

AP - 001

ANNUAL MONITORING REPORT

YEAR(S):
1994



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☐ Urgent ☐ Please Reply By _____ ☐ No Reply Needed

DATE: 12/7/94

TO: BILL OLSON

FROM:

OIL CONSERVATION DIV.

TRENT THOMAS

2040 SOUTH PACHECO

SUBJECT: SANTA FE, N.M. 87505

REMARKS: THIRD QUARTER MONITORING

RESULTS (SEPT 1994)

RECEIVED

DEC 08 1994

OIL CONSERVATION DIV.
SANTA FE

Signed: Trent A. Thomas

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					
Acenaphthene	None	NS	ND	ND					
Acenaphthylene	None	NS	ND	ND					
Anthracene	TP	NS	ND	ND					
Benzo(a)anthracene	None	NS	ND	ND					
Benzo(b)fluoranthene	None	NS	ND	ND					
Benzo(k)fluoranthene	TP	NS	ND	ND					
Benzo(g,h,i)perylene	None	NS	ND	ND					
Benzo(u)pyrene	0.7	NS	ND	ND					
Chrysene	None	NS	ND	ND					
Dibenz(a,h)anthracene	None	NS	ND	ND					
Fluoranthene	TP	NS	ND	ND					
Fluorene	TP	NS	ND	ND					
Indeno(1,2,3-cd)pyrene	None	NS	ND	ND					
1-Methylnaphthalene	TP	NS	ND	ND					
2-Methylnaphthalene	TP	NS	ND	ND					
Naphthalene	30 *	NS	ND	ND					
Phenanthrene	TP	NS	ND	ND					
Pyrene	TP	NS	ND	ND					

Detection Limits (ug/l):

Acenaphthene	50	Benzo(g,h,i)perylene	50	Indeno(1,2,3-cd)pyrene	50
Acenaphthylene	50	Benzo(a)pyrene	50	1-Methylnaphthalene	50
Anthracene	50	Chrysene	50	2-Methylnaphthalene	50
Benzo(a)anthracene	50	Dibenzo(a,h)anthracene	50	Naphthalene	50
Benzo(b)fluoranthene	50	Fluoranthene	50	Phenanthrene	50
Benzo(k)fluoranthene	50	Fluorene	50	Pyrene	50

* - 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			
Acenaphthene	None	NS	ND	ND	ND			
Acenaphthylene	None	NS	ND	ND	ND			
Anthracene	TP	NS	ND	ND	ND			
Benzo(a)anthracene	None	NS	ND	ND	ND			
Benzo(b)fluoranthene	None	NS	ND	ND	ND			
Benzo(k)fluoranthene	TP	NS	ND	ND	ND			
Benzo(g,h,i)perylene	None	NS	ND	ND	ND			
Benzo(a)pyrene	0.7	NS	ND	ND	ND			
Chrysene	None	NS	ND	ND	ND			
Dibenzo(a,h)anthracene	None	NS	ND	ND	ND			
Fluoranthene	TP	NS	ND	ND	ND			
Fluorene	TP	NS	ND	ND	ND			
Indeno(1,2,3-cd)pyrene	None	NS	ND	ND	ND			
1-Methylnaphthalene	TP	NS	46	ND	61			
2-Methylnaphthalene	TP	NS	64	ND	75			
Naphthalene	30 *	NS	140	93	230			
Phenanthrene	TP	NS	ND	ND	ND			
Pyrene	TP	NS	ND	ND	ND			

Detection Limits (ug/l):

Acenaphthene	50	Benzo(g,h,i)perylene	50	Indeno(1,2,3-cd)pyrene	50
Acenaphthylene	50	Benzo(a)pyrene	50	1-Methylnaphthalene	50
Anthracene	50	Chrysene	50	2-Methylnaphthalene	50
Benzo(a)anthracene	50	Dibenzo(a,h)anthracene	50	Naphthalene	50
Benzo(b)fluoranthene	50	Fluoranthene	50	Phenanthrene	50
Benzo(k)fluoranthene	50	Fluorene	50	Pyrene	50

* - 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				
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	NA	ND	ND	ND				
2-Methylnaphthalene	TP	NA	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

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			
Acenaphthene	None	NS	ND	ND	ND			
Acenaphthylene	None	NS	ND	ND	ND			
Anthracene	TP	NS	ND	ND	ND			
Benzo(a)anthracene	None	NS	ND	ND	ND			
Benzo(b)fluoranthene	None	NS	ND	ND	ND			
Benzo(k)fluoranthene	TP	NS	ND	ND	ND			
Benzo(g,h,i)perylene	None	NS	ND	ND	ND			
Benzo(a)pyrene	0.7	NS	ND	ND	ND			
Chrysene	None	NS	ND	ND	ND			
Dibenzo(a,h)anthracene	None	NS	ND	ND	ND			
Fluoranthene	TP	NS	ND	ND	ND			
Fluorene	TP	NS	ND	ND	12			
Indeno(1,2,3-cd)pyrene	None	NS	ND	ND	ND			
1-Methylnaphthalene	TP	NS	29	ND	120			
2-Methylnaphthalene	TP	NS	ND	ND	18			
Naphthalene	30 *	NS	ND	ND	35			
Phenanthrene	TP	NS	ND	ND	32			
Pyrene	TP	NS	ND	ND	16			

Detection Limits (ug/l):

Acenaphthene	50	Benzo(g,h,i)perylene	50	Indeno(1,2,3-cd)pyrene	50
Acenaphthylene	50	Benzo(a)pyrene	50	1-Methylnaphthalene	50
Anthracene	50	Chrysene	50	2-Methylnaphthalene	50
Benzo(a)anthracene	50	Dibenzo(a,h)anthracene	50	Naphthalene	50
Benzo(b)fluoranthene	50	Fluoranthene	50	Phenanthrene	50
Benzo(k)fluoranthene	50	Fluorene	50	Pyrene	50

* - 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				
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	NA	ND	ND	ND				
2-Methylnaphthalene	TP	NA	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

MW-14
Brickland Refinery Site
Quarterly Analytical Results

(All results in ug/l)

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

Detection Limits (ug/l):

Acenaphthene	50	Benzo(a,h,i)perylene	50	Indeno(1,2,3-cd)pyrene	50
Acenaphthylene	50	Benzo(a)pyrene	50	1-Methylnaphthalene	50
Anthracene	50	Chrysene	50	2-Methylnaphthalene	50
Benzo(a)anthracene	50	Dibenzo(a,h)anthracene	50	Naphthalene	50
Benzo(b)fluoranthene	50	Fluoranthene	50	Phenanthrene	50
Benzo(k)fluoranthene	50	Fluorene	50	Pyrene	50

* - Standard for naphthalene includes monomethylnaphthalenes

NS = Not sampled

ND = Not detected

NA = Not analyzed

TP = WQCC toxic pollutant

MW-15
Brickland Refinery Site
Quarterly Analytical Results

(All results in ug/l)

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

MW-16
Brickland Refinery Site
Quarterly Analytical Results

(All results in ug/l)

Parameter	WQCC Std.	06/28/94	07/12/94	09/27/94					
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	NA	ND,ND	ND					
2-Methylnaphthalene	TP	NA	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

MW-17
Brickland Refinery Site
Quarterly Analytical Results

(All results in ug/l)

Parameter	WQCC Std.	06/28/94	09/27/94					
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	ND	20,14					
2-Methylnaphthalene	TP	ND	14,10					
Naphthalene	30 *	ND	24,13					
Phenanthrene	TP	ND	ND					
Pyrene	TP	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 except 1"PII)

Parameter	WQCC Std.	12/08/93	03/23/94	07/12/94	09/27/94				
Benzene	10	ND	ND	1.3	ND				
Toluene	750	ND	ND	ND	ND				
Ethyl Benzene	750	ND	ND	ND	ND				
Xylenes	620	ND	ND	ND	ND				
Total Vol. Petroleum Hydrocarbons	None	0.1	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				
Calcium	None	NS	109	106	113				
Magnesium	None	NS	27.2	31.0	31.7				
Potassium	None	NS	14	13.7	10.6				
Sodium	None	NS	175	105	135				
Bicarbonate	None	NS	456	488	427				
Chloride	250	NS	133	39.3	115				
Nitrate (N)	10	NS	ND	0.3	ND				
Sulfate	600	NS	123	150	136				

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

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				
Benzene	10	NS	ND	ND	ND				
Toluene	750	NS	18	ND	ND				
Ethyl Benzene	750	NS	3.2	ND	ND				
Xylenes	620	NS	49	ND	ND				
Total Vol. Petroleum Hydrocarbon	None	NS	0.5	NA	NA				

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

(All results in mg/l)

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

Detection Limits (mg/l):
 Calcium 20 Bicarbonate 5.0 ND = Not detected
 Magnesium 20 Chloride 25.0 NS = Not sampled
 Potassium 5.0 Nitrate (N) 0.1
 Sodium 20 Sulfate 1000

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				
Benzene	10	ND	ND	0.8	ND				
Toluene	750	ND	4.9	ND	ND				
Ethyl Benzene	750	ND	ND	ND	ND				
Xylenes	620	ND	18	ND	ND				
Total Vol. Petroleum Hydrocarbon	None	0.1	ND	NA	NA				

Detection Limits (ug/l):

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

(All results in mg/l)

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

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 250

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				
Benzene	10	ND	ND	0.6	ND				
Toluene	750	ND	ND	ND	ND				
Ethyl Benzene	750	ND	ND	ND	ND				
Xylenes	620	ND	ND	ND	ND				
Total Vol. Petroleum Hydrocarbon	None	0.1	ND	NA	NA				

Detection Limits (ug/l):

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

(All results in mg/l)

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

Detection Limits (mg/l):

Calcium	20	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	1000	

MW-4
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				
Benzene	10	NS	130,110	1800	2000				
Toluene	750	NS	ND,ND	12	ND				
Ethyl Benzene	750	NS	2.5,1.6	50	ND				
Xylenes	620	NS	ND,ND	ND	ND				
Total Vol. Petroleum Hydrocarbon	None	NS	ND,ND	NA	NA				

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

(All results in mg/l)

Parameter	WQCC Std.	12/08/93	03/23/94	06/27/94	09/27/94				
Calcium	None	NS	740,755	430	370				
Magnesium	None	NS	262,247	217	225				
Potassium	None	NS	57,69	66	65				
Sodium	None	NS	2920,2930	2050	2340				
Bicarbonate	None	NS	924,908	1350	1470				
Chloride	250	NS	4010,4330	4300	4360				
Nitrate (N)	10	NS	ND,ND	2.8	0.4				
Sulfate	600	NS	1820,2100	932	364				

Detection Limits (mg/l):
 Calcium 20.0 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 100

MW-5
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				
Benzene	10	NS	7100	5000,4200	5600				
Toluene	750	NS	160	ND,ND	ND				
Ethyl Benzene	750	NS	53	ND,ND	ND				
Xylenes	620	NS	420	130,130	160				
Total Vol. Petroleum Hydrocarbon	None	NS	12	NA,NA	NA				

Detection Limits (ug/l):

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

(All results in mg/l)

Parameter	WQCC Std.	12/08/93	03/24/94	06/27/94	09/27/94				
Calcium	None	NS	402	500	620				
Magnesium	None	NS	180	160	186				
Potassium	None	NS	24.2	58	60				
Sodium	None	NS	2880	2230	3040				
Bicarbonate	None	NS	1860	1710	1630				
Chloride	250	NS	5280	5450	4310				
Nitrate (N)	10	NS	ND	0.3	ND				
Sulfate	600	NS	505	962	904				

Detection Limits (mg/l):

Calcium	20.0	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	150	

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				
Benzene	10	71	74	110	4.8				
Toluene	750	ND	ND	ND	2.8				
Ethyl Benzene	750	52	12	30	34				
Xylenes	620	ND	7.6	88	16				
Total Vol. Petroleum Hydrocarbon	None	2.9	1.8	NA	NA				

Detection Limits (ug/l):

Benzene	10	Ethyl Benzene	10	Total Vol. Petroleum Hydrocarbons	0.1 mg/l
Toluene	10	Xylenes	10		

(All results in mg/l)

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

Detection Limits (mg/l):

Calcium	1.0	Bicarbonate	5.0	ND = Not detected
Magnesium	0.5	Chloride	5.0	NS = Not sampled
Potassium	0.5	Nitrate (N)	0.1	
Sodium	20	Sulfate	10-100	

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				
Benzene	10	ND	ND	ND	ND				
Toluene	750	ND	ND	ND	ND				
Ethyl Benzene	750	ND	ND	ND	ND				
Xylenes	620	ND	1.6	ND	ND				
Total Vol. Petroleum Hydrocarbon	None	0.1	ND	NA	NA				

Detection Limits (ug/l):

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

(All results in mg/l)

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

Detection Limits (mg/l):

Calcium	20.0	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	1000	

MW-7
Irteckland 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				
Benzene	10	NS	31	ND	ND				
Toluene	750	NS	ND	ND	ND				
Ethyl Benzene	750	NS	2.1	ND	3.6				
Xylenes	620	NS	0.6	3.2	1.3				
Total Vol. Petroleum Hydrocarbon	None	NS	ND	NA	NA				

Detection Limits (ug/l):

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

(All results in mg/l)

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

Detection Limits (mg/l):

Calcium 1.0 Bicarbonate 5.0 ND = Not detected
 Magnesium 0.5 Chloride 5.0 NS = Not sampled
 Potassium 0.5 Nitrate (N) 0.1
 Sodium 20 Sulfate 10-100

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				
Benzene	10	NS	9600	2400	13000				
Toluene	750	NS	ND	ND	ND				
Ethyl Benzene	750	NS	ND	ND	ND				
Xylenes	620	NS	720	ND	ND				
Total Vol. Petroleum Hydrocarbon	None	NS	ND	NA	NA				

Detection Limits (ug/l):

Benzene	100	Ethyl Benzene	100	Total Vol. Petroleum Hydrocarbons	0.1 mg/l
Toluene	100	Xylenes	100		

(All results in mg/l)

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

Detection Limits (mg/l):

Calcium	1.0	Bicarbonate	5.0	ND = Not detected
Magnesium	0.5	Chloride	5.0	NS = Not sampled
Potassium	0.1	Nitrate (N)	0.1	
Sodium	20	Sulfate	10	

3031/BTEX-TPH/MW-8.WQ2

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				
Benzene	10	ND	ND	ND	ND				
Toluene	750	ND	ND	ND	ND				
Ethyl Benzene	750	ND	ND	ND	ND				
Xylenes	620	ND	ND	0.6	ND				
Total Vol. Petroleum Hydrocarbon	None	0.1	ND	NA	NA				

Detection Limits (ug/l):

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

(All results in mg/l)

Parameter	WQCC Std.	12/08/93	03/25/94	06/27/94	09/27/94				
Calcium	None	NS	305	245	322				
Magnesium	None	NS	104	87.3	95.6				
Potassium	None	NS	13.7	27	32				
Sodium	None	NS	1450	1090	1510				
Bicarbonate	None	NS	628	820	830				
Chloride	250	NS	1280	1350	1500				
Nitrate (N)	10	NS	ND	1.4	ND				
Sulfate	640	NS	1800	2010	1760				

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	1000	

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				
Benzene	10	NS	120	ND	15				
Toluene	750	NS	0.7	ND	2.3				
Ethyl Benzene	750	NS	4.7	ND	8.9				
Xylenes	620	NS	4.4	ND	9.4				
Total Vol. Petroleum Hydrocarbon	None	NS	1.0	ND	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				
Calcium	None	NS	79	116	201				
Magnesium	None	NS	62.3	69.5	72.2				
Potassium	None	NS	18.3	29	39.4				
Sodium	None	NS	1050	820	950				
Bicarbonate	None	NS	1620	1830	2100				
Chloride	250	NS	959	927	792				
Nitrate (N)	10	NS	0.2	1.3	0.6				
Sulfate	600	NS	ND	18	22				

Detection Limits (mg/l):

Calcium 1.0 Bicarbonate 5.0 ND = Not detected
Magnesium 0.5 Chloride 5.0 NS = Not sampled
Potassium 5 Nitrate (N) 0.1
Sodium 20 Sulfate 10

3031/BTEX-TPH/MW-11.WQ2

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				
Benzene	10	ND	ND	1.9	ND				
Toluene	750	ND	ND	ND	ND				
Ethyl Benzene	750	ND	ND	ND	ND				
Xylenes	620	ND	ND	ND	ND				
Total Vol. Petroleum Hydrocarbon	None	0.1	ND	ND	NA				

Detection Limits (ug/l):

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

(All results in mg/l)

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

Detection Limits (mg/l):

Calcium 20 Bicarbonate 5.0 ND = Not detected
 Magnesium 20 Chloride 25.0 NS = Not sampled
 Potassium 5 Nitrate (N) 0.1
 Sodium 20 Sulfate 1000

MW-14
Brickland Refinery Site
Quarterly Analytical Results

(All results in ug/l except TPH)

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

Detection Limits (ug/l):

Benzene 500 Ethyl Benzene 500 Total Vol. Petroleum 0.1 mg/l
Toluene 500 Xylenes 500 Hydrocarbons

(All results in mg/l)

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

Detection Limits (mg/l):

Calcium 0.1 Bicarbonate 5.0
Magnesium 0.1 Chloride 2.5
Potassium 2.5 Nitrate (N) 0.1
Sodium 5 Sulfate 5.0

ND = Not detected
NS = Not sampled

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

Parameter	WQCC Std.	06/28/94	09/27/94						
Benzene	10	34	270						
Toluene	750	ND	ND						
Ethyl Benzene	750	13	2						
Xylenes	620	13	60						
Total Vol. Petroleum Hydrocarbon	None	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.	07/12/94	09/27/94						
Calcium	None	57.7	99.1						
Magnesium	None	16.4	16.8						
Potassium	None	23	23.1						
Sodium	None	458	950						
Bicarbonate	None	723	2420						
Chloride	250	436	442						
Nitrate (N)	10	ND	0.2						
Sulfate	600	294	142						

Detection Limits (mg/l):
 Calcium 1.0 Bicarbonate 5.0 ND = Not detected
 Magnesium 0.1 Chloride 5.0 NS = Not sampled
 Potassium 1.0 Nitrate (N) 0.1
 Sodium 5.0 Sulfate 20.0

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

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

Detection Limits (ug/l):

Benzene	1.0	Ethyl Benzene	1.0	Total Vol. Petroleum Hydrocarbons	0.1 mg/l
Toluene	1.0	Xylenes	1.0		

(All results in mg/l)

Parameter	WQCC Std.	07/12/94	09/27/94					
Calcium	None	237,243	261					
Magnesium	None	96,799.5	108					
Potassium	None	35,30	33.5					
Sodium	None	1500,1490	1510					
Bicarbonate	None	1100,1090	1130					
Chloride	250	1910,1870	1950					
Nitrate (N)	10	ND,ND	0.9					
Sulfate	600	1510,1780	2340					

Detection Limits (mg/l):

Calcium	1.0
Magnesium	0.1
Potassium	2.0
Sodium	10

Bicarbonate
Chloride
Nitrate (N)
Sulfate

5.0
5.0
0.1
100

ND = Not detected
 NS = Not sampled

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

Parameter	WQCC Std.	06/28/94	09/27/94					
Benzene	10	17	46.68					
Toluene	750	ND	21.25					
Ethyl Benzene	750	19	35.41					
Xylenes	620	30	8.9.2					
Total Vol. Petroleum Hydrocarbon	None	NA	NA					

Detection Limits (ug/l):

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

(All results in mg/l)

Parameter	WQCC Std.	06/28/94	09/27/94					
Calcium	None	218	241.237					
Magnesium	None	63.8	77.76.3					
Potassium	None	38	36.4.36.7					
Sodium	None	610	136.800					
Bicarbonate	None	1100	1590.1650					
Chloride	250	1350	2110.1930					
Nitrate (N)	10	0.3	0.1,ND					
Sulfate	600	318	239.198					

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	30.0	

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				
<u>Phenols</u>									
2,4,6-Trichlorophenol	TP	NS	ND	ND	ND				
2,4-Dichlorophenol	TP	NS	ND	ND	ND				
2,4-Dimethylphenol	None	NS	ND	ND	ND				
2,4-Dinitrophenol	TP	NS	ND	ND	ND				
2-Chlorophenol	None	NS	ND	ND	ND				
2-Nitrophenol	None	NS	ND	ND	ND				
4,6-Dinitro-2-methylphenol	None	NS	ND	ND	ND				
4-Chloro-3-methylphenol	None	NS	ND	ND	ND				
4-Nitrophenol	None	NS	ND	ND	ND				
Pentachlorophenol	TP	NS	ND	ND	ND				
Phenol	5	NS	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				
<u>Phenols</u>									
	2,4,6-Trichlorophenol	TP	NS	ND	ND	ND			
	2,4-Dichlorophenol	TP	NS	ND	ND	ND			
	2,4-Dimethylphenol	None	NS	ND	ND	ND			
	2,4-Dinitrophenol	TP	NS	ND	ND	ND			
	2-Chlorophenol	None	NS	ND	ND	ND			
	2-Nitrophenol	None	NS	ND	ND	ND			
	4,6-Dinitro-2-methylphen	None	NS	ND	ND	ND			
	4-Chloro-3-methylphenol	None	NS	ND	ND	ND			
	4-Nitrophenol	None	NS	ND	ND	ND			
	Pentachlorophenol	TP	NS	ND	ND	ND			
	Phenol	5	NS	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-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				
<u>Phenols</u>									
2,4,6-Trichlorophenol	TP	NS	ND	ND	ND				
2,4-Dichlorophenol	TP	NS	ND	ND	ND				
2,4-Dimethylphenol	None	NS	ND	ND	ND				
2,4-Dinitrophenol	TP	NS	ND	ND	ND				
2-Chlorophenol	None	NS	ND	ND	ND				
2-Nitrophenol	None	NS	ND	ND	ND				
4,6-Dinitro-2-methylphen	None	NS	ND	ND	ND				
4-Chloro-3-methylphenol	None	NS	ND	ND	ND				
4-Nitrophenol	None	NS	ND	ND	ND				
Pentachlorophenol	TP	NS	ND	ND	ND				
Phenol	5	NS	ND	ND	ND				

Detection Limits (ug/l):

2,4,6-Trichlorophenol	10	2-Nitrophenol	10
2,4-Dichlorophenol	10	4,6-Dinitro-2-methylphenol	50
2,4-Dimethylphenol	10	4-Chloro-3-methylphenol	10
2,4-Dinitrophenol	50	4-Nitrophenol	50
2-Chlorophenol	10	Pentachlorophenol	50
		Phenol	10

NS = Not sampled
NA = Not analyzed
ND = Not detected
TP = WQCC toxic pollutant

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				
Phenols									
2,4,6-Trichlorophenol	TP	NS	ND	ND	ND				
2,4-Dichlorophenol	TP	NS	ND	ND	ND				
2,4-Dimethylphenol	None	NS	ND	ND	ND				
2,4-Dinitrophenol	TP	NS	ND	ND	ND				
2-Chlorophenol	None	NS	ND	ND	ND				
2-Nitrophenol	None	NS	ND	ND	ND				
4,6-Dinitro-2-methylphen	None	NS	ND	ND	ND				
4-Chloro-3-methylphenol	None	NS	ND	ND	ND				
4-Nitrophenol	None	NS	ND	ND	ND				
Pentachlorophenol	TP	NS	ND	ND	ND				
Phenol	5	NS	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/Pheno/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				
<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-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				
<u>Phenols</u>									
2,4,6-Trichlorophenol	TP	NS	ND	ND	ND				
2,4-Dichlorophenol	TP	NS	ND	ND	ND				
2,4-Dimethylphenol	None	NS	16	ND	ND				
2,4-Dinitrophenol	TP	NS	ND	ND	ND				
2-Chlorophenol	None	NS	ND	ND	ND				
2-Nitrophenol	None	NS	ND	ND	ND				
4,6-Dinitro-2-methylphenol	None	NS	ND	ND	ND				
4-Chloro-3-methylphenol	None	NS	ND	ND	ND				
4-Nitrophenol	None	NS	ND	ND	ND				
Pentachlorophenol	TP	NS	ND	ND	ND				
Phenol	5	NS	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				
<u>Phenols</u>									
	2,4,6-Trichlorophenol	TP	NS	ND	ND	ND			
	2,4-Dichlorophenol	TP	NS	ND	ND	ND			
	2,4-Dimethylphenol	None	NS	ND	ND	ND			
	2,4-Dinitrophenol	TP	NS	ND	ND	ND			
	2-Chlorophenol	None	NS	ND	ND	ND			
	2-Nitrophenol	None	NS	ND	ND	ND			
	4,6-Dinitro-2-methylphen	None	NS	ND	ND	ND			
	4-Chloro-3-methylphenol	None	NS	ND	ND	ND			
	4-Nitrophenol	None	NS	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				
<u>Phenols</u>									
2,4,6-Trichlorophenol	TP	NS	ND	ND	ND				
2,4-Dichlorophenol	TP	NS	ND	ND	ND				
2,4-Dimethylphenol	None	NS	ND	ND	ND				
2,4-Dinitrophenol	TP	NS	ND	ND	ND				
2-Chlorophenol	None	NS	ND	ND	ND				
2-Nitrophenol	None	NS	ND	ND	ND				
4,6-Dinitro-2-methylphen	None	NS	ND	ND	ND				
4-Chloro-3-methylphenol	None	NS	NA	ND	ND				
4-Nitrophenol	None	NS	ND	ND	ND				
Pentachlorophenol	TP	NS	ND	ND	ND				
Phenol	5	NS	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-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				
<u>Phenols</u>									
2,4,6-Trichlorophenol	TP	NS	ND	ND	ND				
2,4-Dichlorophenol	TP	NS	ND	ND	ND				
2,4-Dimethylphenol	None	NS	ND	ND	ND				
2,4-Dinitrophenol	TP	NS	ND	ND	ND				
2-Chlorophenol	None	NS	ND	ND	ND				
2-Nitrophenol	None	NS	ND	ND	ND				
4,6-Dinitro-2-methylphen	None	NS	ND	ND	ND				
4-Chloro-3-methylphenol	None	NS	ND	ND	ND				
4-Nitrophenol	None	NS	ND	ND	ND				
Pentachlorophenol	TP	NS	ND	ND	ND				
Phenol	5	NS	ND	ND	ND				

Detection Limits (ug/l):

2,4,6-Trichlorophenol	50	2-Nitrophenol	50	NS = Not sampled
2,4-Dichlorophenol	50	4,6-Dinitro-2-methylphenol	250	NA = Not analyzed
2,4-Dimethylphenol	50	4-Chloro-3-methylphenol	50	ND = Not detected
2,4-Dinitrophenol	250	4-Nitrophenol	250	TP = WQCC toxic pollutant
2-Chlorophenol	50	Pentachlorophenol	250	
		Phenol	50	

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				
<u>Phenols</u>									
2,4,6-Trichlorophenol	TP	NS	ND	ND	ND				
2,4-Dichlorophenol	TP	NS	ND	ND	ND				
2,4-Dimethylphenol	None	NS	96	56	110				
2,4-Dinitrophenol	TP	NS	ND	ND	ND				
2-Chlorophenol	None	NS	ND	ND	ND				
2-Nitrophenol	None	NS	ND	ND	ND				
4,6-Dinitro-2-methylphen	None	NS	ND	ND	ND				
4-Chloro-3-methylphenol	None	NS	ND	ND	ND				
4-Nitrophenol	None	NS	ND	ND	ND				
Pentachlorophenol	TP	NS	ND	ND	ND				
Phenol	5	NS	ND	110	ND				

Detection Limits (ug/l):

2,4,6-Trichlorophenol	50	2-Nitrophenol	50	NS = Not sampled
2,4-Dichlorophenol	50	4,6-Dinitro-2-methylphenol	250	NA = Not analyzed
2,4-Dimethylphenol	50	4-Chloro-3-methylphenol	50	ND = Not detected
2,4-Dinitrophenol	250	4-Nitrophenol	250	TP = WQCC toxic pollutant
2-Chlorophenol	50	Pentachlorophenol	250	
		Phenol	50	

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				
<u>Phenols</u>									
2,4,6-Trichlorophenol	TP	NS	ND	ND	ND				
2,4-Dichlorophenol	TP	NS	ND	ND	ND				
2,4-Dimethylphenol	None	NS	ND	ND	ND				
2,4-Dinitrophenol	TP	NS	ND	ND	ND				
2-Chlorophenol	None	NS	ND	ND	ND				
2-Nitrophenol	None	NS	ND	ND	ND				
4,6-Dinitro-2-methylphen	None	NS	ND	ND	ND				
4-Chloro-3-methylphenol	None	NS	ND	ND	ND				
4-Nitrophenol	None	NS	ND	ND	ND				
Pentachlorophenol	TP	NS	ND	ND	ND				
Phenol	5	NS	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-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				
<u>Phenols</u>	2,4,6-Trichlorophenol	TP	NS	ND	ND	ND			
	2,4-Dichlorophenol	TP	NS	ND	ND	ND			
	2,4-Dimethylphenol	None	NS	ND	ND	ND			
	2,4-Dinitrophenol	TP	NS	ND	ND	ND			
	2-Chlorophenol	None	NS	ND	ND	ND			
	2-Nitrophenol	None	NS	ND	ND	ND			
	4,6-Dinitro-2-methylphen	None	NS	ND	ND	ND			
	4-Chloro-3-methylphenol	None	NS	ND	ND	ND			
	4-Nitrophenol	None	NS	ND	ND	ND			
	Pentachlorophenol	TP	NS	ND	ND	ND			
Phenol	5	NS	ND	ND	ND	ND			

Detection Limits (ug/l):

2,4,6-Trichlorophenol	50	2-Nitrophenol	50
2,4-Dichlorophenol	50	4,6-Dinitro-2-methylphenol	50
2,4-Dimethylphenol	50	4-Chloro-3-methylphenol	50
2,4-Dinitrophenol	50	4-Nitrophenol	50
2-Chlorophenol	50	Pentachlorophenol	50
		Phenol	50

NS = Not sampled
NA = Not analyzed
ND = Not detected
TP = WQCC toxic pollutant

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				
<u>Phenols</u>									
2,4,6-Trichlorophenol	TP	NS	ND	ND	ND				
2,4-Dichlorophenol	TP	NS	ND	ND	ND				
2,4-Dimethylphenol	None	NS	ND	ND	ND				
2,4-Dinitrophenol	TP	NS	ND	ND	ND				
2-Chlorophenol	None	NS	ND	ND	ND				
2-Nitrophenol	None	NS	ND	ND	ND				
4,6-Dinitro-2-methylphen	None	NS	ND	ND	ND				
4-Chloro-3-methylphenol	None	NS	ND	ND	ND				
4-Nitrophenol	None	NS	ND	ND	ND				
Pentachlorophenol	TP	NS	ND	ND	ND				
Phenol	5	NS	ND	ND	ND				

Detection Limits (ug/l):

2,4,6-Trichlorophenol	10	2-Nitrophenol	10
2,4-Dichlorophenol	10	4,6-Dinitro-2-methylphenol	50
2,4-Dimethylphenol	10	4-Chloro-3-methylphenol	10
2,4-Dinitrophenol	50	4-Nitrophenol	50
2-Chlorophenol	10	Pentachlorophenol	50
		Phenol	10

NS = Not sampled
NA = Not analyzed
ND = Not detected
TP = WQCC toxic pollutant

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

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

Detection Limits (ug/l):

2,4,6-Trichlorophenol	50	2-Nitrophenol	50
2,4-Dichlorophenol	50	4,6-Dinitro-2-methylphenol	250
2,4-Dimethylphenol	50	4-Chloro-3-methylphenol	50
2,4-Dinitrophenol	250	4-Nitrophenol	250
2-Chlorophenol	50	Pentachlorophenol	250
		Phenol	250

NS = Not sampled
NA = Not analyzed
ND = Not detected
TP = WQCC toxic pollutant

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

Parameter	WQCC Std.	06/28/94	09/27/94					
<u>Phenols</u>								
2,4,6-Trichlorophenol	TP	ND	ND					
2,4-Dichlorophenol	TP	ND	ND					
2,4-Dimethylphenol	None	ND	ND					
2,4-Dinitrophenol	TP	ND	ND					
2-Chlorophenol	None	ND	ND					
2-Nitrophenol	None	ND	ND					
4,6-Dinitro-2-methylphen	None	ND	ND					
4-Chloro-3-methylphenol	None	ND	ND					
4-Nitrophenol	None	ND	ND					
Pentachlorophenol	TP	ND	ND					
Phenol	5	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					
<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-16P.WQ2

MW-17
Brickland Refinery Site
Quarterly Analytical Results

(All results in ug/l)

Parameter	WQCC Std.	06/28/94	09/27/94						
Phenols									
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-17P.WQ2

Core Laboratories

CORE LABORATORIES
ANALYTICAL REPORT

Job Number: 942450
Prepared For:

GEOSCIENCE CONSULTANTS, LTD.

505 MARQUETTE NW, SUITE 1100
ALBUQUERQUE, NM 87102

Date: 10/20/94

Linda L. Benkers
Signature

10-20-94
Date:

Name: Linda L. Benkers

Core Laboratories
10703 East Bethany Drive
Aurora, CO 80014

Title: QA/QC COORDINATOR



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

Chain of Custody

8285

74/451

Date 9/28/94 Page 1 Of 1

Lab Name CORE LABORATORIES						Analysis Request																						
Address 10703 East Bethany Drive Aurora, CO 80014-2696																												
Telephone 303/751-1780																												
Sample(s) SIGNATURES)																												
Sample Number	Matrix	Loblation	Halogenated Volatiles 601/8010	Aromatic Volatiles 52/8020 BTEX	Phenols, Sub Phenols 624/8040	Pesticides/PCB 528/8080	Polynuclear Aromatic Hydrocarbons 610/8310	Volatile Compounds GC/MS 624/8240	Base/New Acid Compounds GC/MS 622/8270 PAN PHENOLS	Total Organic Carbon (TOC) 415/9060	Total Organic Halides (TOX) 9020	Petroleum Hydrocarbons 418.1	TPH/BTEX Modified 8015	TCLP - Vol., Semi-Vol. Herbicides, Pesticides	TCLP - Metals	RCRA Metals(8)	Priority Pollutant Metals (13)	CAM Metals (18) TTLC/STLC	Fresh Point	Corrosivity	Reactivity	Oil & Grease	Cyanide Total/Amenable	Chemical Oxygen Demand (COD)	WQCC METALS	CATION ANIONS	Number of Containers	
9409280730	H ₂ O	MU-35		3			-	-	-																	2	1	7
9409280820	H ₂ O	MU-3d		3			-	-	-																	2	1	7
9409280910	H ₂ O	MU-65		3			-	-	-																	2	1	7
940928000	H ₂ O	MU-6d		3			-	-	-																	2	1	7
9409281010	H ₂ O	Temp Blank		1																							1	
Project Information			Sample Receipt																									
Project REVENUE	Total No. of Containers		Relinquished By ID Lee	(Time) 1:30 PM	Signature) DAVID NEE	(Date) 9/22/94	Signed By Amylary	(Time) 9:00 AM	Received By Amylary	(Signature) Amylary	(Date) 9/23/94	Company) Core																
Project Director TRENT T.	Chain of Custody Seals	OK																										
Charge Code No. 3081-COC	Rec'd Good Condition/Cold	OK																										
Shipping ID. No. 0214074140	Conforms to Record	OK																										
Via Fed X	Lab No. 9424SD																											
Special Instructions/Comments: Nitrates 48 hr Holding Time																												

Core Laboratories

SAMPLE DELIVERY GROUP NARRATIVE

October 20, 1994

Customer: Geoscience Consultants, Ltd
Project: Rexene COC #8285
Core Laboratories Project Number: 942450

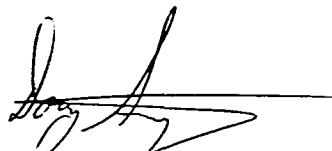
On 9-29-94 Core Laboratories received samples for analysis. The following information is pertinent to the interpretation of the data package.

Organic Analysis:

During analysis for semivolatile organics on sample 9409280910, 1 of 6 internal standards had a low percent recovery. This sample was reanalyzed with similar results. This sample had a matrix problem present that interfered with the later eluting internal standards.



Linda L. Benkers
QA/QC Coordinator



Douglas Georgic
Laboratory Supervisor

Core Laboratories
LABORATORY TESTS RESULTS
10/20/94

JOB NUMBER: 942450

CUSTOMER: GEOSCIENCE CONSULTANTS, LTD.

ATTN:
CLIENT I.D.: REXENE COC#8285

DATE SAMPLED.: 09/28/94

TIME SAMPLED.: 07:30

WORK DESCRIPTION.: 9409280730

LABORATORY I.D.: 942450-0001

DATE RECEIVED.: 09/29/94

TIME RECEIVED.: 10:00

REMARKS.: MW-3S

TEST DESCRIPTION	FINAL RESULT	LIMITS/*DILUTION	UNITS OF MEASURE	TEST METHOD	DATE	TECHN
Bicarbonate (Unfilt.)	692	5	mg/L	2320 B (3)	10/12/94	SLS
Chloride (Unfilt.)	1240	25	mg/L	325.2 (1)	10/17/94	DME
Nitrogen, Nitrate (Unfilt.)	0.1	0.1	mg/L (as N)	353.2 (1)	09/30/94	DME
Sulfate (Unfilt.)	620	50	mg/L	375.2 (1)	10/18/94	DME
Aluminum, Diss. (Al)	0.19	0.05	mg/L	6010 (2)	10/13/94	GEF
Arsenic, Diss. (As)	0.08	0.05	mg/L	6010 (2)	10/13/94	GEF
Barium, Diss. (Ba)	0.08	0.01	mg/L	6010 (2)	10/13/94	GEF
Cadmium, Diss. (Cd)	<0.005	0.005	mg/L	6010 (2)	10/13/94	GEF
Calcium, Total (Ca)	97.3	1.0	mg/L	6010 (2)	10/10/94	GAG
Chromium, Diss. (Cr)	<0.01	0.01	mg/L	6010 (2)	10/13/94	GEF
Cobalt, Diss. (Co)	<0.03	0.03	mg/L	6010 (2)	10/13/94	GEF
Copper, Diss. (Cu)	<0.01	0.01	mg/L	6010 (2)	10/13/94	GEF
Iron, Diss. (Fe)	0.16	0.03	mg/L	6010 (2)	10/13/94	GEF
Lead, Diss. (Pb)	<0.05	0.05	mg/L	6010 (2)	10/13/94	GEF
Mercury, Total (Hg)	<0.0002	0.0002	mg/L	7470 (2)	10/13/94	BPB
Magnesium, Total (Mg)	41.9	0.1	mg/L	6010 (2)	10/10/94	GAG
Manganese, Diss. (Mn)	0.51	0.01	mg/L	6010 (2)	10/13/94	GEF
Molybdenum, Diss. (Mo)	<0.05	0.05	mg/L	6010 (2)	10/13/94	GEF
Nickel, Diss. (Ni)	<0.04	0.04	mg/L	6010 (2)	10/13/94	GEF
Potassium, Total (K)	8.6	0.1	mg/L	7610 (2)	10/12/94	BPB
Selenium, Diss. (Se)	<0.1	0.1	mg/L	6010 (2)	10/13/94	GEF
Silver, Diss. (Ag)	<0.01	0.01	mg/L	6010 (2)	10/13/94	GEF
Sodium, Total (Na)	1050	5	mg/L	6010 (2)	10/10/94	GAG

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

Core Laboratories
LABORATORY TESTS RESULTS
10/20/94

JOB NUMBER: 942450

CUSTOMER: GEOSCIENCE CONSULTANTS, LTD.

ATTN:
CLIENT I.D.: REXENE COC#8285

DATE SAMPLED.: 09/28/94

TIME SAMPLED.: 07:30

WORK DESCRIPTION.: 9409280730

LABORATORY I.D.: 942450-0001

DATE RECEIVED.: 09/29/94

TIME RECEIVED.: 10:00

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)	10/13/94	GEF
602 - VOLATILE AROMATIC ORGANICS		*1		602 (6)	10/12/94	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)	106	0	% Recovery	85-115% Limit		
Time Analyzed	0938	0				
PAH AND PHENOLS LIST BY 8270		*1		8270 (2)	10/10/94	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)	35	0	% Recovery	35-114% Limit		
2-Fluorobiphenyl (Surrogate)	49	0	% Recovery	43-116% Limit		
4-Terphenyl-d14 (Surrogate)	66	0	% Recovery	33-141% Limit		

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Core Laboratories
LABORATORY TESTS RESULTS
 10/20/94

JOB NUMBER: 942450 **CUSTOMER:** GEOSCIENCE CONSULTANTS, LTD. **ATTN:**
CLIENT I.D.: REXENE COC#8285
DATE SAMPLED: 09/28/94
TIME SAMPLED: 07:30
WORK DESCRIPTION: 9409280730

LABORATORY I.D.: 942450-0001
DATE RECEIVED: 09/29/94
TIME RECEIVED: 10:00
REMARKS: MW-3S

TEST DESCRIPTION	FINAL RESULT	LIMITS/*DILUTION	UNITS OF MEASURE	TEST METHOD	DATE	TECHN
Phenol-d6 (Surrogate)	31	0	% Recovery	10-94% Limit		
2-Fluorophenol (Surrogate)	24	0	% Recovery	21-100% Limit		
2,4,6-Tribromophenol (Surrogate)	44	0	% Recovery	10-123% Limit		
Time Analyzed	1258	0				
Date Extracted	10/04/94	0				

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Core Laboratories
LABORATORY TESTS RESULTS
 10/20/94

JOB NUMBER: 942450

CUSTOMER: GEOSCIENCE CONSULTANTS, LTD.

ATTN:

CLIENT I.D.: REXENE COC#8285

DATE SAMPLED: 09/28/94

TIME SAMPLED: 08:20

WORK DESCRIPTION: 9409280820

LABORATORY I.D.: 942450-0002

DATE RECEIVED: 09/29/94

TIME RECEIVED: 10:00

REMARKS: MW-3D

TEST DESCRIPTION	FINAL RESULT	LIMITS/*DILUTION	UNITS OF MEASURE	TEST METHOD	DATE	TECHN
Bicarbonate (Unfilt.)	460	5	mg/L	2320 B (3)	10/12/94	SLS
Chloride (Unfilt.)	4750	5	mg/L	325.2 (1)	10/17/94	DME
Nitrogen, Nitrate (Unfilt.)	<0.1	0.1	mg/L (as N)	353.2 (1)	09/30/94	DME
Sulfate (Unfilt.)	2330	250	mg/L	375.2 (1)	10/18/94	DME
Aluminum, Diss. (Al)	0.10	0.05	mg/L	6010 (2)	10/13/94	GEF
Arsenic, Diss. (As)	<0.05	0.05	mg/L	6010 (2)	10/13/94	GEF
Barium, Diss. (Ba)	0.06	0.01	mg/L	6010 (2)	10/13/94	GEF
Cadmium, Diss. (Cd)	<0.005	0.005	mg/L	6010 (2)	10/13/94	GEF
Calcium, Total (Ca)	396	1.0	mg/L	6010 (2)	10/10/94	GAG
Chromium, Diss. (Cr)	<0.01	0.01	mg/L	6010 (2)	10/13/94	GEF
Cobalt, Diss. (Co)	<0.03	0.03	mg/L	6010 (2)	10/13/94	GEF
Copper, Diss. (Cu)	<0.01	0.01	mg/L	6010 (2)	10/13/94	GEF
Iron, Diss. (Fe)	0.10	0.03	mg/L	6010 (2)	10/13/94	GEF
Lead, Diss. (Pb)	<0.05	0.05	mg/L	6010 (2)	10/13/94	GEF
Mercury, Total (Hg)	<0.0002	0.0002	mg/L	7470 (2)	10/13/94	BPB
Magnesium, Total (Mg)	224	0.5	mg/L	6010 (2)	10/10/94	GAG
Manganese, Diss. (Mn)	2.75	0.01	mg/L	6010 (2)	10/13/94	GEF
Molybdenum, Diss. (Mo)	<0.05	0.05	mg/L	6010 (2)	10/13/94	GEF
Nickel, Diss. (Ni)	<0.04	0.04	mg/L	6010 (2)	10/13/94	GEF
Potassium, Total (K)	21	5	mg/L	6010 (2)	10/10/94	GAG
Selenium, Diss. (Se)	<0.1	0.1	mg/L	6010 (2)	10/13/94	GEF
Silver, Diss. (Ag)	0.01	0.01	mg/L	6010 (2)	10/13/94	GEF
Sodium, Total (Na)	3230	20	mg/L	6010 (2)	10/10/94	GAG

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LABORATORY TESTS RESULTS 10/20/94

JOB NUMBER: 942450

CUSTOMER: GEOSCIENCE CONSULTANTS, LTD.

ATTN:
CLIENT I.D.: REXENE COC#8285

LABORATORY I.D.: 942450-0002

DATE SAMPLED: 09/28/94

DATE RECEIVED: 09/29/94

TIME SAMPLED: 08:20

TIME RECEIVED: 10:00

WORK DESCRIPTION: 9409280820

REMARKS: MW-3D

TEST DESCRIPTION	FINAL RESULT	LIMITS/*DILUTION	UNITS OF MEASURE	TEST METHOD	DATE	TECHN
Zinc, Diss. (Zn)	0.02	0.01	mg/L	6010 (2)	10/13/94	GEF
602 - VOLATILE AROMATIC ORGANICS		*1		602 (6)	10/12/94	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)	105	0	% Recovery	85-115% Limit		
Time Analyzed	1013	0				
PAH AND PHENOLS LIST BY 8270		*1		8270 (2)	10/10/94	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)	64	0	% Recovery	43-116% Limit		
4-Terphenyl-d14 (Surrogate)	62	0	% Recovery	33-141% Limit		

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LABORATORY TESTS RESULTS 10/20/94

JOB NUMBER: 942450

CUSTOMER: GEOSCIENCE CONSULTANTS, LTD.

ATTN:

CLIENT I.D.: REXENE COC#8285

DATE SAMPLED: 09/28/94

TIME SAMPLED: 08:20

WORK DESCRIPTION: 9409280820

LABORATORY I.D.: 942450-0002

DATE RECEIVED: 09/29/94

TIME RECEIVED: 10:00

REMARKS: MW-3D

TEST DESCRIPTION	FINAL RESULT	LIMITS/*DILUTION	UNITS OF MEASURE	TEST METHOD	DATE	TECHN
Phenol-d6 (Surrogate)	47	0	% Recovery	10-94% Limit		
2-Fluorophenol (Surrogate)	37	0	% Recovery	21-100% Limit		
2,4,6-Tribromophenol (Surrogate)	28	0	% Recovery	10-123% Limit		
Time Analyzed	1359	0				
Date Extracted	10/04/94	0				

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LABORATORY TESTS RESULTS 10/20/94

JOB NUMBER: 942450

CUSTOMER: GEOSCIENCE CONSULTANTS, LTD.

ATTN:

CLIENT I.D.: REXENE COC#8285

DATE SAMPLED: 09/28/94

TIME SAMPLED: 09:10

WORK DESCRIPTION: 9409280910

LABORATORY I.D.: 942450-0003

DATE RECEIVED: 09/29/94

TIME RECEIVED: 10:00

REMARKS: MW-6S

TEST DESCRIPTION	FINAL RESULT	LIMITS/*DILUTION	UNITS OF MEASURE	TEST METHOD	DATE	TECHN
Bicarbonate (Unfilt.)	2550	5	mg/L	2320 B (3)	10/12/94	SLS
Chloride (Unfilt.)	1650	10	mg/L	325.2 (1)	10/17/94	DME
Nitrogen, Nitrate (Unfilt.)	<0.1	0.1	mg/L (as N)	353.2 (1)	09/30/94	DME
Sulfate (Unfilt.)	130	10	mg/L	375.2 (1)	10/18/94	DME
Aluminum, Diss. (Al)	0.10	0.05	mg/L	6010 (2)	10/13/94	GEF
Arsenic, Diss. (As)	0.48	0.05	mg/L	6010 (2)	10/13/94	GEF
Barium, Diss. (Ba)	0.98	0.01	mg/L	6010 (2)	10/13/94	GEF
Cadmium, Diss. (Cd)	<0.005	0.005	mg/L	6010 (2)	10/13/94	GEF
Calcium, Total (Ca)	155	1.0	mg/L	6010 (2)	10/10/94	GAG
Chromium, Diss. (Cr)	<0.01	0.01	mg/L	6010 (2)	10/13/94	GEF
Cobalt, Diss. (Co)	<0.03	0.03	mg/L	6010 (2)	10/13/94	GEF
Copper, Diss. (Cu)	<0.01	0.01	mg/L	6010 (2)	10/13/94	GEF
Iron, Diss. (Fe)	4.68	0.03	mg/L	6010 (2)	10/13/94	GEF
Lead, Diss. (Pb)	<0.05	0.05	mg/L	6010 (2)	10/13/94	GEF
Mercury, Total (Hg)	0.0003	0.0002	mg/L	7470 (2)	10/13/94	BPB
Magnesium, Total (Mg)	125	0.5	mg/L	6010 (2)	10/10/94	GAG
Manganese, Diss. (Mn)	0.59	0.01	mg/L	6010 (2)	10/13/94	GEF
Molybdenum, Diss. (Mo)	<0.05	0.05	mg/L	6010 (2)	10/13/94	GEF
Nickel, Diss. (Ni)	<0.04	0.04	mg/L	6010 (2)	10/13/94	GEF
Potassium, Total (K)	25	5	mg/L	6010 (2)	10/10/94	GAG
Selenium, Diss. (Se)	<0.1	0.1	mg/L	6010 (2)	10/13/94	GEF
Silver, Diss. (Ag)	0.01	0.01	mg/L	6010 (2)	10/13/94	GEF
Sodium, Total (Na)	2980	20	mg/L	6010 (2)	10/10/94	GAG

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LABORATORY TESTS RESULTS 10/20/94

JOB NUMBER: 942450

CUSTOMER: GEOSCIENCE CONSULTANTS, LTD.

ATTN:
CLIENT I.D.: REXENE COC#8285

DATE SAMPLED.: 09/28/94

TIME SAMPLED.: 09:10

WORK DESCRIPTION.: 9409280910

LABORATORY I.D.: 942450-0003

DATE RECEIVED.: 09/29/94

TIME RECEIVED.: 10:00

REMARKS.: MW-6S

TEST DESCRIPTION	FINAL RESULT	LIMITS/*DILUTION	UNITS OF MEASURE	TEST METHOD	DATE	TECHN
Zinc, Diss. (Zn)	0.02	0.01	mg/L	6010 (2)	10/13/94	GEF
602 - VOLATILE AROMATIC ORGANICS		*1		602 (6)	10/12/94	JHT
Benzene	4.8	0.5	ug/L			
Toluene	2.8	0.5	ug/L			
Ethyl benzene	34	0.5	ug/L			
Xylenes	16	0.5	ug/L			
4-Bromofluorobenzene (surrogate)	105	0	% Recovery	85-115% Limit		
Time Analyzed	1159	0				
PAH AND PHENOLS LIST BY 8270		*1		8270 (2)	10/10/94	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)	47	0	% Recovery	35-114% Limit		
2-Fluorobiphenyl (Surrogate)	46	0	% Recovery	43-116% Limit		
4-Terphenyl-d14 (Surrogate)	36	0	% Recovery	33-141% Limit		

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Core Laboratories
LABORATORY TESTS RESULTS
10/20/94

JOB NUMBER: 942450

CUSTOMER: GEOSCIENCE CONSULTANTS, LTD.

ATTN:
CLIENT I.D.: REXENE COC#8285

DATE SAMPLED: 09/28/94

TIME SAMPLED: 09:10

WORK DESCRIPTION: 9409280910

LABORATORY I.D.: 942450-0003

DATE RECEIVED: 09/29/94

TIME RECEIVED: 10:00

REMARKS: MW-6S

TEST DESCRIPTION	FINAL RESULT	LIMITS/*DILUTION	UNITS OF MEASURE	TEST METHOD	DATE	TECHN
Phenol-d6 (Surrogate)	30	0	% Recovery	10-94% Limit		
2-Fluorophenol (Surrogate)	55	0	% Recovery	21-100% Limit		
2,4,6-Tribromophenol (Surrogate)	49	0	% Recovery	10-123% Limit		
Time Analyzed	1500	0				
Date Extracted	10/04/94	0				
Semi-Volatile Organic - Surrogates		*1		8270(2)/625(6)	10/11/94	JMC
Nitrobenzene-d5 (Surrogate)	73	0	% Recovery	35-114% Limit		
2-Fluorobiphenyl (Surrogate)	48	0	% Recovery	43-116% Limit		
4-Terphenyl-d14 (Surrogate)	43	0	% Recovery	33-141% Limit		
Phenol-d6 (Surrogate)	40	0	% Recovery	10-94% Limit		
2-Fluorophenol (Surrogate)	67	0	% Recovery	21-100% Limit		
2,4,6-Tribromophenol (Surrogate)	53	0	% Recovery	10-123% Limit		
Date Extracted	10/04/94	0				
Time Analyzed	2145	0				

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LABORATORY TESTS RESULTS 10/20/94

JOB NUMBER: 942450

CUSTOMER: GEOSCIENCE CONSULTANTS, LTD.

ATTN:

CLIENT I.D.: REXEME COC#8285

DATE SAMPLED: 09/28/94

TIME SAMPLED: 10:00

WORK DESCRIPTION: 9409281000

LABORATORY I.D.: 942450-0004

DATE RECEIVED: 09/29/94

TIME RECEIVED: 10:00

REMARKS: MW-60

TEST DESCRIPTION	FINAL RESULT	LIMITS/*DILUTION	UNITS OF MEASURE	TEST METHOD	DATE	TECHN
Bicarbonate (Unfilt.)	506	5	mg/L	2320 B (3)	10/12/94	SLS
Chloride (Unfilt.)	5000	25	mg/L	325.2 (1)	10/17/94	DME
Nitrogen, Nitrate (Unfilt.)	<0.1	0.1	mg/L (as N)	353.2 (1)	09/30/94	DME
Sulfate (Unfilt.)	2150	250	mg/L	375.2 (1)	10/18/94	DME
Aluminum, Diss. (Al)	0.09	0.05	mg/L	6010 (2)	10/13/94	GEF
Arsenic, Diss. (As)	<0.05	0.05	mg/L	6010 (2)	10/13/94	GEF
Barium, Diss. (Ba)	0.05	0.01	mg/L	6010 (2)	10/13/94	GEF
Cadmium, Diss. (Cd)	<0.005	0.005	mg/L	6010 (2)	10/13/94	GEF
Calcium, Total (Ca)	411	1.0	mg/L	6010 (2)	10/10/94	GAG
Chromium, Diss. (Cr)	<0.01	0.01	mg/L	6010 (2)	10/13/94	GEF
Cobalt, Diss. (Co)	<0.03	0.03	mg/L	6010 (2)	10/13/94	GEF
Copper, Diss. (Cu)	<0.01	0.01	mg/L	6010 (2)	10/13/94	GEF
Iron, Diss. (Fe)	0.28	0.03	mg/L	6010 (2)	10/13/94	GEF
Lead, Diss. (Pb)	<0.05	0.05	mg/L	6010 (2)	10/13/94	GEF
Mercury, Total (Hg)	<0.0002	0.0002	mg/L	7470 (2)	10/13/94	BPB
Magnesium, Total (Mg)	190	0.5	mg/L	6010 (2)	10/10/94	GAG
Manganese, Diss. (Mn)	3.10	0.01	mg/L	6010 (2)	10/13/94	GEF
Molybdenum, Diss. (Mo)	<0.05	0.05	mg/L	6010 (2)	10/13/94	GEF
Nickel, Diss. (Ni)	<0.04	0.04	mg/L	6010 (2)	10/13/94	GEF
Potassium, Total (K)	21	5	mg/L	6010 (2)	10/10/94	GAG
Selenium, Diss. (Se)	<0.1	0.1	mg/L	6010 (2)	10/13/94	GEF
Silver, Diss. (Ag)	<0.01	0.01	mg/L	6010 (2)	10/13/94	GEF
Sodium, Total (Na)	3270	20	mg/L	6010 (2)	10/10/94	GAG

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LABORATORY TESTS RESULTS

10/20/94

JOB NUMBER: 942450 CUSTOMER: GEOSCIENCE CONSULTANTS, LTD.

ATTN:

CLIENT I.D.: REXENE COC#8285

DATE SAMPLED: 09/28/94

TIME SAMPLED: 10:00

WORK DESCRIPTION: 9409281000

LABORATORY I.D.: 942450-0004

DATE RECEIVED: 09/29/94

TIME RECEIVED: 10:00

REMARKS: MW-6D

TEST DESCRIPTION	FINAL RESULT	LIMITS/*DILUTION	UNITS OF MEASURE	TEST METHOD	DATE	TECHN
Zinc, Diss. (Zn)	0.02	0.01	mg/L	6010 (2)	10/13/94	GEF
602 - VOLATILE AROMATIC ORGANICS		*1		602 (6)	10/12/94	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)	105	0	% Recovery	85-115% Limit		
Time Analyzed	1123	0				
PAH AND PHENOLS LIST BY 8270		*1		8270 (2)	10/10/94	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)	57	0	% Recovery	35-114% Limit		
2-Fluorobiphenyl (Surrogate)	66	0	% Recovery	43-116% Limit		
4-Terphenyl-d14 (Surrogate)	81	0	% Recovery	33-141% Limit		

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Core Laboratories

LABORATORY TESTS RESULTS 10/20/94

JOB NUMBER: 942450

CUSTOMER: GEOSCIENCE CONSULTANTS, LTD.

ATTN:

CLIENT I.D.: REXENE COC#8285

DATE SAMPLED: 09/28/94

TIME SAMPLED: 10:00

WORK DESCRIPTION: 9409281000

LABORATORY I.D.: 942450-0004

DATE RECEIVED: 09/29/94

TIME RECEIVED: 10:00

REMARKS: MW-6D

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)	30	0	% Recovery	21-100% Limit		
2,4,6-Tribromophenol (Surrogate)	43	0	% Recovery	10-123% Limit		
Time Analyzed	1602	0				
Date Extracted	10/04/94	0				

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Core Laboratories
LABORATORY TESTS RESULTS
 10/20/94

JOB NUMBER: 942450 CUSTOMER: GEOSCIENCE CONSULTANTS, LTD. ATTN:

 CLIENT I.D.: REXENE COC#8285 LABORATORY I.D.: 942450-0005
 DATE SAMPLED: 09/28/94 DATE RECEIVED: 09/29/94
 TIME SAMPLED: 10:10 TIME RECEIVED: 10:00
 WORK DESCRIPTION: 9409281010 REMARKS: TRIP BLANK

TEST DESCRIPTION	FINAL RESULT	LIMITS/*DILUTION	UNITS OF MEASURE	TEST METHOD	DATE	TECHN
602 - VOLATILE AROMATIC ORGANICS		*1		602 (6)	10/12/94	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)	105	0	% Recovery	85-115% Limit		
Time Analyzed	0902	0				

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LABORATORY TESTS RESULTS 10/20/94

JOB NUMBER: 942450

CUSTOMER: GEOSCIENCE CONSULTANTS, LTD.

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

LABORATORY I.D....: 942450-0006
DATE RECEIVED.....: / /
TIME RECEIVED.....: :
REMARKS.....:

TEST DESCRIPTION	FINAL RESULT	LIMITS/*DILUTION	UNITS OF MEASURE	TEST METHOD	DATE	TECHN
602 - VOLATILE AROMATIC ORGANICS		*1		602 (6)	10/12/94	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)	105	0	% Recovery	85-115% Limit		
Time Analyzed	0827	0				
PAH AND PHENOLS LIST BY 8270		*1		8270 (2)	10/10/94	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)	71	0	% Recovery	43-116% Limit		
4-Terphenyl-d14 (Surrogate)	89	0	% Recovery	33-141% Limit		
Phenol-d6 (Surrogate)	49	0	% Recovery	10-94% Limit		
2-Fluorophenol (Surrogate)	48	0	% Recovery	21-100% Limit		

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Core Laboratories

LABORATORY TESTS RESULTS 10/20/94

JOB NUMBER: 942450

CUSTOMER: GEOSCIENCE CONSULTANTS, LTD.

ATTN:

CLIENT I.D.....:

DATE SAMPLED.....: / /

TIME SAMPLED.....: :

WORK DESCRIPTION...: METHOD BLANK

LABORATORY I.D....: 942450-0006

DATE RECEIVED.....: / /

TIME RECEIVED.....: :

REMARKS.....:

TEST DESCRIPTION	FINAL RESULT	LIMITS/*DILUTION	UNITS OF MEASURE	TEST METHOD	DATE	TECHN
2,4,6-Tribromophenol (Surrogate)	67	0	% Recovery	10-123% Limit		
Time Analyzed	1156	0				
Date Extracted	10/04/94	0				

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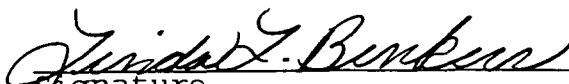
Core Laboratories

CORE LABORATORIES
ANALYTICAL REPORTJob Number: 942434
Prepared For:

GEOSCIENCE CONSULTANTS, LTD.

505 MARQUETTE NW, SUITE 1100
ALBUQUERQUE, NM 87102

Date: 10/19/94


Signature10-19-94
Date:

Name: Linda L. Benkers

Core Laboratories
10703 East Bethany Drive
Aurora, CO 80014

Title: QA/QC COORDINATOR



Environmental Science
and Engineering
A BOM International Company

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Las Cruces, NM 88004
(505) 524-5353
FAX: (505) 524-5315

No 8289

Chain of Custody

Date 9/27/94 Page 1 of 1

Lab Name **CORE LABORATORIES**
Address **10703 East Bethany Drive**
Aurora, CO 80014-2696
Telephone **303/751-1780**

Sampler (SIGNATURES)
D. NEE
M. H.

Sample Number	Matrix	Location
9409270855	H2O	MW-4
9409270945	H2O	MW-2
9409271030	H2O	MW-7
9409271115	H2O	MW-17
9409271130	H2O	MW-17A
9409271225	H2O	MW-14
9409271315	H2O	MW-15
9409271400	H2O	MW-12
9409271440	H2O	MW-1
9409271520	H2O	MW-18/9S

Analysis Request																				Number of Containers
Volatiles 601/8010	Aromatic Volatiles 602/8020	Phenols, Sub Phenols 504/8040	Pesticides/PCB 508/8080	Polynuclear Aromatic Hydrocarbons 610/8310	Volatile Compounds GC/MS 624/8240	Base/Neutral Compounds GC/MS 625/8270	Total Organic Carbon (TOC) 415/9060	Total Organic Halides (TOX) 9020	Petroleum Hydrocarbons 418.1 TPH/8TEX Modified 8015	TCF Vol. Semi Vol. Herbicides, Pesticides	TCF Metals	PCRA Metals (8)	Priority Pollutant Metals (13)	CAM Metals (18) TMS/STC	Flash Point	Corrosivity	Reactivity	Oil & Grease	Cyanide Total/Ambient	
3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3
PER ANNETTE MONTOYA - CHANGED TO 9/28/94																				

Project Information		Sample Receipt		Relinquished By		Relinquished By		Relinquished By	
Project REVENUE	Total No. of Containers	Signature DAVID NEE	Signature DAVID NEE	Signature DAVID NEE	Signature DAVID NEE	Signature DAVID NEE	Signature DAVID NEE	Signature DAVID NEE	Signature DAVID NEE
Project Director TRENT T.	Chain of Custody Seals	(Printed Name) DAVID NEE	(Printed Name) DAVID NEE	(Printed Name) DAVID NEE	(Printed Name) DAVID NEE	(Printed Name) DAVID NEE	(Printed Name) DAVID NEE	(Printed Name) DAVID NEE	(Printed Name) DAVID NEE
Charge Code No. 3031.004	Rec'd Good Condition/Cold	(Date) 9/27/94	(Date) 9/27/94	(Date) 9/27/94	(Date) 9/27/94	(Date) 9/27/94	(Date) 9/27/94	(Date) 9/27/94	(Date) 9/27/94
Shipping ID. No. 0214090984	Conforms to Record	(Company) GCL	(Company) GCL	(Company) GCL	(Company) GCL	(Company) GCL	(Company) GCL	(Company) GCL	(Company) GCL
Via: FED X	Lab No.	Received By Amey Feary	Received By Amey Feary	Received By Amey Feary	Received By Amey Feary	Received By Amey Feary	Received By Amey Feary	Received By Amey Feary	Received By Amey Feary
Special Instructions/Comments:		(Signature) Amey Feary	(Signature) Amey Feary	(Signature) Amey Feary	(Signature) Amey Feary	(Signature) Amey Feary	(Signature) Amey Feary	(Signature) Amey Feary	(Signature) Amey Feary
		(Printed Name) Amey Feary	(Printed Name) Amey Feary	(Printed Name) Amey Feary	(Printed Name) Amey Feary	(Printed Name) Amey Feary	(Printed Name) Amey Feary	(Printed Name) Amey Feary	(Printed Name) Amey Feary
		(Date) 9/28/94	(Date) 9/28/94	(Date) 9/28/94	(Date) 9/28/94	(Date) 9/28/94	(Date) 9/28/94	(Date) 9/28/94	(Date) 9/28/94
		(Company) GCL	(Company) GCL	(Company) GCL	(Company) GCL	(Company) GCL	(Company) GCL	(Company) GCL	(Company) GCL

Distribution: White, Canary-Laboratory • Pink, GCL

Core Laboratories

SAMPLE DELIVERY GROUP NARRATIVE

October 19, 1994

Customer: Geoscience Consultants, Ltd
Project: Rexene COC #8289
Core Laboratories Project Number: 942434

On 9-28-94 Core Laboratories received samples for analysis. The following information is pertinent to the interpretation of the data package.

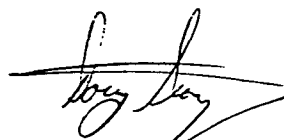
Organic Analysis:

During analysis for semivolatile organics on these samples, 1 of 6 internal standards had a low percent recovery for these samples. Sample 7 had 2 of 6 internal standards with low recoveries. All these samples were reanalyzed with similar results. These samples had a matrix problem present that interfered with the later eluting internal standards.

The result for the pentachlorophenol spike blank analyzed with these sample is incorrectly reported as 8%. This result is below the EPA recommended recovery criteria. The correct result is 9% but due to rounding limitations in Core Laboratories LIMS system 8% is reported.



Linda L. Benkers
QA/QC Coordinator



Douglas Georgic
Laboratory Supervisor

Core Laboratories

Sample Delivery Group Narrative

October 14, 1994

Customer: Geoscience Consultants, Inc.

Project: Rexene COC#8289

Core Laboratories Project Number: 942434

The following information is pertinent to the interpretation of this data package.

During the analysis and subsequent data review, it was noted that one of the method duplicates for cadmium on 942434-010 (9409271520) was slightly outside of the acceptance range for method duplicates. The raw data was examined and no definitive answer was found for the variance. The reported values were re-verified from the raw data. Under a normal CLP reporting format, this cadmium value and all associated cadmium values would be flagged with an "*".



Linda L. Benkers
QA/QC Coordinator



Timothy L. Kellogg
Laboratory Supervisor



Core Laboratories

LABORATORY TESTS RESULTS 10/19/94

JOB NUMBER: 942434

CUSTOMER: GEOSCIENCE CONSULTANTS, LTD.

ATTN:

CLIENT I.D.: REXENE COC#8289

DATE SAMPLED: 09/27/94

TIME SAMPLED: 08:55

WORK DESCRIPTION: 9409270855

LABORATORY I.D.: 942434-0001

DATE RECEIVED: 09/28/94

TIME RECEIVED: 10:15

REMARKS: MW-4

TEST DESCRIPTION	FINAL RESULT	LIMITS/*DILUTION	UNITS OF MEASURE	TEST METHOD	DATE	TECHN
Bicarbonate (Unfilt.)	1470	5	mg/L	2320 B (3)	10/08/94	KDS
Chloride (Unfilt.)	4360	25	mg/L	325.2 (1)	10/17/94	DME
Nitrogen, Nitrate (Unfilt.)	0.4	0.1	mg/L (as N)	353.2 (1)	09/29/94	DME
Sulfate (Unfilt.)	364	50	mg/L	375.2 (1)	10/18/94	DME
Aluminum, Diss. (Al)	0.11	0.05	mg/L	6010 (2)	10/04/94	GEF
Arsenic, Diss. (As)	0.11	0.05	mg/L	6010 (2)	10/04/94	GEF
Barium, Diss. (Ba)	0.39	0.01	mg/L	6010 (2)	10/04/94	GEF
Cadmium, Diss. (Cd)	<0.005	0.005	mg/L	6010 (2)	10/04/94	GEF
Calcium, Total (Ca)	370	5	mg/L	6010 (2)	09/30/94	WGL
Chromium, Diss. (Cr)	<0.01	0.01	mg/L	6010 (2)	10/04/94	GEF
Cobalt, Diss. (Co)	<0.03	0.03	mg/L	6010 (2)	10/04/94	GEF
Copper, Diss. (Cu)	<0.01	0.01	mg/L	6010 (2)	10/04/94	GEF
Iron, Diss. (Fe)	0.86	0.03	mg/L	6010 (2)	10/04/94	GEF
Lead, Diss. (Pb)	<0.05	0.05	mg/L	6010 (2)	10/04/94	GEF
Mercury, Total (Hg)	<0.0002	0.0002	mg/L	7470 (2)	10/13/94	BPB
Magnesium, Total (Mg)	225	0.1	mg/L	6010 (2)	09/30/94	WGL
Manganese, Diss. (Mn)	2.81	0.01	mg/L	6010 (2)	10/04/94	GEF
Molybdenum, Diss. (Mo)	<0.05	0.05	mg/L	6010 (2)	10/04/94	GEF
Nickel, Diss. (Ni)	<0.04	0.04	mg/L	6010 (2)	10/04/94	GEF
Potassium, Total (K)	65	5	mg/L	6010 (2)	09/30/94	WGL
Selenium, Diss. (Se)	<0.1	0.1	mg/L	6010 (2)	10/04/94	GEF
Silver, Diss. (Ag)	<0.01	0.01	mg/L	6010 (2)	10/04/94	GEF
Sodium, Total (Na)	2340	20	mg/L	6010 (2)	09/30/94	WGL

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Core Laboratories
LABORATORY TESTS RESULTS
10/19/94

JOB NUMBER: 942434

CUSTOMER: GEOSCIENCE CONSULTANTS, LTD.

ATTN:
CLIENT I.D.: REXENE COC#8289

DATE SAMPLED 09/27/94

TIME SAMPLED 08:55

WORK DESCRIPTION....: 9409270855

LABORATORY I.D....: 942434-0001

DATE RECEIVED.....: 09/28/94

TIME RECEIVED.....: 10:15

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)	10/04/94	GEF
602 - VOLATILE AROMATIC ORGANICS		*20		602 (6)	10/11/94	JHT
Benzene	2000	10	ug/L			
Toluene	ND	10	ug/L			
Ethyl benzene	ND	10	ug/L			
Xylenes	ND	10	ug/L			
4-Bromofluorobenzene (surrogate)	94	0	% Recovery	85-115% Limit		
Time Analyzed	1239	0				
PAH AND PHENOLS LIST BY 8270		*1		8270 (2)	10/14/94	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	58	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)	79	0	% Recovery	35-114% Limit		
2-Fluorobiphenyl (Surrogate)	69	0	% Recovery	43-116% Limit		
4-Terphenyl-d14 (Surrogate)	60	0	% Recovery	33-141% Limit		

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Core Laboratories
LABORATORY TESTS RESULTS
10/19/94
JOB NUMBER: 942434 **CUSTOMER:** GEOSCIENCE CONSULTANTS, LTD. **ATTN:**
CLIENT I.D.....: REXENE COC#8289
DATE SAMPLED.....: 09/27/94
TIME SAMPLED.....: 08:55
WORK DESCRIPTION....: 9409270855

LABORATORY I.D....: 942434-0001
DATE RECEIVED.....: 09/28/94
TIME RECEIVED.....: 10:15
REMARKS.....: MW-4

TEST DESCRIPTION	FINAL RESULT	LIMITS/*DILUTION	UNITS OF MEASURE	TEST METHOD	DATE	TECHN
Phenol-d6 (Surrogate)	46	0	% Recovery	10-94% Limit		
2-Fluorophenol (Surrogate)	31	0	% Recovery	21-100% Limit		
2,4,6-Tribromophenol (Surrogate)	69	0	% Recovery	10-123% Limit		
Time Analyzed	1525	0				
Date Extracted	10/02/94	0				
Semi-Volatile Organic - Surrogates		*1		8270(2)/625(6)	10/17/94	JMC
Nitrobenzene-d5 (Surrogate)	84	0	% Recovery	35-114% Limit		
2-Fluorobiphenyl (Surrogate)	57	0	% Recovery	43-116% Limit		
4-Terphenyl-d14 (Surrogate)	67	0	% Recovery	33-141% Limit		
Phenol-d6 (Surrogate)	45	0	% Recovery	10-94% Limit		
2-Fluorophenol (Surrogate)	31	0	% Recovery	21-100% Limit		
2,4,6-Tribromophenol (Surrogate)	65	0	% Recovery	10-123% Limit		
Date Extracted	10/02/94	0				
Time Analyzed	2110	0				

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Core Laboratories

LABORATORY TESTS RESULTS 10/19/94

JOB NUMBER: 942434

CUSTOMER: GEOSCIENCE CONSULTANTS, LTD.

ATTN:

CLIENT I.D.: REXENE COC#8289

DATE SAMPLED: 09/27/94

TIME SAMPLED: 09:45

WORK DESCRIPTION: 9409270945

LABORATORY I.D.: 942434-0002

DATE RECEIVED: 09/28/94

TIME RECEIVED: 10:15

REMARKS: MW-2

TEST DESCRIPTION	FINAL RESULT	LIMITS/*DILUTION	UNITS OF MEASURE	TEST METHOD	DATE	TECHN
Bicarbonate (Unfilt.)	671	5	mg/L	2320 B (3)	10/08/94	KDS
Chloride (Unfilt.)	9600	25	mg/L	325.2 (1)	10/17/94	DME
Nitrogen, Nitrate (Unfilt.)	0.3	0.1	mg/L (as N)	353.2 (1)	09/29/94	DME
Sulfate (Unfilt.)	2440	200	mg/L	375.2 (1)	10/18/94	DME
Aluminum, Diss. (Al)	0.12	0.05	mg/L	6010 (2)	10/04/94	GEF
Arsenic, Diss. (As)	0.05	0.05	mg/L	6010 (2)	10/04/94	GEF
Barium, Diss. (Ba)	0.03	0.01	mg/L	6010 (2)	10/04/94	GEF
Cadmium, Diss. (Cd)	<0.005	0.005	mg/L	6010 (2)	10/04/94	GEF
Calcium, Total (Ca)	985	5	mg/L	6010 (2)	09/30/94	WGL
Chromium, Diss. (Cr)	<0.01	0.01	mg/L	6010 (2)	10/04/94	GEF
Cobalt, Diss. (Co)	<0.03	0.03	mg/L	6010 (2)	10/04/94	GEF
Copper, Diss. (Cu)	<0.01	0.01	mg/L	6010 (2)	10/04/94	GEF
Iron, Diss. (Fe)	0.50	0.03	mg/L	6010 (2)	10/04/94	GEF
Lead, Diss. (Pb)	<0.05	0.05	mg/L	6010 (2)	10/04/94	GEF
Mercury, Total (Hg)	<0.0002	0.0002	mg/L	7470 (2)	10/13/94	BPB
Magnesium, Total (Mg)	470	5	mg/L	6010 (2)	09/30/94	WGL
Manganese, Diss. (Mn)	8.07	0.01	mg/L	6010 (2)	10/04/94	GEF
Molybdenum, Diss. (Mo)	<0.05	0.05	mg/L	6010 (2)	10/04/94	GEF
Nickel, Diss. (Ni)	<0.04	0.04	mg/L	6010 (2)	10/04/94	GEF
Potassium, Total (K)	98	5	mg/L	6010 (2)	09/30/94	WGL
Selenium, Diss. (Se)	<0.1	0.1	mg/L	6010 (2)	10/04/94	GEF
Silver, Diss. (Ag)	<0.01	0.01	mg/L	6010 (2)	10/04/94	GEF
Sodium, Total (Na)	3140	20	mg/L	6010 (2)	09/30/94	WGL

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Core Laboratories
LABORATORY TESTS RESULTS
 10/19/94

JOB NUMBER: 942434 CUSTOMER: GEOSCIENCE CONSULTANTS, LTD. ATTN:

 CLIENT I.D.: REXENE COC#8289 LABORATORY I.D.: 942434-0002
 DATE SAMPLED: 09/27/94 DATE RECEIVED: 09/28/94
 TIME SAMPLED: 09:45 TIME RECEIVED: 10:15
 WORK DESCRIPTION: 9409270945 REMARKS: MW-2

TEST DESCRIPTION	FINAL RESULT	LIMITS/*DILUTION	UNITS OF MEASURE	TEST METHOD	DATE	TECHN
Zinc, Diss. (Zn)	0.03	0.01	mg/L	6010 (2)	10/04/94	GEF
602 - VOLATILE AROMATIC ORGANICS		*1		602 (6)	10/10/94	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)	108	0	% Recovery	85-115% Limit		
Time Analyzed	1721	0				
PAH AND PHENOLS LIST BY 8270		*1		8270 (2)	10/14/94	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)	70	0	% Recovery	35-114% Limit		
2-Fluorobiphenyl (Surrogate)	72	0	% Recovery	43-116% Limit		
4-Terphenyl-d14 (Surrogate)	72	0	% Recovery	33-141% Limit		

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LABORATORY TESTS RESULTS 10/19/94

JOB NUMBER: 942434

CUSTOMER: GEOSCIENCE CONSULTANTS, LTD.

ATTN:

CLIENT I.D.: REXENE COC#8289

DATE SAMPLED: 09/27/94

TIME SAMPLED: 09:45

WORK DESCRIPTION: 9409270945

LABORATORY I.D.: 942434-0002

DATE RECEIVED: 09/28/94

TIME RECEIVED: 10:15

REMARKS: MW-2

TEST DESCRIPTION	FINAL RESULT	LIMITS/DILUTION	UNITS OF MEASURE	TEST METHOD	DATE	TECHN
Phenol-d6 (Surrogate)	64	0	% Recovery	10-94% Limit		
2-Fluorophenol (Surrogate)	42	0	% Recovery	21-100% Limit		
2,4,6-Tribromophenol (Surrogate)	74	0	% Recovery	10-123% Limit		
Time Analyzed	1627	0				
Date Extracted	10/02/94	0				

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LABORATORY TESTS RESULTS
 10/19/94

JOB NUMBER: 942434

CUSTOMER: GEOSCIENCE CONSULTANTS, LTD.

ATTN:

CLIENT I.D.: REXENE COC#8289

DATE SAMPLED: 09/27/94

TIME SAMPLED: 10:30

WORK DESCRIPTION: 9409271030

LABORATORY I.D.: 942434-0003

DATE RECEIVED: 09/28/94

TIME RECEIVED: 10:15

REMARKS: MW-7

TEST DESCRIPTION	FINAL RESULT	LIMITS/*DILUTION	UNITS OF MEASURE	TEST METHOD	DATE	TECHN
Bicarbonate (Unfilt.)	1300	5	mg/L	2320 B (3)	10/10/94	RPK
Chloride (Unfilt.)	1580	4.0	mg/L	325.2 (1)	10/04/94	DME
Nitrogen, Nitrate (Unfilt.)	0.1	0.1	mg/L (as N)	353.2 (1)	09/29/94	DME
Sulfate (Unfilt.)	548	100	mg/L	375.2 (1)	10/18/94	DME
Aluminum, Diss. (Al)	0.11	0.05	mg/L	6010 (2)	10/04/94	GEF
Arsenic, Diss. (As)	0.28	0.05	mg/L	6010 (2)	10/04/94	GEF
Barium, Diss. (Ba)	0.36	0.01	mg/L	6010 (2)	10/04/94	GEF
Cadmium, Diss. (Cd)	<0.005	0.005	mg/L	6010 (2)	10/04/94	GEF
Calcium, Total (Ca)	320	2	mg/L	6010 (2)	09/30/94	WGL
Chromium, Diss. (Cr)	<0.01	0.01	mg/L	6010 (2)	10/04/94	GEF
Cobalt, Diss. (Co)	<0.03	0.03	mg/L	6010 (2)	10/04/94	GEF
Copper, Diss. (Cu)	<0.01	0.01	mg/L	6010 (2)	10/04/94	GEF
Iron, Diss. (Fe)	0.97	0.03	mg/L	6010 (2)	10/04/94	GEF
Lead, Diss. (Pb)	<0.05	0.05	mg/L	6010 (2)	10/04/94	GEF
Mercury, Total (Hg)	0.0005	0.0002	mg/L	7470 (2)	10/13/94	BPB
Magnesium, Total (Mg)	73.0	0.1	mg/L	6010 (2)	09/30/94	WGL
Manganese, Diss. (Mn)	0.87	0.01	mg/L	6010 (2)	10/04/94	GEF
Molybdenum, Diss. (Mo)	<0.05	0.05	mg/L	6010 (2)	10/04/94	GEF
Nickel, Diss. (Ni)	<0.04	0.04	mg/L	6010 (2)	10/04/94	GEF
Potassium, Total (K)	41.5	0.1	mg/L	6010 (2)	09/30/94	WGL
Selenium, Diss. (Se)	<0.1	0.1	mg/L	6010 (2)	10/04/94	GEF
Silver, Diss. (Ag)	<0.01	0.01	mg/L	6010 (2)	10/04/94	GEF
Sodium, Total (Na)	1230	10	mg/L	6010 (2)	09/30/94	WGL

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Core Laboratories
LABORATORY TESTS RESULTS
10/19/94

JOB NUMBER: 942434

CUSTOMER: GEOSCIENCE CONSULTANTS, LTD.

ATTN:
CLIENT I.D.: REXENE COC#8289

LABORATORY I.D.: 942434-0003

DATE SAMPLED: 09/27/94

DATE RECEIVED: 09/28/94

TIME SAMPLED: 10:30

TIME RECEIVED: 10:15

WORK DESCRIPTION: 9409271030

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)	10/04/94	GEF
602 - VOLATILE AROMATIC ORGANICS		*1		602 (6)	10/10/94	JHT
Benzene	ND	0.5	ug/L			
Toluene	ND	0.5	ug/L			
Ethyl benzene	3.6	0.5	ug/L			
Xylenes	1.3	0.5	ug/L			
4-Bromofluorobenzene (surrogate)	109	0	% Recovery	85-115% Limit		
Time Analyzed	1756	0				
PAH AND PHENOLS LIST BY 8270		*1		8270 (2)	10/14/94	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)	100	0	% Recovery	35-114% Limit		
2-Fluorobiphenyl (Surrogate)	69	0	% Recovery	43-116% Limit		
4-Terphenyl-d14 (Surrogate)	68	0	% Recovery	33-141% Limit		

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LABORATORY TESTS RESULTS
10/19/94

JOB NUMBER: 942434

CUSTOMER: GEOSCIENCE CONSULTANTS, LTD.

ATTN:
CLIENT I.D.....: REXENE COC#8289

LABORATORY I.D....: 942434-0003

DATE SAMPLED.....: 09/27/94

DATE RECEIVED.....: 09/28/94

TIME SAMPLED.....: 10:30

TIME RECEIVED.....: 10:15

WORK DESCRIPTION....: 9409271030

REMARKS.....: MW-7

TEST DESCRIPTION	FINAL RESULT	LIMITS/*DILUTION	UNITS OF MEASURE	TEST METHOD	DATE	TECHN
Phenol-d6 (Surrogate)	47	0	% Recovery	10-94% Limit		
2-Fluorophenol (Surrogate)	62	0	% Recovery	21-100% Limit		
2,4,6-Tribromophenol (Surrogate)	89	0	% Recovery	10-123% Limit		
Time Analyzed	1728	0				
Date Extracted	10/02/94	0				
Semi-Volatile Organic - Surrogates		*1		8270(2)/625(6)	10/17/94	JMC
Nitrobenzene-d5 (Surrogate)	100	0	% Recovery	35-114% Limit		
2-Fluorobiphenyl (Surrogate)	62	0	% Recovery	43-116% Limit		
4-Terphenyl-d14 (Surrogate)	68	0	% Recovery	33-141% Limit		
Phenol-d6 (Surrogate)	56	0	% Recovery	10-94% Limit		
2-Fluorophenol (Surrogate)	66	0	% Recovery	21-100% Limit		
2,4,6-Tribromophenol (Surrogate)	81	0	% Recovery	10-123% Limit		
Date Extracted	10/02/94	0				
Time Analyzed	2211	0				

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LABORATORY TESTS RESULTS 10/19/94

JOB NUMBER: 942434

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ATTN:

CLIENT I.D.: REXENE COC#8289

DATE SAMPLED: 09/27/94

TIME SAMPLED: 11:15

WORK DESCRIPTION: 9409271115

LABORATORY I.D.: 942434-0004

DATE RECEIVED: 09/28/94

TIME RECEIVED: 10:15

REMARKS: MW-17

TEST DESCRIPTION	FINAL RESULT	LIMITS/*DILUTION	UNITS OF MEASURE	TEST METHOD	DATE	TECHN
Bicarbonate (Unfilt.)	1650	5	mg/L	2320 B (3)	10/10/94	RPK
Chloride (Unfilt.)	1930	15	mg/L	325.2 (1)	10/17/94	DME
Nitrogen, Nitrate (Unfilt.)	<0.1	0.1	mg/L (as N)	353.2 (1)	09/29/94	DME
Sulfate (Unfilt.)	198	20	mg/L	375.2 (1)	10/18/94	DME
Aluminum, Diss. (Al)	0.20	0.05	mg/L	6010 (2)	10/04/94	GEF
Arsenic, Diss. (As)	0.44	0.05	mg/L	6010 (2)	10/04/94	GEF
Barium, Diss. (Ba)	1.81	0.01	mg/L	6010 (2)	10/04/94	GEF
Cadmium, Diss. (Cd)	<0.005	0.005	mg/L	6010 (2)	10/04/94	GEF
Calcium, Total (Ca)	237	0.1	mg/L	6010 (2)	09/30/94	WGL
Chromium, Diss. (Cr)	0.01	0.01	mg/L	6010 (2)	10/04/94	GEF
Cobalt, Diss. (Co)	0.03	0.03	mg/L	6010 (2)	10/04/94	GEF
Copper, Diss. (Cu)	0.01	0.01	mg/L	6010 (2)	10/04/94	GEF
Iron, Diss. (Fe)	9.41	0.03	mg/L	6010 (2)	10/04/94	GEF
Lead, Diss. (Pb)	<0.05	0.05	mg/L	6010 (2)	10/04/94	GEF
Mercury, Total (Hg)	<0.0002	0.0002	mg/L	7470 (2)	10/13/94	BPB
Magnesium, Total (Mg)	76.3	0.1	mg/L	6010 (2)	09/30/94	WGL
Manganese, Diss. (Mn)	7.64	0.01	mg/L	6010 (2)	10/04/94	GEF
Molybdenum, Diss. (Mo)	<0.05	0.05	mg/L	6010 (2)	10/04/94	GEF
Nickel, Diss. (Ni)	<0.04	0.04	mg/L	6010 (2)	10/04/94	GEF
Potassium, Total (K)	36.7	0.1	mg/L	6010 (2)	09/30/94	WGL
Selenium, Diss. (Se)	<0.1	0.1	mg/L	6010 (2)	10/04/94	GEF
Silver, Diss. (Ag)	0.02	0.01	mg/L	6010 (2)	10/04/94	GEF
Sodium, Total (Na)	800	10	mg/L	6010 (2)	09/30/94	WGL

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LABORATORY TESTS RESULTS 10/19/94

JOB NUMBER: 942434

CUSTOMER: GEOSCIENCE CONSULTANTS, LTD.

ATTN:
CLIENT I.D.: REXENE COC#8289

DATE SAMPLED: 09/27/94

TIME SAMPLED: 11:15

WORK DESCRIPTION: 9409271115

LABORATORY I.D.: 942434-0004

DATE RECEIVED: 09/28/94

TIME RECEIVED: 10:15

REMARKS: MW-17

TEST DESCRIPTION	FINAL RESULT	LIMITS/*DILUTION	UNITS OF MEASURE	TEST METHOD	DATE	TECHN
Zinc, Diss. (Zn)	0.02	0.01	mg/L	6010 (2)	10/04/94	GEF
602 - VOLATILE AROMATIC ORGANICS		*1		602 (6)	10/10/94	JHT
Benzene	68	0.5	ug/L			
Toluene	25	0.5	ug/L			
Ethyl benzene	41	0.5	ug/L			
Xylenes	9.2	0.5	ug/L			
4-Bromofluorobenzene (surrogate)	109	0	% Recovery	85-115% Limit		
Time Analyzed	2018	0				
PAH AND PHENOLS LIST BY 8270		*1		8270 (2)	10/14/94	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	20	10	ug/L			
2-Methylnaphthalene	14	10	ug/L			
Naphthalene	24	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)	71	0	% Recovery	43-116% Limit		
4-Terphenyl-d14 (Surrogate)	60	0	% Recovery	33-141% Limit		

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LABORATORY TESTS RESULTS 10/19/94

JOB NUMBER: 942434

CUSTOMER: GEOSCIENCE CONSULTANTS, LTD.

ATTN:

CLIENT I.D.: REXENE COC#8289

DATE SAMPLED: 09/27/94

TIME SAMPLED: 11:15

WORK DESCRIPTION: 9409271115

LABORATORY I.D.: 942434-0004

DATE RECEIVED: 09/28/94

TIME RECEIVED: 10:15

REMARKS: MW-17

TEST DESCRIPTION	FINAL RESULT	LIMITS/*DILUTION	UNITS OF MEASURE	TEST METHOD	DATE	TECHN
Phenol-d6 (Surrogate)	89	0	% Recovery	10-94% Limit		
2-Fluorophenol (Surrogate)	74	0	% Recovery	21-100% Limit		
2,4,6-Tribromophenol (Surrogate)	108	0	% Recovery	10-123% Limit		
Time Analyzed	1830	0				
Date Extracted	10/02/94	0				
Semi-Volatile Organic - Surrogates		*1		8270(2)/625(6)	10/17/94	JMC
Nitrobenzene-d5 (Surrogate)	82	0	% Recovery	35-114% Limit		
2-Fluorobiphenyl (Surrogate)	68	0	% Recovery	43-116% Limit		
4-Terphenyl-d14 (Surrogate)	65	0	% Recovery	33-141% Limit		
Phenol-d6 (Surrogate)	84	0	% Recovery	10-94% Limit		
2-Fluorophenol (Surrogate)	70	0	% Recovery	21-100% Limit		
2,4,6-Tribromophenol (Surrogate)	107	0	% Recovery	10-123% Limit		
Date Extracted	10/02/94	0				
Time Analyzed	2313	0				

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Core Laboratories
LABORATORY TESTS RESULTS
10/19/94

JOB NUMBER: 942434

CUSTOMER: GEOSCIENCE CONSULTANTS, LTD.

ATTN:
CLIENT I.D.: REXENE COC#8289

DATE SAMPLED: 09/27/94

TIME SAMPLED: 11:30

WORK DESCRIPTION: 9409271130

LABORATORY I.D.: 942434-0005

DATE RECEIVED: 09/28/94

TIME RECEIVED: 10:15

REMARKS: MW-17A

TEST DESCRIPTION	FINAL RESULT	LIMITS/*DILUTION	UNITS OF MEASURE	TEST METHOD	DATE	TECHN
Bicarbonate (Unfilt.)	1590	5	mg/L	2320 B (3)	10/10/94	RPK
Chloride (Unfilt.)	2110	15	mg/L	325.2 (1)	10/17/94	DME
Nitrogen, Nitrate (Unfilt.)	0.1	0.1	mg/L (as N)	353.2 (1)	09/29/94	DME
Sulfate (Unfilt.)	239	20	mg/L	375.2 (1)	10/18/94	DME
Aluminum, Diss. (Al)	0.22	0.05	mg/L	6010 (2)	10/04/94	GEF
Arsenic, Diss. (As)	0.16	0.05	mg/L	6010 (2)	10/04/94	GEF
Barium, Diss. (Ba)	2.11	0.01	mg/L	6010 (2)	10/04/94	GEF
Cadmium, Diss. (Cd)	<0.005	0.005	mg/L	6010 (2)	10/04/94	GEF
Calcium, Total (Ca)	241	0.1	mg/L	6010 (2)	09/30/94	WGL
Chromium, Diss. (Cr)	<0.01	0.01	mg/L	6010 (2)	10/04/94	GEF
Cobalt, Diss. (Co)	0.03	0.03	mg/L	6010 (2)	10/04/94	GEF
Copper, Diss. (Cu)	<0.01	0.01	mg/L	6010 (2)	10/04/94	GEF
Iron, Diss. (Fe)	9.70	0.03	mg/L	6010 (2)	10/04/94	GEF
Lead, Diss. (Pb)	<0.05	0.05	mg/L	6010 (2)	10/04/94	GEF
Mercury, Total (Hg)	<0.0002	0.0002	mg/L	7470 (2)	10/13/94	BPB
Magnesium, Total (Mg)	77.0	0.1	mg/L	6010 (2)	09/30/94	WGL
Manganese, Diss. (Mn)	8.48	0.01	mg/L	6010 (2)	10/04/94	GEF
Molybdenum, Diss. (Mo)	<0.05	0.05	mg/L	6010 (2)	10/04/94	GEF
Nickel, Diss. (Ni)	<0.04	0.04	mg/L	6010 (2)	10/04/94	GEF
Potassium, Total (K)	36.4	0.1	mg/L	6010 (2)	09/30/94	WGL
Selenium, Diss. (Se)	0.1	0.1	mg/L	6010 (2)	10/04/94	GEF
Silver, Diss. (Ag)	0.02	0.01	mg/L	6010 (2)	10/04/94	GEF
Sodium, Total (Na)	136	2	mg/L	6010 (2)	09/30/94	WGL

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LABORATORY TESTS RESULTS
10/19/94

JOB NUMBER: 942434

CUSTOMER: GEOSCIENCE CONSULTANTS, LTD.

ATTN:
CLIENT I.D.: REXENE COC#8289

DATE SAMPLED.: 09/27/94

TIME SAMPLED.: 11:30

WORK DESCRIPTION.: 9409271130

LABORATORY I.D.: 942434-0005

DATE RECEIVED.: 09/28/94

TIME RECEIVED.: 10:15

REMARKS.: MW-17A

TEST DESCRIPTION	FINAL RESULT	LIMITS/*DILUTION	UNITS OF MEASURE	TEST METHOD	DATE	TECHN
Zinc, Diss. (Zn)	0.02	0.01	mg/L	6010 (2)	10/04/94	GEF
602 - VOLATILE AROMATIC ORGANICS		*1		602 (6)	10/10/94	JHT
Benzene	46	0.5	ug/L			
Toluene	21	0.5	ug/L			
Ethyl benzene	35	0.5	ug/L			
Xylenes	8.0	0.5	ug/L			
4-Bromofluorobenzene (surrogate)	107	0	% Recovery	85-115% Limit		
Time Analyzed	2053	0				
PAH AND PHENOLS LIST BY 8270		*1		8270 (2)	10/14/94	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	14	10	ug/L			
2-Methylnaphthalene	10	10	ug/L			
Naphthalene	13	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)	75	0	% Recovery	35-114% Limit		
2-Fluorobiphenyl (Surrogate)	67	0	% Recovery	43-116% Limit		
4-Terphenyl-d14 (Surrogate)	96	0	% Recovery	33-141% Limit		

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LABORATORY TESTS RESULTS 10/19/94

JOB NUMBER: 942434

CUSTOMER: GEOSCIENCE CONSULTANTS, LTD.

ATTN:

CLIENT I.D.: REXENE COC#8289

DATE SAMPLED: 09/27/94

TIME SAMPLED: 11:30

WORK DESCRIPTION: 9409271130

LABORATORY I.D.: 942434-0005

DATE RECEIVED: 09/28/94

TIME RECEIVED: 10:15

REMARKS: MW-17A

TEST DESCRIPTION	FINAL RESULT	LIMITS/*DILUTION	UNITS OF MEASURE	TEST METHOD	DATE	TECHN
Phenol-d6 (Surrogate)	75	0	% Recovery	10-94% Limit		
2-Fluorophenol (Surrogate)	46	0	% Recovery	21-100% Limit		
2,4,6-Tribromophenol (Surrogate)	102	0	% Recovery	10-123% Limit		
Time Analyzed	1931	0				
Date Extracted	10/02/94	0				
Semi-Volatile Organic - Surrogates		*1		8270(2)/625(6)	10/18/94	JMC
Nitrobenzene-d5 (Surrogate)	79	0	% Recovery	35-114% Limit		
2-Fluorobiphenyl (Surrogate)	65	0	% Recovery	43-116% Limit		
4-Terphenyl-d14 (Surrogate)	94	0	% Recovery	33-141% Limit		
Phenol-d6 (Surrogate)	78	0	% Recovery	10-94% Limit		
2-Fluorophenol (Surrogate)	47	0	% Recovery	21-100% Limit		
2,4,6-Tribromophenol (Surrogate)	103	0	% Recovery	10-123% Limit		
Date Extracted	10/02/94	0				
Time Analyzed	0014	0				

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LABORATORY TESTS RESULTS 10/19/94

JOB NUMBER: 942434

CUSTOMER: GEOSCIENCE CONSULTANTS, LTD.

ATTN:
CLIENT I.D.: REXENE COC#8289

DATE SAMPLED: 09/27/94

TIME SAMPLED: 12:25

WORK DESCRIPTION: 9409271225

LABORATORY I.D.: 942434-0006

DATE RECEIVED: 09/28/94

TIME RECEIVED: 10:15

REMARKS: MW-14

TEST DESCRIPTION	FINAL RESULT	LIMITS/*DILUTION	UNITS OF MEASURE	TEST METHOD	DATE	TECHN
Bicarbonate (Unfilt.)	1160	5	mg/L	2320 B (3)	10/11/94	RPK
Chloride (Unfilt.)	3190	25	mg/L	325.2 (1)	10/17/94	DME
Nitrogen, Nitrate (Unfilt.)	<0.1	0.1	mg/L (as N)	353.2 (1)	09/29/94	DME
Sulfate (Unfilt.)	986	100	mg/L	375.2 (1)	10/18/94	DME
Aluminum, Diss. (Al)	0.20	0.05	mg/L	6010 (2)	10/04/94	GEF
Arsenic, Diss. (As)	0.17	0.05	mg/L	6010 (2)	10/04/94	GEF
Barium, Diss. (Ba)	0.78	0.01	mg/L	6010 (2)	10/04/94	GEF
Cadmium, Diss. (Cd)	<0.005	0.005	mg/L	6010 (2)	10/04/94	GEF
Calcium, Total (Ca)	625	5	mg/L	6010 (2)	09/30/94	WGL
Chromium, Diss. (Cr)	<0.01	0.01	mg/L	6010 (2)	10/04/94	GEF
Cobalt, Diss. (Co)	<0.03	0.03	mg/L	6010 (2)	10/04/94	GEF
Copper, Diss. (Cu)	<0.01	0.01	mg/L	6010 (2)	10/04/94	GEF
Iron, Diss. (Fe)	13.1	0.03	mg/L	6010 (2)	10/04/94	GEF
Lead, Diss. (Pb)	<0.05	0.05	mg/L	6010 (2)	10/04/94	GEF
Mercury, Total (Hg)	0.0009	0.0002	mg/L	7470 (2)	10/13/94	BPB
Magnesium, Total (Mg)	154	0.1	mg/L	6010 (2)	09/30/94	WGL
Manganese, Diss. (Mn)	7.59	0.01	mg/L	6010 (2)	10/04/94	GEF
Molybdenum, Diss. (Mo)	<0.05	0.05	mg/L	6010 (2)	10/04/94	GEF
Nickel, Diss. (Ni)	<0.04	0.04	mg/L	6010 (2)	10/04/94	GEF
Potassium, Total (K)	42	5	mg/L	6010 (2)	09/30/94	WGL
Selenium, Diss. (Se)	<0.1	0.1	mg/L	6010 (2)	10/04/94	GEF
Silver, Diss. (Ag)	0.02	0.01	mg/L	6010 (2)	10/04/94	GEF
Sodium, Total (Na)	1800	20	mg/L	6010 (2)	09/30/94	WGL

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LABORATORY TESTS RESULTS
 10/19/94

JOB NUMBER: 942434

CUSTOMER: GEOSCIENCE CONSULTANTS, LTD.

ATTN:

CLIENT I.D.: REXENE COC#8289

DATE SAMPLED: 09/27/94

TIME SAMPLED: 12:25

WORK DESCRIPTION: 9409271225

LABORATORY I.D.: 942434-0006

DATE RECEIVED: 09/28/94

TIME RECEIVED: 10:15

REMARKS: MW-14

TEST DESCRIPTION	FINAL RESULT	LIMITS/*DILUTION	UNITS OF MEASURE	TEST METHOD	DATE	TECHN
Zinc, Diss. (Zn)	0.02	0.01	mg/L	6010 (2)	10/04/94	GEF
602 - VOLATILE AROMATIC ORGANICS		*100		602 (6)	10/11/94	JHT
Benzene	2900	50	ug/L			
Toluene	ND	50	ug/L			
Ethyl benzene	ND	50	ug/L			
Xylenes	ND	50	ug/L			
4-Bromofluorobenzene (surrogate)	104	0	% Recovery	85-115% Limit		
Time Analyzed	1721	0				
PAH AND PHENOLS LIST BY 8270		*1		8270 (2)	10/14/94	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	26	10	ug/L			
2-Methylnaphthalene	14	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	20	10	ug/L			
2,4,6-Trichlorophenol	ND	10	ug/L			
Nitrobenzene-d5 (Surrogate)	71	0	% Recovery	35-114% Limit		
2-Fluorobiphenyl (Surrogate)	63	0	% Recovery	43-116% Limit		
4-Terphenyl-d14 (Surrogate)	49	0	% Recovery	33-141% Limit		

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LABORATORY TESTS RESULTS 10/19/94

JOB NUMBER: 942434

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ATTN:

CLIENT I.D.: REXENE COC#8289

DATE SAMPLED: 09/27/94

TIME SAMPLED: 12:25

WORK DESCRIPTION: 9409271225

LABORATORY I.D.: 942434-0006

DATE RECEIVED: 09/28/94

TIME RECEIVED: 10:15

REMARKS: MW-14

TEST DESCRIPTION	FINAL RESULT	LIMITS/*DILUTION	UNITS OF MEASURE	TEST METHOD	DATE	TECHN
Phenol-d6 (Surrogate)	40	0	% Recovery	10-94% Limit		
2-Fluorophenol (Surrogate)	63	0	% Recovery	21-100% Limit		
2,4,6-Tribromophenol (Surrogate)	104	0	% Recovery	10-123% Limit		
Time Analyzed	2033	0				
Date Extracted	10/02/94	0				

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LABORATORY TESTS RESULTS 10/19/94

JOB NUMBER: 942434

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CLIENT I.D.: REXENE COC#8289

DATE SAMPLED: 09/27/94

TIME SAMPLED: 13:15

WORK DESCRIPTION: 9409271315

LABORATORY I.D.: 942434-0007

DATE RECEIVED: 09/28/94

TIME RECEIVED: 10:15

REMARKS: MW-15

TEST DESCRIPTION	FINAL RESULT	LIMITS/*DILUTION	UNITS OF MEASURE	TEST METHOD	DATE	TECHN
Bicarbonate (Unfilt.)	2420	5	mg/L	2320 B (3)	10/11/94	RPK
Chloride (Unfilt.)	442	2.5	mg/L	325.2 (1)	10/04/94	DME
Nitrogen, Nitrate (Unfilt.)	0.2	0.1	mg/L (as N)	353.2 (1)	09/29/94	DME
Sulfate (Unfilt.)	142	10	mg/L	375.2 (1)	10/18/94	DME
Aluminum, Diss. (Al)	0.42	0.05	mg/L	6010 (2)	10/04/94	GEF
Arsenic, Diss. (As)	0.14	0.05	mg/L	6010 (2)	10/04/94	GEF
Barium, Diss. (Ba)	0.41	0.01	mg/L	6010 (2)	10/04/94	GEF
Cadmium, Diss. (Cd)	<0.005	0.005	mg/L	6010 (2)	10/04/94	GEF
Calcium, Total (Ca)	99.1	0.1	mg/L	6010 (2)	09/30/94	WGL
Chromium, Diss. (Cr)	<0.01	0.01	mg/L	6010 (2)	10/04/94	GEF
Cobalt, Diss. (Co)	<0.03	0.03	mg/L	6010 (2)	10/04/94	GEF
Copper, Diss. (Cu)	<0.01	0.01	mg/L	6010 (2)	10/04/94	GEF
Iron, Diss. (Fe)	2.33	0.03	mg/L	6010 (2)	10/04/94	GEF
Lead, Diss. (Pb)	<0.05	0.05	mg/L	6010 (2)	10/04/94	GEF
Mercury, Total (Hg)	<0.0002	0.0002	mg/L	7470 (2)	10/13/94	BPB
Magnesium, Total (Mg)	16.8	0.1	mg/L	6010 (2)	09/30/94	WGL
Manganese, Diss. (Mn)	2.90	0.01	mg/L	6010 (2)	10/04/94	GEF
Molybdenum, Diss. (Mo)	<0.05	0.05	mg/L	6010 (2)	10/04/94	GEF
Nickel, Diss. (Ni)	<0.04	0.04	mg/L	6010 (2)	10/04/94	GEF
Potassium, Total (K)	23.1	0.1	mg/L	6010 (2)	09/30/94	WGL
Selenium, Diss. (Se)	<0.1	0.1	mg/L	6010 (2)	10/04/94	GEF
Silver, Diss. (Ag)	0.02	0.01	mg/L	6010 (2)	10/04/94	GEF
Sodium, Total (Na)	950	10	mg/L	6010 (2)	09/30/94	WGL

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LABORATORY TESTS RESULTS
 10/19/94

JOB NUMBER: 942434

CUSTOMER: GEOSCIENCE CONSULTANTS, LTD.

ATTN:

CLIENT I.D.: REXENE COC#8289

DATE SAMPLED: 09/27/94

TIME SAMPLED: 13:15

WORK DESCRIPTION: 9409271315

LABORATORY I.D.: 942434-0007

DATE RECEIVED: 09/28/94

TIME RECEIVED: 10:15

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)	10/04/94	GEF
602 - VOLATILE AROMATIC ORGANICS		*5		602 (6)	10/11/94	JHT
Benzene	270	2	ug/L			
Toluene	ND	2	ug/L			
Ethyl benzene	21	2	ug/L			
Xylenes	60	2	ug/L			
4-Bromofluorobenzene (surrogate)	107	0	% Recovery	85-115% Limit		
Time Analyzed	1349	0				
PAH AND PHENOLS LIST BY 8270		*1		8270 (2)	10/14/94	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	62	10	ug/L			
2-Methylnaphthalene	11	10	ug/L			
Naphthalene	53	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)	95	0	% Recovery	35-114% Limit		
2-Fluorobiphenyl (Surrogate)	64	0	% Recovery	43-116% Limit		
4-Terphenyl-d14 (Surrogate)	95	0	% Recovery	33-141% Limit		

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LABORATORY TESTS RESULTS 10/19/94

JOB NUMBER: 942434

CUSTOMER: GEOSCIENCE CONSULTANTS, LTD.

ATTN:
CLIENT I.D.: REXENE COC#8289

LABORATORY I.D.: 942434-0007

DATE SAMPLED.: 09/27/94

DATE RECEIVED.: 09/28/94

TIME SAMPLED.: 13:15

TIME RECEIVED.: 10:15

WORK DESCRIPTION.: 9409271315

REMARKS.: MW-15

TEST DESCRIPTION	FINAL RESULT	LIMITS/*DILUTION	UNITS OF MEASURE	TEST METHOD	DATE	TECHN
Phenol-d6 (Surrogate)	88	0	% Recovery	10-94% Limit		
2-Fluorophenol (Surrogate)	94	0	% Recovery	21-100% Limit		
2,4,6-Tribromophenol (Surrogate)	80	0	% Recovery	10-123% Limit		
Time Analyzed	2134	0				
Date Extracted	10/02/94	0				
Semi-Volatile Organic - Surrogates		*1		8270(2)/625(6)	10/18/94	JMC
Nitrobenzene-d5 (Surrogate)	102	0	% Recovery	35-114% Limit		
2-Fluorobiphenyl (Surrogate)	66	0	% Recovery	43-116% Limit		
4-Terphenyl-d14 (Surrogate)	86	0	% Recovery	33-141% Limit		
Phenol-d6 (Surrogate)	86	0	% Recovery	10-94% Limit		
2-Fluorophenol (Surrogate)	68	0	% Recovery	21-100% Limit		
2,4,6-Tribromophenol (Surrogate)	82	0	% Recovery	10-123% Limit		
Date Extracted	10/02/94	0				
Time Analyzed	0115	0				

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LABORATORY TESTS RESULTS
 10/19/94

JOB NUMBER: 942434 CUSTOMER: GEOSCIENCE CONSULTANTS, LTD.

ATTN:

CLIENT I.D.: REXENE COC#8289

DATE SAMPLED: 09/27/94

TIME SAMPLED: 14:00

WORK DESCRIPTION: 9409271400

LABORATORY I.D.: 942434-0008

DATE RECEIVED: 09/28/94

TIME RECEIVED: 10:15

REMARKS: MW-12

TEST DESCRIPTION	FINAL RESULT	LIMITS/*DILUTION	UNITS OF MEASURE	TEST METHOD	DATE	TECHN
Bicarbonate (Unfilt.)	512	5	mg/L	2320 B (3)	10/11/94	RPK
Chloride (Unfilt.)	8860	50	mg/L	325.2 (1)	10/17/94	DME
Nitrogen, Nitrate (Unfilt.)	<0.1	0.1	mg/L (as N)	353.2 (1)	09/29/94	DME
Sulfate (Unfilt.)	2140	200	mg/L	375.2 (1)	10/18/94	DME
Aluminum, Diss. (Al)	0.23	0.05	mg/L	6010 (2)	10/04/94	GEF
Arsenic, Diss. (As)	<0.05	0.05	mg/L	6010 (2)	10/04/94	GEF
Barium, Diss. (Ba)	0.11	0.01	mg/L	6010 (2)	10/04/94	GEF
Cadmium, Diss. (Cd)	0.009	0.005	mg/L	6010 (2)	10/04/94	GEF
Calcium, Total (Ca)	1380	5	mg/L	6010 (2)	09/30/94	WGL
Chromium, Diss. (Cr)	0.05	0.01	mg/L	6010 (2)	10/04/94	GEF
Cobalt, Diss. (Co)	<0.03	0.03	mg/L	6010 (2)	10/04/94	GEF
Copper, Diss. (Cu)	0.01	0.01	mg/L	6010 (2)	10/04/94	GEF
Iron, Diss. (Fe)	5.85	0.03	mg/L	6010 (2)	10/04/94	GEF
Lead, Diss. (Pb)	<0.05	0.05	mg/L	6010 (2)	10/04/94	GEF
Mercury, Total (Hg)	<0.0002	0.0002	mg/L	7470 (2)	10/13/94	BPB
Magnesium, Total (Mg)	585	5	mg/L	6010 (2)	09/30/94	WGL
Manganese, Diss. (Mn)	10.8	0.01	mg/L	6010 (2)	10/04/94	GEF
Molybdenum, Diss. (Mo)	0.05	0.05	mg/L	6010 (2)	10/04/94	GEF
Nickel, Diss. (Ni)	<0.04	0.04	mg/L	6010 (2)	10/04/94	GEF
Potassium, Total (K)	104	5	mg/L	6010 (2)	09/30/94	WGL
Selenium, Diss. (Se)	0.4	0.1	mg/L	6010 (2)	10/04/94	GEF
Silver, Diss. (Ag)	0.03	0.01	mg/L	6010 (2)	10/04/94	GEF
Sodium, Total (Na)	4100	20	mg/L	6010 (2)	09/30/94	WGL

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LABORATORY TESTS RESULTS 10/19/94

JOB NUMBER: 942434

CUSTOMER: GEOSCIENCE CONSULTANTS, LTD.

ATTN:
CLIENT I.D.: REXENE COC#8289

DATE SAMPLED.....: 09/27/94

TIME SAMPLED.....: 14:00

WORK DESCRIPTION....: 9409271400

LABORATORY I.D.: 942434-0008

DATE RECEIVED.....: 09/28/94

TIME RECEIVED.....: 10:15

REMARKS.....: MW-12

TEST DESCRIPTION	FINAL RESULT	LIMITS/*DILUTION	UNITS OF MEASURE	TEST METHOD	DATE	TECHN
Zinc, Diss. (Zn)	0.04	0.01	mg/L	6010 (2)	10/04/94	GEF
602 - VOLATILE AROMATIC ORGANICS		*1		602 (6)	10/10/94	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	2240	0				
PAH AND PHENOLS LIST BY 8270		*1		8270 (2)	10/14/94	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)	76	0	% Recovery	35-114% Limit		
2-Fluorobiphenyl (Surrogate)	79	0	% Recovery	43-116% Limit		
4-Terphenyl-d14 (Surrogate)	87	0	% Recovery	33-141% Limit		

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Core Laboratories
LABORATORY TESTS RESULTS
 10/19/94

JOB NUMBER: 942434

CUSTOMER: GEOSCIENCE CONSULTANTS, LTD.

ATTN:

CLIENT I.D.: REXENE COC#8289

DATE SAMPLED: 09/27/94

TIME SAMPLED: 14:00

WORK DESCRIPTION: 9409271400

LABORATORY I.D.: 942434-0008

DATE RECEIVED: 09/28/94

TIME RECEIVED: 10:15

REMARKS: MW-12

TEST DESCRIPTION	FINAL RESULT	LIMITS/*DILUTION	UNITS OF MEASURE	TEST METHOD	DATE	TECHN
Phenol-d6 (Surrogate)	81	0	% Recovery	10-94% Limit		
2-Fluorophenol (Surrogate)	63	0	% Recovery	21-100% Limit		
2,4,6-Tribromophenol (Surrogate)	99	0	% Recovery	10-123% Limit		
Time Analyzed	2235	0				
Date Extracted	10/02/94	0				

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Core Laboratories

LABORATORY TESTS RESULTS 10/19/94

JOB NUMBER: 942434

CUSTOMER: GEOSCIENCE CONSULTANTS, LTD.

ATTN:

CLIENT I.D.: REXENE COC#8289

DATE SAMPLED: 09/27/94

TIME SAMPLED: 14:40

WORK DESCRIPTION: 9409271440

LABORATORY I.D.: 942434-0009

DATE RECEIVED: 09/28/94

TIME RECEIVED: 10:15

REMARKS: MW-1

TEST DESCRIPTION	FINAL RESULT	LIMITS/*DILUTION	UNITS OF MEASURE	TEST METHOD	DATE	TECHN
Bicarbonate (Unfilt.)	427	5	mg/L	2320 8 (3)	10/11/94	RPK
Chloride (Unfilt.)	115	0.5	mg/L	325.2 (1)	10/04/94	DME
Nitrogen, Nitrate (Unfilt.)	<0.1	0.1	mg/L (as N)	353.2 (1)	09/29/94	DME
Sulfate (Unfilt.)	136	10	mg/L	375.2 (1)	10/18/94	DME
Aluminum, Diss. (Al)	0.11	0.05	mg/L	6010 (2)	10/04/94	GEF
Arsenic, Diss. (As)	<0.05	0.05	mg/L	6010 (2)	10/04/94	GEF
Barium, Diss. (Ba)	0.13	0.01	mg/L	6010 (2)	10/04/94	GEF
Cadmium, Diss. (Cd)	<0.005	0.005	mg/L	6010 (2)	10/04/94	GEF
Calcium, Total (Ca)	113	0.1	mg/L	6010 (2)	09/30/94	WGL
Chromium, Diss. (Cr)	<0.01	0.01	mg/L	6010 (2)	10/04/94	GEF
Cobalt, Diss. (Co)	<0.03	0.03	mg/L	6010 (2)	10/04/94	GEF
Copper, Diss. (Cu)	<0.01	0.01	mg/L	6010 (2)	10/04/94	GEF
Iron, Diss. (Fe)	0.08	0.03	mg/L	6010 (2)	10/04/94	GEF
Lead, Diss. (Pb)	<0.05	0.05	mg/L	6010 (2)	10/04/94	GEF
Mercury, Total (Hg)	<0.0002	0.0002	mg/L	7470 (2)	10/13/94	BPB
Magnesium, Total (Mg)	31.7	0.1	mg/L	6010 (2)	09/30/94	WGL
Manganese, Diss. (Mn)	1.12	0.01	mg/L	6010 (2)	10/04/94	GEF
Molybdenum, Diss. (Mo)	<0.05	0.05	mg/L	6010 (2)	10/04/94	GEF
Nickel, Diss. (Ni)	<0.04	0.04	mg/L	6010 (2)	10/04/94	GEF
Potassium, Total (K)	10.6	0.1	mg/L	6010 (2)	09/30/94	WGL
Selenium, Diss. (Se)	0.1	0.1	mg/L	6010 (2)	10/04/94	GEF
Silver, Diss. (Ag)	<0.01	0.01	mg/L	6010 (2)	10/04/94	GEF
Sodium, Total (Na)	135	5	mg/L	6010 (2)	09/30/94	WGL

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LABORATORY TESTS RESULTS
 10/19/94

JOB NUMBER: 942434 CUSTOMER: GEOSCIENCE CONSULTANTS, LTD. ATTN:

 CLIENT I.D.: REXENE COC#8289
 DATE SAMPLED: 09/27/94
 TIME SAMPLED: 14:40
 WORK DESCRIPTION: 9409271440

 LABORATORY I.D.: 942434-0009
 DATE RECEIVED: 09/28/94
 TIME RECEIVED: 10:15
 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)	10/04/94	GEF
602 - VOLATILE AROMATIC ORGANICS		*1		602 (6)	10/10/94	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)	106	0	% Recovery	85-115% Limit		
Time Analyzed	2315	0				
PAH AND PHENOLS LIST BY 8270		*1		8270 (2)	10/14/94	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)	76	0	% Recovery	35-114% Limit		
2-Fluorobiphenyl (Surrogate)	78	0	% Recovery	43-116% Limit		
4-Terphenyl-d14 (Surrogate)	84	0	% Recovery	33-141% Limit		

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LABORATORY TESTS RESULTS 10/19/94

JOB NUMBER: 942434

CUSTOMER: GEOSCIENCE CONSULTANTS, LTD.

ATTN:

CLIENT I.D.: REXENE COC#8289

DATE SAMPLED: 09/27/94

TIME SAMPLED: 14:40

WORK DESCRIPTION: 9409271440

LABORATORY I.D.: 942434-0009

DATE RECEIVED: 09/28/94

TIME RECEIVED: 10:15

REMARKS: MW-1

TEST DESCRIPTION	FINAL RESULT	LIMITS/*DILUTION	UNITS OF MEASURE	TEST METHOD	DATE	TECHN
Phenol-d6 (Surrogate)	60	0	% Recovery	10-94% Limit		
2-Fluorophenol (Surrogate)	41	0	% Recovery	21-100% Limit		
2,4,6-Tribromophenol (Surrogate)	94	0	% Recovery	10-123% Limit		
Time Analyzed	2336	0				
Date Extracted	10/02/94	0				

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LABORATORY TESTS RESULTS 10/19/94

JOB NUMBER: 942434

CUSTOMER: GEOSCIENCE CONSULTANTS, LTD.

ATTN:

CLIENT I.D.: REXENE COC#8289

DATE SAMPLED: 09/27/94

TIME SAMPLED: 15:20

WORK DESCRIPTION: 9409271520

LABORATORY I.D.: 942434-0010

DATE RECEIVED: 09/28/94

TIME RECEIVED: 10:15

REMARKS: MW-9S

TEST DESCRIPTION	FINAL RESULT	LIMITS/*DILUTION	UNITS OF MEASURE	TEST METHOD	DATE	TECHN
Bicarbonate (Unfilt.)	830	5	mg/L	2320 B (3)	10/11/94	RPK
Chloride (Unfilt.)	1500	4.0	mg/L	325.2 (1)	10/04/94	DME
Nitrogen, Nitrate (Unfilt.)	<0.1	0.1	mg/L (as N)	353.2 (1)	09/29/94	DME
Sulfate (Unfilt.)	1760	250	mg/L	375.2 (1)	10/18/94	DME
Aluminum, Diss. (Al)	0.12	0.05	mg/L	6010 (2)	10/04/94	GEF
Arsenic, Diss. (As)	<0.05	0.05	mg/L	6010 (2)	10/04/94	GEF
Barium, Diss. (Ba)	0.06	0.01	mg/L	6010 (2)	10/04/94	GEF
Cadmium, Diss. (Cd)	0.006	0.005	mg/L	6010 (2)	10/04/94	GEF
Calcium, Total (Ca)	322	2	mg/L	6010 (2)	09/30/94	WGL
Chromium, Diss. (Cr)	<0.01	0.01	mg/L	6010 (2)	10/04/94	GEF
Cobalt, Diss. (Co)	<0.03	0.03	mg/L	6010 (2)	10/04/94	GEF
Copper, Diss. (Cu)	<0.01	0.01	mg/L	6010 (2)	10/04/94	GEF
Iron, Diss. (Fe)	4.66	0.03	mg/L	6010 (2)	10/04/94	GEF
Lead, Diss. (Pb)	<0.05	0.05	mg/L	6010 (2)	10/04/94	GEF
Mercury, Total (Hg)	<0.0002	0.0002	mg/L	7470 (2)	10/13/94	BPB
Magnesium, Total (Mg)	95.6	0.1	mg/L	6010 (2)	09/30/94	WGL
Manganese, Diss. (Mn)	3.11	0.01	mg/L	6010 (2)	10/04/94	GEF
Molybdenum, Diss. (Mo)	<0.05	0.05	mg/L	6010 (2)	10/04/94	GEF
Nickel, Diss. (Ni)	<0.04	0.04	mg/L	6010 (2)	10/04/94	GEF
Potassium, Total (K)	32	2	mg/L	6010 (2)	09/30/94	WGL
Selenium, Diss. (Se)	<0.1	0.1	mg/L	6010 (2)	10/04/94	GEF
Silver, Diss. (Ag)	0.01	0.01	mg/L	6010 (2)	10/04/94	GEF
Sodium, Total (Na)	1510	10	mg/L	6010 (2)	09/30/94	WGL

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Core Laboratories
LABORATORY TESTS RESULTS
10/19/94

JOB NUMBER: 942434

CUSTOMER: GEOSCIENCE CONSULTANTS, LTD.

ATTN:
CLIENT I.D.: REXENE COC#8289

DATE SAMPLED.: 09/27/94

TIME SAMPLED.: 15:20

WORK DESCRIPTION.: 9409271520

LABORATORY I.D.: 942434-0010

DATE RECEIVED.: 09/28/94

TIME RECEIVED.: 10:15

REMARKS.: MW-9S

TEST DESCRIPTION	FINAL RESULT	LIMITS/*DILUTION	UNITS OF MEASURE	TEST METHOD	DATE	TECHN
Zinc, Diss. (Zn)	0.01	0.01	mg/L	6010 (2)	10/04/94	GEF
602 - VOLATILE AROMATIC ORGANICS		*1		602 (6)	10/10/94	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)	108	0	% Recovery	85-115% Limit		
Time Analyzed	2350	0				
PAH AND PHENOLS LIST BY 8270		*1		8270 (2)	10/15/94	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)	71	0	% Recovery	35-114% Limit		
2-Fluorobiphenyl (Surrogate)	67	0	% Recovery	43-116% Limit		
4-Terphenyl-d14 (Surrogate)	73	0	% Recovery	33-141% Limit		

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LABORATORY TESTS RESULTS 10/19/94

JOB NUMBER: 942434

CUSTOMER: GEOSCIENCE CONSULTANTS, LTD.

ATTN:

CLIENT I.D.: REXENE COC#8289

DATE SAMPLED: 09/27/94

TIME SAMPLED: 15:20

WORK DESCRIPTION: 9409271520

LABORATORY I.D.: 942434-0010

DATE RECEIVED: 09/28/94

TIME RECEIVED: 10:15

REMARKS: MW-9S

TEST DESCRIPTION	FINAL RESULT	LIMITS/*DILUTION	UNITS OF MEASURE	TEST METHOD	DATE	TECHN
Phenol-d6 (Surrogate)	32	0	% Recovery	10-94% Limit		
2-Fluorophenol (Surrogate)	29	0	% Recovery	21-100% Limit		
2,4,6-Tribromophenol (Surrogate)	14	0	% Recovery	10-123% Limit		
Time Analyzed	0038	0				
Date Extracted	10/02/94	0				

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Core Laboratories
LABORATORY TESTS RESULTS
10/19/94

JOB NUMBER: 942434

CUSTOMER: GEOSCIENCE CONSULTANTS, LTD.

ATTN:

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

LABORATORY I.D....: 942434-0011
DATE RECEIVED.....: / /
TIME RECEIVED.....: :
REMARKS.....:

TEST DESCRIPTION	FINAL RESULT	LIMITS/*DILUTION	UNITS OF MEASURE	TEST METHOD	DATE	TECHN
602 - VOLATILE AROMATIC ORGANICS		*1		602 (6)	10/10/94	JHT
Benzene	MD	0.5	ug/L			
Toluene	MD	0.5	ug/L			
Ethyl benzene	MD	0.5	ug/L			
Xylenes	MD	0.5	ug/L			
4-Bromofluorobenzene (surrogate)	105	0	% Recovery	85-115% Limit		
Time Analyzed	1011	0				
PAH AND PHENOLS LIST BY 8270		*1		8270 (2)	10/14/94	JMC
Acenaphthene	MD	10	ug/L			
Acenaphthylene	MD	10	ug/L			
Anthracene	MD	10	ug/L			
Benzo(a)anthracene	MD	10	ug/L			
Benzo(b)fluoranthene	MD	10	ug/L			
Benzo(k)fluoranthene	MD	10	ug/L			
Benzo(ghi)perylene	MD	10	ug/L			
Benzo(a)pyrene	MD	10	ug/L			
Chrysene	MD	10	ug/L			
Dibenzo(a,h)anthracene	MD	10	ug/L			
Fluoranthene	MD	10	ug/L			
Fluorene	MD	10	ug/L			
Indeno(1,2,3-cd)pyrene	MD	10	ug/L			
1-Methylnaphthalene	MD	10	ug/L			
2-Methylnaphthalene	MD	10	ug/L			
Naphthalene	MD	10	ug/L			
Phenanthrene	MD	10	ug/L			
Pyrene	MD	10	ug/L			
4-Chloro-3-methylphenol	MD	10	ug/L			
2-Chlorophenol	MD	10	ug/L			
2,4-Dichlorophenol	MD	10	ug/L			
2,4-Dimethylphenol	MD	10	ug/L			
2,4-Dinitrophenol	MD	50	ug/L			
2-Methyl-4,6-dinitrophenol	MD	50	ug/L			
2-Nitrophenol	MD	10	ug/L			
4-Nitrophenol	MD	50	ug/L			
Pentachlorophenol	MD	50	ug/L			
Phenol	MD	10	ug/L			
2,4,6-Trichlorophenol	MD	10	ug/L			
Nitrobenzene-d5 (Surrogate)	47	0	% Recovery	35-114% Limit		
2-Fluorobiphenyl (Surrogate)	55	0	% Recovery	43-116% Limit		
4-Terphenyl-d14 (Surrogate)	93	0	% Recovery	33-141% Limit		
Phenol-d6 (Surrogate)	46	0	% Recovery	10-94% Limit		
2-Fluorophenol (Surrogate)	40	0	% Recovery	21-100% Limit		

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LABORATORY TESTS RESULTS 10/19/94

JOB NUMBER: 942434

CUSTOMER: GEOSCIENCE CONSULTANTS, LTD.

ATTN:

CLIENT I.D.....:

DATE SAMPLED.....: / /

TIME SAMPLED.....: :

WORK DESCRIPTION....: METHOD BLANK

LABORATORY I.D....: 942434-0011

DATE RECEIVED.....: / /

TIME RECEIVED.....: :

REMARKS.....:

TEST DESCRIPTION	FINAL RESULT	LIMITS/*DILUTION	UNITS OF MEASURE	TEST METHOD	DATE	TECHN
2,4,6-Tribromophenol (Surrogate)	59	0	% Recovery	10-123% Limit		
Time Analyzed	1424	0				
Date Extracted	10/02/94	0				

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LABORATORY TESTS RESULTS 10/19/94

JOB NUMBER: 942434

CUSTOMER: GEOSCIENCE CONSULTANTS, LTD.

ATTN:

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

LABORATORY I.D....: 942434-0012
DATE RECEIVED.....: / /
TIME RECEIVED.....: :
REMARKS.....:

TEST DESCRIPTION	FINAL RESULT	LIMITS/*DILUTION	UNITS OF MEASURE	TEST METHOD	DATE	TECHN
602 - VOLATILE AROMATIC ORGANICS		*1		602 (6)	10/11/94	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)	105	0	% Recovery	85-115% Limit		
Time Analyzed	1204	0				

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4



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CORE LABORATORIES ANALYTICAL REPORT
Job Number: 942432 Prepared For:
GEOSCIENCE CONSULTANTS, LTD.
505 MARQUETTE NW, SUITE 1100 ALBUQUERQUE, NM 87102
Date: 10/18/94

Linda L. Benkers
Signature

10-18-94
Date:

Name: Linda L. Benkers

Core Laboratories
10703 East Bethany Drive
Aurora, CO 80014

Title: QA/QC COORDINATOR

Core Laboratories

SAMPLE DELIVERY GROUP NARRATIVE

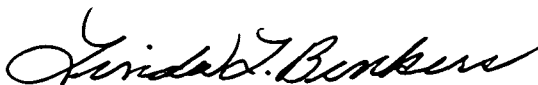
October 19, 1994

Customer: Geoscience Consultants, Ltd
Project: Rexene COC #8280
Core Laboratories Project Number: 942432

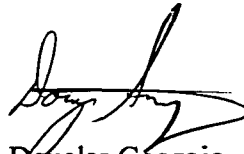
On 9-28-94 Core Laboratories received samples for analysis. The following information is pertinent to the interpretation of the data package.

Organic Analysis:

Sample 9409270625 had 1 of 6 surrogates recovered low at 42%. The EPA recommended acceptance criteria is 43% to 116%. Sample 94090270720 had 1 of 6 surrogates recovered low in the undiluted initial analysis. This sample was reanalyzed at a 2x dilution and 3 of 6 surrogates had low percent recoveries. This compound was not found in any of these samples.



Linda L. Benkers
QA/QC Coordinator



Douglas Georgic
Laboratory Supervisor



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4221 Forbes Blvd., Ste. 240
Lanham, MD 20706-4325
(301) 459-9677
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PO Drawer MM
Las Cruces, NM 88004
(505) 524-5353
FAX: (505) 524-5315

№ 8280

Chain of Custody

Date 9/26/94 Page 1 Of 1

Analysis Request

Lab Name	CORE LABORATORIES
Address	10703 East Bethany Drive Aurora, CO 80014-2696
Telephone	303/751-1780

Samplers (SIGNATURES)

D. Noss *[Signature]*

Sample Number	Matrix	Location
9409261325	Soil	TR-1
99409261405	Soil	TR-3
99409261440	Soil	TR-2
99409261515	Soil	TR-6
9409261600	Soil	TR-4
9409261650	Soil	TR-5
9409270530	H ₂ O	MW-16
9409270625	H ₂ O	MW-11
9409270720	H ₂ O	MW-8
9409270805	H ₂ O	MW-5

Halogenated Volatiles 601/8010	Aromatic Volatiles 602/8020 <i>BTEX</i>	Phenols, Sub Phenols 604/8040	Pesticides/PCB 608/8080	Polynuclear Aromatic Hydrocarbons 610/8310	Volatile Compounds GC/MS 624/8240	Base/Neutral Compounds GC/MS 625/8270 <i>PAH's</i>	Total Organic Carbon (TOC) 415/9060	Total Organic Halides (TOX) 9020	Petroleum Hydrocarbons 418.1	TPH/BTEX Modified 8015	TCLP - Vol., Semi-Vol. Heterocycles, Pesticides	TCLP - Metals <i>Pb ONLY</i>	RCRA Metals(8)	Priority Pollutant Metals (13)	CAM Metals (18) TLC/STLC	Flash Point	Corrosivity	Reactivity	Oil & Grease	Cyanide Total/Amenable	Chemical Oxygen Demand (COD)	WQC METALS	CATIONS/ANIONS	Number of Containers
	3					-						-										2	1	1
	3					-						-										2	1	1
	3					-						-										2	1	1
	4					-						-										2	1	1

Project Information		Sample Receipt	Relinquished By	Relinquished By	Relinquished By
Project	REXENE	Total No. of Containers	Signature	Signature	Signature
Project Director	TRENT T.	Chain of Custody Seals	(Printed Name)	(Printed Name)	(Printed Name)
Charge Code No.	3031-006	Rec'd Good Condition/Cold	(Date)	(Date)	(Date)
Shipping ID. No.		Conforms to Record	(Company)	(Company)	(Company)
	0214090984	Lab No.	Received By	Received By	Received By (Laboratory)
Via	fed x		Signature	Signature	Signature
Special Instructions/Comments:			(Printed Name)	(Printed Name)	(Printed Name)
			(Date)	(Date)	(Date)
			(Company)	(Company)	(Laboratory)

Distribution: White, Canary-Laboratory • Pink, GCL

Core Laboratories

SAMPLE DELIVERY GROUP NARRATIVE

October 19, 1994

Customer: Geoscience Consultants, Ltd
Project: Rexene COC #8280
Core Laboratories Project Number: 942432

On 9-28-94 Core Laboratories received samples for analysis. The following information is pertinent to the interpretation of the data package.

Organic Analysis:

Sample 9409270625 had 1 of 6 surrogates recovered low at 42%. The EPA recommended acceptance criteria is 43% to 116%. Sample 94090270720 had 1 of 6 surrogates recovered low in the undiluted initial analysis. This sample was reanalyzed at a 2x dilution and 3 of 6 surrogates had low percent recoveries.



Linda L. Benkers
QA/QC Coordinator



Douglas Georgic
Laboratory Supervisor

Core Laboratories

Sample Delivery Group Narrative

October 14, 1994

Customer: Geoscience Consultants, Inc.
Project: Rexene COC#8280
Core Laboratories Project Number: 942432

The following information is pertinent to the interpretation of this data package.

During the analysis and subsequent data review, it was noted that one of the method duplicates for cadmium on 942434-010 (9409271520) was slightly outside of the acceptance range for method duplicates. The raw data was examined and no definitive answer was found for the variance. The reported values were re-verified from the raw data. Under a normal CLP reporting format, this cadmium value and all associated cadmium values would be flagged with an "**".


Linda L. Benkers
QA/QC Coordinator


Timothy L. Kellogg
Laboratory Supervisor

Core Laboratories

SAMPLE DELIVERY GROUP NARRATIVE

October 19, 1994

Customer: Geoscience Consultants, Ltd
Project: Rexene COC #8289
Core Laboratories Project Number: 942434

On 9-28-94 Core Laboratories received samples for analysis. The following information is pertinent to the interpretation of the data package.

Organic Analysis:

During analysis for semivolatile organics on these samples, 1 of 6 internal standards had a low percent recovery for these samples. Sample 7 had 2 of 6 internal standards with low recoveries. All these samples were reanalyzed with similar results. These samples had a matrix problem present that interfered with the later eluting internal standards.

The result for the pentachlorophenol spike blank analyzed with these sample is incorrectly reported as 8%. This result is below the EPA recommended recovery criteria. The correct result is 9% but due to rounding limitations in Core Laboratories LIMS system 8% is reported.



Linda L. Benkers
QA/QC Coordinator



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 user 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.
- * - Used to indicate matrix interference.

Core Laboratories
LABORATORY TESTS RESULTS
10/18/94

JOB NUMBER: 942432

CUSTOMER: GEOSCIENCE CONSULTANTS, LTD.

ATTN:
CLIENT I.D.: REXENE COC#8280

DATE SAMPLED.: 09/26/94

TIME SAMPLED.: 13:25

WORK DESCRIPTION.: 9409261325

LABORATORY I.D.: 942432-0001

DATE RECEIVED.: 09/28/94

TIME RECEIVED.: 10:15

REMARKS.: TR-1

TEST DESCRIPTION	FINAL RESULT	LIMITS/*DILUTION	UNITS OF MEASURE	TEST METHOD	DATE	TECHN
Lead, TCLP (Pb)	1.80	0.05	mg/L	TCLP 6010 (2)	09/30/94	GEF
TCLP Physical Characterization		*1		1311 (2)	09/28/94	SGM
% Solids	100	0.5	%			
% Liquid	<0.5	0.5	%			
% Aqueous-Extract	100	0.5	%			
% Non-aqueous-Extract	<0.5	0.5	%			
TCLP Extraction Date	09/28/94	0				

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LABORATORY TESTS RESULTS 10/18/94

JOB NUMBER: 942432

CUSTOMER: GEOSCIENCE CONSULTANTS, LTD.

ATTN:

CLIENT I.D.: REXENE COC#8280

DATE SAMPLED: 09/26/94

TIME SAMPLED: 14:05

WORK DESCRIPTION: 9409261405

LABORATORY I.D.: 942432-0002

DATE RECEIVED: 09/28/94

TIME RECEIVED: 10:15

REMARKS: TR-3

TEST DESCRIPTION	FINAL RESULT	LIMITS/*DILUTION	UNITS OF MEASURE	TEST METHOD	DATE	TECHN
Lead, TCLP (Pb)	64	5	mg/L	TCLP 6010 (2)	09/30/94	GEF
TCLP Physical Characterization		*1		1311 (2)	09/28/94	SGM
% Solids	100	0.5	%			
% Liquid	<0.5	0.5	%			
% Aqueous-Extract	100	0.5	%			
% Non-aqueous-Extract	<0.5	0.5	%			
TCLP Extraction Date	09/28/94	0				

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LABORATORY TESTS RESULTS 10/18/94

JOB NUMBER: 942432

CUSTOMER: GEOSCIENCE CONSULTANTS, LTD.

ATTN:

CLIENT I.D.: REXENE COC#8280

DATE SAMPLED: 09/26/94

TIME SAMPLED: 14:40

WORK DESCRIPTION: 9409261440

LABORATORY I.D.: 942432-0003

DATE RECEIVED: 09/28/94

TIME RECEIVED: 10:15

REMARKS: TR-2

TEST DESCRIPTION	FINAL RESULT	LIMITS/*DILUTION	UNITS OF MEASURE	TEST METHOD	DATE	TECHN
Lead, TCLP (Pb)	1.18	0.05	mg/L	TCLP 6010 (2)	09/30/94	GEF
TCLP Physical Characterization		*1		1311 (2)	09/28/94	SGM
% Solids	100	0.5	%			
% Liquid	<0.5	0.5	%			
% Aqueous-Extract	100	0.5	%			
% Non-aqueous-Extract	<0.5	0.5	%			
TCLP Extraction Date	09/28/94	0				

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Core Laboratories
LABORATORY TESTS RESULTS
 10/18/94

JOB NUMBER: 942432

CUSTOMER: GEOSCIENCE CONSULTANTS, LTD.

ATTN:

CLIENT I.D.: REXENE COC#8280

DATE SAMPLED: 09/26/94

TIME SAMPLED: 15:15

WORK DESCRIPTION: 9409261515

LABORATORY I.D.: 942432-0004

DATE RECEIVED: 09/28/94

TIME RECEIVED: 10:15

REMARKS: TR-6

TEST DESCRIPTION	FINAL RESULT	LIMITS/*DILUTION	UNITS OF MEASURE	TEST METHOD	DATE	TECHN
Lead, TCLP (Pb)	1.08	0.05	mg/L	TCLP 6010 (2)	09/30/94	GEF
TCLP Physical Characterization		*1		1311 (2)	09/28/94	SGM
% Solids	100	0.5	%			
% Liquid	<0.5	0.5	%			
% Aqueous-Extract	100	0.5	%			
% Non-aqueous-Extract	<0.5	0.5	%			
TCLP Extraction Date	09/28/94	0				

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LABORATORY TESTS RESULTS 10/18/94

JOB NUMBER: 942432

CUSTOMER: GEOSCIENCE CONSULTANTS, LTD.

ATTN:

CLIENT I.D.: REXENE COC#8280

DATE SAMPLED: 09/26/94

TIME SAMPLED: 16:00

WORK DESCRIPTION: 9409261600

LABORATORY I.D.: 942432-0005

DATE RECEIVED: 09/28/94

TIME RECEIVED: 10:15

REMARKS: TR-4

TEST DESCRIPTION	FINAL RESULT	LIMITS/*DILUTION	UNITS OF MEASURE	TEST METHOD	DATE	TECHN
Reactivity (HCN)	<1	1	mg/Kg	9010 (2)	09/30/94	SGM
Reactivity (H2S)	<10	10	mg/Kg	9030 (2)	09/30/94	SGM

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LABORATORY TESTS RESULTS 10/18/94

JOB NUMBER: 942432 CUSTOMER: GEOSCIENCE CONSULTANTS, LTD.

ATTN:

CLIENT I.D.: REXENE COC#8280
DATE SAMPLED: 09/26/94
TIME SAMPLED: 16:50
WORK DESCRIPTION: 9409261650

LABORATORY I.D.: 942432-0006
DATE RECEIVED: 09/28/94
TIME RECEIVED: 10:15
REMARKS: TR-5

TEST DESCRIPTION	FINAL RESULT	LIMITS/*DILUTION	UNITS OF MEASURE	TEST METHOD	DATE	TECHN
Reactivity (HCN)	<1	1	mg/Kg	9010 (2)	09/30/94	SGM
Reactivity (H2S)	<10	10	mg/Kg	9030 (2)	09/30/94	SGM

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Core Laboratories
LABORATORY TESTS RESULTS
10/18/94

JOB NUMBER: 942432

CUSTOMER: GEOSCIENCE CONSULTANTS, LTD.

ATTN:
CLIENT I.D.....: REXENE COC#8280
DATE SAMPLED.....: 09/27/94
TIME SAMPLED.....: 05:30
WORK DESCRIPTION....: 9409270530

LABORATORY I.D....: 942432-0007
DATE RECEIVED.....: 09/28/94
TIME RECEIVED.....: 10:15
REMARKS.....: MW-16

TEST DESCRIPTION	FINAL RESULT	LIMITS/*DILUTION	UNITS OF MEASURE	TEST METHOD	DATE	TECHN
Bicarbonate (Unfilt.)	1130	5	mg/L	2320 B (3)	10/04/94	RPK
Chloride (Unfilt.)	1950	5	mg/L	325.2 (1)	10/04/94	DME
Nitrogen, Nitrate (Unfilt.)	0.9	0.1	mg/L (as N)	353.2 (1)	09/29/94	DME
Sulfate (Unfilt.)	2340	200	mg/L	375.2 (1)	10/06/94	DME
Aluminum, Diss. (Al)	0.12	0.05	mg/L	6010 (2)	10/04/94	GEF
Arsenic, Diss. (As)	0.05	0.05	mg/L	6010 (2)	10/04/94	GEF
Barium, Diss. (Ba)	0.09	0.01	mg/L	6010 (2)	10/04/94	GEF
Cadmium, Diss. (Cd)	<0.005	0.005	mg/L	6010 (2)	10/04/94	GEF
Calcium, Total (Ca)	261	0.1	mg/L	6010 (2)	09/30/94	WGL
Chromium, Diss. (Cr)	<0.01	0.01	mg/L	6010 (2)	10/04/94	GEF
Cobalt, Diss. (Co)	<0.03	0.03	mg/L	6010 (2)	10/04/94	GEF
Copper, Diss. (Cu)	<0.01	0.01	mg/L	6010 (2)	10/04/94	GEF
Iron, Diss. (Fe)	2.05	0.03	mg/L	6010 (2)	10/04/94	GEF
Lead, Diss. (Pb)	<0.05	0.05	mg/L	6010 (2)	10/04/94	GEF
Mercury, Total (Hg)	<0.0002	0.0002	mg/L	7470 (2)	10/06/94	LMT
Magnesium, Total (Mg)	108	0.1	mg/L	6010 (2)	09/30/94	WGL
Manganese, Diss. (Mn)	5.21	0.01	mg/L	6010 (2)	10/04/94	GEF
Molybdenum, Diss. (Mo)	<0.05	0.05	mg/L	6010 (2)	10/04/94	GEF
Nickel, Diss. (Ni)	0.06	0.04	mg/L	6010 (2)	10/04/94	GEF
Potassium, Total (K)	33.5	0.5	mg/L	6010 (2)	09/30/94	WGL
Selenium, Diss. (Se)	<0.1	0.1	mg/L	6010 (2)	10/04/94	GEF
Silver, Diss. (Ag)	<0.01	0.01	mg/L	6010 (2)	10/04/94	GEF
Sodium, Total (Na)	1510	50	mg/L	6010 (2)	09/30/94	WGL

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LABORATORY TESTS RESULTS 10/18/94

JOB NUMBER: 942432

CUSTOMER: GEOSCIENCE CONSULTANTS, LTD.

ATTN:
CLIENT I.D.: REXENE COC#8280

DATE SAMPLED.: 09/27/94

TIME SAMPLED.: 05:30

WORK DESCRIPTION.: 9409270530

LABORATORY I.D.: 942432-0007

DATE RECEIVED.: 09/28/94

TIME RECEIVED.: 10:15

REMARKS.: MW-16

TEST DESCRIPTION	FINAL RESULT	LIMITS/*DILUTION	UNITS OF MEASURE	TEST METHOD	DATE	TECHN
Zinc, Diss. (Zn)	0.02	0.01	mg/L	6010 (2)	10/04/94	GEF
602 - VOLATILE AROMATIC ORGANICS		*1		602 (6)	10/10/94	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)	107	0	% Recovery	85-115% Limit		
Time Analyzed	1046	0				
PAH AND PHENOLS LIST BY 8270		*1		8270 (2)	10/04/94	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)	87	0	% Recovery	35-114% Limit		
2-Fluorobiphenyl (Surrogate)	82	0	% Recovery	43-116% Limit		
4-Terphenyl-d14 (Surrogate)	85	0	% Recovery	33-141% Limit		

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LABORATORY TESTS RESULTS 10/18/94

JOB NUMBER: 942432 CUSTOMER: GEOSCIENCE CONSULTANTS, LTD. ATTN:

CLIENT I.D.: REXENE COC#8280
DATE SAMPLED: 09/27/94
TIME SAMPLED: 05:30
WORK DESCRIPTION: 9409270530

LABORATORY I.D.: 942432-0007
DATE RECEIVED: 09/28/94
TIME RECEIVED: 10:15
REMARKS: MW-16

TEST DESCRIPTION	FINAL RESULT	LIMITS/*DILUTION	UNITS OF MEASURE	TEST METHOD	DATE	TECHN
Phenol-d6 (Surrogate)	28	0	% Recovery	10-94% Limit		
2-Fluorophenol (Surrogate)	68	0	% Recovery	21-100% Limit		
2,4,6-Tribromophenol (Surrogate)	102	0	% Recovery	10-123% Limit		
Time Analyzed	1541	0				
Date Extracted	09/30/94	0				

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Core Laboratories
LABORATORY TESTS RESULTS
10/18/94

JOB NUMBER: 942432 **CUSTOMER:** GEOSCIENCE CONSULTANTS, LTD. **ATTN:**
CLIENT I.D.....: REXENE COC#8280
DATE SAMPLED.....: 09/27/94
TIME SAMPLED.....: 06:25
WORK DESCRIPTION....: 9409270625

LABORATORY I.D....: 942432-0008
DATE RECEIVED.....: 09/28/94
TIME RECEIVED.....: 10:15
REMARKS.....: MW-11

TEST DESCRIPTION	FINAL RESULT	LIMITS/*DILUTION	UNITS OF MEASURE	TEST METHOD	DATE	TECHN
Bicarbonate (Unfilt.)	2100	5	mg/L	2320 B (3)	10/04/94	RPK
Chloride (Unfilt.)	792	2.5	mg/L	325.2 (1)	10/04/94	DME
Nitrogen, Nitrate (Unfilt.)	0.6	0.1	mg/L (as N)	353.2 (1)	09/29/94	DME
Sulfate (Unfilt.)	22	10	mg/L	375.2 (1)	10/05/94	DME
Aluminum, Diss. (Al)	0.12	0.05	mg/L	6010 (2)	10/04/94	GEF
Arsenic, Diss. (As)	0.15	0.05	mg/L	6010 (2)	10/04/94	GEF
Barium, Diss. (Ba)	1.03	0.01	mg/L	6010 (2)	10/04/94	GEF
Cadmium, Diss. (Cd)	<0.005	0.005	mg/L	6010 (2)	10/04/94	GEF
Calcium, Total (Ca)	201	0.1	mg/L	6010 (2)	09/30/94	WGL
Chromium, Diss. (Cr)	<0.01	0.01	mg/L	6010 (2)	10/04/94	GEF
Cobalt, Diss. (Co)	<0.03	0.03	mg/L	6010 (2)	10/04/94	GEF
Copper, Diss. (Cu)	<0.01	0.01	mg/L	6010 (2)	10/04/94	GEF
Iron, Diss. (Fe)	4.27	0.03	mg/L	6010 (2)	10/04/94	GEF
Lead, Diss. (Pb)	<0.05	0.05	mg/L	6010 (2)	10/04/94	GEF
Mercury, Total (Hg)	0.0003	0.0002	mg/L	7470 (2)	10/06/94	LMT
Magnesium, Total (Mg)	72.2	0.1	mg/L	6010 (2)	09/30/94	WGL
Manganese, Diss. (Mn)	0.75	0.01	mg/L	6010 (2)	10/04/94	GEF
Molybdenum, Diss. (Mo)	<0.05	0.05	mg/L	6010 (2)	10/04/94	GEF
Nickel, Diss. (Ni)	<0.04	0.04	mg/L	6010 (2)	10/04/94	GEF
Potassium, Total (K)	39.4	0.1	mg/L	6010 (2)	09/30/94	WGL
Selenium, Diss. (Se)	<0.1	0.1	mg/L	6010 (2)	10/04/94	GEF
Silver, Diss. (Ag)	<0.01	0.01	mg/L	6010 (2)	10/04/94	GEF
Sodium, Total (Na)	950	10	mg/L	6010 (2)	09/30/94	WGL

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Core Laboratories
LABORATORY TESTS RESULTS
 10/18/94

JOB NUMBER: 942432

CUSTOMER: GEOSCIENCE CONSULTANTS, LTD.

ATTN:

CLIENT I.D.: REXENE COC#8280

LABORATORY I.D.: 942432-0008

DATE SAMPLED: 09/27/94

DATE RECEIVED: 09/28/94

TIME SAMPLED: 06:25

TIME RECEIVED: 10:15

WORK DESCRIPTION: 9409270625

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)	10/04/94	GEF
602 - VOLATILE AROMATIC ORGANICS		*1		602 (6)	10/10/94	JHT
Benzene	15	0.5	ug/L			
Toluene	2.3	0.5	ug/L			
Ethyl benzene	8.9	0.5	ug/L			
Xylenes	9.4	0.5	ug/L			
4-Bromofluorobenzene (surrogate)	94	0	% Recovery	85-115% Limit		
Time Analyzed	1121	0				
PAH AND PHENOLS LIST BY 8270		*1		8270 (2)	10/04/94	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	12	10	ug/L			
Indeno(1,2,3-cd)pyrene	ND	10	ug/L			
1-Methylnaphthalene	120	10	ug/L			
2-Methylnaphthalene	18	10	ug/L			
Naphthalene	35	10	ug/L			
Phenanthrene	32	10	ug/L			
Pyrene	16	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)	98	0	% Recovery	35-114% Limit		
2-Fluorobiphenyl (Surrogate)	42 *	0	% Recovery	43-116% Limit		
4-Terphenyl-d14 (Surrogate)	37	0	% Recovery	33-141% Limit		

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LABORATORY TESTS RESULTS 10/18/94

JOB NUMBER: 942432 CUSTOMER: GEOSCIENCE CONSULTANTS, LTD. ATTN:

CLIENT I.D.: REXENE COC#8283
DATE SAMPLED: 09/27/94
TIME SAMPLED: 06:25
WORK DESCRIPTION: 9409270625

LABORATORY I.D.: 942432-0008
DATE RECEIVED: 09/28/94
TIME RECEIVED: 10:15
REMARKS: MW-11

TEST DESCRIPTION	FINAL RESULT	LIMITS/*DILUTION	UNITS OF MEASURE	TEST METHOD	DATE	TECHN
Phenol-d6 (Surrogate)	91	0	% Recovery	10-94% Limit		
2-Fluorophenol (Surrogate)	76	0	% Recovery	21-100% Limit		
2,4,6-Tribromophenol (Surrogate)	44	0	% Recovery	10-123% Limit		
Time Analyzed	1645	0				
Date Extracted	09/30/94	0				

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LABORATORY TESTS RESULTS 10/18/94

JOB NUMBER: 942432

CUSTOMER: GEOSCIENCE CONSULTANTS, LTD.

ATTN:
CLIENT I.D.: REXENE COC#8280

DATE SAMPLED: 09/27/94

TIME SAMPLED: 07:20

WORK DESCRIPTION: 9409270720

LABORATORY I.D.: 942432-0009

DATE RECEIVED: 09/28/94

TIME RECEIVED: 10:15

REMARKS: MW-8

TEST DESCRIPTION	FINAL RESULT	LIMITS/*DILUTION	UNITS OF MEASURE	TEST METHOD	DATE	TECHN
Bicarbonate (Unfilt.)	2930	5	mg/L	2320 B (3)	10/04/94	RPK
Chloride (Unfilt.)	1450	4.0	mg/L	325.2 (1)	10/04/94	DME
Nitrogen, Nitrate (Unfilt.)	0.1	0.1	mg/L (as N)	353.2 (1)	09/29/94	DME
Sulfate (Unfilt.)	73	10	mg/L	375.2 (1)	10/05/94	DME
Aluminum, Diss. (Al)	0.21	0.05	mg/L	6010 (2)	10/04/94	GEF
Arsenic, Diss. (As)	0.18	0.05	mg/L	6010 (2)	10/04/94	GEF
Barium, Diss. (Ba)	0.74	0.01	mg/L	6010 (2)	10/04/94	GEF
Cadmium, Diss. (Cd)	<0.005	0.005	mg/L	6010 (2)	10/04/94	GEF
Calcium, Total (Ca)	47.2	0.1	mg/L	6010 (2)	09/30/94	WGL
Chromium, Diss. (Cr)	<0.01	0.01	mg/L	6010 (2)	10/04/94	GEF
Cobalt, Diss. (Co)	<0.03	0.03	mg/L	6010 (2)	10/04/94	GEF
Copper, Diss. (Cu)	<0.01	0.01	mg/L	6010 (2)	10/04/94	GEF
Iron, Diss. (Fe)	5.10	0.03	mg/L	6010 (2)	10/04/94	GEF
Lead, Diss. (Pb)	<0.05	0.05	mg/L	6010 (2)	10/04/94	GEF
Mercury, Total (Hg)	<0.0002	0.0002	mg/L	7470 (2)	10/06/94	LMT
Magnesium, Total (Mg)	38.2	0.1	mg/L	6010 (2)	09/30/94	WGL
Manganese, Diss. (Mn)	0.18	0.01	mg/L	6010 (2)	10/04/94	GEF
Molybdenum, Diss. (Mo)	<0.05	0.05	mg/L	6010 (2)	10/04/94	GEF
Nickel, Diss. (Ni)	<0.04	0.04	mg/L	6010 (2)	10/04/94	GEF
Potassium, Total (K)	29.8	0.1	mg/L	6010 (2)	09/30/94	WGL
Selenium, Diss. (Se)	<0.1	0.1	mg/L	6010 (2)	10/04/94	GEF
Silver, Diss. (Ag)	0.01	0.01	mg/L	6010 (2)	10/04/94	GEF
Sodium, Total (Na)	1550	50	mg/L	6010 (2)	09/30/94	WGL

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LABORATORY TESTS RESULTS 10/18/94

JOB NUMBER: 942432

CUSTOMER: GEOSCIENCE CONSULTANTS, LTD.

ATTN:
CLIENT I.D.: REXENE COC#8280

LABORATORY I.D.: 942432-0009

DATE SAMPLED.: 09/27/94

DATE RECEIVED.: 09/28/94

TIME SAMPLED.: 07:20

TIME RECEIVED.: 10:15

WORK DESCRIPTION.: 9409270720

REMARKS.: MW-8

TEST DESCRIPTION	FINAL RESULT	LIMITS/*DILUTION	UNITS OF MEASURE	TEST METHOD	DATE	TECHN
Zinc, Diss. (Zn)	0.03	0.01	mg/L	6010 (2)	10/04/94	GEF
602 - VOLATILE AROMATIC ORGANICS		*200		602 (6)	10/10/94	JHT
Benzene	13000	100	ug/L			
Toluene	ND	100	ug/L			
Ethyl benzene	ND	100	ug/L			
Xylenes	ND	100	ug/L			
4-Bromofluorobenzene (surrogate)	103	0	% Recovery	85-115% Limit		
Time Analyzed	1535	0				
PAH AND PHENOLS LIST BY 8270		*1		8270 (2)	10/04/94	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	61	10	ug/L			
2-Methylnaphthalene	75	10	ug/L			
Naphthalene	230	20	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	110	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)	67	0	% Recovery	35-114% Limit		
2-Fluorobiphenyl (Surrogate)	71	0	% Recovery	43-116% Limit		
4-Terphenyl-d14 (Surrogate)	33	0	% Recovery	33-141% Limit		

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LABORATORY TESTS RESULTS 10/18/94

JOB NUMBER: 942432

CUSTOMER: GEOSCIENCE CONSULTANTS, LTD.

ATTN:

CLIENT I.D.: REXENE COC#8280

DATE SAMPLED: 09/27/94

TIME SAMPLED: 07:20

WORK DESCRIPTION: 9409270720

LABORATORY I.D.: 942432-0009

DATE RECEIVED: 09/28/94

TIME RECEIVED: 10:15

REMARKS: MW-8

TEST DESCRIPTION	FINAL RESULT	LIMITS/*DILUTION	UNITS OF MEASURE	TEST METHOD	DATE	TECHN
Phenol-d6 (Surrogate)	14	0	% Recovery	10-94% Limit		
2-Fluorophenol (Surrogate)	69	0	% Recovery	21-100% Limit		
2,4,6-Tribromophenol (Surrogate)	0 *	0	% Recovery	10-123% Limit		
Time Analyzed	1749	0				
Date Extracted	09/30/94	0				
Semi-Volatile Organic - Surrogates		*2		8270(2)/625(6)	10/10/94	JMC
Nitrobenzene-d5 (Surrogate)	57	0	% Recovery	35-114% Limit		
2-Fluorobiphenyl (Surrogate)	76	0	% Recovery	43-116% Limit		
4-Terphenyl-d14 (Surrogate)	31 *	0	% Recovery	33-141% Limit		
Phenol-d6 (Surrogate)	2 *	0	% Recovery	10-94% Limit		
2-Fluorophenol (Surrogate)	75	0	% Recovery	21-100% Limit		
2,4,6-Tribromophenol (Surrogate)	0 *	0	% Recovery	10-123% Limit		
Date Extracted	09/30/94	0				
Time Analyzed	1342	0				

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LABORATORY TESTS RESULTS 10/18/94

JOB NUMBER: 942432

CUSTOMER: GEOSCIENCE CONSULTANTS, LTD.

ATTN:

CLIENT I.D.: REXENE COC#8280

DATE SAMPLED: 09/27/94

TIME SAMPLED: 08:05

WORK DESCRIPTION: 9409270805

LABORATORY I.D.: 942432-0010

DATE RECEIVED: 09/28/94

TIME RECEIVED: 10:15

REMARKS: MW-5

TEST DESCRIPTION	FINAL RESULT	LIMITS/*DILUTION	UNITS OF MEASURE	TEST METHOD	DATE	TECHN
Bicarbonate (Unfilt.)	1630	5	mg/L	2320 B (3)	10/04/94	RPK
Chloride (Unfilt.)	4310	25	mg/L	325.2 (1)	10/17/94	DME
Nitrogen, Nitrate (Unfilt.)	<0.1	0.1	mg/L (as N)	353.2 (1)	09/29/94	DME
Sulfate (Unfilt.)	904	50	mg/L	375.2 (1)	10/05/94	DME
Aluminum, Diss. (Al)	0.12	0.05	mg/L	6010 (2)	10/04/94	GEF
Arsenic, Diss. (As)	0.08	0.05	mg/L	6010 (2)	10/04/94	GEF
Barium, Diss. (Ba)	0.18	0.01	mg/L	6010 (2)	10/04/94	GEF
Cadmium, Diss. (Cd)	<0.005	0.005	mg/L	6010 (2)	10/04/94	GEF
Calcium, Total (Ca)	620	10	mg/L	6010 (2)	09/30/94	WGL
Chromium, Diss. (Cr)	<0.01	0.01	mg/L	6010 (2)	10/04/94	GEF
Cobalt, Diss. (Co)	<0.03	0.03	mg/L	6010 (2)	10/04/94	GEF
Copper, Diss. (Cu)	<0.01	0.01	mg/L	6010 (2)	10/04/94	GEF
Iron, Diss. (Fe)	0.17	0.03	mg/L	6010 (2)	10/04/94	GEF
Lead, Diss. (Pb)	<0.05	0.05	mg/L	6010 (2)	10/04/94	GEF
Mercury, Total (Hg)	<0.0002	0.0002	mg/L	7470 (2)	10/06/94	LMT
Magnesium, Total (Mg)	186	0.1	mg/L	6010 (2)	09/30/94	WGL
Manganese, Diss. (Mn)	0.03	0.01	mg/L	6010 (2)	10/04/94	GEF
Molybdenum, Diss. (Mo)	<0.05	0.05	mg/L	6010 (2)	10/04/94	GEF
Nickel, Diss. (Ni)	<0.04	0.04	mg/L	6010 (2)	10/04/94	GEF
Potassium, Total (K)	60	5	mg/L	6010 (2)	09/30/94	WGL
Selenium, Diss. (Se)	<0.1	0.1	mg/L	6010 (2)	10/04/94	GEF
Silver, Diss. (Ag)	<0.01	0.01	mg/L	6010 (2)	10/04/94	GEF
Sodium, Total (Na)	3040	50	mg/L	6010 (2)	09/30/94	WGL

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Core Laboratories
LABORATORY TESTS RESULTS
10/18/94

JOB NUMBER: 942432

CUSTOMER: GEOSCIENCE CONSULTANTS, LTD.

ATTN:
CLIENT I.D.: REXENE COC#8280

LABORATORY I.D.: 942432-0010

DATE SAMPLED.: 09/27/94

DATE RECEIVED.: 09/28/94

TIME SAMPLED.: 08:05

TIME RECEIVED.: 10:15

WORK DESCRIPTION.: 9409270805

REMARKS.: MW-5

TEST DESCRIPTION	FINAL RESULT	LIMITS/*DILUTION	UNITS OF MEASURE	TEST METHOD	DATE	TECHN
Zinc, Diss. (Zn)	0.02	0.01	mg/L	6010 (2)	10/04/94	GEF
602 - VOLATILE AROMATIC ORGANICS		*100		602 (6)	10/10/94	JHT
Benzene	5600	50	ug/L			
Toluene	ND	50	ug/L			
Ethyl benzene	ND	50	ug/L			
Xylenes	160	50	ug/L			
4-Bromofluorobenzene (surrogate)	103	0	% Recovery	85-115% Limit		
Time Analyzed	1417	0				
PAH AND PHENOLS LIST BY 8270		*1		8270 (2)	10/04/94	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	110	10	ug/L			
2-Methylnaphthalene	32	10	ug/L			
Naphthalene	49	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)	99	0	% Recovery	35-114% Limit		
2-Fluorobiphenyl (Surrogate)	87	0	% Recovery	43-116% Limit		
4-Terphenyl-d14 (Surrogate)	81	0	% Recovery	33-141% Limit		

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LABORATORY TESTS RESULTS 10/18/94

JOB NUMBER: 942432

CUSTOMER: GEOSCIENCE CONSULTANTS, LTD.

ATTN:

CLIENT I.D.: REXENE COC#8280

DATE SAMPLED: 09/27/94

TIME SAMPLED: 08:05

WORK DESCRIPTION: 9409270805

LABORATORY I.D.: 942432-0010

DATE RECEIVED: 09/28/94

TIME RECEIVED: 10:15

REMARKS: MW-5

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)	63	0	% Recovery	21-100% Limit		
2,4,6-Tribromophenol (Surrogate)	96	0	% Recovery	10-123% Limit		
Time Analyzed	1853	0				
Date Extracted	09/30/94	0				

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LABORATORY TESTS RESULTS
 10/18/94

JOB NUMBER: 942432

CUSTOMER: GEOSCIENCE CONSULTANTS, LTD.

ATTN:

CLIENT I.D.....:

DATE SAMPLED.....: / /

TIME SAMPLED.....:

WORK DESCRIPTION...: METHOD BLANK

LABORATORY I.D....: 942432-0011

DATE RECEIVED.....: / /

TIME RECEIVED.....:

REMARKS.....:

TEST DESCRIPTION	FINAL RESULT	LIMITS/*DILUTION	UNITS OF MEASURE	TEST METHOD	DATE	TECHN
602 - VOLATILE AROMATIC ORGANICS		*1		602 (6)	10/10/94	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)	105	0	% Recovery	85-115% Limit		
Time Analyzed	1011	0				
PAH AND PHENOLS LIST BY 8270		*1		8270 (2)	10/04/94	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)	75	0	% Recovery	35-114% Limit		
2-Fluorobiphenyl (Surrogate)	67	0	% Recovery	43-116% Limit		
4-Terphenyl-d14 (Surrogate)	69	0	% Recovery	33-141% Limit		
Phenol-d6 (Surrogate)	64	0	% Recovery	10-94% Limit		
2-Fluorophenol (Surrogate)	55	0	% Recovery	21-100% Limit		

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LABORATORY TESTS RESULTS 10/18/94

JOB NUMBER: 942432

CUSTOMER: GEOSCIENCE CONSULTANTS, LTD.

ATTN:

CLIENT I.D.....:

DATE SAMPLED.....: / /

TIME SAMPLED.....: :

WORK DESCRIPTION....: METHOD BLANK

LABORATORY I.D....: 942432-0011

DATE RECEIVED.....: / /

TIME RECEIVED.....: :

REMARKS.....:

TEST DESCRIPTION	FINAL RESULT	LIMITS/*DILUTION	UNITS OF MEASURE	TEST METHOD	DATE	TECHN
2,4,6-Tribromophenol (Surrogate)	50	0	% Recovery	10-123% Limit		
Time Analyzed	1251	0				
Date Extracted	09/30/94	0				

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BRICKLAND REFINERY SITE
QUARTERLY GROUNDWATER MONITORING SUMMARY
3RD. QUARTER (SEPT. 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	0.11	0.12	0.19	0.1	0.11	0.12	0.1	0.09	0.11	0.21	0.12	0.12	0.23
Arsenic		0.05	0.08		0.11	0.08	0.48		0.28	0.18		0.15	
Barium	0.13	0.03	0.08	0.06	0.39	0.18	0.98	0.05	0.36	0.74	0.06	1.03	0.11
Cadmium											0.006		0.009
Chromium													0.05
Cobalt													
Copper										0.01			0.01
Iron	0.08	0.5	0.16	0.1	0.86	0.17	4.68	0.28	0.97	5.10	4.66	4.27	5.85
Lead													
Manganese	1.12	8.07	0.51	2.75	3.21	0.03	0.59	3.1	0.87	0.18	3.11	0.75	10.8
Mercury							0.0003		0.0005			0.0003	
Molybdenum													0.05
Nickel													
Selenium	0.1												0.4
Silver				0.01			0.01		0.01	0.01	0.01		0.03
Zinc		0.03		0.02	0.01	0.02	0.02	0.02	0.01	0.03	0.01	0.01	0.04

<u>Cations/Anions</u>													
Calcium	113	985	97.3	396	370	620	155	411	320	47.2	322	201	1380
Magnesium	31.7	470	41.9	224	225	186	125	190	73	38.2	95.6	72.2	585
Potassium	10.6	98	8.6	21	65	60	25	21	41.5	29.8	32	39.4	104
Sodium	135	3140	1050	3230	2340	3040	2980	3270	1230	1550	1510	950	4100
Bicarbonate	427	671	692	460	1470	1630	2550	506	1300	2930	830	2100	512
Chloride	115	9600	1240	4750	4360	4310	1650	5000	1580	1450	1500	792	8860
Nitrate (N)		0.3	0.1		0.4				0.1	0.1		0.6	
Sulfate	136	2440	620	2330	364	904	130	2150	548	73	1760	22	2140

(All results in mg/l)

[illegible]

BRICKLAND REFINERY SITE
QUARTERLY GROUNDWATER MONITORING SUMMARY
3RD. QUARTER (SEPT. 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	12	ND
Indeno(1,2,3-cd)pyrene	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
1-Methylnaphthalene	ND	ND	ND	ND	58	110	ND	ND	ND	61	ND	120	ND
2-Methylnaphthalene	ND	ND	ND	ND	ND	32	ND	ND	ND	75	ND	18	ND
Naphthalene	ND	ND	ND	ND	ND	49	ND	ND	ND	230	ND	35	ND
Phenanthrene	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	32	ND
Pyrene	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	16	ND

2NDPAHLWQ2

(All results in ug/l)

[illegible]

2NDPAH2.WQ2

BRICKLAND REFINERY SITE
QUARTERLY GROUNDWATER MONITORING SUMMARY
3RD. QUARTER (SEPT. 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	110	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	ND	ND	ND	ND	ND	ND	ND	ND	ND
<u>BTEX/TPH</u>													
Benzene	ND	ND	ND	ND	2000	5600	4.8	ND	ND	13000	ND	15	ND
Toluene	ND	ND	ND	ND	ND	ND	2.8	ND	ND	ND	ND	2.3	ND
Ethyl benzeno	ND	ND	ND	ND	ND	ND	34	ND	3.6	ND	ND	8.9	ND
Xylenes	ND	ND	ND	ND	ND	160	16	ND	1.3	ND	ND	9.4	ND

(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			
Aluminum	5.0	NA	NA	1.20	0.11			
Arsenic	0.1	0.07	0.07	ND	ND			
Barium	1.0	0.14	0.11	0.18	0.13			
Cadmium	0.01	ND	ND	ND	ND			
Chromium	0.05	ND	ND	ND	ND			
Cobalt	0.05	ND	ND	ND	ND			
Copper	1.0	ND	ND	0.01	ND			
Iron	1.0	NA	NA	1.96	0.08			
Lead	0.05	ND	ND	ND	ND			
Manganese	0.2	NA	NA	1.42	1.12			
Mercury	0.002	ND	ND	ND	ND			
Molybdenum	1.0	ND	ND	ND	ND			
Nickel	0.2	ND	ND	ND	ND			
Selenium	0.05	ND	ND	ND	0.1			
Silver	0.05	ND	ND	ND	ND			
Zinc	10.0	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	0.01
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		
Aluminum	5.0	NS	NA	ND	0.12		
Arsenic	0.1	NS	ND	ND	0.05		
Barium	1.0	NS	0.01	ND	0.03		
Cadmium	0.01	NS	ND	ND	ND		
Chromium	0.05	NS	0.01	ND	ND		
Cobalt	0.05	NS	ND	ND	ND		
Copper	1.0	NS	ND	ND	ND		
Iron	1.0	NS	NA	1.83	0.05		
Lead	0.05	NS	ND	ND	ND		
Manganese	0.2	NS	NA	7.47	8.07		
Mercury	0.002	NS	ND	ND	ND		
Molybdenum	1.0	NS	ND	ND	ND		
Nickel	0.2	NS	ND	ND	ND		
Selenium	0.05	NS	ND	ND	ND		
Silver	0.05	NS	ND	ND	ND		
Zinc	10.0	NS	ND	ND	0.03		

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-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		
Aluminum	5.0	NA	NA	2.32	0.19		
Arsenic	0.1	ND	ND	ND	0.08		
Barium	1.0	0.08	0.08	0.13	0.08		
Cadmium	0.01	ND	ND	ND	ND		
Chromium	0.05	ND	ND	ND	ND		
Cobalt	0.05	ND	ND	ND	ND		
Copper	1.0	ND	ND	0.01	ND		
Iron	1.0	NA	NA	3.91	0.16		
Lead	0.05	ND	ND	ND	ND		
Manganese	0.2	NA	NA	1.12	0.51		
Mercury	0.002	ND	ND	ND	ND		
Molybdenum	1.0	ND	ND	ND	ND		
Nickel	0.2	ND	ND	ND	ND		
Selenium	0.05	0.1	ND	ND	ND		
Silver	0.05	ND	ND	ND	ND		
Zinc	10.0	ND	ND	0.09	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			
Aluminum	5.0	NA	NA	0.23	0.1			
Arsenic	0.1	ND	ND	ND	ND			
Barium	1.0	0.04	0.04	0.04	0.06			
Cadmium	0.01	ND	ND	ND	ND			
Chromium	0.05	ND	ND	ND	ND			
Cobalt	0.05	ND	ND	ND	ND			
Copper	1.0	0.02	ND	ND	ND			
Iron	1.0	NA	NA	2.41	0.1			
Lead	0.05	ND	ND	ND	ND			
Manganese	0.2	NA	NA	3.25	2.75			
Mercury	0.002	ND	ND	ND	ND			
Molybdenum	1.0	ND	ND	ND	ND			
Nickel	0.2	0.04	ND	ND	ND			
Selenium	0.05	0.1	ND	ND	ND			
Silver	0.05	ND	ND	ND	0.01			
Zinc	10.0	0.01	ND	ND	0.02			

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			
Aluminum	5.0	NS	NA,NA	ND	0.11			
Arsenic	0.1	NS	0.07,ND	ND	0.11			
Barium	1.0	NS	0.05,0.05	0.20	0.39			
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	ND			
Iron	1.0	NS	NA,NA	1.78	0.86			
Lead	0.05	NS	ND,ND	ND	ND			
Manganese	0.2	NS	NA,NA	3.21	3.21			
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	ND	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

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			
Aluminum	5.0	NS	NA	ND	0.12			
Arsenic	0.1	NS	ND	ND	0.08			
Barium	1.0	NS	0.31	0.25	0.18			
Cadmium	0.01	NS	ND	ND	ND			
Chromium	0.05	NS	ND	ND	ND			
Cobalt	0.05	NS	ND	ND	ND			
Copper	1.0	NS	ND	ND	ND			
Iron	1.0	NS	NA	0.06	0.17			
Lead	0.05	NS	ND	ND	ND			
Manganese	0.2	NS	NA	0.01	0.03			
Mercury	0.002	NS	ND	ND	ND			
Molybdenum	1.0	NS	ND	ND	ND			
Nickel	0.2	NS	ND	ND	ND			
Selenium	0.05	NS	0.1	ND	ND			
Silver	0.05	NS	ND	ND	ND			
Zinc	10.0	NS	ND	ND	0.02			

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			
Aluminum	5.0	NA	NA	0.08	0.1			
Arsenic	0.1	ND	0.27	0.08	0.48			
Barium	1.0	0.04	1.07	1.16	0.98			
Cadmium	0.01	ND	ND	ND	ND			
Chromium	0.05	ND	ND	ND	ND			
Cobalt	0.05	ND	ND	ND	ND			
Copper	1.0	0.02	ND	ND	ND			
Iron	1.0	NA	NA	4.78	4.68			
Lead	0.05	ND	ND	ND	ND			
Manganese	0.2	NA	NA	1.08	0.59			
Mercury	0.002	ND	ND	ND	0.0003			
Molybdenum	1.0	ND	ND	ND	ND			
Nickel	0.2	0.04	ND	ND	ND			
Selenium	0.05	0.1	ND	ND	ND			
Silver	0.05	ND	ND	ND	0.01			
Zinc	10.0	0.01	ND	ND	0.02			

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			
Aluminum	5.0	NA	NA	0.06	0.09			
Arsenic	0.1	ND	ND	ND	ND			
Barium	1.0	0.05	0.02	0.03	0.05			
Cadmium	0.01	0.029	ND	ND	ND			
Chromium	0.05	ND	ND	ND	ND			
Cobalt	0.05	ND	ND	ND	ND			
Copper	1.0	0.02	ND	ND	ND			
Iron	1.0	NA	NA	1.30	0.28			
Lead	0.05	ND	ND	ND	ND			
Manganese	0.2	NA	NA	4.20	3.1			
Mercury	0.002	ND	ND	ND	ND			
Molybdenum	1.0	ND	ND	ND	ND			
Nickel	0.2	0.04	0.04	ND	ND			
Selenium	0.05	ND	ND	ND	ND			
Silver	0.05	ND	ND	ND	ND			
Zinc	10.0	0.02	ND	ND	0.02			

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			
Aluminum	5.0	NS	NA	0.07	0.11			
Arsenic	0.1	NS	0.08	ND	0.28			
Barium	1.0	NS	0.22	0.35	0.36			
Cadmium	0.01	NS	ND	ND	ND			
Chromium	0.05	NS	ND	ND	ND			
Cobalt	0.05	NS	ND	ND	ND			
Copper	1.0	NS	ND	ND	ND			
Iron	1.0	NS	NA	1.92	0.97			
Lead	0.05	NS	ND	ND	ND			
Manganese	0.2	NS	NA	0.80	0.87			
Mercury	0.002	NS	ND	ND	0.0005			
Molybdenum	1.0	NS	ND	ND	ND			
Nickel	0.2	NS	ND	ND	ND			
Selenium	0.05	NS	ND	ND	ND			
Silver	0.05	NS	ND	0.01	0.01			
Zinc	10.0	NS	0.01	ND	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-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			
Aluminum	5.0	NS	NA	0.12	0.21			
Arsenic	0.1	NS	0.22	0.08	0.18			
Barium	1.0	NS	0.52	0.70	0.74			
Cadmium	0.01	NS	ND	ND	ND			
Chromium	0.05	NS	ND	ND	ND			
Cobalt	0.05	NS	ND	ND	ND			
Copper	1.0	NS	ND	0.01	0.01			
Iron	1.0	NS	NA	5.79	5.10			
Lead	0.05	NS	ND	ND	ND			
Manganese	0.2	NS	NA	0.23	0.18			
Mercury	0.002	NS	ND	ND	ND			
Molybdenum	1.0	NS	ND	ND	ND			
Nickel	0.2	NS	ND	ND	ND			
Selenium	0.05	NS	0.2	ND	ND			
Silver	0.05	NS	ND	ND	0.01			
Zinc	10.0	NS	0.01	0.02	0.03			

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		
Aluminum	5.0	NA	NA	ND	0.12		
Arsenic	0.1	ND	ND	ND	ND		
Barium	1.0	0.07	0.04	0.04	0.06		
Cadmium	0.01	0.014	ND	ND	0.006		
Chromium	0.05	ND	ND	ND	ND		
Cobalt	0.05	ND	ND	ND	ND		
Copper	1.0	ND	ND	ND	ND		
Iron	1.0	NA	NA	4.80	4.66		
Lead	0.05	ND	ND	ND	ND		
Manganese	0.2	NA	NA	3.20	3.11		
Mercury	0.002	ND	0.0002	ND	ND		
Molybdenum	1.0	ND	ND	ND	ND		
Nickel	0.2	ND	ND	ND	ND		
Selenium	0.05	ND	ND	ND	ND		
Silver	0.05	ND	ND	ND	0.01		
Zinc	10.0	0.01	ND	ND	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-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			
Aluminum	5.0	NS	NA	0.10	0.12			
Arsenic	0.1	NS	0.1	0.07	0.15			
Barium	1.0	NS	1.0	1.10	1.03			
Cadmium	0.01	NS	ND	0.009	0.009			
Chromium	0.05	NS	ND	ND	ND			
Cobalt	0.05	NS	ND	ND	ND			
Copper	1.0	NS	ND	0.01	ND			
Iron	1.0	NS	NA	4.68	4.27			
Lead	0.05	NS	ND	ND	ND			
Manganese	0.2	NS	NA	0.67	0.75			
Mercury	0.002	NS	ND	ND	0.0003			
Molybdenum	1.0	NS	ND	ND	ND			
Nickel	0.2	NS	ND	ND	ND			
Selenium	0.05	NS	ND	ND	ND			
Silver	0.05	NS	ND	0.01	ND			
Zinc	10.0	NS	ND	0.01	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-11.WQ2

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

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

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				
Aluminum	5.0	0.32	0.42				
Arsenic	0.1	ND	0.14				
Barium	1.0	0.28	0.78				
Cadmium	0.01	ND	ND				
Chromium	0.05	ND	ND				
Cobalt	0.05	ND	ND				
Copper	1.0	ND	ND				
Iron	1.0	0.52	2.33				
Lead	0.05	ND	ND				
Manganese	0.2	1.06	2.9				
Mercury	0.002	ND	ND				
Molybdenum	1.0	ND	ND				
Nickel	0.2	ND	ND				
Selenium	0.05	ND	ND				
Silver	0.05	ND	0.02				
Zinc	10.0	ND	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-15.WQ2

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

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

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					
Aluminum	5.0	0.05	0.22,0.20					
Arsenic	0.1	ND	0.16,0.44					
Barium	1.0	1.24	2.11,1.81					
Cadmium	0.01	ND	ND,ND					
Chromium	0.05	ND	ND,0.01					
Cobalt	0.05	ND	0.03,0.03					
Copper	1.0	ND	ND,0.01					
Iron	1.0	0.21	9.7,9.41					
Lead	0.05	ND	ND,ND					
Manganese	0.2	3.16	8.48,7.64					
Mercury	0.002	ND	ND,ND					
Molybdenum	1.0	ND	ND,ND					
Nickel	0.2	0.05	ND,ND					
Selenium	0.05	ND	ND,0.01					
Silver	0.05	ND	0.02,0.02					
Zinc	10.0	ND	0.02,0.02					

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			
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	NA	ND	ND	ND			
2-Methylnaphthalene	TP	NA	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-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		
Acenaphthene	None	NS	ND	ND	ND		
Acenaphthylene	None	NS	ND	ND	ND		
Anthracene	TP	NS	ND	ND	ND		
Benzo(a)anthracene	None	NS	ND	ND	ND		
Benzo(b)fluoranthene	None	NS	ND	ND	ND		
Benzo(k)fluoranthene	TP	NS	ND	ND	ND		
Benzo(g,h,i)perylene	None	NS	ND	ND	ND		
Benzo(a)pyrene	0.7	NS	ND	ND	ND		
Chrysene	None	NS	ND	ND	ND		
Dibenzo(a,h)anthracene	None	NS	ND	ND	ND		
Fluoranthene	TP	NS	ND	ND	ND		
Fluorene	TP	NS	ND	ND	ND		
Indeno(1,2,3-cd)pyrene	None	NS	ND	ND	ND		
1-Methylnaphthalene	TP	NS	ND	ND	ND		
2-Methylnaphthalene	TP	NS	ND	ND	ND		
Naphthalene	30 *	NS	ND	ND	ND		
Phenanthrene	TP	NS	ND	ND	ND		
Pyrene	TP	NS	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		
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	NA	ND	ND	ND		
2-Methylnaphthalene	TP	NA	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-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		
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	NA	ND	ND	ND		
2-Methylnaphthalene	TP	NA	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-3D.WQ2

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

Parameter	WQCC Std.	12/08/93	03/23/94	6/27/94	09/27/94		
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(i)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	58		
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-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		
Acenaphthene	None	NS	ND	ND	ND		
Acenaphthylene	None	NS	ND	ND	ND		
Anthracene	TP	NS	ND	ND	ND		
Benzo(a)anthracene	None	NS	ND	ND	ND		
Benzo(b)fluoranthene	None	NS	ND	ND	ND		
Benzo(k)fluoranthene	TP	NS	ND	ND	ND		
Benzo(g,h,i)perylene	None	NS	ND	ND	ND		
Benzo(a)pyrene	0.7	NS	ND	ND	ND		
Chrysene	None	NS	ND	ND	ND		
Dibenzo(a,h)anthracene	None	NS	ND	ND	ND		
Fluoranthene	TP	NS	ND	ND	ND		
Fluorene	TP	NS	ND	ND	ND		
Indeno(1,2,3-cd)pyrene	None	NS	ND	ND	ND		
1-Methylnaphthalene	TP	NS	79	78	110		
2-Methylnaphthalene	TP	NS	ND	12	32		
Naphthalene	30 *	NS	28	27	49		
Phenanthrene	TP	NS	ND	ND	ND		
Pyrene	TP	NS	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			
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	NA	ND	ND	ND			
2-Methylnaphthalene	TP	NA	ND	ND	ND			
Naphthulene	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-6S.WQ2

MW-6D
Brickland Refinery Site
Quarterly Analytical Results

(All results in ug/l)

Parameter	WQCC Std.	12/08/93	06/27/94	09/28/94				
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	NA	ND	ND				
2-Methylnaphthalene	TP	NA	ND	ND				
Naphthalene	30 *	ND	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-6D.WQ2