	Total Lead 4oz. poly jar Cool to 4°C	TCLP - Lead 4oz. poly jar Cool to 4°C	Geotechnical glass or poly jar	REMARKS
0	6/13	1120	S	MW1049	Z	00A	00L	1	X			
1	↓	1210	S	MW1049	Z	00H	00L	↓	↓			
2		1242	S	MW1049	Z	00W	00L					
3		1255	S	MW1049	Z	00X	00L					
4		1220	S	MW1049	Z	00U	00L					
5		1232	S	MW1049	Z	00V	00L					
6	↓	1222	S	MW1049	Z	00U	0LD	↓	↓			
			S									
			S									
			S									
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RELINQUISHED BY: (Signature)	DATE / TIME	RECEIVED BY: (Signature)	DATE / TIME
	6/14/92 16:30		6-14-92 1410
RELINQUISHED BY: (Signature)	DATE / TIME	RECEIVED AT LAB BY: (Signature)	DATE / TIME
	6-14-92 1410		

METHOD OF SHIPMENT:

AIRBILL NO: (If Applicable)

COOLER/SAMPLE RECEIPT FORM

Rev.01 10/7/91

ESE Cooler # _____
Client Cooler # ✓
No Cooler _____

Project: Woodward Clyde Date/Time Received: 6-19-92 1410

USE OTHER SIDE OF THIS FORM TO NOTE FURTHER DETAILS CONCERNING CHECK-IN PROBLEMS AND TO SPECIFY AND DESCRIBE ANY ACTION(S) REGARDING THE RESOLUTION(S) OF PROBLEMS. IF SHIPMENT WAS ACCEPTED AND IF REQUESTED, NOTE ON BACK THE ADDRESS WHERE THE EMPTY COOLER WAS RETURNED AND LIKEWISE IF THE SHIPMENT WAS REJECTED.

IF INFORMATION IS MISSING OR THERE ARE PROBLEMS NOTIFY LABORATORY PROJECT MANAGER SO THAT HE CAN NOTIFY THE PROJECT MANAGER IMMEDIATELY.

A. PRELIMINARY EXAMINATION PHASE: Date/Time cooler/sample was opened and checked: 6-19-92 1450

by (print) James Cash (sign) James Cash

1. List courier delivering samples client . . . . . YES NO
2. Did cooler come with a shipping slip (air bill, etc.)? . . . . . YES (NO)
   If YES, attach and enter carrier and air bill number here: _____
3. Were custody seals on outside of cooler? . . . . . (YES) NO
   If YES, how many and where: 2 on Front
   If YES, enter the following: seal date: 6-18-92, seal name: E Page
4. Were custody seals unbroken and intact at the date and time of arrival? . . . . . (YES) NO
5. Was chain-of-custody provided? . . . . . (YES) NO
6. Were custody papers sealed in a Ziplec™ bag and taped inside to the lid? . . . . . (YES) NO
7. Were entries on custody papers completed, including cooler number? (YES) NO - If no, give details on back
8. Turnaround time included? . . . . . YES (NO)
9. Did you sign custody papers in the appropriate place? . . . . . (YES) NO
10. Was project identifiable from custody papers? If YES, enter project name at the top of this form. . (YES) NO

B. SAMPLE CHECK-IN PHASE: Date samples were checked-in: 6-19-92 by (all those involved must sign below):

(print) James Cash (sign) James Cash

11. Describe packing: Packed in Blue Ice + Stucked
*12. If required, was enough ice used? (temperature maintained correctly)? . . . . . (YES) NO
13. Were all bottles sealed in separate plastic bags? . . . . . YES (NO)
*14. Did all bottles arrive unbroken and in good condition? . . . . . (YES) NO
15. Were all bottle labels complete (ID, date, time, signature, preservative, etc.)? . . . . . (YES) NO
16. Did all bottle labels agree with custody papers? If NO, indicate discrepancies on back. . . . . (YES) NO
17. Were correct containers used for the tests indicated? . . . . . (YES) NO
*18. Were correct preservatives used when required? . NA . . . . . YES NO
*19. pH of samples maintained correctly as required? If NO, list by ID# NA . YES NO
20. Was a sufficient amount of sample sent for tests indicated? . . . . . (YES) NO
*21. Bubbles present in VOA vials? If YES, list by ID#: NA . YES NO
22. Was lab. project manager called and status discussed? If YES, give details on the back of this form. YES (NO)
23. Who was called? _____ By whom? _____ on (date) _____
24. Second Party Review: _____

* Sample rejection criteria

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REPORT
OF
ANALYTICAL RESULTS

Project No.:
5912031 0100

Prepared For:
Woodward-Clyde Consultants
Maryland Heights, MO 63043

Submitted By:
St. Louis Chemistry Laboratory
Environmental Science &
Engineering, Inc.

September 21, 1992

Environmental
Science &
Engineering, Inc.

A CILCORP Company

Environmental
Science &
Engineering, Inc.

September 21, 1992
ESE No. 5912031 0100

Ms. Cynthia Pavelka
Woodward-Clyde Consultants
2318 Millpark Dr.
Maryland Heights, MO 63043

RE: Report of Analytical Chemistry Results,
Woodward-Clyde Consultants - TCLP Report 2
NL/Taracorp Superfund Site Predesign Field Investigation, WWC89MC114V

Dear Ms. Pavelka:

Enclosed is the complete report of results for eight (8) soil samples received in the ESE St. Louis Laboratory between March 3, and June 29, 1992. The samples were analyzed in accordance with the approved EPA methods as indicated in the report.

The QC results are composed of the following summaries: Method Blank for method background evaluation, Continuing Calibration Verification for instrument stability check, Standard Matrix Spike Recovery for method performance evaluation and Sample Matrix Spike Recovery for sample analytes results correction in accordance with the EPA TCLP QC requirements.

The QC results have been reviewed by the analysts and the Laboratory Manager. The QC results indicate that there were no technical problems with the analysis.

As per your request, the samples were examined and if necessary, were reduced to a particle size that would pass through a 9.5mm (0.375 inch) standard sieve.

We appreciate the opportunity to be of technical service to you. If there are any questions with regard to this report, please feel free to call.

Sincerely,

ENVIRONMENTAL SCIENCE & ENGINEERING, INC.

John F. Gemoules

John F. Gemoules
Laboratory Project Manager

JFG/pl/REPORT/WWCTCLP.RP2

Enclosures

11605 Lilburn Park Road St. Louis, MO 63140-3535 Phone (314) 567-4600 Fax (314) 567-5030

METALS/WET CHEMISTRY DATA ASSESSMENT

PROJECT NO. 89MC114V
LABORATORY ESE
LAB PROJECT NO. 5912031 0100
NO. OF SAMPLES/
MATRIX 22/SOIL

ANALYSIS DATE: 6/15/92

SITE NL/TARACORP SUPERFUND SITE

REVIEWER [signature]
REVIEWER'S NAME WENDY REINBOLT
COMPLETION DATE 9/22/92

DATA ASSESSMENT SUMMARY

	ICP	AA	Hg	CN	OTHER
1. HOLDING TIMES	✓				
2. BLANKS	(1)				
3. CCV	✓				
4. STANDARD MATRIX SPIKE	✓				
5. MATRIX SPIKE	✓				
6. OTHER QC	NA				
7. OVERALL ASSESSMENT	O/M				

O = Data had no problems/or qualified due to minor problems.
M = Data qualified due to major problems.
Z = Data unacceptable.
X = Problems, but do not affect data.

ACTION ITEMS: (1) LEAD CONCENTRATION FOUND IN METHOD BLANKS. ALL DATA RESULTS GREATER THAN 5 TIMES BLANK CONCENTRATION WILL BE QUALIFIED AS ESTIMATED (J). ALL DATA RESULTS LESS THAN 5 TIMES METHOD BLANK CONCENTRATION WILL BE QUALIFIED AS NON-DETECT (U.

COMMENTS:

METALS/WET CHEMISTRY DATA ASSESSMENT

PROJECT NO. 89MC114V
LABORATORY ESE
LAB PROJECT NO. 59121 31 C100
NO. OF SAMPLES/
MATRIX 1/SOIL
ANALYSIS DATE: 6/18/92

SITE NL/TARACORP SUPERFUND SITE

REVIEWER Wendy Rentbolt
REVIEWER'S NAME WENDY RENTBOLT
COMPLETION DATE 9/22/92

DATA ASSESSMENT SUMMARY

	ICP	AA	Hg	CN	OTHER
1. HOLDING TIMES	✓				
2. BLANKS	✓				
3. CCV	✓				
4. STANDARD MATRIX SPIKE	✓				
5. MATRIX SPIKE	✓				
6. OTHER QC	NA				
7. OVERALL ASSESSMENT	O				

O = Data had no problems/or qualified due to minor problems.
M = Data qualified due to major problems.
Z = Data unacceptable.
X = Problems, but do not affect data.

ACTION ITEMS:

COMMENTS:

METALS/WET CHEMISTRY DATA ASSESSMENT

PROJECT NO. 89MC114V
LABORATORY ESE
LAB PROJECT NO. 59120391 [illegible]
NO. OF SAMPLES/
MATRIX 4/SOIL
ANALYSIS DATE: 7/29/92

SITE NL/TARACORP SUPERFUND SITE

REVIEWER [illegible]
REVIEWER'S NAME [illegible]
COMPLETION DATE 9/22/92

DATA ASSESSMENT SUMMARY

	ICP	AA	Hg	CN	OTHER
1. HOLDING TIMES	✓				
2. BLANKS	✓				
3. CCV	✓				
4. STANDARD MATRIX SPIKE	✓				
5. MATRIX SPIKE	✓				
6. OTHER QC	NA				
7. OVERALL ASSESSMENT					

O = Data had no problems/or qualified due to minor problems.
M = Data qualified due to major problems.
Z = Data unacceptable.
X = Problems, but do not affect data.

ACTION ITEMS:

COMMENTS:

METALS/WET CHEMISTRY DATA ASSESSMENT

PROJECT NO. 89MC114V
LABORATORY ESE
LAB PROJECT NO. 5912C310100
NO. OF SAMPLES/
MATRIX 6/SOIL
ANALYSIS DATE: 8/17/92

SITE NL/TARACORP SUPERFUND SITE

REVIEWER [illegible]
REVIEWER'S NAME WENDY REDIBOLT
COMPLETION DATE 9/22/92

DATA ASSESSMENT SUMMARY

	ICP	AA	Hg	CN	OTHER
1. HOLDING TIMES	✓				
2. BLANKS	✓				
3. CCV	✓				
4. STANDARD MATRIX SPIKE	✓				
5. MATRIX SPIKE	✓				
6. OTHER QC	N/A				
7. OVERALL ASSESSMENT	O				

O = Data had no problems/or qualified due to minor problems.
M = Data qualified due to major problems.
Z = Data unacceptable.
X = Problems, but do not affect data.

ACTION ITEMS:

COMMENTS:

METALS/WET CHEMISTRY DATA ASSESSMENT

PROJECT NO. 89MC114V
LABORATORY ESE
LAB PROJECT NO. 5912031 0100
NO. OF SAMPLES/
MATRIX 4/SOIL
ANALYSIS DATE: 9/1/92

SITE NL/TARACORP SUPERFUND SITE
REVIEWER [illegible]
REVIEWER'S NAME WENDY REINBOLT
COMPLETION DATE 9/22/92

DATA ASSESSMENT SUMMARY

	ICP	AA	Hg	CN	OTHER
1. HOLDING TIMES	✓				
2. BLANKS	✓				
3. CCV	✓				
4. STANDARD MATRIX SPIKE	✓				
5. MATRIX SPIKE	✓				
6. OTHER QC	NA				
7. OVERALL ASSESSMENT	O				

O = Data had no problems/or qualified due to minor problems.
M = Data qualified due to major problems.
Z = Data unacceptable.
X = Problems, but do not affect data.

ACTION ITEMS:

COMMENTS:

METALS/WET CHEMISTRY DATA ASSESSMENT

PROJECT NO. 89MC114V
LABORATORY ESE
LAB PROJECT NO. 5912031 0100
NO. OF SAMPLES/
MATRIX 4/SOIL
ANALYSIS DATE: 9/9/92

SITE NL/TARACORP SUPERFUND SITE
REVIEWER [illegible]
REVIEWER'S NAME WENDY REINBOLT
COMPLETION DATE 9/22/92

DATA ASSESSMENT SUMMARY

	ICP	AA	Hg	CN	OTHER
1. HOLDING TIMES	✓				
2. BLANKS	✓				
3. CCV	✓				
4. STANDARD MATRIX SPIKE	✓				
5. MATRIX SPIKE	✓				
6. OTHER QC	NA				
7. OVERALL ASSESSMENT	O				

O = Data had no problems/or qualified due to minor problems.
M = Data qualified due to major problems.
Z = Data unacceptable.
X = Problems, but do not affect data.

ACTION ITEMS:

COMMENTS:

METALS/WET CHEMISTRY DATA ASSESSMENT

PROJECT NO. 89MC114V
LABORATORY ESE
LAB PROJECT NO. 5912031 C100
NO. OF SAMPLES/
MATRIX 7/SOIL
ANALYSIS DATE: 9/15/92

SITE NL/TARACORP SUPERFUND SITE
REVIEWER Wendy Reinbolt
REVIEWER'S NAME WENDY REINBOLT
COMPLETION DATE 9/22/92

DATA ASSESSMENT SUMMARY

	ICP	AA	Hg	CN	OTHER
1. HOLDING TIMES	✓				
2. BLANKS	✓				
3. CCV	✓				
4. STANDARD MATRIX SPIKE	✓				
5. MATRIX SPIKE	(1)				
6. OTHER QC	N/A				
7. OVERALL ASSESSMENT	O				

O = Data had no problems/or qualified due to minor problems.
M = Data qualified due to major problems.
Z = Data unacceptable.
X = Problems, but do not affect data.

ACTION ITEMS:

COMMENTS: (1) WWC6*557 SHOWS LOW % RECOVERY. DATA NOT QUALIFIED BECAUSE TCLP RECOVERY CRITERIA HAS NOT BEEN SPECIFIED

TCLP LEAD ANALYSIS

Pages 1 - 2

Environmental Science & Engineering, Inc.

St. Louis Chemistry Laboratory

11665 Lilburn Park Road
St. Louis, Missouri 63146-3535

Phone (314) 567-4600
Fax (314) 567-5030

Analytical Chemistry Results

STATUS: FINAL

PROJECT NAME: NL/TARACORP SUPERFUND SITE PREDESIGN FIELD INVESTIGATION, WWC89MC114V

PROJECT NUMBER: 5912031 0100

REPORT DATE: 09-18-92

SAMPLE MATRIX: SOIL

LAB MANAGER/QC REVIEW: JEFFREY W. SIRIA

PROJECT MANAGER: JOHN F. GEMOULES

REPORT APPROVED BY: FRANCIS Y. HUANG

SAMPLE I.D.	LABORATORY I.D.	COLLECTION DATE	RECEIVED DATE	LEAD, MG/L METHOD: 3051/6010	MDL	EXTRACT. DATE	ANALYSIS DATE	CHEM. INIT.
SDE1638200A00L	WWC3*25	03/03/92	03/03/92	0.13 *	0.02	08/24/92	09/01/92	CAG
SBE1941200A00L	WWC3*121	03/04/92	03/04/92	ND	0.13	08/10/92	08/17/92	CAG
SGR0825100A00L	WWC4*106	03/27/92	03/27/92	ND	0.13	08/10/92	08/17/92	CAG
SGW1015100B00L	WWC4*248	03/31/92	03/31/92	48.6 *	0.13	08/10/92	08/17/92	CAG
SED2211100A00L	WWC4*356	04/01/92	04/01/92	ND	0.13	08/10/92	08/17/92	CAG
SIO1026200C00L	WWC4*603	04/07/92	04/07/92	1.03 *	0.13	08/10/92	08/17/92	CAG
SME0616200A00L	WWC4*883	04/13/92	04/13/92	ND	0.13	08/10/92	08/17/92	CAG
SOR0001100A00T	WWC5*271	04/22/92	04/22/92	10.3 * J	0.18	06/03/92	06/15/92	CAG
SOR0001100A0TD	WWC5*272	04/22/92	04/22/92	11.2 * J	0.18	06/03/92	06/15/92	CAG
SOR0002100A00T	WWC5*273	04/22/92	04/22/92	72.8 * J	0.18	06/03/92	06/15/92	CAG
SOR0003100A00T	WWC5*274	04/22/92	04/22/92	15.6 * J	0.18	06/03/92	06/15/92	CAG
SDE1628300A00T	WWC6*187	05/13/92	05/13/92	0.47 *	0.02	08/24/92	09/01/92	CAG
SDE1628400A00T	WWC6*188	05/13/92	05/13/92	0.11 *	0.02	08/24/92	09/01/92	CAG
SOR0026100C00T	WWC6*216	05/13/92	05/13/92	10.9 *	0.02	08/24/92	09/01/92	CAG
SCA0108100A00T	WWC6*401	05/19/92	05/19/92	4.00 *	0.18	07/04/92	09/09/92	CAG
SOR002210AB00T	WWC6*408	05/20/92	05/20/92	ND	0.18	06/09/92	06/15/92	CAG
SOR002310AB00T	WWC6*411	05/20/92	05/20/92	ND	0.18	06/09/92	06/15/92	CAG
SOR002410AB00T	WWC6*413	05/20/92	05/20/92	4.29 * u	0.18	06/09/92	06/15/92	CAG
STE0203100C00T	WWC6*420	05/20/92	05/20/92	71.6 *	0.18	09/04/92	09/09/92	CAG
STE020310AB00T	WWC6*421	05/20/92	05/20/92	156 *	0.18	09/04/92	09/09/92	CAG
STE020320AB00T	WWC6*424	05/20/92	05/20/92	52.3 * J	0.18	06/09/92	06/15/92	CAG
STE020330AB00T	WWC6*429	05/20/92	05/20/92	32.2 * J	0.18	06/09/92	06/15/92	CAG
STE020340AB00T	WWC6*433	05/20/92	05/20/92	101 * J	0.18	06/09/92	06/15/92	CAG
SHI010010AB00T	WWC6*437	05/20/92	05/20/92	152 * J	0.18	06/09/92	06/15/92	CAG
SHI010020AB00T	WWC6*441	05/20/92	05/20/92	1.36 * u	0.18	06/09/92	06/15/92	CAG
STE020810AB00T	WWC6*444	05/21/92	05/21/92	1.79 *	0.18	06/09/92	06/15/92	CAG
STE020820AB00T	WWC6*447	05/21/92	05/21/92	0.88 *	0.18	06/09/92	06/15/92	CAG
STE020840AB00T	WWC6*452	05/21/92	05/21/92	0.51 *	0.18	06/09/92	06/15/92	CAG
STE020850AB00T	WWC6*455	05/21/92	05/21/92	0.53 *	0.18	06/09/92	06/15/92	CAG
SHA0205300D00T	WWC6*464	05/21/92	05/21/92	0.22 *	0.18	06/09/92	06/15/92	CAG
SHA0205300D0TD	WWC6*465	05/21/92	05/21/92	0.32 * u	0.18	06/09/92	06/15/92	CAG
SHA0205300E00T	WWC6*467	05/21/92	05/21/92	ND	0.18	06/09/92	06/15/92	CAG
SHA0203300D00T	WWC6*475	05/22/92	05/22/92	0.54 * u	0.18	06/09/92	06/15/92	CAG
SHA0203300E00T	WWC6*477	05/22/92	05/22/92	0.31 * u	0.18	06/09/92	06/15/92	CAG
SHA0203400D00T	WWC6*483	05/22/92	05/22/92	ND	0.18	06/09/92	06/15/92	CAG
SHA020210AB00T	WWC6*551	05/27/92	05/27/92	440 *	0.18	07/02/92	09/15/92	PW
SHA0202100C00T	WWC6*553	05/27/92	05/27/92	11.7 *	0.18	06/10/92	06/18/92	CAG
SHA020220AB00T	WWC6*556	05/27/92	05/27/92	1.47 *	0.18	07/02/92	09/15/92	PW
SHA0202200C00T	WWC6*557	05/27/92	05/27/92	2.34 *	0.18	07/02/92	09/15/92	PW
SHA0202300F00T	WWC6*564	05/27/92	05/27/92	0.93 *	0.18	07/02/92	09/15/92	PW
SHA0202300F0TD	WWC6*565	05/27/92	05/27/92	1.13 *	0.18	07/02/92	09/15/92	PW
SRS0128200D00T	WWC6*574	05/27/92	05/27/92	0.30 *	0.18	07/02/92	09/15/92	PW
SRS0128300C00T	WWC6*577	05/27/92	05/27/92	ND	0.18	07/02/92	09/15/92	PW

* - Corrected for percent recovery

Environmental
Science &
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Analytical Chemistry Result

STATUS: FINAL

PROJECT NAME: NL/TARACORP SUPERFUND SITE PREDESIGN FIELD INVESTIGATION, WWC89MC114V

PROJECT NUMBER: 5912031 0100 **REPORT DATE:** 09-18-92

SAMPLE MATRIX: SOIL **LAB MANAGER/QC REVIEW:** JEFFREY W. SIRIA

PROJECT MANAGER: JOHN F. GEMOULES **REPORT APPROVED BY:** FRANCIS Y. HUANG

SAMPLE I.D.	LABORATORY I.D.	COLLECTION DATE	RECEIVED DATE	LEAD, MG/L METHOD: 3051/6010	MDL	EXTRACT. DATE	ANALYSIS DATE	CHEM. INIT.
SRS0128300D00T	WWC6*579	05/27/92	05/27/92	0.37 *	0.18	07/04/92	09/09/92	CAG
SOR0013100K00T	WWC6*657	06/29/92	06/30/92	3.94 *	0.18	07/22/92	07/29/92	CAG
SOR0014100K00T	WWC6*658	06/29/92	06/30/92	ND	0.18	07/22/92	07/29/92	CAG
SOR0015100J00T	WWC6*659	06/29/92	06/30/92	ND	0.18	07/22/92	07/29/92	CAG
SOR0015100K00T	WWC6*660	06/29/92	06/30/92	0.68 *	0.18	07/22/92	07/29/92	CAG

* - Corrected for percent recovery

QC SUMMARY

LEGEND

STOR*METH - storet*method code. Used as a unique identification of the analytical parameter.

BATCH - analytical data batch identification.

DATE - analysis date.

FOUND (method blank) - quantitated concentration determined to be in the method blank.

FOUND (continuing calibration verification) - quantitated concentration determined to be in the CCV sample.

FOUND (standard matrix spike) - quantitated concentration determined to be in the standard matrix spike.

FOUND (sample matrix spike) - the difference in the quantitated concentration in the sample matrix spike and the UNSPIKED sample.

UNSPIKED (sample matrix spike) - quantitated concentration determined to be in the sample prior to spike fortification.

R.P.D. - replicate percent difference.

R.P.D. CRITERIA - R.P.D. not to be exceeded.

TARGET - the calculated concentration of the analyte in the spike or QC sample. The TARGET may vary from sample to sample based on sample weight, and moisture content. This concentration is the benchmark to which the FOUND concentrations are compared.

R.P.D.*1 - default reference when RPD cannot be calculated due to the spike sample I.D. used in the data batch.

JFG/pl/REPORT/WWC.LEG

N

Method Blank Sample Summary

ME	UNITS	STOR*METH	BATCH	SAMPLE	DATE	FOUND	FOOTNOTE
AD	MG/L	1051*STCLP	S7866	MB*6/3*2	06/15/92	1.07	
AD	MG/L			MB*6/9*1		0.11	
AD	MG/L		S7993	MB*EF2*1	06/18/92	0.01	
AD	MG/L		S8403	MB*EX.FL#1*1	08/17/92	0.0	
AD	MG/L		S8404	MB*NONE*3	07/29/92	0.0	
AD	MG/L		S8406	MB*EX.FL#1*1	08/17/92	0.0	
AD	MG/L		S8566	MB*NONE*1	09/01/92	0.003	
AD	MG/L		S8604	MB*EF#1*1	09/09/92	0.15	
AD	MG/L			MB*EF#1*2		0.49	
AD	MG/L		S8643	MB*EF#1*1	09/15/92	0.12	

Continuing Calibration Verification Sample Summary

AME	UNITS	STOR*METH	BATCH	SAMPLE	DATE	TARGET	FOUND	%RECV	RECV CRIT	FOOTNOTE
AD	MG/L	1051*STCLP	S7866	CCV*CCVB*1	06/15/92	2.00	1.88	94.0	75-125	
AD	MG/L			CCV*CCVB*2		2.00	1.88	94.0	75-125	
AD	MG/L			CCV*CCVB*3		2.00	1.86	93.0	75-125	
AD	MG/L			CCV*CCVB*4		2.00	1.86	93.0	75-125	
AD	MG/L			CCV*CCVB*5		2.00	1.85	92.5	75-125	
AD	MG/L			CCV*CCVB*6		2.00	1.86	93.0	75-125	
AD	MG/L			CCV*CCVB*7		2.00	1.84	92.0	75-125	
AD	MG/L		S7993	CCV*CCVB*1	06/18/92	2.00	1.91	95.5	75-125	
AD	MG/L			CCV*CCVB*2		2.00	1.95	97.5	75-125	
AD	MG/L			CCV*CCVB*3		2.00	1.95	97.5	75-125	
AD	MG/L		S8403	CCV*CCVB*1	08/17/92	2.00	1.94	97.0	75-125	
AD	MG/L			CCV*CCVB*2		2.00	1.96	98.0	75-125	
AD	MG/L			CCV*CCVB*3		2.00	1.93	96.5	75-125	
AD	MG/L			CCV*CCVB*4		2.00	1.93	96.5	75-125	
AD	MG/L			CCV*CCVB*5		2.00	1.91	95.5	75-125	
AD	MG/L		S8404	CCV*CCVB*1	07/29/92	2.00	1.90	95.0	75-125	
AD	MG/L			CCV*CCVB*2		2.00	1.84	92.0	75-125	
AD	MG/L			CCV*CCVB*6		2.00	1.83	91.5	75-125	
AD	MG/L			CCV*CCVB*7		2.00	1.79	89.5	75-125	
AD	MG/L		S8406	CCV*CCVB*1	08/17/92	2.00	1.94	97.0	75-125	
AD	MG/L			CCV*CCVB*2		2.00	1.96	98.0	75-125	
AD	MG/L			CCV*CCVB*3		2.00	1.93	96.5	75-125	
AD	MG/L			CCV*CCVB*4		2.00	1.93	96.5	75-125	
AD	MG/L			CCV*CCVB*5		2.00	1.91	95.5	75-125	
AD	MG/L		S8566	CCV*CCVB*1	09/01/92	2.00	1.93	96.5	75-125	
AD	MG/L			CCV*CCVB*2		2.00	1.93	96.5	75-125	
AD	MG/L			CCV*CCVB*3		2.00	1.92	96.0	75-125	
AD	MG/L			CCV*CCVB*6		2.00	1.99	99.5	75-125	
AD	MG/L		S8604	CCV*CCVB*1	09/09/92	2.00	1.96	98.0	75-125	
AD	MG/L			CCV*CCVB*2		2.00	1.96	98.0	75-125	
AD	MG/L			CCV*CCVB*3		2.00	2.02	101	75-125	
AD	MG/L			CCV*CCVB*4		2.00	1.99	99.5	75-125	
AD	MG/L		S8643	CCV*CCVB*1	09/15/92	2.00	1.92	96.0	75-125	
AD	MG/L			CCV*CCVB*2		2.00	1.89	94.5	75-125	
AD	MG/L			CCV*CCVB*3		2.00	1.92	96.0	75-125	

Standard Matrix Spike Recovery and Replicate Summary

ME	UNITS	STOR*METH	BATCH	SAMPLE	DATE	TARGET	FOUND	%RECV	RECV CRIT	R.P.D.	R.P.D. CRIT.	FOOTNOTE
AD	MG/L	1051*STCLP	S7866	SP*NONE*1	06/15/92	25.0	24.8	99.2	75-125		20	
AD	MG/L			SP*NONE*2		25.0	25.5	102	75-125		20	
AD	MG/L		S7993	SP*TCLP*1	06/18/92	25.0	26.9	108	75-125		20	
AD	MG/L		S8403	SP*EX.FL#1*1	08/17/92	25.0	27.5	110	75-125		20	
AD	MG/L		S8404	SP*NONE*3	07/29/92	25.0	26.5	106	75-125		20	
AD	MG/L		S8406	SP*EX.FL#1*1	08/17/92	25.0	27.5	110	75-125		20	
AD	MG/L		S8566	SP*NONE*1	09/01/92	2.78	2.85	102	75-125		20	
AD	MG/L		S8604	SP*NONE*1	09/09/92	25.0	26.7	107	75-125		20	
AD	MG/L		S8643	SP*NONE*1	09/15/92	25.0	26.2	105	75-125		20	

Sample Matrix Spike Recovery Summary

ME	UNITS	STOR*METH	BATCH	SAMPLE	DATE	TARGET	FOUND	%RECV	RECV CRIT	UNSPIKED	R.P.D.	R.P.D. CRIT.	FOOTNOTE
AD	MG/L	1051*STCLP	S7866	SPM1*WWC5*271	06/15/92	25.0	24.3	97.2	75-125	10.00		20	
AD	MG/L			SPM2*WWC5*271		25.0	23.7	94.8	75-125	10.00	2.50	20	
AD	MG/L			SPM1*WWC5*273		25.0	23.3	93.2	75-125	67.9		20	
AD	MG/L			SPM2*WWC5*273		25.0	22.1	88.4	75-125	67.9	5.29	20	
AD	MG/L			SPM1*WWC5*274		25.0	21.6	86.4	75-125	13.5		20	
AD	MG/L			SPM2*WWC5*274		25.0	24.6	98.4	75-125	13.5	13.0	20	
AD	MG/L			SPM1*WWC6*444		25.0	22.0	88.1	75-125	1.58		20	
AD	MG/L			SPM2*WWC6*444		25.0	20.6	82.5	75-125	1.58	6.57	20	
AD	MG/L			SPM1*WWC6*467		25.0	24.2	96.8	75-125	0.09		20	
AD	MG/L			SPM2*WWC6*467		25.0	24.6	98.4	75-125	0.09	1.64	20	
AD	MG/L			SPM1*WWC6*465		25.0	24.4	97.6	75-125	0.31		20	
AD	MG/L			SPM2*WWC6*465		25.0	23.6	94.4	75-125	0.31	3.33	20	
AD	MG/L		S7993	SPM1*WWC6*553	06/18/92	25.0	26.5	106	75-125	12.4		20	
AD	MG/L			SPM2*WWC6*553		25.0	25.9	104	75-125	12.4	1.90	20	
AD	MG/L		S8403	SPM1*WWC3*121	08/17/92	25.0	25.5	102	75-125	0.0		20	
AD	MG/L			SPM2*WWC3*121		25.0	26.2	105	75-125	0.0	2.90	20	
AD	MG/L		S8404	SPM*WWC6*657	07/29/92	25.0	26.5	106	75-125	4.18		20	
AD	MG/L			SPM2*WWC6*657		25.0	24.3	97.3	75-125	4.18		20	
AD	MG/L			SPM1*WWC6*659		25.0	23.9	95.6	75-125	0.11		20	
AD	MG/L			SPM2*WWC6*659		25.0	24.2	96.8	75-125	0.11	1.25	20	
AD	MG/L		S8406	SPM1*WWC4*106	08/17/92	25.0	25.4	102	75-125	0.08		20	
AD	MG/L			SPM2*WWC4*106		25.0	26.1	104	75-125	0.08	1.94	20	
AD	MG/L		S8566	SPM1*WWC6*216	09/01/92	2.78	2.70	97.2	75-125	10.7		20	
AD	MG/L			SPM2*WWC6*216		2.78	2.80	101	75-125	10.7	3.94	20	
AD	MG/L		S8604	SPM*WWC6*401	09/09/92	25.0	25.4	102	75-125	4.07		20	
AD	MG/L			SPM*WWC6*579		25.0	25.7	103	75-125	0.38		20	
AD	MG/L		S8643	SPM*WWC6*551	09/15/92	25.0	13.0	52.0	75-125	222		20	(1)
AD	MG/L			SPM*WWC6*574		25.0	26.0	104	75-125	0.31		20	

- Advisory limits, no criteria specified for TCLP spike recover amples concentrations corrected for matrix recovery.

CHAIN OF CUSTODY

CHAIN OF CUSTODY RECORD

WWC 3

WOODWARD-CLYDE CONSULTANTS
2318 MILLPARK DR.
MARYLAND HEIGHTS, MISSOURI 63043
314-429-0100

SHEET 2 of 4

PROJECT NO.: 89MC114V

PROJECT NAME: NL/TARACORP SUPERFUND SITE PREDESIGN FIELD INVESTIGATION

SAMPLER'S: (Signatures)

	DATE	TIME	SAMPLE I.D. NUMBER: Matrix	Location	Boring	Depth	Sample Type		NO. OF CONTAINERS	Total Lead 4oz. poly jar Cool to 4°C	TCLP - Lead 4oz. poly jar Cool to 4°C	Geotechnical glass or poly jar	REMARKS
1	3/3	859	S	DE1636	2	00C	00L	✓	1	X			
2		906	S	DE1638	1	00A	00L	✓	1	X			
3		908	S	DE1638	1	00B	00L	✓	1	X			
4		910	S	DE1638	1	00C	00L	✓	1	X			
5		915	S	DE1638	2	00A	00L	✓	1	X			
6		917	S	DE1638	2	00B	00L	✓	1	X			
7		919	S	DE1638	2	00C	00L		1	X			
8		930	S	DE1637	1	00A	00L	✓	1	X			
		~~930~~	~~S~~	~~DE1637~~	~~1~~	~~00A~~	~~0LQ~~		~~1~~	~~X~~			
9		930	S	DE1637	1	00A	0LD	✓	1	X			
10		932	S	DE1637	1	00B	00L	✓	1	X			
		~~932~~	~~S~~	~~DE1637~~	~~1~~	~~00B~~	~~0LQ~~		~~1~~	~~X~~			
11		932	S	DE1637	1	00B	0LD	✓	1	X			
12		934	S	DE1637	1	00C	00L	✓	1	X			
		~~934~~	~~S~~	~~DE1637~~	~~1~~	~~00C~~	~~0LQ~~		~~1~~	~~X~~			
13		934	S	DE1637	1	00C	0LD	✓	1	X			
14		939	S	DE1637	2	00A	00L	✓	1	X			
15		941	S	DE1637	2	00B	00L	✓	1	X			
16		943	S	DE1637	2	00C	00L	✓	1	X			
17		1111	S	DE1715	1	00A	00L	✓	1	X			
18		1113	S	DE1715	1	00B	00L	✓	1	X			
19		1115	S	DE1715	1	00C	00L	✓	1	X			
20		1120	S	DE1715	2	00A	00L	✓	1	X			

RELINQUISHED BY: (Signature)	DATE / TIME	RECEIVED BY: (Signature)	DATE / TIME
	3/3/92 1500		3/3 1500
RELINQUISHED BY: (Signature)	**DATE / TIME**	**RECEIVED AT LAB BY: (Signature)**	**DATE / TIME**
	3/3 1650		3/3/92 1650
METHOD OF SHIPMENT:		**AIRBILL NO: (If Applicable)**	

CHAIN OF CUSTODY RECORD

WWC3

WOODWARD-CLYDE CONSULTANTS
2318 MILLPARK DR.
MARYLAND HEIGHTS, MISSOURI 63043
314-429-0100

SHEET 3 of 4

PROJECT NO.: 89MC114V

PROJECT NAME: NL/TARACORP SUPERFUND SITE PREDESIGN FIELD INVESTIGATION

SAMPLER'S: (Signatures) [signature] [signature]

DATE	TIME	SAMPLE I.D. NUMBER: Matrix	Location	Boring	Depth	Sample Type	NO. OF CONTAINERS	CONTAINER DESCRIPTION/ ANALYSES REQUESTED: Total Lead 4oz. poly jar Cool to 4°C	TCLP - Lead 4oz. poly jar Cool to 4°C	Geotechnical glass or poly jar	REMARKS
3/3/92	1134	S	BE1940	2	00B	00L	1	X			
	1136	S	BE1940	2	00C	00L	1	X			
	1157	S	BE1941	1	00A	00L	1	X			
	1153	S	BE1941	1	00B	00L	1	X			
	1155	S	BE1941	1	00C	00L	1	X			
	1200	S	BE1941	2	00A	00L	1	X			
	1202	S	BE1941	2	00B	00L	1	X			
	1204	S	BE1941	2	00C	00L	1	X			
	1339	S	BE2140	1	00A	00L	1	X			
	1341	S	BE2140	1	00B	00L	1	X			
	1343	S	BE2140	1	00C	00L	1	X			
	1348	S	BE2140	2	00A	00L	1	X			
	1350	S	BE2140	2	00B	00L	1	X			
	1352	S	BE2140	2	00C	00L	1	X			
	1412	S	BE2020	1	00A	00L	1	X			
	1414	S	BE2020	1	00B	00L	1	X			
	1416	S	BE2020	1	00C	00L	1	X			
	1421	S	BE2020	2	00A	00L	1	X			
	1423	S	BE2020	2	00B	00L	1	X			
	1425	S	BE2020	2	00C	00L	1	X			
	1435	S	BE2034	1	00A	00L	1	X			
	1437	S	BE2034	1	00B	00L	1	X			
	1439	S	BE2034	1	00C	00L	1	X			

RELINQUISHED BY: (Signature)	DATE / TIME	RECEIVED BY: (Signature)	DATE / TIME
Cynthia Pawlikan	3/4/92 3:45	[signature]	3/4 1545
RELINQUISHED BY: (Signature)	DATE / TIME	RECEIVED AT LAB BY: (Signature)	DATE / TIME
[signature]	3/4 1655	Carol Cash	3/4 1655
METHOD OF SHIPMENT:		AIRBILL NO: (If Applicable)	

CHAIN OF CUSTODY RECORD

WOODWARD-CLYDE CONSULTANTS
2318 MILLPARK DR.
MARYLAND HEIGHTS, MISSOURI 63043
314-429-0100

SHEET 4 of 4

PROJECT NO.: 89MC114V

PROJECT NAME: NL/TARACORP SUPERFUND SITE PREDESIGN FIELD INVESTIGATION

SAMPLER'S: (Signatures) [signature] [signature]

	DATE	TIME	SAMPLE I.D. NUMBER: Matrix	Location	Boring	Depth	Sample Type	NO. OF CONTAINERS	CONTAINER DESCRIPTION/ ANALYSES REQUESTED: Total Lead 4oz. poly jar Cool to 4°C	TCLP - Lead 4oz. poly jar Cool to 4°C	Geotechnical glass or poly jar	REMARKS
343	4/1	913	S	ED2212	1	00C	00L	1	✓			
344		931	S	ED2218	1	00A	00L	1	✓			
345		933	S	ED2218	1	00B	00L	1	✓			
346		935	S	ED2218	1	00C	00L	1	✓			
347		939	S	ED2218	2	00A	00L	1	✓			
348		941	S	ED2218	2	00B	00L	1	✓			
349		943	S	ED2218	2	00C	00L	1	✓			
350		953	S	ED2219	1	00A	00L	1	✓			
351		955	S	ED2219	1	00B	00L	1	✓			
352		957	S	ED2219	1	00C	00L	1	✓			
353		1000	S	ED2219	2	00A	00L	1	✓			
354		1003	S	ED2219	2	00B	00L	1	✓			
355		1005	S	ED2219	2	00C	00L	1	✓			
356		1016	S	ED2211	1	00A	00L	1	✓			
357		1018	S	ED2211	1	00B	00L	1	✓			
358		1020	S	ED2211	1	00C	00L	1	✓			
359		1023	S	ED2211	2	00A	00L	1	✓			
360		1025	S	ED2211	2	00B	00L	1	✓			
361		1027	S	ED2211	2	00C	00L	1	✓			
362		1041	S	ED2225	1	00A	00L	1	✓			
363		1043	S	ED2225	1	00B	00L	1	✓			
364		1045	S	ED2225	1	00C	00L	1	✓			
365		1047	S	ED2225	2	00A	00L	1	✓			

RELINQUISHED BY: (Signature)	DATE / TIME	RECEIVED BY: (Signature)	DATE / TIME
[signature]	4/1/92 1600	[signature]	4/1 1600
RELINQUISHED BY: (Signature)	DATE / TIME	RECEIVED AT LAB BY: (Signature)	DATE / TIME
[signature]	4/1 1630	Carol Cash	4/1 1630
METHOD OF SHIPMENT:		AIRBILL NO: (If Applicable)	

CHAIN OF CUSTODY RECORD

WOODWARD-CLYDE CONSULTANTS
2318 MILLPARK DR.
MARYLAND HEIGHTS, MISSOURI 63043
314-429-0100

SHEET 2 of 3

PROJECT NO.: 89MC114V

PROJECT NAME: NL/TARACORP SUPERFUND SITE PREDESIGN FIELD INVESTIGATION

SAMPLER'S: (Signatures) [signature]

DATE	TIME	SAMPLE I.D. NUMBER: Matrix	Location	Boring	Depth	Sample Type	NO. OF CONTAINERS	CONTAINER DESCRIPTION/ ANALYSES REQUESTED: Total Lead 4oz. poly jar Cool to 4°C	TCLP - Lead 4oz. poly jar Cool to 4°C	Geotechnical glass or poly jar	REMARKS
3/27/92	1032	S	GR0801	1	00C	00L	1	✓			
	1034	S	GR0801	2	00A	00L	1	✓			
	1036	S	GR0801	2	00B	00L	1	✓			
	1038	S	GR0801	2	00C	00L	1	✓			
	1052	S	GR0805	1	00A	00L	1	✓			
	1054	S	GR0805	1	00B	00L	1	✓			
	1056	S	GR0805	1	00C	00L	1	✓			
	1100	S	GR0805	2	00A	00L	1	✓			
	1103	S	GR0805	2	00B	00L	1	✓		✓	
	1105	S	GR0805	2	00C	00L	1	✓			
	1113	S	GR0825	1	00A	00L	1	✓			
	1115	S	GR0825	1	00B	00L	1	✓			
	1117	S	GR0825	1	00C	00L	1	✓			
	1122	S	GR0825	2	00A	00L	1	✓			
	1124	S	GR0825	2	00B	00L	1	✓			
	1126	S	GR0825	2	00C	00L	1	✓			
	1151	S	FO0823	1	00A	00L	1	✓			
	1153	S	FO0823	1	00B	00L	1	✓			
	1155	S	FO0823	1	00C	00L	1	✓			
	1332	S	FO0817	1	00A	00L	1	✓			
	1334	S	FO0817	1	00B	00L	1	✓			
	1336	S	FO0817	1	00C	00L	1	✓			
	1338	S	FO0817	2	00A	00L	1	✓			

RELINQUISHED BY: (Signature)	DATE / TIME	RECEIVED BY: (Signature)	DATE / TIME
Cynthia Parker	3/27/92 16:00	[signature]	3/27 1600
RELINQUISHED BY: (Signature)	DATE / TIME	RECEIVED AT LAB BY: (Signature)	DATE / TIME
[signature]	3/27 1635	[signature]	3/27 1635
METHOD OF SHIPMENT:		AIRBILL NO: (If Applicable)	

CHAIN OF CUSTODY RECORD

WOODWARD-CLYDE CONSULTANTS
2318 MILLPARK DR.
MARYLAND HEIGHTS, MISSOURI 63043
314-429-0100

SHEET 2 of 2

PROJECT NO.: 89MC114V

PROJECT NAME: NL/TARACORP SUPERFUND SITE PREDESIGN FIELD INVESTIGATION

SAMPLER'S: (Signatures) M Miller / [illegible]

DATE	TIME	SAMPLE I.D. NUMBER (Matrix / Location / Boring / Depth / Sample Type)						NO. OF CONTAINERS	Total Lead 4oz. poly jar Cool to 4°C	TCLP - Lead 4oz. poly jar Cool to 4°C	Geotechnical glass or poly jar	REMARKS
4/7/92	10:03	S	IO1009	2	00C	00L	✓	1	X			
589	10:12	S	IO1005	1	00B	00L	✓					
590	10:14	S	IO1005	1	00B	00L	✓					
591	10:16	S	IO1005	1	00C	00L	✓					
592	10:19	S	IO1005	2	00A	00L	✓					
593	10:21	S	IO1005	2	00B	00L	✓					
594	10:23	S	IO1005	2	00C	00L	✓					
595	10:32	S	IO1004	1	00B	00L	✓					
596	10:34	S	IO1004	1	00B	00L	✓					
597	10:36	S	IO1004	1	00C	00L	✓					
598	11:14	S	IO1026	1	00B	00L	✓					
599	11:16	S	IO1026	1	00B	00L	✓					
600	11:18	S	IO1026	1	00C	00L	✓					
601	11:21	S	IO1026	2	00B	00L	✓					
602	11:23	S	IO1026	2	00B	00L	✓					
603	11:29	S	IO1026	2	00C	00L	✓					
604	11:33	S	IO1032	1	00A	00L	✓					
605	11:35	S	IO1032	1	00B	00L	✓					
606	11:37	S	IO1032	1	00C	00L	✓					
607	11:33	S	IO1030	1	00A	00D	✓					
608	11:35	S	IO1030	1	00B	00D	✓					
609	11:37	S	IO1030	1	00C	00D	✓					
610	11:40	S	IO1030	2	00A	00L	✓					

RELINQUISHED BY: (Signature)	DATE / TIME	RECEIVED BY: (Signature)	DATE / TIME
[illegible]	4/7/92	[illegible]	4/7 1530
RELINQUISHED BY: (Signature)	DATE / TIME	RECEIVED AT LAB BY: (Signature)	DATE / TIME
[illegible]	4/7 1615	Carol Cash	4-7 1615
METHOD OF SHIPMENT:		AIRBILL NO: (If Applicable)	

WWC4 - 862 - 933

CHAIN OF CUSTODY RECORD

WOODWARD-CLYDE CONSULTANTS
2318 MILLPARK DR.
MARYLAND HEIGHTS, MISSOURI 63043
314-429-0100

PROJECT NO.: 89MC114V

PROJECT NAME: NL/TARACORP SUPERFUND SITE PREDESIGN FIELD INVESTIGATION

SAMPLER'S: (Signatures)

DATE	TIME	SAMPLE I.D. NUMBER: Matrix	Location	Boring	Depth	Sample Type		NO. OF CONTAINERS	Total Lead 4oz. poly jar Cool to 4°C	TCLP - Lead 4oz. poly jar Cool to 4°C	Geotechnical glass or poly jar	REMARKS
4/13	823	S	MA0907	1	00A	00L	✓	1	X			
	825	S	MA0907	1	00B	00L	✓					
	827	S	MA0907	1	00C	00L	✓					
	830	S	MA0907	2	00A	00L	✓					
	832	S	MA0907	2	00B	00L	✓					
	834	S	MA0907	2	00C	00L	✓					
	911	S	ME0620	1	00A	00L	✓					
	913	S	ME0620	1	00B	00L	✓					
	915	S	ME0620	1	00C	00L	✓					
	918	S	ME0620	2	00A	00L	✓					
	920	S	ME0620	2	00B	00L	✓					
	922	S	ME0620	2	00C	00L	✓					
	930	S	ME0606	1	00A	00L	✓					
	932	S	ME0606	1	00B	00L	✓					
	934	S	ME0606	1	00C	00L	✓					
	938	S	ME0606	2	00A	00L	✓					
	940	S	ME0606	2	00B	00L	✓					
	942	S	ME0606	2	00C	00L	✓					
	947	S	ME0616	1	00A	00L	✓					
	949	S	ME0616	1	00B	00L	✓					
	951	S	ME0616	1	00C	00L	✓					
	954	S	ME0616	2	00A	00L	✓					
	956	S	ME0616	2	00B	00L	✓					

RELINQUISHED BY: (Signature)	DATE / TIME	RECEIVED BY: (Signature)	DATE / TIME
[illegible]	4/13/92 1600	[illegible]	4/13 1600
RELINQUISHED BY: (Signature)	DATE / TIME	RECEIVED AT LAB BY: (Signature)	DATE / TIME
[illegible]	4/13 1695	[illegible]	4-13 4PM

METHOD OF SHIPMENT:

AIRBILL NO:

CHAIN OF CUSTODY RECORD

WOODWARD-CLYDE CONSULTANTS
2318 MILLPARK DR.
MARYLAND HEIGHTS, MISSOURI 63043
314-429-0100

SHEET 2 of 4

PROJECT NO.: 89MC114V

PROJECT NAME: NL/TARACORP SUPERFUND SITE PREDESIGN FIELD INVESTIGATION

SAMPLER'S: (Signatures) [signature]

	DATE	TIME	SAMPLE I.D. NUMBER: Matrix	Location	Boring	Depth	Sample Type	NO. OF CONTAINERS	CONTAINER DESCRIPTION/ ANALYSES REQUESTED: Total Lead 4oz. poly jar Cool to 4°C	TCLP - Lead 4oz. poly jar Cool to 4°C	Geotechnical glass or poly jar	REMARKS
31	3/31/92	952	S	GL1103	2	00C	00L	1	✓			
32		1028	S	GW0916	1	00A	00L	1	✓			
33		1030	S	GW0916	1	00B	00L	1	✓			
34		1032	S	GW0916	1	00C	00L	1	✓			
35		1035	S	GW0916	2	00A	00L	1	✓			
36		1037	S	GW0916	2	00B	00L	1	✓			
37		1039	S	GW0916	2	00C	00L	1	✓			
38		1101	S	GW1028	1	00A	00L	1	✓			
39		1103	S	GW1028	1	00B	00L	1	✓			
40		1105	S	GW1028	1	00C	00L	1	✓			
41		1111	S	GW1028	2	00A	00L	1	✓			
42		1113	S	GW1028	2	00B	00L	1	✓			
43		1115	S	GW1028	2	00C	00L	1	✓			
44		1125	S	GW1012	1	00A	00L	1	✓			
45		1127	S	GW1012	1	00B	00L	1	✓			
46		1129	S	GW1012	1	00C	00L	1	✓			
			~~S~~	~~GW1012~~	~~2~~	~~00A~~	~~00L~~	~~1~~	~~✓~~			~~xe~~
			~~S~~	~~GW1012~~	~~2~~	~~00B~~	~~00L~~	~~1~~	~~✓~~			~~xe~~
			~~S~~	~~GW1012~~	~~2~~	~~00C~~	~~00L~~	~~1~~	~~✓~~			~~xe~~
47		1137	S	GW1015	1	00A	00L	1	✓			
48		1139	S	GW1015	1	00B	00L	1	✓			
49		1141	S	GW1015	1	00C	00L	1	✓			
			~~S~~									~~xe~~

RELINQUISHED BY: (Signature)	DATE / TIME	RECEIVED BY: (Signature)	DATE / TIME
[signature]	3/31/92 16:15	[signature]	3/31 1615
RELINQUISHED BY: (Signature)	DATE / TIME	RECEIVED AT LAB BY: (Signature)	DATE / TIME
[signature]	3/31 1650	[signature] /802 / ESE	3-31-92 1650
METHOD OF SHIPMENT:		AIRBILL NO: (If Applicable)	

CHAIN OF CUSTODY RECORD

WOODWARD-CLYDE CONSULTANTS
2318 MILLPARK DR.
MARYLAND HEIGHTS, MISSOURI 63043
314-429-0100

PROJECT NO.: 89MC114V

PROJECT NAME: NL/TARACORP SUPERFUND SITE PREDESIGN FIELD INVESTIGATION

SAMPLER'S: (Signatures)

DATE	TIME	SAMPLE I.D. NUMBER (Matrix / Location / Boring / Depth / Sample Type)	NO. OF CONTAINERS	Total Lead 4oz. poly jar Cool to 4°C	TCLP - Lead 4oz. poly jar Cool to 4°C GRND SAMPLE	Geotechnical glass or poly jar	REMARKS
4/22	1305	S MA1429 1 00A 00L ✓	1	✓			
	1307	S MA1429 1 00B 00L ✓	1	✓			
	1309	S MA1429 1 00C 00L ✓	1	✓			
	1311	S MA1429 2 00A 00L ✓	1	✓			
	1313	S MA1429 2 00B 00L ✓	1	✓			
	1315	S MA1429 2 00C 00L ✓	1	✓			
	1345	S MA1439 1 00A 00L ✓	1	✓			
	1347	S MA1439 1 00B 00L ✓	1	✓			
	1349	S MA1439 1 00C 00L ✓	1	✓			
	1037	S OR0001 1 00A 00I ✓	1	~~✓~~	✓		GRND SAMPLES
	1047	S OR0001 1 00A 01D ✓	1	~~✓~~	✓		GRND SAMPLES
	1100	S OR0002 1 00A 00I ✓	1	~~✓~~	✓		GRND SAMPLES
		~~S OR0002 1 00A 01D~~					
	1120	S OR0003 1 00A 00I ✓	1		✓		GRND SAMPLE
	1420	S SI2247 1 00A 00L ✓	1	✓			
	1422	S SI2247 1 00B 00L ✓	1	✓			
	1424	S SI2247 1 00C 00L ✓	1	✓			
	1428	S SI2247 2 00A 00L ✓	1	✓			
	1430	S SI2247 2 00B 00L ✓	1	✓			
	1432	S SI2247 2 00C 00L ✓	1	✓			
	1442	S SI2228 1 00A 00L ✓	1	✓			
	1444	S SI2228 1 00B 00L ✓	1	✓			
	1446	S SI2228 1 00C 00L ✓	1	✓			

RELINQUISHED BY: (Signature)	DATE / TIME	RECEIVED BY: (Signature)	DATE / TIME
[signature]	4/22/92 1530	[signature]	4/22/92 153
RELINQUISHED BY: (Signature)	DATE / TIME	RECEIVED AT LAB BY: (Signature)	DATE / TIME
[signature]	4/22/92 1740	[signature]	4/22/92 1740

METHOD OF SHIPMENT:

AIRBILL NO: (If Applicable)

187-244

WWC6

CHAIN OF CUSTODY RECORD

WOODWARD-CLYDE CONSULTANTS
2318 MILLPARK DR.
MARYLAND HEIGHTS, MISSOURI 63043
314-429-0100

SHEET 1 of 3

PROJECT NO.: 89MC114V

PROJECT NAME: NL/TARACORP SUPERFUND SITE PREDESIGN FIELD INVESTIGATION

SAMPLER'S: (Signatures) [signature] K [signature]

	DATE	TIME	SAMPLE I.D. NUMBER: Matrix	Location	Boring	Depth	Sample Type	NO. OF CONTAINERS	CONTAINER DESCRIPTION/ ANALYSES REQUESTED: Total Lead 4oz. poly jar Cool to 4°C	TCLP - Lead 4oz. poly jar Cool to 4°C	Geotechnical glass or poly jar	REMARKS
7-	5/13	825	S	DE1628	3	00A	00T		5/13 per C. [signature] 13:05 X			Pulverize Samples
8		855	S	DE1628	4	00A	00T		X			Pulverize Samples
9		926	S	WS2035	1	00A	00L		X	SOR0025300A00T		
0		928	S	WS2035	1	00B	00L			SOR0025400A00T		
1		930	S	WS2035	1	00C	00L					
2		957	S	DE2100	3	00A	00L					
3		959	S	DE2100	3	00B	00L					
4		1001	S	DE2100	3	00C	00L					
5		1004	S	WS2140	1	00A	00L					
6		1006	S	WS2140	1	00B	00L					
7		1008	S	WS2140	1	00C	00L					
8		1012	S	WS2140	2	00A	00L					
9		1014	S	WS2140	2	00B	00L					
00		1016	S	WS2140	2	00C	00L					
01		1034	S	DE2100	1	00A	00L			200		
02		1036	S	DE2100	1	00B	00L			201		
03		1038	S	DE2100	1	00C	00L			202		
04-		1043	S	DE2100	2	00A	00L			203		
05		1045	S	DE2100	2	00B	00L			204		
-		1047	S	DE2100	2	00C	00L			205		
-		1115	S	IO2103	1	00A	00L	not yellow		206		
-		1117	S	IO2103	1	00B	00L			207		
-		1119	S	IO2103	1	00C	00L			208		

RELINQUISHED BY: (Signature)	DATE / TIME	RECEIVED BY: (Signature)	DATE / TIME
Cynthia Paulkin	5/13/92 16:45	K [signature]	5/13/92 1645
RELINQUISHED BY: (Signature)	DATE / TIME	RECEIVED AT LAB BY: (Signature)	DATE / TIME
K [signature]	5/13/92 1715	[signature]	5-13-92 5:15 p.
METHOD OF SHIPMENT:		AIRBILL NO: (If Applicable)	

CHAIN OF CUSTODY RECORD

WOODWARD-CLYDE CONSULTANTS
2318 MILLPARK DR.
MARYLAND HEIGHTS, MISSOURI 63043
314-429-0100

SHEET 2 of 3

PROJECT NO.: 89MC114V

PROJECT NAME: NL/TARACORP SUPERFUND SITE PREDESIGN FIELD INVESTIGATION

SAMPLER'S: (Signatures)

DATE	TIME	SAMPLE I.D. NUMBER (Matrix / Location / Boring / Depth / Sample Type)	NO. OF CONTAINERS	Total Lead 4oz. poly jar Cool to 4°C	TCLP - Lead 4oz. poly jar Cool to 4°C	Geotechnical glass or poly jar	REMARKS
5/13	1124	S 102L03 2 00A 00L	1	X			
	1126	S 102103 2 00B 00L					
	1128	S 102103 2 00C 00L					
	1311	S OR0026 1 00A 00L					Take from TCLP
	1313	S OR0026 1 00B 00L					
	~~1315~~	~~S OR0026 1 00C 00L~~					
	1407	S OR0026 2 00A 00L					
	1409	S OR0026 2 00B 00L					
	1411	S OR0026 2 00C 00L					
1645	~~1311~~	S OR0026 1 00A 00L		X	X		Pulverize Sample
	1523	S OH2025 1 00A 00L		X			
	1524	S OH2025 1 00B 00L		X			
	1525	S OH2025 1 00C 00L					
	1527	S OH2025 2 00A 00L					
	1528	S OH2025 2 00B 00L					
	1530	S OH2025 2 00C 00L					
	1532	S OH2025 3 00A 00L					
	1534	S OH2025 3 00B 00L					
	1535	S OH2025 3 00C 00L					
	1537	S OH2025 4 00A 00L		~~Wrong~~	~~Time~~ JDC		
	1538	S OH2025 4 00B 00L		~~Wrong~~	~~Time~~ JDC		
	1540	S OH2025 4 00C 00L		~~Wrong~~	~~Time~~ JDC		
	1541	S OH2025 5 00A 00L		~~Wrong~~			

RELINQUISHED BY: (Signature)	DATE / TIME	RECEIVED BY: (Signature)	DATE / TIME
Cynthia Powell	5/13/92 16:45	[illegible]	5/13/92 1645
RELINQUISHED BY: (Signature)	DATE / TIME	RECEIVED AT LAB BY: (Signature)	DATE / TIME
[illegible]	5/13/92 1715	[illegible]	5-13-92 5[illegible]

METHOD OF SHIPMENT:

AIRBILL NO: (If Applicable)

CHAIN OF CUSTODY RECORD

WOODWARD-CLYDE CONSULTANTS
2318 MILLPARK DR.
MARYLAND HEIGHTS, MISSOURI 63043
314-429-0100

PROJECT NO.: 89MC114V

PROJECT NAME: NL/TARACORP SUPERFUND SITE PREDESIGN FIELD INVESTIGATION

SAMPLER'S: (Signatures) M. Walker

	DATE	TIME	SAMPLE I.D. NUMBER: Matrix	Location	Boring	Depth	Sample Type		NO. OF CONTAINERS	Total Lead 4oz. poly jar Cool to 4°C	TCLP - Lead 4oz. poly jar Cool to 4°C	Geotechnical glass or poly jar	REMARKS
18	5/19/92	11:05	S	ET1312	1	00A	00L	✓	1	X			
19		11:07	S	ET1312	1	00B	00L	✓	1	X			
20		11:09	S	ET1312	2	00A	00L	✓	1	X			
21		13:50	S	CA0108	1	00A	00L	✓	1		X		
22		13:52	S	CA0108	1	00C	00L	✓	1	X			
23		14:35	S	CA0108	2	0AB	00L	✓	1	X			
24		14:36	S	CA0108	2	00C	00L	✓	1	X			
25		15:17	S	CA0111	2	0AB	00L	✓	1	X			
26		15:19	S	CA0111	1	0AB	00L	✓	1	X			
			S										
			S										
			S										
			S										
			S										
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			S										
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RELINQUISHED BY: (Signature)	DATE / TIME	RECEIVED BY: (Signature)	DATE / TIME
[illegible]	5/19/92 1600	[illegible]	5/19/92 1600
RELINQUISHED BY: (Signature)	DATE / TIME	RECEIVED AT LAB BY: (Signature)	DATE / TIME
[illegible]	5/19/92 1700	[illegible]	5-19 5Pm
METHOD OF SHIPMENT:		AIRBILL NO: (If Applicable)	

CHAIN OF CUSTODY RECORD

WWC5

WOODWARD-CLYDE CONSULTANTS
2318 MILLPARK DR.
MARYLAND HEIGHTS, MISSOURI 63043
314-429-0100

SHEET 1 of 2

PROJECT NO.: 89MC114V

PROJECT NAME: NL/TARACORP SUPERFUND SITE PREDESIGN FIELD INVESTIGATION

SAMPLER'S: (Signatures) [signature]

DATE	TIME	SAMPLE I.D. NUMBER (Matrix / Location / Boring / Depth / Sample Type)	NO. OF CONTAINERS	Total Lead 4oz. poly jar Cool to 4°C	TCLP - Lead 4oz. poly jar Cool to 4°C	Geotechnical glass or poly jar	REMARKS
5/20/92	8:50	S 0R0022 1 0AB 00L ✓	1	X			
	8:50	S 0R0022 1 0AB 00T ✓	1		X	WWCB	
	8:55	S 0R0022 1 00C 00L ✓	1	X			
	9:25	S 0R0023 1 0AB 00L ✓	1	X			
	9:25	S 0R0023 1 0AB 00T ✓	1		X		
	9:35	S 0R0023 1 00C 00L ✓	1	X			
	10:10	S 0R0024 1 0AB 00T ✓	1		X		
	~~10:10~~	~~S 0R0024 1 0AB 0TQ~~	1		X		
	10:10	S 0R0024 1 0AB 00L ✓	1	X			
	10:10	S 0R0024 1 0AB 0LD ✓	1	X			
	10:15	S 0R0024 1 00C 00L ✓	1	X			
	10:20	S 0R0024 1 00D 00L ✓	1	X			
	12:20	S TE0203 1 0AB 00L ✓	1	X			
	12:25	S TE0203 1 00C 00L ✓	1	X			
	12:25	S TE0203 1 00C 00T ✓	1	X			
	12:20	S TE0203 1 0AB 00T ✓	1	X			
	12:30	S TE0203 1 00D 00L ✓	1	X			
	12:50	S TE0203 2 0AB 00L ✓	1	X			
	12:50	S TE0203 2 0AB 00T ✓	1		X		
	13:00	S TE0203 2 00C 00L ✓	1	X			
	13:03	S TE0203 2 0AB 00L ✓	1	X			
	13:15	S TE0203 3 0AB 00L ✓	1	X			
	13:15	S TE0203 3 0AB 0LD ✓	1	X			

RELINQUISHED BY: (Signature)	DATE / TIME	RECEIVED BY: (Signature)	DATE / TIME
[signature]	5/20/92 1600	[signature]	5/20/92 1600
RELINQUISHED BY: (Signature)	DATE / TIME	RECEIVED AT LAB BY: (Signature)	DATE / TIME
[signature]	5/20/92 1700	[signature]	5-20-92 1700

METHOD OF SHIPMENT:

AIRBILL NO: (If Applicable)

CHAIN OF CUSTODY RECORD

WOODWARD-CLYDE CONSULTANTS
2318 MILLPARK DR.
MARYLAND HEIGHTS, MISSOURI 63043
314-429-0100

SHEET 2 of 2

PROJECT NO.: 89MC114V

PROJECT NAME: NL/TARACORP SUPERFUND SITE PREDESIGN FIELD INVESTIGATION

SAMPLER'S: (Signatures) M. Walker

	DATE	TIME	SAMPLE I.D. NUMBER: Matrix	Location	Boring	Depth	Sample Type		NO. OF CONTAINERS	Total Lead 4oz. poly jar Cool to 4°C	TCLP - Lead 4oz. poly jar Cool to 4°C	Geotechnical glass or poly jar	REMARKS
29	5/20/92	13:15	S	IE0203	3	0AB	00T	✓	1		X		
30		13:20	S	IE0203	3	00C	00L	✓	1	X			
31		13:23	S	IE0203	3	00D	00L	✓	1	X			
32		13:45	S	IE0203	4	0AB	00L	✓	1	X			
33		13:45	S	IE0203	4	0AB	00T	✓	1		X		
34		13:50	S	IE0203	4	00C	00L	✓	1	X			
35		13:55	S	IE0203	4	00D	00L	✓	1	X			
36		14:23	S	H10100	1	0AB	00L	✓	1	X			
37		14:23	S	H10100	1	0AB	00T	✓	1		X		
38		14:24	S	H10100	1	00C	00L	✓	1	X			
39		14:25	S	H10100	1	00D	00L	✓	1	X			
40		14:38	S	H10100	2	0AB	00L	✓	1	X			
41		14:38	S	H10100	2	0AB	00T	✓	1		X		
42		14:40	S	H10100	2	00C	00L	✓	1	X			
			S										
			S										
			S										
			S										
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RELINQUISHED BY: (Signature)	DATE / TIME	RECEIVED BY: (Signature)	DATE / TIME
[illegible]	5/20/92 1600	[illegible]	5/20/92 1600
RELINQUISHED BY: (Signature)	DATE / TIME	RECEIVED AT LAB BY: (Signature)	DATE / TIME
[illegible]	5/20/92 1700	[illegible]	5-20-92/1700

METHOD OF SHIPMENT:

AIRBILL NO: (If Applicable)

CHAIN OF CUSTODY RECORD

WWC5

WOODWARD-CLYDE CONSULTANTS
2318 MILLPARK DR.
MARYLAND HEIGHTS, MISSOURI 63043
314-429-0100

SHEET 1 of 2

(x) Glass in sample

PROJECT NO.: 89MC114V

PROJECT NAME: NL/TARACORP SUPERFUND SITE PREDESIGN FIELD INVESTIGATION

SAMPLER'S: (Signatures) K Hedge, M Mullins

DATE	TIME	SAMPLE I.D. NUMBER: Matrix	Location	Boring	Depth	Sample Type		NO. OF CONTAINERS	CONTAINER DESCRIPTION/ ANALYSES REQUESTED: Total Lead 4oz. poly jar Cool to 4°C	TCLP - Lead 4oz. poly jar Cool to 4°C	Geotechnical glass or poly jar	REMARKS
5/21	845	S	TE0208	1	0AB	00L	✓	1	✓			
	845	S	TE0208	1	0AB	00T	✓			✓		Pulverize Samples
	847	S	TE0208	1	00C	00L	✓		✓			
	907	S	TE0208	2	0AB	00L	✓		✓			Glass in Sample
	907	S	TE0208	2	0AB	00T	✓			✓		Pulverize Sample
	~~907~~	~~S~~	~~TE0208~~	~~2~~	~~0AB~~	~~0LQ~~						
	909	S	TE0208	2	00C	00L	✓		✓			
	930	S	TE0208	3	0AB	00L	✓		✓			
	932	S	TE0208	3	00C	00L	✓		✓			
	1020	S	TE0208	4	0AB	00L	✓		✓			
	1020	S	TE0208	4	0AB	0LT	✓			✓		Pulverize Sample
	1023	S	TE0208	4	00C	00L	✓		✓			
	1055	S	TE0208	5	0AB	00L	✓		✓			
	1055	S	TE0208	5	0AB	0LT	✓			✓		Pulverize Sample
	1057	S	TE0208	5	00C	00L	✓		✓			
	1353	S	HA0205	1	00D	00L	✓		✓			
	1354	S	HA0205	1	00E	00L	✓		✓			
	1427	S	HA0205	2	00D	00L	✓		✓			
	1429	S	HA0205	2	00D	0LD	✓		✓			
	1434	S	HA0205	2	00E	00L	✓		✓			
	1437	S	HA0205	2	00F	00L	✓		✓			
	1527	S	HA0205	3	00D	00L	✓		✓			
	1527	S	HA0205	3	00D	00T	✓			✓		Pulverize Sample

RELINQUISHED BY: (Signature)	DATE / TIME	RECEIVED BY: (Signature)	DATE / TIME
[signature]	5/21/92 1700	[signature]	5/21/92 1700
RELINQUISHED BY: (Signature)	DATE / TIME	RECEIVED AT LAB BY: (Signature)	DATE / TIME
[signature]	5/21/92 1810	[signature]	5-21-92
METHOD OF SHIPMENT:		AIRBILL NO: (If Applicable)	

CHAIN OF CUSTODY RECORD

WOODWARD-CLYDE CONSULTANTS
2318 MILLPARK DR.
MARYLAND HEIGHTS, MISSOURI 63043
314-429-0100

SHEET 2 of 2

(1) Glass in Sample

PROJECT NO.:	PROJECT NAME:
89MC114V	NL/TARACORP SUPERFUND SITE PREDESIGN FIELD INVESTIGATION

SAMPLER'S: (Signatures) [signature] [signature]

DATE	TIME	SAMPLE I.D. NUMBER: Matrix	Location	Boring	Depth	Sample Type	NO. OF CONTAINERS	CONTAINER DESCRIPTION/ ANALYSES REQUESTED: Total Lead 4oz. poly jar Cool to 4°C	TCLP - Lead 4oz. poly jar Cool to 4°C	Geotechnical glass or poly jar	REMARKS
5/21	1529	S	HA0205	3	00D	0TD ✓	1		✓		(1) pulverize sample
	1530	S	HA0205	3	00E	00L ✓	1	✓			(1)
	1530	S	HA0205	3	00E	00T ✓			✓		(1) pulverize sample
		~~S~~	~~HA0205~~	~~3~~	~~00E~~	~~0LQ~~		✓	KI		
	1523	S	HA0205	3	0AC	00L ✓		✓			✓
		S									
		S									
		S									
		S									
		S									
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RELINQUISHED BY: (Signature)	DATE / TIME	RECEIVED BY: (Signature)	DATE / TIME
[signature]	5/21/92 1700	[signature]	5/21/92 170[illegible]
RELINQUISHED BY: (Signature)	DATE / TIME	RECEIVED AT LAB BY: (Signature)	DATE / TIME
[signature]	5/21/92 1810	[signature]	5-21-92 615[illegible]
METHOD OF SHIPMENT:		AIRBILL NO: (If Applicable)	

CHAIN OF CUSTODY RECORD

WWC5

WOODWARD-CLYDE CONSULTANTS
2318 MILLPARK DR.
MARYLAND HEIGHTS, MISSOURI 63043
314-429-0100

SHEET 1 of 1

PROJECT NO.: 89MC114V

PROJECT NAME: NL/TARACORP SUPERFUND SITE PREDESIGN FIELD INVESTIGATION

SAMPLER'S: (Signatures) K Oleska, C. Pavelka

DATE	TIME	SAMPLE I.D. NUMBER (Matrix / Location / Boring / Depth / Sample Type)		NO. OF CONTAINERS	CONTAINER DESCRIPTION/ ANALYSES REQUESTED: Total Lead 4oz. poly jar Cool to 4°C	TCLP - Lead 4oz. poly jar Cool to 4°C	Geotechnical glass or poly jar	REMARKS
5/22	8:45	s HAØ2Ø3 1 OAC OOL	✓	1	X			
	8:50	s HAØ2Ø3 1 OOD OOL	✓	1	X			
	9:25	s HAØ2Ø3 2 OAC OOL	✓	1	X			Cinders
	9:30	s HAØ2Ø3 2 OOD OOL	✓	1	X			
	10:15	s HAØ2Ø3 3 OOD OOL	✓	1	X			Cinders
	10:15	s HAØ2Ø3 3 OOD OOLD	✓	1	X			Cinders
	10:15	s HAØ2Ø3 3 OOD OOT	✓	1		X		Pulverize Sample- Cinders
	10:20	s HAØ2Ø3 3 OOE OOL	✓	1	X			Cinders
	10:20	s HAØ2Ø3 3 OOE OOT	✓	1		X		Pulverize Sample, Cinders
	10:25	s HAØ2Ø3 3 OOF OOL	✓	1	X			
	11:10	s HAØ2Ø3 4 OAC OOL	✓	1	X			
	11:13	s HAØ2Ø3 4 OOD OOL	✓	1	X			Cinders
	11:15	s HAØ2Ø3 4 OOE OOL	✓	1	X			
	11:20	s HAØ2Ø3 4 OOF OOL	✓	1	X			
	11:13	s HAØ2Ø3 4 OOD OOT	✓	1		X		Pulverize, Cinders
		s						
		s						
		s						
		s						
		s						
		s						
		s						
		s						

C. Pavelka

RELINQUISHED BY: (Signature)	DATE / TIME	RECEIVED BY: (Signature)	DATE / TIME
[illegible]	5/22/92 1330	Kim Oleska	5/22/92 1330
RELINQUISHED BY: (Signature)	DATE / TIME	RECEIVED AT LAB BY: (Signature)	DATE / TIME
[illegible]	5/22/92 1700	[illegible]	5-22-92 1700
METHOD OF SHIPMENT:		AIRBILL NO: (If Applicable)	

CHAIN OF CUSTODY RECORD

WWC5

WOODWARD-CLYDE CONSULTANTS
2318 MILLPARK DR.
MARYLAND HEIGHTS, MISSOURI 63043
314-429-0100

SHEET 1 of 4

PROJECT NO.: 89MC114V

PROJECT NAME: NL/TARACORP SUPERFUND SITE PREDESIGN FIELD INVESTIGATION

SAMPLER'S: (Signatures) [signature]

DATE	TIME	SAMPLE I.D. NUMBER: Matrix	Location	Boring	Depth	Sample Type		NO. OF CONTAINERS	CONTAINER DESCRIPTION/ ANALYSES REQUESTED: Total Lead 4oz. poly jar Cool to 4°C	TCLP - Lead 4oz. poly jar Cool to 4°C	Geotechnical glass or poly jar	REMARKS
5/27	813	S	HA0202	1	0AB	00L	✓		✓			
	813	S	HA0202	1	0AB	00T	✓			✓		pulverize sample
	818	S	HA0202	1	00C	00L	✓		✓			
	818	S	HA0202	1	00C	00T	✓			✓		pulverize sample
	828	S	HA0202	1	00E	00L	✓		✓			
	853	S	HA0202	2	0AB	00L	✓	KF	✓			
	853	S	HA0202	2	0AB	00T	✓			✓		pulverize sample
	854	S	HA0202	2	00C	00T	✓			✓		pulverize sample
	907	S	HA0202	2	00F	00L	✓		✓			
	8~~8~~24	S	HA0202	1~~2~~	00D	00L	✓		✓			
	945	S	HA0202	3	00C	00L	✓		✓			
	~~945~~	~~S~~	~~HA0202~~	~~3~~	~~00C~~	~~00T~~				✓		~~pulverize sample~~
	943	S	HA0202	3	0AB	00L	✓		✓			
	943	S	HA0202	3	0AB	0LD	✓		✓			
	945	S	HA0202	3	00E	00L	✓		✓			
	1010	S	HA0202	3	00F	00T	✓			✓		pulverize sample
	1013	S	HA0202	3	00F	~~0LD~~	OTD		KF	✓		pulverize sample
	1015	S	HA0202	3	00G	00L	✓		✓			
	1105	S	HA0202	4	0AB	00L	✓		✓			
	1110	S	HA0202	4	00C	00L	✓		✓			
	12:05	S	RS0128	1	0AB	00L	✓		✓			
	12:08	S	RS0128	1	00C	00L	✓		✓			
	12:10	S	RS0128	1	00D	00L	✓		✓			

RELINQUISHED BY: (Signature)	DATE / TIME	RECEIVED BY: (Signature)	DATE / TIME
[signature]	5/27/92 1800	[signature]	5/27 1800
RELINQUISHED BY: (Signature)	DATE / TIME	RECEIVED AT LAB BY: (Signature)	DATE / TIME
[signature]	5/27 1830	[signature]	5/27 1830
METHOD OF SHIPMENT:		AIRBILL NO. (If Applicable)	

CHAIN OF CUSTODY RECORD

WOODWARD-CLYDE CONSULTANTS
2318 MILLPARK DR.
MARYLAND HEIGHTS, MISSOURI 63043
314-429-0100

PROJECT NO.: 89MC114V

PROJECT NAME: NL/TARACORP SUPERFUND SITE PREDESIGN FIELD INVESTIGATION

SAMPLER'S: (Signatures)

	DATE	TIME	SAMPLE I.D. NUMBER (Matrix / Location / Boring / Depth / Sample Type)		NO. OF CONTAINERS	Total Lead 4oz. poly jar Cool to 4°C	TCLP - Lead 4oz. poly jar Cool to 4°C	Geotechnical glass or poly jar		REMARKS
2	5/27/92	12:28	s RSØ128 2 00C 00L	✓	1	X				
3		12:30	s RSØ128 2 00D 00L	✓	1	X				
1		12:31	s RSØ128 2 00D 00T	✓	1		X			Pulverize Samples
5		12:35	s RSØ128 2 00E 00L	✓	1	X				
6		12:50	s RSØ128 3 00C 00L	✓	1	X				
7		12:51	s RSØ128 3 00C 00T	✓	1		X			Pulverize Sample
8		12:55	s RSØ128 3 00D 00L	✓	1	X				
9		12:56	s RSØ128 3 00D 00T	✓	1		X			Pulverize Sample
80		12:58	s RSØ128 3 00E 00L	✓	1	X				
		1414	s MA1423 1 00A 00L	✓	1	✓				
58		1416	s MA1423 1 00B 00L	✓	1	✓				
		1418	s MA1423 1 00C 00L	✓	1	✓				
		1414	s MA1423 1 00A 0LD	✓	1	✓				
		1416	s MA1423 1 00B 0LD	✓	1	✓				
		1418	s MA1423 1 00C 0LD	✓	1	✓				
87		1420	s MA1423 2 00A 00L	✓	1	✓				
		1422	s MA1423 2 00B 00L	✓	1	✓				
589		1424	s MA1423 2 00C 00L	✓	1					
		1450	s NE1500 1 00A 00L	✓	1	✓				
591		1452	s NE1500 1 00B 00L	✓	1	✓				
2		1454	s NE1500 1 00C 00L	✓	1	✓				
3		1455	s NE1500 2 00A 00L	✓	1	✓				
4		1457	s NE1500 2 00B 00L	✓	1	✓				

RELINQUISHED BY: (Signature)	DATE / TIME	RECEIVED BY: (Signature)	DATE / TIME
[signature]	5/27/92 1500	[signature]	5/27 1800
RELINQUISHED BY: (Signature)	DATE / TIME	RECEIVED AT LAB BY: (Signature)	DATE / TIME
[signature]	5/27 1830	[signature]	5/27 1830
METHOD OF SHIPMENT:		AIRBILL NO. (If Applicable)	

CHAIN OF CUSTODY RECORD

WWC6

WOODWARD-CLYDE CONSULTANTS
2318 MILLPARK DR.
MARYLAND HEIGHTS, MISSOURI 63043
314-429-0100

SHEET 1 of 1

PROJECT NO.:	PROJECT NAME:
89MC114V	NL/TARACORP SUPERFUND SITE PREDESIGN FIELD INVESTIGATION

SAMPLER'S: (Signatures) C. Powell

	DATE	TIME	SAMPLE I.D. NUMBER: Matrix	Location	Boring	Depth	Sample Type	NO. OF CONTAINERS	CONTAINER DESCRIPTION/ ANALYSES REQUESTED: Total Lead 4oz. poly jar Cool to 4°C	TCLP - Lead 4oz. poly jar Cool to 4°C	Geotechnical glass or poly jar	REMARKS
657	6/29/92	14:35	S	OR0013	1	00K	00T	1		X		Pulverize Samples
658		15:00	S	OR0014	1	00K	00T	1		X		" "
659		15:20	S	OR0015	1	00J	00T	1		X		" "
660		15:25	S	OR0015	1	00K	00T	1		X		
			S									
			S									
			S									
			S									
			S									
			S									
			S									
			S									
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RELINQUISHED BY: (Signature)	DATE / TIME	RECEIVED BY: (Signature)	DATE / TIME
Cynthia Powell			
RELINQUISHED BY: (Signature)	DATE / TIME	RECEIVED AT LAB BY: (Signature)	DATE / TIME
		Carol Cash	6-30-92 800
METHOD OF SHIPMENT:		AIRBILL NO: (If Applicable)	

CHAIN OF CUSTODY RECORD

WOODWARD–CLYDE CONSULTANTS
2318 MILLPARK DR.
MARYLAND HEIGHTS, MISSOURI 63043
314–429–0100

SHEET 1 of 3

PROJECT NO.: 89MC114V

PROJECT NAME: NL/TARACORP SUPERFUND SITE PREDESIGN FIELD INVESTIGATION

SAMPLER'S: (Signatures) M Wallace / [illegible]

DATE	TIME	SAMPLE I.D. NUMBER: Matrix	Location	Boring	Depth	Sample Type	NO. OF CONTAINERS	CONTAINER DESCRIPTION / ANALYSES REQUESTED: Total Lead 4oz. poly jar Cool to 4°C	TCLP – Lead 4oz. poly jar Cool to 4°C	Geotechnical glass or poly jar	REMARKS
8/12/92	0900	S	GR1933	1	00A	00L					
	0900	S	GR1933	1	00A	00D					
	~~0900~~	~~S~~	~~GR1933~~	~~1~~	~~00A~~	~~00G~~					
	0903	S	GR1933	1	00B	00L					
	0903	S	GR1933	1	00B	00D					
	0905	S	GR1933	1	00C	00L					
	0905	S	GR1933	1	00C	00D					
	0915	S	GR1924	1	00A	00L					
	0918	S	GR1924	1	00B	00L					
	0920	S	GR1924	1	00C	00L					
	0923	S	GR1924	2	00A	00L					
	0925	S	GR1924	2	00B	00L					
	0930	S	GR1924	2	00C	00L					
	1010	S	MR1340	1	00A	00L					
	1015	S	MR1340	1	00B	00L					
	1020	S	MR1348	1	00A	00L					
	1023	S	MR1348	1	00B	00L					
	1025	S	MR1348	1	00C	00L					
	1100	S	GR0922	1	00A	00L					
	1103	S	GR0922	1	00B	00L					
	1106	S	GR0922	1	00C	00L					
	1135	S	DE1712	1	00A	00L					
	1138	S	DE1712	1	00B	00L					

RELINQUISHED BY: (Signature)	DATE / TIME	RECEIVED BY: (Signature)	DATE / TIME
RELINQUISHED BY: (Signature) [illegible]	DATE / TIME 8/12/92 1645	RECEIVED AT LAB BY: (Signature) [illegible]	DATE / TIME 8/12/92 16:45
METHOD OF SHIPMENT:		AIRBILL NO: (If Applicable)	

CHAIN OF CUSTODY RECORD

WOODWARD–CLYDE CONSULTANTS
2318 MILLPARK DR.
MARYLAND HEIGHTS, MISSOURI 63043
314–429–0100

SHEET 2 of 3

PROJECT NO.: 89MC114V

PROJECT NAME: NL/TARACORP SUPERFUND SITE PREDESIGN FIELD INVESTIGATION

SAMPLER'S: (Signatures) M Wallace, [illegible]

	DATE	TIME	SAMPLE I.D. NUMBER (Matrix / Location / Boring / Depth / Sample Type)	NO. OF CONTAINERS	Total Lead 4oz. Poly jar Cool to 4°C	TCLP – Lead 4oz. Poly jar Cool to 4°C	Geotechnical glass or poly jar	REMARKS
3	8/12/92	1140	S DE1712 1 00C 00L ✓					
4		1143	S DE1712 2 00A 00L ✓					
5		1145	S DE1712 2 00B 00L ✓					
6		1148	S DE1712 2 00C 00L ✓					
7		1310	S DE2033 1 00A 00L ✓					
8		1313	S DE2033 1 00B 00L ✓					
9		1315	S DE2033 1 00C 00L ✓					
10		1318	S DE2033 2 00A 00L ✓					
11		1320	S DE2033 2 00B 00L ✓					
12		1323	S DE2033 2 00C 00L ✓					
13		1350	S ST2240 1 00A 00L ✓					
14		1353	S ST2240 1 00B 00L ✓					
15		1355	S ST2240 1 00C 00L ✓					
16		1400	S ST2240 2 00A 00L ✓					
17		1403	S ST2240 2 00B 00L ✓					
18		1405	S ST2240 2 00C 00L ✓					
19		1410	S ST2238 1 00A 00L ✓					
20		1413	S ST2238 1 00B 00L ✓					
21		1415	S ST2238 1 00C 00L ✓					
22		1418	S ST2238 2 00A 00L ✓					
23		1420	S ST2238 2 00B 00L ✓					
24		1423	S ST2238 2 00C 00L ✓					
25		1245	S BE2208 1 00A 00L ✓					

RELINQUISHED BY: (Signature)	DATE / TIME	RECEIVED BY: (Signature)	DATE / TIME
RELINQUISHED BY: (Signature)	DATE / TIME	RECEIVED AT LAB BY: (Signature)	DATE / TIME
[illegible]	8/12/92 1645	[illegible]	8/12/92 16:45
METHOD OF SHIPMENT:		AIRBILL NO: (If Applicable)	

REPORT
OF
ANALYTICAL RESULTS

Project No.:
5912031 0100

Prepared For:
Woodward-Clyde Consultants
Maryland Heights, MO 63043

Submitted By:
St. Louis Chemistry Laboratory
Environmental Science &
Engineering, Inc.

September 21, 1992

Environmental
Science &
Engineering, Inc.

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Environmental Science & Engineering, Inc.

September 21, 1992
ESE No. 5912031 0100

Ms. Cynthia Pavelka
Woodward-Clyde Consultants
2318 Millpark Dr.
Maryland Heights, MO 63043

RE: Report of Analytical Chemistry Results,
Woodward-Clyde Consultants - Report 8
NL/Taracorp Project

Dear Ms. Pavelka:

Enclosed is the complete report of results for seven (7) soil samples received in the ESE St. Louis Laboratory on June 18, 1992. The samples were analyzed in accordance with the approved EPA methods as indicated in the report.

The QC results are composed of two parts, precision and accuracy. The % recovery is used to assess the accuracy of the analytical method. The % recovery limits for each of the control compounds are tabulated in the following report along with the actual % recovery for the spiked sample. The difference of the recoveries of the duplicate samples are calculated as replicate % difference which is used to measure the precision of the analytical method. Both % recovery limits and replicate % difference limits used in this analysis are set forth by the United States Environmental Protection Agency as the criteria of laboratory quality control for this type of analysis.

The QC results have been reviewed by the analysts and the Laboratory Manager. Explanations for QC results that did not fall within the QC criteria are provided in the summary.

We appreciate the opportunity to be of technical service to you. If there are any questions with regard to this report, please feel free to call.

Sincerely,

ENVIRONMENTAL SCIENCE & ENGINEERING, INC.

John F. Gemoules

John F. Gemoules
Laboratory Project Manager

JFG/pl/REPORT/WWC6.RP2

Enclosures

11665 Lilburn Park Road St. Louis, MO 63146-3535 Phone (314) 567-4600 Fax (314) 567-5030

COOLER/SAMPLE RECEIPT FORM

Rev.01 10/7/91

ESE Cooler # _____
Client Cooler # _____
No Cooler _____

Project: Woodward-Clyde Date/Time Received: 8-12-92 1645 & 8-13-92 1425

USE OTHER SIDE OF THIS FORM TO NOTE FURTHER DETAILS CONCERNING CHECK-IN PROBLEMS AND TO SPECIFY AND DESCRIBE ANY ACTION(S) REGARDING THE RESOLUTION(S) OF PROBLEMS. IF SHIPMENT WAS ACCEPTED AND IF REQUESTED, NOTE ON BACK THE ADDRESS WHERE THE EMPTY COOLER WAS RETURNED AND LIKEWISE IF THE SHIPMENT WAS REJECTED.

IF INFORMATION IS MISSING OR THERE ARE PROBLEMS NOTIFY LABORATORY PROJECT MANAGER SO THAT HE CAN NOTIFY THE PROJECT MANAGER IMMEDIATELY.

A. PRELIMINARY EXAMINATION PHASE: Date/Time cooler/sample was opened and checked: 8-14-92 1000

by (print) Carol Cash (sign) Carol Cash

1. List courier delivering samples . . . . . Client . . . . . YES NO
2. Did cooler come with a shipping slip (air bill, etc.)? . . . . . YES (NO)
   If YES, attach and enter carrier and air bill number here: _____
3. Were custody seals on outside of cooler? . . . . . (YES) NO
   If YES, how many and where: 1 on front 1 on Back
   If YES, enter the following: seal date: 8-13-92, seal name: Eric Page
4. Were custody seals unbroken and intact at the date and time of arrival? . . . . . (YES) NO
5. Was chain-of-custody provided? . . . . . (YES) NO
6. Were custody papers sealed in a Ziplec® bag and taped inside to the lid? . . . . . (YES) NO
7. Were entries on custody papers completed, including cooler number? (YES) NO - If no, give details on back
8. Turnaround time included? . . . . . YES (NO)
9. Did you sign custody papers in the appropriate place? . . . . . (YES) NO
10. Was project identifiable from custody papers? If YES, enter project name at the top of this form. (YES) NO

B. SAMPLE CHECK-IN PHASE: Date samples were checked-in: 8-14-92 by (all those involved must sign below):

(print) Carol Cash (sign) Carol Cash

11. Describe packing: Samples with ice
*12. If required, was enough ice used? (temperature maintained correctly)? . . . . . (YES) NO
13. Were all bottles sealed in separate plastic bags? . . . . . YES (NO)
*14. Did all bottles arrive unbroken and in good condition? . . . . . (YES) NO
15. Were all bottle labels complete (ID, date, time, signature, preservative, etc.)? . . . . . (YES) NO
16. Did all bottle labels agree with custody papers? If NO, indicate discrepancies on back. . . . . (YES) NO
17. Were correct containers used for the tests indicated? . . . . . (YES) NO
*18. Were correct preservatives used when required? . . . . . (YES) NO
*19. pH of samples maintained correctly as required? If NO, list by ID# _____ . (YES) NO
20. Was a sufficient amount of sample sent for tests indicated? . . . . . (YES) NO
*21. Bubbles present in VOA vials? If YES, list by ID#: N/A . YES NO
22. Was lab. project manager called and status discussed? If YES, give details on the back of this form. YES NO
23. Who was called? _____ By whom? _____ on (date) _____
24. Second Party Review: _____

* Sample rejection criteria

W:\WP\CHEMCOM\CRF.01

LEAD ANALYSIS

Environmental
Science &
Engineering, Inc.

. Louis Chemistry Laboratory

''665 Lilburn Park Road
. Louis, Missouri 63146-3535

Phone (314) 567-4600
Fax (314) 567-5030

Analytical Chemistry Results

STATUS: FINAL

PROJECT NAME: NL/TARACORP SUPERFUND SITE PREDESIGN FIELD INVESTIGATION, WWC89MC114V

PROJECT NUMBER: 5912031 0100

REPORT DATE: 09-17-92

SAMPLE MATRIX: SOIL

LAB MANAGER/QC REVIEW: JEFFREY W. SIRIA

PROJECT MANAGER: JOHN F. GEMOULES

REPORT APPROVED BY: FRANCIS Y. HUANG

SAMPLE I.D.	LABORATORY I.D.	COLLECTION DATE	RECEIVED DATE	MOISTURE, %WET WT METHOD: PB215192	EXTRACT. DATE	ANALYSIS DATE	CHEM. INIT.
SMW104920AC00L	WWC6*650	06/18/92	06/19/92	12.9		07/10/92	RLW
SMW1049200H00L	WWC6*651	06/18/92	06/19/92	18.7		07/10/92	RLW
SMW1049200W00L	WWC6*652	06/18/92	06/19/92	21.9		07/10/92	RLW
SMW1049200X00L	WWC6*653	06/18/92	06/19/92	26.2		07/10/92	RLW
SMW1049200U00L	WWC6*654	06/18/92	06/19/92	25.9		07/10/92	RLW
SMW1049200V00L	WWC6*655	06/18/92	06/19/92	12.3		07/10/92	RLW
SMW104920000LD	WWC6*656	06/18/92	06/19/92	28.1		07/10/92	RLW

CHAIN OF CUSTODY RECORD

WOODWARD-CLYDE CONSULTANTS
2318 MILLPARK DR.
MARYLAND HEIGHTS, MISSOURI 63043
314-429-0100

SHEET 1 of 1

PROJECT NO.: 89MC114V

PROJECT NAME: NL/TARACORP SUPERFUND SITE PREDESIGN FIELD INVESTIGATION

SAMPLER'S: (Signatures) [signature]

DATE	TIME	SAMPLE I.D. NUMBER: Matrix	Location	Boring	Depth	Sample Type	NO. OF CONTAINERS	Total Lead 4oz. poly jar Cool to 4°C	TCLP - Lead 4oz. poly jar Cool to 4°C	Geotechnical glass or poly jar	REMARKS
6/18	1120	S	MW1049	Z	00A	00L	1	X			
	1210	S	MW1049	Z	00H	00L					
	1242	S	MW1049	Z	00M	00L					
	1255	S	MW1049	Z	00X	00L					
	1220	S	MW1049	Z	00U	00L					
	1232	S	MW1049	Z	00V	00L					
	1222	S	MW1049	Z	00U	0LD					
		S									
		S									
		S									
		S									
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		S									
		S									
		S									
		S									
		S									
		S									
		S									
		S									

RELINQUISHED BY: (Signature)	DATE / TIME	RECEIVED BY: (Signature)	DATE / TIME
[signature]	6/18/92 1630	[signature]	6/19/92 1410
RELINQUISHED BY: (Signature)	DATE / TIME	RECEIVED AT LAB BY: (Signature)	DATE / TIME
[signature]	6/19/92 1410		
METHOD OF SHIPMENT:		AIRBILL NO: (If Applicable)	

COOLER/SAMPLE RECEIPT FORM

Rev.01 10/7/91

ESE Cooler # _____
Client Cooler # ✓
No Cooler _____

Project: Woodward Clyde Date/Time Received: 6-19-92 1410

USE OTHER SIDE OF THIS FORM TO NOTE FURTHER DETAILS CONCERNING CHECK-IN PROBLEMS AND TO SPECIFY AND DESCRIBE ANY ACTION(S) REGARDING THE RESOLUTION(S) OF PROBLEMS. IF SHIPMENT WAS ACCEPTED AND IF REQUESTED, NOTE ON BACK THE ADDRESS WHERE THE EMPTY COOLER WAS RETURNED AND LIKEWISE IF THE SHIPMENT WAS REJECTED.

IF INFORMATION IS MISSING OR THERE ARE PROBLEMS NOTIFY LABORATORY PROJECT MANAGER SO THAT HE CAN NOTIFY THE PROJECT MANAGER IMMEDIATELY.

A. PRELIMINARY EXAMINATION PHASE: Date/Time cooler/sample was opened and checked: 6-19-92 1450

by (print) James Cash (sign) James Cash

1. List courier delivering samples client . . . . . YES NO
2. Did cooler come with a shipping slip (air bill, etc.)? . . . . . YES (NO)
   If YES, attach and enter carrier and air bill number here: _____
3. Were custody seals on outside of cooler? . . . . . (YES) NO
   If YES, how many and where: 2 on FRONT
   If YES, enter the following: seal date: 6-18-92, seal name: E Page
4. Were custody seals unbroken and intact at the date and time of arrival? . . . . . (YES) NO
5. Was chain-of-custody provided? . . . . . (YES) NO
6. Were custody papers sealed in a Ziplec™ bag and taped inside to the lid? . . . . . (YES) NO
7. Were entries on custody papers completed, including cooler number? (YES) NO - If no, give details on back
8. Turnaround time included? . . . . . YES (NO)
9. Did you sign custody papers in the appropriate place? . . . . . (YES) NO
10. Was project identifiable from custody papers? If YES, enter project name at the top of this form. . (YES) NO

B. SAMPLE CHECK-IN PHASE: Date samples were checked-in: 6-19-92 by (all those involved must sign below):
(print) James Cash (sign) James Cash

11. Describe packing: packed in Blue Ice + stucked
*12. If required, was enough ice used? (temperature maintained correctly)? . . . . . (YES) NO
13. Were all bottles sealed in separate plastic bags? . . . . . YES (NO)
*14. Did all bottles arrive unbroken and in good condition? . . . . . (YES) NO
15. Were all bottle labels complete (ID, date, time, signature, preservative, etc.)? . . . . . (YES) NO
16. Did all bottle labels agree with custody papers? If NO, indicate discrepancies on back. . . . . (YES) NO
17. Were correct containers used for the tests indicated? . . . . . (YES) NO
*18. Were correct preservatives used when required? . . NA . . . . . YES NO
*19. pH of samples maintained correctly as required? If NO, list by ID# NA . YES NO
20. Was a sufficient amount of sample sent for tests indicated? . . . . . (YES) NO
*21. Bubbles present in VOA vials? If YES, list by ID#: NA . YES NO
22. Was lab. project manager called and status discussed? If YES, give details on the back of this form. YES (NO)
23. Who was called? _____ By whom? _____ on (date) _____
24. Second Party Review: _____

* Sample rejection criteria

W:\WP\CHEMCOM\CRF.01

COOLER/SAMPLE RECEIPT FORM

Rev.01 10/7/91

ESE Cooler # _____
Client Cooler # ✓
No Cooler _____

Project: Woodward-Clyde Date/Time Received: ~~6-29-92~~ 6-30-92 800

USE OTHER SIDE OF THIS FORM TO NOTE FURTHER DETAILS CONCERNING CHECK-IN PROBLEMS AND TO SPECIFY AND DESCRIBE ANY ACTION(S) REGARDING THE RESOLUTION(S) OF PROBLEMS. IF SHIPMENT WAS ACCEPTED AND IF REQUESTED, NOTE ON BACK THE ADDRESS WHERE THE EMPTY COOLER WAS RETURNED AND LIKEWISE IF THE SHIPMENT WAS REJECTED.

IF INFORMATION IS MISSING OR THERE ARE PROBLEMS NOTIFY LABORATORY PROJECT MANAGER SO THAT HE CAN NOTIFY THE PROJECT MANAGER IMMEDIATELY.

A. PRELIMINARY EXAMINATION PHASE: Date/Time cooler/sample was opened and checked: 6-30-92 830
by (print) Carol Cash (sign) Carol Cash

1. List courier delivering samples . . . . . Cynthia Pavelka . . . . YES NO
2. Did cooler come with a shipping slip (air bill, etc.)? . . . . . YES (NO)
   If YES, attach and enter carrier and air bill number here: _____
3. Were custody seals on outside of cooler? . . . . . (YES) NO
   If YES, how many and where: 1 on Front 1 on Back
   If YES, enter the following: seal date: 6-29-92, seal name: Cynthia Pavelka
4. Were custody seals unbroken and intact at the date and time of arrival? . . . . . (YES) NO
5. Was chain-of-custody provided? . . . . . (YES) NO
6. Were custody papers sealed in a Ziplock® bag and taped inside to the lid? . . . . . (YES) NO
7. Were entries on custody papers completed, including cooler number? (YES) NO - If no, give details on back Client Cooler
8. Turnaround time included? . . . . . YES (NO)
9. Did you sign custody papers in the appropriate place? . . . . . (YES) NO
10. Was project identifiable from custody papers? If YES, enter project name at the top of this form. (YES) NO

B. SAMPLE CHECK-IN PHASE: Date samples were checked-in: 6-30-92 by (all those involved must sign below):
(print) Carol Cash (sign) Carol Cash

11. Describe packing: Samples with ice
*12. If required, was enough ice used? (temperature maintained correctly)? . . . . . (YES) NO
13. Were all bottles sealed in separate plastic bags? . . . . . YES (NO)
*14. Did all bottles arrive unbroken and in good condition? . . . . . (YES) NO
15. Were all bottle labels complete (ID, date, time, signature, preservative, etc.)? . . . . . (YES) NO
16. Did all bottle labels agree with custody papers? If NO, indicate discrepancies on back. . . . . (YES) NO
17. Were correct containers used for the tests indicated? . . . . . (YES) NO
*18. Were correct preservatives used when required? . . . . . (YES) NO
*19. pH of samples maintained correctly as required? If NO, list by ID# _____ . (YES) NO
20. Was a sufficient amount of sample sent for tests indicated? . . . . . (YES) NO
*21. Bubbles present in VOA vials? If YES, list by ID#: NA . YES NO
22. Was lab. project manager called and status discussed? If YES, give details on the back of this form. YES NO
23. Who was called? _____ By whom? _____ on (date) _____
24. Second Party Review: _____

* Sample rejection criteria

W:\WP\CHEMCOM\CRF.01

REPORT
OF
ANALYTICAL RESULTS

Project No.:
5912031 0100

Prepared For:
Woodward-Clyde Consultants
Maryland Heights, MO 63043

Submitted By:
St. Louis Chemistry Laboratory
Environmental Science &
Engineering, Inc.

March 4, 1992

Environmental
Science &
Engineering, Inc.

A CILCORP Company

Environmental
Science &
Engineering, Inc.
A CILCORP Company

March 4, 1992
ESE No. 5912031 0100

Ms. Cynthia Pavelka
Woodward-Clyde Consultants
2318 Millpark Dr.
Maryland Heights, MO 63043

RE: **Report of Analytical Chemistry Results, NL/Taracorp Superfund Site**

Dear Ms. Pavelka:

Enclosed is the complete report of additionally requested results for three (3) soil samples received in the ESE St. Louis Laboratory on November 4, 11, and 15, 1991. The additional analyses were requested on January 28, 1992. The preliminary results have been reported to you in writing on February 27, 1992. The samples were analyzed in accordance with the approved EPA methods as indicated in the report.

The QC results are composed of the following summaries: Method Blank for method background evaluation, Continuing Calibration Verification for instrument stability check, and Sample Matrix Spike Recovery for sample analytes results correction in accordance with the EPA TCLP QC requirements.

The QC results have been reviewed by the analysts and the Laboratory Manager. Explanations for QC results that did not fall within the QC criteria are provided in the summary. The QC results indicate that there were no technical problems with the analysis.

As per your request, the samples were homogenized and examined to find to have apparent particle sizes that would pass through a 9.5mm (0.375 inch) standard sieve. According to TCLP protocol, no size reduction was required for these samples prior to leachate generation.

We appreciate the opportunity to be of technical service to you. If there are any questions with regard to this report, please feel free to call.

Sincerely,

ENVIRONMENTAL SCIENCE & ENGINEERING, INC.

John F. Gemoules

John F. Gemoules
Laboratory Project Manager

JFG/pl/REPORT/WWCTCLP.RP1

Enclosures

11665 Lilburn Park Road St. Louis, MO 63146-3535 Phone (314) 567-4600 Fax (314) 567-5030

METALS/WET CHEMISTRY DATA ASSESSMENT

PROJECT NO. 89MC114V
LABORATORY ESE
LAB PROJECT NO. 5912031 0100
NO. OF SAMPLES/
MATRIX 3 / soil

SITE NL/TARACORP SUPERFUND SITE

REVIEWER [illegible]
REVIEWER'S NAME Dana Doerfler
COMPLETION DATE 3/18/92

DATA ASSESSMENT SUMMARY

	TCLP ICP	AA	Hg	CN	OTHER
1. HOLDING TIMES	✓				
2. BLANKS	✓				
3. CCV	✓				
4. STANDARD MATRIX SPIKE	NA				
5. MATRIX SPIKE	✓				
6. OTHER QC	NA				
7. OVERALL ASSESSMENT	O				

O = Data had no problems/or qualified due to minor problems.
M = Data qualified due to major problems.
Z = Data unacceptable.
X = Problems, but do not affect data.

ACTION ITEMS:

COMMENTS: Note: Data recovery corrected by laboratory.

Environmental Science & Engineering, Inc.

St. Louis Chemistry Laboratory

11665 Lilburn Park Road
St. Louis, Missouri 63146-3535

Phone (314) 567-4600
Fax (314) 567-5030

Analytical Chemistry Results

STATUS: FINAL PAGE# 1

PROJECT NAME: NL/TARACORP SUPERFUND SITE PREDESIGN FIELD INVESTIGATION, WWC89MC114V

PROJECT NUMBER: 5912031 0100 REPORT DATE: 03-09-92

SAMPLE MATRIX: SOIL LAB MANAGER/QC REVIEW: JEFFREY W. SIRIA

PROJECT MANAGER: JOHN F. GEMOULES REPORT APPROVED BY: FRANCIS Y. HUANG

SAMPLE I.D.			SMP1640100B00L	SDE1624200A00L	SLE2037100A00L	DATE	DATE	ANALYST
LAB I.D.			WWC*38	WWC*352	WWC*760	EXTRACTED	ANALYZED	INITIALS
COLLECTION DATE			11/04/91	11/11/91	11/15/91			
RECEIVED DATE			11/04/91	11/11/91	11/15/91			
PARAMETER	METHOD	UNITS						
TCLP EXTRACT(METALS)	1311					02-10-92		WHP
TCLP METALS								
LEAD	3051/6010	MG/L	<0.13	0.24 *	0.18 *	02-11-92	02-13-92	CAG

* - Corrected for percent recovery

Method Blank Sample Summary

ME	UNITS	STOR*METH	BATCH	SAMPLE	DATE	FOUND	FOOTNOTE
AD	MG/L	1051*STCLP	S6945	MB*NONE*6	02/13/92	0.0	
LVER	MG/L	1077*STCLP		MB*NONE*6		0.02	
SENIC	MG/L	1002*STCLP		MB*NONE*6		0.0	
RIUM	MG/L	1007*STCLP		MB*NONE*6		0.006	
DMIUM	MG/L	1027*STCLP		MB*NONE*6		0.0	
ROMIUM	MG/L	1034*STCLP		MB*NONE*6		0.003	
LENIUM	MG/L	1147*STCLP		MB*NONE*6		0.08	

Continuing Calibration Verification Sample Summary

ME	UNITS	STOR*METH	BATCH	SAMPLE	DATE	TARGET	FOUND	%RECV	RECV CRIT	FOOTNOTE
AD	MG/L	1051*STCLP	S6945	CCV*CCVB*1	02/13/92	2.00	1.95	97.5	N/A	
AD	MG/L			CCV*CCVB*7		2.00	1.91	95.5	N/A	
AD	MG/L			CCV*CCVB*8		2.00	1.94	97.0	N/A	
AD	MG/L			CCV*CCVB*10		2.00	1.97	98.5	N/A	
AD	MG/L		S6955	CCV*CCVB*1		2.00	1.95	97.5	N/A	
AD	MG/L			CCV*CCVB*9		2.00	1.95	97.5	N/A	
AD	MG/L			CCV*CCVB*10		2.00	1.97	98.5	N/A	
LVER	MG/L	1077*STCLP	S6945	CCV*CCVB*1		2.00	2.07	104	N/A	
LVER	MG/L			CCV*CCVB*7		2.00	2.01	101	N/A	
LVER	MG/L			CCV*CCVB*8		2.00	2.03	102	N/A	
LVER	MG/L			CCV*CCVB*10		2.00	2.08	104	N/A	
SENIC	MG/L	1002*STCLP		CCV*CCVB*1		2.00	2.09	105	N/A	
SENIC	MG/L			CCV*CCVB*7		2.00	2.04	102	N/A	
SENIC	MG/L			CCV*CCVB*8		2.00	2.05	103	N/A	
SENIC	MG/L			CCV*CCVB*10		2.00	2.12	106	N/A	
RIUM	MG/L	1007*STCLP		CCV*CCVB*1		2.00	2.00	100.0	N/A	
RIUM	MG/L			CCV*CCVB*7		2.00	1.91	95.5	N/A	
RIUM	MG/L			CCV*CCVB*8		2.00	1.94	97.0	N/A	
RIUM	MG/L			CCV*CCVB*10		2.00	2.00	100.0	N/A	
DMIUM	MG/L	1027*STCLP		CCV*CCVB*1		2.00	2.00	100.0	N/A	
DMIUM	MG/L			CCV*CCVB*7		2.00	1.96	98.0	N/A	
DMIUM	MG/L			CCV*CCVB*8		2.00	1.95	97.5	N/A	
DMIUM	MG/L			CCV*CCVB*10		2.00	1.98	99.0	N/A	
ROMIUM	MG/L	1034*STCLP		CCV*CCVB*1		2.00	2.08	104	N/A	
ROMIUM	MG/L			CCV*CCVB*7		2.00	2.01	101	N/A	
ROMIUM	MG/L			CCV*CCVB*8		2.00	2.04	102	N/A	
ROMIUM	MG/L			CCV*CCVB*10		2.00	2.09	105	N/A	
LENIUM	MG/L	1147*STCLP		CCV*CCVB*1		2.00	2.04	102	N/A	
LENIUM	MG/L			CCV*CCVB*7		2.00	2.00	100.0	N/A	
LENIUM	MG/L			CCV*CCVB*8		2.00	2.04	102	N/A	
LENIUM	MG/L			CCV*CCVB*10		2.00	2.10	105	N/A	

QC SUMMARY

Sample Matrix Spike Recovery Summary

ME	UNITS	STOR*METH	BATCH	SAMPLE	DATE	TARGET	FOUND	%RECV	RECV CRIT	UNSPIKED	R.P.D.	R.P.D. CRIT.	FOOTNOTE
AD	MG/L	1051*STCLP	S6945	SPM*APS2*1	02/13/92	25.0	24.6	98.4	N/A	0.09		N/A	
AD	MG/L		S6955	SPM*WWC*38		25.0	26.0	104	N/A	0.0		N/A	
LVER	MG/L	1077*STCLP	S6945	SPM*APS2*1		10.00	2.26	22.6	N/A	0.02		N/A	(1)
SENIC	MG/L	1002*STCLP		SPM*APS2*1		10.00	10.9	109	N/A	0.0		N/A	
RIUM	MG/L	1007*STCLP		SPM*APS2*1		50.0	51.4	103	N/A	0.09		N/A	
DMIUM	MG/L	1027*STCLP		SPM*APS2*1		5.00	4.91	98.2	N/A	0.0002		N/A	
ROMIUM	MG/L	1034*STCLP		SPM*APS2*1		10.00	10.00	100.0	N/A	0.0		N/A	
LENIUM	MG/L	1147*STCLP		SPM*APS2*1		5.00	5.91	118	N/A	0.0		N/A	

Environmental
Science &
Engineering, Inc.

A CALCORP Company

January 28, 1992
ESE No. 5912031 0100

Ms. Cynthia Pavelka
Woodward-Clyde Consultants
2318 Millpark Dr.
Maryland Heights, MO 63043

RE: **Report of Analytical Chemistry Results,**
Woodward-Clyde Consultants - TCLP Report 1
NL/Taracorp Superfund Site Predesign Field Investigation, WWC89MC114V

Dear Ms. Pavelka:

Enclosed is the complete report of results for eight (8) soil samples received in the ESE St. Louis Laboratory on December 2, 3, 5 and 10, 1991. The samples were analyzed in accordance with the approved EPA methods as indicated in the report.

The QC results are composed of the following summaries: Method Blank for method background evaluation, Continuing Calibration Verification for instrument stability check, Standard Matrix Spike Recovery for method performance evaluation and Sample Matrix Spike Recovery for sample analytes results correction in accordance with the EPA TCLP QC requirements.

The QC results have been reviewed by the analysts and the Laboratory Manager. The QC results indicate that there were no technical problems with the analysis.

As per your request, the samples were examined and found to have apparent particle sizes that would pass through a 9.5mm (0.375 inch) standard sieve. According to TCLP protocol, no size reduction was required for these samples prior to to leachate generation.

We appreciate the opportunity to be of technical service to you. If there are any questions with regard to this report, please feel free to call.

Sincerely,

ENVIRONMENTAL SCIENCE & ENGINEERING, INC.

John F. Gemoules

John F. Gemoules
Laboratory Project Manager

JFG/pl/REPORT/WWC2TCLP.RP1

Enclosures

11005 Lilburn Park Road St. Louis, MO 63146-3535 Phone (314) 567-4000 Fax (314) 567-5030

REPORT
OF
ANALYTICAL RESULTS

Project No.:
5912031 0100

Prepared For:
Woodward-Clyde Consultants
Maryland Heights, MO 63043

Submitted By:
St. Louis Chemistry Laboratory
Environmental Science &
Engineering, Inc.

January 28, 1992

Environmental
Science &
Engineering, Inc.

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Environmental
Science &
Engineering, Inc.

St. Louis Chemistry Laboratory

Analytical Chemistry Resu

11665 Lilburn Park Road
St. Louis, Missouri 63146-3535

Phone (314) 567-4600
Fax (314) 567-5030

STATUS: FINAL

PROJECT NAME: NL/TARACORP SUPERFUND SITE PREDESIGN FIELD INVESTIGATION, WWC89MC114V

PROJECT NUMBER: 5912031 0100 **REPORT DATE:** 01-21-92

SAMPLE MATRIX: SOIL **LAB MANAGER/QC REVIEW:** JEFFERY W. SIRIA

PROJECT MANAGER: JOHN F. GEMOULES **REPORT APPROVED BY:** FRANCIS Y. HUANG

SAMPLE I.D.	LABORATORY I.D.	COLLECTION DATE	RECEIVED DATE	TCLP LEAD, MG/L METHOD: 1311/6010	MDL	EXTRACT. DATE	ANALYSIS DATE	CHEM. INIT.
SVE0002100J00T	WWC2*517	12/02/91	12/02/91	ND	0.65	12/31/91	01/07/92	JWC
SVE0004100J00T	WWC2*518	12/02/91	12/02/91	6.80 *	0.65	12/31/91	01/07/92	JWC
SVE0005100L00T	WWC2*519	12/02/91	12/02/91	7.52 *	0.65	12/31/91	01/07/92	JWC
SVE0008100L00T	WWC2*520	12/03/91	12/03/91	ND	0.65	12/31/91	01/07/92	JWC
SVE0009100J00T	WWC2*521	12/03/91	12/03/91	1.53 *	0.65	12/31/91	01/07/92	JWC
SVE0009100J0TD	WWC2*522	12/03/91	12/03/91	0.92 *	0.65	12/31/91	01/07/92	JWC
SVE0011100J00T	WWC2*523	12/03/91	12/03/91	5.64 *	0.65	12/31/91	01/07/92	JWC
SVE0013100J00T	WWC2*524	12/03/91	12/03/91	ND	0.65	12/31/91	01/07/92	JWC
SVE0015100K00T	WWC2*525	12/03/91	12/03/91	ND	0.65	12/31/91	01/07/92	JWC
SVE0017100J00T	WWC2*526	12/03/91	12/03/91	93.4 *	0.65	12/31/91	01/07/92	JWC
SVE0020100J00T	WWC2*680	12/05/91	12/05/91	2.59 *	0.65	12/31/91	01/07/92	JWC
SOR000710AB00T	WWC2*903	12/10/91	12/10/91	180 *	0.65	12/31/91	01/07/92	JWC
SOR000810AB00T	WWC2*904	12/10/91	12/10/91	ND	0.65	12/31/91	01/07/92	JWC
SOR000910AB00T	WWC2*905	12/10/91	12/10/91	235 *	0.65	12/31/91	01/07/92	JWC
SOR001010AB00T	WWC2*906	12/10/91	12/10/91	82.5 *	0.65	12/31/91	01/07/92	JWC
SOR000410AB00T	WWC2*907	12/10/91	12/10/91	13.0 *	0.65	12/31/91	01/07/92	JWC
SOR000510AB00T	WWC2*908	12/10/91	12/10/91	1.41 *	0.65	12/31/91	01/07/92	JWC
SOR000610AB00T	WWC2*909	12/10/91	12/10/91	4.86 *	0.65	12/31/91	01/07/92	JWC

* - Corrected for percent recovery

METALS/WET CHEMISTRY DATA ASSESSMENT

PROJECT NO. 89MC114V
LABORATORY ESE
LAB PROJECT NO. 59120310100
NO. OF SAMPLES/
MATRIX /soil
Analysis date: 1/7/92

SITE NL/TARACORP SUPERFUND SITE
REVIEWER Dana Doerfler
REVIEWER'S NAME Dana Doerfler
COMPLETION DATE 2/11/92

DATA ASSESSMENT SUMMARY

	ICP	AA	Hg	CN	OTHER
1. HOLDING TIMES	✓				
2. BLANKS	✓				
3. CCV	✓				
4. STANDARD MATRIX SPIKE	✓				
5. MATRIX SPIKE	✓				
6. OTHER QC	NA				
7. OVERALL ASSESSMENT	O				

O = Data had no problems/or qualified due to minor problems.
M = Data qualified due to major problems.
Z = Data unacceptable.
X = Problems, but do not affect data.

ACTION ITEMS:

COMMENTS:

Method Blank Sample Summary

AME	UNITS	STOR*METH	BATCH	SAMPLE	DATE	FOUND	FOOTNOTE
EAD	MG/L	1051*STCLP	S6748	MB*NONE*4	01/07/92	<0.65	

Continuing Calibration Verification Sample Summary

AME	UNITS	STOR*METH	BATCH	SAMPLE	DATE	TARGET	FOUND	%RECV	RECV CRIT	FOOTNOTE
EAD	MG/L	1051*STCLP	S6748	CCV*CCVB*1	01/07/92	2.00	1.86	93.0	0-0	
EAD	MG/L			CCV*CCVB*5		2.00	1.91	95.5	0-0	
EAD	MG/L			CCV*CCVB*6		2.00	1.90	95.0	0-0	
EAD	MG/L			CCV*CCVB*8		2.00	1.84	92.0	0-0	

Standard Matrix Spike Recovery and Replicate Summary

AME	UNITS	STOR*METH	BATCH	SAMPLE	DATE	TARGET	FOUND	%RECV	RECV CRIT	R.P.D.	R.P.D. CRIT.	FOOTNOTE
EAD	MG/L	1051*STCLP	S6748	SP*NONE*4	01/07/92	35.0	35.8	102	0-0		N/A	

Sample Matrix Spike Recovery Summary

AME	UNITS	STOR*METH	BATCH	SAMPLE	DATE	TARGET	FOUND	%RECV	RECV CRIT	UNSPIKED	R.P.D.	R.P.D. CRIT.	FOOTNOTE
EAD	MG/L	1051*STCLP	S6748	SPM*WWC2*909	01/07/92	35.0	37.3	107	0-0	5.18		N/A	

QC SUMMARY

CHAIN OF CUSTODY RECORD

WOODWARD-CLYDE CONSULTANTS
2318 MILLPARK DR.
MARYLAND HEIGHTS, MISSOURI 63043
314-429-0100

SHEET 1 of 1

WWC

PROJECT NO.:	PROJECT NAME:
89MC114V	NL/TARACORP SUPERFUND SITE PREDESIGN FIELD INVESTIGATION

SAMPLER'S: (Signatures) [signature] Jorge [signature]

	DATE	TIME	SAMPLE I.D. NUMBER: Matrix	Location	Boring	Depth	Sample Type		NO. OF CONTAINERS	CONTAINER DESCRIPTION/ ANALYSES REQUESTED: Total Lead 4oz. poly jar Cool to 4°C	TCLP - Lead 4oz. poly jar Cool to 4°C	Geotechnical glass or poly jar	REMARKS
517	12-2-91	11:15	S	VE0002	1	00J	00T	✓	1	← time on jar says 1105			
518	12-2-91	13:05	S	VE0004	1	00J	00T	✓	1		1		
519	12-2-91	14:35	S	VE0005	1	00L	00T	✓	1		1		
			S						Nothing Follows				
			S						Karen Meyer				
			S										
			S										
			S										
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RELINQUISHED BY: (Signature)	DATE / TIME	RECEIVED BY: (Signature)	DATE / TIME
Karen Meyer	12/2 4:35	[signature]	12/2 1635
RELINQUISHED BY: (Signature)	DATE / TIME	RECEIVED AT LAB BY: (Signature)	DATE / TIME
[signature]	12/2 1635	John Gemoules	12-2-91 5:3
METHOD OF SHIPMENT: WCC Employee		AIRBILL NO: (If Applicable)	

CHAIN OF CUSTODY

COOLER/SAMPLE RECEIPT FORM

01 10/7/91

ESE Cooler # ✓
Client Cooler #
No Cooler

Project: Woodward Clyde Date/Time Received: 12-5-91 1840

USE OTHER SIDE OF THIS FORM TO NOTE FURTHER DETAILS CONCERNING CHECK-IN PROBLEMS AND TO SPECIFY AND DESCRIBE ANY ACTION(S) REGARDING THE RESOLUTION(S) OF PROBLEMS. IF SHIPMENT WAS ACCEPTED AND IF REQUESTED, NOTE ON BACK THE ADDRESS WHERE THE EMPTY COOLER WAS RETURNED AND LIKEWISE IF THE SHIPMENT WAS REJECTED.

IF INFORMATION IS MISSING OR THERE ARE PROBLEMS NOTIFY LABORATORY PROJECT MANAGER SO THAT HE CAN NOTIFY THE PROJECT MANAGER IMMEDIATELY.

A. PRELIMINARY EXAMINATION PHASE: Date/Time cooler/sample was opened and checked: 12·6·91 900

by (print) Carol Cash (sign) Carol Cash

1. List courier delivering samples ..... Client ..... YES NO
2. Did cooler come with a shipping slip (air bill, etc.)? ..... YES (NO)
   If YES, attach and enter carrier and air bill number here: _____
3. Were custody seals on outside of cooler? ..... (YES) NO
   If YES, how many and where: 2 on the front
   If YES, enter the following: seal date: 12·5·91, seal name: Can't read
4. Were custody seals unbroken and intact at the date and time of arrival? ..... (YES) NO
5. Was chain-of-custody provided? ..... (YES) NO
6. Were custody papers sealed in a Ziploc™ bag and taped inside to the lid? ..... (YES) NO
7. Were entries on custody papers completed? YES NO . If no, give details on back
8. Turnaround time included? ..... YES (NO)
9. Did you sign custody papers in the appropriate place? ..... (YES) NO
10. Was project identifiable from custody papers? If YES, enter project name at the top of this form. (YES) NO

B. SAMPLE CHECK-IN PHASE: Date samples were checked-in: 12·6·91 by (all those involved must sign below)

(print) Carol Cash (sign) Carol Cash

11. Describe packing: samples with ice
*12. If required, was enough ice used? (temperature maintained correctly)? ..... (YES) NO
13. Were all bottles sealed in separate plastic bags? ..... YES (NO)
*14. Did all bottles arrive unbroken and in good condition? ..... (YES) NO
15. Were all bottle labels complete (ID, date, time, signature, preservative, etc.)? ..... (YES) NO
16. Did all bottle labels agree with custody papers? If NO, indicate discrepancies on back. ..... (YES) NO
17. Were correct containers used for the tests indicated? ..... (YES) NO
*18. Were correct preservatives used when required? ..... (YES) NO
*19. pH of samples maintained correctly as required? If NO, list by ID# _____ (YES) NO
20. Was a sufficient amount of sample sent for tests indicated? ..... (YES) NO
*21. Bubbles present in VOA vials? If YES, list by ID#: NA . YES NO
22. Was lab. project manager called and status discussed? If YES, give details on the back of this form. YES NO
23. Who was called? _____ By whom? _____ on (date) _____
24. Second Party Review: _____

* Sample rejection criteria

V:\WP\CHEMCON\CRF.01

+9) Ethan Litsey signed custody papers.

CHAIN OF CUSTODY RECORD

SHEET 3 of

WOODWARD-CLYDE CONSULTANTS
2318 MILLPARK DR.
MARYLAND HEIGHTS, MISSOURI 63043
314-429-0100

PROJECT NO.: 89MC114V

PROJECT NAME: NL/TARACORP SUPERFUND SITE PREDESIGN FIELD INVESTIGATION

SAMPLER'S: (Signatures) Jorge J Garcia

DATE	TIME	SAMPLE I.D. NUMBER: Matrix	Location	Boring	Depth	Sample Type	NO. OF CONTAINERS	CONTAINER DESCRIPTION/ ANALYSES REQUESTED: Total Lead 4oz. poly jar Cool to 4°C	TCLP - Lead 4oz. poly jar Cool to 4°C	Geotechnical glass or poly jar	REMAR
689 12-4-91	9:45	S	VE0020	1	00J	00T	1		X		
		S									
		S									
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CED 12/5/91

RELINQUISHED BY: (Signature)	DATE / TIME	RECEIVED BY: (Signature)	DATE /
Cynthia Pavlica	12/5/91 5:20pm	Ethan Litsey	12-5
RELINQUISHED BY: (Signature)	DATE / TIME	RECEIVED AT LAB BY: (Signature)	DATE /
METHOD OF SHIPMENT:		AIRBILL NO: (If Applicable)	

COOLER/SAMPLE RECEIPT FORM

Rev.01 10/7/91

ESE Cooler # _____
Client Cooler # _____
No Cooler _____

Project: Woodward-Clyde Date/Time Received: 12-3-91 183

USE OTHER SIDE OF THIS FORM TO NOTE FURTHER DETAILS CONCERNING CHECK-IN PROBLEMS AND TO SPECIFY AND DESCRIBE AN ACTION(S) REGARDING THE RESOLUTION(S) OF PROBLEMS. IF SHIPMENT WAS ACCEPTED AND IF REQUESTED, NOTE ON BACK THE ADDRESS WHERE THE EMPTY COOLER WAS RETURNED AND LIKEWISE IF THE SHIPMENT WAS REJECTED.

IF INFORMATION IS MISSING OR THERE ARE PROBLEMS NOTIFY LABORATORY PROJECT MANAGER SO THAT HE CAN NOTIFY THE PRO. MANAGER IMMEDIATELY.

A. PRELIMINARY EXAMINATION PHASE: Date/Time cooler/sample was opened and checked: 12-4-91 900

by (print) Carol Cash (sign) Carol Cash

1. List courier delivering samples ..... Client ..... YES
2. Did cooler come with a shipping slip (air bill, etc.)? ..... YES
   If YES, attach and enter carrier and air bill number here: _____
3. Were custody seals on outside of cooler? ..... YES
   If YES, how many and where: 2 on the front
   If YES, enter the following: seal date: 12-3-91, seal name: Can't read
4. Were custody seals unbroken and intact at the date and time of arrival? ..... YES
5. Was chain-of-custody provided? ..... YES
6. Were custody papers sealed in a Ziploc™ bag and taped inside to the lid? ..... YES
7. Were entries on custody papers completed? YES NO . If no, give details on back
8. Turnaround time included? ..... YES
*9. Did you sign custody papers in the appropriate place? ..... YES
10. Was project identifiable from custody papers? If YES, enter project name at the top of this form. . YES

B. SAMPLE CHECK-IN PHASE: Date samples were checked-in: 12-4-91 by (all those involved must sign

(print) Carol Cash (sign) Carol Cash

11. Describe packing: samples in cooler
*12. If required, was enough ice used? (temperature maintained correctly)? ..... YES
13. Were all bottles sealed in separate plastic bags? ..... YES
*14. Did all bottles arrive unbroken and in good condition? ..... YES
15. Were all bottle labels complete (ID, date, time, signature, preservative, etc.)? ..... YES
16. Did all bottle labels agree with custody papers? If NO, indicate discrepancies on back. ..... YES
17. Were correct containers used for the tests indicated? ..... YES
*18. Were correct preservatives used when required? ..... YES
*19. pH of samples maintained correctly as required? If NO, list by ID# _____ . YES
20. Was a sufficient amount of sample sent for tests indicated? ..... YES
*21. Bubbles present in VOA vials? If YES, list by ID#: NA . YES
22. Was lab. project manager called and status discussed? If YES, give details on the back of this form. YES
23. Who was called? _____ By whom? _____ on (date) _____
24. Second Party Review: _____

* Sample rejection criteria

W:\WP\CHEMCOM\CRF.01

*9 Ethan Lotsey signed custody papers

WWC2

CHAIN OF CUSTODY RECORD

WOODWARD-CLYDE CONSULTANTS
2318 MILLPARK DR.
MARYLAND HEIGHTS, MISSOURI 63043
314-429-0100

SHEET 1 of

PROJECT NO.: 89MC114V

PROJECT NAME: NL/TARACORP SUPERFUND SITE PREDESIGN FIELD INVESTIGATION

SAMPLER'S: (Signatures)

	DATE	TIME	SAMPLE I.D. NUMBER (Matrix / Location / Boring / Depth / Sample Type)	NO. OF CONTAINERS	Total Lead 4oz. poly jar Cool to 4°C	TCLP - Lead 4oz. poly jar Cool to 4°C	Geotechnical glass or poly jar	REMAR
520	12/3	925	S VE0008 L 00L 00I	1		X		
521		950	S VE0009 1 00J 00I	1		X		
522		950	S VE0009 L 00J 00D	1		X		
523		1050	S VE0011 L 00J 00I	1		X		
524		1255	S VE0013 L 00J 00I	1		X		
525		1345	S VE0015 L 00K 00I	1		X		
526		1455	S VE0017 L 00J 00I	1		X		
			S			/		

CFD

RELINQUISHED BY: (Signature)	DATE / TIME	RECEIVED BY: (Signature)	DATE /
Lynthia Parella	12/3/91 5:40pm		12/3
RELINQUISHED BY: (Signature)	DATE / TIME	RECEIVED AT LAB BY: (Signature)	DATE /
	12/3 1830		12/3
METHOD OF SHIPMENT: UPS envelope		AIRBILL NO: (If Applicable)	

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order

REPORT
OF
ANALYTICAL RESULTS

Project No.:
5912031 0100

Prepared For:
Woodward-Clyde Consultants
St. Louis, MO 63043

Submitted By:
St. Louis Chemistry Laboratory
Environmental Science &
Engineering, Inc.

August 17, 1992

Environmental
Science &
Engineering, Inc.

A CILCORP Company

ORGANIC DATA ASSESSMENT

PROJECT NO. 89MC114V
LABORATORY ESE
LAB PROJECT NO. 5912031 0100
NO. OF SAMPLES/
MATRIX 1/WATER

SITE NLTSS
REVIEWER [signature]
REVIEWER'S NAME WENDY RETNROLT
COMPLETION DATE 9/1/92

DATA ASSESSMENT SUMMARY

	VOA	BNA	PEST	HERB	OTHER
1. HOLDING TIMES	✓				
2. BLANKS	(1)				
3. SURROGATES	(2)				
4. SCS	✓				
5. DCS	✓				
6. MATRIX SPIKE/DUP	✓				
7. DILUTION	✓				
8. OVERALL ASSESSMENT	O				

O = Data had no problems/or qualified due to minor problems.
M = Data qualified due to major problems.
Z = Data unacceptable.
X = Problems, but do not affect data.

ACTION ITEMS: (1) TRPH (PURGEABLES) DETECTED IN METHOD BLANK. TRPH DATA QUALIFIED AS NON-DETECT (U.)

COMMENTS: (2) SURROGATE RECOVERY OUT OF CONTROL FOR TRIFLUOROTOLUENE. DATA NOT ASSESSED.

Environmental
Science &
Engineering, Inc.

August 17, 1992
ESE No. 5912031 0100

Ms. Cynthia Pavelka
Woodward-Clyde Consultants
2318 Millpark Dr.
St. Louis, MO 63043

RE: Report of Analytical Chemistry Results,
NL/Taracorp Superfund Site Predesign Field Investigation
Additional Analyses Requested for Sample WWC6*642
24 Hour Service

Dear Ms. Pavelka:

Enclosed is the report of additional results for one (1) soil sample received in the ESE St. Louis Laboratory on June 12, 1992. The preliminary results have been reported to you on June 15, and 17, 1992. The sample was analyzed in accordance with the approved regulatory methods as indicated in the report.

The QC results are composed of two parts, precision and accuracy. The % recovery is used to assess the accuracy of the analytical method. The % recovery limits for each of the control compounds are tabulated in the following report along with the actual % recovery for the spiked sample. The difference of the recoveries of the duplicate samples are calculated as replicate % difference which is used to measure the precision of the analytical method. Both % recovery limits and replicate % difference limits used in this analysis are set forth by the United States Environmental Protection Agency as the criteria of laboratory quality control for this type of analysis. The recoveries of surrogate compounds in organic analyses are also included in the QC report.

The QC results have been reviewed by the analysts and the Laboratory Manager. Explanations for QC results that did not fall within the QC criteria are provided in the summary.

We appreciate the opportunity to be of technical service to you. If there are any questions with regard to this report, please feel free to call.

Sincerely,

ENVIRONMENTAL SCIENCE & ENGINEERING, INC.

John F. Gemoules

John F. Gemoules
Laboratory Project Manager

JFG/pl/REPORT/WWC6-TPH.RP1

Enclosures

11665 Lilburn Park Road St. Louis, MO 63146-3535 Phone (314) 567-4600 Fax (314) 567-5030

Environmental Science & Engineering, Inc.

St. Louis Chemistry Laboratory

11665 Lilburn Park Road
St. Louis, Missouri 63146-3535

Phone (314) 567-4600
Fax (314) 567-5030

Analytical Chemistry Results

STATUS: FINAL

PROJECT NAME: NL/TARACORP SUPERFUND SITE PREDESIGN FIELD INVESTIGATION, WWC89MC114V
PROJECT NUMBER: 5912031 0100
REPORT DATE: 08-14-92
SAMPLE MATRIX: SOIL
LAB MANAGER/QC REVIEW: JEFFREY W. SIRIA
PROJECT MANAGER: JOHN F. GEMOULES
REPORT APPROVED BY: FRANCIS Y. HUANG

SAMPLE I.D.			SMW1089200M00L	DATE EXTRACTED	DATE ANALYZED	ANALYST
LAB I.D.			WWC6*642			
COLLECTION DATE			06/12/92			
RECEIVED DATE			06/12/92			
PARAMETER	METHOD	UNITS				
MOISTURE	PB215192	%WET WT	18.4		06-12-92	CAG
VOLATILE PETROLEUM COMPOUNDS	(BT(E)X)					
BENZENE	5030/8020	MG/KG-DRY	<0.005	06-15-92	06-15-92	SJM
ETHYLBENZENE	5030/8020	MG/KG-DRY	<0.008	06-15-92	06-15-92	SJM
M/P-XYLENES	5030/8020	MG/KG-DRY	<0.01	06-15-92	06-15-92	SJM
O-XYLENE	5030/8020	MG/KG-DRY	<0.006	06-15-92	06-15-92	SJM
TOLUENE	5030/8020	MG/KG-DRY	<0.008	06-15-92	06-15-92	SJM
TRPH (PURGEABLES)	GC/PID	MG/KG-DRY	1.96 u	06-15-92	06-15-92	SJM
GENERAL CHEMISTRY						
TRPH (IR)	9071/9073	MG/KG-DRY	<12	06-12-92	06-15-92	KAG

QC SUMMARY

Method Blank Sample Summary

AME	UNITS	STOR*METH	BATCH	SAMPLE	DATE	FOUND	FOOTNOTE
ENZENE	MG/KG-DRY	34030*SPIS	S7836	MB*NONE*1	06/15/92	<0.001	
THYLBENZENE	MG/KG-DRY	34371*SPIS		MB*NONE*1		<0.002	
/P-XYLENES	MG/KG-DRY	97033*SPIS		MB*NONE*1		<0.003	
-XYLENE	MG/KG-DRY	99417*SPIS		MB*NONE*1		<0.001	
OLUENE	MG/KG-DRY	34010*SPIS		MB*NONE*1		0.005	
RPH (PURGEABLES)	MG/KG-DRY	45501*SGCPS		MB*NONE*1		1.75	
RPH (PURGEABLES)	MG/KG-DRY	45501*SPIS		MB*NONE*1		<4.04	
RPH (IR)	MG/KG-DRY	45501*[illegible]	S7819	MB*NONE*1		<2.0	

Standard Matrix Spike Recovery and Replicate Summary

AME	UNITS	STOR*METH	BATCH	SAMPLE	DATE	TARGET	FOUND	%RECV	RECV CRIT	R.P.D.	R.P.D. CRIT.	FOOTNOTE
ENZENE	MG/KG-DRY	34030*SPIS	S7836	SP1*NONE*1		0.39	0.40	103	39-150		24	
ENZENE	MG/KG-DRY			SP2*NONE*1		0.38	0.36	94.7	39-150		24	
-XYLENE	MG/KG-DRY	99417*SPIS		SP1*NONE*1		0.39	0.35	89.7	50-150		20	
-XYLENE	MG/KG-DRY			SP2*NONE*1		0.39	0.32	82.1	50-150	8.85	20	
OLUENE	MG/KG-DRY	34010*SPIS		SP1*NONE*1		0.39	0.38	96.2	46-148		14	
OLUENE	MG/KG-DRY			SP2*NONE*1		0.38	0.34	88.2	46-148		14	
RPH (IR)	MG/KG-DRY	45501*SOXS	S7819	SP1*NONE*1		25	26	100	80-120		25	
RPH (IR)	MG/KG-DRY			SP2*NONE*1		25	26	100	80-120	0.0	25	

Sample Matrix Spike Recovery Summary

AME	UNITS	STOR*METH	BATCH	SAMPLE	DATE	TARGET	FOUND	%RECV	RECV CRIT	UNSPIKED	R.P.D.	R.P.D. CRIT.	FOOTNOTE
ENZENE	MG/KG-DRY	34030*SPIS		SPM1*UST2*2		0.44	0.46	104	39-150	0.0		24	
ENZENE	MG/KG-DRY			SPM2*UST2*2		0.44	0.43	97.4	39-150	0.0	7.51	24	
-XYLENE	MG/KG-DRY	99417*SPIS		SPM1*UST2*2		0.44	0.43	96.9	50-150	0.02		20	
-XYLENE	MG/KG-DRY			SPM2*UST2*2		0.44	0.43	96.9	50-150	0.02	0.82	20	
OLUENE	MG/KG-DRY	34010*SPIS		SPM1*UST2*2		0.44	0.42	95.6	46-148	0.008		14	
OLUENE	MG/KG-DRY			SPM2*UST2*2		0.44	0.40	91.1	46-148	0.008	5.13	14	
RPH (IR)	MG/KG-DRY	45501*SOXS	S7819	SPM*UST2*2		140	120	85	80-120	380		25	
RPH (IR)	MG/KG-DRY			SPM2*UST2*2		140	80	57	80-120	380		25	(1)

Surrogate Spike Recovery Summary

AME	UNITS	STOR*METH	BATCH	SAMPLE	DATE	TARGET	FOUND	%RECV	RECV CRIT	FOOTNOTE
AA TRIFLUOROTOLUENE	MG/KG-DRY	96101*SUR	S7836	CCS*NONE*1	06/15/92	9.40	9.78	104	75-125	
AA TRIFLUOROTOLUENE	MG/KG-DRY			MB*NONE*1		0.40	0.39	97.5	75-125	
AA TRIFLUOROTOLUENE	MG/KG-DRY			SP1*NONE*1		0.40	0.40	100.0	75-125	
AA TRIFLUOROTOLUENE	MG/KG-DRY			DA*VAC6*642		0.39	0.31	79.5	75-125	
AA TRIFLUOROTOLUENE	MG/KG-DRY			DA*UST2*2		0.40	0.40	100.0	75-125	
AA TRIFLUOROTOLUENE	MG/KG-DRY			SPM1*UST2*2		0.40	0.39	97.5	75-125	
AA TRIFLUOROTOLUENE	MG/KG-DRY			SPM2*UST2*2		0.40	0.36	90.0	75-125	
AA TRIFLUOROTOLUENE	MG/KG-DRY			DA*UST2*3		0.41	0.36	87.8	75-125	
AA TRIFLUOROTOLUENE	MG/KG-DRY			DA*GSB*3		0.39	0.61	156	75-125	(2)
AA TRIFLUOROTOLUENE	MG/KG-DRY			DA*GSB*5		0.40	0.36	90.0	75-125	
AA TRIFLUOROTOLUENE	MG/KG-DRY			DA*GSB*6		0.42	0.38	90.5	75-125	
AA TRIFLUOROTOLUENE	MG/KG-DRY			SP2*NONE*1		0.39	0.35	89.7	75-125	
AA TRIFLUOROTOLUENE	MG/KG-DRY			CCV*NONE*1		9.78	8.66	88.5	75-125	
AA TRIFLUOROTOLUENE	MG/KG-DRY			CCV*NONE*2		9.78	9.56	97.8	75-125	

1)- No action necessary; sample inhomogeneity.
2)- No action necessary; sample matrix interference.

CHAIN OF CUSTODY

CHAIN OF CUSTODY RECORD

WOODWARD-CLYDE CONSULTANTS
2318 MILLPARK DR.
MARYLAND HEIGHTS, MISSOURI 63043
314-429-0100

SHEET 1 of 1

WWC4

PROJECT NO.: 89MC114V

PROJECT NAME: NL/TARACORP SUPERFUND SITE PREDESIGN FIELD INVESTIGATION

SAMPLER'S: (Signatures) C. Pavelka

	DATE	TIME	Matrix	Location	Boring	Depth	Sample Type	NO. OF CONTAINERS	Total Lead 4oz. poly jar Cool to 4°C	TCLP - Lead 4oz. poly jar Cool to 4°C	Method 8015, BTEX Geotechnical glass or poly jar-CP TPH-Infrared	REMARKS
638	6/12/92	10:35	S	MW1089	2	0AC	00L	1	X			
639	6/12/92	11:20	S	MW1089	2	0GH	00L	1	X			
640	6/12/92	12:20	S	MW1089	2	0GU	00L	1	X			
641	6/12/92	12:32	S	MW1089	2	0GV	00L	1	X			
642	6/12/92	12:50	S	MW1089	2	0GW	00L	1	X		X	
643	6/12/92	13:05	S	MW1089	2	0GX	00L	1	X			
			S									
			S									
			S									
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			S									
			S									

RELINQUISHED BY: (Signature)	DATE / TIME	RECEIVED BY: (Signature)	DATE / TIME
Cynthia Pavelka	6/12/92	[illegible]	6/12 1520
RELINQUISHED BY: (Signature)	DATE / TIME	RECEIVED AT LAB BY: (Signature)	DATE / TIME
[illegible]	6/12 1520	[illegible]	6/12 [illegible]

REPORT
OF
ANALYTICAL RESULTS

Project No.:
5912031 0100

Prepared For:
Woodward-Clyde Consultants
Maryland Heights, MO 63043

Submitted By:
St. Louis Chemistry Laboratory
Environmental Science &
Engineering, Inc.

December 10, 1991

Environmental
Science &
Engineering, Inc.

A CILCORP Company

Environmental
Science &
Engineering, Inc.

December 10, 1991
ESE No. 5912031 0100

Ms. Cynthia Pavelka
Woodward-Clyde Consultants
2318 Millpark Dr.
Maryland Heights, MO 63043

RE: Report of Analytical Chemistry Results,
NL/Tara Corp Superfund Site
Industrial Hygiene Samples (24 Hour Service)

Dear Ms. Pavelka:

Enclosed is the complete report of results for twelve (12) PASP filter samples received in the ESE St. Louis Laboratory on November 5, 6, 18 and 22, 1991. The preliminary results have been reported to you verbally on November 7 and 19, 1991 and via telecommunications on November 26, 1991. The samples were analyzed in accordance with the approved NIOSH methods as indicated in the report. Sample results are reported in mg/m^3 based upon volumes issued by you to the ESE Laboratory. Blanks and samples issued without volumes are reported in mg-total.

The QC results are composed of the following summaries: Method Blank for method background evaluation, Continuing Calibration Verification for instrument stability check and Standard Matrix Spike Recovery for method performance evaluation.

The QC results have been reviewed by the analysts and the Laboratory Manager. The QC results indicate that there were no technical problems with the analysis.

We appreciate the opportunity to be of technical service to you. If there are any questions with regard to this report, please feel free to call.

Sincerely,

ENVIRONMENTAL SCIENCE & ENGINEERING, INC.

John F. Gemoules

John F. Gemoules
Laboratory Project Manager

JFG/pl/REPORT/WWC-F.RP1

Enclosures

11665 Lilburn Park Road St. Louis, MO 63146-3535 Phone (314) 567-4600 Fax (314) 567-5030

Environmental
Science &
Engineering, Inc.

St. Louis Chemistry Laboratory

11665 Lilburn Park Road
St. Louis, Missouri 63146-3535

Phone (314) 567-4600
Fax (314) 567-5030

Analytical Chemistry Resu

STATUS: FINAL

PROJECT NAME: WOODWARD CLYDE/NL-TARA CORP./FILTERS
PROJECT NUMBER: 5912031 0100
REPORT DATE: 11-27-91
SAMPLE MATRIX: FILTERS
LAB MANAGER/QC REVIEW: JEFFERY W. SIRIA
PROJECT MANAGER: JOHN F. GEMOULES
REPORT APPROVED BY: FRANCIS Y. HUANG

SAMPLE I.D.	LABORATORY I.D.	COLLECTION DATE	RECEIVED DATE	LEAD, MG/M3(AIR) METHOD: NIOSH 7300	ANALYSIS DATE	CHEM. INIT.
PASP#1	WWC-F*1	11/05/91	11/05/91	<0.0002	11-06-91	JWC
PASP#2	WWC-F*2	11/05/91	11/05/91	0.0002	11-06-91	JWC
PASP#3	WWC-F*3	11/05/91	11/05/91	0.0002	11-06-91	JWC
PASP#4	WWC-F*4	11/05/91	11/05/91	0.0002	11-06-91	JWC

SAMPLE I.D.	LABORATORY I.D.	COLLECTION DATE	RECEIVED DATE	LEAD, MG-TOTAL METHOD: NIOSH 7300	ANALYSIS DATE	CHEM. INIT.
PASP#5	WWC-F*5	11/06/91	11/06/91	<0.0001	11-20-91	JWC
PASP#6	WWC-F*6	11/15/91	11/18/91	0.0002	11-20-91	JWC
PASP#7	WWC-F*7	11/15/91	11/18/91	0.0002	11-20-91	JWC
PASP#8	WWC-F*8	11/15/91	11/18/91	<0.0001	11-20-91	JWC
PASP#9	WWC-F*9	11/15/91	11/18/91	0.0008	11-20-91	JWC
PASP#10	WWC-F*10	11/15/91	11/18/91	<0.0001	11-20-91	JWC
PASP#11	WWC-F*11	11/22/91	11/22/91	0.0006	11-26-91	JWC
PASP#12	WWC-F*12	11/22/91	11/22/91	0.002	11-26-91	JWC

SECTION 2

QC Summary

Method Blank Sample Summary

ME	UNITS	STOR=METH	BATCH	SAMPLE	DATE	FOUND	FOOTNOTE
RIUM	MG-TOTAL	1007=SIHA	S6452	MB=NOFILTER=2	11/06/91	0.00001	
RIUM	MG-TOTAL			MB=FILTER=2		0.00001	
RIUM	MG-TOTAL			MB=NOFILTER=3		0.000006	
RIUM	MG-TOTAL			MB=FILTER=3		0.00002	
RIUM	MG-TOTAL			MB=NOFILTER=4		0.000002	
RIUM	MG-TOTAL			MB=FILTER=4		0.00005	
RIUM	MG-TOTAL			MB=NOFILTER=5		0.00005	
RIUM	MG-TOTAL			MB=FILTER=5		0.00004	
RIUM	MG-TOTAL		S6453	MB=NOFILTER=1	11/20/91	0.00002	
RIUM	MG-TOTAL			MB=FILTER=1		0.00002	
RIUM	MG-TOTAL			MB=NOFILTER=2		0.00001	
RIUM	MG-TOTAL			MB=FILTER=2		0.000008	
RIUM	MG-TOTAL			MB=NOFILTER=3		0.000009	
RIUM	MG-TOTAL			MB=FILTER=3		0.00002	
AD	MG-TOTAL	1051=SIHA	S6452	MB=NOFILTER=2	11/06/91	0.0001	
AD	MG-TOTAL			MB=FILTER=2		0.00008	
AD	MG-TOTAL			MB=NOFILTER=3		0.00007	
AD	MG-TOTAL			MB=FILTER=3		0.00009	
AD	MG-TOTAL			MB=NOFILTER=4		0.0001	
AD	MG-TOTAL			MB=FILTER=4		0.00004	
AD	MG-TOTAL			MB=NOFILTER=5		0.00009	
AD	MG-TOTAL			MB=FILTER=5		0.0002	
AD	MG-TOTAL		S6453	MB=NOFILTER=1	11/20/91	0.00002	
AD	MG-TOTAL			MB=FILTER=1		0.0	
AD	MG-TOTAL			MB=NOFILTER=2		0.00003	
AD	MG-TOTAL			MB=FILTER=2		0.0	
AD	MG-TOTAL			MB=NOFILTER=3		0.0	
AD	MG-TOTAL			MB=FILTER=3		0.0	

Continuing Calibration Verification Sample Summary

ME	UNITS	STOR=METH	BATCH	SAMPLE	DATE	TARGET	FOUND	%RECV	RECV CRIT	FOOTNOTE
RIUM	MG-TOTAL	1007=SIHA	S6452	CCV=CHECK=1	11/06/91	2.00	2.02	101	80-120	
RIUM	MG-TOTAL			CCV=CHECK=2		2.00	2.04	102	80-120	
RIUM	MG-TOTAL			CCV=CHECK=4		2.00	1.99	99.5	80-120	
RIUM	MG-TOTAL			CCV=CHECK=5		2.00	2.00	100.0	80-120	
RIUM	MG-TOTAL			CCV=CHECK=6		2.00	2.01	101	80-120	
RIUM	MG-TOTAL			CCV=CHECK=7		2.00	1.97	98.5	80-120	
RIUM	MG-TOTAL			CCV=CHECK=8		2.00	2.01	101	80-120	
RIUM	MG-TOTAL		S6453	CCV=CHECK=1	11/20/91	2.00	2.04	102	80-120	
RIUM	MG-TOTAL			CCV=CHECK=2		2.00	2.10	105	80-120	
RIUM	MG-TOTAL			CCV=CHECK=3		2.00	2.07	104	80-120	
RIUM	MG-TOTAL			CCV=CHECK=4		2.00	2.08	104	80-120	
RIUM	MG-TOTAL			CCV=CHECK=5		2.00	2.07	104	80-120	
RIUM	MG-TOTAL			CCV=CHECK=6		2.00	2.04	102	80-120	
AD	MG-TOTAL	1051=SIHA	S6452	CCV=CHECK=1	11/06/91	2.00	2.06	103	80-120	
AD	MG-TOTAL			CCV=CHECK=2		2.00	2.08	104	80-120	
AD	MG-TOTAL			CCV=CHECK=4		2.00	2.06	103	80-120	
AD	MG-TOTAL			CCV=CHECK=5		2.00	2.06	103	80-120	
AD	MG-TOTAL			CCV=CHECK=6		2.00	2.07	104	80-120	
AD	MG-TOTAL			CCV=CHECK=7		2.00	2.04	102	80-120	
AD	MG-TOTAL			CCV=CHECK=8		2.00	2.06	103	80-120	

Continuing Calibration Verification Sample Summary

AME	UNITS	STOR=METH	BATCH	SAMPLE	DATE	TARGET	FOUND	%RECV	RECV CRIT	FOOTNOTE
EAD	MG-TOTAL		S6453	CCV=CHECK=1	11/20/91	2.00	2.05	103	80-120	
EAD	MG-TOTAL			CCV=CHECK=2		2.00	2.13	107	80-120	
EAD	MG-TOTAL			CCV=CHECK=3		2.00	2.09	105	80-120	
EAD	MG-TOTAL			CCV=CHECK=4		2.00	2.07	104	80-120	
EAD	MG-TOTAL			CCV=CHECK=5		2.00	2.07	104	80-120	
EAD	MG-TOTAL			CCV=CHECK=6		2.00	2.04	102	80-120	

Standard Matrix Spike Recovery and Replicate Summary

AME	UNITS	STOR=METH	BATCH	SAMPLE	DATE	TARGET	FOUND	%RECV	RECV CRIT	R.P.D.	R.P.D. CRIT.	FOOTNOTE
ARIUM	MG-TOTAL	1007=SIHA	S6452	SP1=NONE=2	11/06/91	0.300	0.294	98.0	N/A		20	
ARIUM	MG-TOTAL			SP2=NONE=2		0.300	0.262	87.3	N/A	11.5	20	
ARIUM	MG-TOTAL			SP1=NONE=3		0.300	0.291	97.0	N/A	RPD=1	20	
ARIUM	MG-TOTAL			SP2=NONE=3		0.300	0.300	100.0	N/A	3.05	20	
ARIUM	MG-TOTAL			SP1=NONE=4		0.300	0.281	93.7	N/A	RPD=1	20	
ARIUM	MG-TOTAL			SP2=NONE=4		0.300	0.286	95.3	N/A	1.69	20	
ARIUM	MG-TOTAL			SP1=NONE=5		0.300	0.300	100.0	N/A	RPD=1	20	
ARIUM	MG-TOTAL			SP2=NONE=5		0.300	0.291	97.0	N/A	3.05	20	
ARIUM	MG-TOTAL		S6453	SP1=NONE=1	11/20/91	3.00	2.72	90.7	N/A		20	
ARIUM	MG-TOTAL			SP2=NONE=1		0.030	0.023	76.7	N/A		20	
ARIUM	MG-TOTAL			SP1=NONE=2		0.300	0.258	86.0	N/A		20	
ARIUM	MG-TOTAL			SP2=NONE=2		0.300	0.290	96.7	N/A	11.7	20	
ARIUM	MG-TOTAL			SP1=NONE=3		0.030	0.027	90.0	N/A		20	
ARIUM	MG-TOTAL			SP2=NONE=3		0.030	0.028	93.3	N/A	3.60	20	
AD	MG-TOTAL	1051=SIHA	S6452	SP1=NONE=2	11/06/91	0.030	0.029	96.7	N/A		20	
AD	MG-TOTAL			SP2=NONE=2		0.030	0.029	96.7	N/A	0.0	20	
AD	MG-TOTAL			SP1=NONE=3		0.030	0.029	96.7	N/A	RPD=1	20	
AD	MG-TOTAL			SP2=NONE=3		0.030	0.030	100.0	N/A	3.36	20	
AD	MG-TOTAL			SP1=NONE=4		0.030	0.028	93.3	N/A	RPD=1	20	
AD	MG-TOTAL			SP2=NONE=4		0.030	0.028	93.3	N/A	0.0	20	
AD	MG-TOTAL			SP1=NONE=5		0.030	0.029	96.7	N/A	RPD=1	20	
AD	MG-TOTAL			SP2=NONE=5		0.030	0.029	96.7	N/A	0.0	20	
AD	MG-TOTAL		S6453	SP1=NONE=1	11/20/91	3.00	2.60	86.7	N/A		20	
AD	MG-TOTAL			SP2=NONE=1		0.030	0.021	70.0	N/A		20	
AD	MG-TOTAL			SP1=NONE=2		0.030	0.029	96.7	N/A	RPD=1	20	
AD	MG-TOTAL			SP2=NONE=2		0.030	0.029	96.7	N/A	0.0	20	
AD	MG-TOTAL			SP1=NONE=3		0.030	0.026	86.7	N/A	RPD=1	20	
AD	MG-TOTAL			SP2=NONE=3		0.030	0.027	90.0	N/A	3.74	20	

A- Not applicable. Recovery criteria has yet to be established f .s method.

SECTION 3

Chain of Custody

CHAIN OF CUSTODY RECORD

WOODWARD-CLYDE CONSULTANTS
2318 MILLPARK DR.
MARYLAND HEIGHTS, MISSOURI 63043
314-429-0100

WWC-F

SHEET 1 of 1

PROJECT NO: 89MC114V

PROJECT NAME: NL/Tamcorp

SAMPLER'S: (Signature) Cynthia Fowler

DATE	TIME	SAMPLE I.D. NUMBER	NO. OF CONTAINERS	Total Lead PASP Filters					REMARKS
~~11/4/5~~	CFF	11/5/91							
11/4→5/91	~~12:00pm~~ 11:00am CFF 11/6/91	PASP #1 (Personel Air Sampling Pump Filter)	1	X					Flow Rate 1500 cc/min Sampling Time 8:10
11/4→5/91	~~12:00pm~~ 11:00am	PASP #2 (Personel Air Sampling Pump Filter	1	X					Flow Rate 1500 cc/min Sampling Time 8:35
11/4→5/91	12:00pm	PASP #3 (Personel Air Sampling Pump Filter	1	X					Flow Rate 1500 cc/min Sampling Time 9:05
11/4→5/91	12:00pm	PASP #4 (Personel Air Sampling Pump Filter	1	X					Flow Rate 1500 cc/min Sampling Time 9:05

RELINQUISHED BY: (Signature)	DATE / TIME	RECEIVED BY: (Signature)	DATE / TIME
Karen Meyer	11/5/91 5:43	[illegible]	11/5 5:43
RELINQUISHED BY: (Signature) [illegible]	DATE / TIME	RECEIVED AT LAB BY: (Signature) [illegible]	DATE / TIME 11/5 6:30 PM

METHOD OF SHIPMENT:

CHAIN OF CUSTODY RECORD

SHEET 6 of 6

WWC-F

WOODWARD-CLYDE CONSULTANTS
2318 MILLPARK DR.
MARYLAND HEIGHTS, MISSOURI 63043
314-429-0100

PROJECT NO: 089MC114V

PROJECT NAME: NL/Taracorp Superfund Site

SAMPLER'S: (Signature) Cynthia Pavelka

DATE	TIME	SAMPLE I.D. NUMBER	NO. OF CONTAINERS	Total Lead	Filter Cartridge					REMARKS
11/15,18/91	4:30pm	PASP # 6 (Personal Air Sampling Pump)	1	X	✓					
11/15,18/91	4:30pm	PASP # 7 " " " "	1	X	✓					
11/15,18/91	4:30pm	PASP # 8 " " " "	1	X	✓					
11/15,18/91	4:30pm	PASP # 9 " " " "	1	X	✓					
11/15,18/91	4:30pm	PASP # 10 " " " "	1	X	✓					
		Nothing Follows 11/18/91								

RELINQUISHED BY: (Signature)	DATE / TIME	RECEIVED BY: (Signature)	DATE / TIME
Karen Meyer	11/18 4:55	[illegible]	11/18 1830
RELINQUISHED BY: (Signature)	DATE / TIME	RECEIVED AT LAB BY: (Signature)	DATE / TIME
[illegible]	1915	[illegible]	11/18 1915
METHOD OF SHIPMENT:		AIRBILL NO:	

WWC-F

CHAIN OF CUSTODY RECORD

SHEET 6 of 6

WOODWARD-CLYDE CONSULTANTS
2318 MILLPARK DR.
MARYLAND HEIGHTS, MISSOURI 63043
314-429-0100

PROJECT NO: 89 MC 114V

PROJECT NAME: NL/Taracorp

SAMPLER'S: (Signature) Cynthia Pavelka

DATE	TIME	SAMPLE I.D. NUMBER	NO. OF CONTAINERS	Total Lead Air Filter					REMARKS
11/6/91	2:00 pm	PASP #5 (Personal Air Sampling Pump) Filter	1	X					(Blank)

RELINQUISHED BY: (Signature)	DATE / TIME	RECEIVED BY: (Signature)	DATE / TIME
Karen Kreger	11/6 5:30	[illegible]	11/7/91 5:30
RELINQUISHED BY: (Signature)	DATE / TIME	RECEIVED AT LAB BY: (Signature)	DATE / TIME
[illegible]	11/6 630	Ethan Litsey	11/6 6:30 PM
METHOD OF SHIPMENT:		AIRBILL NO:	

METALS WET CHEMISTRY DATA ASSESSMENT

PROJECT NO. 89MC114V
LABORATORY ESE
LAB PROJECT NO. 5912031 0100
NO. OF SAMPLES/
MATRIX 60 / SOIL
ANALYSIS DATE: 9/10/92

SITE NL/TARACORP SUPERFUND SITE
REVIEWER [illegible]
REVIEWER'S NAME WENDY REITNBOLT
COMPLETION DATE 9/22/92

DATA ASSESSMENT SUMMARY

	ICP	AA	Hg	CN	OTHER
1. HOLDING TIMES		✓			
2. BLANKS		(1)			
3. CCV		✓			
4. STANDARD MATRIX SPIKE		✓			
5. MATRIX SPIKE		(2)			
6. OTHER QC		NA			
7. OVERALL ASSESSMENT		O/M			

O = Data had no problems/or qualified due to minor problems.
M = Data qualified due to major problems.
Z = Data unacceptable.
X = Problems, but do not affect data.

ACTION ITEMS: (1) METHOD BLANK ANALYSIS RETURNED A CONCENTRATION OF LEAD. ALL DATA GREATER THAN 5 TIMES BLANK CONCENTRATION, IS QUALIFIED AS ESTIMATED (J). ALL DATA LESS THAN 5 TIMES BLANK CONCENTRATION IS QUALIFIED AS NON-DETECT (U).

COMMENTS: (2) WWC6*655, WWC7*60 EXCEED % RECOVERY CONTROL LIMITS (& WWC6*655 EXCEEDS RPD CONTROL LIMIT). LAB ATTRIBUTES TO SAMPLE INHOMOGENEITY AND SAMPLE MATRIX EFFECT. QUALIFY DATA AS ESTIMATED (J).

METALS/WET CHEMISTRY DATA ASSESSMENT

PROJECT NO. 89MC114V
LABORATORY ESE
LAB PROJECT NO. 5912C31 0100
NO. OF SAMPLES/
MATRIX S/SOIL
ANALYSIS DATE: 9/11/92

SITE NL/TARACORP SUPERFUND SITE

REVIEWER Wendy Reinholt
REVIEWER'S NAME WENDY REINHOLT
COMPLETION DATE 9/22/92

DATA ASSESSMENT SUMMARY

	ICP	AA	Hg	CN	OTHER
1. HOLDING TIMES	✓				
2. BLANKS	✓				
3. CCV	✓				
4. STANDARD MATRIX SPIKE	✓				
5. MATRIX SPIKE	✓				
6. OTHER QC	NA				
7. OVERALL ASSESSMENT	O				

O = Data had no problems/or qualified due to minor problems.
M = Data qualified due to major problems.
Z = Data unacceptable.
X = Problems, but do not affect data.

ACTION ITEMS:

COMMENTS:

MOISTURE

Pages 1 - 2

Environmental Science & Engineering, Inc.

St. Louis Chemistry Laboratory

11665 Lilburn Park Road
St. Louis, Missouri 63146-3535

Phone (314) 567-4600
Fax (314) 567-5030

Analytical Chemistry Results

STATUS: FINAL

PROJECT NAME: NL/TARACORP SUPERFUND SITE PREDESIGN FIELD INVESTIGATION, WWC89MC114V

PROJECT NUMBER: 5912031 0100 **REPORT DATE:** 09-17-92

SAMPLE MATRIX: SOIL **LAB MANAGER/QC REVIEW:** JEFFREY W. SIRIA

PROJECT MANAGER: JOHN F. GEMOULES **REPORT APPROVED BY:** FRANCIS Y. HUANG

SAMPLE I.D.	LABORATORY I.D.	COLLECTION DATE	RECEIVED DATE	MOISTURE, %WET WT METHOD: PB215192	EXTRACT. DATE	ANALYSIS DATE	CHEM. INIT.
SGR1933100A00L	WWC7*1	08/12/92	08/12/92	9.8		08/17/92	RLW
SGR1933100A0LD	WWC7*2	08/12/92	08/12/92	9.6		08/17/92	RLW
SGR1933100B00L	WWC7*3	08/12/92	08/12/92	10.2		08/17/92	RLW
SGR1933100B0LD	WWC7*4	08/12/92	08/12/92	10.2		08/17/92	RLW
SGR1933100C00L	WWC7*5	08/12/92	08/12/92	9.3		08/17/92	RLW
SGR1933100C0LD	WWC7*6	08/12/92	08/12/92	9.1		08/17/92	RLW
SGR1924100A00L	WWC7*7	08/12/92	08/12/92	13.4		08/17/92	RLW
SGR1924100B00L	WWC7*8	08/12/92	08/12/92	12.8		08/17/92	RLW
SGR1924100C00L	WWC7*9	08/12/92	08/12/92	13.4		08/17/92	RLW
SGR1924200A00L	WWC7*10	08/12/92	08/12/92	14.9		08/17/92	RLW
SGR1924200B00L	WWC7*11	08/12/92	08/12/92	14.8		08/17/92	RLW
SGR1924200C00L	WWC7*12	08/12/92	08/12/92	15.9		08/17/92	RLW
SMA1340100A00L	WWC7*13	08/12/92	08/12/92	3.3		08/17/92	RLW
SMA1340100B00L	WWC7*14	08/12/92	08/12/92	3.5		08/17/92	RLW
SMA1348100A00L	WWC7*15	08/12/92	08/12/92	9.8		08/17/92	RLW
SMA1348100B00L	WWC7*16	08/12/92	08/12/92	9.4		08/17/92	RLW
SMA1348100C00L	WWC7*17	08/12/92	08/12/92	9.8		08/17/92	RLW
SGR0922100A00L	WWC7*18	08/12/92	08/12/92	9.0		08/17/92	RLW
SGR0922100B00L	WWC7*19	08/12/92	08/12/92	8.5		08/17/92	RLW
SGR0922100C00L	WWC7*20	08/12/92	08/12/92	7.7		08/17/92	RLW
SDE1712100A00L	WWC7*21	08/12/92	08/12/92	8.1		08/17/92	RLW
SDE1712100B00L	WWC7*22	08/12/92	08/12/92	6.3		08/17/92	RLW
SDE1712100C00L	WWC7*23	08/12/92	08/12/92	7.6		08/17/92	RLW
SDE1712200A00L	WWC7*24	08/12/92	08/12/92	9.8		08/17/92	RLW
SDE1712200B00L	WWC7*25	08/12/92	08/12/92	7.6		08/17/92	RLW
SDE1712200C00L	WWC7*26	08/12/92	08/12/92	10.8		08/17/92	RLW
SDE2033100A00L	WWC7*27	08/12/92	08/12/92	7.8		08/17/92	RLW
SDE2033100B00L	WWC7*28	08/12/92	08/12/92	6.3		08/17/92	RLW
SDE2033100C00L	WWC7*29	08/12/92	08/12/92	6.5		08/17/92	RLW
SDE2033200A00L	WWC7*30	08/12/92	08/12/92	9.9		08/17/92	RLW
SDE2033200B00L	WWC7*31	08/12/92	08/12/92	6.7		08/17/92	RLW
SDE2033200C00L	WWC7*32	08/12/92	08/12/92	7.7		08/17/92	RLW
SST2240100A00L	WWC7*33	08/12/92	08/12/92	10.5		08/17/92	RLW
SST2240100B00L	WWC7*34	08/12/92	08/12/92	8.3		08/17/92	RLW
SST2240100C00L	WWC7*35	08/12/92	08/12/92	7.7		08/17/92	RLW
SST2240200A00L	WWC7*36	08/12/92	08/12/92	8.8		08/17/92	RLW
SST2240200B00L	WWC7*37	08/12/92	08/12/92	6.9		08/17/92	RLW
SST2240200C00L	WWC7*38	08/12/92	08/12/92	7.6		08/17/92	RLW
SST2238100A00L	WWC7*39	08/12/92	08/12/92	10.6		08/17/92	RLW
SST2238100B00L	WWC7*40	08/12/92	08/12/92	9.4		08/17/92	RLW
SST2238100C00L	WWC7*41	08/12/92	08/12/92	9.1		08/17/92	RLW
SST2238200A00L	WWC7*42	08/12/92	08/12/92	9.3		08/17/92	RLW

Environmental Science & Engineering, Inc.

St. Louis Chemistry Laboratory

11465 Lilburn Park Road
St. Louis, Missouri 63146-3535

Phone (314) 567-4600
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Analytical Chemistry Results

STATUS: FINAL

PROJECT NAME: NL/TARACORP SUPERFUND SITE PREDESIGN FIELD INVESTIGATION, WWC89MC114V

PROJECT NUMBER: 5912031 0100

REPORT DATE: 09-17-92

SAMPLE MATRIX: SOIL

LAB MANAGER/QC REVIEW: JEFFREY W. SIRIA

PROJECT MANAGER: JOHN F. GEMOULES

REPORT APPROVED BY: FRANCIS Y. HUANG

SAMPLE I.D.	LABORATORY I.D.	COLLECTION DATE	RECEIVED DATE	MOISTURE, %WET WT METHOD: PB215192	EXTRACT. DATE	ANALYSIS DATE	CHEM. INIT.
SST2238200B00L	WWC7*43	08/12/92	08/12/92	7.0		08/17/92	RLW
SST2238200C00L	WWC7*44	08/12/92	08/12/92	7.9		08/17/92	RLW
SBE2208100A00L	WWC7*45	08/12/92	08/12/92	11.9		08/17/92	RLW
SBE2208100B00L	WWC7*46	08/12/92	08/12/92	9.0		08/17/92	RLW
SBE2208100C00L	WWC7*47	08/12/92	08/12/92	4.9		08/17/92	RLW
SBE2208200A00L	WWC7*48	08/12/92	08/12/92	8.1		08/17/92	RLW
SBE2208200B00L	WWC7*49	08/12/92	08/12/92	8.2		08/17/92	RLW
SBE2208200C00L	WWC7*50	08/12/92	08/12/92	11.1		08/17/92	RLW
SBE2028100A00L	WWC7*51	08/13/92	08/13/92	7.3		08/17/92	RLW
SBE2028100B00L	WWC7*52	08/13/92	08/13/92	7.2		08/17/92	RLW
SBE2028100C00L	WWC7*53	08/13/92	08/13/92	4.7		08/17/92	RLW
SBE2028200A00L	WWC7*54	08/13/92	08/13/92	7.4		08/17/92	RLW
SBE2028200B00L	WWC7*55	08/13/92	08/13/92	6.5		08/17/92	RLW
SBE2028300C00L	WWC7*56	08/13/92	08/13/92	5.4		08/17/92	RLW
SBR2027100A00L	WWC7*57	08/13/92	08/13/92	11.6		08/17/92	RLW
SBR2027100B00L	WWC7*58	08/13/92	08/13/92	8.9		08/17/92	RLW
SBR2027100C00L	WWC7*59	08/13/92	08/13/92	8.5		08/17/92	RLW
SCL2317100A00L	WWC7*60	08/13/92	08/13/92	20.8		08/17/92	RLW
SCL2317100B00L	WWC7*61	08/13/92	08/13/92	21.8		08/17/92	RLW
SCL2317100C00L	WWC7*62	08/13/92	08/13/92	20.8		08/17/92	RLW
SCL2317200A00L	WWC7*63	08/13/92	08/13/92	14.7		08/17/92	RLW
CL2317200B00L	WWC7*64	08/13/92	08/13/92	12.7		08/17/92	RLW
SCL2317200C00L	WWC7*65	08/13/92	08/13/92	14.1		08/17/92	RLW
SCL2317100B00L	WWC7*61	08/13/92	08/13/92	21.8		08/17/92	RLW
SCL2317100C00L	WWC7*62	08/13/92	08/13/92	20.8		08/17/92	RLW
SCL2317200A00L	WWC7*63	08/13/92	08/13/92	14.7		08/17/92	RLW
SCL2317200B00L	WWC7*64	08/13/92	08/13/92	12.7		08/17/92	RLW
SCL2317200C00L	WWC7*65	08/13/92	08/13/92	14.1		08/17/92	RLW

LEAD ANALYSIS

Pages 3 - 4

Environmental Science & Engineering, Inc.

St. Louis Chemistry Laboratory

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St. Louis, Missouri 63146-3535

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Analytical Chemistry Results

STATUS: FINAL

PROJECT NAME: NL/TARACORP SUPERFUND SITE PREDESIGN FIELD INVESTIGATION, WWC89MC114V

PROJECT NUMBER: 5912031 0100

REPORT DATE: 09-17-92

SAMPLE MATRIX: SOIL

LAB MANAGER/QC REVIEW: JEFFREY W. SIRIA

PROJECT MANAGER: JOHN F. GEMOULES

REPORT APPROVED BY: FRANCIS Y. HUANG

SAMPLE I.D.	LABORATORY I.D.	COLLECTION DATE	RECEIVED DATE	LEAD(FAA), MG/KG-DRY METHOD: 3051/7420		MDL	EXTRACT. DATE	ANALYSIS DATE	CHEM. INIT.
SGR1933100A00L	WWC7*1	08/12/92	08/12/92	464	J	5.17	08/21/92	09/10/92	PW
SGR1933100A0LD	WWC7*2	08/12/92	08/12/92	509		5.50	08/21/92	09/10/92	PW
SGR1933100B00L	WWC7*3	08/12/92	08/12/92	465		5.24	08/21/92	09/10/92	PW
SGR1933100B0LD	WWC7*4	08/12/92	08/12/92	324		5.48	08/21/92	09/10/92	PW
SGR1933100C00L	WWC7*5	08/12/92	08/12/92	236		5.19	08/21/92	09/10/92	PW
SGR1933100C0LD	WWC7*6	08/12/92	08/12/92	284		5.25	08/21/92	09/10/92	PW
SGR1924100A00L	WWC7*7	08/12/92	08/12/92	650		5.58	08/21/92	09/10/92	PW
SGR1924100B00L	WWC7*8	08/12/92	08/12/92	498		5.39	08/21/92	09/10/92	PW
SGR1924100C00L	WWC7*9	08/12/92	08/12/92	243		5.50	08/21/92	09/10/92	PW
SGR1924200A00L	WWC7*10	08/12/92	08/12/92	993		5.51	08/21/92	09/10/92	PW
SGR1924200B00L	WWC7*11	08/12/92	08/12/92	489		5.62	08/21/92	09/10/92	PW
SGR1924200C00L	WWC7*12	08/12/92	08/12/92	316		5.93	08/21/92	09/10/92	PW
SMA1340100A00L	WWC7*13	08/12/92	08/12/92	53.4		5.04	08/21/92	09/10/92	PW
SMA1340100B00L	WWC7*14	08/12/92	08/12/92	133		4.93	08/21/92	09/10/92	PW
SMA1348100A00L	WWC7*15	08/12/92	08/12/92	528		5.39	08/21/92	09/10/92	PW
SMA1348100B00L	WWC7*16	08/12/92	08/12/92	902		5.27	08/21/92	09/10/92	PW
SMA1348100C00L	WWC7*17	08/12/92	08/12/92	763		5.20	08/21/92	09/10/92	PW
SGR0922100A00L	WWC7*18	08/12/92	08/12/92	352		5.22	08/21/92	09/10/92	PW
SGR0922100B00L	WWC7*19	08/12/92	08/12/92	349		5.24	08/21/92	09/10/92	PW
SGR0922100C00L	WWC7*20	08/12/92	08/12/92	219		5.31	08/21/92	09/10/92	PW
SDE1712100A00L	WWC7*21	08/12/92	08/12/92	930		5.21	08/21/92	09/10/92	PW
SDE1712100B00L	WWC7*22	08/12/92	08/12/92	260		5.31	08/21/92	09/10/92	PW
SDE1712100C00L	WWC7*23	08/12/92	08/12/92	118		5.41	08/21/92	09/10/92	PW
SDE1712200A00L	WWC7*24	08/12/92	08/12/92	877		5.30	08/21/92	09/10/92	PW
SDE1712200B00L	WWC7*25	08/12/92	08/12/92	386		5.34	08/21/92	09/10/92	PW
SDE1712200C00L	WWC7*26	08/12/92	08/12/92	887		5.51	08/21/92	09/10/92	PW
SDE2033100A00L	WWC7*27	08/12/92	08/12/92	657		5.25	08/21/92	09/10/92	PW
SDE2033100B00L	WWC7*28	08/12/92	08/12/92	212		5.15	08/21/92	09/10/92	PW
SDE2033100C00L	WWC7*29	08/12/92	08/12/92	118		5.18	08/21/92	09/10/92	PW
SDE2033200A00L	WWC7*30	08/12/92	08/12/92	789		5.24	08/21/92	09/10/92	PW
SDE2033200B00L	WWC7*31	08/12/92	08/12/92	370		5.26	08/21/92	09/10/92	PW
SDE2033200C00L	WWC7*32	08/12/92	08/12/92	121		5.41	08/21/92	09/10/92	PW
SST2240100A00L	WWC7*33	08/12/92	08/12/92	415		5.40	08/21/92	09/10/92	PW
SST2240100B00L	WWC7*34	08/12/92	08/12/92	348		4.98	08/21/92	09/10/92	PW
SST2240100C00L	WWC7*35	08/12/92	08/12/92	372		5.41	08/21/92	09/10/92	PW
SST2240200A00L	WWC7*36	08/12/92	08/12/92	200		5.36	08/21/92	09/10/92	PW
SST2240200B00L	WWC7*37	08/12/92	08/12/92	691		5.04	08/21/92	09/10/92	PW
SST2240200C00L	WWC7*38	08/12/92	08/12/92	474		5.31	08/21/92	09/10/92	PW
SST2238100A00L	WWC7*39	08/12/92	08/12/92	402		5.24	08/21/92	09/10/92	PW
SST2238100B00L	WWC7*40	08/12/92	08/12/92	335		5.08	08/21/92	09/10/92	PW
SST2238100C00L	WWC7*41	08/12/92	08/12/92	262		5.11	08/21/92	09/10/92	PW
SST2238200A00L	WWC7*42	08/12/92	08/12/92	1080	J	5.43	08/21/92	09/10/92	PW

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Analytical Chemistry Resul

STATUS: FINAL

PROJECT NAME: NL/TARACORP SUPERFUND SITE PREDESIGN FIELD INVESTIGATION, WWC89MC114V

PROJECT NUMBER: 5912031 0100

REPORT DATE: 09-17-92

SAMPLE MATRIX: SOIL

LAB MANAGER/QC REVIEW: JEFFREY W. SIRIA

PROJECT MANAGER: JOHN F. GEMOULES

REPORT APPROVED BY: FRANCIS Y. HUANG

SAMPLE I.D.	LABORATORY I.D.	COLLECTION DATE	RECEIVED DATE	LEAD(FAA), MG/KG-DRY METHOD: 3051/7420		MDL	EXTRACT. DATE	ANALYSIS DATE	CHEM. INIT.
SST2238200B00L	WWC7*43	08/12/92	08/12/92	378	J	5.10	08/21/92	09/10/92	PW
SST2238200C00L	WWC7*44	08/12/92	08/12/92	169		5.13	08/21/92	09/10/92	PW
SBE2208100A00L	WWC7*45	08/12/92	08/12/92	164		5.28	08/21/92	09/10/92	PW
SBE2208100B00L	WWC7*46	08/12/92	08/12/92	91.8		5.46	08/21/92	09/10/92	PW
SBE2208100C00L	WWC7*47	08/12/92	08/12/92	677		5.25	08/21/92	09/10/92	PW
SBE2208200A00L	WWC7*48	08/12/92	08/12/92	2550	D	24.8	08/21/92	09/10/92	PW
SBE2208200B00L	WWC7*49	08/12/92	08/12/92	575		5.33	08/21/92	09/10/92	PW
SBE2208200C00L	WWC7*50	08/12/92	08/12/92	476		5.39	08/21/92	09/10/92	PW
SBE2028100A00L	WWC7*51	08/13/92	08/13/92	986		5.31	08/21/92	09/10/92	PW
SBE2028100B00L	WWC7*52	08/13/92	08/13/92	271		5.15	08/21/92	09/10/92	PW
SBE2028100C00L	WWC7*53	08/13/92	08/13/92	95.3		4.81	08/21/92	09/10/92	PW
SBE2028200A00L	WWC7*54	08/13/92	08/13/92	423		5.03	08/21/92	09/10/92	PW
SBE2028200B00L	WWC7*55	08/13/92	08/13/92	504		5.15	08/21/92	09/10/92	PW
SBE2028300C00L	WWC7*56	08/13/92	08/13/92	213		5.16	08/21/92	09/10/92	PW
SBR2027100A00L	WWC7*57	08/13/92	08/13/92	1330		5.31	08/21/92	09/10/92	PW
SBR2027100B00L	WWC7*58	08/13/92	08/13/92	2700	D	26.3	08/21/92	09/10/92	PW
SCL2317100A00L	WWC7*60	08/13/92	08/13/92	1280	J	6.08	08/21/92	09/10/92	PW

SAMPLE I.D.	LABORATORY I.D.	COLLECTION DATE	RECEIVED DATE	LEAD(ICAP), MG/KG-DRY METHOD: 3051/6010	MDL	EXTRACT. DATE	ANALYSIS DATE	CHEM. INIT.
SBR2027100C00L	WWC7*59	08/13/92	08/13/92	545	1.91	08/21/92	09/11/92	PW
SCL2317100B00L	WWC7*61	08/13/92	08/13/92	1770	2.18	08/24/92	09/11/92	PW
SCL2317100C00L	WWC7*62	08/13/92	08/13/92	1150	2.21	08/24/92	09/11/92	PW
SCL2317200A00L	WWC7*63	08/13/92	08/13/92	234	2.06	08/24/92	09/11/92	PW
SCL2317200B00L	WWC7*64	08/13/92	08/13/92	183	1.94	08/24/92	09/11/92	PW
SCL2317200C00L	WWC7*65	08/13/92	08/13/92	68.0	1.93	08/24/92	09/11/92	PW

D - Sample was diluted for this parameter

CHAIN OF CUSTODY RECORD

WOODWARD-CLYDE CONSULTANTS
2318 MILLPARK DR.
MARYLAND HEIGHTS, MISSOURI 63043
314-429-0100

SHEET 1 of 1

PROJECT NO.: 89MC114V

PROJECT NAME: NL/TARACORP SUPERFUND SITE PREDESIGN FIELD INVESTIGATION

SAMPLER'S: (Signatures)

DATE	TIME	SAMPLE I.D. NUMBER (Matrix / Location / Boring / Depth / Sample Type)	NO. OF CONTAINERS	Total Lead 4oz. poly jar Cool to 4°C	TCLP - Lead 4oz. poly jar Cool to 4°C	Geotechnical glass or poly jar	REMARKS
6/1	1120	S MW1049 Z 00A 00L	1	X			
	1210	S MW1049 Z 00H 00L					
	1242	S MW1049 Z 00W 00L					
	1255	S MW1049 Z 00X 00L					
	1220	S MW1049 Z 00U 00L					
	1232	S MW1049 Z 00V 00L					
	1222	S MW1049 Z 00U 0LD					
		S					
		S					
		S					
		S					
		S					
		S					
		S					
		S					
		S					
		S					
		S					
		S					
		S					
		S					
		S					
		S					

RELINQUISHED BY: (Signature)	DATE / TIME	RECEIVED BY: (Signature)	DATE / TIME
	6/16/92 1630	James Cook	6/19/92 1410
RELINQUISHED BY: (Signature)	DATE / TIME	RECEIVED AT LAB BY: (Signature)	DATE / TIME
	6-19-92 1410		

METHOD OF SHIPMENT:

AIRBILL NO: (If Applicable)

COOLER/SAMPLE RECEIPT FORM

ev.01 10/7/91

ESE Cooler # _____
Client Cooler # 1
No Cooler _____

-oject: Woodward Clyde Date/Time Received: 6-19-92 1410

E OTHER SIDE OF THIS FORM TO NOTE FURTHER DETAILS CONCERNING CHECK-IN PROBLEMS AND TO SPECIFY AND DESCRIBE ANY :TION(S) REGARDING THE RESOLUTION(S) OF PROBLEMS. IF SHIPMENT WAS ACCEPTED AND IF REQUESTED, NOTE ON BACK THE :DRESS WHERE THE EMPTY COOLER WAS RETURNED AND LIKEWISE IF THE SHIPMENT WAS REJECTED.

: INFORMATION IS MISSING OR THERE ARE PROBLEMS NOTIFY LABORATORY PROJECT MANAGER SO THAT HE CAN NOTIFY THE PROJECT MAGER IMMEDIATELY.

PRELIMINARY EXAMINATION PHASE: Date/Time cooler/sample was opened and checked: 6-19-92 1450

by (print) James Cash (sign) James Cash

1. List courier delivering samples client . . . . . YES NO
2. Did cooler come with a shipping slip (air bill, etc.)? . . . . . YES (NO)
   If YES, attach and enter carrier and air bill number here: _____
3. Were custody seals on outside of cooler? . . . . . (YES) NO
   If YES, how many and where: 2 on Front
   If YES, enter the following: seal date: 6-18-92, seal name: E Roe
4. Were custody seals unbroken and intact at the date and time of arrival? . . . . . (YES) NO
5. Was chain-of-custody provided? . . . . . (YES) NO
6. Were custody papers sealed in a Ziplock™ bag and taped inside to the lid? . . . . . (YES) NO
7. Were entries on custody papers completed, including cooler number? (YES) NO - If no, give details on back
8. Turnaround time included? . . . . . YES (NO)
9. Did you sign custody papers in the appropriate place? . . . . . (YES) NO
10. Was project identifiable from custody papers? If YES, enter project name at the top of this form. . (YES) NO

SAMPLE CHECK-IN PHASE: Date samples were checked-in: 6-19-92 by (all those involved must sign below):
(print) James Cash (sign) James Cash

. Describe packing: Packed in Blue Ice + stacked
. If required, was enough ice used? (temperature maintained correctly)? . . . . . (YES) NO
. Were all bottles sealed in separate plastic bags? . . . . . YES (NO)
. Did all bottles arrive unbroken and in good condition? . . . . . (YES) NO
. Were all bottle labels complete (ID, date, time, signature, preservative, etc.)? . . . . . (YES) NO
. Did all bottle labels agree with custody papers? If NO, indicate discrepancies on back. . . . . (YES) NO
. Were correct containers used for the tests indicated? . . . . . (YES) NO
. Were correct preservatives used when required? . NA . . . . . YES NO
. pH of samples maintained correctly as required? If NO, list by ID# NA . YES NO
. Was a sufficient amount of sample sent for tests indicated? . . . . . (YES) NO
. Bubbles present in VOA vials? If YES, list by ID#: NA . YES NO
. Was lab. project manager called and status discussed? If YES, give details on the back of this form. YES (NO)
Who was called? _____ By whom? _____ on (date) _____
Second Party Review: _____

Sample rejection criteria

P\CHEMCON\CRF.01

N

Method Blank Sample Summary

AME	UNITS	STOR=METH	BATCH	SAMPLE	DATE	FOUND	FOOTNOTE
EAD(FAA)	MG/KG-DRY	1051=SFAAS	S8624	MB=NONE=1	09/10/92	2.00	
EAD(FAA)	MG/KG-DRY			MB=NONE=3		0.0	
EAD(FAA)	MG/KG-DRY			MB=NONE=2		0.0	
EAD(FAA)	MG/KG-DRY			MB=NONE=4		0.0	

Continuing Calibration Verification Sample Summary

AME	UNITS	STOR=METH	BATCH	SAMPLE	DATE	TARGET	FOUND	%RECV	RECV CRIT	FOOTNOTE
EAD(FAA)	MG/KG-DRY	1051=SFAAS	S8624	CCV=NONE=1	09/10/92	5.00	5.43	109	75-125	
EAD(FAA)	MG/KG-DRY			CCV=NONE=2		5.00	5.18	104	75-125	
EAD(FAA)	MG/KG-DRY			CCV=NONE=3		5.00	5.35	107	75-125	
EAD(FAA)	MG/KG-DRY			CCV=NONE=4		5.00	5.31	106	75-125	
EAD(FAA)	MG/KG-DRY			CCV=NONE=5		5.00	5.31	106	75-125	
EAD(FAA)	MG/KG-DRY			CCV=NONE=6		5.00	5.19	104	75-125	
EAD(FAA)	MG/KG-DRY			CCV=NONE=7		5.00	4.84	96.8	75-125	
EAD(FAA)	MG/KG-DRY			CCV=NONE=8		5.00	4.87	97.4	75-125	
EAD(FAA)	MG/KG-DRY			CCV=NONE=9		5.00	4.95	99.0	75-125	
EAD(FAA)	MG/KG-DRY			CCV=NONE=10		5.00	4.84	96.8	75-125	
EAD(FAA)	MG/KG-DRY			CCV=NONE=11		5.00	4.57	91.4	75-125	

Standard Matrix Spike Recovery and Replicate Summary

AME	UNITS	STOR=METH	BATCH	SAMPLE	DATE	TARGET	FOUND	%RECV	RECV CRIT	R.P.D.	R.P.D. CRIT.	FOOTNOTE
EAD(FAA)	MG/KG-DRY	1051=SFAAS	S8624	SP=NONE=1	09/10/92	500	552	110	75-125		20	
EAD(FAA)	MG/KG-DRY			SP=NONE=3		500	574	115	75-125		20	
EAD(FAA)	MG/KG-DRY			SP=NONE=2		500	495	100.0	75-125		20	
EAD(FAA)	MG/KG-DRY			SP=NONE=4		500	562	114	75-125		20	

Sample Matrix Spike Recovery Summary

AME	UNITS	STOR=METH	BATCH	SAMPLE	DATE	TARGET	FOUND	%RECV	RECV CRIT	UNSPIKED	R.P.D.	R.P.D. CRIT.	FOOTNOTE
EAD(FAA)	MG/KG-DRY	1051=SFAAS	S8624	SPM1=WWC7=40	09/10/92	528	557	106	75-125	335		20	
EAD(FAA)	MG/KG-DRY			SPM2=WWC7=40		533	571	107	75-125	335	1.89	20	
EAD(FAA)	MG/KG-DRY			SPM1=WWC6=655		563	1060	187	75-125	174		20	(1)
EAD(FAA)	MG/KG-DRY			SPM2=WWC6=655		558	192	34.4	75-125	174	138	20	(1)
EAD(FAA)	MG/KG-DRY			SPM1=WWC7=20		524	600	115	75-125	219		20	
EAD(FAA)	MG/KG-DRY			SPM2=WWC7=20		541	597	110	75-125	219	4.44	20	
EAD(FAA)	MG/KG-DRY			SPM1=WWC7=60		609	370	60.7	75-125	1280		20	(2)
EAD(FAA)	MG/KG-DRY			SPM2=WWC7=60		620	410	66.1	75-125	1280	8.35	20	(2)

1) - Sample inhomogeneity.
2) - Sample matrix effect.

CHAIN OF CUSTODY

WWC/WWC-R

CHAIN OF CUSTODY RECORD

WOODWARD-CLYDE CONSULTANTS
2318 MILLPARK DR.
MARYLAND HEIGHTS, MISSOURI 63043
314-429-0100

SHEET 1 of .

PROJECT NO.: 89MC114V

PROJECT NAME: NL/TARACORP SUPERFUND SITE PREDESIGN FIELD INVESTIGATION

SAMPLER'S: (Signatures) [signature] [signature]

	DATE	TIME	SAMPLE I.D. NUMBER: Matrix	Location	Boring	Depth	Sample Type	NO. OF CONTAINERS	CONTAINER DESCRIPTION/ ANALYSES REQUESTED: Total Lead 4oz. poly jar Cool to 4°C	TCLP - Lead 4oz. poly jar Cool to 4°C	Geotechnical glass or poly jar	REMARKS
1	11/4	1000	S	MP1713	1	00A	00L	1	X			
2		1005	S	MP1713	1	00B	00L	1	X			
3		1010	S	MP1713	1	00C	00L	1	X			
4		1050	S	MP1713	2	00A	00L	1	X			
5		1055	S	MP1713	2	00B	00L	1	X			
6		1100	S	MP1713	2	00C	00L	1	X			
7		1140	S	MP1716	1	00A	00L	1	X			
8		1145	S	MP1716	1	00B	00L	1	X			
9	*	1150	S	MP1716	1	00C	00L	1	X			
10		1225	S	MP1716	2	00A	00L	1	X			
11		1234	S	MP1716	2	00B	00L	1	X			
12		1242	S	MP1716	2	00C	00L	1	X			
13		2:56	S	MP1720	1	00A	00L	1	X			
14		3:01	S	MP1720	1	00B	00L	1	X			
15		3:10	S	MP1720	1	00C	00L	1	X			
16		3:40	S	MP1720	2	00A	00L	1	X			
17		3:43	S	MP1720	2	00B	00L	1	X			
18		3:45	S	MP1720	2	00C	00L	1	X			
1		4:30	S	DEIONIZED	1			1				500 ml Total Meta
			S									
			S									
			S									
			S									

RELINQUISHED BY: (Signature)	DATE / TIME	RECEIVED BY: (Signature)	DATE / TIME
Karen Meyer	11/4/91 4:55		
RELINQUISHED BY: (Signature)	DATE / TIME	RECEIVED AT LAB BY: (Signature)	DATE / TIME
[signature]		Ethan Litsey	11/4/91
METHOD OF SHIPMENT:		AIRBILL NO: (If Applicable)	

4

COOLER/SAMPLE RECEIPT FORM

Rev.01 10/7/91 WWC/WWC-R

ESE Cooler # ✓
Client Cooler #
No Cooler

Project: Woodward Clyde Date/Time Received: 11-4-91 1810

USE OTHER SIDE OF THIS FORM TO NOTE FURTHER DETAILS CONCERNING CHECK-IN PROBLEMS AND TO SPECIFY AND DESCRIBE ANY ACTION(S) REGARDING THE RESOLUTION(S) OF PROBLEMS. IF SHIPMENT WAS ACCEPTED AND IF REQUESTED, NOTE ON BACK THE ADDRESS WHERE THE EMPTY COOLER WAS RETURNED AND LIKEWISE IF THE SHIPMENT WAS REJECTED.

IF INFORMATION IS MISSING OR THERE ARE PROBLEMS NOTIFY LABORATORY PROJECT MANAGER SO THAT HE CAN NOTIFY THE PROJECT MANAGER IMMEDIATELY.

A. PRELIMINARY EXAMINATION PHASE: Date/Time cooler/sample was opened and checked: 11-5-91 830

by (print) Carol Cash (sign) Carol Cash

1. List courier delivering samples ..... Client ..... YES NO
2. Did cooler come with a shipping slip (air bill, etc.)? ..... YES (NO)
   If YES, attach and enter carrier and air bill number here: _____
3. Were custody seals on outside of cooler? ..... (YES) NO
   If YES, how many and where: 2 on the front
   If YES, enter the following: seal date: 11-4-91, seal name: Mark Wallace, Ray S
4. Were custody seals unbroken and intact at the date and time of arrival? ..... YES NO
5. Was chain-of-custody provided? ..... (YES) NO
6. Were custody papers sealed in a Ziplock™ bag and taped inside to the lid? ..... YES (NO)
7. Were entries on custody papers completed? (YES) NO . If no, give details on back
8. Turnaround time included? ..... YES (NO)
9. Did you sign custody papers in the appropriate place? Willy Ethan Stacy ..... YES NO
10. Was project identifiable from custody papers? If YES, enter project name at the top of this form. (YES) NO

B. SAMPLE CHECK-IN PHASE: Date samples were checked-in: 11-5-91 by (all those involved must sign below):

(print) Carol Cash (sign) Carol Cash

11. Describe packing: samples in ice
*12. If required, was enough ice used? (temperature maintained correctly)? ..... (YES) NO
13. Were all bottles sealed in separate plastic bags? ..... YES (NO)
*14. Did all bottles arrive unbroken and in good condition? ..... (YES) NO
15. Were all bottle labels complete (ID, date, time, signature, preservative, etc.)? ..... (YES) NO
16. Did all bottle labels agree with custody papers? If NO, indicate discrepancies on back. ..... (YES) NO
17. Were correct containers used for the tests indicated? ..... (YES) NO
*18. Were correct preservatives used when required? ..... (YES) NO
*19. pH of samples maintained correctly as required? If NO, list by ID# _____ . (YES) NO
20. Was a sufficient amount of sample sent for tests indicated? ..... (YES) NO
*21. Bubbles present in VOA vials? If YES, list by ID#: NA . YES NO
22. Was lab. project manager called and status discussed? If YES, give details on the back of this form. YES NO
23. Who was called? _____ By whom? _____ on (date) _____
24. Second Party Review: _____

* Sample rejection criteria

W:\WP\CHENCOK\CRF.01

*SMP1716100C001, the time rubbed out on lable

Standard Matrix Spike Recovery and Replicate Summary

E	UNITS	STOR#METH	BATCH	SAMPLE	DATE	TARGET	FOUND	%RECV	RECV CRIT	R.P.D.	R.P.D. CRIT.	FOOTNOTE
ENIC	MG/L	1002#SCLP	S6712	SP#NONE#1	01/02/92	0.04	0.04	99.7	75-125		20	
ENIC	MG/L			SP#NONE#2		0.04	0.04	100.0	75-125	RPD#1	20	
ENIC	MG/L			SP#NONE#3		0.04	0.04	100.0	75-125	RPD#1	20	
D	MG/L	1051#SCLP	S6723	SP#NONE#1	01/06/92	0.02	0.02	97.8	75-125		20	
D	MG/L			SP#NONE#2		0.02	0.03	107	75-125	RPD#1	20	
D	MG/L			SP#NONE#3		0.02	0.02	95.6	75-125	RPD#1	20	
ENIUM	MG/L	1147#SCLP	S6716	SP#NONE#1	01/03/92	0.01	0.01	100.0	75-125		20	
ENIUM	MG/L			SP#NONE#2		0.01	0.009	94.4	75-125	RPD#1	20	
ENIUM	MG/L			SP#NONE#3		0.01	0.01	98.9	75-125	RPD#1	20	

Sample Matrix Spike Recovery Summary

E	UNITS	STOR#METH	BATCH	SAMPLE	DATE	TARGET	FOUND	%RECV	RECV CRIT	UNSPIKED	R.P.D.	R.P.D. CRIT.	FOOTNOTE
ENIC	MG/L	1002#SCLP	S6712	SPM#LALE-W#1	01/02/92	0.04	0.04	87.8	75-125	0.001		20	
ENIC	MG/L			SPM#WWC-R#1		0.04	0.04	89.6	75-125	0.0002		20	
ENIC	MG/L			SPM#SCM2#69		0.04	0.04	89.6	75-125	0.0002		20	
IUM	MG/L	1007#SCLP	S6536	SPM1#WWC-R#1	12/03/91	2.00	2.26	113	75-125	0.009		20	
MIUM	MG/L	1027#SCLP		SPM1#WWC-R#1		0.05	0.06	119	75-125	0.0003		20	
OMIUM	MG/L	1034#SCLP		SPM1#WWC-R#1		0.20	0.24	118	75-125	0.004		20	
D	MG/L	1051#SCLP	S6723	SPM#LALE-W#1	01/06/92	0.02	0.02	90.0	75-125	0.01		20	
D	MG/L			SPM#WWC-R#1		0.02	0.03	113	75-125	0.0006		20	
D	MG/L			SPM#SCM2#69		0.02	0.02	88.2	75-125	0.0004		20	
VER	MG/L	1077#SCLP	S6536	SPM1#WWC-R#1	12/03/91	0.05	0.06	114	75-125	0.003		20	
ENIUM	MG/L	1147#SCLP	S6716	SPM#LALE-W#1	01/03/92	0.01	0.006	57.6	75-125	0.0006		20	(2)
ENIUM	MG/L			SPM#WWC-R#1		0.01	0.01	90.0	75-125	0.0		20	
ENIUM	MG/L			SPM#SCM2#69		0.01	0.01	88.2	75-125	0.0002		20	

)- Not applicable, the concentration of the target compound in both the sample matrix and the replicate were found to be < 5 times the required detection limit.
)- Sample matrix interference.

CHAIN OF CUSTODY

QC SUMMARY

Method Blank Sample Summary

ME	UNITS	STOR*METH	BATCH	SAMPLE	DATE	FOUND	FOOTNOTE
SENIC	MG/L	1002*SCLP	S6712	MB*NONE*1	01/02/92	0.0001	
SENIC	MG/L			MB*NONE*2		0.0	
SENIC	MG/L			MB*NONE*3		0.0	
RIUM	MG/L	1007*SCLP	S6536	MB*NONE*8	12/03/91	0.007	
DMIUM	MG/L	1027*SCLP		MB*NONE*8		0.0005	
ROMIUM	MG/L	1034*SCLP		MB*NONE*8		0.003	
AD	MG/L	1051*SCLP	S6723	MB*NONE*1	01/06/92	0.0004	
AD	MG/L			MB*NONE*2		0.001	
AD	MG/L			MB*NONE*3		0.0009	
LVER	MG/L	1077*SCLP	S6536	MB*NONE*8	12/03/91	0.001	
LENIUM	MG/L	1147*SCLP	S6716	MB*NONE*1	01/03/92	0.0	
LENIUM	MG/L			MB*NONE*2		0.0006	
LENIUM	MG/L			MB*NONE*3		0.0001	

Continuing Calibration Verification Sample Summary

ME	UNITS	STOR*METH	BATCH	SAMPLE	DATE	TARGET	FOUND	%RECV	RECV CRIT	FOOTNOTE
SENIC	MG/L	1002*SCLP	S6712	CCV*NONE*1	01/02/92	0.04	0.04	100.0	75-125	
SENIC	MG/L			CCV*NONE*2		0.04	0.04	100.0	75-125	
RIUM	MG/L	1007*SCLP	S6536	CCV*CCVB*1	12/03/91	2.00	2.06	103	75-125	
RIUM	MG/L			CCV*CCVB*19		2.00	2.05	103	75-125	
RIUM	MG/L			CCV*CCVB*20		2.00	2.07	104	75-125	
DMIUM	MG/L	1027*SCLP		CCV*CCVB*1		2.00	2.00	100.0	75-125	
DMIUM	MG/L			CCV*CCVB*19		2.00	2.12	106	75-125	
DMIUM	MG/L			CCV*CCVB*20		2.00	2.13	107	75-125	
ROMIUM	MG/L	1034*SCLP		CCV*CCVB*1		2.00	2.08	104	75-125	
ROMIUM	MG/L			CCV*CCVB*19		2.00	2.12	106	75-125	
ROMIUM	MG/L			CCV*CCVB*20		2.00	2.13	107	75-125	
AD	MG/L	1051*SCLP	S6723	CCV*NONE*1	01/06/92	0.04	0.04	100.0	75-125	
AD	MG/L			CCV*NONE*2		0.04	0.04	100.0	75-125	
LVER	MG/L	1077*SCLP	S6536	CCV*CCVB*1	12/03/91	2.00	2.12	106	75-125	
LVER	MG/L			CCV*CCVB*19		2.00	2.11	106	75-125	
LVER	MG/L			CCV*CCVB*20		2.00	2.14	107	75-125	
LENIUM	MG/L	1147*SCLP	S6716	CCV*NONE*1	01/03/92	0.04	0.04	100.0	75-125	
LENIUM	MG/L			CCV*NONE*2		0.04	0.04	100.0	75-125	
LENIUM	MG/L			CCV*NONE*3		0.04	0.04	100.0	75-125	
RCURY	MG/L	71900*SCLP	S6541	CCV*NONE*1	12/05/91	0.0040	0.0037	92.5	75-125	

Replicate Analysis Sample Summary

ME	UNITS	STOR*METH	BATCH	SAMPLE	DATE	FOUND #1	FOUND #2	R.P.D.	MAX % REPL DIFF	FOOTNOTE
SENIC	MG/L	1002*SCLP	S6712	RP*LALE-W*1	01/02/92	0.001	0.0008	22.2	20	(1)
SENIC	MG/L			RP*WWC-R*1		0.0002	0.0006	100.0	20	(1)
SENIC	MG/L			RP*SCM2*69		0.0	0.0003	200	20	(1)
RIUM	MG/L	1007*SCLP	S6536	RP*WWC-R*1	12/03/91	0.009	0.008	11.8	20	
DMIUM	MG/L	1027*SCLP		RP*WWC-R*1		0.0003	0.002	148	20	(1)
ROMIUM	MG/L	1034*SCLP		RP*WWC-R*1		0.004	0.002	66.7	20	(1)
AD	MG/L	1051*SCLP	S6723	RP*LALE-W*1	01/06/92	0.01	0.01	0.0	20	
AD	MG/L			RP*WWC-R*1		0.0006	0.001	50.0	20	(1)
AD	MG/L			RP*SCM2*69		0.0	0.0003	200	20	(1)
LVER	MG/L	1077*SCLP	S6536	RP*WWC-R*1	12/03/91	0.003	0.001	100.0	20	(1)
LENIUM	MG/L	1147*SCLP	S6716	RP*LALE-	01/03/92	0.0006	0.0	200	20	(1)
LENIUM	MG/L			RP*WWC-[illegible]		0.0	0.0	0.[illegible]	20	
LENIUM	MG/L			RP*SCM2*[illegible]		0.0	0.0004	200	20	(1)

Environmental Science & Engineering, Inc.

t. Louis Chemistry Laboratory

*1665 Lilburn Park Road
t. Louis, Missouri 63146-3535

Phone (314) 567-4600
Fax (314) 567-5030

Analytical Chemistry Results

STATUS: FINAL

PROJECT NAME: NL/TARACORP SUPERFUND SITE PREDESIGN FIELD INVESTIGATION, WWC89MC114V

PROJECT NUMBER: 5912031 0100 **REPORT DATE:** 09-17-92

SAMPLE MATRIX: SOIL **LAB MANAGER/QC REVIEW:** JEFFREY W. SIRIA

PROJECT MANAGER: JOHN F. GEMOULES **REPORT APPROVED BY:** FRANCIS Y. HUANG

SAMPLE I.D.	LABORATORY I.D.	COLLECTION DATE	RECEIVED DATE	LEAD(FAA), MG/KG-DRY METHOD: 3051/7420	MDL	EXTRACT. DATE	ANALYSIS DATE	CHEM. INIT.
SMW104920AC00L	WWC6*650	06/18/92	06/19/92	10800 D J	54.5	08/04/92	09/10/92	PW
SMW1049200B00L	WWC6*651	06/18/92	06/19/92	3770 D J	60.5	08/04/92	09/10/92	PW
SMW1049200W00L	WWC6*652	06/18/92	06/19/92	39.8 J	6.03	08/04/92	09/10/92	PW
SMW1049200X00L	WWC6*653	06/18/92	06/19/92	74.5 J	6.78	08/04/92	09/10/92	PW
SMW1049200U00L	WWC6*654	06/18/92	06/19/92	346 J	6.53	08/04/92	09/10/92	PW
SMW1049200V00L	WWC6*655	06/18/92	06/19/92	174 J	5.49	08/04/92	09/10/92	PW
SMW104920000LD	WWC6*656	06/18/92	06/19/92	111 J	6.79	08/04/92	09/10/92	PW

D - Sample was diluted for this parameter

QC SUMMARY

LEGEND

STOR*METH - storet*method code. Used as a unique identification of the analytical parameter.

BATCH - analytical data batch identification.

DATE - analysis date.

FOUND (method blank) - quantitated concentration determined to be in the method blank.

FOUND (continuing calibration verification) - quantitated concentration determined to be in the CCV sample.

FOUND (standard matrix spike) - quantitated concentration determined to be in the standard matrix spike.

FOUND (sample matrix spike) - the difference in the quantitated concentration in the sample matrix spike and the UNSPIKED sample.

UNSPIKED (sample matrix spike) - quantitated concentration determined to be in the sample prior to spike fortification.

R.P.D. - replicate percent difference.

R.P.D. CRITERIA - R.P.D. not to be exceeded.

TARGET - the calculated concentration of the analyte in the spike or QC sample. The TARGET may vary from sample to sample based on sample weight, and moisture content. This concentration is the benchmark to which the FOUND concentrations are compared.

R.P.D.*1 - default reference when RPD cannot be calculated due to the spike sample I.D. used in the data batch.

JFG/pl/REPORT/WWC.LEG

N

Method Blank Sample Summary

NAME	UNITS	STOR*METH	BATCH	SAMPLE	DATE	FOUND	FOOTNOTE
LEAD(FAA)	MG/KG-DRY	1051*SFAAS	S8624	MB*NONE*1	09/10/92	2.00	
LEAD(FAA)	MG/KG-DRY			MB*NONE*3		0.0	
LEAD(FAA)	MG/KG-DRY			MB*NONE*2		0.0	
LEAD(FAA)	MG/KG-DRY			MB*NONE*4		0.0	

Continuing Calibration Verification Sample Summary

NAME	UNITS	STOR*METH	BATCH	SAMPLE	DATE	TARGET	FOUND	%RECV	RECV CRIT	FOOTNOTE
LEAD(FAA)	MG/KG-DRY	1051*SFAAS	S8624	CCV*NONE*1	09/10/92	5.00	5.43	109	75-125	
LEAD(FAA)	MG/KG-DRY			CCV*NONE*2		5.00	5.18	104	75-125	
LEAD(FAA)	MG/KG-DRY			CCV*NONE*3		5.00	5.35	107	75-125	
LEAD(FAA)	MG/KG-DRY			CCV*NONE*4		5.00	5.31	106	75-125	
LEAD(FAA)	MG/KG-DRY			CCV*NONE*5		5.00	5.31	106	75-125	
LEAD(FAA)	MG/KG-DRY			CCV*NONE*6		5.00	5.19	104	75-125	
LEAD(FAA)	MG/KG-DRY			CCV*NONE*7		5.00	4.84	96.8	75-125	
LEAD(FAA)	MG/KG-DRY			CCV*NONE*8		5.00	4.87	97.4	75-125	
LEAD(FAA)	MG/KG-DRY			CCV*NONE*9		5.00	4.95	99.0	75-125	
LEAD(FAA)	MG/KG-DRY			CCV*NONE*10		5.00	4.84	96.8	75-125	
LEAD(FAA)	MG/KG-DRY			CCV*NONE*11		5.00	4.57	91.4	75-125	

Standard Matrix Spike Recovery and Replicate Summary

NAME	UNITS	STOR*METH	BATCH	SAMPLE	DATE	TARGET	FOUND	%RECV	RECV CRIT	R.P.D.	R.P.D. CRIT.	FOOTNOTE
LEAD(FAA)	MG/KG-DRY	1051*SFAAS	S8624	SP*NONE*1	09/10/92	500	552	110	75-125		20	
LEAD(FAA)	MG/KG-DRY			SP*NONE*3		500	574	115	75-125		20	
LEAD(FAA)	MG/KG-DRY			SP*NONE*2		500	495	100.0	75-125		20	
LEAD(FAA)	MG/KG-DRY			SP*NONE*4		500	562	114	75-125		20	

Sample Matrix Spike Recovery Summary

NAME	UNITS	STOR*METH	BATCH	SAMPLE	DATE	TARGET	FOUND	%RECV	RECV CRIT	UNSPIKED	R.P.D.	R.P.D. CRIT.	FOOTNOTE
LEAD(FAA)	MG/KG-DRY	1051*SFAAS	S8624	SPM1*WWC7*40	09/10/92	528	557	106	75-125	335		20	
LEAD(FAA)	MG/KG-DRY			SPM2*WWC7*40		533	571	107	75-125	335	1.89	20	
LEAD(FAA)	MG/KG-DRY			SPM1*WWC6*655		563	1060	187	75-125	174		20	(1)
LEAD(FAA)	MG/KG-DRY			SPM2*WWC6*655		558	192	34.4	75-125	174	138	20	(1)
LEAD(FAA)	MG/KG-DRY			SPM1*WWC7*20		524	600	115	75-125	219		20	
LEAD(FAA)	MG/KG-DRY			SPM2*WWC7*20		541	597	110	75-125	219	4.44	20	
LEAD(FAA)	MG/KG-DRY			SPM1*WWC7*60		609	370	60.7	75-125	1280		20	(2)
LEAD(FAA)	MG/KG-DRY			SPM2*WWC7*60		620	410	66.1	75-125	1280	8.35	20	(2)

(1) - Sample inhomogeneity.
(2) - Sample matrix effect.

CHAIN OF CUSTODY

CHAIN OF CUSTODY RECORD

WOODWARD-CLYDE CONSULTANTS
2318 MILLPARK DR.
MARYLAND HEIGHTS, MISSOURI 63043
314-429-0100

SHEET 3 of 3

PROJECT NO.: 89MC114V

PROJECT NAME: NL/TARACORP SUPERFUND SITE PREDESIGN FIELD INVESTIGATION

SAMPLER'S: (Signatures) M Wallace / [illegible]

DATE	TIME	SAMPLE I.D. NUMBER: Matrix	Location	Boring	Depth	Sample Type	NO. OF CONTAINERS	Total Lead 4oz. poly jar Cool to 4°C	TCLP - Lead 4oz. poly jar Cool to 4°C	Geotechnical glass or poly jar	REMARKS
6 8/12/92	1440	S	BE2208	1	003	005	1	1			
7	1450	S	BE2208	1	005	006	1	1			
	1458	S	BE2208	2	004	006	1	1			
9	1500	S	BE2208	2	003	006	1	1			
0	1503	S	BE2208	2	005	002	1	1			
		S									
		S									
		S									
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RELINQUISHED BY: (Signature)	DATE / TIME	RECEIVED BY: (Signature)	DATE / TIME
RELINQUISHED BY: (Signature) [signature]	DATE / TIME 8/12/92 1845	RECEIVED AT LAB BY: (Signature) [signature]	DATE / TIME 8/12/92 16:45
METHOD OF SHIPMENT:		AIRBILL NO: (If Applicable)	

CHAIN OF CUSTODY RECORD

WOODWARD-CLYDE CONSULTANTS
2318 MILLPARK DR.
MARYLAND HEIGHTS, MISSOURI 63043
314-429-0100

SHEET 1 of 1

PROJECT NO.: 89MC114V

PROJECT NAME: NL/TARACORP SUPERFUND SITE PREDESIGN FIELD INVESTIGATION

SAMPLER'S: (Signatures) Wendy Rabolt

	DATE	TIME	SAMPLE I.D. NUMBER: Matrix	Location	Boring	Depth	Sample Type		NO. OF CONTAINERS	CONTAINER DESCRIPTION/ ANALYSES REQUESTED: Total Lead 4oz. poly jar Cool to 4°C	TCLP - Lead 4oz. poly jar Cool to 4°C	Geotechnical glass or poly jar	REMARKS
1	8/13/92	0850	S	BE2028	1	00A	00L	✓	1	1			
2		0853	S	BE2028	1	00B	00L	✓	1	1			
3		0855	S	BE2028	1	00C	00L	✓	1	1			
4		0900	S	BE2028	2	00A	00L	✓	1	1			
5		0903	S	BE2028	2	00B	00L	✓	1	1			
6		0905	S	BE2028	3	00C	00L	✓	1	1			
7		0935	S	BR2027	1	00A	00L	✓	1	1			
8		0938	S	BR2027	1	00B	00L	✓	1	1			
9		0940	S	BR2027	1	00C	00L	✓	1	1			
0		1025	S	CL2317	1	00A	00L	✓	1	1			
1		1028	S	CL2317	1	00B	00L	✓	1	1			
2		1030	S	CL2317	1	00C	00L	✓	1	1			
3		1035	S	CL2317	2	00A	00L	✓	1	1			
4		1038	S	CL2317	2	00B	00L	✓	1	1			
5		1040	S	CL2317	2	00C	00L	✓	1	1			
			S										
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			S										
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			S										

RELINQUISHED BY: (Signature)	DATE / TIME	RECEIVED BY: (Signature)	DATE / TIME
Wendy Rabolt	8/13/92 1415	[illegible] ESE	8-13-92 1425
RELINQUISHED BY: (Signature)	DATE / TIME	RECEIVED AT LAB BY: (Signature)	DATE / TIME

METHOD OF SHIPMENT:

AIRBILL NO: (If Applicable)

LEGEND

STOR*METH - storet*method code. Used as a unique identification of the analytical parameter.

BATCH - analytical data batch identification.

DATE - analysis date.

FOUND (method blank) - quantitated concentration determined to be in the method blank.

FOUND (continuing calibration verification) - quantitated concentration determined to be in the CCV sample.

FOUND (standard matrix spike) - quantitated concentration determined to be in the standard matrix spike.

FOUND (sample matrix spike) - the difference in the quantitated concentration in the sample matrix spike and the UNSPIKED sample.

UNSPIKED (sample matrix spike) - quantitated concentration determined to be in the sample prior to spike fortification.

R.P.D. - replicate percent difference.

R.P.D. CRITERIA - R.P.D. not to be exceeded.

TARGET - the calculated concentration of the analyte in the spike or QC sample. The TARGET may vary from sample to sample based on sample weight, and moisture content. This concentration is the benchmark to which the FOUND concentrations are compared.

R.P.D.*1 - default reference when RPD cannot be calculated due to the spike sample I.D. used in the data batch.

JFG/pl/REPORT/WWC.LEG

CHAIN OF CUSTODY

WWC 2

CHAIN OF CUSTODY RECORD

WOODWARD-CLYDE CONSULTANTS
2318 MILLPARK DR.
MARYLAND HEIGHTS, MISSOURI 63043
314-429-0100

SHEET 1 of

PROJECT NO.: 89MC114V

PROJECT NAME: NL/TARACORP SUPERFUND SITE PREDESIGN FIELD INVESTIGATION

SAMPLER'S: (Signatures)

	DATE	TIME	SAMPLE I.D. NUMBER (Matrix / Location / Boring / Depth / Sample Type)	NO. OF CONTAINERS	Total Lead 4oz. poly jar Cool to 4°C	TCLP - Lead 4oz. poly jar Cool to 4°C	Geotechnical glass or poly jar	REMAR
903	12/10	858	S 0R0007 1 0AB00T	1		X		
904		915	S 0R0008 1 0AB00T	1		X		
905		745	S 0R0009 1 0AB00T	1		X		
906		1025	S 0R0010 1 0AB00T	1		X		
907		124	S 0R0004 1 0AB00T	1		X		
		~~1019~~	~~S~~					
908		138	S 0R0005 1 0AB00T	1		X		
909		154	S 0R0006 1 0AB00T	1		X		
			S			Nothing Follows		
			S			Karen Meyer		
			S			12-10-91		
			S					
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			S					

RELINQUISHED BY: (Signature)	DATE / TIME	RECEIVED BY: (Signature)	DATE /
Karen Meyer	12/10 4:30	Greg Hagerty	12/10
RELINQUISHED BY: (Signature)	DATE / TIME	RECEIVED AT LAB BY: (Signature)	DATE /
Greg Hagerty	12/10 6:30	Ethan Tubary	12-10
METHOD OF SHIPMENT: WCC Empl		AIRBILL NO: (If Applicable)	

COOLER/SAMPLE RECEIPT FORM

01 10/7/91

ESE Cooler # _____
Client Cooler # ✓
No Cooler _____

Project: Woodward-Clyde Date/Time Received: 12-10-91 1830

USE OTHER SIDE OF THIS FORM TO NOTE FURTHER DETAILS CONCERNING CHECK-IN PROBLEMS AND TO SPECIFY AND DESCRIBE ANY ACTION(S) REGARDING THE RESOLUTION(S) OF PROBLEMS. IF SHIPMENT WAS ACCEPTED AND IF REQUESTED, NOTE ON BACK THE ADDRESS WHERE THE EMPTY COOLER WAS RETURNED AND LIKEWISE IF THE SHIPMENT WAS REJECTED.

IF INFORMATION IS MISSING OR THERE ARE PROBLEMS NOTIFY LABORATORY PROJECT MANAGER SO THAT HE CAN NOTIFY THE PROJE MANAGER IMMEDIATELY.

A. PRELIMINARY EXAMINATION PHASE: Date/Time cooler/sample was opened and checked: 12-11-91 900

by (print) Carol Cash (sign) Carol Cash

1. List courier delivering samples ..... Client ..... YES
2. Did cooler come with a shipping slip (air bill, etc.)? ..... YES
   If YES, attach and enter carrier and air bill number here: _____
3. Were custody seals on outside of cooler? ..... YES
   If YES, how many and where: 1 on Front 1 on Back
   If YES, enter the following: seal date: 12-10-91, seal name: Karen Meyer
4. Were custody seals unbroken and intact at the date and time of arrival? ..... YES
5. Was chain-of-custody provided? ..... YES
6. Were custody papers sealed in a Ziploc™ bag and taped inside to the lid? ..... YES
7. Were entries on custody papers completed? YES NO . If no, give details on back
8. Turnaround time included? ..... YES
9. Did you sign custody papers in the appropriate place? ..... YES
10. Was project identifiable from custody papers? If YES, enter project name at the top of this form. YES

B. SAMPLE CHECK-IN PHASE: Date samples were checked-in: 12-11-91 by (all those involved must sign be

(print) Carol Cash (sign) Carol Cash

11. Describe packing: Samples in Cooler
*12. If required, was enough ice used? (temperature maintained correctly)? ..... YES NO
13. Were all bottles sealed in separate plastic bags? ..... YES NO
*14. Did all bottles arrive unbroken and in good condition? ..... YES NO
15. Were all bottle labels complete (ID, date, time, signature, preservative, etc.)? ..... YES NO
16. Did all bottle labels agree with custody papers? If NO, indicate discrepancies on back. ..... YES NO
17. Were correct containers used for the tests indicated? ..... YES NO
*18. Were correct preservatives used when required? ..... YES NO
*19. pH of samples maintained correctly as required? If NO, list by ID# _____ YES NO
20. Was a sufficient amount of sample sent for tests indicated? ..... YES NO
*21. Bubbles present in VOA vials? If YES, list by ID#: NA YES NO
22. Was lab. project manager called and status discussed? If YES, give details on the back of this form. YES NO
23. Who was called? _____ By whom? _____ on (date) _____
24. Second Party Review: _____

* Sample rejection criteria

V:\WP\CHEMCOM\CRF.01

METALS/WET CHEMISTRY DATA ASSESSMENT

PROJECT NO. 89MC114V
LABORATORY ESE
LAB PROJECT NO. 5912031 0100
NO. OF SAMPLES/
MATRIX 1/RINSATE

SITE NL/TARACORP SUPERFUND SITE

REVIEWER [illegible]
REVIEWER'S NAME [illegible]
COMPLETION DATE 7/21/92

DATA ASSESSMENT SUMMARY

	ICP	AA	Hg	CN	OTHER
1. HOLDING TIMES	✓				
2. BLANKS	(1)				
3. CCV	✓				
4. STANDARD MATRIX SPIKE	✓				
5. MATRIX SPIKE	✓				
6. OTHER QC	NA				
7. OVERALL ASSESSMENT	O/M				

O = Data had no problems/or qualified due to minor problems.
M = Data qualified due to major problems.
Z = Data unacceptable.
X = Problems, but do not affect data.

ACTION ITEMS: (1) THE METHOD BLANK FOR BARIUM, CADMIUM, CHROMIUM, LEAD, AND SILVER MULTIPLIED BY 5 IS GREATER THAN THE SAMPLE CONCENTRATION OF THESE CONTAMINANTS; DATA QUALIFIED AS NON-DETECT (U).

COMMENTS:

Environmental Science & Engineering, Inc.

St. Louis Chemistry Laboratory

11665 Lilburn Park Road
St. Louis, Missouri 63146-3535

Phone (314) 567-4600
Fax (314) 567-5030

Analytical Chemistry Results

STATUS: FINAL

PROJECT NAME: WOODWARD CLYDE/NL-TARA CORP./RINSATES

PROJECT NUMBER: 5912031 0100

REPORT DATE: 01-09-92

SAMPLE MATRIX: RINSATE

LAB MANAGER/QC REVIEW: JEFFERY W. SIRIA

PROJECT MANAGER: JOHN F. GEMOULES

REPORT APPROVED BY: FRANCIS Y. HUANG

SAMPLE I.D.	DEIONIZED1	DATE EXTRACTED	DATE ANALYZED	ANALYST INITIALS
LAB I.D.	WWC-R-1			
COLLECTION DATE	11/04/91			
RECEIVED DATE	11/05/91			

PARAMETER	METHOD	UNITS				
RCRA TOXIC METALS						
ARSENIC	200.7/206.2	MG/L	<0.0009	11-11-91	01-02-92	CAG
BARIUM	200.7	MG/L	0.009 u	12-04-91	12-03-91	JWC
CADMIUM	200.7	MG/L	<0.002 u	12-04-91	12-03-91	JWC
CHROMIUM	200.7	MG/L	0.004 u	12-04-91	12-03-91	JWC
LEAD	200.7/239.2	MG/L	<0.003 u	11-11-91	01-06-92	PW
MERCURY	245.1	MG/L	<0.0002	12-04-91	12-05-91	CAG
SELENIUM	200.7/270.2	MG/L	<0.002	11-11-91	01-03-92	CAG
SILVER	200.7	MG/L	0.003 u	12-04-91	12-03-91	JWC

REPORT
OF
ANALYTICAL RESULTS

Project No.:
5912031 0100

Prepared For:
Woodward-Clyde Consultants
Maryland Heights, MO 63043

Submitted By:
St. Louis Chemistry Laboratory
Environmental Science &
Engineering, Inc.

January 14, 1992

Environmental
Science &
Engineering, Inc.

A CILCORP Company

Environmental
Science &
Engineering, Inc.

January 13, 1992
ESE No. 5912031 0100

Ms. Cynthia Pavelka
Woodward-Clyde Consultants
2318 Millpark Dr.
Maryland Heights, MO 63043

RE: Report of Analytical Chemistry Results,
NL/Taracorp Project
Rinsate Sample

Dear Ms. Pavelka:

Enclosed is the complete report of results for one (1) rinsate sample received in the ESE St. Louis Laboratory on November 5, 1991. The partial preliminary results have been reported to you on December 6, 1991. The sample was analyzed in accordance with the approved EPA methods as indicated in the report.

The QC results are composed of two parts, precision and accuracy. The % recovery is used to assess the accuracy of the analytical method. The % recovery limits for each of the control compounds are tabulated in the following report along with the actual % recovery for the spiked sample. The difference of the recoveries of the duplicate samples are calculated as replicate % difference which is used to measure the precision of the analytical method. Both % recovery limits and replicate % difference limits used in this analysis are set forth by the United States Environmental Protection Agency as the criteria of laboratory quality control for this type of analysis.

The holding time for the analysis of mercury (28 days from time of collection to analysis) has been missed by two days. After careful review of the data, we feel the integrity of the analysis has not been affected.

The QC results have been reviewed by the analysts and the Laboratory Manager. Explanations for QC results that did not fall within the QC criteria are provided in the summary.

We appreciate the opportunity to be of technical service to you. If there are any questions with regard to this report, please feel free to call.

Sincerely,

ENVIRONMENTAL SCIENCE & ENGINEERING, INC.

John F. Gemoules

John F. Gemoules
Laboratory Project Manager

JFG/pl/REPORT/WWC-R.RP1

Enclosures

11665 Lilburn Park Road St. Louis, MO 63146-3535 Phone (314) 567-4600 Fax (314) 567-5030

WWC-X

CHAIN OF CUSTODY RECORD

SHEET 1/4 of 1/4
KMM

WOODWARD-CLYDE CONSULTANTS
2318 MILLPARK DR.
MARYLAND HEIGHTS, MISSOURI 63043
314-429-0100

PROJECT NO: 89MC114V

PROJECT NAME: NL/Taracorp Superfund Site

SAMPLER'S: (Signature)

DATE	TIME	SAMPLE I.D. NUMBER	NO. OF CONTAINERS	Total Lead Filter Cartridge					REMARKS
11/22	1545	PASP #11 (Personal Air Sample Pump)	1	X					Need 24 hr. turnaround (11/25/91)
11/22	1545	PASP #12 (Personal Air Sample Pump)	1	X					Need 24 hr. turnaround (11/25/91)

CONTAINER DESCRIPTION / ANALYSES REQUESTED

RELINQUISHED BY: (Signature)	DATE / TIME	RECEIVED BY: (Signature)	DATE / TIME
Karen Mayer	11/22 4:12	[illegible]	11/22 1615
RELINQUISHED BY: (Signature)	DATE / TIME	RECEIVED AT LAB BY: (Signature)	DATE / TIME
[illegible]	11/22 500	[illegible]	11/22 5 PM
METHOD OF SHIPMENT:		AIRBILL NO:	

REPORT
OF
ANALYTICAL RESULTS

Project No.:
5912031 0100

Prepared For:
Woodward-Clyde Consultants
Maryland Heights, MO 63043

Submitted By:
St. Louis Chemistry Laboratory
Environmental Science &
Engineering, Inc.

September 21, 1992

Environmental
Science &
Engineering, Inc.

A CILCORP Company

Environmental
Science &
Engineering, Inc.

A CALCORP Company

September 21, 1992
ESE No. 5912031 0100

Ms. Cynthia Pavelka
Woodward-Clyde Consultants
2318 Millpark Dr.
Maryland Heights, MO 63043

RE: Report of Analytical Chemistry Results,
Woodward-Clyde Consultants - Report 9
NL/Taracorp Project

Dear Ms. Pavelka:

Enclosed is the complete report of results for sixty-five (65) soil samples received in the ESE St. Louis Laboratory between August 12, and August 13, 1992. The samples were analyzed in accordance with the approved EPA methods as indicated in the report.

The QC results are composed of two parts, precision and accuracy. The % recovery is used to assess the accuracy of the analytical method. The % recovery limits for each of the control compounds are tabulated in the following report along with the actual % recovery for the spiked sample. The difference of the recoveries of the duplicate samples are calculated as replicate % difference which is used to measure the precision of the analytical method. Both % recovery limits and replicate % difference limits used in this analysis are set forth by the United States Environmental Protection Agency as the criteria of laboratory quality control for this type of analysis.

The QC results have been reviewed by the analysts and the Laboratory Manager. Explanations for QC results that did not fall within the QC criteria are provided in the summary.

We appreciate the opportunity to be of technical service to you. If there are any questions with regard to this report, please feel free to call.

Sincerely,

ENVIRONMENTAL SCIENCE & ENGINEERING, INC.

John F. Gemoules

John F. Gemoules
Laboratory Project Manager

JFG/pl/REPORT/WWC7.RP1

Enclosures

11665 Lilburn Park Road St. Louis, MO 63146-3535 Phone (314) 567-4600 Fax (314) 567-5030

METALS/WET CHEMISTRY DATA ASSESSMENT

PROJECT NO. 89MC114V
LABORATORY ESE
LAB PROJECT NO. 5912031 0100
NO. OF SAMPLES/
MATRIX 7/SOIL

SITE NL/TARACORP SUPERFUND SITE

REVIEWER WENDY REINBOLT
REVIEWER'S NAME Wendy Reinbolt
COMPLETION DATE 9/22/92

DATA ASSESSMENT SUMMARY

	ICP	AA	Hg	CN	OTHER
1. HOLDING TIMES		✓			
2. BLANKS		(1)			
3. CCV		✓			
4. STANDARD MATRIX SPIKE		✓			
5. MATRIX SPIKE		(2)			
6. OTHER QC		NA			
7. OVERALL ASSESSMENT		O			

O = Data had no problems/or qualified due to minor problems.
M = Data qualified due to major problems.
Z = Data unacceptable.
X = Problems, but do not affect data.

ACTION ITEMS: (1) METHOD BLANK SHOWED LEAD. ALL DATA RESULTS WERE GREATER THAN 5 TIMES METHOD BLANK CONCENTRATION, THEREFORE ALL DATA IS QUALIFIED AS ESTIMATED (J).
(2) WWC6*1055, WWC7*60 % RECOVERY EXCEEDS CONTROL LIMITS. LAB ATTRIBUTES TO SAMPLE INHOMOGENEITY & MATRIX EFFECT. QUALIFY DATA AS ESTIMATED (J.)

COMMENTS:

MOISTURE