

AP - 001

**ANNUAL
MONITORING REPORT**

YEAR(S):

MARCh 2, 1995

March 2, 1995

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REX100.LTR

Mr. Bill Olson
Hydrogeologist
Environmental Bureau
Oil Conservation Division
Energy, Minerals and Natural Resources Department
2040 South Pacheco
Santa Fe, New Mexico 87505

RE: MODIFICATIONS TO THE QUARTERLY GROUNDWATER MONITORING
PROGRAM FOR THE BRICKLAND REFINERY SITE

Dear Mr. Olson:

As discussed in our meeting on February 6, 1995, Rexene Corporation is proposing that the following modifications be made to the quarterly groundwater monitoring program for the Brickland Refinery site based on the data obtained during the previous year and the additional requirements contained in your letter of January 30, 1995.

WQCC Metals: Reduce sampling frequency to annually. The 3 to 4 quarters of data obtained to date do not indicate that the facility has had an impact on the shallow groundwater underlying the site. The metals that have been detected appear to be naturally occurring or within sampling and analytical variation.

PAH'S and Phenols: Reduce sampling frequency to annually with the exception of the following wells which will be sampled quarterly:

MW-3S	MW-3D	MW-5	MW-6S
MW-6D	MW-8	MW-9S	MW-11
MW-14	MW-15	MW-17	

This list includes the wells that have had consistent "hits" of PAH's and phenols and the 5 downgradient off-site wells. As agreed in the February 6, 1995 meeting, the well points indicated in your letter will be sampled for PAH's and phenols during the first quarterly sampling to provide a comparison in time with the other monitoring wells. Well points that contain free phase hydrocarbon or that are dry will be excluded along with the well points indicated in your letter.

BTEX Compounds: Reduce sampling frequency to annually with the exception of the following wells which will be sampled quarterly:

MW-3S	MW-3D	MW-4	MW-5
MW-6S	MW-6D	MW-9S	MW-7
MW-8	MW-11	MW-14	MW-16
MW-17			

Mr. Bill Olson
March 3, 1995
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These wells have exhibited consistent levels of BTEX compounds or are located in critical downgradient off-site areas. The well points that will be sampled for PAH's and phenols as indicated above will also be sampled for BTEX compounds for the next 2 quarters as requested.

Cations/Anions: Eliminate sampling and analysis for cations/anions.

The next quarterly sampling event is tentatively scheduled for the week of March 20-24, 1995. If you would like to collect split samples during the sampling trip I will contact you the week before to let you know the exact days that our personnel will be on site. If not I will let you know when the sampling will be conducted in the following quarter (June 1995).

The data reduction for the December 1994 sampling event has been completed and I am enclosing copies of the general analytical summary sheets, the individual well summaries, and copies of the raw analytical data. I will also forward a copy of the analytical results to Ms. Kerrie Neet at NMED under cover of a separate letter as per prior agreements.

If you have any comments regarding the proposed modifications to the sampling program at the Brickland Refinery site or the December 1994 analytical results please feel free to contact me at (505) 842-0001.

Very truly yours,
Geoscience Consultants, Ltd. (GCL)



Trent H. Thomas
Program Manager

54159/REX100.LTR

Enclosure

cc: Todd Carver-Rexene Corporation
Rob Sutphen-Rexene Corporation
Reggie Baker-Rexene Corporation
Roger Martin-Rexene Corporation
Ned Kendrick-Montgomery & Andrews

BRICKLAND REFINERY SITE
QUARTERLY GROUNDWATER MONITORING SUMMARY
4TH. QUARTER (DEC. 1994)

(All results in mg/l)

* Not detected in duplicate sample

PARAMETER	MW-1	MW-2	MW-3S	MW-3D	MW-4	MW-5	MW-6S	MW-6D	MW-7	MW-8	MW-9S	MW-11	MW-12
<u>Metals</u>													
Aluminum	0.10		0.13	0.09	0.12	0.06	0.08	0.07	0.10	0.19	0.06	0.09	0.08
Arsenic						0.13	0.08			0.14		0.05	
Barium	0.12		0.08	0.04	0.17	0.22	0.73	0.03	0.41	0.68	0.04	0.84	0.03
Cadmium				0.006									
Chromium													
Cobalt													
Copper	0.02	0.01	0.01	0.01				0.01		0.02			0.02
Iron	0.03	0.18	0.12	0.08	1.99	0.09	1.88	0.11	0.45	2.06	2.25	1.58	1.10
Lead													
Manganese	0.21	1.95	0.06	1.27	2.43	0.03	0.46	2.19	0.64	0.18	2.30	0.51	6.18
Mercury									0.0006				
Molybdenum													
Nickel													
Selenium													
Silver													
Zinc							0.01			0.01			
<u>Cations/Anions</u>													
Calcium	86.9	950	97.7	367	298	503	150	379	229	60.0	255	93.4	975
Magnesium	25.8	391	39.8	207	219	184	82.3	177	77.4	36.4	88.9	60.8	366
Potassium	5.7	37	8.5	17	27	21	14	16	15	13.1	11	12	27
Sodium	137	3130	985	3210	2360	3070	1840	3410	1100	1870	1520	985	4060
Bicarbonate	464	688	854	464	1020	1830	2710	525	1500	2940	866	1980	586
Chloride	116	3240	1250	4800	4680	2430	2180	5210	1570	831	1440	924	14,000
Nitrate (N)	0.3	0.3	0.3	0.7		1.1		1.0	5.1	5.5	0.4	0.2	3.1
Sulfate	139	2470	573	2270	3060	705	209	2490	333	72	978	35	2490

(All results in mg/l)

* Not detected in duplicate sample

[illegible]

BRICKLAND REFINERY SITE
QUARTERLY GROUNDWATER MONITORING SUMMARY
4TH QUARTER (DEC. 1994)

(All results in ug/l)

PARAMETER	MW-1	MW-2	MW-3S	MW-3D	MW-4	MW-5	MW-6S	MW-6D	MW-7	MW-8	MW-9S	MW-11	MW-12
<u>PAH'S</u>													
Acenaphthene	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Acenaphthylene	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Anthracene	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Benzo(a)anthracene	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Benzo(b)fluoranthene	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Benzo(k)fluoranthene	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Benzo(g,h,i)perylene	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Benzo(a)pyrene	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Chrysene	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Dibenzo(a,h)anthracene	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Fluoranthene	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Fluorene	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Indeno(1,2,3-cd)pyrene	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	69	ND
1-Methylnaphthalene	ND	ND	ND	ND	ND	71	ND	ND	ND	42	ND	ND	ND
2-Methylnaphthalene	ND	ND	ND	ND	ND	22	ND	ND	ND	54	ND	ND	ND
Naphthalene	ND	ND	ND	ND	ND	46	ND	ND	ND	140	ND	ND	ND
Phenanthrene	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	21	ND
Pyrene	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	58	ND

2NDPAH.WQ2

(All results in ug/l)

2NDPAH2.WQ2

BRICKLAND REFINERY SITE
QUARTERLY GROUNDWATER MONITORING SUMMARY
4TH. QUARTER (DEC. 1994)

(All results in ug/l)

PARAMETER	MW-1	MW-2	MW-3S	MW-3D	MW-4	MW-5	MW-6S	MW-6D	MW-7	MW-8	MW-9S	MW-11	MW-12
<u>Phenols</u>													
2,4,6-Trichlorophenol	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
2,4-Dichlorophenol	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
2,4-Dimethylphenol	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
2,4-Dinitrophenol	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
2-Chlorophenol	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
2-Nitrophenol	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
4,6-Dinitro-2-methylphenol	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
4-Chloro-3-methylphenol	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
4-Nitrophenol	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Pentachlorophenol	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Phenol	ND	ND	ND	ND	18	ND	ND	ND	ND	ND	ND	ND	ND
<u>BTEX/TPH</u>													
Benzene	ND	ND	ND	ND	220	4600	59	ND	36	5300	ND	15	ND
Toluene	ND	ND	ND	ND	ND	84	ND	ND	ND	ND	ND	ND	ND
Ethyl benzene	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Xylenes	ND	ND	ND	ND	ND	140	ND	ND	ND	140	ND	2.5	ND

2NDPHEN1.WQ2

(All results in ug/l)

2NDPHEN2.WQ2

MW-1
Brickland Refinery Site
Quarterly Analytical Results
 (All results in mg/l)

Parameter	WQCC Std.	12/08/93	03/23/94	06/27/94	09/27/94	12/13/94		
Aluminum	5.0	NA	NA	1.20	0.11	0.10		
Arsenic	0.1	0.07	ND	ND	ND	ND		
Barium	1.0	0.14	0.11	0.18	0.13	0.12		
Cadmium	0.01	ND	ND	ND	ND	ND		
Chromium	0.05	ND	ND	ND	ND	ND		
Cobalt	0.05	ND	ND	ND	ND	ND		
Copper	1.0	ND	ND	0.01	ND	0.02		
Iron	1.0	NA	NA	1.96	0.08	0.03		
Lead	0.05	ND	ND	ND	ND	ND		
Manganese	0.2	NA	NA	1.42	1.12	0.21		
Mercury	0.002	ND	ND	ND	ND	ND		
Molybdenum	1.0	ND	ND	ND	ND	ND		
Nickel	0.2	ND	ND	ND	ND	ND		
Selenium	0.05	ND	ND	ND	0.1	ND		
Silver	0.05	ND	ND	ND	ND	ND		
Zinc	10.0	ND	ND	0.01	ND	ND		

Detection Limits (mg/l):

Aluminum	0.05	Copper	0.01	Molybdenum	0.05
Arsenic	0.05	Iron	0.03	Nickel	0.04
Barium	0.01	Lead	0.05	Selenium	0.1
Cadmium	0.005	Mercury	0.0002	Silver	0.01
Chromium	0.01	Manganese	0.01	Zinc	0.01
Cobalt	0.03				

NS = Not sampled
 ND = Not detected
 NA = Not analyzed

3031/METALS/MW-1.WQ2

MW-2
Brickland Refinery Site
Quarterly Analytical Results
 (All results in mg/l)

Parameter	WQCC Std.	12/08/93	03/23/94	06/28/94	09/27/94	12/13/94		
Aluminum	5.0	NS	NA	ND	0.12	ND		
Arsenic	0.1	NS	ND	ND	0.05	ND		
Barium	1.0	NS	0.01	ND	0.03	ND		
Cadmium	0.01	NS	ND	ND	ND	ND		
Chromium	0.05	NS	0.01	ND	ND	ND		
Cobalt	0.05	NS	ND	ND	ND	ND		
Copper	1.0	NS	ND	ND	ND	0.01		
Iron	1.0	NS	NA	1.83	0.05	0.18		
Lead	0.05	NS	ND	ND	ND	ND		
Manganese	0.2	NS	NA	7.47	8.07	1.95		
Mercury	0.002	NS	ND	ND	ND	ND		
Molybdenum	1.0	NS	ND	ND	ND	ND		
Nickel	0.2	NS	ND	ND	ND	ND		
Selenium	0.05	NS	ND	ND	ND	ND		
Silver	0.05	NS	ND	ND	ND	ND		
Zinc	10.0	NS	ND	ND	0.03	ND		

Detection Limits (mg/l):

Aluminum	0.05	Copper	0.01	Molybdenum	0.05
Arsenic	0.05	Iron	0.03	Nickel	0.04
Barium	0.4	Lead	0.05	Selenium	0.1
Cadmium	0.005	Mercury	0.0002	Silver	0.01
Chromium	0.01	Manganese	0.01	Zinc	0.01
Cobalt	0.03				

NS = Not sampled
 ND = Not detected
 NA = Not analyzed

3031/METALS/MW-2 WQ2

MW-3S
Brickland Refinery Site
Quarterly Analytical Results
(All results in mg/l)

Parameter	WQCC Std.	12/08/93	03/25/94	06/27/94	09/28/94	12/13/94		
Aluminum	5.0	NA	NA	2.32	0.19	0.13		
Arsenic	0.1	ND	ND	ND	0.08	ND		
Barium	1.0	0.08	0.08	0.13	0.08	0.08		
Cadmium	0.01	ND	ND	ND	ND	ND		
Chromium	0.05	ND	ND	ND	ND	ND		
Cobalt	0.05	ND	ND	ND	ND	ND		
Copper	1.0	ND	ND	0.01	ND	0.01		
Iron	1.0	NA	NA	3.91	0.16	0.12		
Lead	0.05	ND	ND	ND	ND	ND		
Manganese	0.2	NA	NA	1.12	0.51	0.06		
Mercury	0.002	ND	ND	ND	ND	ND		
Molybdenum	1.0	ND	ND	ND	ND	ND		
Nickel	0.2	ND	ND	ND	ND	ND		
Selenium	0.05	0.1	ND	ND	ND	ND		
Silver	0.05	ND	ND	ND	ND	ND		
Zinc	10.0	ND	ND	0.09	ND	ND		

Detection Limits (mg/l):

Aluminum	0.05	Copper	0.01	Molybdenum	0.05
Arsenic	0.05	Iron	0.03	Nickel	0.04
Barium	0.01	Lead	0.05	Selenium	0.1
Cadmium	0.005	Mercury	0.0002	Silver	0.01
Chromium	0.01	Manganese	0.01	Zinc	0.01
Cobalt	0.03				

NS = Not sampled
ND = Not detected
NA = Not analyzed

3031/METALS/MW-3S.WQ2

MW-3D
Brickland Refinery Site
Quarterly Analytical Results
(All results in mg/l)

Parameter	WQCC Std.	12/08/93	03/23/94	06/27/94	09/28/94	12/13/94		
Aluminum	5.0	NA	NA	0.23	0.1	0.09		
Arsenic	0.1	ND	ND	ND	ND	ND		
Barium	1.0	0.04	0.04	0.04	0.06	0.04		
Cadmium	0.01	ND	ND	ND	ND	0.006		
Chromium	0.05	ND	ND	ND	ND	ND		
Cobalt	0.05	ND	ND	ND	ND	ND		
Copper	1.0	0.02	ND	ND	ND	0.01		
Iron	1.0	NA	NA	2.41	0.1	0.08		
Lead	0.05	ND	ND	ND	ND	ND		
Manganese	0.2	NA	NA	3.25	2.75	1.27		
Mercury	0.002	ND	ND	ND	ND	ND		
Molybdenum	1.0	ND	ND	ND	ND	ND		
Nickel	0.2	0.04	ND	ND	ND	ND		
Selenium	0.05	0.1	ND	ND	ND	ND		
Silver	0.05	ND	ND	ND	0.01	ND		
Zinc	10.0	0.01	ND	ND	0.02	ND		

Detection Limits (mg/l):

Aluminum	0.05	Copper	0.01	Molybdenum	0.05
Arsenic	0.05	Iron	0.03	Nickel	0.04
Barium	0.01	Lead	0.05	Selenium	0.1
Cadmium	0.005	Mercury	0.0002	Silver	0.01
Chromium	0.01	Manganese	0.01	Zinc	0.01
Cobalt	0.03				

NS = Not sampled
ND = Not detected
NA = Not analyzed

3031/METALS/MW-3D.WQ2

MW-4
Brickland Refinery Site
Quarterly Analytical Results
(All results in mg/l)

Parameter	WQCC Std.	12/08/93	03/23/94	06/27/94	09/27/94	12/13/94		
Aluminum	5.0	NS	NA,NA	ND	0.11	0.12		
Arsenic	0.1	NS	0.07,ND	ND	0.11	ND		
Barium	1.0	NS	0.05,0.05	0.20	0.39	0.17		
Cadmium	0.01	NS	ND,ND	ND	ND	ND		
Chromium	0.05	NS	0.01,ND	ND	ND	ND		
Cobalt	0.05	NS	ND,ND	ND	ND	ND		
Copper	1.0	NS	ND,ND	ND	ND	ND		
Iron	1.0	NS	NA,NA	1.78	0.86	1.99		
Lead	0.05	NS	ND,ND	ND	ND	ND		
Manganese	0.2	NS	NA,NA	3.21	3.21	2.43		
Mercury	0.002	NS	ND,ND	ND	ND	ND		
Molybdenum	1.0	NS	ND,ND	ND	ND	ND		
Nickel	0.2	NS	ND,ND	ND	ND	ND		
Selenium	0.05	NS	ND,ND	ND	ND	ND		
Silver	0.05	NS	ND,ND	ND	ND	ND		
Zinc	10.0	NS	ND,ND	ND	0.01	ND		

Detection Limits (mg/l):

Aluminum	0.05	Copper	0.01	Molybdenum	0.05
Arsenic	0.05	Iron	0.03	Nickel	0.04
Barium	0.01	Lead	0.05	Selenium	0.1
Cadmium	0.005	Mercury	0.0002	Silver	0.01
Chromium	0.01	Manganese	0.01	Zinc	0.01
Cobalt	0.03				

NS = Not sampled
ND = Not detected
NA = Not analyzed

3031/METALS/MW-4.WQ2

MW-5
Brickland Refinery Site
Quarterly Analytical Results
(All results in mg/l)

Parameter	WQCC Std.	12/08/93	03/24/94	06/27/94	09/27/94	12/13/94		
Aluminum	5.0	NS	NA	ND	0.12	0.06		
Arsenic	0.1	NS	ND	ND	0.08	0.13		
Barium	1.0	NS	0.31	0.25	0.18	0.22		
Cadmium	0.01	NS	ND	ND	ND	ND		
Chromium	0.05	NS	ND	ND	ND	ND		
Cobalt	0.05	NS	ND	ND	ND	ND		
Copper	1.0	NS	ND	ND	ND	ND		
Iron	1.0	NS	NA	0.06	0.17	0.09		
Lead	0.05	NS	ND	ND	ND	ND		
Manganese	0.2	NS	NA	0.01	0.03	0.03		
Mercury	0.002	NS	ND	ND	ND	ND		
Molybdenum	1.0	NS	ND	ND	ND	ND		
Nickel	0.2	NS	ND	ND	ND	ND		
Selenium	0.05	NS	0.1	ND	ND	ND		
Silver	0.05	NS	ND	ND	ND	ND		
Zinc	10.0	NS	ND	ND	0.02	ND		

Detection Limits (mg/l):

Aluminum	0.05	Copper	0.01	Molybdenum	0.05
Arsenic	0.05	Iron	0.03	Nickel	0.04
Barium	0.01	Lead	0.05	Selenium	0.1
Cadmium	0.005	Mercury	0.0002	Silver	0.01
Chromium	0.01	Manganese	0.01	Zinc	0.01
Cobalt	0.03				

NS = Not sampled
ND = Not detected
NA = Not analyzed

3031/METALS/MW-5.WQ2

MW-6S
Brickland Refinery Site
Quarterly Analytical Results
(All results in mg/l)

Parameter	WQCC Std.	12/08/93	03/25/94	06/27/94	09/28/94	12/13/94		
Aluminum	5.0	NA	NA	0.08	0.1	0.08		
Arsenic	0.1	ND	0.27	0.08	0.48	0.08		
Barium	1.0	0.04	1.07	1.16	0.98	0.73		
Cadmium	0.01	ND	ND	ND	ND	ND		
Chromium	0.05	ND	ND	ND	ND	ND		
Cobalt	0.05	ND	ND	ND	ND	ND		
Copper	1.0	0.02	ND	ND	ND	ND		
Iron	1.0	NA	NA	4.78	4.68	1.88		
Lead	0.05	ND	ND	ND	ND	ND		
Manganese	0.2	NA	NA	1.08	0.59	0.46		
Mercury	0.002	ND	ND	ND	0.0003	ND		
Molybdenum	1.0	ND	ND	ND	ND	ND		
Nickel	0.2	0.04	ND	ND	ND	ND		
Selenium	0.05	0.1	ND	ND	ND	ND		
Silver	0.05	ND	ND	ND	0.01	ND		
Zinc	10.0	0.01	ND	ND	0.02	0.01		

Detection Limits (mg/l):

Aluminum	0.05	Copper	0.01	Molybdenum	0.05
Arsenic	0.05	Iron	0.03	Nickel	0.04
Barium	0.01	Lead	0.05	Selenium	0.1
Cadmium	0.005	Mercury	0.0002	Silver	0.01
Chromium	0.01	Manganese	0.01	Zinc	0.01
Cobalt	0.03				

NS = Not sampled
ND = Not detected
NA = Not analyzed

3031/METALS/MW-6S.WQ2

MW-6D

Brickland Refinery Site

Quarterly Analytical Results

(All results in mg/l)

Parameter	WQCC Std.	12/08/93	03/23/94	06/27/94	09/28/94	12/13/94		
Aluminum	5.0	NA	NA	0.06	0.09	0.07		
Arsenic	0.1	ND	ND	ND	ND	ND		
Barium	1.0	0.05	0.02	0.03	0.05	0.03		
Cadmium	0.01	0.029	ND	ND	ND	ND		
Chromium	0.05	ND	ND	ND	ND	ND		
Cobalt	0.05	ND	ND	ND	ND	ND		
Copper	1.0	0.02	ND	ND	ND	0.01		
Iron	1.0	NA	NA	1.30	0.28	0.11		
Lead	0.05	ND	ND	ND	ND	ND		
Manganese	0.2	NA	NA	4.20	3.1	2.19		
Mercury	0.002	ND	ND	ND	ND	ND		
Molybdenum	1.0	ND	ND	ND	ND	ND		
Nickel	0.2	0.04	0.04	ND	ND	ND		
Selenium	0.05	ND	ND	ND	ND	ND		
Silver	0.05	ND	ND	ND	ND	ND		
Zinc	10.0	0.02	ND	ND	0.02	ND		

Detection Limits (mg/l):

Aluminum	0.05	Copper	0.01	Molybdenum	0.05
Arsenic	0.05	Iron	0.03	Nickel	0.04
Barium	0.01	Lead	0.05	Selenium	0.1
Cadmium	0.005	Mercury	0.0002	Silver	0.01
Chromium	0.01	Manganese	0.01	Zinc	0.01
Cobalt	0.03				

NS = Not sampled

ND = Not detected

NA = Not analyzed

3031/METALS/MW-6S.WQ2

MW-7
Brickland Refinery Site
Quarterly Analytical Results
 (All results in mg/l)

Parameter	WQCC Std.	12/08/93	03/24/94	06/27/94	09/27/94	12/13/94		
Aluminum	5.0	NS	NA	0.07	0.11	0.10		
Arsenic	0.1	NS	0.08	ND	0.28	ND		
Barium	1.0	NS	0.22	0.35	0.36	0.41		
Cadmium	0.01	NS	ND	ND	ND	ND		
Chromium	0.05	NS	ND	ND	ND	ND		
Cobalt	0.05	NS	ND	ND	ND	ND		
Copper	1.0	NS	ND	ND	ND	ND		
Iron	1.0	NS	NA	1.92	0.97	0.45		
Lead	0.05	NS	ND	ND	ND	ND		
Manganese	0.2	NS	NA	0.80	0.87	0.64		
Mercury	0.002	NS	ND	ND	0.0005	0.0006		
Molybdenum	1.0	NS	ND	ND	ND	ND		
Nickel	0.2	NS	ND	ND	ND	ND		
Selenium	0.05	NS	ND	ND	ND	ND		
Silver	0.05	NS	ND	0.01	ND	ND		
Zinc	10.0	NS	0.01	ND	ND	ND		

Detection Limits (mg/l):

Aluminum	0.05	Copper	0.01	Molybdenum	0.05
Arsenic	0.05	Iron	0.03	Nickel	0.04
Barium	0.01	Lead	0.05	Selenium	0.1
Cadmium	0.005	Mercury	0.0002	Silver	0.01
Chromium	0.01	Manganese	0.01	Zinc	0.01
Cobalt	0.03				

NS = Not sampled
 ND = Not detected
 NA = Not analyzed

3031/METALS/MW-7.WQ2

MW-8
Brickland Refinery Site
Quarterly Analytical Results
 (All results in mg/l)

Parameter	WQCC Std.	12/08/93	03/24/94	06/27/94	09/27/94	12/13/94		
Aluminum	5.0	NS	NA	0.12	0.21	0.19		
Arsenic	0.1	NS	0.22	0.08	0.18	0.14		
Barium	1.0	NS	0.52	0.70	0.74	0.68		
Cadmium	0.01	NS	ND	ND	ND	ND		
Chromium	0.05	NS	ND	ND	ND	ND		
Cobalt	0.05	NS	ND	ND	ND	ND		
Copper	1.0	NS	ND	0.01	0.01	0.02		
Iron	1.0	NS	NA	5.79	5.10	2.06		
Lead	0.05	NS	ND	ND	ND	ND		
Manganese	0.2	NS	NA	0.23	0.18	0.18		
Mercury	0.002	NS	ND	ND	ND	ND		
Molybdenum	1.0	NS	ND	ND	ND	ND		
Nickel	0.2	NS	ND	ND	ND	ND		
Selenium	0.05	NS	0.2	ND	ND	ND		
Silver	0.05	NS	ND	ND	0.01	ND		
Zinc	10.0	NS	0.01	0.02	0.03	0.01		

Detection Limits (mg/l):

Aluminum	0.05	Copper	0.01	Molybdenum	0.05
Arsenic	0.05	Iron	0.03	Nickel	0.04
Barium	0.01	Lead	0.05	Selenium	0.1
Cadmium	0.005	Mercury	0.0002	Silver	0.01
Chromium	0.01	Manganese	0.01	Zinc	0.01
Cobalt	0.03				

NS = Not sampled
 ND = Not detected
 NA = Not analyzed

3031/METALS/MW-8.WQ2

MW-9S
Brickland Refinery Site
Quarterly Analytical Results
 (All results in mg/l)

Parameter	WQCC Std.	12/08/93	03/25/94	06/27/94	09/27/94	12/13/94		
Aluminum	5.0	NA	NA	ND	0.12	0.06		
Arsenic	0.1	ND	ND	ND	ND	ND		
Barium	1.0	0.07	0.04	0.04	0.06	0.04		
Cadmium	0.01	0.014	ND	ND	0.006	ND		
Chromium	0.05	ND	ND	ND	ND	ND		
Cobalt	0.05	ND	ND	ND	ND	ND		
Copper	1.0	ND	ND	ND	ND	ND		
Iron	1.0	NA	NA	4.80	4.66	2.25		
Lead	0.05	ND	ND	ND	ND	ND		
Manganese	0.2	NA	NA	3.20	3.11	2.30		
Mercury	0.002	ND	0.0002	ND	ND	ND		
Molybdenum	1.0	ND	ND	ND	ND	ND		
Nickel	0.2	ND	ND	ND	ND	ND		
Selenium	0.05	ND	ND	ND	ND	ND		
Silver	0.05	ND	ND	ND	0.01	ND		
Zinc	10.0	0.01	ND	ND	0.01	ND		

Detection Limits (mg/l):

Aluminum	0.05	Copper	0.01	Molybdenum	0.05
Arsenic	0.05	Iron	0.03	Nickel	0.04
Barium	0.01	Lead	0.05	Selenium	0.1
Cadmium	0.005	Mercury	0.0002	Silver	0.01
Chromium	0.01	Manganese	0.01	Zinc	0.01
Cobalt	0.03				

NS = Not sampled
 ND = Not detected
 NA = Not analyzed

3031/METALS/MW-9S.WQ2

MW-11
Brickland Refinery Site
Quarterly Analytical Results
(All results in mg/l)

Parameter	WQCC Std.	12/08/93	03/25/94	06/27/94	09/27/94	12/13/94	
Aluminum	5.0	NS	NA	0.10	0.12	0.09	
Arsenic	0.1	NS	0.1	0.07	0.15	0.05	
Barium	1.0	NS	1.0	1.10	1.03	0.84	
Cadmium	0.01	NS	ND	0.009	0.009	ND	
Chromium	0.05	NS	ND	ND	ND	ND	
Cobalt	0.05	NS	ND	ND	ND	ND	
Copper	1.0	NS	ND	0.01	ND	ND	
Iron	1.0	NS	NA	4.68	4.27	1.58	
Lead	0.05	NS	ND	ND	ND	ND	
Manganese	0.2	NS	NA	0.67	0.75	0.51	
Mercury	0.002	NS	ND	ND	0.0003	ND	
Molybdenum	1.0	NS	ND	ND	ND	ND	
Nickel	0.2	NS	ND	ND	ND	ND	
Selenium	0.05	NS	ND	ND	ND	ND	
Silver	0.05	NS	ND	0.01	ND	ND	
Zinc	10.0	NS	ND	0.01	0.01	ND	

Detection Limits (mg/l):

Aluminum	0.05	Copper	0.01	Molybdenum	0.05
Arsenic	0.05	Iron	0.03	Nickel	0.04
Barium	0.01	Lead	0.05	Selenium	0.1
Cadmium	0.005	Mercury	0.0002	Silver	0.01
Chromium	0.01	Manganese	0.01	Zinc	0.01
Cobalt	0.03				

NS = Not sampled
ND = Not detected
NA = Not analyzed

3031/METALS/MW-11.WQ2

MW-12
Brickland Refinery Site
Quarterly Analytical Results
 (All results in mg/l)

Parameter	WQCC Std.	12/08/93	03/23/94	06/27/94	09/27/94	12/13/94		
Aluminum	5.0	NA	NA	ND	0.23	0.08		
Arsenic	0.1	ND	0.08	ND	ND	ND		
Barium	1.0	0.04	0.03	0.02	0.11	0.03		
Cadmium	0.01	0.005	ND	ND	0.009	ND		
Chromium	0.05	ND	ND	ND	0.05	ND		
Cobalt	0.05	ND	ND	ND	ND	ND		
Copper	1.0	ND	ND	ND	0.01	0.02		
Iron	1.0	NA	NA	3.89	5.85	1.10		
Lead	0.05	ND	ND	ND	ND	ND		
Manganese	0.2	NA	NA	5.90	10.8	6.18		
Mercury	0.002	ND	ND	ND	ND	ND		
Molybdenum	1.0	ND	ND	ND	0.05	ND		
Nickel	0.2	0.05	ND	ND	ND	ND		
Selenium	0.05	ND	0.2	ND	0.4	ND		
Silver	0.05	0.03	ND	ND	0.03	ND		
Zinc	10.0	ND	0.02	0.01	0.04	ND		

Detection Limits (mg/l):

Aluminum	0.05	Copper	0.01	Molybdenum	0.05
Arsenic	0.05	Iron	0.03	Nickel	0.04
Barium	0.01	Lead	0.05	Selenium	0.1
Cadmium	0.005	Mercury	0.0002	Silver	0.01
Chromium	0.01	Manganese	0.01	Zinc	0.01
Cobalt	0.03				

NS = Not sampled
 ND = Not detected
 NA = Not analyzed

3031/METALS/MW-12.WQ2

MW-14
Brickland Refinery Site
Quarterly Analytical Results
 (All results in mg/l)

Parameter	WQCC Std.	06/28/94	09/27/94	12/13/94				
Aluminum	5.0	ND	0.2	0.08				
Arsenic	0.1	0.05	0.17	ND				
Barium	1.0	0.67	0.78	0.22				
Cadmium	0.01	ND	ND	ND				
Chromium	0.05	ND	ND	ND				
Cobalt	0.05	ND	ND	ND				
Copper	1.0	ND	ND	ND				
Iron	1.0	4.78	13.1	10.3				
Lead	0.05	ND	ND	ND				
Manganese	0.2	4.13	7.59	5.46				
Mercury	0.002	ND	0.0009	0.0024				
Molybdenum	1.0	ND	ND	ND				
Nickel	0.2	0.07	ND	ND				
Selenium	0.05	ND	ND	ND				
Silver	0.05	ND	0.02	ND				
Zinc	10.0	ND	0.02	ND				

Detection Limits (mg/l):

Aluminum	0.05	Copper	0.01	Molybdenum	0.05
Arsenic	0.05	Iron	0.03	Nickel	0.04
Barium	0.01	Lead	0.05	Selenium	0.1
Cadmium	0.005	Mercury	0.0002	Silver	0.01
Chromium	0.01	Manganese	0.01	Zinc	0.01
Cobalt	0.03				

NS = Not sampled
 ND = Not detected
 NA = Not analyzed

3031/METALS/MW-14.WQ2

MW-15
Brickland Refinery Site
Quarterly Analytical Results
 (All results in mg/l)

Parameter	WQCC Std.	06/28/94	09/27/94	12/13/94				
Aluminum	5.0	0.32	0.42	0.36				
Arsenic	0.1	ND	0.14	ND				
Barium	1.0	0.28	0.41	0.38				
Cadmium	0.01	ND	ND	ND				
Chromium	0.05	ND	ND	ND				
Cobalt	0.05	ND	ND	ND				
Copper	1.0	ND	ND	ND				
Iron	1.0	0.52	2.33	3.69				
Lead	0.05	ND	ND	ND				
Manganese	0.2	1.06	2.9	1.66				
Mercury	0.002	ND	ND	ND				
Molybdenum	1.0	ND	ND	ND				
Nickel	0.2	ND	ND	ND				
Selenium	0.05	ND	ND	ND				
Silver	0.05	ND	0.02	0.09				
Zinc	10.0	ND	0.01	ND				

Detection Limits (mg/l):

Aluminum	0.05	Copper	0.01	Molybdenum	0.05
Arsenic	0.05	Iron	0.03	Nickel	0.04
Barium	0.01	Lead	0.05	Selenium	0.1
Cadmium	0.005	Mercury	0.0002	Silver	0.01
Chromium	0.01	Manganese	0.01	Zinc	0.01
Cobalt	0.03				

NS = Not sampled
 ND = Not detected
 NA = Not analyzed

3031/METALS/MW-15.WQ2

MW-16
Brickland Refinery Site
Quarterly Analytical Results
(All results in mg/l)

Parameter	WQCC Std.	06/28/94	09/27/94	12/13/94				
Aluminum	5.0	ND	0.12	0.11				
Arsenic	0.1	ND	0.05	ND				
Barium	1.0	0.31	0.09	0.07				
Cadmium	0.01	ND	ND	ND				
Chromium	0.05	ND	ND	ND				
Cobalt	0.05	ND	ND	ND				
Copper	1.0	ND	ND	ND				
Iron	1.0	ND	2.05	1.70				
Lead	0.05	ND	ND	ND				
Manganese	0.2	2.77	5.21	4.15				
Mercury	0.002	ND	ND	ND				
Molybdenum	1.0	ND	ND	ND				
Nickel	0.2	ND	0.06	0.05				
Selenium	0.05	ND	ND	ND				
Silver	0.05	ND	ND	ND				
Zinc	10.0	ND	0.02	ND				

Detection Limits (mg/l):

Aluminum	0.05	Copper	0.01	Molybdenum	0.05
Arsenic	0.05	Iron	0.03	Nickel	0.04
Barium	0.01	Lead	0.05	Selenium	0.1
Cadmium	0.005	Mercury	0.0002	Silver	0.01
Chromium	0.01	Manganese	0.01	Zinc	0.01
Cobalt	0.03				

NS = Not sampled
ND = Not detected
NA = Not analyzed

3031/METALS/MW-16.WQ2

MW-17
Brickland Refinery Site
Quarterly Analytical Results
(All results in mg/l)

Parameter	WQCC Std.	06/28/94	09/27/94	12/13/94				
Aluminum	5.0	0.05	0.22,0.20	0.10				
Arsenic	0.1	ND	0.16,0.44	ND				
Barium	1.0	1.24	2.11,1.81	0.42				
Cadmium	0.01	ND	ND,ND	ND				
Chromium	0.05	ND	ND,0.01	ND				
Cobalt	0.05	ND	0.03,0.03	ND				
Copper	1.0	ND	ND,0.01	ND				
Iron	1.0	0.21	9.7,9.41	8.47				
Lead	0.05	ND	ND,ND	ND				
Manganese	0.2	3.16	8.48,7.64	3.37				
Mercury	0.002	ND	ND,ND	ND				
Molybdenum	1.0	ND	ND,ND	ND				
Nickel	0.2	0.05	ND,ND	ND				
Selenium	0.05	ND	ND,0.01	ND				
Silver	0.05	ND	0.02,0.02	ND				
Zinc	10.0	ND	0.02,0.02	ND				

Detection Limits (mg/l):

Aluminum	0.05	Copper	0.01	Molybdenum	0.05
Arsenic	0.05	Iron	0.03	Nickel	0.04
Barium	0.01	Lead	0.05	Selenium	0.1
Cadmium	0.005	Mercury	0.0002	Silver	0.01
Chromium	0.01	Manganese	0.01	Zinc	0.01
Cobalt	0.03				

NS = Not sampled
ND = Not detected
NA = Not analyzed

3031/METALS/MW-17.WQ2

MW-1
Brickland Refinery Site
Quarterly Analytical Results
(All results in ug/l)

Parameter	WQCC Std.	12/08/93	03/23/94	06/27/94	09/27/94	12/13/94		
Acenaphthene	None	ND	ND	ND	ND	ND		
Acenaphthylene	None	ND	ND	ND	ND	ND		
Anthracene	TP	ND	ND	ND	ND	ND		
Benzo(a)anthracene	None	ND	ND	ND	ND	ND		
Benzo(b)fluoranthene	None	ND	ND	ND	ND	ND		
Benzo(k)fluoranthene	TP	ND	ND	ND	ND	ND		
Benzo(g,h,i)perylene	None	ND	ND	ND	ND	ND		
Benzo(a)pyrene	0.7	ND	ND	ND	ND	ND		
Chrysene	None	ND	ND	ND	ND	ND		
Dibenzo(a,h)anthracene	None	ND	ND	ND	ND	ND		
Fluoranthene	TP	ND	ND	ND	ND	ND		
Fluorene	TP	ND	ND	ND	ND	ND		
Indeno(1,2,3-cd)pyrene	None	ND	ND	ND	ND	ND		
1-Methylnaphthalene	TP	NA	ND	ND	ND	ND		
2-Methylnaphthalene	TP	NA	ND	ND	ND	ND		
Naphthalene	30 *	ND	ND	ND	ND	ND		
Phenanthrene	TP	ND	ND	ND	ND	ND		
Pyrene	TP	ND	ND	ND	ND	ND		

Detection Limits (ug/l):

Acenaphthene	10	Benzo(g,h,i)perylene	10	Indeno(1,2,3-cd)pyrene	10
Acenaphthylene	10	Benzo(a)pyrene	10	1-Methylnaphthalene	10
Anthracene	10	Chrysene	10	2-Methylnaphthalene	10
Benzo(a)anthracene	10	Dibenzo(a,h)anthracene	10	Naphthalene	10
Benzo(b)fluoranthene	10	Fluoranthene	10	Phenanthrene	10
Benzo(k)fluoranthene	10	Fluorene	10	Pyrene	10

* - Standard for naphthalene includes monomethylnaphthalenes

NS = Not sampled

ND = Not detected

NA = Not analyzed

TP = WQCC toxic pollutant

3031/PAH/MW-1.WQ2

MW-2
Brickland Refinery Site
Quarterly Analytical Results
(All results in ug/l)

Parameter	WQCC Std.	12/08/93	03/23/94	06/28/94	09/27/94	12/13/94		
Acenaphthene	None	NS	ND	ND	ND	ND		
Acenaphthylene	None	NS	ND	ND	ND	ND		
Anthracene	TP	NS	ND	ND	ND	ND		
Benzo(a)anthracene	None	NS	ND	ND	ND	ND		
Benzo(b)fluoranthene	None	NS	ND	ND	ND	ND		
Benzo(k)fluoranthene	TP	NS	ND	ND	ND	ND		
Benzo(g,h,i)perylene	None	NS	ND	ND	ND	ND		
Benzo(a)pyrene	0.7	NS	ND	ND	ND	ND		
Chrysene	None	NS	ND	ND	ND	ND		
Dibenzo(a,h)anthracene	None	NS	ND	ND	ND	ND		
Fluoranthene	TP	NS	ND	ND	ND	ND		
Fluorene	TP	NS	ND	ND	ND	ND		
Indeno(1,2,3-cd)pyrene	None	NS	ND	ND	ND	ND		
1-Methylnaphthalene	TP	NS	ND	ND	ND	ND		
2-Methylnaphthalene	TP	NS	ND	ND	ND	ND		
Naphthalene	30 *	NS	ND	ND	ND	ND		
Phenanthrene	TP	NS	ND	ND	ND	ND		
Pyrene	TP	NS	ND	ND	ND	ND		

Detection Limits (ug/l):

Acenaphthene	10	Benzo(g,h,i)perylene	10	Indeno(1,2,3-cd)pyrene	10
Acenaphthylene	10	Benzo(a)pyrene	10	1-Methylnaphthalene	10
Anthracene	10	Chrysene	10	2-Methylnaphthalene	10
Benzo(a)anthracene	10	Dibenzo(a,h)anthracene	10	Naphthalene	10
Benzo(b)fluoranthene	10	Fluoranthene	10	Phenanthrene	10
Benzo(k)fluoranthene	10	Fluorene	10	Pyrene	10

* - Standard for naphthalene includes monomethylnaphthalenes

NS = Not sampled

ND = Not detected

NA = Not analyzed

TP = WQCC toxic pollutant

3031/PAH/MW-2. WQ2

MW-3S
Brickland Refinery Site
Quarterly Analytical Results
(All results in ug/l)

Parameter	WQCC Std.	12/08/93	03/25/94	06/27/94	09/28/94	12/13/94		
Acenaphthene	None	ND	ND	ND	ND	ND		
Acenaphthylene	None	ND	ND	ND	ND	ND		
Anthracene	TP	ND	ND	ND	ND	ND		
Benzo(a)anthracene	None	ND	ND	ND	ND	ND		
Benzo(b)fluoranthene	None	ND	ND	ND	ND	ND		
Benzo(k)fluoranthene	TP	ND	ND	ND	ND	ND		
Benzo(g,h,i)perylene	None	ND	ND	ND	ND	ND		
Benzo(a)pyrene	0.7	ND	ND	ND	ND	ND		
Chrysene	None	ND	ND	ND	ND	ND		
Dibenzo(a,h)anthracene	None	ND	ND	ND	ND	ND		
Fluoranthene	TP	ND	ND	ND	ND	ND		
Fluorene	TP	ND	ND	ND	ND	ND		
Indeno(1,2,3-cd)pyrene	None	ND	ND	ND	ND	ND		
1-Methylnaphthalene	TP	NA	ND	ND	ND	ND		
2-Methylnaphthalene	TP	NA	ND	ND	ND	ND		
Naphthalene	30 *	ND	ND	ND	ND	ND		
Phenanthrene	TP	ND	ND	ND	ND	ND		
Pyrene	TP	ND	ND	ND	ND	ND		

Detection Limits (ug/l):

Acenaphthene	10	Benzo(g,h,i)perylene	10	Indeno(1,2,3-cd)pyrene	10
Acenaphthylene	10	Benzo(a)pyrene	10	1-Methylnaphthalene	10
Anthracene	10	Chrysene	10	2-Methylnaphthalene	10
Benzo(a)anthracene	10	Dibenzo(a,h)anthracene	10	Naphthalene	10
Benzo(b)fluoranthene	10	Fluoranthene	10	Phenanthrene	10
Benzo(k)fluoranthene	10	Fluorene	10	Pyrene	10

* - Standard for naphthalene includes monomethylnaphthalenes

NS = Not sampled

ND = Not detected

NA = Not analyzed

TP = WQCC toxic pollutant

3031/PAH/MW-3S. WQ2

MW-3D
Brickland Refinery Site
Quarterly Analytical Results
 (All results in ug/l)

Parameter	WQCC Std.	12/08/93	03/23/94	07/12/94	09/28/94	12/13/94		
Acenaphthene	None	ND	ND	ND	ND	ND		
Acenaphthylene	None	ND	ND	ND	ND	ND		
Anthracene	TP	ND	ND	ND	ND	ND		
Benzo(a)anthracene	None	ND	ND	ND	ND	ND		
Benzo(b)fluoranthene	None	ND	ND	ND	ND	ND		
Benzo(k)fluoranthene	TP	ND	ND	ND	ND	ND		
Benzo(g,h,i)perylene	None	ND	ND	ND	ND	ND		
Benzo(a)pyrene	0.7	ND	ND	ND	ND	ND		
Chrysene	None	ND	ND	ND	ND	ND		
Dibenzo(a,h)anthracene	None	ND	ND	ND	ND	ND		
Fluoranthene	TP	ND	ND	ND	ND	ND		
Fluorene	TP	ND	ND	ND	ND	ND		
Indeno(1,2,3-cd)pyrene	None	ND	ND	ND	ND	ND		
1-Methylnaphthalene	TP	NA	ND	ND	ND	ND		
2-Methylnaphthalene	TP	NA	ND	ND	ND	ND		
Naphthalene	30 *	ND	ND	ND	ND	ND		
Phenanthrene	TP	ND	ND	ND	ND	ND		
Pyrene	TP	ND	ND	ND	ND	ND		

Detection Limits (ug/l):

Acenaphthene	10	Benzo(g,h,i)perylene	10	Indeno(1,2,3-cd)pyrene	10
Acenaphthylene	10	Benzo(a)pyrene	10	1-Methylnaphthalene	10
Anthracene	10	Chrysene	10	2-Methylnaphthalene	10
Benzo(a)anthracene	10	Dibenzo(a,h)anthracene	10	Naphthalene	10
Benzo(b)fluoranthene	10	Fluoranthene	10	Phenanthrene	10
Benzo(k)fluoranthene	10	Fluorene	10	Pyrene	10

* - Standard for naphthalene includes monomethylnaphthalenes

NS = Not sampled

ND = Not detected

NA = Not analyzed

TP = WQCC toxic pollutant

3031/PAH/MW-3D, WQ2

MW-4
Brickland Refinery Site
Quarterly Analytical Results
(All results in ug/l)

Parameter	WQCC Std.	12/08/93	03/23/94	06/28/94	09/27/94	12/13/94		
Acenaphthene	None	NS	ND,ND	ND	ND	ND		
Acenaphthylene	None	NS	ND,ND	ND	ND	ND		
Anthracene	TP	NS	ND,ND	ND	ND	ND		
Benzo(a)anthracene	None	NS	ND,ND	ND	ND	ND		
Benzo(b)fluoranthene	None	NS	ND,ND	ND	ND	ND		
Benzo(k)fluoranthene	TP	NS	ND,ND	ND	ND	ND		
Benzo(g,h,i)perylene	None	NS	ND,ND	ND	ND	ND		
Benzo(a)pyrene	0.7	NS	ND,ND	ND	ND	ND		
Chrysene	None	NS	ND,ND	ND	ND	ND		
Dibenzo(a,h)anthracene	None	NS	ND,ND	ND	ND	ND		
Fluoranthene	TP	NS	ND,ND	ND	ND	ND		
Fluorene	TP	NS	ND,ND	ND	ND	ND		
Indeno(1,2,3-cd)pyrene	None	NS	ND,ND	ND	ND	ND		
1-Methylnaphthalene	TP	NS	ND,ND	ND	58	ND		
2-Methylnaphthalene	TP	NS	ND,ND	ND	ND	ND		
Naphthalene	30 *	NS	ND,ND	ND	ND	ND		
Phenanthrene	TP	NS	ND,ND	ND	ND	ND		
Pyrene	TP	NS	ND,ND	ND	ND	ND		

Detection Limits (ug/l):

Acenaphthene	10	Benzo(g,h,i)perylene	10	Indeno(1,2,3-cd)pyrene	10
Acenaphthylene	10	Benzo(a)pyrene	10	1-Methylnaphthalene	10
Anthracene	10	Chrysene	10	2-Methylnaphthalene	10
Benzo(a)anthracene	10	Dibenzo(a,h)anthracene	10	Naphthalene	10
Benzo(b)fluoranthene	10	Fluoranthene	10	Phenanthrene	10
Benzo(k)fluoranthene	10	Fluorene	10	Pyrene	10

* - Standard for naphthalene includes monomethylnaphthalenes

NS = Not sampled

ND = Not detected

NA = Not analyzed

TP = WQCC toxic pollutant

3031/PAH/MW-4.WQ2

MW-5
Brickland Refinery Site
Quarterly Analytical Results
 (All results in ug/l)

Parameter	WQCC Std.	12/08/93	03/24/94	06/27/94	09/27/94	12/13/94		
Acenaphthene	None	NS	ND	ND	ND	ND		
Acenaphthylene	None	NS	ND	ND	ND	ND		
Anthracene	TP	NS	ND	ND	ND	ND		
Benzo(a)anthracene	None	NS	ND	ND	ND	ND		
Benzo(b)fluoranthene	None	NS	ND	ND	ND	ND		
Benzo(k)fluoranthene	TP	NS	ND	ND	ND	ND		
Benzo(g,h,i)perylene	None	NS	ND	ND	ND	ND		
Benzo(a)pyrene	0.7	NS	ND	ND	ND	ND		
Chrysene	None	NS	ND	ND	ND	ND		
Dibenzo(a,h)anthracene	None	NS	ND	ND	ND	ND		
Fluoranthene	TP	NS	ND	ND	ND	ND		
Fluorene	TP	NS	ND	ND	ND	ND		
Indeno(1,2,3-cd)pyrene	None	NS	ND	ND	ND	ND		
1-Methylnaphthalene	TP	NS	79	78	110	71		
2-Methylnaphthalene	TP	NS	ND	12	32	22		
Naphthalene	30 *	NS	28	27	49	46		
Phenanthrene	TP	NS	ND	ND	ND	ND		
Pyrene	TP	NS	ND	ND	ND	ND		

Detection Limits (ug/l):

Acenaphthene	10	Benzo(g,h,i)perylene	10	Indeno(1,2,3-cd)pyrene	10
Acenaphthylene	10	Benzo(a)pyrene	10	1-Methylnaphthalene	10
Anthracene	10	Chrysene	10	2-Methylnaphthalene	10
Benzo(a)anthracene	10	Dibenzo(a,h)anthracene	10	Naphthalene	10
Benzo(b)fluoranthene	10	Fluoranthene	10	Phenanthrene	10
Benzo(k)fluoranthene	10	Fluorene	10	Pyrene	10

* - Standard for naphthalene includes monomethylnaphthalenes

NS = Not sampled

ND = Not detected

NA = Not analyzed

TP = WQCC toxic pollutant

3031/PAH/MW-5.WQ2

MW-6S
Brickland Refinery Site
Quarterly Analytical Results
 (All results in ug/l)

Parameter	WQCC Std.	12/08/93	03/25/94	6/27/94	09/28/94	12/13/94		
Acenaphthene	None	ND	ND	ND	ND	ND		
Acenaphthylene	None	ND	ND	ND	ND	ND		
Anthracene	TP	ND	ND	ND	ND	ND		
Benzo(a)anthracene	None	ND	ND	ND	ND	ND		
Benzo(b)fluoranthene	None	ND	ND	ND	ND	ND		
Benzo(k)fluoranthene	TP	ND	ND	ND	ND	ND		
Benzo(g,h,i)perylene	None	ND	ND	ND	ND	ND		
Benzo(a)pyrene	0.7	ND	ND	ND	ND	ND		
Chrysene	None	ND	ND	ND	ND	ND		
Dibenzo(a,h)anthracene	None	ND	ND	ND	ND	ND		
Fluoranthene	TP	ND	ND	ND	ND	ND		
Fluorene	TP	ND	ND	ND	ND	ND		
Indeno(1,2,3-cd)pyrene	None	ND	ND	ND	ND	ND		
1-Methylnaphthalene	TP	NA	ND	ND	ND	ND		
2-Methylnaphthalene	TP	NA	ND	ND	ND	ND		
Naphthalene	30 *	ND	ND	ND	ND	ND		
Phenanthrene	TP	ND	ND	ND	ND	ND		
Pyrene	TP	ND	ND	ND	ND	ND		

Detection Limits (ug/l):

Acenaphthene	10	Benzo(g,h,i)perylene	10	Indeno(1,2,3-cd)pyrene	10
Acenaphthylene	10	Benzo(a)pyrene	10	1-Methylnaphthalene	10
Anthracene	10	Chrysene	10	2-Methylnaphthalene	10
Benzo(a)anthracene	10	Dibenzo(a,h)anthracene	10	Naphthalene	10
Benzo(b)fluoranthene	10	Fluoranthene	10	Phenanthrene	10
Benzo(k)fluoranthene	10	Fluorene	10	Pyrene	10

* - Standard for naphthalene includes monomethylnaphthalenes

NS = Not sampled

ND = Not detected

NA = Not analyzed

TP = WQCC toxic pollutant

3031/PAH/MW-6S.WQ2

MW-6D

Brickland Refinery Site

Quarterly Analytical Results

(All results in ug/l)

Parameter	WQCC Std.	12/08/93	03/23/94	06/27/94	09/28/94	12/13/94		
Acenaphthene	None	ND	ND	ND	ND	ND		
Acenaphthylene	None	ND	ND	ND	ND	ND		
Anthracene	TP	ND	ND	ND	ND	ND		
Benzo(a)anthracene	None	ND	ND	ND	ND	ND		
Benzo(b)fluoranthene	None	ND	ND	ND	ND	ND		
Benzo(k)fluoranthene	TP	ND	ND	ND	ND	ND		
Benzo(g,h,i)perylene	None	ND	ND	ND	ND	ND		
Benzo(a)pyrene	0.7	ND	ND	ND	ND	ND		
Chrysene	None	ND	ND	ND	ND	ND		
Dibenzo(a,h)anthracene	None	ND	ND	ND	ND	ND		
Fluoranthene	TP	ND	ND	ND	ND	ND		
Fluorene	TP	ND	ND	ND	ND	ND		
Indeno(1,2,3-cd)pyrene	None	ND	ND	ND	ND	ND		
1-Methylnaphthalene	TP	NA	ND	ND	ND	ND		
2-Methylnaphthalene	TP	NA	ND	ND	ND	ND		
Naphthalene	30 *	ND	ND	ND	ND	ND		
Phenanthrene	TP	ND	ND	ND	ND	ND		
Pyrene	TP	ND	ND	ND	ND	ND		

Detection Limits (ug/l):

Acenaphthene	10	Benzo(g,h,i)perylene	10	Indeno(1,2,3-cd)pyrene	10
Acenaphthylene	10	Benzo(a)pyrene	10	1-Methylnaphthalene	10
Anthracene	10	Chrysene	10	2-Methylnaphthalene	10
Benzo(a)anthracene	10	Dibenzo(a,h)anthracene	10	Naphthalene	10
Benzo(b)fluoranthene	10	Fluoranthene	10	Phenanthrene	10
Benzo(k)fluoranthene	10	Fluorene	10	Pyrene	10

* - Standard for naphthalene includes monomethylnaphthalenes

NS = Not sampled

ND = Not detected

NA = Not analyzed

TP = WQCC toxic pollutant

3031/PAH/MW-6D.WQ2

MW-7

Brickland Refinery Site

Quarterly Analytical Results

(All results in ug/l)

Parameter	WQCC Std.	12/08/93	03/24/94	06/27/94	09/27/94	12/13/94		
Acenaphthene	None	NS	ND	ND	ND	ND		
Acenaphthylene	None	NS	ND	ND	ND	ND		
Anthracene	TP	NS	ND	ND	ND	ND		
Benzo(a)anthracene	None	NS	ND	ND	ND	ND		
Benzo(b)fluoranthene	None	NS	ND	ND	ND	ND		
Benzo(k)fluoranthene	TP	NS	ND	ND	ND	ND		
Benzo(g,h,i)perylene	None	NS	ND	ND	ND	ND		
Benzo(a)pyrene	0.7	NS	ND	ND	ND	ND		
Chrysene	None	NS	ND	ND	ND	ND		
Dibenzo(a,h)anthracene	None	NS	ND	ND	ND	ND		
Fluoranthene	TP	NS	ND	ND	ND	ND		
Fluorene	TP	NS	ND	ND	ND	ND		
Indeno(1,2,3-cd)pyrene	None	NS	ND	ND	ND	ND		
1-Methylnaphthalene	TP	NS	ND	ND	ND	ND		
2-Methylnaphthalene	TP	NS	ND	ND	ND	ND		
Naphthalene	30 *	NS	ND	ND	ND	ND		
Phenanthrene	TP	NS	ND	ND	ND	ND		
Pyrene	TP	NS	ND	ND	ND	ND		

Detection Limits (ug/l):

Acenaphthene	10	Benzo(g,h,i)perylene	10	Indeno(1,2,3-cd)pyrene	10
Acenaphthylene	10	Benzo(a)pyrene	10	1-Methylnaphthalene	10
Anthracene	10	Chrysene	10	2-Methylnaphthalene	10
Benzo(a)anthracene	10	Dibenzo(a,h)anthracene	10	Naphthalene	10
Benzo(b)fluoranthene	10	Fluoranthene	10	Phenanthrene	10
Benzo(k)fluoranthene	10	Fluorene	10	Pyrene	10

* - Standard for naphthalene includes monomethylnaphthalenes

NS = Not sampled

ND = Not detected

NA = Not analyzed

TP = WQCC toxic pollutant

3031/PAH/MW-7.WQ2

MW-8
Brickland Refinery Site
Quarterly Analytical Results
 (All results in ug/l)

Parameter	WQCC Std.	12/08/93	03/24/94	06/27/94	09/27/94	12/13/94		
Acenaphthene	None	NS	ND	ND	ND	ND		
Acenaphthylene	None	NS	ND	ND	ND	ND		
Anthracene	TP	NS	ND	ND	ND	ND		
Benzo(a)anthracene	None	NS	ND	ND	ND	ND		
Benzo(b)fluoranthene	None	NS	ND	ND	ND	ND		
Benzo(k)fluoranthene	TP	NS	ND	ND	ND	ND		
Benzo(g,h,i)perylene	None	NS	ND	ND	ND	ND		
Benzo(a)pyrene	0.7	NS	ND	ND	ND	ND		
Chrysene	None	NS	ND	ND	ND	ND		
Dibenzo(a,h)anthracene	None	NS	ND	ND	ND	ND		
Fluoranthene	TP	NS	ND	ND	ND	ND		
Fluorene	TP	NS	ND	ND	ND	ND		
Indeno(1,2,3-cd)pyrene	None	NS	ND	ND	ND	ND		
1-Methylnaphthalene	TP	NS	46	ND	61	42		
2-Methylnaphthalene	TP	NS	64	ND	75	54		
Naphthalene	30 *	NS	140	93	230	140		
Phenanthrene	TP	NS	ND	ND	ND	ND		
Pyrene	TP	NS	ND	ND	ND	ND		

Detection Limits (ug/l):

Acenaphthene	10	Benzo(g,h,i)perylene	10	Indeno(1,2,3-cd)pyrene	10
Acenaphthylene	10	Benzo(a)pyrene	10	1-Methylnaphthalene	10
Anthracene	10	Chrysene	10	2-Methylnaphthalene	10
Benzo(a)anthracene	10	Dibenzo(a,h)anthracene	10	Naphthalene	10
Benzo(b)fluoranthene	10	Fluoranthene	10	Phenanthrene	10
Benzo(k)fluoranthene	10	Fluorene	10	Pyrene	10

* - Standard for naphthalene includes monomethylnaphthalenes

NS = Not sampled

ND = Not detected

NA = Not analyzed

TP = WQCC toxic pollutant

3031/PAH/MW-8.WQ2

MW-9S
Brickland Refinery Site
Quarterly Analytical Results
 (All results in ug/l)

Parameter	WQCC Std.	12/08/93	03/25/94	06/27/94	09/27/94	12/13/94		
Acenaphthene	None	ND	ND	ND	ND	ND		
Acenaphthylene	None	ND	ND	ND	ND	ND		
Anthracene	TP	ND	ND	ND	ND	ND		
Benzo(a)anthracene	None	ND	ND	ND	ND	ND		
Benzo(b)fluoranthene	None	ND	ND	ND	ND	ND		
Benzo(k)fluoranthene	TP	ND	ND	ND	ND	ND		
Benzo(g,h,i)perylene	None	ND	ND	ND	ND	ND		
Benzo(a)pyrene	0.7	ND	ND	ND	ND	ND		
Chrysene	None	ND	ND	ND	ND	ND		
Dibenzo(a,h)anthracene	None	ND	ND	ND	ND	ND		
Fluoranthene	TP	ND	ND	ND	ND	ND		
Fluorene	TP	ND	ND	ND	ND	ND		
Indeno(1,2,3-cd)pyrene	None	ND	ND	ND	ND	ND		
1-Methylnaphthalene	TP	NA	ND	ND	ND	ND		
2-Methylnaphthalene	TP	NA	ND	ND	ND	ND		
Naphthalene	30 *	ND	ND	ND	ND	ND		
Phenanthrene	TP	ND	ND	ND	ND	ND		
Pyrene	TP	ND	ND	ND	ND	ND		

Detection Limits (ug/l):

Acenaphthene	10	Benzo(g,h,i)perylene	10	Indeno(1,2,3-cd)pyrene	10
Acenaphthylene	10	Benzo(a)pyrene	10	1-Methylnaphthalene	10
Anthracene	10	Chrysene	10	2-Methylnaphthalene	10
Benzo(a)anthracene	10	Dibenzo(a,h)anthracene	10	Naphthalene	10
Benzo(b)fluoranthene	10	Fluoranthene	10	Phenanthrene	10
Benzo(k)fluoranthene	10	Fluorene	10	Pyrene	10

* - Standard for naphthalene includes monomethylnaphthalenes

NS = Not sampled

ND = Not detected

NA = Not analyzed

TP = WQCC toxic pollutant

3031/PAH/MW-9S.WQ2

MW-11
Brickland Refinery Site
Quarterly Analytical Results

(All results in ug/l)

Parameter	WQCC Std.	12/08/93	03/25/94	06/27/94	09/27/94	12/13/94		
Acenaphthene	None	NS	ND	ND	ND	ND		
Acenaphthylene	None	NS	ND	ND	ND	ND		
Anthracene	TP	NS	ND	ND	ND	ND		
Benzo(a)anthracene	None	NS	ND	ND	ND	ND		
Benzo(b)fluoranthene	None	NS	ND	ND	ND	ND		
Benzo(k)fluoranthene	TP	NS	ND	ND	ND	ND		
Benzo(g,h,i)perylene	None	NS	ND	ND	ND	ND		
Benzo(a)pyrene	0.7	NS	ND	ND	ND	ND		
Chrysene	None	NS	ND	ND	ND	ND		
Dibenzo(a,h)anthracene	None	NS	ND	ND	ND	ND		
Fluoranthene	TP	NS	ND	ND	ND	ND		
Fluorene	TP	NS	ND	ND	12	ND		
Indeno(1,2,3-cd)pyrene	None	NS	ND	ND	ND	ND		
1-Methylnaphthalene	TP	NS	29	ND	120	69		
2-Methylnaphthalene	TP	NS	ND	ND	18	ND		
Naphthalene	30 *	NS	ND	ND	35	ND		
Phenanthrene	TP	NS	ND	ND	32	21		
Pyrene	TP	NS	ND	ND	16	58		

Detection Limits (ug/l):

Acenaphthene	10	Benzo(g,h,i)perylene	10	Indeno(1,2,3-cd)pyrene	10
Acenaphthylene	10	Benzo(a)pyrene	10	1-Methylnaphthalene	10
Anthracene	10	Chrysene	10	2-Methylnaphthalene	10
Benzo(a)anthracene	10	Dibenzo(a,h)anthracene	10	Naphthalene	10
Benzo(b)fluoranthene	10	Fluoranthene	10	Phenanthrene	10
Benzo(k)fluoranthene	10	Fluorene	10	Pyrene	10

* - Standard for naphthalene includes monomethylnaphthalenes

NS = Not sampled

ND = Not detected

NA = Not analyzed

TP = WQCC toxic pollutant

3031/PAH/MW-11.WQ2

MW-12
Brickland Refinery Site
Quarterly Analytical Results
(All results in ug/l)

Parameter	WQCC Std.	12/08/93	03/23/94	06/27/94	09/27/94	12/13/94		
Acenaphthene	None	ND	ND	ND	ND	ND		
Acenaphthylene	None	ND	ND	ND	ND	ND		
Anthracene	TP	ND	ND	ND	ND	ND		
Benzo(a)anthracene	None	ND	ND	ND	ND	ND		
Benzo(b)fluoranthene	None	ND	ND	ND	ND	ND		
Benzo(k)fluoranthene	TP	ND	ND	ND	ND	ND		
Benzo(g,h,i)perylene	None	ND	ND	ND	ND	ND		
Benzo(a)pyrene	0.7	ND	ND	ND	ND	ND		
Chrysene	None	ND	ND	ND	ND	ND		
Dibenzo(a,h)anthracene	None	ND	ND	ND	ND	ND		
Fluoranthene	TP	ND	ND	ND	ND	ND		
Fluorene	TP	ND	ND	ND	ND	ND		
Indeno(1,2,3-cd)pyrene	None	ND	ND	ND	ND	ND		
1-Methylnaphthalene	TP	NA	ND	ND	ND	ND		
2-Methylnaphthalene	TP	NA	ND	ND	ND	ND		
Naphthalene	30 *	ND	ND	ND	ND	ND		
Phenanthrene	TP	ND	ND	ND	ND	ND		
Pyrene	TP	ND	ND	ND	ND	ND		

Detection Limits (ug/l):

Acenaphthene	10	Benzo(g,h,i)perylene	10	Indeno(1,2,3-cd)pyrene	10
Acenaphthylene	10	Benzo(a)pyrene	10	1-Methylnaphthalene	10
Anthracene	10	Chrysene	10	2-Methylnaphthalene	10
Benzo(a)anthracene	10	Dibenzo(a,h)anthracene	10	Naphthalene	10
Benzo(b)fluoranthene	10	Fluoranthene	10	Phenanthrene	10
Benzo(k)fluoranthene	10	Fluorene	10	Pyrene	10

* - Standard for naphthalene includes monomethylnaphthalenes

NS = Not sampled

ND = Not detected

NA = Not analyzed

TP = WQCC toxic pollutant

3031/PAH/MW-12.WQ2

MW-14
Brickland Refinery Site
Quarterly Analytical Results
(All results in ug/l)

Parameter	WQCC Std.	06/28/94	09/27/94	12/13/94				
Acenaphthene	None	ND	ND	ND				
Acenaphthylene	None	ND	ND	ND				
Anthracene	TP	ND	ND	ND				
Benzo(a)anthracene	None	ND	ND	ND				
Benzo(b)fluoranthene	None	ND	ND	ND				
Benzo(k)fluoranthene	TP	ND	ND	ND				
Benzo(g,h,i)perylene	None	ND	ND	ND				
Benzo(a)pyrene	0.7	ND	ND	ND				
Chrysene	None	ND	ND	ND				
Dibenzo(a,h)anthracene	None	ND	ND	ND				
Fluoranthene	TP	ND	ND	ND				
Fluorene	TP	ND	ND	ND				
Indeno(1,2,3-cd)pyrene	None	ND	ND	ND				
1-Methylnaphthalene	TP	160	26	ND				
2-Methylnaphthalene	TP	180	14	ND				
Naphthalene	30 *	230	ND	ND				
Phenanthrene	TP	ND	ND	ND				
Pyrene	TP	ND	ND	ND				

Detection Limits (ug/l):

Acenaphthene	10	Benzo(g,h,i)perylene	10	Indeno(1,2,3-cd)pyrene	10
Acenaphthylene	10	Benzo(a)pyrene	10	1-Methylnaphthalene	10
Anthracene	10	Chrysene	10	2-Methylnaphthalene	10
Benzo(a)anthracene	10	Dibenzo(a,h)anthracene	10	Naphthalene	10
Benzo(b)fluoranthene	10	Fluoranthene	10	Phenanthrene	10
Benzo(k)fluoranthene	10	Fluorene	10	Pyrene	10

* - Standard for naphthalene includes monomethylnaphthalenes

NS = Not sampled

ND = Not detected

NA = Not analyzed

TP = WQCC toxic pollutant

3031/PAH/MW-14.WQ2

MW-15
Brickland Refinery Site
Quarterly Analytical Results
(All results in ug/l)

Parameter	WQCC Std.	06/28/94	09/27/94	12/13/94				
Acenaphthene	None	ND	ND	ND				
Acenaphthylene	None	ND	ND	ND				
Anthracene	TP	ND	ND	ND				
Benzo(a)anthracene	None	ND	ND	ND				
Benzo(b)fluoranthene	None	ND	ND	ND				
Benzo(k)fluoranthene	TP	ND	ND	ND				
Benzo(g,h,i)perylene	None	ND	ND	ND				
Benzo(a)pyrene	0.7	ND	ND	ND				
Chrysene	None	ND	ND	ND				
Dibenzo(a,h)anthracene	None	ND	ND	ND				
Fluoranthene	TP	ND	ND	ND				
Fluorene	TP	ND	ND	ND				
Indeno(1,2,3-cd)pyrene	None	ND	ND	ND				
1-Methylnaphthalene	TP	61	62	47				
2-Methylnaphthalene	TP	41	11	ND				
Naphthalene	30 *	15	53	37				
Phenanthrene	TP	ND	ND	ND				
Pyrene	TP	ND	ND	ND				

Detection Limits (ug/l):

Acenaphthene	10	Benzo(g,h,i)perylene	10	Indeno(1,2,3-cd)pyrene	10
Acenaphthylene	10	Benzo(a)pyrene	10	1-Methylnaphthalene	10
Anthracene	10	Chrysene	10	2-Methylnaphthalene	10
Benzo(a)anthracene	10	Dibenzo(a,h)anthracene	10	Naphthalene	10
Benzo(b)fluoranthene	10	Fluoranthene	10	Phenanthrene	10
Benzo(k)fluoranthene	10	Fluorene	10	Pyrene	10

* - Standard for naphthalene includes monomethylnaphthalenes

NS = Not sampled

ND = Not detected

NA = Not analyzed

TP = WQCC toxic pollutant

3031/PAH/MW-15. WQ2

MW-16
Brickland Refinery Site
Quarterly Analytical Results
 (All results in ug/l)

Parameter	WQCC Std.	07/12/94	09/27/94	12/13/94				
Acenaphthene	None	ND,ND	ND	ND				
Acenaphthylene	None	ND,ND	ND	ND				
Anthracene	TP	ND,ND	ND	ND				
Benzo(a)anthracene	None	ND,ND	ND	ND				
Benzo(b)fluoranthene	None	ND,ND	ND	ND				
Benzo(k)fluoranthene	TP	ND,ND	ND	ND				
Benzo(g,h,i)perylene	None	ND,ND	ND	ND				
Benzo(a)pyrene	0.7	ND,ND	ND	ND				
Chrysene	None	ND,ND	ND	ND				
Dibenzo(a,h)anthracene	None	ND,ND	ND	ND				
Fluoranthene	TP	ND,ND	ND	ND				
Fluorene	TP	ND,ND	ND	ND				
Indeno(1,2,3-cd)pyrene	None	ND,ND	ND	ND				
1-Methylnaphthalene	TP	ND,ND	ND	ND				
2-Methylnaphthalene	TP	ND,ND	ND	ND				
Naphthalene	30 *	ND,ND	ND	ND				
Phenanthrene	TP	ND,ND	ND	ND				
Pyrene	TP	ND,ND	ND	ND				

Detection Limits (ug/l):

Acenaphthene	10	Benzo(g,h,i)perylene	10	Indeno(1,2,3-cd)pyrene	10
Acenaphthylene	10	Benzo(a)pyrene	10	1-Methylnaphthalene	10
Anthracene	10	Chrysene	10	2-Methylnaphthalene	10
Benzo(a)anthracene	10	Dibenzo(a,h)anthracene	10	Naphthalene	10
Benzo(b)fluoranthene	10	Fluoranthene	10	Phenanthrene	10
Benzo(k)fluoranthene	10	Fluorene	10	Pyrene	10

* - Standard for naphthalene includes monomethylnaphthalenes

NS = Not sampled

ND = Not detected

NA = Not analyzed

TP = WQCC toxic pollutant

3031/PAH/MW-16.WQ2

MW-17
Brickland Refinery Site
Quarterly Analytical Results
 (All results in ug/l)

Parameter	WQCC Std.	06/28/94	09/27/94	12/13/94				
Acenaphthene	None	ND	ND,ND	ND				
Acenaphthylene	None	ND	ND,ND	ND				
Anthracene	TP	ND	ND,ND	ND				
Benzo(a)anthracene	None	ND	ND,ND	ND				
Benzo(b)fluoranthene	None	ND	ND,ND	ND				
Benzo(k)fluoranthene	TP	ND	ND,ND	ND				
Benzo(g,h,i)perylene	None	ND	ND,ND	ND				
Benzo(a)pyrene	0.7	ND	ND,ND	ND				
Chrysene	None	ND	ND,ND	ND				
Dibenzo(a,h)anthracene	None	ND	ND,ND	ND				
Fluoranthene	TP	ND	ND,ND	ND				
Fluorene	TP	ND	ND,ND	ND				
Indeno(1,2,3-cd)pyrene	None	ND	ND,ND	ND				
1-Methylnaphthalene	TP	ND	20,14	ND				
2-Methylnaphthalene	TP	ND	14,10	ND				
Naphthalene	30 *	ND	24,13	ND				
Phenanthrene	TP	ND	ND	ND				
Pyrene	TP	ND	ND	ND				

Detection Limits (ug/l):

Acenaphthene	10	Benzo(g,h,i)perylene	10	Indeno(1,2,3-cd)pyrene	10
Acenaphthylene	10	Benzo(a)pyrene	10	1-Methylnaphthalene	10
Anthracene	10	Chrysene	10	2-Methylnaphthalene	10
Benzo(a)anthracene	10	Dibenzo(a,h)anthracene	10	Naphthalene	10
Benzo(b)fluoranthene	10	Fluoranthene	10	Phenanthrene	10
Benzo(k)fluoranthene	10	Fluorene	10	Pyrene	10

* - Standard for naphthalene includes monomethylnaphthalenes

NS = Not sampled

ND = Not detected

NA = Not analyzed

TP = WQCC toxic pollutant

3031/PAH/MW-17.WQ2

MW-1

Brickland Refinery Site

Quarterly Analytical Results

(All results in ug/l)

Parameter	WQCC Std.	12/08/93	3/23/94	6/27/94	09/27/94	12/13/94		
<u>Phenols</u>								
2,4,6-Trichlorophenol	TP	NS	ND	ND	ND	ND		
2,4-Dichlorophenol	TP	NS	ND	ND	ND	ND		
2,4-Dimethylphenol	None	NS	ND	ND	ND	ND		
2,4-Dinitrophenol	TP	NS	ND	ND	ND	ND		
2-Chlorophenol	None	NS	ND	ND	ND	ND		
2-Nitrophenol	None	NS	ND	ND	ND	ND		
4,6-Dinitro-2-methylphen	None	NS	ND	ND	ND	ND		
4-Chloro-3-methylphenol	None	NS	ND	ND	ND	ND		
4-Nitrophenol	None	NS	ND	ND	ND	ND		
Pentachlorophenol	TP	NS	ND	ND	ND	ND		
Phenol	5	NS	ND	ND	ND	ND		

Detection Limits (ug/l):

2,4,6-Trichlorophenol	10	2-Nitrophenol	10	NS = Not sampled
2,4-Dichlorophenol	10	4,6-Dinitro-2-methylphenol	50	NA = Not analyzed
2,4-Dimethylphenol	10	4-Chloro-3-methylphenol	10	ND = Not detected
2,4-Dinitrophenol	50	4-Nitrophenol	50	TP = WQCC toxic pollutant
2-Chlorophenol	10	Pentachlorophenol	50	
		Phenol	10	

MW-2
Brickland Refinery Site
Quarterly Analytical Results
 (All results in ug/l)

Parameter	WQCC Std.	12/08/93	3/23/94	06/28/94	09/27/94	12/13/94		
<u>Phenols</u>								
2,4,6-Trichlorophenol	TP	NS	ND	ND	ND	ND		
2,4-Dichlorophenol	TP	NS	ND	ND	ND	ND		
2,4-Dimethylphenol	None	NS	ND	ND	ND	ND		
2,4-Dinitrophenol	TP	NS	ND	ND	ND	ND		
2-Chlorophenol	None	NS	ND	ND	ND	ND		
2-Nitrophenol	None	NS	ND	ND	ND	ND		
4,6-Dinitro-2-methylphen	None	NS	ND	ND	ND	ND		
4-Chloro-3-methylphenol	None	NS	ND	ND	ND	ND		
4-Nitrophenol	None	NS	ND	ND	ND	ND		
Pentachlorophenol	TP	NS	ND	ND	ND	ND		
Phenol	5	NS	ND	ND	ND	ND		

Detection Limits (ug/l):

2,4,6-Trichlorophenol	10	2-Nitrophenol	10	NS = Not sampled
2,4-Dichlorophenol	10	4,6-Dinitro-2-methylphenol	50	NA = Not analyzed
2,4-Dimethylphenol	10	4-Chloro-3-methylphenol	10	ND = Not detected
2,4-Dinitrophenol	50	4-Nitrophenol	50	TP = WQCC toxic pollutant
2-Chlorophenol	10	Pentachlorophenol	50	
		Phenol	10	

3031/Phenol/MW-2P.WQ2

MW-3S

Brickland Refinery Site

Quarterly Analytical Results

(All results in ug/l)

Parameter	WQCC Std.	12/08/93	3/25/94	6/27/94	09/27/94	12/13/94		
<u>Phenols</u>								
2,4,6-Trichlorophenol	TP	NS	ND	ND	ND	ND		
2,4-Dichlorophenol	TP	NS	ND	ND	ND	ND		
2,4-Dimethylphenol	None	NS	ND	ND	ND	ND		
2,4-Dinitrophenol	TP	NS	ND	ND	ND	ND		
2-Chlorophenol	None	NS	ND	ND	ND	ND		
2-Nitrophenol	None	NS	ND	ND	ND	ND		
4,6-Dinitro-2-methylphen	None	NS	ND	ND	ND	ND		
4-Chloro-3-methylphenol	None	NS	ND	ND	ND	ND		
4-Nitrophenol	None	NS	ND	ND	ND	ND		
Pentachlorophenol	TP	NS	ND	ND	ND	ND		
Phenol	5	NS	ND	ND	ND	ND		

Detection Limits (ug/l):

2,4,6-Trichlorophenol	10	2-Nitrophenol	10	NS = Not sampled
2,4-Dichlorophenol	10	4,6-Dinitro-2-methylphenol	50	NA = Not analyzed
2,4-Dimethylphenol	10	4-Chloro-3-methylphenol	10	ND = Not detected
2,4-Dinitrophenol	50	4-Nitrophenol	50	TP = WQCC toxic pollutant
2-Chlorophenol	10	Pentachlorophenol	50	
		Phenol	10	

3031/Phenol/MW-3SP.WQ2

MW-3D
Brickland Refinery Site
Quarterly Analytical Results
 (All results in ug/l)

Parameter	WQCC Std.	12/08/93	3/23/94	07/12/94	09/28/94	12/13/94		
<u>Phenols</u>								
2,4,6-Trichlorophenol	TP	NS	ND	ND	ND	ND		
2,4-Dichlorophenol	TP	NS	ND	ND	ND	ND		
2,4-Dimethylphenol	None	NS	ND	ND	ND	ND		
2,4-Dinitrophenol	TP	NS	ND	ND	ND	ND		
2-Chlorophenol	None	NS	ND	ND	ND	ND		
2-Nitrophenol	None	NS	ND	ND	ND	ND		
4,6-Dinitro-2-methylphen	None	NS	ND	ND	ND	ND		
4-Chloro-3-methylphenol	None	NS	ND	ND	ND	ND		
4-Nitrophenol	None	NS	ND	ND	ND	ND		
Pentachlorophenol	TP	NS	ND	ND	ND	ND		
Phenol	5	NS	ND	ND	ND	ND		

Detection Limits (ug/l):

2,4,6-Trichlorophenol	10	2-Nitrophenol	10	NS = Not sampled
2,4-Dichlorophenol	10	4,6-Dinitro-2-methylphenol	50	NA = Not analyzed
2,4-Dimethylphenol	10	4-Chloro-3-methylphenol	10	ND = Not detected
2,4-Dinitrophenol	50	4-Nitrophenol	50	TP = WQCC toxic pollutant
2-Chlorophenol	10	Pentachlorophenol	50	
		Phenol	10	

3031/Phenol/MW-3DP.WQ2

MW-4
Brickland Refinery Site
Quarterly Analytical Results
 (All results in ug/l)

Parameter	WQCC Std.	12/08/93	3/23/94	06/27/94	09/27/94	12/13/94		
<u>Phenols</u>								
2,4,6-Trichlorophenol	TP	NS	ND,ND	ND	ND	ND		
2,4-Dichlorophenol	TP	NS	ND,ND	ND	ND	ND		
2,4-Dimethylphenol	None	NS	ND,ND	ND	ND	ND		
2,4-Dinitrophenol	TP	NS	ND,ND	ND	ND	ND		
2-Chlorophenol	None	NS	ND,ND	ND	ND	ND		
2-Nitrophenol	None	NS	ND,ND	ND	ND	ND		
4,6-Dinitro-2-methylphen	None	NS	ND,ND	ND	ND	ND		
4-Chloro-3-methylphenol	None	NS	ND,ND	ND	ND	ND		
4-Nitrophenol	None	NS	ND,ND	ND	ND	ND		
Pentachlorophenol	TP	NS	ND,ND	ND	ND	ND		
Phenol	5	NS	ND,ND	ND	ND	18		

Detection Limits (ug/l):

2,4,6-Trichlorophenol	10	2-Nitrophenol	10	NS = Not sampled
2,4-Dichlorophenol	10	4,6-Dinitro-2-methylphenol	50	NA = Not analyzed
2,4-Dimethylphenol	10	4-Chloro-3-methylphenol	10	ND = Not detected
2,4-Dinitrophenol	50	4-Nitrophenol	50	TP = WQCC toxic pollutant
2-Chlorophenol	10	Pentachlorophenol	50	
		Phenol	10	

3031/Phenol/MW-4P.WQ2

MW-5
Brickland Refinery Site
Quarterly Analytical Results
 (All results in ug/l)

Parameter	WQCC Std.	12/08/93	3/24/94	6/27/94	9/27/94	12/13/94		
<u>Phenols</u>								
2,4,6-Trichlorophenol	TP	NS	ND	ND	ND	ND		
2,4-Dichlorophenol	TP	NS	ND	ND	ND	ND		
2,4-Dimethylphenol	None	NS	16	ND	ND	ND		
2,4-Dinitrophenol	TP	NS	ND	ND	ND	ND		
2-Chlorophenol	None	NS	ND	ND	ND	ND		
2-Nitrophenol	None	NS	ND	ND	ND	ND		
4,6-Dinitro-2-methylphen	None	NS	ND	ND	ND	ND		
4-Chloro-3-methylphenol	None	NS	ND	ND	ND	ND		
4-Nitrophenol	None	NS	ND	ND	ND	ND		
Pentachlorophenol	TP	NS	ND	ND	ND	ND		
Phenol	5	NS	ND	ND	ND	ND		

Detection Limits (ug/l):

2,4,6-Trichlorophenol	10	2-Nitrophenol	10	NS = Not sampled
2,4-Dichlorophenol	10	4,6-Dinitro-2-methylphenol	50	NA = Not analyzed
2,4-Dimethylphenol	10	4-Chloro-3-methylphenol	10	ND = Not detected
2,4-Dinitrophenol	50	4-Nitrophenol	50	TP = WQCC toxic pollutant
2-Chlorophenol	10	Pentachlorophenol	50	
		Phenol	10	

3031/Phenol/MW-5P.WQ2

MW-6S
Brickland Refinery Site
Quarterly Analytical Results
 (All results in ug/l)

Parameter	WQCC Std.	12/08/93	3/25/94	06/27/94	09/28/94	12/13/94		
<u>Phenols</u>								
2,4,6-Trichlorophenol	TP	NS	ND	ND	ND	ND		
2,4-Dichlorophenol	TP	NS	ND	ND	ND	ND		
2,4-Dimethylphenol	None	NS	ND	ND	ND	ND		
2,4-Dinitrophenol	TP	NS	ND	ND	ND	ND		
2-Chlorophenol	None	NS	ND	ND	ND	ND		
2-Nitrophenol	None	NS	ND	ND	ND	ND		
4,6-Dinitro-2-methylphen	None	NS	ND	ND	ND	ND		
4-Chloro-3-methylphenol	None	NS	ND	ND	ND	ND		
4-Nitrophenol	None	NS	ND	ND	ND	ND		
Pentachlorophenol	TP	NS	ND	ND	ND	ND		
Phenol	5	NS	ND	ND	ND	ND		

Detection Limits (ug/l):

2,4,6-Trichlorophenol	10	2-Nitrophenol	10	NS = Not sampled
2,4-Dichlorophenol	10	4,6-Dinitro-2-methylphenol	50	NA = Not analyzed
2,4-Dimethylphenol	10	4-Chloro-3-methylphenol	10	ND = Not detected
2,4-Dinitrophenol	50	4-Nitrophenol	50	TP = WQCC toxic pollutant
2-Chlorophenol	10	Pentachlorophenol	50	
		Phenol	10	

3031/Phenol/MW-6SP.WQ2

MW-6D
Brickland Refinery Site
Quarterly Analytical Results
 (All results in ug/l)

Parameter	WQCC Std.	12/08/93	3/23/94	06/27/94	09/28/94	12/13/94		
<u>Phenols</u>								
2,4,6-Trichlorophenol	TP	NS	ND	ND	ND	ND		
2,4-Dichlorophenol	TP	NS	ND	ND	ND	ND		
2,4-Dimethylphenol	None	NS	ND	ND	ND	ND		
2,4-Dinitrophenol	TP	NS	ND	ND	ND	ND		
2-Chlorophenol	None	NS	ND	ND	ND	ND		
2-Nitrophenol	None	NS	ND	ND	ND	ND		
4,6-Dinitro-2-methylphen	None	NS	ND	ND	ND	ND		
4-Chloro-3-methylphenol	None	NS	ND	ND	ND	ND		
4-Nitrophenol	None	NS	ND	ND	ND	ND		
Pentachlorophenol	TP	NS	ND	ND	ND	ND		
Phenol	5	NS	ND	ND	ND	ND		

Detection Limits (ug/l):								
2,4,6-Trichlorophenol	10	2-Nitrophenol	10	NS = Not sampled				
2,4-Dichlorophenol	10	4,6-Dinitro-2-methylphenol	50	NA = Not analyzed				
2,4-Dimethylphenol	10	4-Chloro-3-methylphenol	10	ND = Not detected				
2,4-Dinitrophenol	50	4-Nitrophenol	50	TP = WQCC toxic pollutant				
2-Chlorophenol	10	Pentachlorophenol	50					
		Phenol	10					

3031/Phenol/MW-6DP.WQ2

MW-7

Brickland Refinery Site

Quarterly Analytical Results

(All results in ug/l)

Parameter	WQCC Std.	12/08/93	3/24/94	06/27/94	09/27/94	12/13/94		
<u>Phenols</u>								
2,4,6-Trichlorophenol	TP	NS	ND	ND	ND	ND		
2,4-Dichlorophenol	TP	NS	ND	ND	ND	ND		
2,4-Dimethylphenol	None	NS	ND	ND	ND	ND		
2,4-Dinitrophenol	TP	NS	ND	ND	ND	ND		
2-Chlorophenol	None	NS	ND	ND	ND	ND		
2-Nitrophenol	None	NS	ND	ND	ND	ND		
4,6-Dinitro-2-methylphen	None	NS	ND	ND	ND	ND		
4-Chloro-3-methylphenol	None	NS	ND	ND	ND	ND		
4-Nitrophenol	None	NS	ND	ND	ND	ND		
Pentachlorophenol	TP	NS	ND	ND	ND	ND		
Phenol	5	NS	ND	ND	ND	ND		

Detection Limits (ug/l):

2,4,6-Trichlorophenol	10	2-Nitrophenol	10	NS = Not sampled
2,4-Dichlorophenol	10	4,6-Dinitro-2-methylphenol	50	NA = Not analyzed
2,4-Dimethylphenol	10	4-Chloro-3-methylphenol	10	ND = Not detected
2,4-Dinitrophenol	50	4-Nitrophenol	50	TP = WQCC toxic pollutant
2-Chlorophenol	10	Pentachlorophenol	50	
		Phenol	10	

3031/Phenol/MW-7P.WQ2

MW-8
Brickland Refinery Site
Quarterly Analytical Results
 (All results in ug/l)

Parameter	WQCC Std.	12/08/93	3/24/94	06/27/94	09/27/94	12/13/94		
<u>Phenols</u>								
2,4,6-Trichlorophenol	TP	NS	ND	ND	ND	ND		
2,4-Dichlorophenol	TP	NS	ND	ND	ND	ND		
2,4-Dimethylphenol	None	NS	96	56	110	ND		
2,4-Dinitrophenol	TP	NS	ND	ND	ND	ND		
2-Chlorophenol	None	NS	ND	ND	ND	ND		
2-Nitrophenol	None	NS	ND	ND	ND	ND		
4,6-Dinitro-2-methylphen	None	NS	ND	ND	ND	ND		
4-Chloro-3-methylphenol	None	NS	ND	ND	ND	ND		
4-Nitrophenol	None	NS	ND	ND	ND	ND		
Pentachlorophenol	TP	NS	ND	ND	ND	ND		
Phenol	5	NS	ND	110	ND	ND		

Detection Limits (ug/l):

2,4,6-Trichlorophenol	10	2-Nitrophenol	10	NS = Not sampled
2,4-Dichlorophenol	10	4,6-Dinitro-2-methylphenol	50	NA = Not analyzed
2,4-Dimethylphenol	10	4-Chloro-3-methylphenol	10	ND = Not detected
2,4-Dinitrophenol	50	4-Nitrophenol	50	TP = WQCC toxic pollutant
2-Chlorophenol	10	Pentachlorophenol	50	
		Phenol	10	

3031/Phenol/MW-8P.WQ2

MW-9S
Brickland Refinery Site
Quarterly Analytical Results
 (All results in ug/l)

Parameter	WQCC Std.	12/08/93	3/25/94	6/27/94	9/27/94	12/13/94		
<u>Phenols</u>								
2,4,6-Trichlorophenol	TP	NS	ND	ND	ND	ND		
2,4-Dichlorophenol	TP	NS	ND	ND	ND	ND		
2,4-Dimethylphenol	None	NS	ND	ND	ND	ND		
2,4-Dinitrophenol	TP	NS	ND	ND	ND	ND		
2-Chlorophenol	None	NS	ND	ND	ND	ND		
2-Nitrophenol	None	NS	ND	ND	ND	ND		
4,6-Dinitro-2-methylphen	None	NS	ND	ND	ND	ND		
4-Chloro-3-methylphenol	None	NS	ND	ND	ND	ND		
4-Nitrophenol	None	NS	ND	ND	ND	ND		
Pentachlorophenol	TP	NS	ND	ND	ND	ND		
Phenol	5	NS	ND	ND	ND	ND		

Detection Limits (ug/l):

2,4,6-Trichlorophenol	10	2-Nitrophenol	10	NS = Not sampled
2,4-Dichlorophenol	10	4,6-Dinitro-2-methylphenol	50	NA = Not analyzed
2,4-Dimethylphenol	10	4-Chloro-3-methylphenol	10	ND = Not detected
2,4-Dinitrophenol	50	4-Nitrophenol	50	TP = WQCC toxic pollutant
2-Chlorophenol	10	Pentachlorophenol	50	
		Phenol	10	

3031/Phenol/MW-9SP.WQ2

MW-11
Brickland Refinery Site
Quarterly Analytical Results
 (All results in ug/l)

Parameter	WQCC Std.	12/08/93	3/25/94	06/27/94	09/27/94	12/13/94		
<u>Phenols</u>								
2,4,6-Trichlorophenol	TP	NS	ND	ND	ND	ND		
2,4-Dichlorophenol	TP	NS	ND	ND	ND	ND		
2,4-Dimethylphenol	None	NS	ND	ND	ND	ND		
2,4-Dinitrophenol	TP	NS	ND	ND	ND	ND		
2-Chlorophenol	None	NS	ND	ND	ND	ND		
2-Nitrophenol	None	NS	ND	ND	ND	ND		
4,6-Dinitro-2-methylphen	None	NS	ND	ND	ND	ND		
4-Chloro-3-methylphenol	None	NS	ND	ND	ND	ND		
4-Nitrophenol	None	NS	ND	ND	ND	ND		
Pentachlorophenol	TP	NS	ND	ND	ND	ND		
Phenol	5	NS	ND	ND	ND	ND		

Detection Limits (ug/l):

2,4,6-Trichlorophenol	10	2-Nitrophenol	10	NS = Not sampled
2,4-Dichlorophenol	10	4,6-Dinitro-2-methylphenol	50	NA = Not analyzed
2,4-Dimethylphenol	10	4-Chloro-3-methylphenol	10	ND = Not detected
2,4-Dinitrophenol	50	4-Nitrophenol	50	TP = WQCC toxic pollutant
2-Chlorophenol	10	Pentachlorophenol	50	
		Phenol	10	

3031/Phenol/MW-11P.WQ2

MW-12

Brickland Refinery Site

Quarterly Analytical Results

(All results in ug/l)

Parameter	WQCC Std.	12/08/93	3/23/94	6/27/94	9/27/94	12/13/94		
<u>Phenols</u>								
2,4,6-Trichlorophenol	TP	NS	ND	ND	ND	ND		
2,4-Dichlorophenol	TP	NS	ND	ND	ND	ND		
2,4-Dimethylphenol	None	NS	ND	ND	ND	ND		
2,4-Dinitrophenol	TP	NS	ND	ND	ND	ND		
2-Chlorophenol	None	NS	ND	ND	ND	ND		
2-Nitrophenol	None	NS	ND	ND	ND	ND		
4,6-Dinitro-2-methylphen	None	NS	ND	ND	ND	ND		
4-Chloro-3-methylphenol	None	NS	ND	ND	ND	ND		
4-Nitrophenol	None	NS	ND	ND	ND	ND		
Pentachlorophenol	TP	NS	ND	ND	ND	ND		
Phenol	5	NS	ND	ND	ND	ND		

Detection Limits (ug/l):

2,4,6-Trichlorophenol	10	2-Nitrophenol	10	NS = Not sampled
2,4-Dichlorophenol	10	4,6-Dinitro-2-methylphenol	50	NA = Not analyzed
2,4-Dimethylphenol	10	4-Chloro-3-methylphenol	10	ND = Not detected
2,4-Dinitrophenol	50	4-Nitrophenol	50	TP = WQCC toxic pollutant
2-Chlorophenol	10	Pentachlorophenol	50	
		Phenol	10	

3031/Phenol/MW-12P.WQ2

MW-14
Brickland Refinery Site
Quarterly Analytical Results
 (All results in ug/l)

Parameter	WQCC Std.	06/28/94	09/27/94	12/13/94				
<u>Phenols</u>								
2,4,6-Trichlorophenol	TP	ND	ND	ND				
2,4-Dichlorophenol	TP	ND	ND	ND				
2,4-Dimethylphenol	None	ND	ND	ND				
2,4-Dinitrophenol	TP	ND	ND	ND				
2-Chlorophenol	None	ND	ND	ND				
2-Nitrophenol	None	ND	ND	ND				
4,6-Dinitro-2-methylphen	None	ND	ND	ND				
4-Chloro-3-methylphenol	None	ND	ND	ND				
4-Nitrophenol	None	ND	ND	ND				
Pentachlorophenol	TP	ND	ND	ND				
Phenol	5	300	20	54				

Detection Limits (ug/l):

2,4,6-Trichlorophenol	10	2-Nitrophenol	10	NS = Not sampled
2,4-Dichlorophenol	10	4,6-Dinitro-2-methylphenol	50	NA = Not analyzed
2,4-Dimethylphenol	10	4-Chloro-3-methylphenol	10	ND = Not detected
2,4-Dinitrophenol	50	4-Nitrophenol	50	TP = WQCC toxic pollutant
2-Chlorophenol	10	Pentachlorophenol	50	
		Phenol	10	

3031/Phenol/MW-14P.WQ2

MW-15
Brickland Refinery Site
Quarterly Analytical Results
 (All results in ug/l)

Parameter	WQCC Std.	06/28/94	09/27/94	12/13/94			
<u>Phenols</u>							
2,4,6-Trichlorophenol	TP	ND	ND	ND			
2,4-Dichlorophenol	TP	ND	ND	ND			
2,4-Dimethylphenol	None	ND	ND	ND			
2,4-Dinitrophenol	TP	ND	ND	ND			
2-Chlorophenol	None	ND	ND	ND			
2-Nitrophenol	None	ND	ND	ND			
4,6-Dinitro-2-methylphen	None	ND	ND	ND			
4-Chloro-3-methylphenol	None	ND	ND	ND			
4-Nitrophenol	None	ND	ND	ND			
Pentachlorophenol	TP	ND	ND	ND			
Phenol	5	ND	ND	ND			

Detection Limits (ug/l):

2,4,6-Trichlorophenol	10	2-Nitrophenol	10	NS = Not sampled
2,4-Dichlorophenol	10	4,6-Dinitro-2-methylphenol	50	NA = Not analyzed
2,4-Dimethylphenol	10	4-Chloro-3-methylphenol	10	ND = Not detected
2,4-Dinitrophenol	50	4-Nitrophenol	50	TP = WQCC toxic pollutant
2-Chlorophenol	10	Pentachlorophenol	50	
		Phenol	10	

3031/Phenol/MW-15P.WQ2

MW-16
Brickland Refinery Site
Quarterly Analytical Results
 (All results in ug/l)

Parameter	WQCC Std.	07/12/94	09/27/94	12/13/94				
<u>Phenols</u>								
2,4,6-Trichlorophenol	TP	ND,ND	ND	ND				
2,4-Dichlorophenol	TP	ND,ND	ND	ND				
2,4-Dimethylphenol	None	ND,ND	ND	ND				
2,4-Dinitrophenol	TP	ND,ND	ND	ND				
2-Chlorophenol	None	ND,ND	ND	ND				
2-Nitrophenol	None	ND,ND	ND	ND				
4,6-Dinitro-2-methylphen	None	ND,ND	ND	ND				
4-Chloro-3-methylphenol	None	ND,ND	ND	ND				
4-Nitrophenol	None	ND,ND	ND	ND				
Pentachlorophenol	TP	ND,ND	ND	ND				
Phenol	5	ND,ND	ND	ND				

Detection Limits (ug/l):

2,4,6-Trichlorophenol	10	2-Nitrophenol	10	NS = Not sampled
2,4-Dichlorophenol	10	4,6-Dinitro-2-methylphenol	50	NA = Not analyzed
2,4-Dimethylphenol	10	4-Chloro-3-methylphenol	10	ND = Not detected
2,4-Dinitrophenol	50	4-Nitrophenol	50	TP = WQCC toxic pollutant
2-Chlorophenol	10	Pentachlorophenol	50	
		Phenol	10	

3031/Phenol/MW-16P.WQ2

MW-17
Brickland Refinery Site
Quarterly Analytical Results
 (All results in ug/l)

Parameter	WQCC Std.	06/28/94	09/27/94	12/13/94				
<u>Phenols</u>								
2,4,6-Trichlorophenol	TP	ND	ND,ND	ND				
2,4-Dichlorophenol	TP	ND	ND,ND	ND				
2,4-Dimethylphenol	None	ND	ND,ND	ND				
2,4-Dinitrophenol	TP	ND	ND,ND	ND				
2-Chlorophenol	None	ND	ND,ND	ND				
2-Nitrophenol	None	ND	ND,ND	ND				
4,6-Dinitro-2-methylphen	None	ND	ND,ND	ND				
4-Chloro-3-methylphenol	None	ND	ND,ND	ND				
4-Nitrophenol	None	ND	ND,ND	ND				
Pentachlorophenol	TP	ND	ND,ND	ND				
Phenol	5	ND	ND,ND	ND				

Detection Limits (ug/l):

2,4,6-Trichlorophenol	10	2-Nitrophenol	10	NS = Not sampled
2,4-Dichlorophenol	10	4,6-Dinitro-2-methylphenol	50	NA = Not analyzed
2,4-Dimethylphenol	10	4-Chloro-3-methylphenol	10	ND = Not detected
2,4-Dinitrophenol	50	4-Nitrophenol	50	TP = WQCC toxic pollutant
2-Chlorophenol	10	Pentachlorophenol	50	
		Phenol	10	

3031/Phenol/MW-17P.WQ2

MW-1

Brickland Refinery Site

Quarterly Analytical Results

(All results in ug/l except TPH)

Parameter	WQCC Std.	12/08/93	03/23/94	07/12/94	09/27/94	12/13/94		
Benzene	10	ND	ND	1.3	ND	ND		
Toluene	750	ND	ND	ND	ND	ND		
Ethyl Benzene	750	ND	ND	ND	ND	ND		
Xylenes	620	ND	ND	ND	ND	ND		
Total Vol. Petroleum Hydrocarbon	None	0.1	ND	NA	NA	NA		

Detection Limits (ug/l):

Benzene 0.5 Ethyl Benzene 0.5 Total Vol. Petroleum 0.1 mg/l
Toluene 0.1 Xylenes 0.5 Hydrocarbons

(All results in mg/l)

Parameter	WQCC Std.	12/08/93	03/23/94	06/27/94	09/27/94	12/13/94		
Calcium	None	NS	109	106	113	86.9		
Magnesium	None	NS	27.2	31.0	31.7	25.8		
Potassium	None	NS	14	13.7	10.6	5.7		
Sodium	None	NS	175	105	135	137		
Bicarbonate	None	NS	456	488	427	464		
Chloride	250	NS	133	39.3	115	116		
Nitrate (N)	10	NS	ND	0.3	ND	0.3		
Sulfate	600	NS	123	150	136	139		

Detection Limits (mg/l):

Calcium 1.0 Bicarbonate 5.0 ND = Not detected
Magnesium 0.5 Chloride 0.5 NS = Not sampled
Potassium 0.1 Nitrate (N) 0.1
Sodium 5.0 Sulfate 10.0

3031/BTEX-TPH/MW-1.WQ2

MW-2

Brickland Refinery Site

Quarterly Analytical Results

(All results in ug/l except TPH)

Parameter	WQCC Std.	12/08/93	03/23/94	07/12/94	09/27/94	12/13/94		
Benzene	10	NS	ND	ND	ND	ND		
Toluene	750	NS	18	ND	ND	ND		
Ethyl Benzene	750	NS	3.2	ND	ND	ND		
Xylenes	620	NS	49	ND	ND	ND		
Total Vol. Petroleum Hydrocarbon	None	NS	0.5	NA	NA	NA		

Detection Limits (ug/l):

Benzene 0.5 Ethyl Benzene 0.5 Total Vol. Petroleum 0.1 mg/l
Toluene 0.5 Xylenes 0.5 Hydrocarbons

(All results in mg/l)

Parameter	WQCC Std.	12/08/93	03/23/94	06/28/94	09/27/94	12/13/94		
Calcium	None	NS	1130	1080	985	950		
Magnesium	None	NS	401	500	470	391		
Potassium	None	NS	72	125	98	37		
Sodium	None	NS	3750	3040	3140	3130		
Bicarbonate	None	NS	728	769	671	688		
Chloride	250	NS	5680	6770	9600	3240		
Nitrate (N)	10	NS	ND	0.3	0.3	0.3		
Sulfate	600	NS	2280	2790	2440	2470		

Detection Limits (mg/l):

Calcium 5 Bicarbonate 5.0
Magnesium 0.5 Chloride 25.0
Potassium 5.0 Nitrate (N) 0.1
Sodium 20 Sulfate 200

ND = Not detected
NS = Not sampled

3031/BTEX-TPH/MW-2.WQ2

MW-3S
Brickland Refinery Site
Quarterly Analytical Results
 (All results in ug/l except TPH)

Parameter	WQCC Std.	12/08/93	03/25/94	07/12/94	09/28/94	12/13/94		
Benzene	10	ND	ND	0.8	ND	ND		
Toluene	750	ND	4.9	ND	ND	ND		
Ethyl Benzene	750	ND	ND	ND	ND	ND		
Xylenes	620	ND	18	ND	ND	ND		
Total Vol. Petroleum Hydrocarbon	None	0.1	ND	NA	NA	NA		

Detection Limits (ug/l):
 Benzene 0.5 Ethyl Benzene 0.5 Total Vol. Petroleum 0.1 mg/l
 Toluene 0.5 Xylenes 0.5 Hydrocarbons

(All results in mg/l)

Parameter	WQCC Std.	12/08/93	03/25/94	06/27/94	09/28/94	12/13/94		
Calcium	None	NS	143	157	97.3	97.7		
Magnesium	None	NS	70.6	75.9	41.9	39.8		
Potassium	None	NS	13.3	28	8.6	8.5		
Sodium	None	NS	1390	1040	1050	985		
Bicarbonate	None	NS	624	756	692	854		
Chloride	250	NS	2030	2630	1240	1250		
Nitrate (N)	10	NS	ND	0.4	0.1	0.3		
Sulfate	600	NS	720	1010	620	573		

Detection Limits (mg/l):
 Calcium 1.0 Bicarbonate 5.0 ND = Not detected
 Magnesium 0.1 Chloride 25.0 NS = Not sampled
 Potassium 0.1 Nitrate (N) 0.1
 Sodium 5 Sulfate 50

MW-3D
Brickland Refinery Site
Quarterly Analytical Results
 (All results in ug/l except TPH)

Parameter	WQCC Std.	12/08/93	03/23/94	07/12/94	09/28/94	12/13/94		
Benzene	10	ND	ND	0.6	ND	ND		
Toluene	750	ND	ND	ND	ND	ND		
Ethyl Benzene	750	ND	ND	ND	ND	ND		
Xylenes	620	ND	ND	ND	ND	ND		
Total Vol. Petroleum Hydrocarbon	None	0.1	ND	NA	NA	NA		

Detection Limits (ug/l):
 Benzene 0.5 Ethyl Benzene 0.5 Total Vol. Petroleum 0.1 mg/l
 Toluene 0.5 Xylenes 0.5 Hydrocarbons

(All results in mg/l)

Parameter	WQCC Std.	12/08/93	03/23/94	06/27/94	09/28/94	12/12/94		
Calcium	None	NS	473	460	396	367		
Magnesium	None	NS	246	220	224	207		
Potassium	None	NS	36	61	21	17		
Sodium	None	NS	3830	2760	3230	3210		
Bicarbonate	None	NS	468	473	460	464		
Chloride	250	NS	4720	6560	4750	4800		
Nitrate (N)	10	NS	ND	0.1	ND	0.7		
Sulfate	600	NS	2630	2550	2330	2270		

Detection Limits (mg/l):
 Calcium 1.0 Bicarbonate 5.0 ND = Not detected
 Magnesium 0.5 Chloride 1.0 NS = Not sampled
 Potassium 5.0 Nitrate (N) 0.1
 Sodium 20 Sulfate 300

MW-6S
Brickland Refinery Site
Quarterly Analytical Results
(All results in ug/l except TPH)

Parameter	WQCC Std.	12/08/93	03/25/94	07/12/94	09/28/94	12/13/94		
Benzene	10	71	74	110	4.8	59		
Toluene	750	ND	ND	ND	2.8	ND		
Ethyl Benzene	750	52	12	30	34	ND		
Xylenes	620	ND	7.6	88	16	ND		
Total Vol. Petroleum Hydrocarbon	None	2.9	1.8	NA	NA	NA		

Detection Limits (ug/l):

Benzene 5 Ethyl Benzene 5 Total Vol. Petroleum 0.1 mg/l
Toluene 5 Xylenes 5 Hydrocarbons

(All results in mg/l)

Parameter	WQCC Std.	12/08/93	03/25/94	06/27/94	09/28/94	12/13/94		
Calcium	None	NS	244	259	155	150		
Magnesium	None	NS	104	101	125	82.3		
Potassium	None	NS	19.4	40	25	14		
Sodium	None	NS	1550	1120	2980	1840		
Bicarbonate	None	NS	1690	2020	2550	2710		
Chloride	250	NS	5280	2090	1650	2180		
Nitrate (N)	10	NS	ND	0.4	ND	ND		
Sulfate	600	NS	505	84	130	209		

Detection Limits (mg/l):

Calcium 1.0 Bicarbonate 5.0 ND = Not detected
Magnesium 0.5 Chloride 1.0 NS = Not sampled
Potassium 5.0 Nitrate (N) 0.1
Sodium 20 Sulfate 40

3031/BTEX-TPH/MW-6S.WQ2

MW-6D
Brickland Refinery Site
Quarterly Analytical Results
(All results in ug/l except TPH)

Parameter	WQCC Std.	12/08/93	03/23/94	07/12/94	09/28/94	12/13/94		
Benzene	10	ND	ND	ND	ND	ND		
Toluene	750	ND	ND	ND	ND	ND		
Ethyl Benzene	750	ND	ND	ND	ND	ND		
Xylenes	620	ND	1.6	ND	ND	ND		
Total Vol. Petroleum Hydrocarbon	None	0.1	ND	NA	NA	NA		

Detection Limits (ug/l):

Benzene 0.5 Ethyl Benzene 0.5 Total Vol. Petroleum 0.1 mg/l
Toluene 0.5 Xylenes 0.5 Hydrocarbons

(All results in mg/l)

Parameter	WQCC Std.	12/08/93	03/23/94	06/27/94	09/28/94	12/13/94		
Calcium	None	NS	510	530	411	379		
Magnesium	None	NS	218	188	190	177		
Potassium	None	NS	25	62	21	16		
Sodium	None	NS	3520	3100	3270	3410		
Bicarbonate	None	NS	475	739	506	525		
Chloride	250	NS	5600	3990	5000	5210		
Nitrate (N)	10	NS	ND	10	ND	1.0		
Sulfate	600	NS	2360	2420	2150	2490		

Detection Limits (mg/l):

Calcium 1.0 Bicarbonate 5.0 ND = Not detected
Magnesium 0.5 Chloride 25.0 NS = Not sampled
Potassium 5.0 Nitrate (N) 0.1
Sodium 20 Sulfate 500

3031/BTEX-TPH/MW-6D.WQ2

MW-7
Brickland Refinery Site
Quarterly Analytical Results
(All results in ug/l except TPH)

Parameter	WQCC Std.	12/08/93	03/24/94	07/12/94	09/27/94	12/13/94		
Benzene	10	NS	31	ND	ND	36		
Toluene	750	NS	ND	ND	ND	ND		
Ethyl Benzene	750	NS	2.1	ND	3.6	ND		
Xylenes	620	NS	0.6	3.2	1.3	ND		
Total Vol. Petroleum Hydrocarbon	None	NS	ND	NA	NA	NA		

Detection Limits (ug/l):

Benzene 0.5 Ethyl Benzene 0.5 Total Vol. Petroleum 0.1 mg/l
Toluene 0.5 Xylenes 0.5 Hydrocarbons

(All results in mg/l)

Parameter	WQCC Std.	12/08/93	03/24/94	06/27/94	09/27/94	12/13/94		
Calcium	None	NS	300	248	320	229		
Magnesium	None	NS	72.3	66.8	73	77.4		
Potassium	None	NS	22.1	37	41.5	15		
Sodium	None	NS	1620	710	1230	1100		
Bicarbonate	None	NS	1320	1330	1300	1500		
Chloride	250	NS	2220	1210	1580	1570		
Nitrate (N)	10	NS	ND	0.3	0.1	5.1		
Sulfate	600	NS	755	575	548	333		

Detection Limits (mg/l):

Calcium 1.0 Bicarbonate 5.0 ND = Not detected
Magnesium 0.5 Chloride 5.0 NS = Not sampled
Potassium 5.0 Nitrate (N) 0.2
Sodium 5.0 Sulfate 30

MW-8
Brickland Refinery Site
Quarterly Analytical Results
 (All results in ug/l except TPH)

Parameter	WQCC Std.	12/08/93	03/24/94	07/12/94	09/27/94	12/13/94		
Benzene	10	NS	9600	2400	13000	5300		
Toluene	750	NS	ND	ND	ND	ND		
Ethyl Benzene	750	NS	ND	ND	ND	ND		
Xylenes	620	NS	720	ND	ND	140		
Total Vol. Petroleum Hydrocarbon	None	NS	ND	NA	NA	NA		

Detection Limits (ug/l):
 Benzene 50 Ethyl Benzene 50 Total Vol. Petroleum 0.1 mg/l
 Toluene 50 Xylenes 50 Hydrocarbons

(All results in mg/l)

Parameter	WQCC Std.	12/08/93	03/24/94	06/27/94	09/27/94	12/13/94		
Calcium	None	NS	46.5	89.9	47.2	60.0		
Magnesium	None	NS	33.9	36.1	38.2	36.4		
Potassium	None	NS	10.2	20.0	29.8	13.1		
Sodium	None	NS	1560	1150	1550	1870		
Bicarbonate	None	NS	2680	2670	2930	2940		
Chloride	250	NS	1210	1380	1450	831		
Nitrate (N)	10	NS	ND	0.5	0.1	5.5		
Sulfate	600	NS	20	60	73	72		

Detection Limits (mg/l):
 Calcium 0.5 Bicarbonate
 Magnesium 0.1 Chloride
 Potassium 0.2 Nitrate (N)
 Sodium 20 Sulfate

ND = Not detected
 NS = Not sampled

MW-9S
Brickland Refinery Site
Quarterly Analytical Results

(All results in ug/l except TPH)

Parameter	WQCC Std.	12/08/93	03/25/94	07/12/94	09/27/94	12/13/94		
Benzene	10	ND	ND	ND	ND	ND		
Toluene	750	ND	ND	ND	ND	ND		
Ethyl Benzene	750	ND	ND	ND	ND	ND		
Xylenes	620	ND	ND	0.6	ND	ND		
Total Vol. Petroleum Hydrocarbon	None	0.1	ND	NA	NA	NA		

Detection Limits (ug/l):

Benzene	0.5	Ethyl Benzene	0.5	Total Vol. Petroleum	0.1 mg/l
Toluene	0.5	Xylenes	0.5	Hydrocarbons	

(All results in mg/l)

Parameter	WQCC Std.	12/08/93	03/25/94	06/27/94	09/27/94	12/13/94		
Calcium	None	NS	305	245	322	255		
Magnesium	None	NS	104	87.3	95.6	88.9		
Potassium	None	NS	13.7	27	32	11		
Sodium	None	NS	1450	1090	1510	1520		
Bicarbonate	None	NS	628	820	830	866		
Chloride	250	NS	1280	1350	1500	1440		
Nitrate (N)	10	NS	ND	1.4	ND	0.4		
Sulfate	600	NS	1800	2010	1760	978		

Detection Limits (mg/l):

Calcium	1.0	Bicarbonate	5.0	ND = Not detected
Magnesium	0.5	Chloride	5.0	NS = Not sampled
Potassium	5.0	Nitrate (N)	0.1	
Sodium	20	Sulfate	100	

MW-11
Brickland Refinery Site
Quarterly Analytical Results
 (All results in ug/l except TPH)

Parameter	WQCC Std.	12/08/93	03/25/94	07/12/94	09/27/94	12/13/94		
Benzene	10	NS	120	ND	15	15		
Toluene	750	NS	0.7	ND	2.3	ND		
Ethyl Benzene	750	NS	4.7	ND	8.9	ND		
Xylenes	620	NS	4.4	ND	9.4	2.5		
Total Vol. Petroleum Hydrocarbon	None	NS	1.0	ND	NA	NA		

Detection Limits (ug/l):
 Benzene 0.5 Ethyl Benzene 0.5 Total Vol. Petroleum 0.1 mg/l
 Toluene 0.5 Xylenes 0.5 Hydrocarbons

(All results in mg/l)

Parameter	WQCC Std.	12/08/93	03/25/94	07/12/94	09/27/94	12/13/94		
Calcium	None	NS	79	116	201	93.4		
Magnesium	None	NS	62.3	69.5	72.2	60.8		
Potassium	None	NS	18.3	29	39.4	12		
Sodium	None	NS	1050	820	950	985		
Bicarbonate	None	NS	1620	1830	2100	1980		
Chloride	250	NS	959	927	792	924		
Nitrate (N)	10	NS	0.2	1.3	0.6	0.2		
Sulfate	600	NS	ND	18	22	35		

Detection Limits (mg/l):
 Calcium 1.0 Bicarbonate 5.0 ND = Not detected
 Magnesium 0.5 Chloride 3.0 NS = Not sampled
 Potassium 5.0 Nitrate (N) 0.1
 Sodium 5.0 Sulfate 20

MW-12
Brickland Refinery Site
Quarterly Analytical Results
 (All results in ug/l except TPH)

Parameter	WQCC Std.	12/08/93	03/23/94	06/27/94	09/27/94	12/13/94		
Benzene	10	ND	ND	1.9	ND	ND		
Toluene	750	ND	ND	ND	ND	ND		
Ethyl Benzene	750	ND	ND	ND	ND	ND		
Xylenes	620	ND	ND	ND	ND	ND		
Total Vol. Petroleum Hydrocarbon	None	0.1	ND	ND	NA	NA		

Detection Limits (ug/l):
 Benzene 0.5 Ethyl Benzene 0.5 Total Vol. Petroleum 0.1 mg/l
 Toluene 0.5 Xylenes 0.5 Hydrocarbons

(All results in mg/l)

Parameter	WQCC Std.	12/08/93	03/23/94	06/27/94	09/27/94	12/13/94		
Calcium	None	NS	1380	910	1380	975		
Magnesium	None	NS	495	380	585	366		
Potassium	None	NS	55	76	104	27		
Sodium	None	NS	4340	3300	4100	4060		
Bicarbonate	None	NS	532	672	512	586		
Chloride	250	NS	8260	7200	8860	14000		
Nitrate (N)	10	NS	ND	0.2	ND	3.1		
Sulfate	600	NS	1920	2350	2140	2490		

Detection Limits (mg/l):
 Calcium 5.0 Bicarbonate
 Magnesium 5.0 Chloride
 Potassium 5.0 Nitrate (N)
 Sodium 20 Sulfate

ND = Not detected
 NS = Not sampled

MW-14
Brickland Refinery Site
Quarterly Analytical Results
(All results in ug/l except TPH)

Parameter	WQCC Std.	07/12/94	09/27/94	12/13/94				
Benzene	10	23000	2900	930				
Toluene	750	ND	ND	ND				
Ethyl Benzene	750	ND	ND	ND				
Xylenes	620	ND	ND	ND				
Total Vol. Petroleum Hydrocarbon	None	NA	NA	NA				

Detection Limits (ug/l):
Benzene 10 Ethyl Benzene 10 Total Vol. Petroleum 0.1 mg/l
Toluene 10 Xylenes 10 Hydrocarbons

(All results in mg/l)

Parameter	WQCC Std.	07/12/94	09/27/94	12/13/94				
Calcium	None	165	625	413				
Magnesium	None	81.3	154	154				
Potassium	None	11.4	42	19				
Sodium	None	730	1800	1720				
Bicarbonate	None	1490	1160	1510				
Chloride	250	910	3190	2430				
Nitrate (N)	10	ND	ND	ND				
Sulfate	600	200	986	1460				

Detection Limits (mg/l):
Calcium 1.0 Bicarbonate 5.0 ND = Not detected
Magnesium 0.5 Chloride 25 NS = Not sampled
Potassium 5.0 Nitrate (N) 0.1
Sodium 20 Sulfate 5.0

MW-15
Brickland Refinery Site
Quarterly Analytical Results
 (All results in ug/l except TPH)

Parameter	WQCC Std.	06/28/94	09/27/94	12/13/94				
Benzene	10	34	270	290				
Toluene	750	ND	ND	ND				
Ethyl Benzene	750	13	21	ND				
Xylenes	620	13	60	ND				
Total Vol. Petroleum Hydrocarbon	None	NA	NA	NA				

Detection Limits (ug/l):
 Benzene 10 Ethyl Benzene 10 Total Vol. Petroleum 0.1 mg/l
 Toluene 10 Xylenes 10 Hydrocarbons

(All results in mg/l)

Parameter	WQCC Std.	07/12/94	09/27/94	12/13/94				
Calcium	None	57.7	99.1	68.5				
Magnesium	None	16.4	16.8	18				
Potassium	None	23	23.1	11				
Sodium	None	458	950	1290				
Bicarbonate	None	723	2420	2700				
Chloride	250	436	442	379				
Nitrate (N)	10	ND	0.2	0.2				
Sulfate	600	294	142	92				

Detection Limits (mg/l):
 Calcium 0.5 Bicarbonate 5.0 ND = Not detected
 Magnesium 0.1 Chloride 2.5 NS = Not sampled
 Potassium 5.0 Nitrate (N) 0.1
 Sodium 20 Sulfate 10

MW-16
Brickland Refinery Site
Quarterly Analytical Results
 (All results in ug/l except TPH)

Parameter	WQCC Std.	06/28/94	09/27/94	12/13/94				
Benzene	10	ND,ND	ND	ND				
Toluene	750	ND,ND	ND	ND				
Ethyl Benzene	750	ND,ND	ND	ND				
Xylenes	620	2,11	ND	ND				
Total Vol. Petroleum Hydrocarbon	None	NA	NA	NA				

Detection Limits (ug/l):
 Benzene 0.5 Ethyl Benzene 0.5 Total Vol. Petroleum 0.1 mg/l
 Toluene 0.5 Xylenes 0.5 Hydrocarbons

(All results in mg/l)

Parameter	WQCC Std.	07/12/94	09/27/94	12/13/94				
Calcium	None	237,243	261	224				
Magnesium	None	96.7,99.5	108	98.3				
Potassium	None	35,30	33.5	15				
Sodium	None	1500,1490	1510	1870				
Bicarbonate	None	1100,1090	1130	1160				
Chloride	250	1910,1870	1950	1980				
Nitrate (N)	10	ND,ND	0.9	ND				
Sulfate	600	1510,1780	2340	1840				

Detection Limits (mg/l):
 Calcium 1.0 Bicarbonate 5.0 ND = Not detected
 Magnesium 0.5 Chloride 10 NS = Not sampled
 Potassium 5.0 Nitrate (N) 0.1
 Sodium 20 Sulfate 200

MW-17

Brickland Refinery Site

Quarterly Analytical Results

(All results in ug/l except TPH)

Parameter	WQCC Std.	06/28/94	09/27/94	12/13/94				
Benzene	10	17	46,68	460				
Toluene	750	ND	21,25	ND				
Ethyl Benzene	750	19	35,41	10				
Xylenes	620	30	8,9,2	10				
Total Vol. Petroleum Hydrocarbon	None	NA	NA	NA				

Detection Limits (ug/l):

Benzene	5.0	Ethyl Benzene	5.0	Total Vol. Petroleum	0.1 mg/l
Toluene	5.0	Xylenes	5.0	Hydrocarbons	

(All results in mg/l)

Parameter	WQCC Std.	06/28/94	09/27/94	12/13/94				
Calcium	None	218	241,237	278				
Magnesium	None	63.8	77,76.3	80				
Potassium	None	38	36,4,36.7	13				
Sodium	None	610	136,800	2090				
Bicarbonate	None	1100	1590,1650	1700				
Chloride	250	1350	2110,1930	2430				
Nitrate (N)	10	0.3	0.1,ND	ND				
Sulfate	600	318	239,198	407				

Detection Limits (mg/l):

Calcium	1.0	Bicarbonate	5.0	ND = Not detected
Magnesium	0.5	Chloride	15	NS = Not sampled
Potassium	5.0	Nitrate (N)	0.1	
Sodium	20	Sulfate	40	

RECEIVED JAN 0 6 1995



CORE LABORATORIES

95 MAR 8 AM 8 52

CORE LABORATORIES
ANALYTICAL REPORT

Job Number: 943142

Prepared For:

GEOSCIENCE CONSULTANTS, LTD.

505 MARQUETTE NW, SUITE 1100
ALBUQUERQUE, NM 87102

Date: 01/03/95

Linda L. Benkers
Signature

1-3-95
Date:

Name: Linda L. Benkers

Core Laboratories
10703 East Bethany Drive
Aurora, CO 80014

Title: QA/QC COORDINATOR



Environmental Science
and Engineering
A BDM International Company

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☐ NASA-WSTF
PO Drawer MM
Las Cruces, NM 88004
(505) 524-5353
FAX: (505) 524-5315

No 9083

Chain of Custody

Date 12/13/94 Page 1 Of 1

Lab Name <u>CORE LABORATORIES</u>		Address <u>10703 East Bethany Drive</u>		Telephone <u>303/751-1780</u>		Aurora, CO 80014-2696	
Sample Number		Matrix	Location	Analysis Request			
9412131240	H2O	MW-12		Halogenated Volatiles 601/6010	602/6020 Aromatic Volatiles Phenols, Sub Phenols 604/6040	Pesticides/PCB 608/6080	Polyaromatic Aromatic Hydrocarbons 610/6310
9412131315	H2O	MW-1		GC/MS 624/8240	Base/Neu/Acid Compounds GC/MS 624/8240	Total Organic Carbon GC/MS 624/8240	Total Organic Halides (TOX) 9020
9412131350	H2O	MW-15		Petroleum Hydrocarbons 418.1	TPH/BTEX Modified 8015	TCLP - Vol., Semi-Vol. Herbicides, Pesticides	TCLP - Metals
9412131425	H2O	MW-35		RCRA Metals(9)	Priority Pollutant Metals (13)	CAM Metals (18) TLC/STLC	Flash Point
9412131445	H2O	MW-3d		Corrosivity	Reactivity	Oil & Grease	Cyanide Total/Amenable
9412131525	H2O	MW-65		Chemical Oxygen Demand (COD)	WQC METALS	Hg, Pb, Mn, Ni, K (Total Metals)	Number of Containers
9412131550	H2O	MW-6d					
9412131620	H2O	MW-9d					
9412131625	H2O	Trip Blank					
9412131630	H2O	Trip Blank					

Project Information		Sample Receipt	
Project <u>REXENE</u>	Total No. of Containers <u>50</u>	Relinquished By <u>D. NEE</u>	Relinquished By <u>DAVID NEE</u>
Project Director <u>TRENT</u>	Chain of Custody Seals <u>OK</u>	(Signature)	(Signature)
Charge Code No. <u>3031.006</u>	Rec'd Good Condition/Cold <u>OK</u>	(Date) <u>12/13/94</u>	(Date) <u>12/13/94</u>
Shipping ID. No. <u>3232867186</u>	Conforms to Record <u>OK</u>	(Printed Name)	(Printed Name)
Via: <u>FED X</u>	Lab No. <u>943142</u>	(Company)	(Company)
Special Instructions/Comments:		Received By <u>DAVID NEE</u>	Received By <u>DAVID NEE</u>
		(Signature)	(Signature)
		(Date)	(Date)
		(Company)	(Company)



CORE LABORATORIES

SAMPLE DELIVERY GROUP NARRATIVE

December 28, 1994

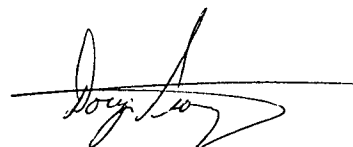
Customer: Geoscience Consultants, Ltd.
Project: Rexene COC #9083
Core Laboratories Project Number: 943142

On 12-14-94 Core Laboratories received samples for analysis. The following information is pertinent to the interpretation of the data package.

Method 8270 Semivolatile Analysis:

Due to a matrix interference present in these samples, 2 of 6 internal standards had low recoveries for sample 9412131525. Samples 9412131350 and 9412131620 had 1 of 6 internal standards recovered low. These samples were reanalyzed with similar results. The method blank extracted with these samples was spilled during extract concentration. The samples could not be re-extracted due to available sample quantity. A spike blank (SB) and spike blank duplicate (SBD) was analyzed with these samples. The SB and SBD had acceptable percent recoveries for all eleven compounds. Relative percent difference criteria was exceeded for 2 of 11 compounds.


Linda L. Benkers
QA/QC Coordinator


Douglas Georgic
Laboratory Supervisor



CORE LABORATORIES

LABORATORY TESTS RESULTS 01/03/95

JOB NUMBER: 943142

CUSTOMER: GEOSCIENCE CONSULTANTS, LTD.

ATTN:

CLIENT I.D.: REXENE COC#9083

DATE SAMPLED: 12/13/94

TIME SAMPLED: 12:40

WORK DESCRIPTION: 9412131240

LABORATORY I.D.: 943142-0001

DATE RECEIVED: 12/14/94

TIME RECEIVED: 10:45

REMARKS: MW-12

TEST DESCRIPTION	FINAL RESULT	LIMITS/*DILUTION	UNITS OF MEASURE	TEST METHOD	DATE	TECHN
Bicarbonate (Unfilt.)	586	5	mg/L	2320 B (3)	12/22/94	KDS
Chloride (Unfilt.)	14000	50	mg/L	325.2 (1)	12/29/94	DME
Nitrogen, Nitrate (Unfilt.)	3.1	0.1	mg/L (as N)	353.2 (1)	12/14/94	DME
Sulfate (Unfilt.)	2490	200	mg/L	375.2 (1)	12/29/94	DME
Aluminum, Diss. (Al)	0.08	0.05	mg/L	6010 (2)	12/28/94	WGL
Arsenic, Diss. (As)	<0.05	0.05	mg/L	6010 (2)	12/28/94	WGL
Barium, Diss. (Ba)	0.03	0.01	mg/L	6010 (2)	12/28/94	WGL
Cadmium, Diss. (Cd)	<0.005	0.005	mg/L	6010 (2)	12/28/94	WGL
Calcium, Total (Ca)	975	5	mg/L	6010 (2)	12/29/94	GEF
Chromium, Diss. (Cr)	<0.01	0.01	mg/L	6010 (2)	12/28/94	WGL
Cobalt, Diss. (Co)	<0.03	0.03	mg/L	6010 (2)	12/28/94	WGL
Copper, Diss. (Cu)	0.02	0.01	mg/L	6010 (2)	12/28/94	WGL
Iron, Diss. (Fe)	1.10	0.03	mg/L	6010 (2)	12/28/94	WGL
Lead, Diss. (Pb)	<0.05	0.05	mg/L	6010 (2)	12/28/94	WGL
Mercury, Total (Hg)	<0.0002	0.0002	mg/L	7470 (2)	12/22/94	BPB
Magnesium, Total (Mg)	366	0.5	mg/L	6010 (2)	12/29/94	GEF
Manganese, Diss. (Mn)	6.18	0.01	mg/L	6010 (2)	12/28/94	WGL
Molybdenum, Diss. (Mo)	<0.05	0.05	mg/L	6010 (2)	12/28/94	WGL
Nickel, Diss. (Ni)	<0.04	0.04	mg/L	6010 (2)	12/28/94	WGL
Potassium, Total (K)	27	5	mg/L	6010 (2)	12/29/94	GEF
Selenium, Diss. (Se)	<0.1	0.1	mg/L	6010 (2)	12/28/94	WGL
Silver, Diss. (Ag)	<0.01	0.01	mg/L	6010 (2)	12/28/94	WGL
Sodium, Total (Na)	4060	20	mg/L	6010 (2)	12/29/94	GEF

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CORE LABORATORIES

LABORATORY TESTS RESULTS

01/03/95

JOB NUMBER: 943142

CUSTOMER: GEOSCIENCE CONSULTANTS, LTD.

ATTN:

CLIENT I.D.: REXENE COC#9083

DATE SAMPLED: 12/13/94

TIME SAMPLED: 12:40

WORK DESCRIPTION: 9412131240

LABORATORY I.D.: 943142-0001

DATE RECEIVED: 12/14/94

TIME RECEIVED: 10:45

REMARKS: MW-12

TEST DESCRIPTION	FINAL RESULT	LIMITS/*DILUTION	UNITS OF MEASURE	TEST METHOD	DATE	TECHN
Zinc, Diss. (Zn)	<0.01	0.01	mg/L	6010 (2)	12/28/94	WGL
8020 - AROMATIC VOLATILE ORGANICS		*1		8020 (2)	12/16/94	JHT
Benzene	ND	0.5	ug/L			
Toluene	ND	0.5	ug/L			
Ethyl benzene	ND	0.5	ug/L			
Xylenes	ND	0.5	ug/L			
4-Bromofluorobenzene (Surrogate)	102	0	% Recovery	85-115% Limit		
Time Analyzed	2027	0				
PAH AND PHENOLS LIST BY 8270		*1		8270 (2)	12/22/94	JMC
Acenaphthene	ND	10	ug/L			
Acenaphthylene	ND	10	ug/L			
Anthracene	ND	10	ug/L			
Benzo(a)anthracene	ND	10	ug/L			
Benzo(b)fluoranthene	ND	10	ug/L			
Benzo(k)fluoranthene	ND	10	ug/L			
Benzo(ghi)perylene	ND	10	ug/L			
Benzo(a)pyrene	ND	10	ug/L			
Chrysene	ND	10	ug/L			
Dibenzo(a,h)anthracene	ND	10	ug/L			
Fluoranthene	ND	10	ug/L			
Fluorene	ND	10	ug/L			
Indeno(1,2,3-cd)pyrene	ND	10	ug/L			
1-Methylnaphthalene	ND	10	ug/L			
2-Methylnaphthalene	ND	10	ug/L			
Naphthalene	ND	10	ug/L			
Phenanthrene	ND	10	ug/L			
Pyrene	ND	10	ug/L			
4-Chloro-3-methylphenol	ND	10	ug/L			
2-Chlorophenol	ND	10	ug/L			
2,4-Dichlorophenol	ND	10	ug/L			
2,4-Dimethylphenol	ND	10	ug/L			
2,4-Dinitrophenol	ND	50	ug/L			
2-Methyl-4,6-dinitrophenol	ND	50	ug/L			
2-Nitrophenol	ND	10	ug/L			
4-Nitrophenol	ND	50	ug/L			
Pentachlorophenol	ND	50	ug/L			
Phenol	ND	10	ug/L			
2,4,6-Trichlorophenol	ND	10	ug/L			
Nitrobenzene-d5 (Surrogate)	81	0	% Recovery	35-114% Limit		
2-Fluorobiphenyl (Surrogate)	63	0	% Recovery	43-116% Limit		
4-Terphenyl-d14 (Surrogate)	63	0	% Recovery	33-141% Limit		

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CORE LABORATORIES

LABORATORY TESTS RESULTS

01/03/95

JOB NUMBER: 943142

CUSTOMER: GEOSCIENCE CONSULTANTS, LTD.

ATTN:

CLIENT I.D.: REXENE COC#9083

DATE SAMPLED: 12/13/94

TIME SAMPLED: 12:40

WORK DESCRIPTION: 9412131240

LABORATORY I.D.: 943142-0001

DATE RECEIVED: 12/14/94

TIME RECEIVED: 10:45

REMARKS: MW-12

TEST DESCRIPTION	FINAL RESULT	LIMITS/*DILUTION	UNITS OF MEASURE	TEST METHOD	DATE	TECHN
Phenol-d6 (Surrogate)	61	0	% Recovery	10-94% Limit		
2-Fluorophenol (Surrogate)	56	0	% Recovery	21-100% Limit		
2,4,6-Tribromophenol (Surrogate)	68	0	% Recovery	10-123% Limit		
Time Analyzed	1255	0				
Date Extracted	12/19/94	0				

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CORE LABORATORIES

LABORATORY TESTS RESULTS 01/03/95

JOB NUMBER: 943142

CUSTOMER: GEOSCIENCE CONSULTANTS, LTD.

ATTN:

CLIENT I.D.: REXENE COC#9083

DATE SAMPLED: 12/13/94

TIME SAMPLED: 13:15

WORK DESCRIPTION: 9412131315

LABORATORY I.D.: 943142-0002

DATE RECEIVED: 12/14/94

TIME RECEIVED: 10:45

REMARKS: MW-1

TEST DESCRIPTION	FINAL RESULT	LIMITS/*DILUTION	UNITS OF MEASURE	TEST METHOD	DATE	TECHN
Bicarbonate (Unfilt.)	464	5	mg/L	2320 B (3)	12/22/94	KDS
Chloride (Unfilt.)	116	0.5	mg/L	325.2 (1)	12/29/94	DME
Nitrogen, Nitrate (Unfilt.)	0.3	0.1	mg/L (as N)	353.2 (1)	12/14/94	DME
Sulfate (Unfilt.)	139	10	mg/L	375.2 (1)	12/29/94	DME
Aluminum, Diss. (Al)	0.10	0.05	mg/L	6010 (2)	12/28/94	WGL
Arsenic, Diss. (As)	<0.05	0.05	mg/L	6010 (2)	12/28/94	WGL
Barium, Diss. (Ba)	0.12	0.01	mg/L	6010 (2)	12/28/94	WGL
Cadmium, Diss. (Cd)	<0.005	0.005	mg/L	6010 (2)	12/28/94	WGL
Calcium, Total (Ca)	86.9	1.0	mg/L	6010 (2)	12/29/94	GEF
Chromium, Diss. (Cr)	<0.01	0.01	mg/L	6010 (2)	12/28/94	WGL
Cobalt, Diss. (Co)	<0.03	0.03	mg/L	6010 (2)	12/28/94	WGL
Copper, Diss. (Cu)	0.02	0.01	mg/L	6010 (2)	12/28/94	WGL
Iron, Diss. (Fe)	0.03	0.03	mg/L	6010 (2)	12/28/94	WGL
Lead, Diss. (Pb)	<0.05	0.05	mg/L	6010 (2)	12/28/94	WGL
Mercury, Total (Hg)	<0.0002	0.0002	mg/L	7470 (2)	12/22/94	BPB
Magnesium, Total (Mg)	25.8	0.1	mg/L	6010 (2)	12/29/94	GEF
Manganese, Diss. (Mn)	0.21	0.01	mg/L	6010 (2)	12/28/94	WGL
Molybdenum, Diss. (Mo)	<0.05	0.05	mg/L	6010 (2)	12/28/94	WGL
Nickel, Diss. (Ni)	<0.04	0.04	mg/L	6010 (2)	12/28/94	WGL
Potassium, Total (K)	5.7	0.1	mg/L	7610 (2)	12/30/94	BPB
Selenium, Diss. (Se)	<0.1	0.1	mg/L	6010 (2)	12/28/94	WGL
Silver, Diss. (Ag)	<0.01	0.01	mg/L	6010 (2)	12/28/94	WGL
Sodium, Total (Na)	137	5	mg/L	6010 (2)	12/29/94	GEF

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CORE LABORATORIES

LABORATORY TESTS RESULTS

01/03/95

JOB NUMBER: 943142

CUSTOMER: GEOSCIENCE CONSULTANTS, LTD.

ATTN:

CLIENT I.D.: REXENE COC#9083

DATE SAMPLED: 12/13/94

TIME SAMPLED: 13:15

WORK DESCRIPTION: 9412131315

LABORATORY I.D.: 943142-0002

DATE RECEIVED: 12/14/94

TIME RECEIVED: 10:45

REMARKS: MW-1

TEST DESCRIPTION	FINAL RESULT	LIMITS/*DILUTION	UNITS OF MEASURE	TEST METHOD	DATE	TECHN
Zinc, Diss. (Zn)	<0.01	0.01	mg/L	6010 (2)	12/28/94	WGL
8020 - AROMATIC VOLATILE ORGANICS		*1		8020 (2)	12/16/94	JHT
Benzene	ND	0.5	ug/L			
Toluene	ND	0.5	ug/L			
Ethyl benzene	ND	0.5	ug/L			
Xylenes	ND	0.5	ug/L			
4-Bromofluorobenzene (Surrogate)	102	0	% Recovery	85-115% Limit		
Time Analyzed	2102	0				
PAH AND PHENOLS LIST BY 8270		*1		8270 (2)	12/22/94	JMC
Acenaphthene	ND	10	ug/L			
Acenaphthylene	ND	10	ug/L			
Anthracene	ND	10	ug/L			
Benzo(a)anthracene	ND	10	ug/L			
Benzo(b)fluoranthene	ND	10	ug/L			
Benzo(k)fluoranthene	ND	10	ug/L			
Benzo(ghi)perylene	ND	10	ug/L			
Benzo(a)pyrene	ND	10	ug/L			
Chrysene	ND	10	ug/L			
Dibenzo(a,h)anthracene	ND	10	ug/L			
Fluoranthene	ND	10	ug/L			
Fluorene	ND	10	ug/L			
Indeno(1,2,3-cd)pyrene	ND	10	ug/L			
1-Methylnaphthalene	ND	10	ug/L			
2-Methylnaphthalene	ND	10	ug/L			
Naphthalene	ND	10	ug/L			
Phenanthrene	ND	10	ug/L			
Pyrene	ND	10	ug/L			
4-Chloro-3-methylphenol	ND	10	ug/L			
2-Chlorophenol	ND	10	ug/L			
2,4-Dichlorophenol	ND	10	ug/L			
2,4-Dimethylphenol	ND	10	ug/L			
2,4-Dinitrophenol	ND	50	ug/L			
2-Methyl-4,6-dinitrophenol	ND	50	ug/L			
2-Nitrophenol	ND	10	ug/L			
4-Nitrophenol	ND	50	ug/L			
Pentachlorophenol	ND	50	ug/L			
Phenol	ND	10	ug/L			
2,4,6-Trichlorophenol	ND	10	ug/L			
Nitrobenzene-d5 (Surrogate)	88	0	% Recovery	35-114% Limit		
2-Fluorobiphenyl (Surrogate)	68	0	% Recovery	43-116% Limit		
4-Terphenyl-d14 (Surrogate)	62	0	% Recovery	33-141% Limit		

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CORE LABORATORIES

LABORATORY TESTS RESULTS

01/03/95

JOB NUMBER: 943142

CUSTOMER: GEOSCIENCE CONSULTANTS, LTD.

ATTN:

CLIENT I.D.: REXENE COC#9083

DATE SAMPLED: 12/13/94

TIME SAMPLED: 13:15

WORK DESCRIPTION: 9412131315

LABORATORY I.D.: 943142-0002

DATE RECEIVED: 12/14/94

TIME RECEIVED: 10:45

REMARKS: MW-1

TEST DESCRIPTION	FINAL RESULT	LIMITS/*DILUTION	UNITS OF MEASURE	TEST METHOD	DATE	TECHN
Phenol-d6 (Surrogate)	61	0	% Recovery	10-94% Limit		
2-Fluorophenol (Surrogate)	60	0	% Recovery	21-100% Limit		
2,4,6-Tribromophenol (Surrogate)	64	0	% Recovery	10-123% Limit		
Time Analyzed	1356	0				
Date Extracted	12/19/94	0				

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CORE LABORATORIES

LABORATORY TESTS RESULTS

01/03/95

JOB NUMBER: 943142

CUSTOMER: GEOSCIENCE CONSULTANTS, LTD.

ATTN:

CLIENT I.D.: REXENE COC#9083

DATE SAMPLED: 12/13/94

TIME SAMPLED: 13:50

WORK DESCRIPTION: 9412131350

LABORATORY I.D.: 943142-0003

DATE RECEIVED: 12/14/94

TIME RECEIVED: 10:45

REMARKS: MW-15

TEST DESCRIPTION	FINAL RESULT	LIMITS/*DILUTION	UNITS OF MEASURE	TEST METHOD	DATE	TECHN
Bicarbonate (Unfilt.)	2700	5	mg/L	2320 B (3)	12/22/94	KDS
Chloride (Unfilt.)	379	2.5	mg/L	325.2 (1)	12/29/94	DME
Nitrogen, Nitrate (Unfilt.)	0.2	0.1	mg/L (as N)	353.2 (1)	12/14/94	DME
Sulfate (Unfilt.)	92	10	mg/L	375.2 (1)	12/29/94	DME
Aluminum, Diss. (Al)	0.36	0.05	mg/L	6010 (2)	12/28/94	WGL
Arsenic, Diss. (As)	<0.05	0.05	mg/L	6010 (2)	12/28/94	WGL
Barium, Diss. (Ba)	0.38	0.01	mg/L	6010 (2)	12/28/94	WGL
Cadmium, Diss. (Cd)	<0.005	0.005	mg/L	6010 (2)	12/28/94	WGL
Calcium, Total (Ca)	68.5	0.5	mg/L	6010 (2)	12/29/94	GEF
Chromium, Diss. (Cr)	<0.01	0.01	mg/L	6010 (2)	12/28/94	WGL
Cobalt, Diss. (Co)	<0.03	0.03	mg/L	6010 (2)	12/28/94	WGL
Copper, Diss. (Cu)	<0.01	0.01	mg/L	6010 (2)	12/28/94	WGL
Iron, Diss. (Fe)	3.69	0.03	mg/L	6010 (2)	12/28/94	WGL
Lead, Diss. (Pb)	<0.05	0.05	mg/L	6010 (2)	12/28/94	WGL
Mercury, Total (Hg)	<0.0002	0.0002	mg/L	7470 (2)	12/22/94	BPB
Magnesium, Total (Mg)	18.0	0.1	mg/L	6010 (2)	12/29/94	GEF
Manganese, Diss. (Mn)	1.66	0.01	mg/L	6010 (2)	12/28/94	WGL
Molybdenum, Diss. (Mo)	<0.05	0.05	mg/L	6010 (2)	12/28/94	WGL
Nickel, Diss. (Ni)	<0.04	0.04	mg/L	6010 (2)	12/28/94	WGL
Potassium, Total (K)	11	5	mg/L	6010 (2)	12/29/94	GEF
Selenium, Diss. (Se)	<0.1	0.1	mg/L	6010 (2)	12/28/94	WGL
Silver, Diss. (Ag)	0.09	0.01	mg/L	6010 (2)	12/28/94	WGL
Sodium, Total (Na)	1290	20	mg/L	6010 (2)	12/29/94	GEF

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CORE LABORATORIES

LABORATORY TESTS RESULTS

01/03/95

JOB NUMBER: 943142

CUSTOMER: GEOSCIENCE CONSULTANTS, LTD.

ATTN:

CLIENT I.D.: REXENE COC#9083

DATE SAMPLED: 12/13/94

TIME SAMPLED: 13:50

WORK DESCRIPTION: 9412131350

LABORATORY I.D.: 943142-0003

DATE RECEIVED: 12/14/94

TIME RECEIVED: 10:45

REMARKS: MW-15

TEST DESCRIPTION	FINAL RESULT	LIMITS/*DILUTION	UNITS OF MEASURE	TEST METHOD	DATE	TECHN
Zinc, Diss. (Zn)	<0.01	0.01	mg/L	6010 (2)	12/28/94	WGL
8020 - AROMATIC VOLATILE ORGANICS		*20		8020 (2)	12/17/94	JHT
Benzene	290	10	ug/L			
Toluene	ND	10	ug/L			
Ethyl benzene	ND	10	ug/L			
Xylenes	ND	10	ug/L			
4-Bromofluorobenzene (Surrogate)	100	0	% Recovery	85-115% Limit		
Time Analyzed	0335	0				
PAH AND PHENOLS LIST BY 8270		*1		8270 (2)	12/22/94	JMC
Acenaphthene	ND	10	ug/L			
Acenaphthylene	ND	10	ug/L			
Anthracene	ND	10	ug/L			
Benzo(a)anthracene	ND	10	ug/L			
Benzo(b)fluoranthene	ND	10	ug/L			
Benzo(k)fluoranthene	ND	10	ug/L			
Benzo(ghi)perylene	ND	10	ug/L			
Benzo(a)pyrene	ND	10	ug/L			
Chrysene	ND	10	ug/L			
Dibenzo(a,h)anthracene	ND	10	ug/L			
Fluoranthene	ND	10	ug/L			
Fluorene	ND	10	ug/L			
Indeno(1,2,3-cd)pyrene	ND	10	ug/L			
1-Methylnaphthalene	47	10	ug/L			
2-Methylnaphthalene	ND	10	ug/L			
Naphthalene	37	10	ug/L			
Phenanthrene	ND	10	ug/L			
Pyrene	ND	10	ug/L			
4-Chloro-3-methylphenol	ND	10	ug/L			
2-Chlorophenol	ND	10	ug/L			
2,4-Dichlorophenol	ND	10	ug/L			
2,4-Dimethylphenol	ND	10	ug/L			
2,4-Dinitrophenol	ND	50	ug/L			
2-Methyl-4,6-dinitrophenol	ND	50	ug/L			
2-Nitrophenol	ND	10	ug/L			
4-Nitrophenol	ND	50	ug/L			
Pentachlorophenol	ND	50	ug/L			
Phenol	ND	10	ug/L			
2,4,6-Trichlorophenol	ND	10	ug/L			
Nitrobenzene-d5 (Surrogate)	79	0	% Recovery	35-114% Limit		
2-Fluorobiphenyl (Surrogate)	76	0	% Recovery	43-116% Limit		
4-Terphenyl-d14 (Surrogate)	52	0	% Recovery	33-141% Limit		

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CORE LABORATORIES

LABORATORY TESTS RESULTS

01/03/95

JOB NUMBER: 943142

CUSTOMER: GEOSCIENCE CONSULTANTS, LTD.

ATTN:

CLIENT I.D.: REXENE COC#9083

DATE SAMPLED: 12/13/94

TIME SAMPLED: 13:50

WORK DESCRIPTION: 9412131350

LABORATORY I.D.: 943142-0003

DATE RECEIVED: 12/14/94

TIME RECEIVED: 10:45

REMARKS: MW-15

TEST DESCRIPTION	FINAL RESULT	LIMITS/*DILUTION	UNITS OF MEASURE	TEST METHOD	DATE	TECHN
Phenol-d6 (Surrogate)	90	0	% Recovery	10-94% Limit		
2-Fluorophenol (Surrogate)	84	0	% Recovery	21-100% Limit		
2,4,6-Tribromophenol (Surrogate)	80	0	% Recovery	10-123% Limit		
Time Analyzed	2005	0				
Date Extracted	12/19/94	0				
Semi-Volatile Organic - Surrogates		*4		8270(2)/625(6)	12/27/94	JMC
Nitrobenzene-d5 (Surrogate)	93	0	% Recovery	35-114% Limit		
2-Fluorobiphenyl (Surrogate)	69	0	% Recovery	43-116% Limit		
4-Terphenyl-d14 (Surrogate)	102	0	% Recovery	33-141% Limit		
Phenol-d6 (Surrogate)	75	0	% Recovery	10-94% Limit		
2-Fluorophenol (Surrogate)	68	0	% Recovery	21-100% Limit		
2,4,6-Tribromophenol (Surrogate)	68	0	% Recovery	10-123% Limit		
Date Extracted	12/19/94	0				
Time Analyzed	1443	0				

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CORE LABORATORIES

LABORATORY TESTS RESULTS

01/03/95

JOB NUMBER: 943142

CUSTOMER: GEOSCIENCE CONSULTANTS, LTD.

ATTN:

CLIENT I.D.: REXENE COC#9083

DATE SAMPLED: 12/13/94

TIME SAMPLED: 14:25

WORK DESCRIPTION: 9412131425

LABORATORY I.D.: 943142-0004

DATE RECEIVED: 12/14/94

TIME RECEIVED: 10:45

REMARKS: MW-3S

TEST DESCRIPTION	FINAL RESULT	LIMITS/*DILUTION	UNITS OF MEASURE	TEST METHOD	DATE	TECHN
Bicarbonate (Unfilt.)	854	5	mg/L	2320 B (3)	12/22/94	KDS
Chloride (Unfilt.)	1250	25	mg/L	325.2 (1)	12/29/94	DME
Nitrogen, Nitrate (Unfilt.)	0.3	0.1	mg/L (as N)	353.2 (1)	12/14/94	DME
Sulfate (Unfilt.)	573	50	mg/L	375.2 (1)	12/29/94	DME
Aluminum, Diss. (Al)	0.13	0.05	mg/L	6010 (2)	12/28/94	WGL
Arsenic, Diss. (As)	<0.05	0.05	mg/L	6010 (2)	12/28/94	WGL
Barium, Diss. (Ba)	0.08	0.01	mg/L	6010 (2)	12/28/94	WGL
Cadmium, Diss. (Cd)	<0.005	0.005	mg/L	6010 (2)	12/28/94	WGL
Calcium, Total (Ca)	97.7	1.0	mg/L	6010 (2)	12/29/94	GEF
Chromium, Diss. (Cr)	<0.01	0.01	mg/L	6010 (2)	12/28/94	WGL
Cobalt, Diss. (Co)	<0.03	0.03	mg/L	6010 (2)	12/28/94	WGL
Copper, Diss. (Cu)	0.01	0.01	mg/L	6010 (2)	12/28/94	WGL
Iron, Diss. (Fe)	0.12	0.03	mg/L	6010 (2)	12/28/94	WGL
Lead, Diss. (Pb)	<0.05	0.05	mg/L	6010 (2)	12/28/94	WGL
Mercury, Total (Hg)	<0.0002	0.0002	mg/L	7470 (2)	12/22/94	BPB
Magnesium, Total (Mg)	39.8	0.1	mg/L	6010 (2)	12/29/94	GEF
Manganese, Diss. (Mn)	0.06	0.01	mg/L	6010 (2)	12/28/94	WGL
Molybdenum, Diss. (Mo)	<0.05	0.05	mg/L	6010 (2)	12/28/94	WGL
Nickel, Diss. (Ni)	<0.04	0.04	mg/L	6010 (2)	12/28/94	WGL
Potassium, Total (K)	8.5	0.1	mg/L	7610 (2)	12/30/94	BPB
Selenium, Diss. (Se)	<0.1	0.1	mg/L	6010 (2)	12/28/94	WGL
Silver, Diss. (Ag)	<0.01	0.01	mg/L	6010 (2)	12/28/94	WGL
Sodium, Total (Na)	985	5	mg/L	6010 (2)	12/29/94	GEF

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CORE LABORATORIES

LABORATORY TESTS RESULTS

01/03/95

JOB NUMBER: 943142

CUSTOMER: GEOSCIENCE CONSULTANTS, LTD.

ATTN:

CLIENT I.D.: REXENE COC#9083

DATE SAMPLED: 12/13/94

TIME SAMPLED: 14:25

WORK DESCRIPTION: 9412131425

LABORATORY I.D.: 943142-0004

DATE RECEIVED: 12/14/94

TIME RECEIVED: 10:45

REMARKS: MW-3S

TEST DESCRIPTION	FINAL RESULT	LIMITS/*DILUTION	UNITS OF MEASURE	TEST METHOD	DATE	TECHN
Zinc, Diss. (Zn)	<0.01	0.01	mg/L	6010 (2)	12/28/94	WGL
8020 - AROMATIC VOLATILE ORGANICS		*1		8020 (2)	12/16/94	JHT
Benzene	ND	0.5	ug/L			
Toluene	ND	0.5	ug/L			
Ethyl benzene	ND	0.5	ug/L			
Xylenes	ND	0.5	ug/L			
4-Bromofluorobenzene (Surrogate)	102	0	% Recovery	85-115% Limit		
Time Analyzed	2138	0				
PAH AND PHENOLS LIST BY 8270		*1		8270 (2)	12/22/94	JMC
Acenaphthene	ND	10	ug/L			
Acenaphthylene	ND	10	ug/L			
Anthracene	ND	10	ug/L			
Benzo(a)anthracene	ND	10	ug/L			
Benzo(b)fluoranthene	ND	10	ug/L			
Benzo(k)fluoranthene	ND	10	ug/L			
Benzo(ghi)perylene	ND	10	ug/L			
Benzo(a)pyrene	ND	10	ug/L			
Chrysene	ND	10	ug/L			
Dibenzo(a,h)anthracene	ND	10	ug/L			
Fluoranthene	ND	10	ug/L			
Fluorene	ND	10	ug/L			
Indeno(1,2,3-cd)pyrene	ND	10	ug/L			
1-Methylnaphthalene	ND	10	ug/L			
2-Methylnaphthalene	ND	10	ug/L			
Naphthalene	ND	10	ug/L			
Phenanthrene	ND	10	ug/L			
Pyrene	ND	10	ug/L			
4-Chloro-3-methylphenol	ND	10	ug/L			
2-Chlorophenol	ND	10	ug/L			
2,4-Dichlorophenol	ND	10	ug/L			
2,4-Dimethylphenol	ND	10	ug/L			
2,4-Dinitrophenol	ND	50	ug/L			
2-Methyl-4,6-dinitrophenol	ND	50	ug/L			
2-Nitrophenol	ND	10	ug/L			
4-Nitrophenol	ND	50	ug/L			
Pentachlorophenol	ND	50	ug/L			
Phenol	ND	10	ug/L			
2,4,6-Trichlorophenol	ND	10	ug/L			
Nitrobenzene-d5 (Surrogate)	83	0	% Recovery	35-114% Limit		
2-Fluorobiphenyl (Surrogate)	61	0	% Recovery	43-116% Limit		
4-Terphenyl-d14 (Surrogate)	58	0	% Recovery	33-141% Limit		

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CORE LABORATORIES

LABORATORY TESTS RESULTS

01/03/95

JOB NUMBER: 943142

CUSTOMER: GEOSCIENCE CONSULTANTS, LTD.

ATTN:

CLIENT I.D.: REXENE COC#9083

DATE SAMPLED: 12/13/94

TIME SAMPLED: 14:25

WORK DESCRIPTION: 9412131425

LABORATORY I.D.: 943142-0034

DATE RECEIVED: 12/14/94

TIME RECEIVED: 10:45

REMARKS: MW-3S

TEST DESCRIPTION	FINAL RESULT	LIMITS/*DILUTION	UNITS OF MEASURE	TEST METHOD	DATE	TECHN
Phenol-d6 (Surrogate)	61	0	% Recovery	10-94% Limit		
2-Fluorophenol (Surrogate)	60	0	% Recovery	21-100% Limit		
2,4,6-Tribromophenol (Surrogate)	67	0	% Recovery	10-123% Limit		
Time Analyzed	1458	0				
Date Extracted	12/19/94	0				

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CORE LABORATORIES

LABORATORY TESTS RESULTS

01/03/95

JOB NUMBER: 943142

CUSTOMER: GEOSCIENCE CONSULTANTS, LTD.

ATTN:

CLIENT I.D.: REXENE COC#9083

DATE SAMPLED: 12/13/94

TIME SAMPLED: 14:45

WORK DESCRIPTION: 9412131445

LABORATORY I.D.: 943142-0005

DATE RECEIVED: 12/14/94

TIME RECEIVED: 10:45

REMARKS: MW-3D

TEST DESCRIPTION	FINAL RESULT	LIMITS/*DILUTION	UNITS OF MEASURE	TEST METHOD	DATE	TECHN
Bicarbonate (Unfilt.)	464	5	mg/L	2320 B (3)	12/22/94	KDS
Chloride (Unfilt.)	4800	1	mg/L	325.3 (1)	12/30/94	DME
Nitrogen, Nitrate (Unfilt.)	0.7	0.1	mg/L (as N)	353.2 (1)	12/14/94	DME
Sulfate (Unfilt.)	2270	300	mg/L	375.2 (1)	12/29/94	DME
Aluminum, Diss. (Al)	0.09	0.05	mg/L	6010 (2)	12/28/94	WGL
Arsenic, Diss. (As)	<0.05	0.05	mg/L	6010 (2)	12/28/94	WGL
Barium, Diss. (Ba)	0.04	0.01	mg/L	6010 (2)	12/28/94	WGL
Cadmium, Diss. (Cd)	0.006	0.005	mg/L	6010 (2)	12/28/94	WGL
Calcium, Total (Ca)	367	1.0	mg/L	6010 (2)	12/29/94	GEF
Chromium, Diss. (Cr)	<0.01	0.01	mg/L	6010 (2)	12/28/94	WGL
Cobalt, Diss. (Co)	<0.03	0.03	mg/L	6010 (2)	12/28/94	WGL
Copper, Diss. (Cu)	0.01	0.01	mg/L	6010 (2)	12/28/94	WGL
Iron, Diss. (Fe)	0.08	0.03	mg/L	6010 (2)	12/28/94	WGL
Lead, Diss. (Pb)	<0.05	0.05	mg/L	6010 (2)	12/28/94	WGL
Mercury, Total (Hg)	<0.0002	0.0002	mg/L	7470 (2)	12/22/94	BFB
Magnesium, Total (Mg)	207	0.5	mg/L	6010 (2)	12/29/94	GEF
Manganese, Diss. (Mn)	1.27	0.01	mg/L	6010 (2)	12/28/94	WGL
Molybdenum, Diss. (Mo)	<0.05	0.05	mg/L	6010 (2)	12/28/94	WGL
Nickel, Diss. (Ni)	<0.04	0.04	mg/L	6010 (2)	12/28/94	WGL
Potassium, Total (K)	17	5	mg/L	6010 (2)	12/29/94	GEF
Selenium, Diss. (Se)	<0.1	0.1	mg/L	6010 (2)	12/28/94	WGL
Silver, Diss. (Ag)	<0.01	0.01	mg/L	6010 (2)	12/28/94	WGL
Sodium, Total (Na)	3210	20	mg/L	6010 (2)	12/29/94	GEF

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CORE LABORATORIES

LABORATORY TESTS RESULTS

01/03/95

JOB NUMBER: 943142

CUSTOMER: GEOSCIENCE CONSULTANTS, LTD.

ATTN:

CLIENT I.D.: REXENE COC#9083

DATE SAMPLED: 12/13/94

TIME SAMPLED: 14:45

WORK DESCRIPTION: 9412131445

LABORATORY I.D.: 943142-0005

DATE RECEIVED: 12/14/94

TIME RECEIVED: 10:45

REMARKS: MW-3D

TEST DESCRIPTION	FINAL RESULT	LIMITS/*DILUTION	UNITS OF MEASURE	TEST METHOD	DATE	TECHN
Zinc, Diss. (Zn)	<0.01	0.01	mg/L	6010 (2)	12/28/94	WGL
8020 - AROMATIC VOLATILE ORGANICS		*1		8020 (2)	12/16/94	JHT
Benzene	ND	0.5	ug/L			
Toluene	ND	0.5	ug/L			
Ethyl benzene	ND	0.5	ug/L			
Xylenes	ND	0.5	ug/L			
4-Bromofluorobenzene (Surrogate)	103	0	% Recovery	85-115% Limit		
Time Analyzed	2214	0				
PAH AND PHENOLS LIST BY 8270		*1		8270 (2)	12/22/94	JMC
Acenaphthene	ND	10	ug/L			
Acenaphthylene	ND	10	ug/L			
Anthracene	ND	10	ug/L			
Benzo(a)anthracene	ND	10	ug/L			
Benzo(b)fluoranthene	ND	10	ug/L			
Benzo(k)fluoranthene	ND	10	ug/L			
Benzo(ghi)perylene	ND	10	ug/L			
Benzo(a)pyrene	ND	10	ug/L			
Chrysene	ND	10	ug/L			
Dibenzo(a,h)anthracene	ND	10	ug/L			
Fluoranthene	ND	10	ug/L			
Fluorene	ND	10	ug/L			
Indeno(1,2,3-cd)pyrene	ND	10	ug/L			
1-Methylnaphthalene	ND	10	ug/L			
2-Methylnaphthalene	ND	10	ug/L			
Naphthalene	ND	10	ug/L			
Phenanthrene	ND	10	ug/L			
Pyrene	ND	10	ug/L			
4-Chloro-3-methylphenol	ND	10	ug/L			
2-Chlorophenol	ND	10	ug/L			
2,4-Dichlorophenol	ND	10	ug/L			
2,4-Dimethylphenol	ND	10	ug/L			
2,4-Dinitrophenol	ND	50	ug/L			
2-Methyl-4,6-dinitrophenol	ND	50	ug/L			
2-Nitrophenol	ND	10	ug/L			
4-Nitrophenol	ND	50	ug/L			
Pentachlorophenol	ND	50	ug/L			
Phenol	ND	10	ug/L			
2,4,6-Trichlorophenol	ND	10	ug/L			
Nitrobenzene-d5 (Surrogate)	86	0	% Recovery	35-114% Limit		
2-Fluorobiphenyl (Surrogate)	67	0	% Recovery	43-116% Limit		
4-Terphenyl-d14 (Surrogate)	65	0	% Recovery	33-141% Limit		

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CORE LABORATORIES

LABORATORY TESTS RESULTS

01/03/95

JOB NUMBER: 943142

CUSTOMER: GEOSCIENCE CONSULTANTS, LTD.

ATTN:

CLIENT I.D.: REXENE COC#9083

DATE SAMPLED: 12/13/94

TIME SAMPLED: 14:45

WORK DESCRIPTION: 9412131445

LABORATORY I.D.: 943142-0005

DATE RECEIVED: 12/14/94

TIME RECEIVED: 10:45

REMARKS: MW-30

TEST DESCRIPTION	FINAL RESULT	LIMITS/*DILUTION	UNITS OF MEASURE	TEST METHOD	DATE	TECHN
Phenol-d6 (Surrogate)	63	0	% Recovery	10-94% Limit		
2-Fluorophenol (Surrogate)	58	0	% Recovery	21-100% Limit		
2,4,6-Tribromophenol (Surrogate)	71	0	% Recovery	10-123% Limit		
Time Analyzed	1559	0				
Date Extracted	12/19/94	0				

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CORE LABORATORIES

LABORATORY TESTS RESULTS 01/03/95

JOB NUMBER: 943142

CUSTOMER: GEOSCIENCE CONSULTANTS, LTD.

ATTN:

CLIENT I.D.: REXENE COC#9083

DATE SAMPLED: 12/13/94

TIME SAMPLED: 15:25

WORK DESCRIPTION: 9412131525

LABORATORY I.D.: 943142-0006

DATE RECEIVED: 12/14/94

TIME RECEIVED: 10:45

REMARKS: MW-6S

TEST DESCRIPTION	FINAL RESULT	LIMITS/*DILUTION	UNITS OF MEASURE	TEST METHOD	DATE	TECHN
Bicarbonate (Unfilt.)	2710	5	mg/L	2320 B (3)	12/22/94	KDS
Chloride (Unfilt.)	2180	1	mg/L	325.3 (1)	12/30/94	DME
Nitrogen, Nitrate (Unfilt.)	<0.1	0.1	mg/L (as N)	353.2 (1)	12/15/94	DME
Sulfate (Unfilt.)	209	40	mg/L	375.2 (1)	12/29/94	DME
Aluminum, Diss. (Al)	0.08	0.05	mg/L	6010 (2)	12/28/94	WGL
Arsenic, Diss. (As)	0.08	0.05	mg/L	6010 (2)	12/28/94	WGL
Barium, Diss. (Ba)	0.73	0.01	mg/L	6010 (2)	12/28/94	WGL
Cadmium, Diss. (Cd)	<0.005	0.005	mg/L	6010 (2)	12/28/94	WGL
Calcium, Total (Ca)	150	1.0	mg/L	6010 (2)	12/29/94	GEF
Chromium, Diss. (Cr)	<0.01	0.01	mg/L	6010 (2)	12/28/94	WGL
Cobalt, Diss. (Co)	<0.03	0.03	mg/L	6010 (2)	12/28/94	WGL
Copper, Diss. (Cu)	<0.01	0.01	mg/L	6010 (2)	12/28/94	WGL
Iron, Diss. (Fe)	1.88	0.03	mg/L	6010 (2)	12/28/94	WGL
Lead, Diss. (Pb)	<0.05	0.05	mg/L	6010 (2)	12/28/94	WGL
Mercury, Total (Hg)	<0.0002	0.0002	mg/L	7470 (2)	12/22/94	BPB
Magnesium, Total (Mg)	82.3	0.5	mg/L	6010 (2)	12/29/94	GEF
Manganese, Diss. (Mn)	0.46	0.01	mg/L	6010 (2)	12/28/94	WGL
Molybdenum, Diss. (Mo)	<0.05	0.05	mg/L	6010 (2)	12/28/94	WGL
Nickel, Diss. (Ni)	<0.04	0.04	mg/L	6010 (2)	12/28/94	WGL
Potassium, Total (K)	14	5	mg/L	6010 (2)	12/29/94	GEF
Selenium, Diss. (Se)	<0.1	0.1	mg/L	6010 (2)	12/28/94	WGL
Silver, Diss. (Ag)	<0.01	0.01	mg/L	6010 (2)	12/28/94	WGL
Sodium, Total (Na)	1840	20	mg/L	6010 (2)	12/29/94	GEF

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CORE LABORATORIES

LABORATORY TESTS RESULTS

01/03/95

JOB NUMBER: 943142

CUSTOMER: GEOSCIENCE CONSULTANTS, LTD.

ATTN:

CLIENT I.D.: REXENE COC#9083

DATE SAMPLED: 12/13/94

TIME SAMPLED: 15:25

WORK DESCRIPTION: 9412131525

LABORATORY I.D.: 943142-0006

DATE RECEIVED: 12/14/94

TIME RECEIVED: 10:45

REMARKS: MW-6S

TEST DESCRIPTION	FINAL RESULT	LIMITS/*DILUTION	UNITS OF MEASURE	TEST METHOD	DATE	TECHN
Zinc, Diss. (Zn)	0.01	0.01	mg/L	6010 (2)	12/28/94	WGL
8020 - AROMATIC VOLATILE ORGANICS		*10		8020 (2)	12/17/94	JHT
Benzene	59	5	ug/L			
Toluene	ND	5	ug/L			
Ethyl benzene	ND	5	ug/L			
Xylenes	ND	5	ug/L			
4-Bromofluorobenzene (Surrogate)	98	0	% Recovery	85-115% Limit		
Time Analyzed	0411	0				
PAH AND PHENOLS LIST BY 8270		*1		8270 (2)	12/22/94	JMC
Acenaphthene	ND	10	ug/L			
Acenaphthylene	ND	10	ug/L			
Anthracene	ND	10	ug/L			
Benzo(a)anthracene	ND	10	ug/L			
Benzo(b)fluoranthene	ND	10	ug/L			
Benzo(k)fluoranthene	ND	10	ug/L			
Benzo(ghi)perylene	ND	10	ug/L			
Benzo(a)pyrene	ND	10	ug/L			
Chrysene	ND	10	ug/L			
Dibenzo(a,h)anthracene	ND	10	ug/L			
Fluoranthene	ND	10	ug/L			
Fluorene	ND	10	ug/L			
Indeno(1,2,3-cd)pyrene	ND	10	ug/L			
1-Methylnaphthalene	ND	10	ug/L			
2-Methylnaphthalene	ND	10	ug/L			
Naphthalene	ND	10	ug/L			
Phenanthrene	ND	10	ug/L			
Pyrene	ND	10	ug/L			
4-Chloro-3-methylphenol	ND	10	ug/L			
2-Chlorophenol	ND	10	ug/L			
2,4-Dichlorophenol	ND	10	ug/L			
2,4-Dimethylphenol	ND	10	ug/L			
2,4-Dinitrophenol	ND	50	ug/L			
2-Methyl-4,6-dinitrophenol	ND	50	ug/L			
2-Nitrophenol	ND	10	ug/L			
4-Nitrophenol	ND	50	ug/L			
Pentachlorophenol	ND	50	ug/L			
Phenol	ND	10	ug/L			
2,4,6-Trichlorophenol	ND	10	ug/L			
Nitrobenzene-d5 (Surrogate)	85	0	% Recovery	35-114% Limit		
2-Fluorobiphenyl (Surrogate)	62	0	% Recovery	43-116% Limit		
4-Terphenyl-d14 (Surrogate)	76	0	% Recovery	33-141% Limit		

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CORE LABORATORIES

LABORATORY TESTS RESULTS 01/03/95

JOB NUMBER: 943142

CUSTOMER: GEOSCIENCE CONSULTANTS, LTD.

ATTN:

CLIENT I.D.: REXENE COC#9083

DATE SAMPLED: 12/13/94

TIME SAMPLED: 15:25

WORK DESCRIPTION: 9412131525

LABORATORY I.D.: 943142-0006

DATE RECEIVED: 12/14/94

TIME RECEIVED: 10:45

REMARKS: MW-6S

TEST DESCRIPTION	FINAL RESULT	LIMITS/*DILUTION	UNITS OF MEASURE	TEST METHOD	DATE	TECHN
Phenol-d6 (Surrogate)	84	0	% Recovery	10-94% Limit		
2-Fluorophenol (Surrogate)	71	0	% Recovery	21-100% Limit		
2,4,6-Tribromophenol (Surrogate)	76	0	% Recovery	10-123% Limit		
Time Analyzed	1904	0				
Date Extracted	12/19/94	0				
Semi-Volatile Organic - Surrogates		*4		8270(2)/625(6)	12/27/94	JMC
Nitrobenzene-d5 (Surrogate)	70	0	% Recovery	35-114% Limit		
2-Fluorobiphenyl (Surrogate)	76	0	% Recovery	43-116% Limit		
4-Terphenyl-d14 (Surrogate)	39	0	% Recovery	33-141% Limit		
Phenol-d6 (Surrogate)	62	0	% Recovery	10-94% Limit		
2-Fluorophenol (Surrogate)	53	0	% Recovery	21-100% Limit		
2,4,6-Tribromophenol (Surrogate)	88	0	% Recovery	10-123% Limit		
Date Extracted	12/19/94	0				
Time Analyzed	1341	0				

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CORE LABORATORIES

LABORATORY TESTS RESULTS 01/03/95

JOB NUMBER: 943142

CUSTOMER: GEOSCIENCE CONSULTANTS, LTD.

ATTN:

CLIENT I.D.: REXENE COC#9083

DATE SAMPLED: 12/13/94

TIME SAMPLED: 15:50

WORK DESCRIPTION: 9412131550

LABORATORY I.D.: 943142-0007

DATE RECEIVED: 12/14/94

TIME RECEIVED: 10:45

REMARKS: MW-6D

TEST DESCRIPTION	FINAL RESULT	LIMITS/*DILUTION	UNITS OF MEASURE	TEST METHOD	DATE	TECHN
Bicarbonate (Unfilt.)	525	5	mg/L	2320 B (3)	12/22/94	KDS
Chloride (Unfilt.)	5210	25	mg/L	325.2 (1)	12/29/94	DME
Nitrogen, Nitrate (Unfilt.)	1.0	0.1	mg/L (as N)	353.2 (1)	12/14/94	DME
Sulfate (Unfilt.)	2490	500	mg/L	375.2 (1)	12/29/94	DME
Aluminum, Diss. (Al)	0.07	0.05	mg/L	6010 (2)	12/28/94	WGL
Arsenic, Diss. (As)	<0.05	0.05	mg/L	6010 (2)	12/28/94	WGL
Barium, Diss. (Ba)	0.03	0.01	mg/L	6010 (2)	12/28/94	WGL
Cadmium, Diss. (Cd)	<0.005	0.005	mg/L	6010 (2)	12/28/94	WGL
Calcium, Total (Ca)	379	1.0	mg/L	6010 (2)	12/29/94	GEF
Chromium, Diss. (Cr)	<0.01	0.01	mg/L	6010 (2)	12/28/94	WGL
Cobalt, Diss. (Co)	<0.03	0.03	mg/L	6010 (2)	12/28/94	WGL
Copper, Diss. (Cu)	0.01	0.01	mg/L	6010 (2)	12/28/94	WGL
Iron, Diss. (Fe)	0.11	0.03	mg/L	6010 (2)	12/28/94	WGL
Lead, Diss. (Pb)	<0.05	0.05	mg/L	6010 (2)	12/28/94	WGL
Mercury, Total (Hg)	<0.0002	0.0002	mg/L	7470 (2)	12/22/94	BPB
Magnesium, Total (Mg)	177	0.5	mg/L	6010 (2)	12/29/94	GEF
Manganese, Diss. (Mn)	2.19	0.01	mg/L	6010 (2)	12/28/94	WGL
Molybdenum, Diss. (Mo)	<0.05	0.05	mg/L	6010 (2)	12/28/94	WGL
Nickel, Diss. (Ni)	<0.04	0.04	mg/L	6010 (2)	12/28/94	WGL
Potassium, Total (K)	16	5	mg/L	6010 (2)	12/29/94	GEF
Selenium, Diss. (Se)	<0.1	0.1	mg/L	6010 (2)	12/28/94	WGL
Silver, Diss. (Ag)	<0.01	0.01	mg/L	6010 (2)	12/28/94	WGL
Sodium, Total (Na)	3410	20	mg/L	6010 (2)	12/29/94	GEF

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CORE LABORATORIES

LABORATORY TESTS RESULTS 01/03/95

JOB NUMBER: 943142

CUSTOMER: GEOSCIENCE CONSULTANTS, LTD.

ATTN:

CLIENT I.D.: REXENE COC#9083

DATE SAMPLED: 12/13/94

TIME SAMPLED: 15:50

WORK DESCRIPTION: 9412131550

LABORATORY I.D.: 943142-0007

DATE RECEIVED: 12/14/94

TIME RECEIVED: 10:45

REMARKS: MW-6D

TEST DESCRIPTION	FINAL RESULT	LIMITS/*DILUTION	UNITS OF MEASURE	TEST METHOD	DATE	TECHN
Zinc, Diss. (Zn)	<0.01	0.01	mg/L	6010 (2)	12/28/94	WGL
8020 - AROMATIC VOLATILE ORGANICS		*1		8020 (2)	12/16/94	JHT
Benzene	ND	0.5	ug/L			
Toluene	ND	0.5	ug/L			
Ethyl benzene	ND	0.5	ug/L			
Xylenes	ND	0.5	ug/L			
4-Bromofluorobenzene (Surrogate)	103	0	% Recovery	85-115% Limit		
Time Analyzed	2249	0				
PAH AND PHENOLS LIST BY 8270		*1		8270 (2)	12/22/94	JMC
Acenaphthene	ND	10	ug/L			
Acenaphthylene	ND	10	ug/L			
Anthracene	ND	10	ug/L			
Benzo(a)anthracene	ND	10	ug/L			
Benzo(b)fluoranthene	ND	10	ug/L			
Benzo(k)fluoranthene	ND	10	ug/L			
Benzo(ghi)perylene	ND	10	ug/L			
Benzo(a)pyrene	ND	10	ug/L			
Chrysene	ND	10	ug/L			
Dibenzo(a,h)anthracene	ND	10	ug/L			
Fluoranthene	ND	10	ug/L			
Fluorene	ND	10	ug/L			
Indeno(1,2,3-cd)pyrene	ND	10	ug/L			
1-Methylnaphthalene	ND	10	ug/L			
2-Methylnaphthalene	ND	10	ug/L			
Naphthalene	ND	10	ug/L			
Phenanthrene	ND	10	ug/L			
Pyrene	ND	10	ug/L			
4-Chloro-3-methylphenol	ND	10	ug/L			
2-Chlorophenol	ND	10	ug/L			
2,4-Dichlorophenol	ND	10	ug/L			
2,4-Dimethylphenol	ND	10	ug/L			
2,4-Dinitrophenol	ND	50	ug/L			
2-Methyl-4,6-dinitrophenol	ND	50	ug/L			
2-Nitrophenol	ND	10	ug/L			
4-Nitrophenol	ND	50	ug/L			
Pentachlorophenol	ND	50	ug/L			
Phenol	ND	10	ug/L			
2,4,6-Trichlorophenol	ND	10	ug/L			
Nitrobenzene-d5 (Surrogate)	90	0	% Recovery	35-114% Limit		
2-Fluorobiphenyl (Surrogate)	61	0	% Recovery	43-116% Limit		
4-Terphenyl-d14 (Surrogate)	66	0	% Recovery	33-141% Limit		

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CORE LABORATORIES

LABORATORY TESTS RESULTS

01/03/95

JOB NUMBER: 943142

CUSTOMER: GEOSCIENCE CONSULTANTS, LTD.

ATTN:

CLIENT I.D.: REXENE COC#9083

DATE SAMPLED: 12/13/94

TIME SAMPLED: 15:50

WORK DESCRIPTION: 9412131550

LABORATORY I.D.: 943142-0007

DATE RECEIVED: 12/14/94

TIME RECEIVED: 10:45

REMARKS: MW-6D

TEST DESCRIPTION	FINAL RESULT	LIMITS/*DILUTION	UNITS OF MEASURE	TEST METHOD	DATE	TECHN
Phenol-d6 (Surrogate)	62	0	% Recovery	10-94% Limit		
2-Fluorophenol (Surrogate)	56	0	% Recovery	21-100% Limit		
2,4,6-Tribromophenol (Surrogate)	73	0	% Recovery	10-123% Limit		
Time Analyzed	1701	0				
Date Extracted	12/19/94	0				

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CORE LABORATORIES

LABORATORY TESTS RESULTS 01/03/95

JOB NUMBER: 943142

CUSTOMER: GEOSCIENCE CONSULTANTS, LTD.

ATTN:

CLIENT I.D.: REXENE COC#9083

DATE SAMPLED: 12/13/94

TIME SAMPLED: 16:20

WORK DESCRIPTION: 9412131620

LABORATORY I.D.: 943142-0008

DATE RECEIVED: 12/14/94

TIME RECEIVED: 10:45

REMARKS: MW-9D

TEST DESCRIPTION	FINAL RESULT	LIMITS/*DILUTION	UNITS OF MEASURE	TEST METHOD	DATE	TECHN
Bicarbonate (Unfilt.)	866	5	mg/L	2320 B (3)	12/22/94	KDS
Chloride (Unfilt.)	1440	5	mg/L	325.2 (1)	12/29/94	DME
Nitrogen, Nitrate (Unfilt.)	0.4	0.1	mg/L (as N)	353.2 (1)	12/15/94	DME
Sulfate (Unfilt.)	978	100	mg/L	375.2 (1)	12/29/94	DME
Aluminum, Diss. (Al)	0.06	0.05	mg/L	6010 (2)	12/28/94	WGL
Arsenic, Diss. (As)	<0.05	0.05	mg/L	6010 (2)	12/28/94	WGL
Barium, Diss. (Ba)	0.04	0.01	mg/L	6010 (2)	12/28/94	WGL
Cadmium, Diss. (Cd)	<0.005	0.005	mg/L	6010 (2)	12/28/94	WGL
Calcium, Total (Ca)	255	1.0	mg/L	6010 (2)	12/29/94	GEF
Chromium, Diss. (Cr)	<0.01	0.01	mg/L	6010 (2)	12/28/94	WGL
Cobalt, Diss. (Co)	<0.03	0.03	mg/L	6010 (2)	12/28/94	WGL
Copper, Diss. (Cu)	<0.01	0.01	mg/L	6010 (2)	12/28/94	WGL
Iron, Diss. (Fe)	2.25	0.03	mg/L	6010 (2)	12/28/94	WGL
Lead, Diss. (Pb)	<0.05	0.05	mg/L	6010 (2)	12/28/94	WGL
Mercury, Total (Hg)	<0.0002	0.0002	mg/L	7470 (2)	12/22/94	BPB
Magnesium, Total (Mg)	88.9	0.5	mg/L	6010 (2)	12/29/94	GEF
Manganese, Diss. (Mn)	2.30	0.01	mg/L	6010 (2)	12/28/94	WGL
Molybdenum, Diss. (Mo)	<0.05	0.05	mg/L	6010 (2)	12/28/94	WGL
Nickel, Diss. (Ni)	<0.04	0.04	mg/L	6010 (2)	12/28/94	WGL
Potassium, Total (K)	11	5	mg/L	6010 (2)	12/29/94	GEF
Selenium, Diss. (Se)	<0.1	0.1	mg/L	6010 (2)	12/28/94	WGL
Silver, Diss. (Ag)	<0.01	0.01	mg/L	6010 (2)	12/28/94	WGL
Sodium, Total (Na)	1520	20	mg/L	6010 (2)	12/29/94	GEF

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CORE LABORATORIES

LABORATORY TESTS RESULTS 01/03/95

JOB NUMBER: 943142

CUSTOMER: GEOSCIENCE CONSULTANTS, LTD.

ATTN:

CLIENT I.D.: REXENE COC#9083

DATE SAMPLED: 12/13/94

TIME SAMPLED: 16:20

WORK DESCRIPTION: 9412131620

LABORATORY I.D.: 943142-0008

DATE RECEIVED: 12/14/94

TIME RECEIVED: 10:45

REMARKS: MW-9D

TEST DESCRIPTION	FINAL RESULT	LIMITS/*DILUTION	UNITS OF MEASURE	TEST METHOD	DATE	TECHN
Zinc, Diss. (Zn)	<0.01	0.01	mg/L	6010 (2)	12/28/94	WGL
8020 - AROMATIC VOLATILE ORGANICS		*1		8020 (2)	12/16/94	JHT
Benzene	ND	0.5	ug/L			
Toluene	ND	0.5	ug/L			
Ethyl benzene	ND	0.5	ug/L			
Xylenes	ND	0.5	ug/L			
4-Bromofluorobenzene (Surrogate)	104	0	% Recovery	85-115% Limit		
Time Analyzed	2325	0				
PAH AND PHENOLS LIST BY 8270		*1		8270 (2)	12/22/94	JMC
Acenaphthene	ND	10	ug/L			
Acenaphthylene	ND	10	ug/L			
Anthracene	ND	10	ug/L			
Benzo(a)anthracene	ND	10	ug/L			
Benzo(b)fluoranthene	ND	10	ug/L			
Benzo(k)fluoranthene	ND	10	ug/L			
Benzo(ghi)perylene	ND	10	ug/L			
Benzo(a)pyrene	ND	10	ug/L			
Chrysene	ND	10	ug/L			
Dibenzo(a,h)anthracene	ND	10	ug/L			
Fluoranthene	ND	10	ug/L			
Fluorene	ND	10	ug/L			
Indeno(1,2,3-cd)pyrene	ND	10	ug/L			
1-Methylnaphthalene	ND	10	ug/L			
2-Methylnaphthalene	ND	10	ug/L			
Naphthalene	ND	10	ug/L			
Phenanthrene	ND	10	ug/L			
Pyrene	ND	10	ug/L			
4-Chloro-3-methylphenol	ND	10	ug/L			
2-Chlorophenol	ND	10	ug/L			
2,4-Dichlorophenol	ND	10	ug/L			
2,4-Dimethylphenol	ND	10	ug/L			
2,4-Dinitrophenol	ND	50	ug/L			
2-Methyl-4,6-dinitrophenol	ND	50	ug/L			
2-Nitrophenol	ND	10	ug/L			
4-Nitrophenol	ND	50	ug/L			
Pentachlorophenol	ND	50	ug/L			
Phenol	ND	10	ug/L			
2,4,6-Trichlorophenol	ND	10	ug/L			
Nitrobenzene-d5 (Surrogate)	69	0	% Recovery	35-114% Limit		
2-Fluorobiphenyl (Surrogate)	71	0	% Recovery	43-116% Limit		
4-Terphenyl-d14 (Surrogate)	54	0	% Recovery	33-141% Limit		

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CORE LABORATORIES

LABORATORY TESTS RESULTS 01/03/95

JOB NUMBER: 943142

CUSTOMER: GEOSCIENCE CONSULTANTS, LTD.

ATTN:

CLIENT I.D.: REXENE COC#9083

DATE SAMPLED: 12/13/94

TIME SAMPLED: 16:20

WORK DESCRIPTION: 9412131620

LABORATORY I.D.: 943142-0008

DATE RECEIVED: 12/14/94

TIME RECEIVED: 10:45

REMARKS: MW-9D

TEST DESCRIPTION	FINAL RESULT	LIMITS/*DILUTION	UNITS OF MEASURE	TEST METHOD	DATE	TECHN
Phenol-d6 (Surrogate)	53	0	% Recovery	10-94% Limit		
2-Fluorophenol (Surrogate)	42	0	% Recovery	21-100% Limit		
2,4,6-Tribromophenol (Surrogate)	81	0	% Recovery	10-123% Limit		
Time Analyzed	1802	0				
Date Extracted	12/19/94	0				
Semi-Volatile Organic - Surrogates		*1		8270(2)/625(6)	12/27/94	JMC
Nitrobenzene-d5 (Surrogate)	67	0	% Recovery	35-114% Limit		
2-Fluorobiphenyl (Surrogate)	67	0	% Recovery	43-116% Limit		
4-Terphenyl-d14 (Surrogate)	54	0	% Recovery	33-141% Limit		
Phenol-d6 (Surrogate)	50	0	% Recovery	10-94% Limit		
2-Fluorophenol (Surrogate)	38	0	% Recovery	21-100% Limit		
2,4,6-Tribromophenol (Surrogate)	80	0	% Recovery	10-123% Limit		
Date Extracted	12/19/94	0				
Time Analyzed	1240	0				

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CORE LABORATORIES

LABORATORY TESTS RESULTS 01/03/95

JOB NUMBER: 943142

CUSTOMER: GEOSCIENCE CONSULTANTS, LTD.

ATTN:

CLIENT I.D.: REXENE COC#9083

DATE SAMPLED: 12/13/94

TIME SAMPLED: 16:25

WORK DESCRIPTION: 9412131625

LABORATORY I.D.: 943142-0009

DATE RECEIVED: 12/14/94

TIME RECEIVED: 10:45

REMARKS: TRIP BLANK

TEST DESCRIPTION	FINAL RESULT	LIMITS/*DILUTION	UNITS OF MEASURE	TEST METHOD	DATE	TECHN
8020 - AROMATIC VOLATILE ORGANICS		*1		8020 (2)	12/16/94	JHT
Benzene	ND	0.5	ug/L			
Toluene	ND	0.5	ug/L			
Ethyl benzene	ND	0.5	ug/L			
Xylenes	ND	0.5	ug/L			
4-Bromofluorobenzene (Surrogate)	104	0	% Recovery	85-115% Limit		
Time Analyzed	1915	0				

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CORE LABORATORIES

LABORATORY TESTS RESULTS

01/03/95

JOB NUMBER: 943142

CUSTOMER: GEOSCIENCE CONSULTANTS, LTD.

ATTN:

CLIENT I.D.: REXENE COC#9083

DATE SAMPLED: 12/13/94

TIME SAMPLED: 16:30

WORK DESCRIPTION: 9412131630

LABORATORY I.D.: 943142-0010

DATE RECEIVED: 12/14/94

TIME RECEIVED: 10:45

REMARKS: TRIP BLANK

TEST DESCRIPTION	FINAL RESULT	LIMITS/*DILUTION	UNITS OF MEASURE	TEST METHOD	DATE	TECHN
8020 - AROMATIC VOLATILE ORGANICS		*1		8020 (2)	12/16/94	JHT
Benzene	ND	0.5	ug/L			
Toluene	ND	0.5	ug/L			
Ethyl benzene	ND	0.5	ug/L			
Xylenes	ND	0.5	ug/L			
4-Bromofluorobenzene (Surrogate)	102	0	% Recovery	85-115% Limit		
Time Analyzed	1951	0				

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CORE LABORATORIES

LABORATORY TESTS RESULTS

01/03/95

JOB NUMBER: 943142

CUSTOMER: GEOSCIENCE CONSULTANTS, LTD.

ATTN:

CLIENT I.D.....:

DATE SAMPLED.....: / /

TIME SAMPLED.....: :

WORK DESCRIPTION...: METHOD BLANK

LABORATORY I.D....: 943142-0011

DATE RECEIVED.....: / /

TIME RECEIVED.....: :

REMARKS.....:

TEST DESCRIPTION	FINAL RESULT	LIMITS/*DILUTION	UNITS OF MEASURE	TEST METHOD	DATE	TECHN
8020 - AROMATIC VOLATILE ORGANICS		*1		8020 (2)	12/16/94	JHT
Benzene	ND	0.5	ug/L			
Toluene	ND	0.5	ug/L			
Ethyl benzene	ND	0.5	ug/L			
Xylenes	ND	0.5	ug/L			
4-Bromofluorobenzene (Surrogate)	102	0	% Recovery	85-115% Limit		
Time Analyzed	1840	0				

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CORE LABORATORIES

QUALITY CONTROL REPORT 01/03/95

JOB NUMBER: 943142

CUSTOMER: GEOSCIENCE CONSULTANTS, LTD.

ATTN:

ANALYSIS				DUPLICATES		REFERENCE STANDARDS		MATRIX SPIKES		
ANALYSIS TYPE	ANALYSIS SUB-TYPE	ANALYSIS I.D.	ANALYZED VALUE (A)	DUPLICATE VALUE (B)	RPD or (A-B)	TRUE VALUE	PERCENT RECOVERY	ORIGINAL VALUE	SPIKE ADDED	PERCENT RECOVERY
PARAMETER:Nitrogen, Nitrate (Unfilt.)				DATE/TIME ANALYZED:12/14/94 10:00				QC BATCH NUMBER:316665		
REPORTING LIMIT/DF: 0.1 UNITS:mg/L (as N)				METHOD REFERENCE :353.2 (1)				TECHNICIAN:DME		
BLANK	ICB	941214	<0.1							
BLANK	CCB	941214	<0.1							
STANDARD	ICV/LCS	G941014A	1.0			1.0	100			
STANDARD	CCV	S3.0	2.9			3.0	97			
SPIKE	MS	943142-7	1.8					1.0	1.0	80
DUPLICATE	MD	943142-7	1.0	1.2	18					
PARAMETER:Nitrogen, Nitrate (Unfilt.)				DATE/TIME ANALYZED:12/15/94 09:00				QC BATCH NUMBER:316674		
REPORTING LIMIT/DF: 0.1 UNITS:mg/L (as N)				METHOD REFERENCE :353.2 (1)				TECHNICIAN:DME		
BLANK	ICB	941215	<0.1							
BLANK	CCB	941215	<0.1							
STANDARD	ICV/LCS	G941014A	1.1			1.0	110			
STANDARD	CCV	S3.0	3.2			3.0	107			
SPIKE	MS	943146-1	1.0					<0.1	1.0	100
DUPLICATE	MD	943146-1	<0.1	<0.1	NC					
PARAMETER:Mercury, Total (Hg)				DATE/TIME ANALYZED:12/22/94 10:30				QC BATCH NUMBER:317086		
REPORTING LIMIT/DF: 0.0002UNITS:mg/L				METHOD REFERENCE :7470 (2)				TECHNICIAN:BPB		
BLANK	ICB	12224	<0.0002							
BLANK	CCB	12224	<0.0002							
BLANK	CCB	12224	<0.0002							
STANDARD	ICV	1121H	0.0040			0.0040	100			
STANDARD	CCV	1013P	0.0026			0.0025	104			
STANDARD	CCV	1013P	0.0024			0.0025	96			
SPIKE	MS	943142-002	0.0049					<0.0002	0.0050	98
SPIKE	PDS	943157-011	0.0027					<0.0002	0.0025	108
DUPLICATE	MD	943142-001	<0.0002	<0.0002	NC					
DUPLICATE	MD	943157-011	<0.0002	<0.0002	NC					
PARAMETER:Bicarbonate (Unfilt.)				DATE/TIME ANALYZED:12/22/94 15:00				QC BATCH NUMBER:317116		
REPORTING LIMIT/DF: 5 UNITS:mg/L				METHOD REFERENCE :2320 B (3)				TECHNICIAN:KDS		
BLANK	MB	941222	<5							
DUPLICATE	MD	943141-10	1500	1450	3					
DUPLICATE	MD	943142-8	866	866	0					
PARAMETER:Silver, Diss. (Ag)				DATE/TIME ANALYZED:12/28/94 09:32				QC BATCH NUMBER:317317		
REPORTING LIMIT/DF: 0.01 UNITS:mg/L				METHOD REFERENCE :6010 (2)				TECHNICIAN:WGL		
BLANK	ICB	1212H	<0.01							
BLANK	CCB	1212H	<0.01							
BLANK	CCB	1212H	<0.01							
BLANK	CCB	1212H	<0.01							
BLANK	CCB	1212H	<0.01							

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CORE LABORATORIES

QUALITY CONTROL REPORT 01/03/95

JOB NUMBER: 943142

CUSTOMER: GEOSCIENCE CONSULTANTS, LTD.

ATTN:

ANALYSIS				DUPLICATES		REFERENCE STANDARDS		MATRIX SPIKES		
ANALYSIS TYPE	ANALYSIS SUB-TYPE	ANALYSIS I.D.	ANALYZED VALUE (A)	DUPLICATE VALUE (B)	RPD or (A-B)	TRUE VALUE	PERCENT RECOVERY	ORIGINAL VALUE	SPIKE ADDED	PERCENT RECOVERY
PARAMETER: Silver, Diss. (Ag)				DATE/TIME ANALYZED: 12/28/94 09:32				QC BATCH NUMBER: 317317		
REPORTING LIMIT/DF: 0.01 UNITS: mg/L				METHOD REFERENCE : 6010 (2)				TECHNICIAN: WGL		
BLANK	CCB	1212H	<0.01							
BLANK	CCB	1212H	<0.01							
BLANK	CCB	1212H	<0.01							
BLANK	CCB	1212H	<0.01							
STANDARD	CCV	0914A	2.45			2.50	98			
STANDARD	ISB	1123J	0.97			1.00	97			
STANDARD	CCV	0914A	2.50			2.50	100			
STANDARD	CCV	0914A	2.61			2.50	104			
STANDARD	CCV	0914A	2.68			2.50	107			
STANDARD	CCV	0914A	2.38			2.50	95			
STANDARD	CCV	0914A	2.58			2.50	103			
STANDARD	CCV	0914A	2.47			2.50	99			
STANDARD	ICV	0729L	2.07			2.00	103			
STANDARD	ISB	1123J	0.99			1.00	99			
STANDARD	CCV	0914A	2.55			2.50	102			
SPIKE	PDS	943193-003	0.92					<0.01	1.00	92
SPIKE	PDS	943141-003	0.91					<0.01	1.00	91
SPIKE	PDS	943082-002	0.94					0.02	1.00	92
SPIKE	PDS	943142-002	0.91					<0.01	1.00	91
SPIKE	PDS	943154-001	0.87					0.02	1.00	85
SPIKE	PDS	943140-008	0.86					<0.01	1.00	86
DUPLICATE	MD	943141-002	<0.01	<0.01	NC					
DUPLICATE	MD	943082-002	0.02	0.01	0.01					
DUPLICATE	MD	943193-003	<0.01	<0.01	NC					
DUPLICATE	MD	943142-001	<0.01	<0.01	NC					
DUPLICATE	MD	943140-008	<0.01	<0.01	NC					

PARAMETER: Aluminum, Diss. (Al)
REPORTING LIMIT/DF: 0.05 UNITS: mg/LDATE/TIME ANALYZED: 12/28/94 11:09
METHOD REFERENCE : 6010 (2)QC BATCH NUMBER: 317318
TECHNICIAN: WGL

BLANK	ICB	1212H	<0.05							
BLANK	CCB	1212H	<0.05							
BLANK	CCB	1212H	<0.05							
BLANK	CCB	1212H	<0.05							
BLANK	CCB	1212H	<0.05							
BLANK	CCB	1212H	<0.05							
BLANK	CCB	1212H	<0.05							
BLANK	CCB	1212H	<0.05							
BLANK	CCB	1212H	<0.05							
STANDARD	CCV	1114H	9.57			10.0	96			
STANDARD	ISA	09260	567			500	113			
STANDARD	CCV	1114H	9.49			10.0	95			
STANDARD	ISB	1123J	540			500	108			
STANDARD	CCV	1114H	9.39			10.0	94			
STANDARD	CCV	1114H	9.97			10.0	100			
STANDARD	CCV	1114H	9.85			10.0	98			

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CORE LABORATORIES

QUALITY CONTROL REPORT 01/03/95

JOB NUMBER: 943142

CUSTOMER: GEOSCIENCE CONSULTANTS, LTD.

ATTN:

ANALYSIS				DUPLICATES		REFERENCE STANDARDS		MATRIX SPIKES		
ANALYSIS TYPE	ANALYSIS SUB-TYPE	ANALYSIS I.D.	ANALYZED VALUE (A)	DUPLICATE VALUE (B)	RPD or (A-B)	TRUE VALUE	PERCENT RECOVERY	ORIGINAL VALUE	SPIKE ADDED	PERCENT RECOVERY
PARAMETER: Aluminum, Diss. (Al)				DATE/TIME ANALYZED: 12/28/94 11:09				QC BATCH NUMBER: 317318		
REPORTING LIMIT/DF: 0.05 UNITS: mg/L				METHOD REFERENCE : 6010 (2)				TECHNICIAN: WGL		
STANDARD	CCV	1114H	9.38			10.0	94			
STANDARD	CCV	1114H	9.46			10.0	95			
STANDARD	ISA	09260	574			500	115			
STANDARD	ISB	1123J	549			500	110			
STANDARD	CCV	1114H	9.74			10.0	97			
STANDARD	ICV	0729L	1.98			2.00	99			
SPIKE	PDS	943193-003	1.98					<0.05	2.00	99
SPIKE	PDS	943141-003	1.93					0.12	2.00	90
SPIKE	PDS	943142-002	2.24					0.10	2.00	107
SPIKE	PDS	943154-001	1.87					<0.05	2.00	94
SPIKE	PDS	943082-002	2.17					0.47	2.00	85
SPIKE	PDS	943140-008	1.84					<0.05	2.00	92
DUPLICATE	MD	943141-002	<0.05	<0.05	NC					
DUPLICATE	MD	943154-001	<0.05	<0.05	NC					
DUPLICATE	MD	943142-001	0.08	0.06	0.02					
DUPLICATE	MD	943140-008	<0.05	<0.05	NC					
DUPLICATE	MD	943193-003	<0.05	<0.05	NC					

PARAMETER: Arsenic, Diss. (As)
REPORTING LIMIT/DF: 0.05 UNITS: mg/LDATE/TIME ANALYZED: 12/28/94 09:32
METHOD REFERENCE : 6010 (2)QC BATCH NUMBER: 317319
TECHNICIAN: WGL

BLANK	ICB	1212H	<0.05							
BLANK	CCB	1212H	<0.05							
BLANK	CCB	1212H	<0.05							
BLANK	CCB	1212H	<0.05							
BLANK	CCB	1212H	<0.05							
BLANK	CCB	1212H	<0.05							
BLANK	CCB	1212H	<0.05							
BLANK	CCB	1212H	<0.05							
STANDARD	CCV	1114H	2.60			2.50	104			
STANDARD	ISB	1123J	1.02			1.00	102			
STANDARD	CCV	1114H	2.60			2.50	104			
STANDARD	CCV	1114H	2.69			2.50	108			
STANDARD	CCV	1114H	2.61			2.50	104			
STANDARD	CCV	1114H	2.63			2.50	105			
STANDARD	CCV	1114H	2.61			2.50	104			
STANDARD	CCV	1114H	2.64			2.50	106			
STANDARD	ICV	0914E	2.09			2.00	104			
STANDARD	ISB	1123J	1.04			1.00	104			
STANDARD	CCV	1114H	2.71			2.50	108			
SPIKE	PDS	943193-003	1.05					<0.05	1.00	105
SPIKE	PDS	943141-003	1.09					<0.05	1.00	109
SPIKE	PDS	943082-002	1.05					<0.05	1.00	105
SPIKE	PDS	943142-002	1.14					<0.05	1.00	114
SPIKE	PDS	943154-001	0.99					<0.05	1.00	99

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CORE LABORATORIES

QUALITY CONTROL REPORT 01/03/95

JOB NUMBER: 943142

CUSTOMER: GEOSCIENCE CONSULTANTS, LTD.

ATTN:

ANALYSIS				DUPLICATES		REFERENCE STANDARDS		MATRIX SPIKES		
ANALYSIS TYPE	ANALYSIS SUB-TYPE	ANALYSIS I.D.	ANALYZED VALUE (A)	DUPLICATE VALUE (B)	RPD or (A-B)	TRUE VALUE	PERCENT RECOVERY	ORIGINAL VALUE	SPIKE ADDED	PERCENT RECOVERY
PARAMETER: Arsenic, Diss. (As)				DATE/TIME ANALYZED: 12/28/94 09:32				QC BATCH NUMBER: 317319		
REPORTING LIMIT/DF: 0.05 UNITS: mg/L				METHOD REFERENCE : 6010 (2)				TECHNICIAN: WGL		
SPIKE	PDS	943140-008	0.98					<0.05	1.00	98
DUPLICATE	MD	943141-002	<0.05	<0.05	NC					
DUPLICATE	MD	943082-002	<0.05	<0.05	NC					
DUPLICATE	MD	943193-003	<0.05	<0.05	NC					
DUPLICATE	MD	943154-001	<0.05	<0.05	NC					
DUPLICATE	MD	943142-001	<0.05	<0.05	NC					
DUPLICATE	MD	943140-008	<0.05	<0.05	NC					
PARAMETER: Barium, Diss. (Ba)				DATE/TIME ANALYZED: 12/28/94 09:32				QC BATCH NUMBER: 317321		
REPORTING LIMIT/DF: 0.01 UNITS: mg/L				METHOD REFERENCE : 6010 (2)				TECHNICIAN: WGL		
BLANK	ICB	1212H	<0.01							
BLANK	CCB	1212H	<0.01							
BLANK	CCB	1212H	<0.01							
BLANK	CCB	1212H	<0.01							
BLANK	CCB	1212H	<0.01							
BLANK	CCB	1212H	<0.01							
BLANK	CCB	1212H	<0.01							
BLANK	CCB	1212H	<0.01							
BLANK	CCB	1212H	<0.01							
STANDARD	CCV	1114H	5.18			5.00	104			
STANDARD	ISB	1123J	0.50			0.50	100			
STANDARD	CCV	1114H	5.16			5.00	103			
STANDARD	CCV	1114H	5.10			5.00	102			
STANDARD	CCV	1114H	5.24			5.00	105			
STANDARD	CCV	1114H	5.46			5.00	109			
STANDARD	CCV	1114H	5.11			5.00	102			
STANDARD	CCV	1114H	5.24			5.00	105			
STANDARD	ICV	0729L	2.09			2.00	104			
STANDARD	ISB	1123J	0.52			0.50	104			
STANDARD	CCV	1114H	5.20			5.00	104			
SPIKE	PDS	943193-003	1.04					0.02	1.00	102
SPIKE	PDS	943141-003	1.09					0.17	1.00	92
SPIKE	PDS	943082-002	1.03					0.04	1.00	99
SPIKE	PDS	943142-002	1.14					0.12	1.00	102
SPIKE	PDS	943154-001	1.03					0.06	1.00	97
SPIKE	PDS	943140-008	1.05					0.12	1.00	93
DUPLICATE	MD	943082-002	0.04	0.04	0.00					
DUPLICATE	MD	943141-002	<0.01	<0.01	NC					
DUPLICATE	MD	943193-003	0.02	0.02	0.00					
DUPLICATE	MD	943154-001	0.06	0.06	0					
DUPLICATE	MD	943142-001	0.03	0.03	0.00					
DUPLICATE	MD	943140-008	0.12	0.12	0					

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CORE LABORATORIES

QUALITY CONTROL REPORT 01/03/95

JOB NUMBER: 943142

CUSTOMER: GEOSCIENCE CONSULTANTS, LTD.

ATTN:

ANALYSIS				DUPLICATES		REFERENCE STANDARDS		MATRIX SPIKES		
ANALYSIS TYPE	ANALYSIS SUB-TYPE	ANALYSIS I.D.	ANALYZED VALUE (A)	DUPLICATE VALUE (B)	RPD or (A-B)	TRUE VALUE	PERCENT RECOVERY	ORIGINAL VALUE	SPIKE ADDED	PERCENT RECOVERY
PARAMETER: Cadmium, Diss. (Cd)				DATE/TIME ANALYZED: 12/28/94 09:32				QC BATCH NUMBER: 317323		
REPORTING LIMIT/DF: 0.005 UNITS: mg/L				METHOD REFERENCE : 6010 (2)				TECHNICIAN: WGL		
BLANK	ICB	1212H	<0.005							
BLANK	CCB	1212H	<0.005							
BLANK	CCB	1212H	<0.005							
BLANK	CCB	1212H	<0.005							
BLANK	CCB	1212H	<0.005							
BLANK	CCB	1212H	<0.005							
BLANK	CCB	1212H	<0.005							
BLANK	CCB	1212H	<0.005							
STANDARD	CCV	1114H	1.02			1.00	102			
STANDARD	ISB	1123J	0.869			1.00	87			
STANDARD	CCV	1114H	1.02			1.00	102			
STANDARD	CCV	1114H	0.999			1.00	100			
STANDARD	CCV	1114H	0.972			1.00	97			
STANDARD	CCV	1114H	0.983			1.00	98			
STANDARD	CCV	1114H	1.01			1.00	101			
STANDARD	CCV	1114H	0.978			1.00	98			
STANDARD	ICV	0914E	1.96			2.00	98			
STANDARD	ISB	1123J	0.893			1.00	89			
STANDARD	CCV	1114H	1.01			1.00	101			
SPIKE	PDS	943193-003	0.972					<0.005	1.00	97
SPIKE	PDS	943141-003	0.820					<0.005	1.00	82
SPIKE	PDS	943082-002	0.928					<0.005	1.00	93
SPIKE	PDS	943142-002	0.967					<0.005	1.00	97
SPIKE	PDS	943154-001	0.885					<0.005	1.00	88
SPIKE	PDS	943140-008	0.855					<0.005	1.00	86
DUPLICATE	MD	943141-002	<0.005	<0.005	NC					
DUPLICATE	MD	943082-002	<0.005	<0.005	NC					
DUPLICATE	MD	943193-003	<0.005	<0.005	NC					
DUPLICATE	MD	943154-001	<0.005	<0.005	NC					
DUPLICATE	MD	943142-001	<0.005	<0.005	NC					
DUPLICATE	MD	943140-008	<0.005	<0.005	NC					

PARAMETER: Cobalt, Diss. (Co)

DATE/TIME ANALYZED: 12/28/94 09:32

QC BATCH NUMBER: 317324

REPORTING LIMIT/DF: 0.03 UNITS: mg/L

METHOD REFERENCE : 6010 (2)

TECHNICIAN: WGL

BLANK	ICB	1212H	<0.03							
BLANK	CCB	1212H	<0.03							
BLANK	CCB	1212H	<0.03							
BLANK	CCB	1212H	<0.03							
BLANK	CCB	1212H	<0.03							
BLANK	CCB	1212H	<0.03							
BLANK	CCB	1212H	<0.03							
BLANK	CCB	1212H	<0.03							
BLANK	CCB	1212H	<0.03							
STANDARD	CCV	1114H	2.53			2.50	101			

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CORE LABORATORIES

QUALITY CONTROL REPORT 01/03/95

JOB NUMBER: 943142 CUSTOMER: GEOSCIENCE CONSULTANTS, LTD. ATTN:

ANALYSIS				DUPLICATES		REFERENCE STANDARDS		MATRIX SPIKES		
ANALYSIS TYPE	ANALYSIS SUB-TYPE	ANALYSIS I.D.	ANALYZED VALUE (A)	DUPLICATE VALUE (B)	RPD or (A-B)	TRUE VALUE	PERCENT RECOVERY	ORIGINAL VALUE	SPIKE ADDED	PERCENT RECOVERY
PARAMETER: Cobalt, Diss. (Co)				DATE/TIME ANALYZED: 12/28/94 09:32				QC BATCH NUMBER: 317324		
REPORTING LIMIT/DF: 0.03 UNITS: mg/L				METHOD REFERENCE : 6010 (2)				TECHNICIAN: WGL		
STANDARD	ISB	1123J	0.45			0.50	90			
STANDARD	CCV	1114H	2.51			2.50	100			
STANDARD	CCV	1114H	2.54			2.50	102			
STANDARD	CCV	1114H	2.67			2.50	107			
STANDARD	CCV	1114H	2.69			2.50	108			
STANDARD	CCV	1114H	2.52			2.50	101			
STANDARD	CCV	1114H	2.60			2.50	104			
STANDARD	ICV	0914E	1.98			2.00	99			
STANDARD	ISB	1123J	0.47			0.50	94			
STANDARD	CCV	1114H	2.58			2.50	103			
SPIKE	PDS	943193-003	1.00					<0.03	1.00	100
SPIKE	PDS	943141-003	0.89					<0.03	1.00	89
SPIKE	PDS	943082-002	0.97					<0.03	1.00	97
SPIKE	PDS	943142-002	1.08					<0.03	1.00	108
SPIKE	PDS	943154-001	0.90					<0.03	1.00	90
SPIKE	PDS	943140-008	0.88					<0.03	1.00	88
DUPLICATE	MD	943141-002	<0.03	<0.03	NC					
DUPLICATE	MD	943082-002	<0.03	<0.03	NC					
DUPLICATE	MD	943193-003	<0.03	<0.03	NC					
DUPLICATE	MD	943154-001	<0.03	<0.03	NC					
DUPLICATE	MD	943142-001	<0.03	<0.03	NC					
DUPLICATE	MD	943140-008	<0.03	<0.03	NC					

PARAMETER: Chromium, Diss. (Cr) DATE/TIME ANALYZED: 12/28/94 09:32 QC BATCH NUMBER: 317325
REPORTING LIMIT/DF: 0.01 UNITS: mg/L METHOD REFERENCE : 6010 (2) TECHNICIAN: WGL

BLANK	ICB	1212H	<0.01							
BLANK	CCB	1212H	<0.01							
BLANK	CCB	1212H	<0.01							
BLANK	CCB	1212H	<0.01							
BLANK	CCB	1212H	<0.01							
BLANK	CCB	1212H	<0.01							
BLANK	CCB	1212H	<0.01							
BLANK	CCB	1212H	<0.01							
STANDARD	CCV	1114H	2.52			2.50	101			
STANDARD	ISB	1123J	0.44			0.50	88			
STANDARD	CCV	1114H	2.51			2.50	100			
STANDARD	CCV	1114H	2.50			2.50	100			
STANDARD	CCV	1114H	2.64			2.50	106			
STANDARD	CCV	1114H	2.64			2.50	106			
STANDARD	CCV	1114H	2.50			2.50	100			
STANDARD	CCV	1114H	2.54			2.50	102			
STANDARD	ICV	0914E	2.00			2.00	100			
STANDARD	ISB	1123J	0.46			0.50	92			
STANDARD	CCV	1114H	2.54			2.50	102			

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(303) 751-1780



CORE LABORATORIES

QUALITY CONTROL REPORT 01/03/95

JOB NUMBER: 943142

CUSTOMER: GEOSCIENCE CONSULTANTS, LTD.

ATTN:

ANALYSIS				DUPLICATES		REFERENCE STANDARDS		MATRIX SPIKES		
ANALYSIS TYPE	ANALYSIS SUB-TYPE	ANALYSIS I.D.	ANALYZED VALUE (A)	DUPLICATE VALUE (B)	RPD or (A-B)	TRUE VALUE	PERCENT RECOVERY	ORIGINAL VALUE	SPIKE ADDED	PERCENT RECOVERY
PARAMETER: Chromium, Diss. (Cr)				DATE/TIME ANALYZED: 12/28/94 09:32				QC BATCH NUMBER: 317325		
REPORTING LIMIT/DF: 0.01 UNITS: mg/L				METHOD REFERENCE : 6010 (2)				TECHNICIAN: WGL		
SPIKE	PDS	943193-003	0.97					<0.01	1.00	97
SPIKE	PDS	943141-003	0.86					<0.01	1.00	86
SPIKE	PDS	943082-002	0.94					<0.01	1.00	94
SPIKE	PDS	943142-002	1.05					<0.01	1.00	105
SPIKE	PDS	943154-001	0.91					<0.01	1.00	91
SPIKE	PDS	943140-008	0.87					<0.01	1.00	87
DUPLICATE	MD	943141-002	<0.01	<0.01	NC					
DUPLICATE	MD	943082-002	<0.01	<0.01	NC					
DUPLICATE	MD	943193-003	<0.01	<0.01	NC					
DUPLICATE	MD	943154-001	<0.01	<0.01	NC					
DUPLICATE	MD	943142-001	<0.01	<0.01	NC					
DUPLICATE	MD	943140-008	<0.01	<0.01	NC					

PARAMETER: Copper, Diss. (Cu)

DATE/TIME ANALYZED: 12/28/94 09:32

QC BATCH NUMBER: 317331

REPORTING LIMIT/DF: 0.01 UNITS: mg/L

METHOD REFERENCE : 6010 (2)

TECHNICIAN: WGL

BLANK	ICB	1212H	<0.01							
BLANK	CCB	1212H	<0.01							
BLANK	CCB	1212H	<0.01							
BLANK	CCB	1212H	<0.01							
BLANK	CCB	1212H	<0.01							
BLANK	CCB	1212H	<0.01							
BLANK	CCB	1212H	<0.01							
BLANK	CCB	1212H	<0.01							
BLANK	CCB	1212H	<0.01							
STANDARD	CCV	1114H	2.51			2.50	100			
STANDARD	ISB	1123J	0.51			0.50	102			
STANDARD	CCV	1114H	2.49			2.50	100			
STANDARD	CCV	1114H	2.62			2.50	105			
STANDARD	CCV	1114H	2.73			2.50	109			
STANDARD	CCV	1114H	2.50			2.50	100			
STANDARD	CCV	1114H	2.49			2.50	100			
STANDARD	CCV	1114H	2.70			2.50	108			
STANDARD	ICV	0914E	1.98			2.00	99			
STANDARD	ISB	1123J	0.54			0.50	108			
STANDARD	CCV	1114H	2.71			2.50	108			
SPIKE	PDS	943193-003	0.99					<0.01	1.00	99
SPIKE	PDS	943141-003	0.98					<0.01	1.00	98
SPIKE	PDS	943082-002	1.03					0.02	1.00	101
SPIKE	PDS	943142-002	1.07					0.02	1.00	105
SPIKE	PDS	943154-001	0.89					<0.01	1.00	89
SPIKE	PDS	943140-008	0.87					<0.01	1.00	87
DUPLICATE	MD	943141-002	0.01	0.01	0.00					
DUPLICATE	MD	943082-002	0.02	0.02	0.00					
DUPLICATE	MD	943193-003	<0.01	<0.01	NC					
DUPLICATE	MD	943154-001	<0.01	<0.01	NC					

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Aurora, CO 80014
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CORE LABORATORIES

QUALITY CONTROL REPORT 01/03/95

JOB NUMBER: 943142

CUSTOMER: GEOSCIENCE CONSULTANTS, LTD.

ATTN:

ANALYSIS				DUPLICATES		REFERENCE STANDARDS		MATRIX SPIKES		
ANALYSIS TYPE	ANALYSIS SUB-TYPE	ANALYSIS I.D.	ANALYZED VALUE (A)	DUPLICATE VALUE (B)	RPD or (A-B)	TRUE VALUE	PERCENT RECOVERY	ORIGINAL VALUE	SPIKE ADDED	PERCENT RECOVERY
PARAMETER: Copper, Diss. (Cu)				DATE/TIME ANALYZED: 12/28/94 09:32				QC BATCH NUMBER: 317331		
REPORTING LIMIT/DF: 0.01 UNITS: mg/L				METHOD REFERENCE : 6010 (2)				TECHNICIAN: WGL		

DUPLICATE	MD	943142-001	0.02	0.02	0.00					
DUPLICATE	MD	943140-008	<0.01	<0.01	NC					

PARAMETER: Iron, Diss. (Fe)				DATE/TIME ANALYZED: 12/28/94 09:32				QC BATCH NUMBER: 317332		
REPORTING LIMIT/DF: 0.03 UNITS: mg/L				METHOD REFERENCE : 6010 (2)				TECHNICIAN: WGL		

BLANK	ICB	1212H	<0.03							
BLANK	CCB	1212H	<0.03							
BLANK	CCB	1212H	<0.03							
BLANK	CCB	1212H	<0.03							
BLANK	CCB	1212H	<0.03							
BLANK	CCB	1212H	<0.03							
BLANK	CCB	1212H	<0.03							
BLANK	CCB	1212H	<0.03							
BLANK	CCB	1212H	<0.03							
STANDARD	CCV	1114H	5.05			5.00	101			
STANDARD	ISA	09260	224			200	112			
STANDARD	CCV	1114H	5.00			5.00	100			
STANDARD	ISB	1123J	213			200	106			
STANDARD	CCV	1114H	5.00			5.00	100			
STANDARD	CCV	1114H	5.25			5.00	105			
STANDARD	CCV	1114H	5.15			5.00	103			
STANDARD	CCV	1114H	4.93			5.00	99			
STANDARD	CCV	1114H	5.01			5.00	100			
STANDARD	ISA	09260	212			200	106			
STANDARD	ISB	1123J	203			200	101			
STANDARD	CCV	1114H	5.12			5.00	102			
STANDARD	ICV	0914E	1.93			2.00	96			
SPIKE	PDS	943193-003	2.04					0.05	2.00	100
SPIKE	PDS	943141-003	3.61					1.99	2.00	81
SPIKE	PDS	943142-002	2.18					0.03	2.00	108
SPIKE	PDS	943154-001	1.87					<0.03	2.00	94
SPIKE	PDS	943082-002	2.17					0.21	2.00	98
SPIKE	PDS	943140-008	1.77					<0.03	2.00	88
DUPLICATE	MD	943141-002	0.18	0.18	0					
DUPLICATE	MD	943193-003	0.05	0.05	0.00					
DUPLICATE	MD	943154-001	<0.03	<0.03	NC					
DUPLICATE	MD	943142-001	1.10	1.25	13					
DUPLICATE	MD	943140-008	<0.03	<0.03	NC					

PARAMETER: Manganese, Diss. (Mn)				DATE/TIME ANALYZED: 12/28/94 09:32				QC BATCH NUMBER: 317335		
REPORTING LIMIT/DF: 0.01 UNITS: mg/L				METHOD REFERENCE : 6010 (2)				TECHNICIAN: WGL		

BLANK	ICB	1212H	<0.01							
BLANK	CCB	1212H	<0.01							
BLANK	CCB	1212H	<0.01							

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CORE LABORATORIES

QUALITY CONTROL REPORT 01/03/95

JOB NUMBER: 943142

CUSTOMER: GEOSCIENCE CONSULTANTS, LTD.

ATTN:

ANALYSIS				DUPLICATES		REFERENCE STANDARDS		MATRIX SPIKES		
ANALYSIS TYPE	ANALYSIS SUB-TYPE	ANALYSIS I.D.	ANALYZED VALUE (A)	DUPLICATE VALUE (B)	RPD or (A-B)	TRUE VALUE	PERCENT RECOVERY	ORIGINAL VALUE	SPIKE ADDED	PERCENT RECOVERY
PARAMETER:Manganese, Diss. (Mn)				DATE/TIME ANALYZED:12/28/94 09:32				QC BATCH NUMBER:317335		
REPORTING LIMIT/DF: 0.01 UNITS:mg/L				METHOD REFERENCE :6010 (2)				TECHNICIAN:WGL		
BLANK	CCB	1212H	<0.01							
BLANK	CCB	1212H	<0.01							
BLANK	CCB	1212H	<0.01							
BLANK	CCB	1212H	<0.01							
BLANK	CCB	1212H	<0.01							
BLANK	CCB	1212H	<0.01							
STANDARD	CCV	1114H	5.24			5.00	105			
STANDARD	ISB	1123J	0.45			0.50	90			
STANDARD	CCV	1114H	5.22			5.00	104			
STANDARD	CCV	1114H	5.18			5.00	104			
STANDARD	CCV	1114H	5.40			5.00	108			
STANDARD	CCV	1114H	5.07			5.00	101			
STANDARD	CCV	1114H	5.19			5.00	104			
STANDARD	CCV	1114H	5.31			5.00	106			
STANDARD	ICV	0914E	2.03			2.00	101			
STANDARD	ISB	1123J	0.47			0.50	94			
STANDARD	CCV	1114H	5.26			5.00	105			
SPIKE	PDS	943193-003	1.05					0.03	1.00	102
SPIKE	PDS	943141-003	3.20					2.43	1.00	77
SPIKE	PDS	943082-002	1.01					0.02	1.00	99
SPIKE	PDS	943142-002	1.28					0.21	1.00	107
SPIKE	PDS	943154-001	0.95					<0.01	1.00	95
SPIKE	PDS	943140-008	1.68					0.80	1.00	88
DUPLICATE	MD	943141-002	1.95	2.00	3					
DUPLICATE	MD	943082-002	0.02	0.02	0.00					
DUPLICATE	MD	943193-003	0.03	0.03	0.00					
DUPLICATE	MD	943154-001	<0.01	<0.01	NC					
DUPLICATE	MD	943142-001	6.18	6.99	12					
DUPLICATE	MD	943140-008	0.80	0.80	0					

PARAMETER:Molybdenum, Diss. (Mo)

DATE/TIME ANALYZED:12/28/94 09:32

QC BATCH NUMBER:317336

REPORTING LIMIT/DF: 0.05 UNITS:mg/L

METHOD REFERENCE :6010 (2)

TECHNICIAN:WGL

BLANK	ICB	1212H	<0.05							
BLANK	CCB	1212H	<0.05							
BLANK	CCB	1212H	<0.05							
BLANK	CCB	1212H	<0.05							
BLANK	CCB	1212H	<0.05							
BLANK	CCB	1212H	<0.05							
BLANK	CCB	1212H	<0.05							
BLANK	CCB	1212H	<0.05							
BLANK	CCB	1212H	<0.05							
STANDARD	CCV	1114H	2.52			2.50	101			
STANDARD	ISB	1123J	0.94			1.00	94			
STANDARD	CCV	1114H	2.50			2.50	100			
STANDARD	CCV	1114H	2.46			2.50	98			

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CUSTOMER: GEOSCIENCE CONSULTANTS, LTD.

ATTN:

ANALYSIS				DUPLICATES		REFERENCE STANDARDS		MATRIX SPIKES		
ANALYSIS TYPE	ANALYSIS SUB-TYPE	ANALYSIS I.D.	ANALYZED VALUE (A)	DUPLICATE VALUE (B)	RPD or (A-B)	TRUE VALUE	PERCENT RECOVERY	ORIGINAL VALUE	SPIKE ADDED	PERCENT RECOVERY
PARAMETER:Molybdenum, Diss. (Mo)				DATE/TIME ANALYZED:12/28/94 09:32				QC BATCH NUMBER:317336		
REPORTING LIMIT/DF: 0.05 UNITS:mg/L				METHOD REFERENCE :6010 (2)				TECHNICIAN:WGL		
STANDARD	CCV	1114H	2.56			2.50	102			
STANDARD	CCV	1114H	2.54			2.50	102			
STANDARD	CCV	1114H	2.50			2.50	100			
STANDARD	CCV	1114H	2.44			2.50	98			
STANDARD	ICV	0914E	1.92			2.00	96			
STANDARD	ISB	1123J	0.96			1.00	96			
STANDARD	CCV	1114H	2.53			2.50	101			
SPIKE	PDS	943193-003	1.02					<0.05	1.00	102
SPIKE	PDS	943141-003	0.92					<0.05	1.00	92
SPIKE	PDS	943082-002	0.97					<0.05	1.00	97
SPIKE	PDS	943142-002	1.06					<0.05	1.00	106
SPIKE	PDS	943154-001	0.93					<0.05	1.00	93
SPIKE	PDS	943140-008	0.92					<0.05	1.00	92
DUPLICATE	MD	943141-002	<0.05	<0.05	NC					
DUPLICATE	MD	943082-002	<0.05	<0.05	NC					
DUPLICATE	MD	943193-003	<0.05	<0.05	NC					
DUPLICATE	MD	943154-001	<0.05	<0.05	NC					
DUPLICATE	MD	943142-001	<0.05	<0.05	NC					
DUPLICATE	MD	943140-008	<0.05	<0.05	NC					

PARAMETER:Nickel, Diss. (Ni)
REPORTING LIMIT/DF: 0.04 UNITS:mg/LDATE/TIME ANALYZED:12/28/94 09:32
METHOD REFERENCE :6010 (2)QC BATCH NUMBER:317339
TECHNICIAN:WGL

BLANK	ICB	1212H	<0.04							
BLANK	CCB	1212H	<0.04							
BLANK	CCB	1212H	<0.04							
BLANK	CCB	1212H	<0.04							
BLANK	CCB	1212H	<0.04							
BLANK	CCB	1212H	<0.04							
BLANK	CCB	1212H	<0.04							
BLANK	CCB	1212H	<0.04							
STANDARD	CCV	1114H	2.57			2.50	103			
STANDARD	ISB	1123J	0.85			1.00	85			
STANDARD	CCV	1114H	2.57			2.50	103			
STANDARD	CCV	1114H	2.47			2.50	99			
STANDARD	CCV	1114H	2.59			2.50	104			
STANDARD	CCV	1114H	2.54			2.50	102			
STANDARD	CCV	1114H	2.55			2.50	102			
STANDARD	CCV	1114H	2.49			2.50	100			
STANDARD	ICV	0914E	1.97			2.00	98			
STANDARD	ISB	1123J	0.85			1.00	85			
STANDARD	CCV	1114H	2.51			2.50	100			
SPIKE	PDS	943193-003	0.99					<0.04	1.00	99
SPIKE	PDS	943141-003	0.80					<0.04	1.00	80
SPIKE	PDS	943082-002	0.95					<0.04	1.00	95

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CORE LABORATORIES

QUALITY CONTROL REPORT 01/03/95

JOB NUMBER: 943142

CUSTOMER: GEOSCIENCE CONSULTANTS, LTD.

ATTN:

ANALYSIS				DUPLICATES		REFERENCE STANDARDS		MATRIX SPIKES		
ANALYSIS TYPE	ANALYSIS SUB-TYPE	ANALYSIS I.D.	ANALYZED VALUE (A)	DUPLICATE VALUE (B)	RPD or (A-B)	TRUE VALUE	PERCENT RECOVERY	ORIGINAL VALUE	SPIKE ADDED	PERCENT RECOVERY
PARAMETER:Nickel, Diss. (Ni)				DATE/TIME ANALYZED:12/28/94 09:32				QC BATCH NUMBER:317339		
REPORTING LIMIT/DF: 0.04 UNITS:mg/L				METHOD REFERENCE :6010 (2)				TECHNICIAN:WGL		
SPIKE	PDS	943142-002	1.02					<0.04	1.00	102
SPIKE	PDS	943154-001	0.87					<0.04	1.00	87
SPIKE	PDS	943140-008	0.86					<0.04	1.00	86
DUPLICATE	MD	943141-002	<0.04	<0.04	NC					
DUPLICATE	MD	943082-002	<0.04	<0.04	NC					
DUPLICATE	MD	943193-003	<0.04	<0.04	NC					
DUPLICATE	MD	943154-001	<0.04	<0.04	NC					
DUPLICATE	MD	943142-001	<0.04	<0.04	NC					
DUPLICATE	MD	943140-008	<0.04	<0.04	NC					

PARAMETER:Lead, Diss. (Pb)

DATE/TIME ANALYZED:12/28/94 09:32

QC BATCH NUMBER:317340

REPORTING LIMIT/DF: 0.05 UNITS:mg/L

METHOD REFERENCE :6010 (2)

TECHNICIAN:WGL

BLANK	ICB	1212H	<0.05							
BLANK	CCB	1212H	<0.05							
BLANK	CCB	1212H	<0.05							
BLANK	CCB	1212H	<0.05							
BLANK	CCB	1212H	<0.05							
BLANK	CCB	1212H	<0.05							
BLANK	CCB	1212H	<0.05							
BLANK	CCB	1212H	<0.05							
BLANK	CCB	1212H	<0.05							
STANDARD	CCV	1114H	1.01			1.00	101			
STANDARD	ISB	1123J	0.87			1.00	87			
STANDARD	CCV	1114H	1.01			1.00	101			
STANDARD	CCV	1114H	0.98			1.00	98			
STANDARD	CCV	1114H	0.97			1.00	97			
STANDARD	CCV	1114H	1.00			1.00	100			
STANDARD	CCV	1114H	0.99			1.00	99			
STANDARD	CCV	1114H	0.95			1.00	95			
STANDARD	ICV	0914E	1.92			2.00	96			
STANDARD	ISB	1123J	0.89			1.00	89			
STANDARD	CCV	1114H	0.99			1.00	99			
SPIKE	PDS	943193-003	0.97					<0.05	1.00	97
SPIKE	PDS	943141-003	0.82					<0.05	1.00	82
SPIKE	PDS	943082-002	0.94					<0.05	1.00	94
SPIKE	PDS	943142-002	0.98					<0.05	1.00	98
SPIKE	PDS	943154-001	0.90					<0.05	1.00	90
SPIKE	PDS	943140-008	0.87					<0.05	1.00	87
DUPLICATE	MD	943141-002	<0.05	<0.05	NC					
DUPLICATE	MD	943082-002	<0.05	<0.05	NC					
DUPLICATE	MD	943193-003	<0.05	<0.05	NC					
DUPLICATE	MD	943154-001	<0.05	<0.05	NC					
DUPLICATE	MD	943142-001	<0.05	<0.05	NC					
DUPLICATE	MD	943140-008	<0.05	<0.05	NC					

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CORE LABORATORIES

QUALITY CONTROL REPORT 01/03/95

JOB NUMBER: 943142

CUSTOMER: GEOSCIENCE CONSULTANTS, LTD.

ATTN:

ANALYSIS				DUPLICATES		REFERENCE STANDARDS		MATRIX SPIKES		
ANALYSIS TYPE	ANALYSIS SUB-TYPE	ANALYSIS I.D.	ANALYZED VALUE (A)	DUPLICATE VALUE (B)	RPD or (A-B)	TRUE VALUE	PERCENT RECOVERY	ORIGINAL VALUE	SPIKE ADDED	PERCENT RECOVERY
PARAMETER:Selenium, Diss. (Se)				DATE/TIME ANALYZED:12/28/94 09:32				QC BATCH NUMBER:317341		
REPORTING LIMIT/DF: 0.1 UNITS:mg/L				METHOD REFERENCE :6010 (2)				TECHNICIAN:WGL		
BLANK	ICB	1212H	<0.1							
BLANK	CCB	1212H	<0.1							
BLANK	CCB	1212H	<0.1							
BLANK	CCB	1212H	<0.1							
BLANK	CCB	1212H	<0.1							
BLANK	CCB	1212H	<0.1							
BLANK	CCB	1212H	<0.1							
BLANK	CCB	1212H	<0.1							
STANDARD	CCV	1114H	2.6			2.5	104			
STANDARD	ISB	1123J	1.0			1.0	100			
STANDARD	CCV	1114H	2.6			2.5	104			
STANDARD	CCV	1114H	2.6			2.5	104			
STANDARD	CCV	1114H	2.6			2.5	104			
STANDARD	CCV	1114H	2.7			2.5	108			
STANDARD	CCV	1114H	2.6			2.5	104			
STANDARD	CCV	1114H	2.5			2.5	100			
STANDARD	ICV	0914E	2.1			2.0	105			
STANDARD	ISB	1123J	1.0			1.0	100			
STANDARD	CCV	1114H	2.7			2.5	108			
SPIKE	PDS	943193-003	1.1					<0.1	1.0	110
SPIKE	PDS	943141-003	1.2					<0.1	1.0	120
SPIKE	PDS	943082-002	1.1					<0.1	1.0	110
SPIKE	PDS	943142-002	1.2					<0.1	1.0	120
SPIKE	PDS	943154-001	1.1					<0.1	1.0	110
SPIKE	PDS	943140-008	1.1					<0.1	1.0	110
DUPLICATE	MD	943141-002	<0.1	<0.1	NC					
DUPLICATE	MD	943082-002	<0.1	<0.1	NC					
DUPLICATE	MD	943193-003	<0.1	<0.1	NC					
DUPLICATE	MD	943154-001	<0.1	<0.1	NC					
DUPLICATE	MD	943142-001	<0.1	<0.1	NC					
DUPLICATE	MD	943140-008	<0.1	<0.1	NC					

PARAMETER:Zinc, Diss. (Zn)
REPORTING LIMIT/DF: 0.01 UNITS:mg/LDATE/TIME ANALYZED:12/28/94 09:32
METHOD REFERENCE :6010 (2)QC BATCH NUMBER:317342
TECHNICIAN:WGL

BLANK	ICB	1212H	<0.01							
BLANK	CCB	1212H	<0.01							
BLANK	CCB	1212H	<0.01							
BLANK	CCB	1212H	<0.01							
BLANK	CCB	1212H	<0.01							
BLANK	CCB	1212H	<0.01							
BLANK	CCB	1212H	<0.01							
BLANK	CCB	1212H	<0.01							
STANDARD	CCV	1114H	2.49			2.50	100			

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ATTN:

ANALYSIS				DUPLICATES		REFERENCE STANDARDS		MATRIX SPIKES		
ANALYSIS TYPE	ANALYSIS SUB-TYPE	ANALYSIS I.D.	ANALYZED VALUE (A)	DUPLICATE VALUE (B)	RPD or (A-B)	TRUE VALUE	PERCENT RECOVERY	ORIGINAL VALUE	SPIKE ADDED	PERCENT RECOVERY
PARAMETER: Zinc, Diss. (Zn)				DATE/TIME ANALYZED: 12/28/94 09:32				QC BATCH NUMBER: 317342		
REPORTING LIMIT/DF: 0.01 UNITS: mg/L				METHOD REFERENCE : 6010 (2)				TECHNICIAN: WGL		
STANDARD	ISB	1123J	0.97			1.00	97			
STANDARD	CCV	1114H	2.47			2.50	99			
STANDARD	CCV	1114H	2.60			2.50	104			
STANDARD	CCV	1114H	2.73			2.50	109			
STANDARD	CCV	1114H	2.59			2.50	104			
STANDARD	CCV	1114H	2.47			2.50	99			
STANDARD	CCV	1114H	2.66			2.50	106			
STANDARD	ICV	0914E	2.03			2.00	101			
STANDARD	ISB	1123J	1.01			1.00	101			
STANDARD	CCV	1114H	2.65			2.50	106			
SPIKE	PDS	943193-003	1.14					0.15	1.00	99
SPIKE	PDS	943141-003	0.92					<0.01	1.00	92
SPIKE	PDS	943082-002	1.08					0.06	1.00	102
SPIKE	PDS	943142-002	1.12					<0.01	1.00	112
SPIKE	PDS	943154-001	0.91					<0.01	1.00	91
SPIKE	PDS	943140-008	0.89					<0.01	1.00	89
DUPLICATE	MD	943141-002	<0.01	<0.01	NC					
DUPLICATE	MD	943082-002	0.06	0.06	0					
DUPLICATE	MD	943193-003	0.15	0.15	0					
DUPLICATE	MD	943154-001	<0.01	<0.01	NC					
DUPLICATE	MD	943142-001	<0.01	<0.01	NC					
DUPLICATE	MD	943140-008	<0.01	<0.01	NC					

PARAMETER: Calcium, Total (Ca)

DATE/TIME ANALYZED: 12/29/94 12:07

QC BATCH NUMBER: 317408

REPORTING LIMIT/DF: 0.1 UNITS: mg/L

METHOD REFERENCE : 6010 (2)

TECHNICIAN: GEF

BLANK	ICB	1212J	<0.1							
BLANK	MB	1216	<0.1							
BLANK	CCB	1212J	<0.1							
BLANK	CCB	1212J	<0.1							
BLANK	CCB	1212J	<0.1							
BLANK	CCB	1212J	<0.1							
BLANK	CCB	1212J	<0.1							
STANDARD	CCV	1215H	9.7			10.0	97			
STANDARD	ICV	Q1101	19.6			20.0	98			
STANDARD	CCV	1215H	9.5			10.0	95			
STANDARD	LCS	R1101	18.3			20.0	92			
STANDARD	CCV	1215H	9.3			10.0	93			
STANDARD	CCV	1215H	9.4			10.0	94			
STANDARD	CCV	1215H	9.6			10.0	96			

PARAMETER: Calcium, Total (Ca)

DATE/TIME ANALYZED: 12/29/94 12:04

QC BATCH NUMBER: 317409

REPORTING LIMIT/DF: 1.0 UNITS: mg/L

METHOD REFERENCE : 6010 (2)

TECHNICIAN: GEF

BLANK	ICB	1212J	<1.0							
BLANK	MB	1216	<1.0							

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CUSTOMER: GEOSCIENCE CONSULTANTS, LTD.

ATTN:

ANALYSIS				DUPLICATES		REFERENCE STANDARDS		MATRIX SPIKES		
ANALYSIS TYPE	ANALYSIS SUB-TYPE	ANALYSIS I.D.	ANALYZED VALUE (A)	DUPLICATE VALUE (B)	RPD or (A-B)	TRUE VALUE	PERCENT RECOVERY	ORIGINAL VALUE	SPIKE ADDED	PERCENT RECOVERY
PARAMETER: Calcium, Total (Ca)				DATE/TIME ANALYZED: 12/29/94 12:04				QC BATCH NUMBER: 317409		
REPORTING LIMIT/DF: 1.0 UNITS: mg/L				METHOD REFERENCE : 6010 (2)				TECHNICIAN: GEF		
BLANK	CCB	1212J	<1.0							
BLANK	CCB	1212J	<1.0							
BLANK	CCB	1212J	<1.0							
BLANK	CCB	1212J	<1.0							
BLANK	CCB	1212J	<1.0							
STANDARD	ISA	09260	530			500	106			
STANDARD	ISB	1123J	512			500	102			
STANDARD	CCV	0914H	261			250	104			
STANDARD	ICV	1101Q	202			200	101			
STANDARD	CCV	0914H	261			250	104			
STANDARD	LCS	1101R	182			200	91			
STANDARD	CCV	0914H	253			250	101			
STANDARD	ISA	09260	469			500	94			
STANDARD	ISB	1123J	459			500	92			
STANDARD	CCV	0914H	258			250	103			
STANDARD	CCV	0914H	261			250	104			
SPIKE	PDS	943141-003	108					65.5	50.0	85
SPIKE	MS	943142-002	141					86.9	50.0	108
SPIKE	MS	943141-003	345					298	50.0	94
DUPLICATE	MD	943142-001	195	190	3					
DUPLICATE	MD	943141-002	190	181	5					

PARAMETER: Potassium, Total (K)

DATE/TIME ANALYZED: 12/29/94 13:21

QC BATCH NUMBER: 317410

REPORTING LIMIT/DF: 5 UNITS: mg/L

METHOD REFERENCE : 6010 (2)

TECHNICIAN: GEF

BLANK	ICB	1212J	<5							
BLANK	MB	1216	<5							
BLANK	CCB	1212J	<5							
BLANK	CCB	1212J	<5							
BLANK	CCB	1212J	<5							
BLANK	CCB	1212J	<5							
BLANK	CCB	1212J	<5							
STANDARD	CCV	0914H	242			250	97			
STANDARD	ISB	1123J	10			10	100			
STANDARD	CCV	0914H	241			250	96			
STANDARD	ICV	1101Q	101			100	101			
STANDARD	CCV	0914H	238			250	95			
STANDARD	LCS	1101R	86			100	86			
STANDARD	CCV	0914H	231			250	92			
STANDARD	ISB	1123J	11			10	110			
STANDARD	CCV	0914H	231			250	92			
SPIKE	MS	943141-003	77					27	50	100
SPIKE	MS	943142-002	52					<5	50	104
SPIKE	PDS	943141-003	57					11	50	92
DUPLICATE	MD	943141-002	37	38	3					
DUPLICATE	MD	943142-001	27	29	7					

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CORE LABORATORIES

QUALITY CONTROL REPORT 01/03/95

JOB NUMBER: 943142

CUSTOMER: GEOSCIENCE CONSULTANTS, LTD.

ATTN:

ANALYSIS				DUPLICATES		REFERENCE STANDARDS		MATRIX SPIKES		
ANALYSIS TYPE	ANALYSIS SUB-TYPE	ANALYSIS I.D.	ANALYZED VALUE (A)	DUPLICATE VALUE (B)	RPD or (A-B)	TRUE VALUE	PERCENT RECOVERY	ORIGINAL VALUE	SPIKE ADDED	PERCENT RECOVERY
PARAMETER: Potassium, Total (K)				DATE/TIME ANALYZED: 12/29/94 13:21				QC BATCH NUMBER: 317410		
REPORTING LIMIT/DF: 5 UNITS: mg/L				METHOD REFERENCE : 6010 (2)				TECHNICIAN: GEF		
PARAMETER: Magnesium, Total (Mg)				DATE/TIME ANALYZED: 12/29/94 14:15				QC BATCH NUMBER: 317411		
REPORTING LIMIT/DF: 0.1 UNITS: mg/L				METHOD REFERENCE : 6010 (2)				TECHNICIAN: GEF		
BLANK	ICB	1212J	<0.1							
BLANK	MB	1216	<0.1							
BLANK	CCB	1212J	<0.1							
BLANK	CCB	1212J	<0.1							
BLANK	CCB	1212J	<0.1							
BLANK	CCB	1212J	<0.1							
BLANK	CCB	1212J	<0.1							
STANDARD	CCV	1215H	24.7			25.0	99			
STANDARD	CCV	1215H	25.2			25.0	101			
STANDARD	ICV	Q1101	20.3			20.0	102			
STANDARD	CCV	1215H	24.5			25.0	98			
STANDARD	LCS	R1101	18.6			20.0	93			
STANDARD	CCV	1215H	24.2			25.0	97			
STANDARD	CCV	1215H	24.5			25.0	98			
SPIKE	MS	943142-002	77.5					25.8	50.0	103
PARAMETER: Magnesium, Total (Mg)				DATE/TIME ANALYZED: 12/29/94 12:00				QC BATCH NUMBER: 317412		
REPORTING LIMIT/DF: 0.5 UNITS: mg/L				METHOD REFERENCE : 6010 (2)				TECHNICIAN: GEF		
BLANK	ICB	1212J	<0.5							
BLANK	MB	1216	<0.5							
BLANK	CCB	1212J	<0.5							
BLANK	CCB	1212J	<0.5							
BLANK	CCB	1212J	<0.5							
BLANK	CCB	1212J	<0.5							
BLANK	CCB	1212J	<0.5							
STANDARD	CCV	0914H	242			250	97			
STANDARD	ISA	09260	533			500	107			
STANDARD	ISB	1123J	508			500	102			
STANDARD	CCV	0914H	241			250	96			
STANDARD	ICV	1101Q	201			200	100			
STANDARD	CCV	0914H	242			250	97			
STANDARD	LCS	1101R	183			200	92			
STANDARD	CCV	0914H	235			250	94			
STANDARD	ISA	09260	516			500	103			
STANDARD	ISB	1123J	498			500	100			
STANDARD	CCV	0914H	240			250	96			
SPIKE	MS	943141-003	265					219	50.0	92
SPIKE	PDS	943141-003	94.5					47.6	50.0	94
DUPLICATE	MD	943142-001	366	376	3					
DUPLICATE	MD	943141-002	391	386	1					

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QUALITY CONTROL REPORT 01/03/95

JOB NUMBER: 943142

CUSTOMER: GEOSCIENCE CONSULTANTS, LTD.

ATTN:

ANALYSIS				DUPLICATES		REFERENCE STANDARDS		MATRIX SPIKES		
ANALYSIS TYPE	ANALYSIS SUB-TYPE	ANALYSIS I.D.	ANALYZED VALUE (A)	DUPLICATE VALUE (B)	RPD or (A-B)	TRUE VALUE	PERCENT RECOVERY	ORIGINAL VALUE	SPIKE ADDED	PERCENT RECOVERY
PARAMETER:Sodium, Total (Na)				DATE/TIME ANALYZED:12/29/94 12:04				QC BATCH NUMBER:317413		
REPORTING LIMIT/DF: 5 UNITS:mg/L				METHOD REFERENCE :6010 (2)				TECHNICIAN:GEF		
BLANK	ICB	1212J	<5							
BLANK	MB	1216	<5							
BLANK	CCB	1212J	<5							
BLANK	CCB	1212J	<5							
BLANK	CCB	1212J	<5							
BLANK	CCB	1212J	<5							
BLANK	CCB	1212J	<5							
STANDARD	ISA	09260	527			500	105			
STANDARD	ISB	1123J	504			500	101			
STANDARD	CCV	0914H	494			500	99			
STANDARD	ICV	1101Q	218			200	109			
STANDARD	CCV	0914H	490			500	98			
STANDARD	LCS	1101R	190			200	95			
STANDARD	CCV	0914H	475			500	95			
STANDARD	ISA	09260	510			500	102			
STANDARD	ISB	1123J	494			500	99			
STANDARD	CCV	0914H	479			500	96			
STANDARD	CCV	0914H	489			500	98			
SPIKE	MS	943141-003	474					471	10	30
SPIKE	PDS	943141-003	511					471	50	80
SPIKE	MS	943142-002	193					137	50	112
DUPLICATE	MD	943142-001	812	793	2					
DUPLICATE	MD	943141-002	626	599	4					

PARAMETER:Chloride (Unfilt.)				DATE/TIME ANALYZED:12/29/94 09:30				QC BATCH NUMBER:317462		
REPORTING LIMIT/DF: 0.5 UNITS:mg/L				METHOD REFERENCE :325.2 (1)				TECHNICIAN:DME		
BLANK	ICB	941229	<0.5							
BLANK	CCB	941229	<0.5							
STANDARD	ICV/LCS	G941102B	51.0			50.0	102			
STANDARD	CCV	S200	205			200	102			
STANDARD	CCV	S200	198			200	99			
SPIKE	MS	943142-2	155					116	50.0	78
SPIKE	MS	943115-15	198					154	50.0	88
DUPLICATE	MD	943115-15	154	154	0					
DUPLICATE	MD	943142-2	116	117	1					

PARAMETER:Sulfate (Unfilt.)				DATE/TIME ANALYZED:12/29/94 16:00				QC BATCH NUMBER:317469		
REPORTING LIMIT/DF: 10 UNITS:mg/L				METHOD REFERENCE :375.2 (1)				TECHNICIAN:DME		
BLANK	ICB	941229	<10							
BLANK	CCB	941229	<10							
BLANK	CCB	941229	<10							
STANDARD	ICV/LCS	G940415A	149			150	99			
STANDARD	CCV	S160	158			160	99			
STANDARD	CCV	S160	153			160	96			

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CORE LABORATORIES

QUALITY CONTROL REPORT 01/03/95

JOB NUMBER: 943142

CUSTOMER: GEOSCIENCE CONSULTANTS, LTD.

ATTN:

ANALYSIS				DUPLICATES		REFERENCE STANDARDS		MATRIX SPIKES		
ANALYSIS TYPE	ANALYSIS SUB-TYPE	ANALYSIS I.D.	ANALYZED VALUE (A)	DUPLICATE VALUE (B)	RPD or (A-B)	TRUE VALUE	PERCENT RECOVERY	ORIGINAL VALUE	SPIKE ADDED	PERCENT RECOVERY
PARAMETER:Sulfate (Unfilt.)				DATE/TIME ANALYZED:12/29/94 16:00				QC BATCH NUMBER:317469		
REPORTING LIMIT/DF: 10 UNITS:mg/L				METHOD REFERENCE :375.2 (1)				TECHNICIAN:DME		
SPIKE	MS	943141-7	63					24	50	78
SPIKE	MS	943142-5	120					76	50	88
DUPLICATE	MD	943141-7	24	21	3					
DUPLICATE	MD	943142-5	76	76	0					

PARAMETER:Potassium, Total (K)				DATE/TIME ANALYZED:12/30/94 14:30				QC BATCH NUMBER:317547		
REPORTING LIMIT/DF: 0.1 UNITS:mg/L				METHOD REFERENCE :7610 (2)				TECHNICIAN:BPB		
BLANK	ICB	12304	<0.1							
BLANK	CCB	12304	<0.1							
BLANK	CCB	12304	<0.1							
BLANK	MB	1216	<0.1							
STANDARD	ICV	1101S	2.1			2.0	105			
STANDARD	CCV	1027C	4.9			5.0	98			
STANDARD	CCV	1027C	5.1			5.0	102			
STANDARD	LCS	R1101	2.0			2.0	100			
SPIKE	PDS	943142-002	8.1					5.7	2.5	96
DUPLICATE	MD	943141-006	6.5	6.6	2					

PARAMETER:Chloride (Unfilt.)				DATE/TIME ANALYZED:12/30/94 15:00				QC BATCH NUMBER:317552		
REPORTING LIMIT/DF: 1 UNITS:mg/L				METHOD REFERENCE :325.3 (1)				TECHNICIAN:DME		
BLANK	MB	941230	<1							
STANDARD	LCS	G940909B	971			1000	97			
SPIKE	MS	943142-5	14600					4800	10000	98
DUPLICATE	MD	943142-5	4800	4800	0					

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CORE LABORATORIES

QUALITY CONTROL REPORT
01/03/95

JOB NUMBER: 943142 CUSTOMER: GEOSCIENCE CONSULTANTS, LTD. ATTN:

BTX SPIKED ANALYSIS-WATER DATE ANALYZED: 12/16/94 TIME ANALYZED: 16:54 METHOD: 8020 (2) QC NUMBER:317072

B L A N K S

TEST DESCRIPTION	ANALY SUB-TYPE	ANALYSIS I.D.	DILUTION FACTOR	ANALYZED VALUE	DETECTION LIMIT	UNITS OF MEASURE
Time Analyzed	SB	1729	1	0	0	
	SBD	1804	1	0	0	

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CORE LABORATORIES

QUALITY CONTROL REPORT 01/03/95

JOB NUMBER: 943142

CUSTOMER: GEOSCIENCE CONSULTANTS, LTD.

ATTN:

BTX SPIKED ANALYSIS-WATER

DATE ANALYZED: 12/16/94 TIME ANALYZED: 16:54 METHOD: 8020 (2)

QC NUMBER: 317072

REFERENCE STANDARDS

TEST DESCRIPTION	ANALYSIS SUB-TYPE	ANALYSIS I. D.	DILUTION FACTOR	ANALYZED VALUE	TRUE VALUE	PERCENT RECOVERY	DETECTION LIMITS	UNITS OF MEASURE
Benzene	SB	T941216C	1	17.3	20.0	86	0.5	ug/L
	SBD	T941216C	1	18.5	20.0	92	0.5	ug/L
Toluene	SB	T941216C	1	17.9	20.0	89	0.5	ug/L
	SBD	T941216C	1	19.0	20.0	95	0.5	ug/L
Ethylbenzene	SB	T941216C	1	18.0	20.0	90	0.5	ug/L
	SBD	T941216C	1	19.5	20.0	98	0.5	ug/L
Xylenes	SB	T941216C	1	54.9	60.0	91	0.5	ug/L
	SBD	T941216C	1	58.6	60.0	98	0.5	ug/L
4-Bromofluorobenzene (Surrogate)	SB	T941216C	1	19.9	20.0	99	0	Limit 85-115%
	SBD	T941216C	1	20.3	20.0	102	0	Limit 85-115%

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CORE LABORATORIES

QUALITY CONTROL REPORT 01/03/95

JOB NUMBER: 943142

CUSTOMER: GEOSCIENCE CONSULTANTS, LTD.

ATTN:

BNA SPIKED ANALYSIS-WATER

DATE ANALYZED: 12/22/94 TIME ANALYZED: 08:29 METHOD: 8270 (2)

QC NUMBER: 317244

REFERENCE STANDARDS

TEST DESCRIPTION	ANALYSIS SUB-TYPE	ANALYSIS I. D.	DILUTION FACTOR	ANALYZED VALUE	TRUE VALUE	PERCENT RECOVERY	DETECTION LIMITS	UNITS OF MEASURE
Phenol	SB	B940331A	1	86	143	60	10	ug/L
	SBD	B940331A	1	92	143	64	10	ug/L
2-Chlorophenol	SB	B940331A	1	92	143	64	10	ug/L
	SBD	B940331A	1	92	143	64	10	ug/L
1,4-Dichlorobenzene	SB	B940331A	1	102	143	71	10	ug/L
	SBD	B940331A	1	98	143	69	10	ug/L
N-Nitrosodi-n-propylamine	SB	B940331A	1	95	143	66	10	ug/L
	SBD	B940331A	1	94	143	66	10	ug/L
1,2,4-Trichlorobenzene	SB	B940331A	1	103	143	72	10	ug/L
	SBD	B940331A	1	99	143	69	10	ug/L
4-Chloro-3-methylphenol	SB	B940331A	1	114	143	80	10	ug/L
	SBD	B940331A	1	112	143	78	10	ug/L
Acenaphthene	SB	B940331A	1	100	143	70	10	ug/L
	SBD	B940331A	1	102	143	71	10	ug/L
4-Nitrophenol	SBD	B940331A	1	104	143	73	50	ug/L
2,4-Dinitrotoluene	SB	B940331A	1	102	143	71	10	ug/L
	SBD	B940331A	1	109	143	76	10	ug/L
Pentachlorophenol	SB	B940331A	1	14	143	10	50	ug/L
	SBD	B940331A	1	103	143	72	50	ug/L
Pyrene	SB	B940331A	1	112	143	78	10	ug/L
	SBD	B940331A	1	121	143	85	10	ug/L
Nitrobenzene-d5 (Surrogate)	SB	B940331A	1	83	100	83	0	35-114% Limit
	SBD	B940331A	1	82	100	82	0	35-114% Limit
2-Fluorobiphenyl (Surrogate)	SB	B940331A	1	74	100	74	0	43-116% Limit
	SBD	B940331A	1	75	100	75	0	43-116% Limit
4-Terphenyl-d14 (Surrogate)	SB	B940331A	1	71	100	71	0	33-141% Limit
	SBD	B940331A	1	75	100	75	0	33-141% Limit
Phenol-d6 (Surrogate)	SB	B940331A	1	57	100	57	0	10-94% Limit
	SBD	B940331A	1	60	100	60	0	10-94% Limit
2-Fluorophenol (Surrogate)	SB	B940331A	1	50	100	50	0	21-100% Limit
	SBD	B940331A	1	50	100	50	0	21-100% Limit
2,4,6-Tribromophenol (Surrogate)	SB	B940331A	1	55	100	55	0	10-123% Limit
	SBD	B940331A	1	64	100	64	0	10-123% Limit

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CORE LABORATORIES

QUALITY CONTROL REPORT
01/03/95

JOB NUMBER: 943142

CUSTOMER: GEOSCIENCE CONSULTANTS, LTD.

ATTN:

BNA SPIKED ANALYSIS-WATER

DATE ANALYZED: 12/27/94 TIME ANALYZED: 09:54 METHOD: 8270(2)/625(6)

QC NUMBER:317245

BLANKS

[illegible]

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CORE LABORATORIES

QUALITY CONTROL REPORT 01/03/95

JOB NUMBER: 943142

CUSTOMER: GEOSCIENCE CONSULTANTS, LTD.

ATTN:

BNA SPIKED ANALYSIS-WATER

DATE ANALYZED: 12/27/94 TIME ANALYZED: 09:54 METHOD: 8270(2)/625(6)

QC NUMBER: 317245

REFERENCE STANDARDS

TEST DESCRIPTION	ANALYSIS SUB-TYPE	ANALYSIS I. D.	DILUTION FACTOR	ANALYZED VALUE	TRUE VALUE	PERCENT RECOVERY	DETECTION LIMITS	UNITS OF MEASURE
4-Nitrophenol	SB	B940331A	1	15	143	10	50	ug/L
Nitrobenzene-d5 (Surrogate)	SB	B940331A	1	83	100	83	0	35-114% Limit
2-Fluorobiphenyl (Surrogate)	SB	B940331A	1	72	100	72	0	43-116% Limit
4-Terphenyl-d14 (Surrogate)	SB	B940331A	1	78	100	78	0	33-141% Limit
Phenol-d6 (Surrogate)	SB	B940331A	1	55	100	55	0	10-94% Limit
2-Fluorophenol (Surrogate)	SB	B940331A	1	49	100	49	0	21-100% Limit
2,4,6-Tribromophenol (Surrogate)	SB	B940331A	1	60	100	60	0	10-123% Limit

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CORE LABORATORIES

QUALITY CONTROL FOOTER

METHOD REFERENCES

- (1) EPA 600/4-79-020, Methods For Chemical Analysis Of Water And Wastes, March 1983
- (2) EPA SW-846, Test Methods For Evaluating Solid Waste, Third Edition, November 1986
- (3) Standard Methods For The Examination Of Water And Wastewater, 17th Edition, 1989
- (4) EPA 600/4-80-032, Prescribed Procedures For Measurement Of Radioactivity In Drinking Water, August 1980
- (5) EPA 600/8-78-017, Microbiological Methods For Monitoring The Environment, December 1978
- (6) Federal Register, July 1, 1990 (40 CFR Part 136)
- (7) EPA 600/4-88-039, Methods For The Determination Of Organics Compounds In Drinking Water, December 1988
- (8) U.S.G.S. Methods For The Determination Of Inorganic Substances In Water And Fluvial Sediments, Book 5, Chapter A1, 1985
- (9) Federal Register, Friday, June 7, 1991, (40 CFR Parts 141 and 142)
- (10) Standard Methods For The Examination Of Water And Wastewater, 16th Edition, 1985
- (11) ASTM, Section 11 Water And Environmental Technology, Volume 11.01 Water (1), 1991
- (12) Methods Of Soil Analysis, American Society Of Agronomy, Agronomy No. 9, 1965
- (13) EPA SW-846, Test Methods For Evaluating Solid Waste, Third Edition, Revision 1, November 1990
- (14) ASTM, Section 5, Petroleum Products, Lubricants, and Fossil Fuels, Volume 05.05, Gaseous Fuels, Coal and Coke
- (15) EPA 600/2-78-054, Field and Laboratory Methods Applicable To Overburdens and Mine Soils, March 1978
- (16) ASTM, Part 19, Soils and Rock; Building Stones, 1981

Comments: Data in QA report may differ from final results due to digestion and/or dilution of sample into analytical ranges. The "Time Analyzed" in the QA report refers to the start time of the analytical batch which may not reflect the actual time of each analysis. The "Date Analyzed" is the actual date of analysis. Results for soil and sludge samples are reported on a wet weight basis (i.e. not corrected for percent moisture) unless otherwise indicated. NC = Not Calculable Due To Value(s) Lower Than The Detection Limit.

Blank QC Sample Identification

MB Method Blank
ICB Initial Calibration Blank
CCB Continuing Calibration Blank

Reference Standard QC Sample Identification

LCS Laboratory Control Standard
RS Reference Standard
ICV Initial Calibration Verification Standard
CCV Continuing Calibration Verification Standard
ISA/ISB ICP Interference Check Samples

Spike QC Sample Identification

MS Method (Matrix) Spike
MSD Method (Matrix) Spike Duplicate
PDS Post Digestion Spike
SB Spiked Blank
SBD Spiked Blank Duplicate

Duplicate QC Sample Identification

MD Method (Matrix) Duplicate
ED Extraction Duplicate
DD Digestion Duplicate

Analyses performed by a subcontract laboratory are indicated on the analytical and/or quality control reports under "Technician" using the following codes:

Subcontract Laboratory

	<u>Code</u>
Core Laboratories - Anaheim, CA	* AN
Core Laboratories - Casper, WY	* CA
Core Laboratories - Corpus Christi, TX	* CC
Core Laboratories - Houston, TX	* HP

Subcontract Laboratory

	<u>Code</u>
Core Laboratories - Lake Charles, LA	* LC
Core Laboratories - Long Beach, CA	* LB
Other Subcontract Laboratories	* XX

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CORE LABORATORIES

CORE LABORATORIES ANALYTICAL REPORT

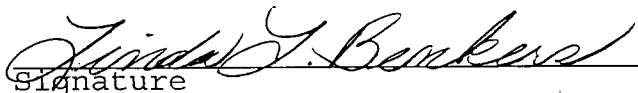
Job Number: 943141

Prepared For:

GEOSCIENCE CONSULTANTS, LTD.

505 MARQUETTE NW, SUITE 1100
ALBUQUERQUE, NM 87102

Date: 01/03/95


Signature

1-3-95
Date:

Name: Linda L. Benkers

Core Laboratories
10703 East Bethany Drive
Aurora, CO 80014

Title: QA/QC COORDINATOR



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Las Cruces, NM 88004
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FAX: (505) 524-5315

No 9308

Chain of Custody

Date 12/12/94 Page 1 of 1

Lab Name		CORE LABORATORIES	
Address		10703 East Bethany Drive Aurora, CO 80014-2696	
Telephone		303/751-1780	
Sample Number	Matrix	Location	
9412121115	H ₂ O	Rinsate	
9412130700	H ₂ O	MW-2	
9412130750	H ₂ O	MW-4	
9412130835	H ₂ O	MW-14	
9412130910	H ₂ O	MW-5	
9412130950	H ₂ O	MW-8	
9412131030	H ₂ O	MW-11	
9412131055	H ₂ O	MW-16	
9412131140	H ₂ O	MW-17	
9412131205	H ₂ O	MW-7	

Project Information		Sample Receipt	
Project	REVENUE	Total No. of Containers	1A
Project Director	TRENT	Chain of Custody Seals	OL
Charge Code No.	3036.006	Rec'd Good Condition/Cold	OL
Shipping ID. No.	3232867186	Conforms to Record	OL
Via: FED X		Lab No.	943141
Special Instructions/Comments:			

Analysis Request	
Sample	Analysis
9412121115	H ₂ O
9412130700	H ₂ O
9412130750	H ₂ O
9412130835	H ₂ O
9412130910	H ₂ O
9412130950	H ₂ O
9412131030	H ₂ O
9412131055	H ₂ O
9412131140	H ₂ O
9412131205	H ₂ O

Sample	Analysis
9412121115	H ₂ O
9412130700	H ₂ O
9412130750	H ₂ O
9412130835	H ₂ O
9412130910	H ₂ O
9412130950	H ₂ O
9412131030	H ₂ O
9412131055	H ₂ O
9412131140	H ₂ O
9412131205	H ₂ O

Sample	Analysis
9412121115	H ₂ O
9412130700	H ₂ O
9412130750	H ₂ O
9412130835	H ₂ O
9412130910	H ₂ O
9412130950	H ₂ O
9412131030	H ₂ O
9412131055	H ₂ O
9412131140	H ₂ O
9412131205	H ₂ O

Sample	Analysis
9412121115	H ₂ O
9412130700	H ₂ O
9412130750	H ₂ O
9412130835	H ₂ O
9412130910	H ₂ O
9412130950	H ₂ O
9412131030	H ₂ O
9412131055	H ₂ O
9412131140	H ₂ O
9412131205	H ₂ O

Sample	Analysis
9412121115	H ₂ O
9412130700	H ₂ O
9412130750	H ₂ O
9412130835	H ₂ O
9412130910	H ₂ O
9412130950	H ₂ O
9412131030	H ₂ O
9412131055	H ₂ O
9412131140	H ₂ O
9412131205	H ₂ O

Sample	Analysis
9412121115	H ₂ O
9412130700	H ₂ O
9412130750	H ₂ O
9412130835	H ₂ O
9412130910	H ₂ O
9412130950	H ₂ O
9412131030	H ₂ O
9412131055	H ₂ O
9412131140	H ₂ O
9412131205	H ₂ O

Sample	Analysis
9412121115	H ₂ O
9412130700	H ₂ O
9412130750	H ₂ O
9412130835	H ₂ O
9412130910	H ₂ O
9412130950	H ₂ O
9412131030	H ₂ O
9412131055	H ₂ O
9412131140	H ₂ O
9412131205	H ₂ O

Sample	Analysis
9412121115	H ₂ O
9412130700	H ₂ O
9412130750	H ₂ O
9412130835	H ₂ O
9412130910	H ₂ O
9412130950	H ₂ O
9412131030	H ₂ O
9412131055	H ₂ O
9412131140	H ₂ O
9412131205	H ₂ O

Sample	Analysis
9412121115	H ₂ O
9412130700	H ₂ O
9412130750	H ₂ O
9412130835	H ₂ O
9412130910	H ₂ O
9412130950	H ₂ O
9412131030	H ₂ O
9412131055	H ₂ O
9412131140	H ₂ O
9412131205	H ₂ O

Sample	Analysis
9412121115	H ₂ O
9412130700	H ₂ O
9412130750	H ₂ O
9412130835	H ₂ O
9412130910	H ₂ O
9412130950	H ₂ O
9412131030	H ₂ O
9412131055	H ₂ O
9412131140	H ₂ O
9412131205	H ₂ O

Sample	Analysis
9412121115	H ₂ O
9412130700	H ₂ O
9412130750	H ₂ O
9412130835	H ₂ O
9412130910	H ₂ O
9412130950	H ₂ O
9412131030	H ₂ O
9412131055	H ₂ O
9412131140	H ₂ O
9412131205	H ₂ O

Sample	Analysis
9412121115	H ₂ O
9412130700	H ₂ O
9412130750	H ₂ O
9412130835	H ₂ O
9412130910	H ₂ O
9412130950	H ₂ O
9412131030	H ₂ O
9412131055	H ₂ O
9412131140	H ₂ O
9412131205	H ₂ O

Sample	Analysis
9412121115	H ₂ O
9412130700	H ₂ O
9412130750	H ₂ O
9412130835	H ₂ O
9412130910	H ₂ O
9412130950	H ₂ O
9412131030	H ₂ O
9412131055	H ₂ O
9412131140	H ₂ O
9412131205	H ₂ O

Sample	Analysis
9412121115	H ₂ O
9412130700	H ₂ O
9412130750	H ₂ O
9412130835	H ₂ O
9412130910	H ₂ O
9412130950	H ₂ O
9412131030	H ₂ O
9412131055	H ₂ O
9412131140	H ₂ O
9412131205	H ₂ O

Sample	Analysis
9412121115	H ₂ O
9412130700	H ₂ O
9412130750	H ₂ O
9412130835	H ₂ O
9412130910	H ₂ O
9412130950	H ₂ O
9412131030	H ₂ O
9412131055	H ₂ O
9412131140	H ₂ O
9412131205	H ₂ O

Sample	Analysis
9412121115	H ₂ O
9412130700	H ₂ O
9412130750	H ₂ O
9412130835	H ₂ O
9412130910	H ₂ O
9412130950	H ₂ O
9412131030	H ₂ O
9412131055	H ₂ O
9412131140	H ₂ O
9412131205	H ₂ O

Sample	Analysis
9412121115	H ₂ O
9412130700	H ₂ O
9412130750	H ₂ O
9412130835	H ₂ O
9412130910	H ₂ O
9412130950	H ₂ O
9412131030	H ₂ O
9412131055	H ₂ O
9412131140	H ₂ O
9412131205	H ₂ O

Sample	Analysis
9412121115	H ₂ O
9412130700	H ₂ O
9412130750	H ₂ O
9412130835	H ₂ O
9412130910	H ₂ O
9412130950	H ₂ O
9412131030	H ₂ O
9412131055	H ₂ O
9412131140	H ₂ O
9412131205	H ₂ O

Sample	Analysis
9412121115	H ₂ O
9412130700	H ₂ O
9412130750	H ₂ O
9412130835	H ₂ O
9412130910	H ₂ O
9412130950	H ₂ O
9412131030	H ₂ O
9412131055	H ₂ O
9412131140	H ₂ O
9412131205	H ₂ O

Sample	Analysis
9412121115	H ₂ O
9412130700	H ₂ O
9412130750	H ₂ O
9412130835	H ₂ O
9412130910	H ₂ O
9412130950	H ₂ O
9412131030	H ₂ O
9412131055	H ₂ O
9412131140	H ₂ O
9412131205	H ₂ O

Sample	Analysis
9412121115	H ₂ O
9412130700	H ₂ O
9412130750	H ₂ O
9412130835	H ₂ O
9412130910	H ₂ O
9412130950	H ₂ O
9412131030	H ₂ O
9412131055	H ₂ O
9412131140	H ₂ O
9412131205	H ₂ O

Sample	Analysis
9412121115	H ₂ O
9412130700	H ₂ O
9412130750	H ₂ O
9412130835	H ₂ O
9412130910	H ₂ O
9412130950	H ₂ O
9412131030	H ₂ O
9412131055	H ₂ O
9412131140	H ₂ O
9412131205	H ₂ O

Sample	Analysis
9412121115	H ₂ O
9412130700	H ₂ O
9412130750	H ₂ O
9412130835	H ₂ O
9412130910	H ₂ O
9412130950	H ₂ O
9412131030	H ₂ O
9412131055	H ₂ O
9412131140	H ₂ O
9412131205	H ₂ O

Sample	Analysis
9412121115	H ₂ O
9412130700	H ₂ O
9412130750	H ₂ O
9412130835	H ₂ O
9412130910	H ₂ O
9412130950	H ₂ O
9412131030	H ₂ O
9412131055	H ₂ O
9412131140	H ₂ O
9412131205	H ₂ O

Sample	Analysis
9412121115	H ₂ O
9412130700	H ₂ O
9412130750	H ₂ O
9412130835	H ₂ O
9412130910	H ₂ O
9412130950	H ₂ O
9412131030	H ₂ O
9412131055	H ₂ O
9412131140	H ₂ O
9412131205	H ₂ O

Sample	Analysis
9412121115	H ₂ O
9412130700	H ₂ O
9412130750	H ₂ O
9412130835	H ₂ O
9412130910	H ₂ O
9412130950	H ₂ O
9412131030	H ₂ O
9412131055	H ₂ O
9412131140	H ₂ O
9412131205	H ₂ O

Sample	Analysis
9412121115	H ₂ O
9412130700	H ₂ O
9412130750	H ₂ O
9412130835	H ₂ O
9412130910	H ₂ O
9412130950	H ₂ O
9412131030	H ₂ O
9412131055	H ₂ O
9412131140	H ₂ O
9412131205	H ₂ O

Sample	Analysis
9412121115	H ₂ O
9412130700	H ₂ O
9412130750	H ₂ O
9412130835	H ₂ O
9412130910	H ₂ O
9412130950	H ₂ O
9412131030	H ₂ O
9412131055	H ₂ O
9412131140	H ₂ O
9412131205	H ₂ O

Sample	Analysis
9412121115	H ₂ O
9412130700	H ₂ O
9412130750	H ₂ O
9412130835	H ₂ O
9412130910	H ₂ O
9412130950	H ₂ O
9412131030	H ₂ O
9412131055	H ₂ O
9412131140	H ₂ O
9412131205	H ₂ O

Sample	Analysis
9412121115	H ₂ O
9412130700	H ₂ O
9412130750	H ₂ O
9412130835	H ₂ O
9412130910	H ₂ O
9412130950	H ₂ O
9412131030	H ₂ O
9412131055	H ₂ O
9412131140	H ₂ O
9412131205	H ₂ O

Sample	Analysis
9412121115	H ₂ O
9412130700	H ₂ O
9412130750	H ₂ O
9412130835	H ₂ O
9412130910	H ₂ O
9412130950	H ₂ O
9412131030	H ₂ O
9412131055	H ₂ O
9412131140	H ₂ O
9412131205	H ₂ O

Sample	Analysis
9412121115	H ₂ O
9412130700	H ₂ O
9412130750	H ₂ O
9412130835	H ₂ O
9412130910	H ₂ O
9412130950	H ₂ O
9412131030	H ₂ O
9412131055	H ₂ O
9412131140	H ₂ O
9412131205	H ₂ O

Sample	Analysis
9412121115	H ₂ O
9412130700	H ₂ O



CORE LABORATORIES

SAMPLE DELIVERY GROUP NARRATIVE

December 27, 1994

Customer: Geoscience Consultants, Ltd.
Project: Rexene COC #9308
Core Laboratories Project Number: 943141

On 12-14-94 Core Laboratories received samples for analysis. The following information is pertinent to the interpretation of the data package.

Method 8270 Semivolatile Analysis:

Due to a matrix interference present in these samples, 2 of 6 internal standards had low recoveries for samples 9412130950, 9412131030, 9412130910, and 9412131205. Samples 9412131105 and 9412131140 had 1 of 6 internal standards recovered low. These samples were reanalyzed with similar or better recoveries. The method blank analyzed with these samples had 2 of 6 surrogates with low percent recoveries. The blank was reanalyzed with 3 of 6 surrogates recovered low. A spike blank (SB) and spike blank duplicate (SBD) was analyzed with these samples. The SB and SBD had acceptable percent recoveries for all eleven compounds. Relative percent difference criteria was exceeded for 4 of 11 compounds. The SBD had 1 of 6 surrogates recovered low and reanalysis confirmed the initial results.

Ron Fuller
Laboratory Manager

Douglas Georgic
Laboratory Supervisor



CORE LABORATORIES

EXPLANATION OF DATA FLAGS

- B - This flag is used to indicate that an analyte is present in the method blank as well as in the sample. It indicates that the client should consider this when evaluating the results.
- D - This flag indicates that surrogates were diluted out of calibration range and cannot be quantified.
- E - This data flag indicates that a sample result is an estimate because the concentration exceeded the calibration range of the instrument.
- J - Indicates that a value is an estimate. It is used when a compound is determined to be present based on the mass spectral data, but at a concentration less than the practical quantitation limit of the method. This flag is also used when estimating the concentration of a tentatively identified compound.
- X - This flag refers the client to an included case narrative for additional information which may be useful in data evaluation.
- I - Used to indicate matrix interference.
- * - Indicates a surrogate recovery that is outside the specified quality control limits.



JOB NUMBER: 943141

CUSTOMER: GEOSCIENCE CONSULTANTS, LTD.

ATTN:

CLIENT I.D.....: REXENE COC#9308
DATE SAMPLED.....: 12/12/94
TIME SAMPLED.....: 11:15
WORK DESCRIPTION...: 9412121115

LABORATORY I.D....: 943141-0001
DATE RECEIVED.....: 12/14/94
TIME RECEIVED.....: 10:45
REMARKS.....: RINSATE

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CORE LABORATORIES

LABORATORY TESTS RESULTS 01/03/95

JOB NUMBER: 943141

CUSTOMER: GEOSCIENCE CONSULTANTS, LTD.

ATTN:

CLIENT I.D.: REXENE COC#9308

DATE SAMPLED: 12/13/94

TIME SAMPLED: 07:00

WORK DESCRIPTION: 9412130700

LABORATORY I.D.: 943141-0002

DATE RECEIVED: 12/14/94

TIME RECEIVED: 10:45

REMARKS: MW-2

TEST DESCRIPTION	FINAL RESULT	LIMITS/*DILUTION	UNITS OF MEASURE	TEST METHOD	DATE	TECHN
Bicarbonate (Unfilt.)	688	5	mg/L	2320 B (3)	12/22/94	KDS
Chloride (Unfilt.)	3240	25	mg/L	325.2 (1)	12/29/94	DME
Nitrogen, Nitrate (Unfilt.)	0.3	0.1	mg/L (as N)	353.2 (1)	12/14/94	DME
Sulfate (Unfilt.)	2470	200	mg/L	375.2 (1)	12/29/94	DME
Aluminum, Diss. (Al)	<0.05	0.05	mg/L	6010 (2)	12/28/94	WGL
Arsenic, Diss. (As)	<0.05	0.05	mg/L	6010 (2)	12/28/94	WGL
Barium, Diss. (Ba)	<0.4	0.4	mg/L	6010 (2)	12/28/94	WGL
Cadmium, Diss. (Cd)	<0.005	0.005	mg/L	6010 (2)	12/28/94	WGL
Calcium, Total (Ca)	950	5	mg/L	6010 (2)	12/29/94	GEF
Chromium, Diss. (Cr)	<0.01	0.01	mg/L	6010 (2)	12/28/94	WGL
Cobalt, Diss. (Co)	<0.03	0.03	mg/L	6010 (2)	12/28/94	WGL
Copper, Diss. (Cu)	0.01	0.01	mg/L	6010 (2)	12/28/94	WGL
Iron, Diss. (Fe)	0.18	0.03	mg/L	6010 (2)	12/28/94	WGL
Lead, Diss. (Pb)	<0.05	0.05	mg/L	6010 (2)	12/28/94	WGL
Mercury, Total (Hg)	<0.0002	0.0002	mg/L	7470 (2)	12/20/94	BPS
Magnesium, Total (Mg)	391	0.5	mg/L	6010 (2)	12/29/94	GEF
Manganese, Diss. (Mn)	1.95	0.01	mg/L	6010 (2)	12/28/94	WGL
Molybdenum, Diss. (Mo)	<0.05	0.05	mg/L	6010 (2)	12/28/94	WGL
Nickel, Diss. (Ni)	<0.04	0.04	mg/L	6010 (2)	12/28/94	WGL
Potassium, Total (K)	37	5	mg/L	6010 (2)	12/29/94	GEF
Selenium, Diss. (Se)	<0.1	0.1	mg/L	6010 (2)	12/28/94	WGL
Silver, Diss. (Ag)	<0.01	0.01	mg/L	6010 (2)	12/28/94	WGL
Sodium, Total (Na)	3130	20	mg/L	6010 (2)	12/29/94	GEF

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CORE LABORATORIES

LABORATORY TESTS RESULTS

01/03/95

JOB NUMBER: 943141

CUSTOMER: GEOSCIENCE CONSULTANTS, LTD.

ATTN:

CLIENT I.D.: REXENE COC#9308

DATE SAMPLED: 12/13/94

TIME SAMPLED: 07:00

WORK DESCRIPTION: 9412130700

LABORATORY I.D.: 943141-0002

DATE RECEIVED: 12/14/94

TIME RECEIVED: 10:45

REMARKS: MW-2

TEST DESCRIPTION	FINAL RESULT	LIMITS/*DILUTION	UNITS OF MEASURE	TEST METHOD	DATE	TECHN
Zinc, Diss. (Zn)	<0.01	0.01	mg/L	6010 (2)	12/28/94	WGL
8020 - AROMATIC VOLATILE ORGANICS		*1		8020 (2)	12/17/94	JHT
Benzene	ND	0.5	ug/L			
Toluene	ND	0.5	ug/L			
Ethyl benzene	ND	0.5	ug/L			
Xylenes	ND	0.5	ug/L			
4-Bromofluorobenzene (surrogate)	103	0	% Recovery	85-115% Limit		
Time Analyzed	0001	0				
PAH AND PHENOLS LIST BY 8270		*1		8270 (2)	12/19/94	JMC
Acenaphthene	ND	10	ug/L			
Acenaphthylene	ND	10	ug/L			
Anthracene	ND	10	ug/L			
Benzo(a)anthracene	ND	10	ug/L			
Benzo(b)fluoranthene	ND	10	ug/L			
Benzo(k)fluoranthene	ND	10	ug/L			
Benzo(ghi)perylene	ND	10	ug/L			
Benzo(a)pyrene	ND	10	ug/L			
Chrysene	ND	10	ug/L			
Dibenzo(a,h)anthracene	ND	10	ug/L			
Fluoranthene	ND	10	ug/L			
Fluorene	ND	10	ug/L			
Indeno(1,2,3-cd)pyrene	ND	10	ug/L			
1-Methylnaphthalene	ND	10	ug/L			
2-Methylnaphthalene	ND	10	ug/L			
Naphthalene	ND	10	ug/L			
Phenanthrene	ND	10	ug/L			
Pyrene	ND	10	ug/L			
4-Chloro-3-methylphenol	ND	10	ug/L			
2-Chlorophenol	ND	10	ug/L			
2,4-Dichlorophenol	ND	10	ug/L			
2,4-Dimethylphenol	ND	10	ug/L			
2,4-Dinitrophenol	ND	50	ug/L			
2-Methyl-4,6-dinitrophenol	ND	50	ug/L			
2-Nitrophenol	ND	10	ug/L			
4-Nitrophenol	ND	50	ug/L			
Pentachlorophenol	ND	50	ug/L			
Phenol	ND	10	ug/L			
2,4,6-Trichlorophenol	ND	10	ug/L			
Nitrobenzene-d5 (Surrogate)	68	0	% Recovery	35-114% Limit		
2-Fluorobiphenyl (Surrogate)	63	0	% Recovery	43-116% Limit		
4-Terphenyl-d14 (Surrogate)	72	0	% Recovery	33-141% Limit		

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CORE LABORATORIES

LABORATORY TESTS RESULTS

01/03/95

JOB NUMBER: 943141

CUSTOMER: GEOSCIENCE CONSULTANTS, LTD.

ATTN:

CLIENT I.D.: REXENE COC#9308

DATE SAMPLED: 12/13/94

TIME SAMPLED: 07:00

WORK DESCRIPTION: 9412130700

LABORATORY I.D.: 943141-0002

DATE RECEIVED: 12/14/94

TIME RECEIVED: 10:45

REMARKS: MW-2

TEST DESCRIPTION	FINAL RESULT	LIMITS/*DILUTION	UNITS OF MEASURE	TEST METHOD	DATE	TECHN
Phenol-d6 (Surrogate)	48	0	% Recovery	10-94% Limit		
2-Fluorophenol (Surrogate)	36	0	% Recovery	21-100% Limit		
2,4,6-Tribromophenol (Surrogate)	29	0	% Recovery	10-123% Limit		
Time Analyzed	1800	0				
Date Extracted	12/16/94	0				

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CORE LABORATORIES

LABORATORY TESTS RESULTS 01/03/95

JOB NUMBER: 943141

CUSTOMER: GEOSCIENCE CONSULTANTS, LTD.

ATTN:

CLIENT I.D.: REXENE COC#9308

DATE SAMPLED: 12/13/94

TIME SAMPLED: 07:50

WORK DESCRIPTION: 9412130750

LABORATORY I.D.: 943141-0003

DATE RECEIVED: 12/14/94

TIME RECEIVED: 10:45

REMARKS: MW-4

TEST DESCRIPTION	FINAL RESULT	LIMITS/*DILUTION	UNITS OF MEASURE	TEST METHOD	DATE	TECHN
Bicarbonate (Unfilt.)	1020	5	mg/L	2320 B (3)	12/22/94	KDS
Chloride (Unfilt.)	4680	25	mg/L	325.2 (1)	12/29/94	DME
Nitrogen, Nitrate (Unfilt.)	<0.1	0.1	mg/L (as N)	353.2 (1)	12/14/94	DME
Sulfate (Unfilt.)	3060	400	mg/L	375.2 (1)	12/29/94	DME
Aluminum, Diss. (Al)	0.12	0.05	mg/L	6010 (2)	12/28/94	WGL
Arsenic, Diss. (As)	<0.05	0.05	mg/L	6010 (2)	12/28/94	WGL
Barium, Diss. (Ba)	0.17	0.01	mg/L	6010 (2)	12/28/94	WGL
Cadmium, Diss. (Cd)	<0.005	0.005	mg/L	6010 (2)	12/28/94	WGL
Calcium, Total (Ca)	298	1.0	mg/L	6010 (2)	12/29/94	GEF
Chromium, Diss. (Cr)	<0.01	0.01	mg/L	6010 (2)	12/28/94	WGL
Cobalt, Diss. (Co)	<0.03	0.03	mg/L	6010 (2)	12/28/94	WGL
Copper, Diss. (Cu)	<0.01	0.01	mg/L	6010 (2)	12/28/94	WGL
Iron, Diss. (Fe)	1.99	0.03	mg/L	6010 (2)	12/28/94	WGL
Lead, Diss. (Pb)	<0.05	0.05	mg/L	6010 (2)	12/28/94	WGL
Mercury, Total (Hg)	<0.0002	0.0002	mg/L	7470 (2)	12/20/94	BPB
Magnesium, Total (Mg)	219	0.5	mg/L	6010 (2)	12/29/94	GEF
Manganese, Diss. (Mn)	2.43	0.01	mg/L	6010 (2)	12/28/94	WGL
Molybdenum, Diss. (Mo)	<0.05	0.05	mg/L	6010 (2)	12/28/94	WGL
Nickel, Diss. (Ni)	<0.04	0.04	mg/L	6010 (2)	12/28/94	WGL
Potassium, Total (K)	27	5	mg/L	6010 (2)	12/29/94	GEF
Selenium, Diss. (Se)	<0.1	0.1	mg/L	6010 (2)	12/28/94	WGL
Silver, Diss. (Ag)	<0.01	0.01	mg/L	6010 (2)	12/28/94	WGL
Sodium, Total (Na)	2360	20	mg/L	6010 (2)	12/29/94	GEF

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CORE LABORATORIES

LABORATORY TESTS RESULTS

01/03/95

JOB NUMBER: 943141

CUSTOMER: GEOSCIENCE CONSULTANTS, LTD.

ATTN:

CLIENT I.D.: REXENE COC#9308

DATE SAMPLED: 12/13/94

TIME SAMPLED: 07:50

WORK DESCRIPTION: 9412130750

LABORATORY I.D.: 943141-0003

DATE RECEIVED: 12/14/94

TIME RECEIVED: 10:45

REMARKS: MW-4

TEST DESCRIPTION	FINAL RESULT	LIMITS/*DILUTION	UNITS OF MEASURE	TEST METHOD	DATE	TECHN
Zinc, Diss. (Zn)	<0.01	0.01	mg/L	6010 (2)	12/28/94	WGL
8020 - AROMATIC VOLATILE ORGANICS		*20		8020 (2)	12/17/94	JHT
Benzene	220	10	ug/L			
Toluene	ND	10	ug/L			
Ethyl benzene	ND	10	ug/L			
Xylenes	ND	10	ug/L			
4-Bromofluorobenzene (surrogate)	99	0	% Recovery	85-115% Limit		
Time Analyzed	0447	0				
PAH AND PHENOLS LIST BY 8270		*1		8270 (2)	12/19/94	JMC
Acenaphthene	ND	10	ug/L			
Acenaphthylene	ND	10	ug/L			
Anthracene	ND	10	ug/L			
Benzo(a)anthracene	ND	10	ug/L			
Benzo(b)fluoranthene	ND	10	ug/L			
Benzo(k)fluoranthene	ND	10	ug/L			
Benzo(ghi)perylene	ND	10	ug/L			
Benzo(a)pyrene	ND	10	ug/L			
Chrysene	ND	10	ug/L			
Dibenzo(a,h)anthracene	ND	10	ug/L			
Fluoranthene	ND	10	ug/L			
Fluorene	ND	10	ug/L			
Indeno(1,2,3-cd)pyrene	ND	10	ug/L			
1-Methylnaphthalene	ND	10	ug/L			
2-Methylnaphthalene	ND	10	ug/L			
Naphthalene	ND	10	ug/L			
Phenanthrene	ND	10	ug/L			
Pyrene	ND	10	ug/L			
4-Chloro-3-methylphenol	ND	10	ug/L			
2-Chlorophenol	ND	10	ug/L			
2,4-Dichlorophenol	ND	10	ug/L			
2,4-Dimethylphenol	ND	10	ug/L			
2,4-Dinitrophenol	ND	50	ug/L			
2-Methyl-4,6-dinitrophenol	ND	50	ug/L			
2-Nitrophenol	ND	10	ug/L			
4-Nitrophenol	ND	50	ug/L			
Pentachlorophenol	ND	50	ug/L			
Phenol	18	10	ug/L			
2,4,6-Trichlorophenol	ND	10	ug/L			
Nitrobenzene-d5 (Surrogate)	39	0	% Recovery	35-114% Limit		
2-Fluorobiphenyl (Surrogate)	51	0	% Recovery	43-116% Limit		
4-Terphenyl-d14 (Surrogate)	47	0	% Recovery	33-141% Limit		

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CORE LABORATORIES

LABORATORY TESTS RESULTS 01/03/95

JOB NUMBER: 943141

CUSTOMER: GEOSCIENCE CONSULTANTS, LTD.

ATTN:

CLIENT I.D.: REXENE COC#9308

DATE SAMPLED: 12/13/94

TIME SAMPLED: 07:50

WORK DESCRIPTION: 9412130750

LABORATORY I.D.: 943141-0003

DATE RECEIVED: 12/14/94

TIME RECEIVED: 10:45

REMARKS: MW-4

TEST DESCRIPTION	FINAL RESULT	LIMITS/*DILUTION	UNITS OF MEASURE	TEST METHOD	DATE	TECHN
Phenol-d6 (Surrogate)	44	0	% Recovery	10-94% Limit		
2-Fluorophenol (Surrogate)	33	0	% Recovery	21-100% Limit		
2,4,6-Tribromophenol (Surrogate)	77	0	% Recovery	10-123% Limit		
Time Analyzed	1902	0				
Date Extracted	12/16/94	0				

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CORE LABORATORIES

LABORATORY TESTS RESULTS

01/03/95

JOB NUMBER: 943141

CUSTOMER: GEOSCIENCE CONSULTANTS, LTD.

ATTN:

CLIENT I.D.: REXENE COC#9308

DATE SAMPLED: 12/13/94

TIME SAMPLED: 08:35

WORK DESCRIPTION: 9412130835

LABORATORY I.D.: 943141-0004

DATE RECEIVED: 12/14/94

TIME RECEIVED: 10:45

REMARKS: MW-14

TEST DESCRIPTION	FINAL RESULT	LIMITS/*DILUTION	UNITS OF MEASURE	TEST METHOD	DATE	TECHN
Bicarbonate (Unfilt.)	1510	5	mg/L	2320 B (3)	12/22/94	KDS
Chloride (Unfilt.)	2430	25	mg/L	325.2 (1)	12/29/94	DME
Nitrogen, Nitrate (Unfilt.)	<0.1	0.1	mg/L (as N)	353.2 (1)	12/14/94	DME
Sulfate (Unfilt.)	1460	100	mg/L	375.2 (1)	12/29/94	DME
Aluminum, Diss. (Al)	0.08	0.05	mg/L	6010 (2)	12/28/94	WGL
Arsenic, Diss. (As)	<0.05	0.05	mg/L	6010 (2)	12/28/94	WGL
Barium, Diss. (Ba)	0.22	0.01	mg/L	6010 (2)	12/28/94	WGL
Cadmium, Diss. (Cd)	<0.005	0.005	mg/L	6010 (2)	12/28/94	WGL
Calcium, Total (Ca)	413	1.0	mg/L	6010 (2)	12/29/94	GEF
Chromium, Diss. (Cr)	<0.01	0.01	mg/L	6010 (2)	12/28/94	WGL
Cobalt, Diss. (Co)	<0.03	0.03	mg/L	6010 (2)	12/28/94	WGL
Copper, Diss. (Cu)	<0.01	0.01	mg/L	6010 (2)	12/28/94	WGL
Iron, Diss. (Fe)	10.3	0.03	mg/L	6010 (2)	12/28/94	WGL
Lead, Diss. (Pb)	<0.05	0.05	mg/L	6010 (2)	12/28/94	WGL
Mercury, Total (Hg)	0.0024	0.0002	mg/L	7470 (2)	12/20/94	BPB
Magnesium, Total (Mg)	154	0.5	mg/L	6010 (2)	12/29/94	GEF
Manganese, Diss. (Mn)	5.46	0.01	mg/L	6010 (2)	12/28/94	WGL
Molybdenum, Diss. (Mo)	<0.05	0.05	mg/L	6010 (2)	12/28/94	WGL
Nickel, Diss. (Ni)	<0.04	0.04	mg/L	6010 (2)	12/28/94	WGL
Potassium, Total (K)	19	5	mg/L	6010 (2)	12/29/94	GEF
Selenium, Diss. (Se)	<0.1	0.1	mg/L	6010 (2)	12/28/94	WGL
Silver, Diss. (Ag)	<0.01	0.01	mg/L	6010 (2)	12/28/94	WGL
Sodium, Total (Na)	1720	20	mg/L	6010 (2)	12/29/94	GEF

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CORE LABORATORIES

LABORATORY TESTS RESULTS

01/03/95

JOB NUMBER: 943141

CUSTOMER: GEOSCIENCE CONSULTANTS, LTD.

ATTN:

CLIENT I.D.: REXENE COC#9308

DATE SAMPLED: 12/13/94

TIME SAMPLED: 08:35

WORK DESCRIPTION: 9412130835

LABORATORY I.D.: 943141-0004

DATE RECEIVED: 12/14/94

TIME RECEIVED: 10:45

REMARKS: MW-14

TEST DESCRIPTION	FINAL RESULT	LIMITS/*DILUTION	UNITS OF MEASURE	TEST METHOD	DATE	TECHN
Zinc, Diss. (Zn)	<0.01	0.01	mg/L	6010 (2)	12/28/94	WGL
8020 - AROMATIC VOLATILE ORGANICS		*20		8020 (2)	12/17/94	JHT
Benzene	930	10	ug/L			
Toluene	ND	10	ug/L			
Ethyl benzene	ND	10	ug/L			
Xylenes	ND	10	ug/L			
4-Bromofluorobenzene (surrogate)	99	0	% Recovery	85-115% Limit		
Time Analyzed	0523	0				
PAH AND PHENOLS LIST BY 8270		*1		8270 (2)	12/20/94	JMC
Acenaphthene	ND	10	ug/L			
Acenaphthylene	ND	10	ug/L			
Anthracene	ND	10	ug/L			
Benzo(a)anthracene	ND	10	ug/L			
Benzo(b)fluoranthene	ND	10	ug/L			
Benzo(k)fluoranthene	ND	10	ug/L			
Benzo(ghi)perylene	ND	10	ug/L			
Benzo(a)pyrene	ND	10	ug/L			
Chrysene	ND	10	ug/L			
Dibenzo(a,h)anthracene	ND	10	ug/L			
Fluoranthene	ND	10	ug/L			
Fluorene	ND	10	ug/L			
Indeno(1,2,3-cd)pyrene	ND	10	ug/L			
1-Methylnaphthalene	ND	10	ug/L			
2-Methylnaphthalene	ND	10	ug/L			
Naphthalene	ND	10	ug/L			
Phenanthrene	ND	10	ug/L			
Pyrene	ND	10	ug/L			
4-Chloro-3-methylphenol	ND	10	ug/L			
2-Chlorophenol	ND	10	ug/L			
2,4-Dichlorophenol	ND	10	ug/L			
2,4-Dimethylphenol	ND	10	ug/L			
2,4-Dinitrophenol	ND	50	ug/L			
2-Methyl-4,6-dinitrophenol	ND	50	ug/L			
2-Nitrophenol	ND	10	ug/L			
4-Nitrophenol	ND	50	ug/L			
Pentachlorophenol	ND	50	ug/L			
Phenol	54	10	ug/L			
2,4,6-Trichlorophenol	ND	10	ug/L			
Nitrobenzene-d5 (Surrogate)	73	0	% Recovery	35-114% Limit		
2-Fluorobiphenyl (Surrogate)	68	0	% Recovery	43-116% Limit		
4-Terphenyl-d14 (Surrogate)	55	0	% Recovery	33-141% Limit		

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CORE LABORATORIES

LABORATORY TESTS RESULTS

01/03/95

JOB NUMBER: 943141

CUSTOMER: GEOSCIENCE CONSULTANTS, LTD.

ATTN:

CLIENT I.D.: REXENE COC#9308

DATE SAMPLED: 12/13/94

TIME SAMPLED: 08:35

WORK DESCRIPTION: 9412130835

LABORATORY I.D.: 943141-0004

DATE RECEIVED: 12/14/94

TIME RECEIVED: 10:45

REMARKS: MW-14

TEST DESCRIPTION	FINAL RESULT	LIMITS/*DILUTION	UNITS OF MEASURE	TEST METHOD	DATE	TECHN
Phenol-d6 (Surrogate)	74	0	% Recovery	10-94% Limit		
2-Fluorophenol (Surrogate)	58	0	% Recovery	21-100% Limit		
2,4,6-Tribromophenol (Surrogate)	80	0	% Recovery	10-123% Limit		
Time Analyzed	1530	0				
Date Extracted	12/16/94	0				

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CORE LABORATORIES

LABORATORY TESTS RESULTS

01/03/95

JOB NUMBER: 943141

CUSTOMER: GEOSCIENCE CONSULTANTS, LTD.

ATTN:

CLIENT I.D.: REXENE COC#9308

DATE SAMPLED: 12/13/94

TIME SAMPLED: 09:10

WORK DESCRIPTION: 9412130910

LABORATORY I.D.: 943141-0005

DATE RECEIVED: 12/14/94

TIME RECEIVED: 10:45

REMARKS: MW-5

TEST DESCRIPTION	FINAL RESULT	LIMITS/*DILUTION	UNITS OF MEASURE	TEST METHOD	DATE	TECHN
Bicarbonate (Unfilt.)	1830	5	mg/L	2320 B (3)	12/22/94	KDS
Chloride (Unfilt.)	2430	25	mg/L	325.2 (1)	12/29/94	DME
Nitrogen, Nitrate (Unfilt.)	1.1	0.1	mg/L (as N)	353.2 (1)	12/14/94	DME
Sulfate (Unfilt.)	705	200	mg/L	375.2 (1)	12/29/94	DME
Aluminum, Diss. (Al)	0.06	0.05	mg/L	6010 (2)	12/28/94	WGL
Arsenic, Diss. (As)	0.13	0.05	mg/L	6010 (2)	12/28/94	WGL
Barium, Diss. (Ba)	0.22	0.01	mg/L	6010 (2)	12/28/94	WGL
Cadmium, Diss. (Cd)	<0.005	0.005	mg/L	6010 (2)	12/28/94	WGL
Calcium, Total (Ca)	503	1.0	mg/L	6010 (2)	12/29/94	GEF
Chromium, Diss. (Cr)	<0.01	0.01	mg/L	6010 (2)	12/28/94	WGL
Cobalt, Diss. (Co)	<0.03	0.03	mg/L	6010 (2)	12/28/94	WGL
Copper, Diss. (Cu)	<0.01	0.01	mg/L	6010 (2)	12/28/94	WGL
Iron, Diss. (Fe)	0.09	0.03	mg/L	6010 (2)	12/28/94	WGL
Lead, Diss. (Pb)	<0.05	0.05	mg/L	6010 (2)	12/28/94	WGL
Mercury, Total (Hg)	<0.0002	0.0002	mg/L	7470 (2)	12/20/94	BPB
Magnesium, Total (Mg)	184	0.5	mg/L	6010 (2)	12/29/94	GEF
Manganese, Diss. (Mn)	0.03	0.01	mg/L	6010 (2)	12/28/94	WGL
Molybdenum, Diss. (Mo)	<0.05	0.05	mg/L	6010 (2)	12/28/94	WGL
Nickel, Diss. (Ni)	<0.04	0.04	mg/L	6010 (2)	12/28/94	WGL
Potassium, Total (K)	21	5	mg/L	6010 (2)	12/29/94	GEF
Selenium, Diss. (Se)	<0.1	0.1	mg/L	6010 (2)	12/28/94	WGL
Silver, Diss. (Ag)	<0.01	0.01	mg/L	6010 (2)	12/28/94	WGL
Sodium, Total (Na)	3070	20	mg/L	6010 (2)	12/29/94	GEF

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CORE LABORATORIES

LABORATORY TESTS RESULTS

01/03/95

JOB NUMBER: 943141

CUSTOMER: GEOSCIENCE CONSULTANTS, LTD.

ATTN:

CLIENT I.D.: REXENE COC#9308

DATE SAMPLED: 12/13/94

TIME SAMPLED: 09:10

WORK DESCRIPTION: 9412130910

LABORATORY I.D.: 943141-0005

DATE RECEIVED: 12/14/94

TIME RECEIVED: 10:45

REMARKS: MW-5

TEST DESCRIPTION	FINAL RESULT	LIMITS/*DILUTION	UNITS OF MEASURE	TEST METHOD	DATE	TECHN
Zinc, Diss. (Zn)	<0.01	0.01	mg/L	6010 (2)	12/28/94	WGL
8020 - AROMATIC VOLATILE ORGANICS		*100		8020 (2)	12/17/94	JHT
Benzene	4600	50	ug/L			
Toluene	84	50	ug/L			
Ethyl benzene	ND	50	ug/L			
Xylenes	140	50	ug/L			
4-Bromofluorobenzene (surrogate)	96	0	% Recovery	85-115% Limit		
Time Analyzed	0559	0				
PAH AND PHENOLS LIST BY 8270		*1		8270 (2)	12/19/94	JMC
Acenaphthene	ND	10	ug/L			
Acenaphthylene	ND	10	ug/L			
Anthracene	ND	10	ug/L			
Benzo(a)anthracene	ND	10	ug/L			
Benzo(b)fluoranthene	ND	10	ug/L			
Benzo(k)fluoranthene	ND	10	ug/L			
Benzo(ghi)perylene	ND	10	ug/L			
Benzo(a)pyrene	ND	10	ug/L			
Chrysene	ND	10	ug/L			
Dibenzo(a,h)anthracene	ND	10	ug/L			
Fluoranthene	ND	10	ug/L			
Fluorene	ND	10	ug/L			
Indeno(1,2,3-cd)pyrene	ND	10	ug/L			
1-Methylnaphthalene	71	10	ug/L			
2-Methylnaphthalene	22	10	ug/L			
Naphthalene	46	10	ug/L			
Phenanthrene	ND	10	ug/L			
Pyrene	ND	10	ug/L			
4-Chloro-3-methylphenol	ND	10	ug/L			
2-Chlorophenol	ND	10	ug/L			
2,4-Dichlorophenol	ND	10	ug/L			
2,4-Dimethylphenol	ND	10	ug/L			
2,4-Dinitrophenol	ND	50	ug/L			
2-Methyl-4,6-dinitrophenol	ND	50	ug/L			
2-Nitrophenol	ND	10	ug/L			
4-Nitrophenol	ND	50	ug/L			
Pentachlorophenol	ND	50	ug/L			
Phenol	ND	10	ug/L			
2,4,6-Trichlorophenol	ND	10	ug/L			
Nitrobenzene-d5 (Surrogate)	71	0	% Recovery	35-114% Limit		
2-Fluorobiphenyl (Surrogate)	72	0	% Recovery	43-116% Limit		
4-Terphenyl-d14 (Surrogate)	90	0	% Recovery	33-141% Limit		

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CORE LABORATORIES

LABORATORY TESTS RESULTS

01/03/95

JOB NUMBER: 943141

CUSTOMER: GEOSCIENCE CONSULTANTS, LTD.

ATTN:

CLIENT I.D.: REXENE COC#9308
DATE SAMPLED: 12/13/94
TIME SAMPLED: 09:10
WORK DESCRIPTION: 9412130910

LABORATORY I.D.: 943141-0005
DATE RECEIVED: 12/14/94
TIME RECEIVED: 10:45
REMARKS: MW-5

TEST DESCRIPTION	FINAL RESULT	LIMITS/*DILUTION	UNITS OF MEASURE	TEST METHOD	DATE	TECHN
Phenol-d6 (Surrogate)	79	0	% Recovery	10-94% Limit		
2-Fluorophenol (Surrogate)	81	0	% Recovery	21-100% Limit		
2,4,6-Tribromophenol (Surrogate)	71	0	% Recovery	10-123% Limit		
Time Analyzed	2104	0				
Date Extracted	12/16/94	0				
Semi-Volatile Organic - Surrogates		*5		8270(2)/625(6)	12/20/94	JMC
Nitrobenzene-d5 (Surrogate)	70	0	% Recovery	35-114% Limit		
2-Fluorobiphenyl (Surrogate)	74	0	% Recovery	43-116% Limit		
4-Terphenyl-d14 (Surrogate)	58	0	% Recovery	33-141% Limit		
Phenol-d6 (Surrogate)	72	0	% Recovery	10-94% Limit		
2-Fluorophenol (Surrogate)	80	0	% Recovery	21-100% Limit		
2,4,6-Tribromophenol (Surrogate)	80	0	% Recovery	10-123% Limit		
Date Extracted	12/16/94	0				
Time Analyzed	1835	0				

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CORE LABORATORIES

LABORATORY TESTS RESULTS

01/03/95

JOB NUMBER: 943141

CUSTOMER: GEOSCIENCE CONSULTANTS, LTD.

ATTN:

CLIENT I.D.: REXENE COC#9308
DATE SAMPLED: 12/13/94
TIME SAMPLED: 09:50
WORK DESCRIPTION: 9412130950

LABORATORY I.D.: 943141-0006
DATE RECEIVED: 12/14/94
TIME RECEIVED: 10:45
REMARKS: MW-8

TEST DESCRIPTION	FINAL RESULT	LIMITS/*DILUTION	UNITS OF MEASURE	TEST METHOD	DATE	TECHN
Bicarbonate (Unfilt.)	2940	5	mg/L	2320 B (3)	12/22/94	KDS
Chloride (Unfilt.)	831	5	mg/L	325.2 (1)	12/29/94	DME
Nitrogen, Nitrate (Unfilt.)	5.5	0.2	mg/L (as N)	353.2 (1)	12/14/94	DME
Sulfate (Unfilt.)	72	10	mg/L	375.2 (1)	12/29/94	DME
Aluminum, Diss. (Al)	0.19	0.05	mg/L	6010 (2)	12/28/94	WGL
Arsenic, Diss. (As)	0.14	0.05	mg/L	6010 (2)	12/28/94	WGL
Barium, Diss. (Ba)	0.68	0.01	mg/L	6010 (2)	12/28/94	WGL
Cadmium, Diss. (Cd)	<0.005	0.005	mg/L	6010 (2)	12/28/94	WGL
Calcium, Total (Ca)	60.0	0.5	mg/L	6010 (2)	12/29/94	GEF
Chromium, Diss. (Cr)	<0.01	0.01	mg/L	6010 (2)	12/28/94	WGL
Cobalt, Diss. (Co)	<0.03	0.03	mg/L	6010 (2)	12/28/94	WGL
Copper, Diss. (Cu)	0.02	0.01	mg/L	6010 (2)	12/28/94	WGL
Iron, Diss. (Fe)	2.06	0.03	mg/L	6010 (2)	12/28/94	WGL
Lead, Diss. (Pb)	<0.05	0.05	mg/L	6010 (2)	12/28/94	WGL
Mercury, Total (Hg)	<0.0002	0.0002	mg/L	7470 (2)	12/20/94	BPS
Magnesium, Total (Mg)	36.4	0.1	mg/L	6010 (2)	12/29/94	GEF
Manganese, Diss. (Mn)	0.18	0.01	mg/L	6010 (2)	12/28/94	WGL
Molybdenum, Diss. (Mo)	<0.05	0.05	mg/L	6010 (2)	12/28/94	WGL
Nickel, Diss. (Ni)	<0.04	0.04	mg/L	6010 (2)	12/28/94	WGL
Potassium, Total (K)	13.1	0.2	mg/L	7610 (2)	12/30/94	BPS
Selenium, Diss. (Se)	<0.1	0.1	mg/L	6010 (2)	12/28/94	WGL
Silver, Diss. (Ag)	<0.01	0.01	mg/L	6010 (2)	12/28/94	WGL
Sodium, Total (Na)	1870	20	mg/L	6010 (2)	12/29/94	GEF

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CORE LABORATORIES

LABORATORY TESTS RESULTS 01/03/95

JOB NUMBER: 943141

CUSTOMER: GEOSCIENCE CONSULTANTS, LTD.

ATTN:

CLIENT I.D.: REXENE COC#9308

DATE SAMPLED: 12/13/94

TIME SAMPLED: 09:50

WORK DESCRIPTION: 9412130950

LABORATORY I.D.: 943141-0006

DATE RECEIVED: 12/14/94

TIME RECEIVED: 10:45

REMARKS: MW-8

TEST DESCRIPTION	FINAL RESULT	LIMITS/*DILUTION	UNITS OF MEASURE	TEST METHOD	DATE	TECHN
Zinc, Diss. (Zn)	0.01	0.01	mg/L	6010 (2)	12/28/94	WGL
8020 - AROMATIC VOLATILE ORGANICS		*100		8020 (2)	12/17/94	JHT
Benzene	5300	50	ug/L			
Toluene	ND	50	ug/L			
Ethyl benzene	ND	50	ug/L			
Xylenes	140	50	ug/L			
4-Bromofluorobenzene (surrogate)	98	0	% Recovery	85-115% Limit		
Time Analyzed	0635	0				
PAH AND PHENOLS LIST BY 8270		*1		8270 (2)	12/19/94	JMC
Acenaphthene	ND	10	ug/L			
Acenaphthylene	ND	10	ug/L			
Anthracene	ND	10	ug/L			
Benzo(a)anthracene	ND	10	ug/L			
Benzo(b)fluoranthene	ND	10	ug/L			
Benzo(k)fluoranthene	ND	10	ug/L			
Benzo(ghi)perylene	ND	10	ug/L			
Benzo(a)pyrene	ND	10	ug/L			
Chrysene	ND	10	ug/L			
Dibenzo(a,h)anthracene	ND	10	ug/L			
Fluoranthene	ND	10	ug/L			
Fluorene	ND	10	ug/L			
Indeno(1,2,3-cd)pyrene	ND	10	ug/L			
1-Methylnaphthalene	42	10	ug/L			
2-Methylnaphthalene	54	10	ug/L			
Naphthalene	140	10	ug/L			
Phenanthrene	ND	10	ug/L			
Pyrene	ND	10	ug/L			
4-Chloro-3-methylphenol	ND	10	ug/L			
2-Chlorophenol	ND	10	ug/L			
2,4-Dichlorophenol	ND	10	ug/L			
2,4-Dimethylphenol	ND	10	ug/L			
2,4-Dinitrophenol	ND	50	ug/L			
2-Methyl-4,6-dinitrophenol	ND	50	ug/L			
2-Nitrophenol	ND	10	ug/L			
4-Nitrophenol	ND	50	ug/L			
Pentachlorophenol	ND	50	ug/L			
Phenol	ND	10	ug/L			
2,4,6-Trichlorophenol	ND	10	ug/L			
Nitrobenzene-d5 (Surrogate)	73	0	% Recovery	35-114% Limit		
2-Fluorobiphenyl (Surrogate)	80	0	% Recovery	43-116% Limit		
4-Terphenyl-d14 (Surrogate)	117	0	% Recovery	33-141% Limit		

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CORE LABORATORIES

LABORATORY TESTS RESULTS

01/03/95

JOB NUMBER: 943141

CUSTOMER: GEOSCIENCE CONSULTANTS, LTD.

ATTN:

CLIENT I.D.: REXENE COC#9308
DATE SAMPLED: 12/13/94
TIME SAMPLED: 09:50
WORK DESCRIPTION: 9412130950

LABORATORY I.D.: 943141-0006
DATE RECEIVED: 12/14/94
TIME RECEIVED: 10:45
REMARKS: MW-8

TEST DESCRIPTION	FINAL RESULT	LIMITS/*DILUTION	UNITS OF MEASURE	TEST METHOD	DATE	TECHN
Phenol-d6 (Surrogate)	58	0	% Recovery	10-94% Limit		
2-Fluorophenol (Surrogate)	60	0	% Recovery	21-100% Limit		
2,4,6-Tribromophenol (Surrogate)	87	0	% Recovery	10-123% Limit		
Time Analyzed	2206	0				
Date Extracted	12/16/94	0				
Semi-Volatile Organic - Surrogates		*5		8270(2)/625(6)	12/20/94	JMC
Nitrobenzene-d5 (Surrogate)	88	0	% Recovery	35-114% Limit		
2-Fluorobiphenyl (Surrogate)	74	0	% Recovery	43-116% Limit		
4-Terphenyl-d14 (Surrogate)	53	0	% Recovery	33-141% Limit		
Phenol-d6 (Surrogate)	83	0	% Recovery	10-94% Limit		
2-Fluorophenol (Surrogate)	87	0	% Recovery	21-100% Limit		
2,4,6-Tribromophenol (Surrogate)	87	0	% Recovery	10-123% Limit		
Date Extracted	12/16/94	0				
Time Analyzed	1937	0				

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CORE LABORATORIES

LABORATORY TESTS RESULTS 01/03/95

JOB NUMBER: 943141

CUSTOMER: GEOSCIENCE CONSULTANTS, LTD.

ATTN:

CLIENT I.D.: REXENE COC#9308

DATE SAMPLED: 12/13/94

TIME SAMPLED: 10:30

WORK DESCRIPTION: 9412131030

LABORATORY I.D.: 943141-0007

DATE RECEIVED: 12/14/94

TIME RECEIVED: 10:45

REMARKS: MW-11

TEST DESCRIPTION	FINAL RESULT	LIMITS/*DILUTION	UNITS OF MEASURE	TEST METHOD	DATE	TECHN
Bicarbonate (Unfilt.)	1980	5	mg/L	2320 B (3)	12/22/94	KDS
Chloride (Unfilt.)	924	3	mg/L	325.2 (1)	12/29/94	DME
Nitrogen, Nitrate (Unfilt.)	0.2	0.1	mg/L (as N)	353.2 (1)	12/14/94	DME
Sulfate (Unfilt.)	35	20	mg/L	375.2 (1)	12/29/94	DME
Aluminum, Diss. (Al)	0.09	0.05	mg/L	6010 (2)	12/28/94	WGL
Arsenic, Diss. (As)	0.05	0.05	mg/L	6010 (2)	12/28/94	WGL
Barium, Diss. (Ba)	0.84	0.01	mg/L	6010 (2)	12/28/94	WGL
Cadmium, Diss. (Cd)	<0.005	0.005	mg/L	6010 (2)	12/28/94	WGL
Calcium, Total (Ca)	93.4	1.0	mg/L	6010 (2)	12/29/94	GEF
Chromium, Diss. (Cr)	<0.01	0.01	mg/L	6010 (2)	12/28/94	WGL
Cobalt, Diss. (Co)	<0.03	0.03	mg/L	6010 (2)	12/28/94	WGL
Copper, Diss. (Cu)	<0.01	0.01	mg/L	6010 (2)	12/28/94	WGL
Iron, Diss. (Fe)	1.58	0.03	mg/L	6010 (2)	12/28/94	WGL
Lead, Diss. (Pb)	<0.05	0.05	mg/L	6010 (2)	12/28/94	WGL
Mercury, Total (Hg)	<0.0002	0.0002	mg/L	7470 (2)	12/20/94	BPB
Magnesium, Total (Mg)	60.8	0.5	mg/L	6010 (2)	12/29/94	GEF
Manganese, Diss. (Mn)	0.51	0.01	mg/L	6010 (2)	12/28/94	WGL
Molybdenum, Diss. (Mo)	<0.05	0.05	mg/L	6010 (2)	12/28/94	WGL
Nickel, Diss. (Ni)	<0.04	0.04	mg/L	6010 (2)	12/28/94	WGL
Potassium, Total (K)	12	5	mg/L	6010 (2)	12/29/94	GEF
Selenium, Diss. (Se)	<0.1	0.1	mg/L	6010 (2)	12/28/94	WGL
Silver, Diss. (Ag)	<0.01	0.01	mg/L	6010 (2)	12/28/94	WGL
Sodium, Total (Na)	985	5	mg/L	6010 (2)	12/29/94	GEF

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CORE LABORATORIES

LABORATORY TESTS RESULTS

01/03/95

JOB NUMBER: 943141

CUSTOMER: GEOSCIENCE CONSULTANTS, LTD.

ATTN:

CLIENT I.D.: REXENE COC#9308

DATE SAMPLED: 12/13/94

TIME SAMPLED: 10:30

WORK DESCRIPTION: 9412131030

LABORATORY I.D.: 943141-0007

DATE RECEIVED: 12/14/94

TIME RECEIVED: 10:45

REMARKS: MW-11

TEST DESCRIPTION	FINAL RESULT	LIMITS/*DILUTION	UNITS OF MEASURE	TEST METHOD	DATE	TECHN
Zinc, Diss. (Zn)	<0.01	0.01	mg/L	6010 (2)	12/28/94	WGL
8020 - AROMATIC VOLATILE ORGANICS		*1		8020 (2)	12/17/94	JHT
Benzene	15	0.5	ug/L			
Toluene	ND	0.5	ug/L			
Ethyl benzene	ND	0.5	ug/L			
Xylenes	2.5	0.5	ug/L			
4-Bromofluorobenzene (surrogate)	93	0	% Recovery	85-115% Limit		
Time Analyzed	0148	0				
PAH AND PHENOLS LIST BY 8270		*1		8270 (2)	12/19/94	JMC
Acenaphthene	ND	10	ug/L			
Acenaphthylene	ND	10	ug/L			
Anthracene	ND	10	ug/L			
Benzo(a)anthracene	ND	10	ug/L			
Benzo(b)fluoranthene	ND	10	ug/L			
Benzo(k)fluoranthene	ND	10	ug/L			
Benzo(ghi)perylene	ND	10	ug/L			
Benzo(a)pyrene	ND	10	ug/L			
Chrysene	ND	10	ug/L			
Dibenzo(a,h)anthracene	ND	10	ug/L			
Fluoranthene	ND	10	ug/L			
Fluorene	ND	10	ug/L			
Indeno(1,2,3-cd)pyrene	ND	10	ug/L			
1-Methylnaphthalene	69	10	ug/L			
2-Methylnaphthalene	ND	10	ug/L			
Naphthalene	ND	10	ug/L			
Phenanthrene	21	10	ug/L			
Pyrene	58	10	ug/L			
4-Chloro-3-methylphenol	ND	10	ug/L			
2-Chlorophenol	ND	10	ug/L			
2,4-Dichlorophenol	ND	10	ug/L			
2,4-Dimethylphenol	ND	10	ug/L			
2,4-Dinitrophenol	ND	50	ug/L			
2-Methyl-4,6-dinitrophenol	ND	50	ug/L			
2-Nitrophenol	ND	10	ug/L			
4-Nitrophenol	ND	50	ug/L			
Pentachlorophenol	ND	50	ug/L			
Phenol	ND	10	ug/L			
2,4,6-Trichlorophenol	ND	10	ug/L			
Nitrobenzene-d5 (Surrogate)	86	0	% Recovery	35-114% Limit		
2-Fluorobiphenyl (Surrogate)	85	0	% Recovery	43-116% Limit		
4-Terphenyl-d14 (Surrogate)	250 I	0	% Recovery	33-141% Limit		

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CORE LABORATORIES

LABORATORY TESTS RESULTS

01/03/95

JOB NUMBER: 943141

CUSTOMER: GEOSCIENCE CONSULTANTS, LTD.

ATTN:

CLIENT I.D.: REXENE COC#9308
DATE SAMPLED: 12/13/94
TIME SAMPLED: 10:30
WORK DESCRIPTION: 9412131030

LABORATORY I.D.: 943141-0007
DATE RECEIVED: 12/14/94
TIME RECEIVED: 10:45
REMARKS: MW-11

TEST DESCRIPTION	FINAL RESULT	LIMITS/*DILUTION	UNITS OF MEASURE	TEST METHOD	DATE	TECHN
Phenol-d6 (Surrogate)	77	0	% Recovery	10-94% Limit		
2-Fluorophenol (Surrogate)	63	0	% Recovery	21-100% Limit		
2,4,6-Tribromophenol (Surrogate)	82	0	% Recovery	10-123% Limit		
Time Analyzed	2308	0				
Date Extracted	12/16/94	0				
Semi-Volatile Organic - Surrogates		*5		8270(2)/625(6)	12/20/94	JMC
Nitrobenzene-d5 (Surrogate)	92	0	% Recovery	35-114% Limit		
2-Fluorobiphenyl (Surrogate)	73	0	% Recovery	43-116% Limit		
4-Terphenyl-d14 (Surrogate)	125	0	% Recovery	33-141% Limit		
Phenol-d6 (Surrogate)	84	0	% Recovery	10-94% Limit		
2-Fluorophenol (Surrogate)	69	0	% Recovery	21-100% Limit		
2,4,6-Tribromophenol (Surrogate)	77	0	% Recovery	10-123% Limit		
Date Extracted	12/16/94	0				
Time Analyzed	2141	0				

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CORE LABORATORIES

LABORATORY TESTS RESULTS 01/03/95

JOB NUMBER: 943141

CUSTOMER: GEOSCIENCE CONSULTANTS, LTD.

ATTN:

CLIENT I.D.: REXENE COC#9308

DATE SAMPLED: 12/13/94

TIME SAMPLED: 11:05

WORK DESCRIPTION: 9412131105

LABORATORY I.D.: 943141-0008

DATE RECEIVED: 12/14/94

TIME RECEIVED: 10:45

REMARKS: MW-16

TEST DESCRIPTION	FINAL RESULT	LIMITS/*DILUTION	UNITS OF MEASURE	TEST METHOD	DATE	TECHN
Bicarbonate (Unfilt.)	1160	5	mg/L	2320 B (3)	12/22/94	KDS
Chloride (Unfilt.)	1980	10	mg/L	325.2 (1)	12/29/94	DME
Nitrogen, Nitrate (Unfilt.)	<0.1	0.1	mg/L (as N)	353.2 (1)	12/14/94	DME
Sulfate (Unfilt.)	1840	200	mg/L	375.2 (1)	12/29/94	DME
Aluminum, Diss. (Al)	0.11	0.05	mg/L	6010 (2)	12/28/94	WGL
Arsenic, Diss. (As)	<0.05	0.05	mg/L	6010 (2)	12/28/94	WGL
Barium, Diss. (Ba)	0.07	0.01	mg/L	6010 (2)	12/28/94	WGL
Cadmium, Diss. (Cd)	<0.005	0.005	mg/L	6010 (2)	12/28/94	WGL
Calcium, Total (Ca)	224	1.0	mg/L	6010 (2)	12/29/94	GEF
Chromium, Diss. (Cr)	<0.01	0.01	mg/L	6010 (2)	12/28/94	WGL
Cobalt, Diss. (Co)	<0.03	0.03	mg/L	6010 (2)	12/28/94	WGL
Copper, Diss. (Cu)	<0.01	0.01	mg/L	6010 (2)	12/28/94	WGL
Iron, Diss. (Fe)	1.70	0.03	mg/L	6010 (2)	12/28/94	WGL
Lead, Diss. (Pb)	<0.05	0.05	mg/L	6010 (2)	12/28/94	WGL
Mercury, Total (Hg)	<0.0002	0.0002	mg/L	7470 (2)	12/20/94	BPB
Magnesium, Total (Mg)	98.3	0.5	mg/L	6010 (2)	12/29/94	GEF
Manganese, Diss. (Mn)	4.15	0.01	mg/L	6010 (2)	12/28/94	WGL
Molybdenum, Diss. (Mo)	<0.05	0.05	mg/L	6010 (2)	12/28/94	WGL
Nickel, Diss. (Ni)	0.05	0.04	mg/L	6010 (2)	12/28/94	WGL
Potassium, Total (K)	15	5	mg/L	6010 (2)	12/29/94	GEF
Selenium, Diss. (Se)	<0.1	0.1	mg/L	6010 (2)	12/28/94	WGL
Silver, Diss. (Ag)	<0.01	0.01	mg/L	6010 (2)	12/28/94	WGL
Sodium, Total (Na)	1870	20	mg/L	6010 (2)	12/29/94	GEF

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CORE LABORATORIES

LABORATORY TESTS RESULTS

01/03/95

JOB NUMBER: 943141

CUSTOMER: GEOSCIENCE CONSULTANTS, LTD.

ATTN:

CLIENT I.D.: REXENE COC#9308

DATE SAMPLED: 12/13/94

TIME SAMPLED: 11:05

WORK DESCRIPTION: 9412131105

LABORATORY I.D.: 943141-0008

DATE RECEIVED: 12/14/94

TIME RECEIVED: 10:45

REMARKS: MW-16

TEST DESCRIPTION	FINAL RESULT	LIMITS/*DILUTION	UNITS OF MEASURE	TEST METHOD	DATE	TECHN
Zinc, Diss. (Zn)	<0.01	0.01	mg/L	6010 (2)	12/28/94	WGL
8020 - AROMATIC VOLATILE ORGANICS		*1		8020 (2)	12/17/94	JHT
Benzene	ND	0.5	ug/L			
Toluene	ND	0.5	ug/L			
Ethyl benzene	ND	0.5	ug/L			
Xylenes	ND	0.5	ug/L			
4-Bromofluorobenzene (surrogate)	101	0	% Recovery	85-115% Limit		
Time Analyzed	0224	0				
PAH AND PHENOLS LIST BY 8270		*1		8270 (2)	12/20/94	JMC
Acenaphthene	ND	10	ug/L			
Acenaphthylene	ND	10	ug/L			
Anthracene	ND	10	ug/L			
Benzo(a)anthracene	ND	10	ug/L			
Benzo(b)fluoranthene	ND	10	ug/L			
Benzo(k)fluoranthene	ND	10	ug/L			
Benzo(ghi)perylene	ND	10	ug/L			
Benzo(a)pyrene	ND	10	ug/L			
Chrysene	ND	10	ug/L			
Dibenzo(a,h)anthracene	ND	10	ug/L			
Fluoranthene	ND	10	ug/L			
Fluorene	ND	10	ug/L			
Indeno(1,2,3-cd)pyrene	ND	10	ug/L			
1-Methylnaphthalene	ND	10	ug/L			
2-Methylnaphthalene	ND	10	ug/L			
Naphthalene	ND	10	ug/L			
Phenanthrene	ND	10	ug/L			
Pyrene	ND	10	ug/L			
4-Chloro-3-methylphenol	ND	10	ug/L			
2-Chlorophenol	ND	10	ug/L			
2,4-Dichlorophenol	ND	10	ug/L			
2,4-Dimethylphenol	ND	10	ug/L			
2,4-Dinitrophenol	ND	50	ug/L			
2-Methyl-4,6-dinitrophenol	ND	50	ug/L			
2-Nitrophenol	ND	10	ug/L			
4-Nitrophenol	ND	50	ug/L			
Pentachlorophenol	ND	50	ug/L			
Phenol	ND	10	ug/L			
2,4,6-Trichlorophenol	ND	10	ug/L			
Nitrobenzene-d5 (Surrogate)	61	0	% Recovery	35-114% Limit		
2-Fluorobiphenyl (Surrogate)	70	0	% Recovery	43-116% Limit		
4-Terphenyl-d14 (Surrogate)	107	0	% Recovery	33-141% Limit		

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CORE LABORATORIES

LABORATORY TESTS RESULTS 01/03/95

JOB NUMBER: 943141

CUSTOMER: GEOSCIENCE CONSULTANTS, LTD.

ATTN:

CLIENT I.D.: REXENE COC#9308

LABORATORY I.D.: 943141-0008

DATE SAMPLED: 12/13/94

DATE RECEIVED: 12/14/94

TIME SAMPLED: 11:05

TIME RECEIVED: 10:45

WORK DESCRIPTION: 9412131105

REMARKS: MW-16

TEST DESCRIPTION	FINAL RESULT	LIMITS/*DILUTION	UNITS OF MEASURE	TEST METHOD	DATE	TECHN
Phenol-d6 (Surrogate)	66	0	% Recovery	10-94% Limit		
2-Fluorophenol (Surrogate)	46	0	% Recovery	21-100% Limit		
2,4,6-Tribromophenol (Surrogate)	90	0	% Recovery	10-123% Limit		
Time Analyzed	0009	0				
Date Extracted	12/16/94	0				
Semi-Volatile Organic - Surrogates		*1		8270(2)/625(6)	12/20/94	JMC
Nitrobenzene-d5 (Surrogate)	63	0	% Recovery	35-114% Limit		
2-Fluorobiphenyl (Surrogate)	73	0	% Recovery	43-116% Limit		
4-Terphenyl-d14 (Surrogate)	78	0	% Recovery	33-141% Limit		
Phenol-d6 (Surrogate)	68	0	% Recovery	10-94% Limit		
2-Fluorophenol (Surrogate)	47	0	% Recovery	21-100% Limit		
2,4,6-Tribromophenol (Surrogate)	84	0	% Recovery	10-123% Limit		
Date Extracted	12/16/94	0				
Time Analyzed	1632	0				

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CORE LABORATORIES

LABORATORY TESTS RESULTS 01/03/95

JOB NUMBER: 943141

CUSTOMER: GEOSCIENCE CONSULTANTS, LTD.

ATTN:

CLIENT I.D.: REXENE COC#9308

DATE SAMPLED: 12/13/94

TIME SAMPLED: 11:40

WORK DESCRIPTION: 9412131140

LABORATORY I.D.: 943141-0009

DATE RECEIVED: 12/14/94

TIME RECEIVED: 10:45

REMARKS: MW-17

TEST DESCRIPTION	FINAL RESULT	LIMITS/*DILUTION	UNITS OF MEASURE	TEST METHOD	DATE	TECHN
Bicarbonate (Unfilt.)	1700	5	mg/L	2320 B (3)	12/22/94	KDS
Chloride (Unfilt.)	2430	15	mg/L	325.2 (1)	12/29/94	DME
Nitrogen, Nitrate (Unfilt.)	<0.1	0.1	mg/L (as N)	353.2 (1)	12/14/94	DME
Sulfate (Unfilt.)	407	40	mg/L	375.2 (1)	12/29/94	DME
Aluminum, Diss. (Al)	0.10	0.05	mg/L	6010 (2)	12/28/94	WGL
Arsenic, Diss. (As)	<0.05	0.05	mg/L	6010 (2)	12/28/94	WGL
Barium, Diss. (Ba)	0.42	0.01	mg/L	6010 (2)	12/28/94	WGL
Cadmium, Diss. (Cd)	<0.005	0.005	mg/L	6010 (2)	12/28/94	WGL
Calcium, Total (Ca)	278	1.0	mg/L	6010 (2)	12/29/94	GEF
Chromium, Diss. (Cr)	<0.01	0.01	mg/L	6010 (2)	12/28/94	WGL
Cobalt, Diss. (Co)	<0.03	0.03	mg/L	6010 (2)	12/28/94	WGL
Copper, Diss. (Cu)	<0.01	0.01	mg/L	6010 (2)	12/28/94	WGL
Iron, Diss. (Fe)	8.47	0.03	mg/L	6010 (2)	12/28/94	WGL
Lead, Diss. (Pb)	<0.05	0.05	mg/L	6010 (2)	12/28/94	WGL
Mercury, Total (Hg)	<0.0002	0.0002	mg/L	7470 (2)	12/29/94	BPB
Magnesium, Total (Mg)	80.0	0.5	mg/L	6010 (2)	12/29/94	GEF
Manganese, Diss. (Mn)	3.37	0.01	mg/L	6010 (2)	12/28/94	WGL
Molybdenum, Diss. (Mo)	<0.05	0.05	mg/L	6010 (2)	12/28/94	WGL
Nickel, Diss. (Ni)	<0.04	0.04	mg/L	6010 (2)	12/28/94	WGL
Potassium, Total (K)	13	5	mg/L	6010 (2)	12/29/94	GEF
Selenium, Diss. (Se)	<0.1	0.1	mg/L	6010 (2)	12/28/94	WGL
Silver, Diss. (Ag)	<0.01	0.01	mg/L	6010 (2)	12/28/94	WGL
Sodium, Total (Na)	2090	20	mg/L	6010 (2)	12/29/94	GEF

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CORE LABORATORIES

LABORATORY TESTS RESULTS

01/03/95

JOB NUMBER: 943141

CUSTOMER: GEOSCIENCE CONSULTANTS, LTD.

ATTN:

CLIENT I.D.: REXENE COC#9308

DATE SAMPLED: 12/13/94

TIME SAMPLED: 11:40

WORK DESCRIPTION: 9412131140

LABORATORY I.D.: 943141-0009

DATE RECEIVED: 12/14/94

TIME RECEIVED: 10:45

REMARKS: MW-17

TEST DESCRIPTION	FINAL RESULT	LIMITS/*DILUTION	UNITS OF MEASURE	TEST METHOD	DATE	TECHN
Zinc, Diss. (Zn)	<0.01	0.01	mg/L	6010 (2)	12/28/94	WGL
8020 - AROMATIC VOLATILE ORGANICS		*10		8020 (2)	12/17/94	JHT
Benzene	460	5	ug/L			
Toluene	ND	5	ug/L			
Ethyl benzene	10	5	ug/L			
Xylenes	10	5	ug/L			
4-Bromofluorobenzene (surrogate)	91	0	% Recovery	85-115% Limit		
Time Analyzed	0711	0				
PAH AND PHENOLS LIST BY 8270		*1		8270 (2)	12/20/94	JMC
Acenaphthene	ND	10	ug/L			
Acenaphthylene	ND	10	ug/L			
Anthracene	ND	10	ug/L			
Benzo(a)anthracene	ND	10	ug/L			
Benzo(b)fluoranthene	ND	10	ug/L			
Benzo(k)fluoranthene	ND	10	ug/L			
Benzo(ghi)perylene	ND	10	ug/L			
Benzo(a)pyrene	ND	10	ug/L			
Chrysene	ND	10	ug/L			
Dibenzo(a,h)anthracene	ND	10	ug/L			
Fluoranthene	ND	10	ug/L			
Fluorene	ND	10	ug/L			
Indeno(1,2,3-cd)pyrene	ND	10	ug/L			
1-Methylnaphthalene	ND	10	ug/L			
2-Methylnaphthalene	ND	10	ug/L			
Naphthalene	ND	10	ug/L			
Phenanthrene	ND	10	ug/L			
Pyrene	ND	10	ug/L			
4-Chloro-3-methylphenol	ND	10	ug/L			
2-Chlorophenol	ND	10	ug/L			
2,4-Dichlorophenol	ND	10	ug/L			
2,4-Dimethylphenol	ND	10	ug/L			
2,4-Dinitrophenol	ND	50	ug/L			
2-Methyl-4,6-dinitrophenol	ND	50	ug/L			
2-Nitrophenol	ND	10	ug/L			
4-Nitrophenol	ND	50	ug/L			
Pentachlorophenol	ND	50	ug/L			
Phenol	ND	10	ug/L			
2,4,6-Trichlorophenol	ND	10	ug/L			
Nitrobenzene-d5 (Surrogate)	48	0	% Recovery	35-114% Limit		
2-Fluorobiphenyl (Surrogate)	62	0	% Recovery	43-116% Limit		
4-Terphenyl-d14 (Surrogate)	84	0	% Recovery	33-141% Limit		

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CORE LABORATORIES

LABORATORY TESTS RESULTS

01/03/95

JOB NUMBER: 943141

CUSTOMER: GEOSCIENCE CONSULTANTS, LTD.

ATTN:

CLIENT I.D.: REXENE COC#9308

DATE SAMPLED: 12/13/94

TIME SAMPLED: 11:40

WORK DESCRIPTION: 9412131140

LABORATORY I.D.: 943141-0009

DATE RECEIVED: 12/14/94

TIME RECEIVED: 10:45

REMARKS: MW-17

TEST DESCRIPTION	FINAL RESULT	LIMITS/*DILUTION	UNITS OF MEASURE	TEST METHOD	DATE	TECHN
Phenol-d6 (Surrogate)	54	0	% Recovery	10-94% Limit		
2-Fluorophenol (Surrogate)	33	0	% Recovery	21-100% Limit		
2,4,6-Tribromophenol (Surrogate)	77	0	% Recovery	10-123% Limit		
Time Analyzed	0111	0				
Date Extracted	12/16/94	0				
Semi-Volatile Organic - Surrogates		*1		8270(2)/625(6)	12/20/94	JMC
Nitrobenzene-d5 (Surrogate)	49	0	% Recovery	35-114% Limit		
2-Fluorobiphenyl (Surrogate)	58	0	% Recovery	43-116% Limit		
4-Terphenyl-d14 (Surrogate)	65	0	% Recovery	33-141% Limit		
Phenol-d6 (Surrogate)	61	0	% Recovery	10-94% Limit		
2-Fluorophenol (Surrogate)	36	0	% Recovery	21-100% Limit		
2,4,6-Tribromophenol (Surrogate)	73	0	% Recovery	10-123% Limit		
Date Extracted	12/16/94	0				
Time Analyzed	1734	0				

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CORE LABORATORIES

LABORATORY TESTS RESULTS 01/03/95

JOB NUMBER: 943141

CUSTOMER: GEOSCIENCE CONSULTANTS, LTD.

ATTN:

CLIENT I.D.: REXENE COC#9308

DATE SAMPLED: 12/13/94

TIME SAMPLED: 12:05

WORK DESCRIPTION: 9412131205

LABORATORY I.D.: 943141-0010

DATE RECEIVED: 12/14/94

TIME RECEIVED: 10:45

REMARKS: MW-7

TEST DESCRIPTION	FINAL RESULT	LIMITS/*DILUTION	UNITS OF MEASURE	TEST METHOD	DATE	TECHN
Bicarbonate (Unfilt.)	1500	5	mg/L	2320 B (3)	12/22/94	KDS
Chloride (Unfilt.)	1570	5	mg/L	325.2 (1)	12/29/94	DME
Nitrogen, Nitrate (Unfilt.)	5.1	0.2	mg/L (as N)	353.2 (1)	12/14/94	DME
Sulfate (Unfilt.)	333	30	mg/L	375.2 (1)	12/29/94	DME
Aluminum, Diss. (Al)	0.10	0.05	mg/L	6010 (2)	12/28/94	WGL
Arsenic, Diss. (As)	<0.05	0.05	mg/L	6010 (2)	12/28/94	WGL
Barium, Diss. (Ba)	0.41	0.01	mg/L	6010 (2)	12/28/94	WGL
Cadmium, Diss. (Cd)	<0.005	0.005	mg/L	6010 (2)	12/28/94	WGL
Calcium, Total (Ca)	229	1.0	mg/L	6010 (2)	12/29/94	GEF
Chromium, Diss. (Cr)	<0.01	0.01	mg/L	6010 (2)	12/28/94	WGL
Cobalt, Diss. (Co)	<0.03	0.03	mg/L	6010 (2)	12/28/94	WGL
Copper, Diss. (Cu)	<0.01	0.01	mg/L	6010 (2)	12/28/94	WGL
Iron, Diss. (Fe)	0.45	0.03	mg/L	6010 (2)	12/28/94	WGL
Lead, Diss. (Pb)	<0.05	0.05	mg/L	6010 (2)	12/28/94	WGL
Mercury, Total (Hg)	0.0006	0.0002	mg/L	7470 (2)	12/20/94	BPB
Magnesium, Total (Mg)	77.4	0.5	mg/L	6010 (2)	12/29/94	GEF
Manganese, Diss. (Mn)	0.64	0.01	mg/L	6010 (2)	12/28/94	WGL
Molybdenum, Diss. (Mo)	<0.05	0.05	mg/L	6010 (2)	12/28/94	WGL
Nickel, Diss. (Ni)	<0.04	0.04	mg/L	6010 (2)	12/28/94	WGL
Potassium, Total (K)	15	5	mg/L	6010 (2)	12/29/94	GEF
Selenium, Diss. (Se)	<0.1	0.1	mg/L	6010 (2)	12/28/94	WGL
Silver, Diss. (Ag)	<0.01	0.01	mg/L	6010 (2)	12/28/94	WGL
Sodium, Total (Na)	1100	5	mg/L	6010 (2)	12/29/94	GEF

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CORE LABORATORIES

LABORATORY TESTS RESULTS 01/03/95

JOB NUMBER: 943141

CUSTOMER: GEOSCIENCE CONSULTANTS, LTD.

ATTN:

CLIENT I.D.: REXENE COC#9308

DATE SAMPLED: 12/13/94

TIME SAMPLED: 12:05

WORK DESCRIPTION: 9412131205

LABORATORY I.D.: 943141-0010

DATE RECEIVED: 12/14/94

TIME RECEIVED: 10:45

REMARKS: MW-7

TEST DESCRIPTION	FINAL RESULT	LIMITS/*DILUTION	UNITS OF MEASURE	TEST METHOD	DATE	TECHN
Zinc, Diss. (Zn)	<0.01	0.01	mg/L	6010 (2)	12/28/94	WGL
8020 - AROMATIC VOLATILE ORGANICS		*1		8020 (2)	12/17/94	JHT
Benzene	36	0.5	ug/L			
Toluene	ND	0.5	ug/L			
Ethyl benzene	ND	0.5	ug/L			
Xylenes	ND	0.5	ug/L			
4-Bromofluorobenzene (surrogate)	96	0	% Recovery	85-115% Limit		
Time Analyzed	0259	0				
PAH AND PHENOLS LIST BY 8270		*1		8270 (2)	12/20/94	JMC
Acenaphthene	ND	10	ug/L			
Acenaphthylene	ND	10	ug/L			
Anthracene	ND	10	ug/L			
Benzo(a)anthracene	ND	10	ug/L			
Benzo(b)fluoranthene	ND	10	ug/L			
Benzo(k)fluoranthene	ND	10	ug/L			
Benzo(ghi)perylene	ND	10	ug/L			
Benzo(a)pyrene	ND	10	ug/L			
Chrysene	ND	10	ug/L			
Dibenzo(a,h)anthracene	ND	10	ug/L			
Fluoranthene	ND	10	ug/L			
Fluorene	ND	10	ug/L			
Indeno(1,2,3-cd)pyrene	ND	10	ug/L			
1-Methylnaphthalene	ND	10	ug/L			
2-Methylnaphthalene	ND	10	ug/L			
Naphthalene	ND	10	ug/L			
Phenanthrene	ND	10	ug/L			
Pyrene	ND	10	ug/L			
4-Chloro-3-methylphenol	ND	10	ug/L			
2-Chlorophenol	ND	10	ug/L			
2,4-Dichlorophenol	ND	10	ug/L			
2,4-Dimethylphenol	ND	10	ug/L			
2,4-Dinitrophenol	ND	50	ug/L			
2-Methyl-4,6-dinitrophenol	ND	50	ug/L			
2-Nitrophenol	ND	10	ug/L			
4-Nitrophenol	ND	50	ug/L			
Pentachlorophenol	ND	50	ug/L			
Phenol	ND	10	ug/L			
2,4,6-Trichlorophenol	ND	10	ug/L			
Nitrobenzene-d5 (Surrogate)	86	0	% Recovery	35-114% Limit		
2-Fluorobiphenyl (Surrogate)	85	0	% Recovery	43-116% Limit		
4-Terphenyl-d14 (Surrogate)	270 I	0	% Recovery	33-141% Limit		

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CORE LABORATORIES

LABORATORY TESTS RESULTS

01/03/95

JOB NUMBER: 943141

CUSTOMER: GEOSCIENCE CONSULTANTS, LTD.

ATTN:

CLIENT I.D.: REXENE COC#9308

DATE SAMPLED: 12/13/94

TIME SAMPLED: 12:05

WORK DESCRIPTION: 9412131205

LABORATORY I.D.: 943141-0010

DATE RECEIVED: 12/14/94

TIME RECEIVED: 10:45

REMARKS: MW-7

TEST DESCRIPTION	FINAL RESULT	LIMITS/*DILUTION	UNITS OF MEASURE	TEST METHOD	DATE	TECHN
Phenol-d6 (Surrogate)	78	0	% Recovery	10-94% Limit		
2-Fluorophenol (Surrogate)	76	0	% Recovery	21-100% Limit		
2,4,6-Tribromophenol (Surrogate)	97	0	% Recovery	10-123% Limit		
Time Analyzed	0212	0				
Date Extracted	12/16/94	0				
Semi-Volatile Organic - Surrogates		*5		8270(2)/625(6)	12/20/94	JMC
Nitrobenzene-d5 (Surrogate)	88	0	% Recovery	35-114% Limit		
2-Fluorobiphenyl (Surrogate)	85	0	% Recovery	43-116% Limit		
4-Terphenyl-d14 (Surrogate)	111	0	% Recovery	33-141% Limit		
Phenol-d6 (Surrogate)	93	0	% Recovery	10-94% Limit		
2-Fluorophenol (Surrogate)	70	0	% Recovery	21-100% Limit		
2,4,6-Tribromophenol (Surrogate)	95	0	% Recovery	10-123% Limit		
Date Extracted	12/16/94	0				
Time Analyzed	2039	0				

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CORE LABORATORIES

LABORATORY TESTS RESULTS

01/03/95

JOB NUMBER: 943141

CUSTOMER: GEOSCIENCE CONSULTANTS, LTD.

ATTN:

CLIENT I.D.:
DATE SAMPLED: / /
TIME SAMPLED: :
WORK DESCRIPTION: METHOD BLANK

LABORATORY I.D.: 943141-0011
DATE RECEIVED: / /
TIME RECEIVED: :
REMARKS:

TEST DESCRIPTION	FINAL RESULT	LIMITS/*DILUTION	UNITS OF MEASURE	TEST METHOD	DATE	TECHN
8020 - AROMATIC VOLATILE ORGANICS		*1		8020 (2)	12/16/94	JHT
Benzene	ND	0.5	ug/L			
Toluene	ND	0.5	ug/L			
Ethyl benzene	ND	0.5	ug/L			
Xylenes	ND	0.5	ug/L			
4-Bromofluorobenzene (surrogate)	102	0	% Recovery	85-115% Limit		
Time Analyzed	1840	0				
PAH AND PHENOLS LIST BY 8270		*1		8270 (2)	12/19/94	JMC
Acenaphthene	ND	10	ug/L			
Acenaphthylene	ND	10	ug/L			
Anthracene	ND	10	ug/L			
Benzo(a)anthracene	ND	10	ug/L			
Benzo(b)fluoranthene	ND	10	ug/L			
Benzo(k)fluoranthene	ND	10	ug/L			
Benzo(ghi)perylene	ND	10	ug/L			
Benzo(a)pyrene	ND	10	ug/L			
Chrysene	ND	10	ug/L			
Dibenzo(a,h)anthracene	ND	10	ug/L			
Fluoranthene	ND	10	ug/L			
Fluorene	ND	10	ug/L			
Indeno(1,2,3-cd)pyrene	ND	10	ug/L			
1-Methylnaphthalene	ND	10	ug/L			
2-Methylnaphthalene	ND	10	ug/L			
Naphthalene	ND	10	ug/L			
Phenanthrene	ND	10	ug/L			
Pyrene	ND	10	ug/L			
4-Chloro-3-methylphenol	ND	10	ug/L			
2-Chlorophenol	ND	10	ug/L			
2,4-Dichlorophenol	ND	10	ug/L			
2,4-Dimethylphenol	ND	10	ug/L			
2,4-Dinitrophenol	ND	50	ug/L			
2-Methyl-4,6-dinitrophenol	ND	50	ug/L			
2-Nitrophenol	ND	10	ug/L			
4-Nitrophenol	ND	50	ug/L			
Pentachlorophenol	ND	50	ug/L			
Phenol	ND	10	ug/L			
2,4,6-Trichlorophenol	ND	10	ug/L			
Nitrobenzene-d5 (Surrogate)	53	0	% Recovery	35-114% Limit		
2-Fluorobiphenyl (Surrogate)	48	0	% Recovery	43-116% Limit		
4-Terphenyl-d14 (Surrogate)	78	0	% Recovery	33-141% Limit		
Phenol-d6 (Surrogate)	15	0	% Recovery	10-94% Limit		
2-Fluorophenol (Surrogate)	6 *	0	% Recovery	21-100% Limit		

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CORE LABORATORIES

LABORATORY TESTS RESULTS

01/03/95

JOB NUMBER: 943141

CUSTOMER: GEOSCIENCE CONSULTANTS, LTD.

ATTN:

CLIENT I.D.....:

DATE SAMPLED.....: / /

TIME SAMPLED.....: :

WORK DESCRIPTION....: METHOD BLANK

LABORATORY I.D....: 943141-0011

DATE RECEIVED.....: / /

TIME RECEIVED.....: :

REMARKS.....:

TEST DESCRIPTION	FINAL RESULT	LIMITS/*DILUTION	UNITS OF MEASURE	TEST METHOD	DATE	TECHN
2,4,6-Tribromophenol (Surrogate)	4 *	0	% Recovery	10-123% Limit		
Time Analyzed	1658	0				
Date Extracted	12/16/94	0				

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CORE LABORATORIES

LABORATORY TESTS RESULTS

01/03/95

JOB NUMBER: 943141

CUSTOMER: GEOSCIENCE CONSULTANTS, LTD.

ATTN:

CLIENT I.D.....:

DATE SAMPLED.....: / /

TIME SAMPLED.....:

WORK DESCRIPTION...: METHOD BLANK

LABORATORY I.D....: 943141-0012

DATE RECEIVED.....: / /

TIME RECEIVED.....:

REMARKS.....:

TEST DESCRIPTION	FINAL RESULT	LIMITS/*DILUTION	UNITS OF MEASURE	TEST METHOD	DATE	TECHN
PAH AND PHENOLS LIST BY 8270		*1		8270 (2)	12/20/94	JMC
Acenaphthene	ND	10	ug/L			
Acenaphthylene	ND	10	ug/L			
Anthracene	ND	10	ug/L			
Benzo(a)anthracene	ND	10	ug/L			
Benzo(b)fluoranthene	ND	10	ug/L			
Benzo(k)fluoranthene	ND	10	ug/L			
Benzo(ghi)perylene	ND	10	ug/L			
Benzo(a)pyrene	ND	10	ug/L			
Chrysene	ND	10	ug/L			
Dibenzo(a,h)anthracene	ND	10	ug/L			
Fluoranthene	ND	10	ug/L			
Fluorene	ND	10	ug/L			
Indeno(1,2,3-cd)pyrene	ND	10	ug/L			
1-Methylnaphthalene	ND	10	ug/L			
2-Methylnaphthalene	ND	10	ug/L			
Naphthalene	ND	10	ug/L			
Phenanthrene	ND	10	ug/L			
Pyrene	ND	10	ug/L			
4-Chloro-3-methylphenol	ND	10	ug/L			
2-Chlorophenol	ND	10	ug/L			
2,4-Dichlorophenol	ND	10	ug/L			
2,4-Dimethylphenol	ND	10	ug/L			
2,4-Dinitrophenol	ND	50	ug/L			
2-Methyl-4,6-dinitrophenol	ND	50	ug/L			
2-Nitrophenol	ND	10	ug/L			
4-Nitrophenol	ND	50	ug/L			
Pentachlorophenol	ND	50	ug/L			
Phenol	ND	10	ug/L			
2,4,6-Trichlorophenol	ND	10	ug/L			
Nitrobenzene-d5 (Surrogate)	59	0	% Recovery	35-114% Limit		
2-Fluorobiphenyl (Surrogate)	36 *	0	% Recovery	43-116% Limit		
4-Terphenyl-d14 (Surrogate)	81	0	% Recovery	33-141% Limit		
Phenol-d6 (Surrogate)	14	0	% Recovery	10-94% Limit		
2-Fluorophenol (Surrogate)	7 *	0	% Recovery	21-100% Limit		
2,4,6-Tribromophenol (Surrogate)	6 *	0	% Recovery	10-123% Limit		
Time Analyzed	1225	0				
Date Extracted	12/16/94	0				

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CORE LABORATORIES

QUALITY CONTROL REPORT 01/03/95

JOB NUMBER: 943141

CUSTOMER: GEOSCIENCE CONSULTANTS, LTD.

ATTN:

ANALYSIS				DUPLICATES		REFERENCE STANDARDS		MATRIX SPIKES		
ANALYSIS TYPE	ANALYSIS SUB-TYPE	ANALYSIS I.D.	ANALYZED VALUE (A)	DUPLICATE VALUE (B)	RPD or (A-B)	TRUE VALUE	PERCENT RECOVERY	ORIGINAL VALUE	SPIKE ADDED	PERCENT RECOVERY
PARAMETER:Nitrogen, Nitrate (Unfilt.)				DATE/TIME ANALYZED:12/14/94 10:00				QC BATCH NUMBER:316621		
REPORTING LIMIT/DF: 0.1 UNITS:mg/L (as N)				METHOD REFERENCE :353.2 (1)				TECHNICIAN:DME		
BLANK	ICB	941214	<0.1							
BLANK	CCB	941214	<0.1							
STANDARD	ICV/LCS	G941014A	1.0			1.0	100			
STANDARD	CCV	S3.0	2.8			3.0	93			
SPIKE	MS	943012-2	3.3					2.4	1.0	90
DUPLICATE	MD	943012-2	2.4	2.4	0					
DUPLICATE	MD	943119-1	1.4	1.4	0					
PARAMETER:Nitrogen, Nitrate (Unfilt.)				DATE/TIME ANALYZED:12/14/94 10:00				QC BATCH NUMBER:316665		
REPORTING LIMIT/DF: 0.1 UNITS:mg/L (as N)				METHOD REFERENCE :353.2 (1)				TECHNICIAN:DME		
BLANK	ICB	941214	<0.1							
BLANK	CCB	941214	<0.1							
STANDARD	ICV/LCS	G941014A	1.0			1.0	100			
STANDARD	CCV	S3.0	2.9			3.0	97			
SPIKE	MS	943142-7	1.8					1.0	1.0	80
DUPLICATE	MD	943142-7	1.0	1.2	18					
PARAMETER:Mercury, Total (Hg)				DATE/TIME ANALYZED:12/20/94 14:00				QC BATCH NUMBER:316949		
REPORTING LIMIT/DF: 0.0002UNITS:mg/L				METHOD REFERENCE :7470 (2)				TECHNICIAN:BPB		
BLANK	ICB	12204	<0.0002							
BLANK	CCB	12204	<0.0002							
BLANK	CCB	12204	<0.0002							
BLANK	CCB	12204	<0.0002							
STANDARD	ICV	1121H	0.0042			0.0040	105			
STANDARD	CCV	1013P	0.0027			0.0025	108			
STANDARD	CCV	1013P	0.0026			0.0025	104			
STANDARD	CCV	1013P	0.0027			0.0025	108			
SPIKE	MS	943141-003	0.0040					0	0.0050	80
DUPLICATE	MD	943141-002	<0.0002	<0.0002	NC					
PARAMETER:Bicarbonate (Unfilt.)				DATE/TIME ANALYZED:12/22/94 15:00				QC BATCH NUMBER:317116		
REPORTING LIMIT/DF: 5 UNITS:mg/L				METHOD REFERENCE :2320 B (3)				TECHNICIAN:KDS		
BLANK	MB	941222	<5							
DUPLICATE	MD	943141-10	1500	1450	3					
DUPLICATE	MD	943142-8	866	866	0					
PARAMETER:Silver, Diss. (Ag)				DATE/TIME ANALYZED:12/28/94 09:32				QC BATCH NUMBER:317317		
REPORTING LIMIT/DF: 0.01 UNITS:mg/L				METHOD REFERENCE :6010 (2)				TECHNICIAN:WGL		
BLANK	ICB	1212H	<0.01							
BLANK	CCB	1212H	<0.01							
BLANK	CCB	1212H	<0.01							
BLANK	CCB	1212H	<0.01							

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CORE LABORATORIES

QUALITY CONTROL REPORT 01/03/95

JOB NUMBER: 943141

CUSTOMER: GEOSCIENCE CONSULTANTS, LTD.

ATTN:

ANALYSIS				DUPLICATES		REFERENCE STANDARDS		MATRIX SPIKES		
ANALYSIS TYPE	ANALYSIS SUB-TYPE	ANALYSIS I.D.	ANALYZED VALUE (A)	DUPLICATE VALUE (B)	RPD or (A-B)	TRUE VALUE	PERCENT RECOVERY	ORIGINAL VALUE	SPIKE ADDED	PERCENT RECOVERY
PARAMETER: Silver, Diss. (Ag)				DATE/TIME ANALYZED: 12/28/94 09:32				QC BATCH NUMBER: 317317		
REPORTING LIMIT/DF: 0.01 UNITS: mg/L				METHOD REFERENCE: 6010 (2)				TECHNICIAN: WGL		
BLANK	CCB	1212H	<0.01							
BLANK	CCB	1212H	<0.01							
BLANK	CCB	1212H	<0.01							
BLANK	CCB	1212H	<0.01							
BLANK	CCB	1212H	<0.01							
STANDARD	CCV	0914A	2.45			2.50	98			
STANDARD	ISB	1123J	0.97			1.00	97			
STANDARD	CCV	0914A	2.50			2.50	100			
STANDARD	CCV	0914A	2.61			2.50	104			
STANDARD	CCV	0914A	2.68			2.50	107			
STANDARD	CCV	0914A	2.38			2.50	95			
STANDARD	CCV	0914A	2.58			2.50	103			
STANDARD	CCV	0914A	2.47			2.50	99			
STANDARD	ICV	0729L	2.07			2.00	103			
STANDARD	ISB	1123J	0.99			1.00	99			
STANDARD	CCV	0914A	2.55			2.50	102			
SPIKE	PDS	943193-003	0.92					<0.01	1.00	92
SPIKE	PDS	943141-003	0.91					<0.01	1.00	91
SPIKE	PDS	943082-002	0.94					0.02	1.00	92
SPIKE	PDS	943142-002	0.91					<0.01	1.00	91
SPIKE	PDS	943154-001	0.87					0.02	1.00	85
SPIKE	PDS	943140-008	0.86					<0.01	1.00	86
DUPLICATE	MD	943141-002	<0.01	<0.01	NC					
DUPLICATE	MD	943082-002	0.02	0.01	0.01					
DUPLICATE	MD	943193-003	<0.01	<0.01	NC					
DUPLICATE	MD	943142-001	<0.01	<0.01	NC					
DUPLICATE	MD	943140-008	<0.01	<0.01	NC					

PARAMETER: Aluminum, Diss. (Al)

DATE/TIME ANALYZED: 12/28/94 11:09

QC BATCH NUMBER: 317318

REPORTING LIMIT/DF: 0.05 UNITS: mg/L

METHOD REFERENCE: 6010 (2)

TECHNICIAN: WGL

BLANK	ICB	1212H	<0.05							
BLANK	CCB	1212H	<0.05							
BLANK	CCB	1212H	<0.05							
BLANK	CCB	1212H	<0.05							
BLANK	CCB	1212H	<0.05							
BLANK	CCB	1212H	<0.05							
BLANK	CCB	1212H	<0.05							
BLANK	CCB	1212H	<0.05							
BLANK	CCB	1212H	<0.05							
STANDARD	CCV	1114H	9.57			10.0	96			
STANDARD	ISA	09260	567			500	113			
STANDARD	CCV	1114H	9.49			10.0	95			
STANDARD	ISB	1123J	540			500	108			
STANDARD	CCV	1114H	9.39			10.0	94			
STANDARD	CCV	1114H	9.97			10.0	100			

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CORE LABORATORIES

QUALITY CONTROL REPORT 01/03/95

JOB NUMBER: 943141

CUSTOMER: GEOSCIENCE CONSULTANTS, LTD.

ATTN:

ANALYSIS				DUPLICATES		REFERENCE STANDARDS		MATRIX SPIKES		
ANALYSIS TYPE	ANALYSIS SUB-TYPE	ANALYSIS I.D.	ANALYZED VALUE (A)	DUPLICATE VALUE (B)	RPD or (A-B)	TRUE VALUE	PERCENT RECOVERY	ORIGINAL VALUE	SPIKE ADDED	PERCENT RECOVERY
PARAMETER: Aluminum, Diss. (Al)				DATE/TIME ANALYZED: 12/28/94 11:09				QC BATCH NUMBER: 317318		
REPORTING LIMIT/DF: 0.05 UNITS: mg/L				METHOD REFERENCE : 6010 (2)				TECHNICIAN: WGL		
STANDARD	CCV	1114H	9.85			10.0	98			
STANDARD	CCV	1114H	9.38			10.0	94			
STANDARD	CCV	1114H	9.46			10.0	95			
STANDARD	ISA	09260	574			500	115			
STANDARD	ISB	1123J	549			500	110			
STANDARD	CCV	1114H	9.74			10.0	97			
STANDARD	ICV	0729L	1.98			2.00	99			
SPIKE	PDS	943193-003	1.98					<0.05	2.00	99
SPIKE	PDS	943141-003	1.93					0.12	2.00	90
SPIKE	PDS	943142-002	2.24					0.10	2.00	107
SPIKE	PDS	943154-001	1.87					<0.05	2.00	94
SPIKE	PDS	943082-002	2.17					0.47	2.00	85
SPIKE	PDS	943140-008	1.84					<0.05	2.00	92
DUPLICATE	MD	943141-002	<0.05	<0.05	NC					
DUPLICATE	MD	943154-001	<0.05	<0.05	NC					
DUPLICATE	MD	943142-001	0.08	0.06	0.02					
DUPLICATE	MD	943140-008	<0.05	<0.05	NC					
DUPLICATE	MD	943193-003	<0.05	<0.05	NC					

PARAMETER: Arsenic, Diss. (As)
REPORTING LIMIT/DF: 0.05 UNITS: mg/LDATE/TIME ANALYZED: 12/28/94 09:32
METHOD REFERENCE : 6010 (2)QC BATCH NUMBER: 317319
TECHNICIAN: WGL

BLANK	ICB	1212H	<0.05							
BLANK	CCB	1212H	<0.05							
BLANK	CCB	1212H	<0.05							
BLANK	CCB	1212H	<0.05							
BLANK	CCB	1212H	<0.05							
BLANK	CCB	1212H	<0.05							
BLANK	CCB	1212H	<0.05							
BLANK	CCB	1212H	<0.05							
STANDARD	CCV	1114H	2.60			2.50	104			
STANDARD	ISB	1123J	1.02			1.00	102			
STANDARD	CCV	1114H	2.60			2.50	104			
STANDARD	CCV	1114H	2.69			2.50	108			
STANDARD	CCV	1114H	2.61			2.50	104			
STANDARD	CCV	1114H	2.63			2.50	105			
STANDARD	CCV	1114H	2.61			2.50	104			
STANDARD	CCV	1114H	2.64			2.50	106			
STANDARD	ICV	0914E	2.09			2.00	104			
STANDARD	ISB	1123J	1.04			1.00	104			
STANDARD	CCV	1114H	2.71			2.50	108			
SPIKE	PDS	943193-003	1.05					<0.05	1.00	105
SPIKE	PDS	943141-003	1.09					<0.05	1.00	109
SPIKE	PDS	943082-002	1.05					<0.05	1.00	105
SPIKE	PDS	943142-002	1.14					<0.05	1.00	114

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CORE LABORATORIES

QUALITY CONTROL REPORT 01/03/95

JOB NUMBER: 943141

CUSTOMER: GEOSCIENCE CONSULTANTS, LTD.

ATTN:

ANALYSIS				DUPLICATES		REFERENCE STANDARDS		MATRIX SPIKES		
ANALYSIS TYPE	ANALYSIS SUB-TYPE	ANALYSIS I.D.	ANALYZED VALUE (A)	DUPLICATE VALUE (B)	RPD or (A-B)	TRUE VALUE	PERCENT RECOVERY	ORIGINAL VALUE	SPIKE ADDED	PERCENT RECOVERY
PARAMETER: Arsenic, Diss. (As)				DATE/TIME ANALYZED: 12/28/94 09:32				QC BATCH NUMBER: 317319		
REPORTING LIMIT/DF: 0.05 UNITS: mg/L				METHOD REFERENCE : 6010 (2)				TECHNICIAN: WGL		
SPIKE	PDS	943154-001	0.99					<0.05	1.00	99
SPIKE	PDS	943140-008	0.98					<0.05	1.00	98
DUPLICATE	MD	943141-002	<0.05	<0.05	NC					
DUPLICATE	MD	943082-002	<0.05	<0.05	NC					
DUPLICATE	MD	943193-003	<0.05	<0.05	NC					
DUPLICATE	MD	943154-001	<0.05	<0.05	NC					
DUPLICATE	MD	943142-001	<0.05	<0.05	NC					
DUPLICATE	MD	943140-008	<0.05	<0.05	NC					

PARAMETER: Barium, Diss. (Ba)
REPORTING LIMIT/DF: 0.01 UNITS: mg/LDATE/TIME ANALYZED: 12/28/94 09:32
METHOD REFERENCE : 6010 (2)QC BATCH NUMBER: 317321
TECHNICIAN: WGL

BLANK	ICB	1212H	<0.01							
BLANK	CCB	1212H	<0.01							
BLANK	CCB	1212H	<0.01							
BLANK	CCB	1212H	<0.01							
BLANK	CCB	1212H	<0.01							
BLANK	CCB	1212H	<0.01							
BLANK	CCB	1212H	<0.01							
BLANK	CCB	1212H	<0.01							
STANDARD	CCV	1114H	5.18			5.00	104			
STANDARD	ISB	1123J	0.50			0.50	100			
STANDARD	CCV	1114H	5.16			5.00	103			
STANDARD	CCV	1114H	5.10			5.00	102			
STANDARD	CCV	1114H	5.24			5.00	105			
STANDARD	CCV	1114H	5.46			5.00	109			
STANDARD	CCV	1114H	5.11			5.00	102			
STANDARD	CCV	1114H	5.24			5.00	105			
STANDARD	ICV	0729L	2.09			2.00	104			
STANDARD	ISB	1123J	0.52			0.50	104			
STANDARD	CCV	1114H	5.20			5.00	104			
SPIKE	PDS	943193-003	1.04					0.02	1.00	102
SPIKE	PDS	943141-003	1.09					0.17	1.00	92
SPIKE	PDS	943082-002	1.03					0.04	1.00	99
SPIKE	PDS	943142-002	1.14					0.12	1.00	102
SPIKE	PDS	943154-001	1.03					0.06	1.00	97
SPIKE	PDS	943140-008	1.05					0.12	1.00	93
DUPLICATE	MD	943082-002	0.04	0.04	0.00					
DUPLICATE	MD	943141-002	<0.01	<0.01	NC					
DUPLICATE	MD	943193-003	0.02	0.02	0.00					
DUPLICATE	MD	943154-001	0.06	0.06	0					
DUPLICATE	MD	943142-001	0.03	0.03	0.00					
DUPLICATE	MD	943140-008	0.12	0.12	0					

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CORE LABORATORIES

QUALITY CONTROL REPORT 01/03/95

JOB NUMBER: 943141

CUSTOMER: GEOSCIENCE CONSULTANTS, LTD

ATTN:

ANALYSIS				DUPLICATES		REFERENCE STANDARDS		MATRIX SPIKES		
ANALYSIS TYPE	ANALYSIS SUB-TYPE	ANALYSIS I.D.	ANALYZED VALUE (A)	DUPLICATE VALUE (B)	RPD or (A-B)	TRUE VALUE	PERCENT RECOVERY	ORIGINAL VALUE	SPIKE ADDED	PERCENT RECOVERY
PARAMETER: Cadmium, Diss. (Cd)				DATE/TIME ANALYZED: 12/28/94 09:32				QC BATCH NUMBER: 317323		
REPORTING LIMIT/DF: 0.005 UNITS: mg/L				METHOD REFERENCE : 6010 (2)				TECHNICIAN: WGL		
BLANK	ICB	1212H	<0.005							
BLANK	CCB	1212H	<0.005							
BLANK	CCB	1212H	<0.005							
BLANK	CCB	1212H	<0.005							
BLANK	CCB	1212H	<0.005							
BLANK	CCB	1212H	<0.005							
BLANK	CCB	1212H	<0.005							
BLANK	CCB	1212H	<0.005							
STANDARD	CCV	1114H	1.02			1.00	102			
STANDARD	ISB	1123J	0.869			1.00	87			
STANDARD	CCV	1114H	1.02			1.00	102			
STANDARD	CCV	1114H	0.999			1.00	100			
STANDARD	CCV	1114H	0.972			1.00	97			
STANDARD	CCV	1114H	0.983			1.00	98			
STANDARD	CCV	1114H	1.01			1.00	101			
STANDARD	CCV	1114H	0.978			1.00	98			
STANDARD	ICV	0914E	1.96			2.00	98			
STANDARD	ISB	1123J	0.893			1.00	89			
STANDARD	CCV	1114H	1.01			1.00	101			
SPIKE	PDS	943193-003	0.972					<0.005	1.00	97
SPIKE	PDS	943141-003	0.820					<0.005	1.00	82
SPIKE	PDS	943082-002	0.928					<0.005	1.00	93
SPIKE	PDS	943142-002	0.967					<0.005	1.00	97
SPIKE	PDS	943154-001	0.885					<0.005	1.00	88
SPIKE	PDS	943140-008	0.855					<0.005	1.00	86
DUPLICATE	MD	943141-002	<0.005	<0.005	NC					
DUPLICATE	MD	943082-002	<0.005	<0.005	NC					
DUPLICATE	MD	943193-003	<0.005	<0.005	NC					
DUPLICATE	MD	943154-001	<0.005	<0.005	NC					
DUPLICATE	MD	943142-001	<0.005	<0.005	NC					
DUPLICATE	MD	943140-008	<0.005	<0.005	NC					

PARAMETER: Cobalt, Diss. (Co)

DATE/TIME ANALYZED: 12/28/94 09:32

QC BATCH NUMBER: 317324

REPORTING LIMIT/DF: 0.03 UNITS: mg/L

METHOD REFERENCE : 6010 (2)

TECHNICIAN: WGL

BLANK	ICB	1212H	<0.03							
BLANK	CCB	1212H	<0.03							
BLANK	CCB	1212H	<0.03							
BLANK	CCB	1212H	<0.03							
BLANK	CCB	1212H	<0.03							
BLANK	CCB	1212H	<0.03							
BLANK	CCB	1212H	<0.03							
BLANK	CCB	1212H	<0.03							
BLANK	CCB	1212H	<0.03							
STANDARD	CCV	1114H	2.53			2.50	101			

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CORE LABORATORIES

QUALITY CONTROL REPORT 01/03/95

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ATTN:

ANALYSIS				DUPLICATES		REFERENCE STANDARDS		MATRIX SPIKES		
ANALYSIS TYPE	ANALYSIS SUB-TYPE	ANALYSIS I.D.	ANALYZED VALUE (A)	DUPLICATE VALUE (B)	RPD or (A-B)	TRUE VALUE	PERCENT RECOVERY	ORIGINAL VALUE	SPIKE ADDED	PERCENT RECOVERY
PARAMETER: Cobalt, Diss. (Co)				DATE/TIME ANALYZED: 12/28/94 09:32				QC BATCH NUMBER: 317324		
REPORTING LIMIT/DF: 0.03 UNITS: mg/L				METHOD REFERENCE : 6010 (2)				TECHNICIAN: WGL		
STANDARD	ISB	1123J	0.45			0.50	90			
STANDARD	CCV	1114H	2.51			2.50	100			
STANDARD	CCV	1114H	2.54			2.50	102			
STANDARD	CCV	1114H	2.67			2.50	107			
STANDARD	CCV	1114H	2.69			2.50	108			
STANDARD	CCV	1114H	2.52			2.50	101			
STANDARD	CCV	1114H	2.60			2.50	104			
STANDARD	ICV	0914E	1.98			2.00	99			
STANDARD	ISB	1123J	0.47			0.50	94			
STANDARD	CCV	1114H	2.58			2.50	103			
SPIKE	PDS	943193-003	1.00					<0.03	1.00	100
SPIKE	PDS	943141-003	0.89					<0.03	1.00	89
SPIKE	PDS	943082-002	0.97					<0.03	1.00	97
SPIKE	PDS	943142-002	1.08					<0.03	1.00	108
SPIKE	PDS	943154-001	0.90					<0.03	1.00	90
SPIKE	PDS	943140-008	0.88					<0.03	1.00	88
DUPLICATE	MD	943141-002	<0.03	<0.03	NC					
DUPLICATE	MD	943082-002	<0.03	<0.03	NC					
DUPLICATE	MD	943193-003	<0.03	<0.03	NC					
DUPLICATE	MD	943154-001	<0.03	<0.03	NC					
DUPLICATE	MD	943142-001	<0.03	<0.03	NC					
DUPLICATE	MD	943140-008	<0.03	<0.03	NC					

PARAMETER: Chromium, Diss. (Cr)

DATE/TIME ANALYZED: 12/28/94 09:32

QC BATCH NUMBER: 317325

REPORTING LIMIT/DF: 0.01 UNITS: mg/L

METHOD REFERENCE : 6010 (2)

TECHNICIAN: WGL

BLANK	ICB	1212H	<0.01							
BLANK	CCB	1212H	<0.01							
BLANK	CCB	1212H	<0.01							
BLANK	CCB	1212H	<0.01							
BLANK	CCB	1212H	<0.01							
BLANK	CCB	1212H	<0.01							
BLANK	CCB	1212H	<0.01							
BLANK	CCB	1212H	<0.01							
STANDARD	CCV	1114H	2.52			2.50	101			
STANDARD	ISB	1123J	0.44			0.50	88			
STANDARD	CCV	1114H	2.51			2.50	100			
STANDARD	CCV	1114H	2.50			2.50	100			
STANDARD	CCV	1114H	2.64			2.50	106			
STANDARD	CCV	1114H	2.64			2.50	106			
STANDARD	CCV	1114H	2.50			2.50	100			
STANDARD	CCV	1114H	2.54			2.50	102			
STANDARD	ICV	0914E	2.00			2.00	100			
STANDARD	ISB	1123J	0.46			0.50	92			
STANDARD	CCV	1114H	2.54			2.50	102			

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CORE LABORATORIES

QUALITY CONTROL REPORT 01/03/95

JOB NUMBER: 943141

CUSTOMER: GEOSCIENCE CONSULTANTS, LTD.

ATTN:

ANALYSIS				DUPLICATES		REFERENCE STANDARDS		MATRIX SPIKES		
ANALYSIS TYPE	ANALYSIS SUB-TYPE	ANALYSIS I.D.	ANALYZED VALUE (A)	DUPLICATE VALUE (B)	RPD or (A-B)	TRUE VALUE	PERCENT RECOVERY	ORIGINAL VALUE	SPIKE ADDED	PERCENT RECOVERY
PARAMETER: Chromium, Diss. (Cr)				DATE/TIME ANALYZED: 12/28/94 09:32				QC BATCH NUMBER: 317325		
REPORTING LIMIT/DF: 0.01 UNITS: mg/L				METHOD REFERENCE : 6010 (2)				TECHNICIAN: WGL		
SPIKE	PDS	943193-003	0.97					<0.01	1.00	97
SPIKE	PDS	943141-003	0.86					<0.01	1.00	86
SPIKE	PDS	943082-002	0.94					<0.01	1.00	94
SPIKE	PDS	943142-002	1.05					<0.01	1.00	105
SPIKE	PDS	943154-001	0.91					<0.01	1.00	91
SPIKE	PDS	943140-008	0.87					<0.01	1.00	87
DUPLICATE	MD	943141-002	<0.01	<0.01	NC					
DUPLICATE	MD	943082-002	<0.01	<0.01	NC					
DUPLICATE	MD	943193-003	<0.01	<0.01	NC					
DUPLICATE	MD	943154-001	<0.01	<0.01	NC					
DUPLICATE	MD	943142-001	<0.01	<0.01	NC					
DUPLICATE	MD	943140-008	<0.01	<0.01	NC					

PARAMETER: Copper, Diss. (Cu)				DATE/TIME ANALYZED: 12/28/94 09:32				QC BATCH NUMBER: 317331		
REPORTING LIMIT/DF: 0.01 UNITS: mg/L				METHOD REFERENCE : 6010 (2)				TECHNICIAN: WGL		
BLANK	ICB	1212H	<0.01							
BLANK	CCB	1212H	<0.01							
BLANK	CCB	1212H	<0.01							
BLANK	CCB	1212H	<0.01							
BLANK	CCB	1212H	<0.01							
BLANK	CCB	1212H	<0.01							
BLANK	CCB	1212H	<0.01							
BLANK	CCB	1212H	<0.01							
BLANK	CCB	1212H	<0.01							
STANDARD	CCV	1114H	2.51			2.50	100			
STANDARD	ISB	1123J	0.51			0.50	102			
STANDARD	CCV	1114H	2.49			2.50	100			
STANDARD	CCV	1114H	2.62			2.50	105			
STANDARD	CCV	1114H	2.73			2.50	109			
STANDARD	CCV	1114H	2.50			2.50	100			
STANDARD	CCV	1114H	2.49			2.50	100			
STANDARD	CCV	1114H	2.70			2.50	108			
STANDARD	ICV	0914E	1.98			2.00	99			
STANDARD	ISB	1123J	0.54			0.50	108			
STANDARD	CCV	1114H	2.71			2.50	108			
SPIKE	PDS	943193-003	0.99					<0.01	1.00	99
SPIKE	PDS	943141-003	0.98					<0.01	1.00	98
SPIKE	PDS	943082-002	1.03					0.02	1.00	101
SPIKE	PDS	943142-002	1.07					0.02	1.00	105
SPIKE	PDS	943154-001	0.89					<0.01	1.00	89
SPIKE	PDS	943140-008	0.87					<0.01	1.00	87
DUPLICATE	MD	943141-002	0.01	0.01	0.00					
DUPLICATE	MD	943082-002	0.02	0.02	0.00					
DUPLICATE	MD	943193-003	<0.01	<0.01	NC					
DUPLICATE	MD	943154-001	<0.01	<0.01	NC					

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CORE LABORATORIES

QUALITY CONTROL REPORT 01/03/95

JOB NUMBER: 943141

CUSTOMER: GEOSCIENCE CONSULTANTS, LTD.

ATTN:

ANALYSIS				DUPLICATES		REFERENCE STANDARDS		MATRIX SPIKES		
ANALYSIS TYPE	ANALYSIS SUB-TYPE	ANALYSIS I.D.	ANALYZED VALUE (A)	DUPLICATE VALUE (B)	RPD or (A-B)	TRUE VALUE	PERCENT RECOVERY	ORIGINAL VALUE	SPIKE ADDED	PERCENT RECOVERY
PARAMETER: Copper, Diss. (Cu)				DATE/TIME ANALYZED: 12/28/94 09:32				QC BATCH NUMBER: 317331		
REPORTING LIMIT/DF: 0.01 UNITS: mg/L				METHOD REFERENCE : 6010 (2)				TECHNICIAN: WGL		
DUPLICATE	MD	943142-001	0.02	0.02	0.00					
DUPLICATE	MD	943140-008	<0.01	<0.01	NC					

PARAMETER: Iron, Diss. (Fe) DATE/TIME ANALYZED: 12/28/94 09:32 QC BATCH NUMBER: 317332
REPORTING LIMIT/DF: 0.03 UNITS: mg/L METHOD REFERENCE : 6010 (2) TECHNICIAN: WGL

BLANK	ICB	1212H	<0.03							
BLANK	CCB	1212H	<0.03							
BLANK	CCB	1212H	<0.03							
BLANK	CCB	1212H	<0.03							
BLANK	CCB	1212H	<0.03							
BLANK	CCB	1212H	<0.03							
BLANK	CCB	1212H	<0.03							
BLANK	CCB	1212H	<0.03							
STANDARD	CCV	1114H	5.05			5.00	101			
STANDARD	ISA	09260	224			200	112			
STANDARD	CCV	1114H	5.00			5.00	100			
STANDARD	ISB	1123J	213			200	106			
STANDARD	CCV	1114H	5.00			5.00	100			
STANDARD	CCV	1114H	5.25			5.00	105			
STANDARD	CCV	1114H	5.15			5.00	103			
STANDARD	CCV	1114H	4.93			5.00	99			
STANDARD	CCV	1114H	5.01			5.00	100			
STANDARD	ISA	09260	212			200	106			
STANDARD	ISB	1123J	203			200	101			
STANDARD	CCV	1114H	5.12			5.00	102			
STANDARD	ICV	0914E	1.93			2.00	96			
SPIKE	PDS	943193-003	2.04					0.05	2.00	100
SPIKE	PDS	943141-003	3.61					1.99	2.00	81
SPIKE	PDS	943142-002	2.18					0.03	2.00	108
SPIKE	PDS	943154-001	1.87					<0.03	2.00	94
SPIKE	PDS	943082-002	2.17					0.21	2.00	98
SPIKE	PDS	943140-008	1.77					<0.03	2.00	88
DUPLICATE	MD	943141-002	0.18	0.18	0					
DUPLICATE	MD	943193-003	0.05	0.05	0.00					
DUPLICATE	MD	943154-001	<0.03	<0.03	NC					
DUPLICATE	MD	943142-001	1.10	1.25	13					
DUPLICATE	MD	943140-008	<0.03	<0.03	NC					

PARAMETER: Manganese, Diss. (Mn) DATE/TIME ANALYZED: 12/28/94 09:32 QC BATCH NUMBER: 317335
REPORTING LIMIT/DF: 0.01 UNITS: mg/L METHOD REFERENCE : 6010 (2) TECHNICIAN: WGL

BLANK	ICB	1212H	<0.01							
BLANK	CCB	1212H	<0.01							
BLANK	CCB	1212H	<0.01							

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CORE LABORATORIES

QUALITY CONTROL REPORT 01/03/95

JOB NUMBER: 943141

CUSTOMER: GEOSCIENCE CONSULTANTS, LTD.

ATTN:

ANALYSIS				DUPLICATES		REFERENCE STANDARDS		MATRIX SPIKES		
ANALYSIS TYPE	ANALYSIS SUB-TYPE	ANALYSIS I.D.	ANALYZED VALUE (A)	DUPLICATE VALUE (B)	RPD or (A-B)	TRUE VALUE	PERCENT RECOVERY	ORIGINAL VALUE	SPIKE ADDED	PERCENT RECOVERY
PARAMETER: Manganese, Diss. (Mn)				DATE/TIME ANALYZED: 12/28/94 09:32				QC BATCH NUMBER: 317335		
REPORTING LIMIT/DF: 0.01 UNITS: mg/L				METHOD REFERENCE : 6010 (2)				TECHNICIAN: WGL		
BLANK	CCB	1212H	<0.01							
BLANK	CCB	1212H	<0.01							
BLANK	CCB	1212H	<0.01							
BLANK	CCB	1212H	<0.01							
BLANK	CCB	1212H	<0.01							
STANDARD	CCV	1114H	5.24			5.00	105			
STANDARD	ISB	1123J	0.45			0.50	90			
STANDARD	CCV	1114H	5.22			5.00	104			
STANDARD	CCV	1114H	5.18			5.00	104			
STANDARD	CCV	1114H	5.40			5.00	108			
STANDARD	CCV	1114H	5.07			5.00	101			
STANDARD	CCV	1114H	5.19			5.00	104			
STANDARD	CCV	1114H	5.31			5.00	106			
STANDARD	ICV	0914E	2.03			2.00	101			
STANDARD	ISB	1123J	0.47			0.50	94			
STANDARD	CCV	1114H	5.26			5.00	105			
SPIKE	PDS	943193-003	1.05					0.03	1.00	102
SPIKE	PDS	943141-003	3.20					2.43	1.00	77
SPIKE	PDS	943082-002	1.01					0.02	1.00	99
SPIKE	PDS	943142-002	1.28					0.21	1.00	107
SPIKE	PDS	943154-001	0.95					<0.01	1.00	95
SPIKE	PDS	943140-008	1.68					0.80	1.00	88
DUPLICATE	MD	943141-002	1.95	2.00	3					
DUPLICATE	MD	943082-002	0.02	0.02	0.00					
DUPLICATE	MD	943193-003	0.03	0.03	0.00					
DUPLICATE	MD	943154-001	<0.01	<0.01	NC					
DUPLICATE	MD	943142-001	6.18	6.99	12					
DUPLICATE	MD	943140-008	0.80	0.80	0					

PARAMETER: Molybdenum, Diss. (Mo)

DATE/TIME ANALYZED: 12/28/94 09:32

QC BATCH NUMBER: 317336

REPORTING LIMIT/DF: 0.05 UNITS: mg/L

METHOD REFERENCE : 6010 (2)

TECHNICIAN: WGL

BLANK	ICB	1212H	<0.05							
BLANK	CCB	1212H	<0.05							
BLANK	CCB	1212H	<0.05							
BLANK	CCB	1212H	<0.05							
BLANK	CCB	1212H	<0.05							
BLANK	CCB	1212H	<0.05							
BLANK	CCB	1212H	<0.05							
BLANK	CCB	1212H	<0.05							
STANDARD	CCV	1114H	2.52			2.50	101			
STANDARD	ISB	1123J	0.94			1.00	94			
STANDARD	CCV	1114H	2.50			2.50	100			
STANDARD	CCV	1114H	2.46			2.50	98			

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ATTN:

ANALYSIS				DUPLICATES		REFERENCE STANDARDS		MATRIX SPIKES		
ANALYSIS TYPE	ANALYSIS SUB-TYPE	ANALYSIS I.D.	ANALYZED VALUE (A)	DUPLICATE VALUE (B)	RPD or (A-B)	TRUE VALUE	PERCENT RECOVERY	ORIGINAL VALUE	SPIKE ADDED	PERCENT RECOVERY
PARAMETER: Molybdenum, Diss. (Mo)				DATE/TIME ANALYZED: 12/28/94 09:32				QC BATCH NUMBER: 317336		
REPORTING LIMIT/DF: 0.05 UNITS: mg/L				METHOD REFERENCE : 6010 (2)				TECHNICIAN: WGL		
STANDARD	CCV	1114H	2.56			2.50	102			
STANDARD	CCV	1114H	2.54			2.50	102			
STANDARD	CCV	1114H	2.50			2.50	100			
STANDARD	CCV	1114H	2.44			2.50	98			
STANDARD	ICV	0914E	1.92			2.00	96			
STANDARD	ISB	1123J	0.96			1.00	96			
STANDARD	CCV	1114H	2.53			2.50	101			
SPIKE	PDS	943193-003	1.02					<0.05	1.00	102
SPIKE	PDS	943141-003	0.92					<0.05	1.00	92
SPIKE	PDS	943082-002	0.97					<0.05	1.00	97
SPIKE	PDS	943142-002	1.06					<0.05	1.00	106
SPIKE	PDS	943154-001	0.93					<0.05	1.00	93
SPIKE	PDS	943140-008	0.92					<0.05	1.00	92
DUPLICATE	MD	943141-002	<0.05	<0.05	NC					
DUPLICATE	MD	943082-002	<0.05	<0.05	NC					
DUPLICATE	MD	943193-003	<0.05	<0.05	NC					
DUPLICATE	MD	943154-001	<0.05	<0.05	NC					
DUPLICATE	MD	943142-001	<0.05	<0.05	NC					
DUPLICATE	MD	943140-008	<0.05	<0.05	NC					

PARAMETER: Nickel, Diss. (Ni)				DATE/TIME ANALYZED: 12/28/94 09:32				QC BATCH NUMBER: 317339		
REPORTING LIMIT/DF: 0.04 UNITS: mg/L				METHOD REFERENCE : 6010 (2)				TECHNICIAN: WGL		
BLANK	ICB	1212H	<0.04							
BLANK	CCB	1212H	<0.04							
BLANK	CCB	1212H	<0.04							
BLANK	CCB	1212H	<0.04							
BLANK	CCB	1212H	<0.04							
BLANK	CCB	1212H	<0.04							
BLANK	CCB	1212H	<0.04							
BLANK	CCB	1212H	<0.04							
STANDARD	CCV	1114H	2.57			2.50	103			
STANDARD	ISB	1123J	0.85			1.00	85			
STANDARD	CCV	1114H	2.57			2.50	103			
STANDARD	CCV	1114H	2.47			2.50	99			
STANDARD	CCV	1114H	2.59			2.50	104			
STANDARD	CCV	1114H	2.54			2.50	102			
STANDARD	CCV	1114H	2.55			2.50	102			
STANDARD	CCV	1114H	2.49			2.50	100			
STANDARD	ICV	0914E	1.97			2.00	98			
STANDARD	ISB	1123J	0.85			1.00	85			
STANDARD	CCV	1114H	2.51			2.50	100			
SPIKE	PDS	943193-003	0.99					<0.04	1.00	99
SPIKE	PDS	943141-003	0.80					<0.04	1.00	80
SPIKE	PDS	943082-002	0.95					<0.04	1.00	95

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CORE LABORATORIES

QUALITY CONTROL REPORT 01/03/95

JOB NUMBER: 943141

CUSTOMER: GEOSCIENCE CONSULTANTS, LTD.

ATTN:

ANALYSIS				DUPLICATES		REFERENCE STANDARDS		MATRIX SPIKES		
ANALYSIS TYPE	ANALYSIS SUB-TYPE	ANALYSIS I.D.	ANALYZED VALUE (A)	DUPLICATE VALUE (B)	RPD or (A-B)	TRUE VALUE	PERCENT RECOVERY	ORIGINAL VALUE	SPIKE ADDED	PERCENT RECOVERY
PARAMETER:Nickel, Diss. (Ni)				DATE/TIME ANALYZED:12/28/94 09:32				QC BATCH NUMBER:317339		
REPORTING LIMIT/DF: 0.04 UNITS:mg/L				METHOD REFERENCE :6010 (2)				TECHNICIAN:WGL		
SPIKE	PDS	943142-002	1.02					<0.04	1.00	102
SPIKE	PDS	943154-001	0.87					<0.04	1.00	87
SPIKE	PDS	943140-008	0.86					<0.04	1.00	86
DUPLICATE	MD	943141-002	<0.04	<0.04	NC					
DUPLICATE	MD	943082-002	<0.04	<0.04	NC					
DUPLICATE	MD	943193-003	<0.04	<0.04	NC					
DUPLICATE	MD	943154-001	<0.04	<0.04	NC					
DUPLICATE	MD	943142-001	<0.04	<0.04	NC					
DUPLICATE	MD	943140-008	<0.04	<0.04	NC					

PARAMETER:Lead, Diss. (Pb)

DATE/TIME ANALYZED:12/28/94 09:32

QC BATCH NUMBER:317340

REPORTING LIMIT/DF: 0.05 UNITS:mg/L

METHOD REFERENCE :6010 (2)

TECHNICIAN:WGL

BLANK	ICB	1212H	<0.05							
BLANK	CCB	1212H	<0.05							
BLANK	CCB	1212H	<0.05							
BLANK	CCB	1212H	<0.05							
BLANK	CCB	1212H	<0.05							
BLANK	CCB	1212H	<0.05							
BLANK	CCB	1212H	<0.05							
BLANK	CCB	1212H	<0.05							
STANDARD	CCV	1114H	1.01			1.00	101			
STANDARD	ISB	1123J	0.87			1.00	87			
STANDARD	CCV	1114H	1.01			1.00	101			
STANDARD	CCV	1114H	0.98			1.00	98			
STANDARD	CCV	1114H	0.97			1.00	97			
STANDARD	CCV	1114H	1.00			1.00	100			
STANDARD	CCV	1114H	0.99			1.00	99			
STANDARD	CCV	1114H	0.95			1.00	95			
STANDARD	ICV	0914E	1.92			2.00	96			
STANDARD	ISB	1123J	0.89			1.00	89			
STANDARD	CCV	1114H	0.99			1.00	99			
SPIKE	PDS	943193-003	0.97					<0.05	1.00	97
SPIKE	PDS	943141-003	0.82					<0.05	1.00	82
SPIKE	PDS	943082-002	0.94					<0.05	1.00	94
SPIKE	PDS	943142-002	0.98					<0.05	1.00	98
SPIKE	PDS	943154-001	0.90					<0.05	1.00	90
SPIKE	PDS	943140-008	0.87					<0.05	1.00	87
DUPLICATE	MD	943141-002	<0.05	<0.05	NC					
DUPLICATE	MD	943082-002	<0.05	<0.05	NC					
DUPLICATE	MD	943193-003	<0.05	<0.05	NC					
DUPLICATE	MD	943154-001	<0.05	<0.05	NC					
DUPLICATE	MD	943142-001	<0.05	<0.05	NC					
DUPLICATE	MD	943140-008	<0.05	<0.05	NC					

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CORE LABORATORIES

QUALITY CONTROL REPORT 01/03/95

JOB NUMBER: 943141

CUSTOMER: GEOSCIENCE CONSULTANTS, LTD.

ATTN:

ANALYSIS				DUPLICATES		REFERENCE STANDARDS		MATRIX SPIKES		
ANALYSIS TYPE	ANALYSIS SUB-TYPE	ANALYSIS I.D.	ANALYZED VALUE (A)	DUPLICATE VALUE (B)	RPD or (A-B)	TRUE VALUE	PERCENT RECOVERY	ORIGINAL VALUE	SPIKE ADDED	PERCENT RECOVERY
PARAMETER:Selenium, Diss. (Se)				DATE/TIME ANALYZED:12/28/94 09:32				QC BATCH NUMBER:317341		
REPORTING LIMIT/DF: 0.1 UNITS:mg/L				METHOD REFERENCE :6010 (2)				TECHNICIAN:WGL		
BLANK	ICB	1212H	<0.1							
BLANK	CCB	1212H	<0.1							
BLANK	CCB	1212H	<0.1							
BLANK	CCB	1212H	<0.1							
BLANK	CCB	1212H	<0.1							
BLANK	CCB	1212H	<0.1							
BLANK	CCB	1212H	<0.1							
BLANK	CCB	1212H	<0.1							
STANDARD	CCV	1114H	2.6			2.5	104			
STANDARD	ISB	1123J	1.0			1.0	100			
STANDARD	CCV	1114H	2.6			2.5	104			
STANDARD	CCV	1114H	2.6			2.5	104			
STANDARD	CCV	1114H	2.6			2.5	104			
STANDARD	CCV	1114H	2.7			2.5	108			
STANDARD	CCV	1114H	2.6			2.5	104			
STANDARD	CCV	1114H	2.5			2.5	100			
STANDARD	ICV	0914E	2.1			2.0	105			
STANDARD	ISB	1123J	1.0			1.0	100			
STANDARD	CCV	1114H	2.7			2.5	108			
SPIKE	PDS	943193-003	1.1					<0.1	1.0	110
SPIKE	PDS	943141-003	1.2					<0.1	1.0	120
SPIKE	PDS	943082-002	1.1					<0.1	1.0	110
SPIKE	PDS	943142-002	1.2					<0.1	1.0	120
SPIKE	PDS	943154-001	1.1					<0.1	1.0	110
SPIKE	PDS	943140-008	1.1					<0.1	1.0	110
DUPLICATE	MD	943141-002	<0.1	<0.1	NC					
DUPLICATE	MD	943082-002	<0.1	<0.1	NC					
DUPLICATE	MD	943193-003	<0.1	<0.1	NC					
DUPLICATE	MD	943154-001	<0.1	<0.1	NC					
DUPLICATE	MD	943142-001	<0.1	<0.1	NC					
DUPLICATE	MD	943140-008	<0.1	<0.1	NC					

PARAMETER:Zinc, Diss. (Zn)
REPORTING LIMIT/DF: 0.01 UNITS:mg/LDATE/TIME ANALYZED:12/28/94 09:32
METHOD REFERENCE :6010 (2)QC BATCH NUMBER:317342
TECHNICIAN:WGL

BLANK	ICB	1212H	<0.01							
BLANK	CCB	1212H	<0.01							
BLANK	CCB	1212H	<0.01							
BLANK	CCB	1212H	<0.01							
BLANK	CCB	1212H	<0.01							
BLANK	CCB	1212H	<0.01							
BLANK	CCB	1212H	<0.01							
BLANK	CCB	1212H	<0.01							
STANDARD	CCV	1114H	2.49			2.50	100			

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CORE LABORATORIES

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CUSTOMER: GEOSCIENCE CONSULTANTS, LTD.

ATTN:

ANALYSIS				DUPLICATES		REFERENCE STANDARDS		MATRIX SPIKES		
ANALYSIS TYPE	ANALYSIS SUB-TYPE	ANALYSIS I.D.	ANALYZED VALUE (A)	DUPLICATE VALUE (B)	RPD or (A-B)	TRUE VALUE	PERCENT RECOVERY	ORIGINAL VALUE	SPIKE ADDED	PERCENT RECOVERY
PARAMETER: Zinc, Diss. (Zn)				DATE/TIME ANALYZED: 12/28/94 09:32				QC BATCH NUMBER: 317342		
REPORTING LIMIT/DF: 0.01 UNITS: mg/L				METHOD REFERENCE : 6010 (2)				TECHNICIAN: WGL		
STANDARD	ISB	1123J	0.97			1.00	97			
STANDARD	CCV	1114H	2.47			2.50	99			
STANDARD	CCV	1114H	2.60			2.50	104			
STANDARD	CCV	1114H	2.73			2.50	109			
STANDARD	CCV	1114H	2.59			2.50	104			
STANDARD	CCV	1114H	2.47			2.50	99			
STANDARD	CCV	1114H	2.66			2.50	106			
STANDARD	ICV	0914E	2.03			2.00	101			
STANDARD	ISB	1123J	1.01			1.00	101			
STANDARD	CCV	1114H	2.65			2.50	106			
SPIKE	PDS	943193-003	1.14					0.15	1.00	99
SPIKE	PDS	943141-003	0.92					<0.01	1.00	92
SPIKE	PDS	943082-002	1.08					0.06	1.00	102
SPIKE	PDS	943142-002	1.12					<0.01	1.00	112
SPIKE	PDS	943154-001	0.91					<0.01	1.00	91
SPIKE	PDS	943140-008	0.89					<0.01	1.00	89
DUPLICATE	MD	943141-002	<0.01	<0.01	NC					
DUPLICATE	MD	943082-002	0.06	0.06	0					
DUPLICATE	MD	943193-003	0.15	0.15	0					
DUPLICATE	MD	943154-001	<0.01	<0.01	NC					
DUPLICATE	MD	943142-001	<0.01	<0.01	NC					
DUPLICATE	MD	943140-008	<0.01	<0.01	NC					

PARAMETER: Calcium, Total (Ca)

DATE/TIME ANALYZED: 12/29/94 12:07

QC BATCH NUMBER: 317408

REPORTING LIMIT/DF: 0.1 UNITS: mg/L

METHOD REFERENCE : 6010 (2)

TECHNICIAN: GEF

BLANK	ICB	1212J	<0.1							
BLANK	MB	1216	<0.1							
BLANK	CCB	1212J	<0.1							
BLANK	CCB	1212J	<0.1							
BLANK	CCB	1212J	<0.1							
BLANK	CCB	1212J	<0.1							
BLANK	CCB	1212J	<0.1							
STANDARD	CCV	1215H	9.7			10.0	97			
STANDARD	ICV	Q1101	19.6			20.0	98			
STANDARD	CCV	1215H	9.5			10.0	95			
STANDARD	LCS	R1101	18.3			20.0	92			
STANDARD	CCV	1215H	9.3			10.0	93			
STANDARD	CCV	1215H	9.4			10.0	94			
STANDARD	CCV	1215H	9.6			10.0	96			

PARAMETER: Calcium, Total (Ca)

DATE/TIME ANALYZED: 12/29/94 12:04

QC BATCH NUMBER: 317409

REPORTING LIMIT/DF: 1.0 UNITS: mg/L

METHOD REFERENCE : 6010 (2)

TECHNICIAN: GEF

BLANK	ICB	1212J	<1.0							
BLANK	MB	1216	<1.0							

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CUSTOMER: GEOSCIENCE CONSULTANTS, LTD.

ATTN:

ANALYSIS				DUPLICATES		REFERENCE STANDARDS		MATRIX SPIKES		
ANALYSIS TYPE	ANALYSIS SUB-TYPE	ANALYSIS I.D.	ANALYZED VALUE (A)	DUPLICATE VALUE (B)	RPD or (A-B)	TRUE VALUE	PERCENT RECOVERY	ORIGINAL VALUE	SPIKE ADDED	PERCENT RECOVERY
PARAMETER: Calcium, Total (Ca)				DATE/TIME ANALYZED: 12/29/94 12:04				QC BATCH NUMBER: 317409		
REPORTING LIMIT/DF: 1.0 UNITS: mg/L				METHOD REFERENCE : 6010 (2)				TECHNICIAN: GEF		
BLANK	CCB	1212J	<1.0							
BLANK	CCB	1212J	<1.0							
BLANK	CCB	1212J	<1.0							
BLANK	CCB	1212J	<1.0							
BLANK	CCB	1212J	<1.0							
STANDARD	ISA	09260	530			500	106			
STANDARD	ISB	1123J	512			500	102			
STANDARD	CCV	0914H	261			250	104			
STANDARD	ICV	1101Q	202			200	101			
STANDARD	CCV	0914H	261			250	104			
STANDARD	LCS	1101R	182			200	91			
STANDARD	CCV	0914H	253			250	101			
STANDARD	ISA	09260	469			500	94			
STANDARD	ISB	1123J	459			500	92			
STANDARD	CCV	0914H	258			250	103			
STANDARD	CCV	0914H	261			250	104			
SPIKE	PDS	943141-003	108					65.5	50.0	85
SPIKE	MS	943142-002	141					86.9	50.0	108
SPIKE	MS	943141-003	345					298	50.0	94
DUPLICATE	MD	943142-001	195	190	3					
DUPLICATE	MD	943141-002	190	181	5					

PARAMETER: Potassium, Total (K)
REPORTING LIMIT/DF: 5 UNITS: mg/LDATE/TIME ANALYZED: 12/29/94 13:21
METHOD REFERENCE : 6010 (2)QC BATCH NUMBER: 317410
TECHNICIAN: GEF

BLANK	ICB	1212J	<5							
BLANK	MB	1216	<5							
BLANK	CCB	1212J	<5							
BLANK	CCB	1212J	<5							
BLANK	CCB	1212J	<5							
BLANK	CCB	1212J	<5							
BLANK	CCB	1212J	<5							
STANDARD	CCV	0914H	242			250	97			
STANDARD	ISB	1123J	10			10	100			
STANDARD	CCV	0914H	241			250	96			
STANDARD	ICV	1101Q	101			100	101			
STANDARD	CCV	0914H	238			250	95			
STANDARD	LCS	1101R	86			100	86			
STANDARD	CCV	0914H	231			250	92			
STANDARD	ISB	1123J	11			10	110			
STANDARD	CCV	0914H	231			250	92			
SPIKE	MS	943141-003	77					27	50	100
SPIKE	MS	943142-002	52					<5	50	104
SPIKE	PDS	943141-003	57					11	50	92
DUPLICATE	MD	943141-002	37	38	3					
DUPLICATE	MD	943142-001	27	29	7					

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CORE LABORATORIES

QUALITY CONTROL REPORT 01/03/95

JOB NUMBER: 943141 CUSTOMER: GEOSCIENCE CONSULTANTS, LTD.

ATTN:

ANALYSIS				DUPLICATES		REFERENCE STANDARDS		MATRIX SPIKES		
ANALYSIS TYPE	ANALYSIS SUB-TYPE	ANALYSIS I.D.	ANALYZED VALUE (A)	DUPLICATE VALUE (B)	RPD or (A-B)	TRUE VALUE	PERCENT RECOVERY	ORIGINAL VALUE	SPIKE ADDED	PERCENT RECOVERY
PARAMETER: Potassium, Total (K)				DATE/TIME ANALYZED: 12/29/94 13:21				QC BATCH NUMBER: 317410		
REPORTING LIMIT/DF: 5 UNITS: mg/L				METHOD REFERENCE : 6010 (2)				TECHNICIAN: GEF		

PARAMETER: Magnesium, Total (Mg)				DATE/TIME ANALYZED: 12/29/94 14:15				QC BATCH NUMBER: 317411		
REPORTING LIMIT/DF: 0.1 UNITS: mg/L				METHOD REFERENCE : 6010 (2)				TECHNICIAN: GEF		

BLANK	ICB	1212J	<0.1							
BLANK	MB	1216	<0.1							
BLANK	CCB	1212J	<0.1							
BLANK	CCB	1212J	<0.1							
BLANK	CCB	1212J	<0.1							
BLANK	CCB	1212J	<0.1							
BLANK	CCB	1212J	<0.1							
STANDARD	CCV	1215H	24.7			25.0	99			
STANDARD	CCV	1215H	25.2			25.0	101			
STANDARD	ICV	Q1101	20.3			20.0	102			
STANDARD	CCV	1215H	24.5			25.0	98			
STANDARD	LCS	R1101	18.6			20.0	93			
STANDARD	CCV	1215H	24.2			25.0	97			
STANDARD	CCV	1215H	24.5			25.0	98			
SPIKE	MS	943142-002	77.5					25.8	50.0	103

PARAMETER: Magnesium, Total (Mg)				DATE/TIME ANALYZED: 12/29/94 12:00				QC BATCH NUMBER: 317412		
REPORTING LIMIT/DF: 0.5 UNITS: mg/L				METHOD REFERENCE : 6010 (2)				TECHNICIAN: GEF		

BLANK	ICB	1212J	<0.5							
BLANK	MB	1216	<0.5							
BLANK	CCB	1212J	<0.5							
BLANK	CCB	1212J	<0.5							
BLANK	CCB	1212J	<0.5							
BLANK	CCB	1212J	<0.5							
BLANK	CCB	1212J	<0.5							
STANDARD	CCV	0914H	242			250	97			
STANDARD	ISA	09260	533			500	107			
STANDARD	ISB	1123J	508			500	102			
STANDARD	CCV	0914H	241			250	96			
STANDARD	ICV	1101Q	201			200	100			
STANDARD	CCV	0914H	242			250	97			
STANDARD	LCS	1101R	183			200	92			
STANDARD	CCV	0914H	235			250	94			
STANDARD	ISA	09260	516			500	103			
STANDARD	ISB	1123J	498			500	100			
STANDARD	CCV	0914H	240			250	96			
SPIKE	MS	943141-003	265					219	50.0	92
SPIKE	PDS	943141-003	94.5					47.6	50.0	94
DUPLICATE	MD	943142-001	366	376	3					
DUPLICATE	MD	943141-002	391	386	1					

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CORE LABORATORIES

QUALITY CONTROL REPORT 01/03/95

JOB NUMBER: 943141

CUSTOMER: GEOSCIENCE CONSULTANTS, LTD.

ATTN:

ANALYSIS				DUPLICATES		REFERENCE STANDARDS		MATRIX SPIKES		
ANALYSIS TYPE	ANALYSIS SUB-TYPE	ANALYSIS I.D.	ANALYZED VALUE (A)	DUPLICATE VALUE (B)	RPD or (A-B)	TRUE VALUE	PERCENT RECOVERY	ORIGINAL VALUE	SPIKE ADDED	PERCENT RECOVERY
PARAMETER:Sodium, Total (Na)				DATE/TIME ANALYZED:12/29/94 12:04				QC BATCH NUMBER:317413		
REPORTING LIMIT/DF: 5 UNITS:mg/L				METHOD REFERENCE :6010 (2)				TECHNICIAN:GEF		
BLANK	ICB	1212J	<5							
BLANK	MB	1216	<5							
BLANK	CCB	1212J	<5							
BLANK	CCB	1212J	<5							
BLANK	CCB	1212J	<5							
BLANK	CCB	1212J	<5							
BLANK	CCB	1212J	<5							
STANDARD	ISA	09260	527			500	105			
STANDARD	ISB	1123J	504			500	101			
STANDARD	CCV	0914H	494			500	99			
STANDARD	ICV	1101Q	218			200	109			
STANDARD	CCV	0914H	490			500	98			
STANDARD	LCS	1101R	190			200	95			
STANDARD	CCV	0914H	475			500	95			
STANDARD	ISA	09260	510			500	102			
STANDARD	ISB	1123J	494			500	99			
STANDARD	CCV	0914H	479			500	96			
STANDARD	CCV	0914H	489			500	98			
SPIKE	MS	943141-003	474					471	10	30
SPIKE	PDS	943141-003	511					471	50	80
SPIKE	MS	943142-002	193					137	50	112
DUPLICATE	MD	943142-001	812	793	2					
DUPLICATE	MD	943141-002	626	599	4					

PARAMETER:Chloride (Unfilt.)
REPORTING LIMIT/DF: 0.5 UNITS:mg/LDATE/TIME ANALYZED:12/29/94 09:30
METHOD REFERENCE :325.2 (1)QC BATCH NUMBER:317462
TECHNICIAN:DME

BLANK	ICB	941229	<0.5							
BLANK	CCB	941229	<0.5							
STANDARD	ICV/LCS	G941102B	51.0			50.0	102			
STANDARD	CCV	S200	205			200	102			
STANDARD	CCV	S200	198			200	99			
SPIKE	MS	943142-2	155					116	50.0	78
SPIKE	MS	943115-15	198					154	50.0	88
DUPLICATE	MD	943115-15	154	154	0					
DUPLICATE	MD	943142-2	116	117	1					

PARAMETER:Sulfate (Unfilt.)
REPORTING LIMIT/DF: 10 UNITS:mg/LDATE/TIME ANALYZED:12/29/94 16:00
METHOD REFERENCE :375.2 (1)QC BATCH NUMBER:317469
TECHNICIAN:DME

BLANK	ICB	941229	<10							
BLANK	CCB	941229	<10							
BLANK	CCB	941229	<10							
STANDARD	ICV/LCS	G940415A	149			150	99			
STANDARD	CCV	S160	158			160	99			
STANDARD	CCV	S160	153			160	96			

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CORE LABORATORIES

QUALITY CONTROL REPORT 01/03/95

JOB NUMBER: 943141 CUSTOMER: GEOSCIENCE CONSULTANTS, LTD. ATTN:

ANALYSIS				DUPLICATES		REFERENCE STANDARDS		MATRIX SPIKES		
ANALYSIS TYPE	ANALYSIS SUB-TYPE	ANALYSIS I.D.	ANALYZED VALUE (A)	DUPLICATE VALUE (B)	RPD or (A-B)	TRUE VALUE	PERCENT RECOVERY	ORIGINAL VALUE	SPIKE ADDED	PERCENT RECOVERY
PARAMETER:Sulfate (Unfilt.)				DATE/TIME ANALYZED:12/29/94 16:00				QC BATCH NUMBER:317469		
REPORTING LIMIT/DF: 10 UNITS:mg/L				METHOD REFERENCE :375.2 (1)				TECHNICIAN:DME		
SPIKE	MS	943141-7	63					24	50	78
SPIKE	MS	943142-5	120					76	50	88
DUPLICATE	MD	943141-7	24	21	3					
DUPLICATE	MD	943142-5	76	76	0					

PARAMETER:Lead, Total (Pb)				DATE/TIME ANALYZED:12/30/94 10:28				QC BATCH NUMBER:317527		
REPORTING LIMIT/DF: 0.05 UNITS:mg/L				METHOD REFERENCE :6010 (2)				TECHNICIAN:WGL		
BLANK	ICB	1212J	<0.05							
BLANK	CCB	1212J	<0.05							
BLANK	MB	1229	<0.05							
BLANK	MB	1229	<0.05							
BLANK	CCB	1212J	<0.05							
BLANK	CCB	1212J	<0.05							
BLANK	CCB	1212J	<0.05							
BLANK	CCB	1212J	<0.05							
BLANK	CCB	1212J	<0.05							
STANDARD	CCV	1017J	0.98			1.00	98			
STANDARD	ICV	1122D	1.90			2.00	95			
STANDARD	CCV	1017J	0.99			1.00	99			
STANDARD	ISB	1123J	0.82			1.00	82			
STANDARD	CCV	1017J	1.00			1.00	100			
STANDARD	CCV	1017J	0.97			1.00	97			
STANDARD	CCV	1017J	1.05			1.00	105			
STANDARD	ISB	1123J	0.88			1.00	88			
STANDARD	CCV	1017J	1.04			1.00	104			
STANDARD	LCS	1222G	0.98			1.00	98			
STANDARD	LCS	1222G	1.00			1.00	100			
SPIKE	MS	943176-002	0.86					<0.05	1.00	86
SPIKE	MS	943227-001	0.94					<0.05	1.00	94
DUPLICATE	MD	943212-006	<0.05	<0.05	NC					
DUPLICATE	MD	943176-001	<0.05	<0.05	NC					

PARAMETER:Potassium, Total (K)				DATE/TIME ANALYZED:12/30/94 14:30				QC BATCH NUMBER:317547		
REPORTING LIMIT/DF: 0.1 UNITS:mg/L				METHOD REFERENCE :7610 (2)				TECHNICIAN:BPS		
BLANK	ICB	12304	<0.1							
BLANK	CCB	12304	<0.1							
BLANK	CCB	12304	<0.1							
BLANK	MB	1216	<0.1							
STANDARD	ICV	1101S	2.1			2.0	105			
STANDARD	CCV	1027C	4.9			5.0	98			
STANDARD	CCV	1027C	5.1			5.0	102			
STANDARD	LCS	R1101	2.0			2.0	100			
SPIKE	PDS	943142-002	8.1					5.7	2.5	96
DUPLICATE	MD	943141-006	6.5	6.6	2					

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QUALITY CONTROL REPORT 01/03/95

JOB NUMBER: 943141

CUSTOMER: GEOSCIENCE CONSULTANTS, LTD.

ATTN:

BNA SPIKED ANALYSIS-WATER

DATE ANALYZED: 12/20/94 TIME ANALYZED: 11:05 METHOD: 8270 (2)

QC NUMBER: 317069

BLANKS

TEST DESCRIPTION	ANALY SUB-TYPE	ANALYSIS I.D.	DILUTION FACTOR	ANALYZED VALUE	DETECTION LIMIT	UNITS OF MEASURE
Time Analyzed	SB	1327	1	0	0	
	SBD	1428	1	0	0	
Date Extracted	SB	12/16/94	1	0	0	
	SBD	12/16/94	1	0	0	

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QUALITY CONTROL REPORT 01/03/95

JOB NUMBER: 943141

CUSTOMER: GEOSCIENCE CONSULTANTS, LTD.

ATTN:

BNA SPIKED ANALYSIS-WATER

DATE ANALYZED: 12/20/94 TIME ANALYZED: 11:05 METHOD: 8270 (2)

QC NUMBER: 317069

REFERENCE STANDARDS

TEST DESCRIPTION	ANALYSIS SUB-TYPE	ANALYSIS I. D.	DILUTION FACTOR	ANALYZED VALUE	TRUE VALUE	PERCENT RECOVERY	DETECTION LIMITS	UNITS OF MEASURE
Phenol	SB	B940331A	1	79	143	55	10	ug/L
	SBD	B940331A	1	46	143	32	10	ug/L
2-Chlorophenol	SB	B940331A	1	82	143	57	10	ug/L
	SBD	B940331A	1	42	143	29	10	ug/L
1,4-Dichlorobenzene	SB	B940331A	1	76	143	53	10	ug/L
	SBD	B940331A	1	79	143	55	10	ug/L
N-Nitrosodi-n-propylamine	SB	B940331A	1	70	143	49	10	ug/L
	SBD	B940331A	1	64	143	45	10	ug/L
1,2,4-Trichlorobenzene	SB	B940331A	1	71	143	50	10	ug/L
	SBD	B940331A	1	69	143	48	10	ug/L
4-Chloro-3-methylphenol	SB	B940331A	1	77	143	54	10	ug/L
	SBD	B940331A	1	58	143	41	10	ug/L
Acenaphthene	SB	B940331A	1	73	143	51	10	ug/L
	SBD	B940331A	1	72	143	50	10	ug/L
4-Nitrophenol	SB	B940331A	1	98	143	69	50	ug/L
	SBD	B940331A	1	46	143	32	50	ug/L
2,4-Dinitrotoluene	SB	B940331A	1	97	143	68	10	ug/L
	SBD	B940331A	1	107	143	75	10	ug/L
Pentachlorophenol	SB	B940331A	1	92	143	64	50	ug/L
	SBD	B940331A	1	42	143	29	50	ug/L
Pyrene	SB	B940331A	1	117	143	82	10	ug/L
	SBD	B940331A	1	131	143	92	10	ug/L
Nitrobenzene-d5 (Surrogate)	SB	B940331A	1	62	100	62	0	35-114% Limit
	SBD	B940331A	1	55	100	55	0	35-114% Limit
2-Fluorobiphenyl (Surrogate)	SB	B940331A	1	49	100	49	0	43-116% Limit
	SBD	B940331A	1	40	100	40	0	43-116% Limit
4-Terphenyl-d14 (Surrogate)	SB	B940331A	1	76	100	76	0	33-141% Limit
	SBD	B940331A	1	78	100	78	0	33-141% Limit
Phenol-d6 (Surrogate)	SB	B940331A	1	53	100	53	0	10-94% Limit
	SBD	B940331A	1	32	100	32	0	10-94% Limit
2-Fluorophenol (Surrogate)	SB	B940331A	1	55	100	55	0	21-100% Limit
	SBD	B940331A	1	26	100	26	0	21-100% Limit
2,4,6-Tribromophenol (Surrogate)	SB	B940331A	1	60	100	60	0	10-123% Limit
	SBD	B940331A	1	30	100	30	0	10-123% Limit

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CORE LABORATORIES

QUALITY CONTROL REPORT
01/03/95

JOB NUMBER: 943141

CUSTOMER: GEOSCIENCE CONSULTANTS, LTD.

ATTN:

BTEX SPIKED ANALYSIS-WATER

DATE ANALYZED: 12/16/94 TIME ANALYZED: 16:54 METHOD: 8020 (2)

QC NUMBER:317072

BLANKS

TEST DESCRIPTION	ANALY SUB-TYPE	ANALYSIS I.D.	DILUTION FACTOR	ANALYZED VALUE	DETECTION LIMIT	UNITS OF MEASURE
Time Analyzed	SB	1729	1	0	0	
	SBD	1804	1	0	0	

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CORE LABORATORIES

QUALITY CONTROL REPORT 01/03/95

JOB NUMBER: 943141

CUSTOMER: GEOSCIENCE CONSULTANTS, LTD.

ATTN:

BTX SPIKED ANALYSIS-WATER

DATE ANALYZED: 12/16/94 TIME ANALYZED: 16:54 METHOD: 8020 (2)

QC NUMBER: 317072

REFERENCE STANDARDS

TEST DESCRIPTION	ANALYSIS SUB-TYPE	ANALYSIS I. D.	DILUTION FACTOR	ANALYZED VALUE	TRUE VALUE	PERCENT RECOVERY	DETECTION LIMITS	UNITS OF MEASURE
Benzene	SB	T941216C	1	17.3	20.0	86	0.5	ug/L
	SBD	T941216C	1	18.5	20.0	92	0.5	ug/L
Toluene	SB	T941216C	1	17.9	20.0	89	0.5	ug/L
	SBD	T941216C	1	19.0	20.0	95	0.5	ug/L
Ethylbenzene	SB	T941216C	1	18.0	20.0	90	0.5	ug/L
	SBD	T941216C	1	19.5	20.0	98	0.5	ug/L
Xylenes	SB	T941216C	1	54.9	60.0	91	0.5	ug/L
	SBD	T941216C	1	58.6	60.0	98	0.5	ug/L
4-Bromofluorobenzene (surrogate)	SB	T941216C	1	19.9	20.0	99	0	Limit 85-115%
	SBD	T941216C	1	20.3	20.0	102	0	Limit 85-115%

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CORE LABORATORIES

QUALITY CONTROL FOOTER

METHOD REFERENCES

- (1) EPA 600/4-79-020, Methods For Chemical Analysis Of Water And Wastes, March 1983
- (2) EPA SW-846, Test Methods For Evaluating Solid Waste, Third Edition, November 1986
- (3) Standard Methods For The Examination Of Water And Wastewater, 17th Edition, 1989
- (4) EPA 600/4-80-032, Prescribed Procedures For Measurement Of Radioactivity In Drinking Water, August 1980
- (5) EPA 600/8-78-017, Microbiological Methods For Monitoring The Environment, December 1978
- (6) Federal Register, July 1, 1990 (40 CFR Part 136)
- (7) EPA 600/4-88-039, Methods For The Determination Of Organics Compounds In Drinking Water, December 1988
- (8) U.S.G.S. Methods For The Determination Of Inorganic Substances In Water And Fluvial Sediments, Book 5, Chapter A1, 1985
- (9) Federal Register, Friday, June 7, 1991, (40 CFR Parts 141 and 142)
- (10) Standard Methods For The Examination Of Water And Wastewater, 16th Edition, 1985
- (11) ASTM, Section 11 Water And Environmental Technology, Volume 11.01 Water (1), 1991
- (12) Methods Of Soil Analysis, American Society Of Agronomy, Agronomy No. 9, 1965
- (13) EPA SW-846, Test Methods For Evaluating Solid Waste, Third Edition, Revision 1, November 1990
- (14) ASTM, Section 5, Petroleum Products, Lubricants, and Fossil Fuels, Volume 05.05, Gaseous Fuels, Coal and Coke
- (15) EPA 600/2-78-054, Field and Laboratory Methods Applicable To Overburdens and Mine Soils, March 1978
- (16) ASTM, Part 19, Soils and Rock; Building Stones, 1981

Comments: Data in QA report may differ from final results due to digestion and/or dilution of sample into analytical ranges. The "Time Analyzed" in the QA report refers to the start time of the analytical batch which may not reflect the actual time of each analysis. The "Date Analyzed" is the actual date of analysis. Results for soil and sludge samples are reported on a wet weight basis (i.e. not corrected for percent moisture) unless otherwise indicated. NC = Not Calculable Due To Value(s) Lower Than The Detection Limit.

Blank QC Sample Identification

MB Method Blank
ICB Initial Calibration Blank
CCB Continuing Calibration Blank

Reference Standard QC Sample Identification

LCS Laboratory Control Standard
RS Reference Standard
ICV Initial Calibration Verification Standard
CCV Continuing Calibration Verification Standard
ISA/ISB ICP Interference Check Samples

Spike QC Sample Identification

MS Method (Matrix) Spike
MSD Method (Matrix) Spike Duplicate
PDS Post Digestion Spike
SB Spiked Blank
SBD Spiked Blank Duplicate

Duplicate QC Sample Identification

MD Method (Matrix) Duplicate
ED Extraction Duplicate
DD Digestion Duplicate

Analyses performed by a subcontract laboratory are indicated on the analytical and/or quality control reports under "Technician" using the following codes:

Subcontract Laboratory

	<u>Code</u>
Core Laboratories - Anaheim, CA	* AN
Core Laboratories - Casper, WY	* CA
Core Laboratories - Corpus Christi, TX	* CC
Core Laboratories - Houston, TX	* HP

Subcontract Laboratory

	<u>Code</u>
Core Laboratories - Lake Charles, LA	* LC
Core Laboratories - Long Beach, CA	* LB
Other Subcontract Laboratories	* XX

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