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**ANNUAL  
MONITORING REPORT**

**YEAR(S):**

1995 - MAY

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Environmental Bureau  
Oil Conservation Division



*Environmental Science  
and Engineering*

*A BDM International Company*

**Quarterly Report — May 1995**

**Appendix A — Appendix G**

*May 25, 1996*

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**Appendix A**

**5th Quarter Groundwater Monitoring Data  
Tabulated Results**

**Brickland Refinery Site**  
**Quarterly Groundwater Monitoring Summary**  
**5th Quarter (March 1995)**  
(all results in ug/l)

Parameter	MW-3D	MW-3S	MW-5	MW-6D	MW-6S	MW-8	MW-8S	MW-9S	MW-11
PAHs									
Acenaphthene	ND	ND	ND	ND	ND	ND	ND	ND	ND
Acenaphthylene	ND	ND	ND	ND	ND	ND	ND	ND	ND
Anthracene	ND	ND	ND	ND	ND	ND	ND	ND	ND
Benzo(a)anthracene	ND	ND	ND	ND	ND	ND	ND	ND	ND
Benzo(b)fluoranthene	ND	ND	ND	ND	ND	ND	ND	ND	ND
Benzo(k)fluoranthene	ND	ND	ND	ND	ND	ND	ND	ND	ND
Benzo(g,h,i)perylene	ND	ND	ND	ND	ND	ND	ND	ND	ND
Benzo(a)pyrene	ND	ND	ND	ND	ND	ND	ND	ND	ND
Chrysene	ND	ND	ND	ND	ND	ND	ND	ND	ND
Dibenzo(a,h)anthracene	ND	ND	ND	ND	ND	ND	ND	ND	ND
Fluoranthene	ND	ND	ND	ND	ND	ND	ND	ND	ND
Fluorene	ND	ND	ND	ND	ND	ND	ND	ND	ND
Indeno(1,2,3-cd)pyrene	ND	ND	ND	ND	ND	ND	ND	ND	ND
1-Methylnaphthalene	ND	ND	65	ND	ND	50	ND	ND	ND
2-Methylnaphthalene	ND	ND	15	ND	ND	42	ND	ND	ND
Naphthalene	ND	ND	37	ND	ND	88	ND	ND	ND
Phenanthrene	ND	ND	ND	ND	ND	ND	ND	ND	ND
Pyrene	ND	ND	ND	ND	ND	ND	ND	ND	ND

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**Brickland Refinery Site**  
**Quarterly Groundwater Monitoring Summary**  
**5th Quarter (March 1995)**  
(all results in ug/l)

Parameter	MW-14	MW-15	MW-17	WP-1	WP-2	WP-3	WP-4	WP-5	WP-6
PAHs									
Acenaphthene	ND	ND	ND	ND	ND	ND	ND	ND	ND
Acenaphthylene	ND	ND	ND	ND	ND	ND	ND	ND	ND
Anthracene	ND	ND	ND	ND	ND	ND	ND	ND	ND
Benzo(a)anthracene	ND	ND	ND	ND	ND	ND	ND	ND	ND
Benzo(b)fluoranthene	ND	ND	ND	ND	ND	ND	ND	ND	ND
Benzo(k)fluoranthene	ND	ND	ND	ND	ND	ND	ND	ND	ND
Benzo(g,h,i)perylene	ND	ND	ND	ND	ND	ND	ND	ND	ND
Benzo(a)pyrene	ND	ND	ND	ND	ND	ND	ND	ND	ND
Chrysene	ND	ND	ND	ND	ND	ND	ND	ND	ND
Dibenzo(a,h)anthracene	ND	ND	ND	ND	ND	ND	ND	ND	ND
Fluoranthene	ND	ND	ND	ND	ND	ND	ND	ND	ND
Fluorene	ND	ND	ND	ND	ND	ND	ND	ND	ND
Indeno(1,2,3-cd)pyrene	ND	ND	ND	ND	ND	ND	ND	ND	ND
1-Methylnaphthalene	ND	ND	ND	36	ND	ND	48	24	160
2-Methylnaphthalene	ND	ND	ND	33	ND	ND	39	27	200
Naphthalene	ND	ND	ND	26	19	ND	14	73	290
Phenanthrene	ND	ND	ND	ND	ND	ND	28	ND	20
Pyrene	ND	ND	ND	ND	ND	ND	24	ND	35

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Brickland Refinery Site  
 Quarterly Groundwater Monitoring Summary  
 5th Quarter (March 1995)  
 (all results in ug/l)

Parameter	WP-7	WP-8	WP-9	WP-15	WP-18	WP-19	WP-20	WP-22	WP-23
PAHs									
Acenaphthene	ND	ND	ND	ND	ND	ND	ND	ND	ND
Acenaphthylene	ND	ND	ND	ND	ND	ND	ND	ND	ND
Anthracene	ND	ND	ND	ND	ND	ND	ND	ND	ND
Benzo(a)anthracene	ND	ND	ND	ND	ND	ND	ND	ND	ND
Benzo(b)fluoranthene	ND	ND	ND	ND	ND	ND	ND	ND	ND
Benzo(k)fluoranthene	ND	ND	ND	ND	ND	ND	ND	ND	ND
Benzo(g,h,i)perylene	ND	ND	ND	ND	ND	ND	ND	ND	ND
Benzo(a)pyrene	ND	ND	ND	ND	ND	ND	ND	ND	ND
Chrysene	ND	ND	ND	ND	ND	ND	ND	ND	ND
Dibenzo(a,h)anthracene	ND	ND	ND	ND	ND	ND	ND	ND	ND
Fluoranthene	ND	ND	ND	ND	ND	ND	ND	ND	ND
Fluorene	ND	ND	ND	ND	ND	ND	ND	ND	ND
Indeno(1,2,3-cd)pyrene	ND	ND	ND	ND	ND	ND	ND	ND	ND
1-Methylnaphthalene	12	40	190	ND	52	75	180	22	ND
2-Methylnaphthalene	ND	59	250	ND	66	87	220	ND	ND
Naphthalene	ND	73	220	ND	60	120	220	ND	ND
Phenanthrene	ND	ND	ND	ND	ND	ND	ND	ND	ND
Pyrene	ND	ND	ND	ND	ND	ND	ND	ND	ND

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Brickland Refinery Site  
 Quarterly Groundwater Monitoring Summary  
 5th Quarter (March 1995)  
 (all results in ug/l)

Parameter	WP-24	WP-26d	WP-27d	WP-29	WP-30
PAHs					
Acenaphthene	ND	ND	ND	ND	ND
Acenaphthylene	ND	ND	ND	ND	ND
Anthracene	ND	ND	ND	ND	ND
Benzo(a)anthracene	ND	ND	ND	ND	ND
Benzo(b)fluoranthene	ND	ND	ND	ND	ND
Benzo(k)fluoranthene	ND	ND	ND	ND	ND
Benzo(g,h,i)perylene	ND	ND	ND	ND	ND
Benzo(a)pyrene	ND	ND	ND	ND	ND
Chrysene	ND	ND	ND	ND	ND
Dibenzo(a,h)anthracene	ND	ND	ND	ND	ND
Fluoranthene	ND	ND	ND	ND	ND
Fluorene	ND	ND	ND	ND	ND
Indeno(1,2,3-cd)pyrene	ND	ND	ND	ND	ND
1-Methylnaphthalene	57	120	160	70	48
2-Methylnaphthalene	32	ND	120	110	12
Naphthalene	19	ND	ND	160	ND
Phenanthrene	ND	85	ND	ND	ND
Pyrene	ND	ND	ND	ND	ND

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**Brickland Refinery Site**  
**Quarterly Groundwater Monitoring Summary**  
**5th Quarter (March 1995)**  
(all results in ug/l)

Parameter	MW-3D	DSMW-3D	MW-3S	MW-4	MW-5	MW-6D	MW-6S	DSMW-6D	MW-7
Phenols									
4-Chloro-3-methylphenol	ND	NS	ND	NS	ND	ND,NS	ND,ND	NS	NS
2-Chlorophenol	ND	NS	ND	NS	ND	ND,NS	ND,ND	NS	NS
2,4-Dichlorophenol	ND	NS	ND	NS	ND	ND,NS	ND,ND	NS	NS
2,4-Dimethylphenol	ND	NS	ND	NS	ND	ND,NS	ND,ND	NS	NS
2,4-Dinitrophenol	ND	NS	ND	NS	ND	ND,NS	ND,ND	NS	NS
4,6-Dinitro-2-methylphenol	ND	NS	ND	NS	ND	ND,NS	ND,ND	NS	NS
2-Nitrophenol	ND	NS	ND	NS	ND	ND,NS	ND,ND	NS	NS
4-Nitrophenol	ND	NS	ND	NS	ND	ND,NS	ND,ND	NS	NS
Pentachlorophenol	ND	NS	ND	NS	ND	ND,NS	ND,ND	NS	NS
Phenol	ND	NS	ND	NS	ND	ND,NS	ND,ND	NS	NS
2,4,6-Trichlorophenol	ND	NS	ND	NS	ND	ND,NS	ND,ND	NS	NS
BTEX									
Benzene	ND	ND	ND	220	4700	ND,ND	110,110	ND	100
Toluene	ND	ND	ND	ND	100	ND,ND	7,7	ND	ND
Ethyl Benzene	ND	ND	ND	6	70	ND,ND	32,31	ND	ND
Xylenes	ND	ND	ND	ND	280	ND,ND	43,44	ND	ND

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DSMW = Down Stream Monitor Well

**Brickland Refinery Site**  
**Quarterly Groundwater Monitoring Summary**  
**5th Quarter (March 1995)**  
(all results in ug/l)

Parameter	MW-8	MW-9S	MW-11	USMW-12	MW-14	MW-15	MW-16	MW-17	WP-1
Phenols									
4-Chloro-3-methylphenol	ND	ND	ND	NS	ND	ND	NS	ND	ND
2-Chlorophenol	ND	ND	ND	NS	ND	ND	NS	ND	ND
2,4-Dichlorophenol	ND	ND	ND	NS	ND	ND	NS	ND	ND
2,4-Dimethylphenol	87	ND	ND	NS	ND	ND	NS	ND	1200
2,4-Dinitrophenol	ND	ND	ND	NS	ND	ND	NS	ND	ND
4,6-Dinitro-2-methylphenol	ND	ND	ND	NS	ND	ND	NS	ND	ND
2-Nitrophenol	ND	ND	ND	NS	ND	ND	NS	ND	ND
4-Nitrophenol	ND	ND	ND	NS	ND	ND	NS	ND	ND
Pentachlorophenol	ND	ND	ND	NS	ND	ND	NS	ND	ND
Phenol	ND	ND	ND	NS	28	ND	NS	ND	ND
2,4,6-Trichlorophenol	ND	ND	ND	NS	ND	ND	NS	ND	ND
BTEX									
Benzene	14000	ND	15	ND	1100	NS	ND	67	300
Toluene	ND	ND	ND	ND	ND	NS	ND	ND	14
Ethyl Benzene	ND	ND	ND	ND	25	NS	ND	ND	25
Xylenes	1100	ND	ND	ND	ND	NS	ND	ND	45

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USMW = Up Stream Monitor Well

**Brickland Refinery Site**  
**Quarterly Groundwater Monitoring Summary**  
**5th Quarter (March 1995)**  
(all results in ug/l)

Parameter	WP-2	WP-3	WP-4	WP-5	WP-6	WP-7	WP-8	WP-9	WP-15
<b>Phenols</b>									
4-Chloro-3-methylphenol	ND	ND	ND	ND	ND	ND	ND	ND	ND
2-Chlorophenol	ND	ND	ND	ND	ND	ND	ND	ND	ND
2,4-Dichlorophenol	ND	ND	ND	ND	ND	ND	ND	ND	ND
2,4-Dimethylphenol	3200	ND	37	ND	ND	ND	78	380	ND
2,4-Dinitrophenol	ND	ND	ND	ND	ND	ND	ND	ND	ND
4,6-Dinitro-2-methylphenol	ND	ND	ND	ND	ND	ND	ND	ND	ND
2-Nitrophenol	ND	ND	ND	ND	ND	ND	ND	ND	ND
4-Nitrophenol	ND	ND	ND	ND	ND	ND	ND	ND	ND
Pentachlorophenol	ND	ND	ND	ND	ND	ND	ND	170	ND
Phenol	ND	ND	ND	ND	ND	ND	ND	ND	ND
2,4,6-Trichlorophenol	ND	ND	ND	ND	ND	ND	ND	12	ND
<b>BTEX</b>									
Benzene	500	ND	ND	4500	17000E	5	5300	6600	ND
Toluene	320	ND	ND	ND	ND	ND	ND	200	ND
Ethyl Benzene	72	ND	ND	130	1400	ND	100	500	ND
Xylenes	110	ND	26	ND	160	ND	100	1400	ND

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E = Indicates sample result is an estimate due to concentration exceeding calibration range of instrument.

**Brickland Refinery Site**  
**Quarterly Groundwater Monitoring Summary**  
**5th Quarter (March 1995)**  
(all results in ug/l)

Parameter	WP-18	WP-19	WP-20	WP-22	WP-23	WP-24	WP-26d	WP-27d	WP-29	WP-30
Phenols										
4-Chloro-3-methylphenol	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
2-Chlorophenol	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
2,4-Dichlorophenol	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
2,4-Dimethylphenol	ND	28	ND	ND	ND	ND	55	6000	2200	ND
2,4-Dinitrophenol	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
2-Nitrophenol	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
4-Nitrophenol	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Pentachlorophenol	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Phenol	ND	78	ND	ND	ND	ND	ND	ND	ND	ND
2,4,6-Trichlorophenol	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
BTEX										
Benzene	76	9400	1700	1800	0.9	160	20	950	1900	8.6
Toluene	ND	ND	ND	ND	ND	ND	ND	30	ND	ND
Ethyl Benzene	14	670	ND	88	ND	ND	ND	250	95	ND
Xylenes	8	380	ND	ND	ND	ND	16	370	210	0.8

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

Parameter	WQCC Std.	12/08/93	03/23/94	07/12/94	09/28/94	12/13/94	03/28/95
Phenols							
4-Chloro-3-methylphenol	None	NS	ND	ND	ND	ND	ND
2-Chlorophenol	None	NS	ND	ND	ND	ND	ND
2,4-Dichlorophenol	TP	NS	ND	ND	ND	ND	ND
2,4-Dimethylphenol	None	NS	ND	ND	ND	ND	ND
2,4-Dinitrophenol	TP	NS	ND	ND	ND	ND	ND
4,6-Dinitro-2-methylphenol	None	NS	ND	ND	ND	ND	ND
2-Nitrophenol	None	NS	ND	ND	ND	ND	ND
4-Nitrophenol	None	NS	ND	ND	ND	ND	ND
Pentachlorophenol	TP	NS	ND	ND	ND	ND	ND
Phenol	5	NS	ND	ND	ND	ND	ND
2,4,6-Trichlorophenol	TP	NS	ND	ND	ND	ND	ND

/PHEN8270/PHB827A.WQ2

Detection Limits (ug/l):

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

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

**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	09/27/94	12/13/94	03/28/95
Phenols							
4-Chloro-3-methylphenol	None	NS	ND	ND	ND	ND	ND
2-Chlorophenol	None	NS	ND	ND	ND	ND	ND
2,4-Dichlorophenol	TP	NS	ND	ND	ND	ND	ND
2,4-Dimethylphenol	None	NS	ND	ND	ND	ND	ND
2,4-Dinitrophenol	TP	NS	ND	ND	ND	ND	ND
4,6-Dinitro-2-methylphenol	None	NS	ND	ND	ND	ND	ND
2-Nitrophenol	None	NS	ND	ND	ND	ND	ND
4-Nitrophenol	None	NS	ND	ND	ND	ND	ND
Pentachlorophenol	TP	NS	ND	ND	ND	ND	ND
Phenol	5	NS	ND	ND	ND	ND	ND
2,4,6-Trichlorophenol	TP	NS	ND	ND	ND	ND	ND

/PHEN82701PHB8270.WQ2

Detection Limits (ug/l):  
 4-Chloro-3-methylphenol 10  
 2-Chlorophenol 10  
 2,4-Dichlorophenol 10  
 2,4-Dimethylphenol 10  
 NS = Not sampled  
 NA = Not analyzed  
 ND = Not detected  
 TP = WQCC toxic pollutant

10 2,4-Dinitrophenol 50  
 10 4,6-Dinitro-2-methylphenol 50  
 10 2-Nitrophenol 10  
 10 4-Nitrophenol 50  
 50 Pentachlorophenol 50  
 10 Phenol 10  
 10 2,4,6-Trichlorophenol 10

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

Parameter	WQCC Std.	12/08/93	3/23/94	6/27/94	09/27/94	12/13/94	03/27/95
Phenols							
4-Chloro-3-methylphenol	None	NS	ND	ND	ND	ND	ND
2-Chlorophenol	None	NS	ND	ND	ND	ND	ND
2,4-Dichlorophenol	TP	NS	ND	ND	ND	ND	ND
2,4-Dimethylphenol	None	NS	ND	ND	ND	ND	ND
2,4-Dinitrophenol	TP	NS	ND	ND	ND	ND	ND
4,6-Dinitro-2-methylphenol	None	NS	ND	ND	ND	ND	ND
2-Nitrophenol	None	NS	ND	ND	ND	ND	ND
4-Nitrophenol	None	NS	ND	ND	ND	ND	ND
Pentachlorophenol	TP	NS	ND	ND	ND	ND	ND
Phenol	5	NS	ND	ND	ND	ND	ND
2,4,6-Trichlorophenol	TP	NS	ND	ND	ND	ND	ND

/PHEN8270/1PHE827A.W02

Detection Limits (ug/l):

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

NS = Not sampled

NA = Not analyzed

ND = Not detected

TP = WQCC toxic pollutant

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

Parameter	WQCC Std.	12/08/93	03/23/94	06/27/94	09/28/94	12/13/94	03/28/95
Phenols							
4-Chloro-3-methylphenol	None	NS	NA	ND	ND	ND	ND
2-Chlorophenol	None	NS	ND	ND	ND	ND	ND
2,4-Dichlorophenol	TP	NS	ND	ND	ND	ND	ND
2,4-Dimethylphenol	None	NS	ND	ND	ND	ND	ND
2,4-Dinitrophenol	TP	NS	ND	ND	ND	ND	ND
4,6-Dinitro-2-methylphenol	None	NS	NA	ND	ND	ND	ND
2-Nitrophenol	None	NS	ND	ND	ND	ND	ND
4-Nitrophenol	None	NS	ND	ND	ND	ND	ND
Pentachlorophenol	TP	NS	ND	ND	ND	ND	ND
Phenol	5	NS	ND	ND	ND	ND	ND
2,4,6-Trichlorophenol	TP	NS	ND	ND	ND	ND	ND

/PHEN8270/PHEN8270.WQ2

**Detection Limits (ug/l):**

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

NS = Not sampled

NA = Not analyzed

ND = Not detected

TP = WQCC toxic pollutant



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

Parameter	WQCC Std.	12/08/93	03/25/94	06/27/94	09/27/94	12/13/94	03/28/95
Phenols							
4-Chloro-3-methylphenol	None	NS	ND	ND	ND	ND	ND
2-Chlorophenol	None	NS	ND	ND	ND	ND	ND
2,4-Dichlorophenol	TP	NS	ND	ND	ND	ND	ND
2,4-Dimethylphenol	None	NS	ND	ND	ND	ND	ND
2,4-Dinitrophenol	TP	NS	ND	ND	ND	ND	ND
4,6-Dinitro-2-methylphenol	None	NS	ND	ND	ND	ND	ND
2-Nitrophenol	None	NS	ND	ND	ND	ND	ND
4-Nitrophenol	None	NS	ND	ND	ND	ND	ND
Pentachlorophenol	TP	NS	ND	ND	ND	ND	ND
Phenol	5	NS	ND	ND	ND	ND	ND
2,4,6-Trichlorophenol	TP	NS	ND	ND	ND	ND	ND

/PHEN8270/PH8270.WQ2

Detection Limits (ug/l):

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

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	12/13/94	03/27/95
Phenols					
4-Chloro-3-methylphenol	None	ND	ND	ND	ND
2-Chlorophenol	None	ND	ND	ND	ND
2,4-Dichlorophenol	TP	ND	ND	ND	ND
2,4-Dimethylphenol	None	ND	ND	ND	ND
2,4-Dinitrophenol	TP	ND	ND	ND	ND
4,6-Dinitro-2-methylphenol	None	ND	ND	ND	ND
2-Nitrophenol	None	ND	ND	ND	ND
4-Nitrophenol	None	ND	ND	ND	ND
Pentachlorophenol	TP	ND	ND	ND	ND
Phenol	5	ND	ND	ND	ND
2,4,6-Trichlorophenol	TP	ND	ND	ND	ND

/PHEN8270/TPHE8270.W02

Detection Limits (ug/l):

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

NS = Not sampled

NA = Not analyzed

ND = Not detected

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	12/13/94	03/27/95
Phenols					
4-Chloro-3-methylphenol	None	ND	ND,ND	ND	ND
2-Chlorophenol	None	ND	ND,ND	ND	ND
2,4-Dichlorophenol	TP	ND	ND,ND	ND	ND
2,4-Dimethylphenol	None	ND	ND,ND	ND	ND
2,4-Dinitrophenol	TP	ND	ND,ND	ND	ND
4,6-Dinitro-2-methylphenol	None	ND	ND,ND	ND	ND
2-Nitrophenol	None	ND	ND,ND	ND	ND
4-Nitrophenol	None	ND	ND,ND	ND	ND
Pentachlorophenol	TP	ND	ND,ND	ND	ND
Phenol	5	ND	ND,ND	ND	ND
2,4,6-Trichlorophenol	TP	ND	ND,ND	ND	ND

/PHEN82701PHB8270.WQ2

Detection Limits (ug/l):

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

NS = Not sampled

NA = Not analyzed

ND = Not detected

TP = WQCC toxic pollutant

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

Parameter	WQCC Std.	03/27/95					
<b>Phenols</b>							
4-Chloro-3-methylphenol	None	ND					
2-Chlorophenol	None	ND					
2,4-Dichlorophenol	TP	ND					
2,4-Dimethylphenol	None	1200					
2,4-Dinitrophenol	TP	ND					
4,6-Dinitro-2-methylphenol	None	ND					
2-Nitrophenol	None	ND					
4-Nitrophenol	None	ND					
Pentachlorophenol	TP	ND					
Phenol	5	ND					
2,4,6-Trichlorophenol	TP	ND					

/PHEN82701PHB8270.WQ2

**Detection Limits (ug/l):**

4-Chloro-3-methylphenol	10	2,4-Dinitrophenol	50	Pentachlorophenol	50
2-Chlorophenol	10	4,6-Dinitro-2-methylphenol	50	Phenol	10
2,4-Dichlorophenol	10	2-Nitrophenol	10	2,4,6-Trichlorophenol	10
2,4-Dimethylphenol	100	4-Nitrophenol	50		

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

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

Parameter	WQCC Std.	03/27/95						
Phenols								
4-Chloro-3-methylphenol	None	ND						
2-Chlorophenol	None	ND						
2,4-Dichlorophenol	TP	ND						
2,4-Dimethylphenol	None	3200						
2,4-Dinitrophenol	TP	ND						
4,6-Dinitro-2-methylphenol	None	ND						
2-Nitrophenol	None	ND						
4-Nitrophenol	None	ND						
Pentachlorophenol	TP	ND						
Phenol	5	ND						
2,4,6-Trichlorophenol	TP	ND						

PHEN82701PHEN8270 WQ2

Detection Limits (ug/l):

4-Chloro-3-methylphenol	10	2,4-Dinitrophenol	50	Pentachlorophenol	50
2-Chlorophenol	10	4,6-Dinitro-2-methylphenol	50	Phenol	10
2,4-Dichlorophenol	10	2-Nitrophenol	10	2,4,6-Trichlorophenol	10
2,4-Dimethylphenol	200	4-Nitrophenol	50		

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

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

Parameter	WQCC Std.	03/27/95						
Phenols								
4-Chloro-3-methylphenol	None	ND						
2-Chlorophenol	None	ND						
2,4-Dichlorophenol	TP	ND						
2,4-Dimethylphenol	None	ND						
2,4-Dinitrophenol	TP	ND						
4,6-Dinitro-2-methylphenol	None	ND						
2-Nitrophenol	None	ND						
4-Nitrophenol	None	ND						
Pentachlorophenol	TP	ND						
Phenol	5	ND						
2,4,6-Trichlorophenol	TP	ND						

PHEN82701PHB8270 WQ2

Detection Limits (ug/l):

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

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

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

Parameter	WQCC Std.	03/27/95					
Phenols							
4-Chloro-3-methylphenol	None	ND					
2-Chlorophenol	None	ND					
2,4-Dichlorophenol	TP	ND					
2,4-Dimethylphenol	None	37					
2,4-Dinitrophenol	TP	ND					
4,6-Dinitro-2-methylphenol	None	ND					
2-Nitrophenol	None	ND					
4-Nitrophenol	None	ND					
Pentachlorophenol	TP	ND					
Phenol	5	ND					
2,4,6-Trichlorophenol	TP	ND					

/PHEN82/W1PH8270.WQZ

Detection Limits (ug/l):

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

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

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

Parameter	WQCC Std.	03/28/95						
Phenols								
4-Chloro-3-methylphenol	None	ND						
2-Chlorophenol	None	ND						
2,4-Dichlorophenol	TP	ND						
2,4-Dimethylphenol	None	ND						
2,4-Dinitrophenol	TP	ND						
4,6-Dinitro-2-methylphenol	None	ND						
2-Nitrophenol	None	ND						
4-Nitrophenol	None	ND						
Pentachlorophenol	TP	ND						
Phenol	5	ND						
2,4,6-Trichlorophenol	TP	ND						

/PHEN8270/1PHB8270.W02

Detection Limits (ug/l):

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

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



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

Parameter	WQCC Std.	03/28/95					
Phenols							
4-Chloro-3-methylphenol	None	ND					
2-Chlorophenol	None	ND					
2,4-Dichlorophenol	TP	ND					
2,4-Dimethylphenol	None	ND					
2,4-Dinitrophenol	TP	ND					
4,6-Dinitro-2-methylphenol	None	ND					
2-Nitrophenol	None	ND					
4-Nitrophenol	None	ND					
Pentachlorophenol	TP	ND					
Phenol	5	ND					
2,4,6-Trichlorophenol	TP	ND					

/PHEN8270/PHE8270.WQ2

Detection Limits (ug/l):

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

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

**WP-7**  
**Brickland Refinery Site**  
**Quarterly Analytical Results**  
 (All results in ug/l)

Parameter	WQCC Std.	03/27/95						
<b>Phenols</b>								
4-Chloro-3-methylphenol	None	ND						
2-Chlorophenol	None	ND						
2,4-Dichlorophenol	TP	ND						
2,4-Dimethylphenol	None	ND						
2,4-Dinitrophenol	TP	ND						
4,6-Dinitro-2-methylphenol	None	ND						
2-Nitrophenol	None	ND						
4-Nitrophenol	None	ND						
Pentachlorophenol	TP	ND						
Phenol	5	ND						
2,4,6-Trichlorophenol	TP	ND						

PPHEN82701PH8270.WQ2

Detection Limits (ug/l):

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

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

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

Parameter	WQCC Std.	03/27/95						
Phenols								
4-Chloro-3-methylphenol	None	ND						
2-Chlorophenol	None	ND						
2,4-Dichlorophenol	TP	ND						
2,4-Dimethylphenol	None	78						
2,4-Dinitrophenol	TP	ND						
4,6-Dinitro-2-methylphenol	None	ND						
2-Nitrophenol	None	ND						
4-Nitrophenol	None	ND						
Pentachlorophenol	TP	ND						
Phenol	5	ND						
2,4,6-Trichlorophenol	TP	ND						

/PHEN8270/PHB827A.WQ2

Detection Limits (ug/l):

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

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

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

Parameter	WQCC Std.	03/27/95						
Phenols								
4-Chloro-3-methylphenol	None	ND						
2-Chlorophenol	None	ND						
2,4-Dichlorophenol	TP	ND						
2,4-Dimethylphenol	None	380						
2,4-Dinitrophenol	TP	ND						
4,6-Dinitro-2-methylphenol	None	ND						
2-Nitrophenol	None	ND						
4-Nitrophenol	None	ND						
Pentachlorophenol	TP	170						
Phenol	5	ND						
2,4,6-Trichlorophenol	TP	12						

/PHEN8270/1PHE8270A WQ2

Detection Limits (ug/l):

4-Chloro-3-methylphenol	10	2,4-Dinitrophenol	50	Pentachlorophenol	50
2-Chlorophenol	10	4,6-Dinitro-2-methylphenol	50	Phenol	10
2,4-Dichlorophenol	10	2-Nitrophenol	10	2,4,6-Trichlorophenol	10
2,4-Dimethylphenol	100	4-Nitrophenol	50		

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

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

Parameter	WQCC Std.	03/28/95						
Phenols								
4-Chloro-3-methylphenol	None	ND						
2-Chlorophenol	None	ND						
2,4-Dichlorophenol	TP	ND						
2,4-Dimethylphenol	None	ND						
2,4-Dinitrophenol	TP	ND						
4,6-Dinitro-2-methylphenol	None	ND						
2-Nitrophenol	None	ND						
4-Nitrophenol	None	ND						
Pentachlorophenol	TP	ND						
Phenol	5	ND						
2,4,6-Trichlorophenol	TP	ND						

PHEN8270/PHEN8270/WQ2

Detection Limits (ug/l):

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

NS = Not sampled

NA = Not analyzed

ND = Not detected

TP = WQCC toxic pollutant

**WP-18**  
**Brickland Refinery Site**  
**Quarterly Analytical Results**  
 (All results in ug/l)

Parameter	WQCC Std.	03/28/95						
Phenols								
4-Chloro-3-methylphenol	None	ND						
2-Chlorophenol	None	ND						
2,4-Dichlorophenol	TP	ND						
2,4-Dimethylphenol	None	ND						
2,4-Dinitrophenol	TP	ND						
4,6-Dinitro-2-methylphenol	None	ND						
2-Nitrophenol	None	ND						
4-Nitrophenol	None	ND						
Pentachlorophenol	TP	ND						
Phenol	5	ND						
2,4,6-Trichlorophenol	TP	ND						

/PHEN82701PHB270.WQ2

Detection Limits (ug/l):

- 4-Chloro-3-methylphenol 10
- 2-Chlorophenol 10
- 2,4-Dichlorophenol 10
- 2,4-Dimethylphenol 10
- NS = Not sampled
- NA = Not analyzed
- ND = Not detected
- TP = WQCC toxic pollutant

2,4-Dinitrophenol 50

4,6-Dinitro-2-methylphenol 50

2-Nitrophenol 10

4-Nitrophenol 50

Pentachlorophenol 50

Phenol 10

2,4,6-Trichlorophenol 10

WP-19

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

Parameter	WQCC Std.	03/28/95						
Phenols								
4-Chloro-3-methylphenol	None	ND						
2-Chlorophenol	None	ND						
2,4-Dichlorophenol	TP	ND						
2,4-Dimethylphenol	None	28						
2,4-Dinitrophenol	TP	ND						
4,6-Dinitro-2-methylphenol	None	ND						
2-Nitrophenol	None	ND						
4-Nitrophenol	None	ND						
Pentachlorophenol	TP	ND						
Phenol	5	78						
2,4,6-Trichlorophenol	TP	ND						

PHEN8270/PHB8270.W02

Detection Limits (ug/l):

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

NS = Not sampled

NA = Not analyzed

ND = Not detected

TP = WQCC toxic pollutant

**WP-20**  
**Brickland Refinery Site**  
**Quarterly Analytical Results**  
 (All results in ug/l)

Parameter	WQCC Std.	03/27/95						
Phenols								
4-Chloro-3-methylphenol	None	ND						
2-Chlorophenol	None	ND						
2,4-Dichlorophenol	TP	ND						
2,4-Dimethylphenol	None	ND						
2,4-Dinitrophenol	TP	ND						
4,6-Dinitro-2-methylphenol	None	ND						
2-Nitrophenol	None	ND						
4-Nitrophenol	None	ND						
Pentachlorophenol	TP	ND						
Phenol	5	ND						
2,4,6-Trichlorophenol	TP	ND						

/PHEN82701PHEN8270.WQ2

Detection Limits (ug/l):

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

NS = Not sampled

NA = Not analyzed

ND = Not detected

TP = WQCC toxic pollutant



**WP-23**  
**Brickland Refinery Site**  
**Quarterly Analytical Results**  
 (All results in ug/l)

Parameter	WQCC Std.	03/28/95						
Phenols								
4-Chloro-3-methylphenol	None	ND						
2-Chlorophenol	None	ND						
2,4-Dichlorophenol	TP	ND						
2,4-Dimethylphenol	None	ND						
2,4-Dinitrophenol	TP	ND						
4,6-Dinitro-2-methylphenol	None	ND						
2-Nitrophenol	None	ND						
4-Nitrophenol	None	ND						
Pentachlorophenol	TP	ND						
Phenol	5	ND						
2,4,6-Trichlorophenol	TP	ND						

/PHEN8270/1PHB8270.W02

Detection Limits (ug/l):

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

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

**WP-24**  
**Brickland Refinery Site**  
**Quarterly Analytical Results**  
 (All results in ug/l)

Parameter	WQCC Std.	03/27/95						
Phenols								
4-Chloro-3-methylphenol	None	ND						
2-Chlorophenol	None	ND						
2,4-Dichlorophenol	TP	ND						
2,4-Dimethylphenol	None	ND						
2,4-Dinitrophenol	TP	ND						
4,6-Dinitro-2-methylphenol	None	ND						
2-Nitrophenol	None	ND						
4-Nitrophenol	None	ND						
Pentachlorophenol	TP	ND						
Phenol	5	ND						
2,4,6-Trichlorophenol	TP	ND						

/PHEN8270/PHB8270/WG2

Detection Limits (ug/l):

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

NS = Not sampled

NA = Not analyzed

ND = Not detected

TP = WQCC toxic pollutant

WP-26d

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

Parameter	WQCC Std.	03/27/95					
Phenols							
4-Chloro-3-methylphenol	None	ND					
2-Chlorophenol	None	ND					
2,4-Dichlorophenol	TP	ND					
2,4-Dimethylphenol	None	55					
2,4-Dinitrophenol	TP	ND					
4,6-Dinitro-2-methylphenol	None	ND					
2-Nitrophenol	None	ND					
4-Nitrophenol	None	ND					
Pentachlorophenol	TP	ND					
Phenol	5	ND					
2,4,6-Trichlorophenol	TP	ND					

PHEN8270/1PHB8270.WQ2

Detection Limits (ug/l):

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

NS = Not sampled

NA = Not analyzed

ND = Not detected

TP = WQCC toxic pollutant

**WP-27d**  
**Brickland Refinery Site**  
**Quarterly Analytical Results**  
 (All results in ug/l)

Parameter	WQCC Std.	03/28/95					
Phenols							
4-Chloro-3-methylphenol	None	ND					
2-Chlorophenol	None	ND					
2,4-Dichlorophenol	TP	ND					
2,4-Dimethylphenol	None	6000					
2,4-Dinitrophenol	TP	ND					
4,6-Dinitro-2-methylphenol	None	ND					
2-Nitrophenol	None	ND					
4-Nitrophenol	None	ND					
Pentachlorophenol	TP	ND					
Phenol	5	ND					
2,4,6-Trichlorophenol	TP	ND					

/PHEN62/WIPHE8270.WQ2

Detection Limits (ug/l):

- 4-Chloro-3-methylphenol 100
- 2-Chlorophenol 100
- 2,4-Dichlorophenol 100
- 2,4-Dimethylphenol 400
- 2,4-Dinitrophenol 500
- 4,6-Dinitro-2-methylphenol 500
- 2-Nitrophenol 100
- 4-Nitrophenol 500
- Pentachlorophenol 500
- Phenol 100
- 2,4,6-Trichlorophenol 100

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

**WP-29**  
**Brickland Refinery Site**  
**Quarterly Analytical Results**  
 (All results in ug/l)

Parameter	WQCC Std.	03/28/95						
Phenols								
4-Chloro-3-methylphenol	None	ND						
2-Chlorophenol	None	ND						
2,4-Dichlorophenol	TP	ND						
2,4-Dimethylphenol	None	2200						
2,4-Dinitrophenol	TP	ND						
4,6-Dinitro-2-methylphenol	None	ND						
2-Nitrophenol	None	ND						
4-Nitrophenol	None	ND						
Pentachlorophenol	TP	ND						
Phenol	5	ND						
2,4,6-Trichlorophenol	TP	ND						

PHEN82701PHES270.WQ2

Detection Limits (ug/l):

4-Chloro-3-methylphenol	10	2,4-Dinitrophenol	50	Pentachlorophenol	50
2-Chlorophenol	10	4,6-Dinitro-2-methylphenol	50	Phenol	10
2,4-Dichlorophenol	10	2-Nitrophenol	10	2,4,6-Trichlorophenol	10
2,4-Dimethylphenol	500	4-Nitrophenol	50		

NS = Not sampled

NA = Not analyzed

ND = Not detected

TP = WQCC toxic pollutant

WP-30

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

Parameter	WQCC Std.	03/28/95						
Phenols								
4-Chloro-3-methylphenol	None	ND						
2-Chlorophenol	None	ND						
2,4-Dichlorophenol	TP	ND						
2,4-Dimethylphenol	None	ND						
2,4-Dinitrophenol	TP	ND						
4,6-Dinitro-2-methylphenol	None	ND						
2-Nitrophenol	None	ND						
4-Nitrophenol	None	ND						
Pentachlorophenol	TP	ND						
Phenol	5	ND						
2,4,6-Trichlorophenol	TP	ND						

/PHEN82701PHE8270.WQ2

Detection Limits (ug/l):

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

NS = Not sampled

NA = Not analyzed

ND = Not detected

TP = WQCC toxic pollutant

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

Parameter	WQCC Std.	12/08/93	03/23/94	07/12/94	09/28/94	12/13/94	03/28/95
PAHs							
Acenaphthene	None	ND	ND	ND	ND	ND	ND
Acenaphthylene	None	ND	ND	ND	ND	ND	ND
Anthracene	TP	ND	ND	ND	ND	ND	ND
Benzo(a)anthracene	None	ND	ND	ND	ND	ND	ND
Benzo(b)fluoranthene	None	ND	ND	ND	ND	ND	ND
Benzo(k)fluoranthene	TP	ND	ND	ND	ND	ND	ND
Benzo(g,h,i)perylene	None	ND	ND	ND	ND	ND	ND
Benzo(a)pyrene	0.7	ND	ND	ND	ND	ND	ND
Chrysene	None	ND	ND	ND	ND	ND	ND
Dibenzo(a,h)anthracene	None	ND	ND	ND	ND	ND	ND
Fluoranthene	TP	ND	ND	ND	ND	ND	ND
Fluorene	TP	ND	ND	ND	ND	ND	ND
Indeno(1,2,3-cd)pyrene	None	ND	ND	ND	ND	ND	ND
1-Methylnaphthalene	TP	NA	ND	ND	ND	ND	ND
2-Methylnaphthalene	TP	NA	ND	ND	ND	ND	ND
Naphthalene	30 *	ND	ND	ND	ND	ND	ND
Phenanthrene	TP	ND	ND	ND	ND	ND	ND
Pyrene	TP	ND	ND	ND	ND	ND	ND

PAH8270/PAH8270/WQ2

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

Parameter	WQCC Std.	12/08/93	03/25/94	06/27/94	09/28/94	12/13/94	03/28/95
PAHs							
Acenaphthene	None	ND	ND	ND	ND	ND	ND
Acenaphthylene	None	ND	ND	ND	ND	ND	ND
Anthracene	TP	ND	ND	ND	ND	ND	ND
Benzo(a)anthracene	None	ND	ND	ND	ND	ND	ND
Benzo(b)fluoranthene	None	ND	ND	ND	ND	ND	ND
Benzo(k)fluoranthene	TP	ND	ND	ND	ND	ND	ND
Benzo(g,h,i)perylene	None	ND	ND	ND	ND	ND	ND
Benzo(a)pyrene	0.7	ND	ND	ND	ND	ND	ND
Chrysene	None	ND	ND	ND	ND	ND	ND
Dibenzo(a,h)anthracene	None	ND	ND	ND	ND	ND	ND
Fluoranthene	TP	ND	ND	ND	ND	ND	ND
Fluorene	TP	ND	ND	ND	ND	ND	ND
Indeno(1,2,3-cd)pyrene	None	ND	ND	ND	ND	ND	ND
1-Methylnaphthalene	TP	NA	ND	ND	ND	ND	ND
2-Methylnaphthalene	TP	NA	ND	ND	ND	ND	ND
Naphthalene	30 *	ND	ND	ND	ND	ND	ND
Phenanthrene	TP	ND	ND	ND	ND	ND	ND
Pyrene	TP	ND	ND	ND	ND	ND	ND

/PAH82701PAH8270.WQ2

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

Parameter	WQCC Std.	12/08/93	03/24/94	06/27/94	09/27/94	12/13/94	03/27/95
<b>PAHs</b>							
Acenaphthene	None	NS	ND	ND	ND	ND	ND
Acenaphthylene	None	NS	ND	ND	ND	ND	ND
Anthracene	TP	NS	ND	ND	ND	ND	ND
Benzo(a)anthracene	None	NS	ND	ND	ND	ND	ND
Benzo(b)fluoranthene	None	NS	ND	ND	ND	ND	ND
Benzo(k)fluoranthene	TP	NS	ND	ND	ND	ND	ND
Benzo(g,h,i)perylene	None	NS	ND	ND	ND	ND	ND
Benzo(a)pyrene	0.7	NS	ND	ND	ND	ND	ND
Chrysene	None	NS	ND	ND	ND	ND	ND
Dibenzo(a,h)anthracene	None	NS	ND	ND	ND	ND	ND
Fluoranthene	TP	NS	ND	ND	ND	ND	ND
Fluorene	TP	NS	ND	ND	ND	ND	ND
Indeno(1,2,3-cd)pyrene	None	NS	ND	ND	ND	ND	ND
1-Methylnaphthalene	TP	NS	79	78	110	71	65
2-Methylnaphthalene	TP	NS	ND	12	32	22	15
Naphthalene	30 *	NS	28	27	49	46	37
Phenanthrene	TP	NS	ND	ND	ND	ND	ND
Pyrene	TP	NS	ND	ND	ND	ND	ND

/PAH8270/PAH8270.WQ2

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

Parameter	WQCC Std.	12/08/93	03/23/94	06/27/94	09/28/94	12/13/94	03/28/95
PAHs							
Acenaphthene	None	ND	ND	ND	ND	ND	ND
Acenaphthylene	None	ND	ND	ND	ND	ND	ND
Anthracene	TP	ND	ND	ND	ND	ND	ND
Benzo(a)anthracene	None	ND	ND	ND	ND	ND	ND
Benzo(b)fluoranthene	None	ND	ND	ND	ND	ND	ND
Benzo(k)fluoranthene	TP	ND	ND	ND	ND	ND	ND
Benzo(g,h,i)perylene	None	ND	ND	ND	ND	ND	ND
Benzo(a)pyrene	0.7	ND	ND	ND	ND	ND	ND
Chrysene	None	ND	ND	ND	ND	ND	ND
Dibenzo(a,h)anthracene	None	ND	ND	ND	ND	ND	ND
Fluoranthene	TP	ND	ND	ND	ND	ND	ND
Fluorene	TP	ND	ND	ND	ND	ND	ND
Indeno(1,2,3-cd)pyrene	None	ND	ND	ND	ND	ND	ND
1-Methylnaphthalene	TP	NA	ND	ND	ND	ND	ND
2-Methylnaphthalene	TP	NA	ND	ND	ND	ND	ND
Naphthalene	30 *	ND	ND	ND	ND	ND	ND
Phenanthrene	TP	ND	ND	ND	ND	ND	ND
Pyrene	TP	ND	ND	ND	ND	ND	ND

/PAH827W1PAH8270.WQ2

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

Parameter	WQCC Std.	12/08/93	03/25/94	6/27/94	09/28/94	12/13/94	03/28/95
PAHs							
Acenaphthene	None	ND	ND	ND	ND	ND	ND
Acenaphthylene	None	ND	ND	ND	ND	ND	ND
Anthracene	TP	ND	ND	ND	ND	ND	ND
Benzo(a)anthracene	None	ND	ND	ND	ND	ND	ND
Benzo(b)fluoranthene	None	ND	ND	ND	ND	ND	ND
Benzo(k)fluoranthene	TP	ND	ND	ND	ND	ND	ND
Benzo(g,h,i)perylene	None	ND	ND	ND	ND	ND	ND
Benzo(a)pyrene	0.7	ND	ND	ND	ND	ND	ND
Chrysene	None	ND	ND	ND	ND	ND	ND
Dibenzo(a,h)anthracene	None	ND	ND	ND	ND	ND	ND
Fluoranthene	TP	ND	ND	ND	ND	ND	ND
Fluorene	TP	ND	ND	ND	ND	ND	ND
Indeno(1,2,3-cd)pyrene	None	ND	ND	ND	ND	ND	ND
1-Methylnaphthalene	TP	NA	ND	ND	ND	ND	ND
2-Methylnaphthalene	TP	NA	ND	ND	ND	ND	ND
Naphthalene	30 *	ND	ND	ND	ND	ND	ND
Phenanthrene	TP	ND	ND	ND	ND	ND	ND
Pyrene	TP	ND	ND	ND	ND	ND	ND

/PAH8270/PAH8270.WQ2

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

Parameter	WQCC Std.	12/08/93	03/24/94	06/27/94	09/27/94	12/13/94	03/27/95
PAHs							
Acenaphthene	None	NS	ND	ND	ND	ND	ND
Acenaphthylene	None	NS	ND	ND	ND	ND	ND
Anthracene	TP	NS	ND	ND	ND	ND	ND
Benzo(a)anthracene	None	NS	ND	ND	ND	ND	ND
Benzo(b)fluoranthene	None	NS	ND	ND	ND	ND	ND
Benzo(k)fluoranthene	TP	NS	ND	ND	ND	ND	ND
Benzo(g,h,i)perylene	None	NS	ND	ND	ND	ND	ND
Benzo(a)pyrene	0.7	NS	ND	ND	ND	ND	ND
Chrysene	None	NS	ND	ND	ND	ND	ND
Dibenzo(a,h)anthracene	None	NS	ND	ND	ND	ND	ND
Fluoranthene	TP	NS	ND	ND	ND	ND	ND
Fluorene	TP	NS	ND	ND	ND	ND	ND
Indeno(1,2,3-cd)pyrene	None	NS	ND	ND	ND	ND	ND
1-Methylnaphthalene	TP	NS	46	ND	61	42	50
2-Methylnaphthalene	TP	NS	64	ND	75	54	42
Naphthalene	30 *	NS	140	93	230	140	88
Phenanthrene	TP	NS	ND	ND	ND	ND	ND
Pyrene	TP	NS	ND	ND	ND	ND	ND

/PAH8270/TPAH8270.WQ2

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

Parameter	WQCC Std.	03/28/95					
PAHs							
Acenaphthene	None	ND					
Acenaphthylene	None	ND					
Anthracene	TP	ND					
Benzo(a)anthracene	None	ND					
Benzo(b)fluoranthene	None	ND					
Benzo(k)fluoranthene	TP	ND					
Benzo(g,h,i)perylene	None	ND					
Benzo(a)pyrene	0.7	ND					
Chrysene	None	ND					
Dibenzo(a,h)anthracene	None	ND					
Fluoranthene	TP	ND					
Fluorene	TP	ND					
Indeno(1,2,3-cd)pyrene	None	ND					
1-Methylnaphthalene	TP	ND					
2-Methylnaphthalene	TP	ND					
Naphthalene	30 *	ND					
Phenanthrene	TP	ND					
Pyrene	TP	ND					

/PAH827/PAH827R.WQZ

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

Parameter	WQCC Std.	12/08/93	03/25/94	06/27/94	09/27/94	12/13/94	03/28/95
PAHs							
Acenaphthene	None	ND	ND	ND	ND	ND	ND
Acenaphthylene	None	ND	ND	ND	ND	ND	ND
Anthracene	TP	ND	ND	ND	ND	ND	ND
Benzo(a)anthracene	None	ND	ND	ND	ND	ND	ND
Benzo(b)fluoranthene	None	ND	ND	ND	ND	ND	ND
Benzo(k)fluoranthene	TP	ND	ND	ND	ND	ND	ND
Benzo(g,h,i)perylene	None	ND	ND	ND	ND	ND	ND
Benzo(a)pyrene	0.7	ND	ND	ND	ND	ND	ND
Chrysene	None	ND	ND	ND	ND	ND	ND
Dibenzo(a,h)anthracene	None	ND	ND	ND	ND	ND	ND
Fluoranthene	TP	ND	ND	ND	ND	ND	ND
Fluorene	TP	ND	ND	ND	ND	ND	ND
Indeno(1,2,3-cd)pyrene	None	ND	ND	ND	ND	ND	ND
1-Methylnaphthalene	TP	NA	ND	ND	ND	ND	ND
2-Methylnaphthalene	TP	NA	ND	ND	ND	ND	ND
Naphthalene	30 *	ND	ND	ND	ND	ND	ND
Phenanthrene	TP	ND	ND	ND	ND	ND	ND
Pyrene	TP	ND	ND	ND	ND	ND	ND

/PAH8270/PAH8270.WQ2

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	12/13/94	03/27/95
PAHs							
Acenaphthene	None	NS	ND	ND	ND	ND	ND
Acenaphthylene	None	NS	ND	ND	ND	ND	ND
Anthracene	TP	NS	ND	ND	ND	ND	ND
Benzo(a)anthracene	None	NS	ND	ND	ND	ND	ND
Benzo(b)fluoranthene	None	NS	ND	ND	ND	ND	ND
Benzo(k)fluoranthene	TP	NS	ND	ND	ND	ND	ND
Benzo(g,h,i)perylene	None	NS	ND	ND	ND	ND	ND
Benzo(a)pyrene	0.7	NS	ND	ND	ND	ND	ND
Chrysene	None	NS	ND	ND	ND	ND	ND
Dibenzo(a,h)anthracene	None	NS	ND	ND	ND	ND	ND
Fluoranthene	TP	NS	ND	ND	ND	ND	ND
Fluorene	TP	NS	ND	ND	12	ND	ND
Indeno(1,2,3-cd)pyrene	None	NS	ND	ND	ND	ND	ND
1-Methylnaphthalene	TP	NS	29	ND	120	69	ND
2-Methylnaphthalene	TP	NS	ND	ND	18	ND	ND
Naphthalene	30 *	NS	ND	ND	35	ND	ND
Phenanthrene	TP	NS	ND	ND	32	21	ND
Pyrene	TP	NS	ND	ND	16	58	ND

PAH8270/PAH8270.W02

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	12/13/94	03/27/95
PAHs					
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	160	26	ND	ND
2-Methylnaphthalene	TP	180	14	ND	ND
Naphthalene	30 *	230	ND	ND	ND
Phenanthrene	TP	ND	ND	ND	ND
Pyrene	TP	ND	ND	ND	ND

PAH8270/PAH8270.WQ2

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

Parameter	WQCC Std.	06/28/94	09/27/94	12/13/94	03/27/95
PAHs					
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	61	62	47	ND
2-Methylnaphthalene	TP	41	11	ND	ND
Naphthalene	30 *	15	53	37	ND
Phenanthrene	TP	ND	ND	ND	ND
Pyrene	TP	ND	ND	ND	ND

PAH8270/PAH8270/WQ2

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	12/13/94	03/27/95
PAHs					
Acenaphthene	None	ND	ND,ND	ND	ND
Acenaphthylene	None	ND	ND,ND	ND	ND
Anthracene	TP	ND	ND,ND	ND	ND
Benzo(a)anthracene	None	ND	ND,ND	ND	ND
Benzo(b)fluoranthene	None	ND	ND,ND	ND	ND
Benzo(k)fluoranthene	TP	ND	ND,ND	ND	ND
Benzo(g,h,i)perylene	None	ND	ND,ND	ND	ND
Benzo(a)pyrene	0.7	ND	ND,ND	ND	ND
Chrysene	None	ND	ND,ND	ND	ND
Dibenzo(a,h)anthracene	None	ND	ND,ND	ND	ND
Fluoranthene	TP	ND	ND,ND	ND	ND
Fluorene	TP	ND	ND,ND	ND	ND
Indeno(1,2,3-cd)pyrene	None	ND	ND,ND	ND	ND
1-Methylnaphthalene	TP	ND	20,14	ND	ND
2-Methylnaphthalene	TP	ND	14,10	ND	ND
Naphthalene	30 *	ND	24,13	ND	ND
Phenanthrene	TP	ND	ND	ND	ND
Pyrene	TP	ND	ND	ND	ND

PAH8270/PAH8270 WQ2

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

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

Parameter	WQCC Std.	03/27/95					
PAHs							
Acenaphthene	None	ND					
Acenaphthylene	None	ND					
Anthracene	TP	ND					
Benzo(a)anthracene	None	ND					
Benzo(b)fluoranthene	None	ND					
Benzo(k)fluoranthene	TP	ND					
Benzo(g,h,i)perylene	None	ND					
Benzo(a)pyrene	0.7	ND					
Chrysene	None	ND					
Dibenzo(a,h)anthracene	None	ND					
Fluoranthene	TP	ND					
Fluorene	TP	ND					
Indeno(1,2,3-cd)pyrene	None	ND					
1-Methylnaphthalene	TP	36					
2-Methylnaphthalene	TP	33					
Naphthalene	30 *	26					
Phenanthrene	TP	ND					
Pyrene	TP	ND					

/PAH8270/PAH8270/WQ2

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

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

Parameter	WQCC Std.	03/27/95						
PAHs								
Acenaphthene	None	ND						
Acenaphthylene	None	ND						
Anthracene	TP	ND						
Benzo(a)anthracene	None	ND						
Benzo(b)fluoranthene	None	ND						
Benzo(k)fluoranthene	TP	ND						
Benzo(g,h,i)perylene	None	ND						
Benzo(a)pyrene	0.7	ND						
Chrysene	None	ND						
Dibenzo(a,h)anthracene	None	ND						
Fluoranthene	TP	ND						
Fluorene	TP	ND						
Indeno(1,2,3-cd)pyrene	None	ND						
1-Methylnaphthalene	TP	ND						
2-Methylnaphthalene	TP	ND						
Naphthalene	30 *	19						
Phenanthrene	TP	ND						
Pyrene	TP	ND						

PAH82701PAH8270.WQ2

**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

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

Parameter	WQCC Std.	03/27/95					
PAHs							
Acenaphthene	None	ND					
Acenaphthylene	None	ND					
Anthracene	TP	ND					
Benzo(a)anthracene	None	ND					
Benzo(b)fluoranthene	None	ND					
Benzo(k)fluoranthene	TP	ND					
Benzo(g,h,i)perylene	None	ND					
Benzo(a)pyrene	0.7	ND					
Chrysene	None	ND					
Dibenzo(a,h)anthracene	None	ND					
Fluoranthene	TP	ND					
Fluorene	TP	ND					
Indeno(1,2,3-cd)pyrene	None	ND					
1-Methylnaphthalene	TP	ND					
2-Methylnaphthalene	TP	ND					
Naphthalene	30 *	ND					
Phenanthrene	TP	ND					
Pyrene	TP	ND					

/PAH82701PAH8270/WQ2

**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

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

Parameter	WQCC Std.	03/27/95						
PAHs								
Acenaphthene	None	ND						
Acenaphthylene	None	ND						
Anthracene	TP	ND						
Benzo(a)anthracene	None	ND						
Benzo(b)fluoranthene	None	ND						
Benzo(k)fluoranthene	TP	ND						
Benzo(g,h,i)perylene	None	ND						
Benzo(a)pyrene	0.7	ND						
Chrysene	None	ND						
Dibenzo(a,h)anthracene	None	ND						
Fluoranthene	TP	ND						
Fluorene	TP	ND						
Indeno(1,2,3-cd)pyrene	None	ND						
1-Methylnaphthalene	TP	48						
2-Methylnaphthalene	TP	39						
Naphthalene	30 *	14						
Phenanthrene	TP	28						
Pyrene	TP	24						

/PAH8270/PAH8270.WQ2

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

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

Parameter	WQCC Std.	03/28/95					
<b>PAHs</b>							
Acenaphthene	None	ND					
Acenaphthylene	None	ND					
Anthracene	TP	ND					
Benzo(a)anthracene	None	ND					
Benzo(b)fluoranthene	None	ND					
Benzo(k)fluoranthene	TP	ND					
Benzo(g,h,i)perylene	None	ND					
Benzo(a)pyrene	0.7	ND					
Chrysene	None	ND					
Dibenzo(a,h)anthracene	None	ND					
Fluoranthene	TP	ND					
Fluorene	TP	ND					
Indeno(1,2,3-cd)pyrene	None	ND					
1-Methylnaphthalene	TP	24					
2-Methylnaphthalene	TP	27					
Naphthalene	30 *	73					
Phenanthrene	TP	ND					
Pyrene	TP	ND					

PAH8270/PAH8270.WQ2

**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

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

Parameter	WQCC Std.	03/28/95					
PAHs							
Acenaphthene	None	ND					
Acenaphthylene	None	ND					
Anthracene	TP	ND					
Benzo(a)anthracene	None	ND					
Benzo(b)fluoranthene	None	ND					
Benzo(k)fluoranthene	TP	ND					
Benzo(g,h,i)perylene	None	ND					
Benzo(a)pyrene	0.7	ND					
Chrysene	None	ND					
Dibenzo(a,h)anthracene	None	ND					
Fluoranthene	TP	ND					
Fluorene	TP	ND					
Indeno(1,2,3-cd)pyrene	None	ND					
1-Methylnaphthalene	TP	160					
2-Methylnaphthalene	TP	200					
Naphthalene	30 *	290					
Phenanthrene	TP	20					
Pyrene	TP	35					

/PAH8270/PAH8270/WQ2

**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	50
Anthracene	10	Chrysene	10	2-Methylnaphthalene	50
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



**WP-7**  
**Brickland Refinery Site**  
**Quarterly Analytical Results**  
 (All results in ug/l)

Parameter	WQCC Std.	03/27/95						
<b>PAHs</b>								
Acenaphthene	None	ND						
Acenaphthylene	None	ND						
Anthracene	TP	ND						
Benzo(a)anthracene	None	ND						
Benzo(b)fluoranthene	None	ND						
Benzo(k)fluoranthene	TP	ND						
Benzo(g,h,i)perylene	None	ND						
Benzo(a)pyrene	0.7	ND						
Chrysene	None	ND						
Dibenzo(a,h)anthracene	None	ND						
Fluoranthene	TP	ND						
Fluorene	TP	ND						
Indeno(1,2,3-cd)pyrene	None	ND						
1-Methylnaphthalene	TP	12						
2-Methylnaphthalene	TP	ND						
Naphthalene	30 *	ND						
Phenanthrene	TP	ND						
Pyrene	TP	ND						

/PAH82/W/PAH8270.WQ2

**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

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

Parameter	WQCC Std.	03/27/95					
PAHs							
Acenaphthene	None	ND					
Acenaphthylene	None	ND					
Anthracene	TP	ND					
Benzo(a)anthracene	None	ND					
Benzo(b)fluoranthene	None	ND					
Benzo(k)fluoranthene	TP	ND					
Benzo(g,h,i)perylene	None	ND					
Benzo(a)pyrene	0.7	ND					
Chrysene	None	ND					
Dibenzo(a,h)anthracene	None	ND					
Fluoranthene	TP	ND					
Fluorene	TP	ND					
Indeno(1,2,3-cd)pyrene	None	ND					
1-Methylnaphthalene	TP	40					
2-Methylnaphthalene	TP	59					
Naphthalene	30 *	73					
Phenanthrene	TP	ND					
Pyrene	TP	ND					

/PAH82701PAH8270.WQ2

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

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

Parameter	WQCC Std.	03/27/95						
PAHs								
Acenaphthene	None	ND						
Acenaphthylene	None	ND						
Anthracene	TP	ND						
Benzo(a)anthracene	None	ND						
Benzo(b)fluoranthene	None	ND						
Benzo(k)fluoranthene	TP	ND						
Benzo(g,h,i)perylene	None	ND						
Benzo(a)pyrene	0.7	ND						
Chrysene	None	ND						
Dibenzo(a,h)anthracene	None	ND						
Fluoranthene	TP	ND						
Fluorene	TP	ND						
Indeno(1,2,3-cd)pyrene	None	ND						
1-Methylnaphthalene	TP	190						
2-Methylnaphthalene	TP	250						
Naphthalene	30 *	220						
Phenanthrene	TP	ND						
Pyrene	TP	ND						

/PAH82701PAH8270.W02

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	100
Anthracene	10	Chrysene	10	2-Methylnaphthalene	100
Benzo(a)anthracene	10	Dibenzo(a,h)anthracene	10	Naphthalene	100
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

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

Parameter	WQCC Std.	03/28/95						
PAHs								
Acenaphthene	None	ND						
Acenaphthylene	None	ND						
Anthracene	TP	ND						
Benzo(a)anthracene	None	ND						
Benzo(b)fluoranthene	None	ND						
Benzo(k)fluoranthene	TP	ND						
Benzo(g,h,i)perylene	None	ND						
Benzo(a)pyrene	0.7	ND						
Chrysene	None	ND						
Dibenzo(a,h)anthracene	None	ND						
Fluoranthene	TP	ND						
Fluorene	TP	ND						
Indeno(1,2,3-cd)pyrene	None	ND						
1-Methylnaphthalene	TP	ND						
2-Methylnaphthalene	TP	ND						
Naphthalene	30 *	ND						
Phenanthrene	TP	ND						
Pyrene	TP	ND						

PAH82701PAH8270.WQ2

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

WP-18  
 Brickland Refinery Site  
 Quarterly Analytical Results  
 (All results in ug/l)

Parameter	WQCC Std.	03/28/95						
PAHs								
Acenaphthene	None	ND						
Acenaphthylene	None	ND						
Anthracene	TP	ND						
Benzo(a)anthracene	None	ND						
Benzo(b)fluoranthene	None	ND						
Benzo(k)fluoranthene	TP	ND						
Benzo(g,h,i)perylene	None	ND						
Benzo(a)pyrene	0.7	ND						
Chrysene	None	ND						
Dibenzo(a,h)anthracene	None	ND						
Fluoranthene	TP	ND						
Fluorene	TP	ND						
Indeno(1,2,3-cd)pyrene	None	ND						
1-Methylnaphthalene	TP	52						
2-Methylnaphthalene	TP	66						
Naphthalene	30 *	60						
Phenanthrene	TP	ND						
Pyrene	TP	ND						

PAH827W1PAH827WQ2

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

**WP-19**  
**Brickland Refinery Site**  
**Quarterly Analytical Results**  
 (All results in ug/l)

Parameter	WQCC Std.	03/28/95							
<b>PAHs</b>									
Acenaphthene	None	ND							
Acenaphthylene	None	ND							
Anthracene	TP	ND							
Benzo(a)anthracene	None	ND							
Benzo(b)fluoranthene	None	ND							
Benzo(k)fluoranthene	TP	ND							
Benzo(g,h,i)perylene	None	ND							
Benzo(a)pyrene	0.7	ND							
Chrysene	None	ND							
Dibenzo(a,h)anthracene	None	ND							
Fluoranthene	TP	ND							
Fluorene	TP	ND							
Indeno(1,2,3-cd)pyrene	None	ND							
1-Methylnaphthalene	TP	75							
2-Methylnaphthalene	TP	87							
Naphthalene	30 *	120							
Phenanthrene	TP	ND							
Pyrene	TP	ND							

/PAH8270/PAH8270.WQ2

**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

**WP-20**  
**Brickland Refinery Site**  
**Quarterly Analytical Results**  
 (All results in ug/l)

Parameter	WQCC Std.	03/27/95						
PAHs								
Acenaphthene	None	ND						
Acenaphthylene	None	ND						
Anthracene	TP	ND						
Benzo(a)anthracene	None	ND						
Benzo(b)fluoranthene	None	ND						
Benzo(k)fluoranthene	TP	ND						
Benzo(g,h,i)perylene	None	ND						
Benzo(a)pyrene	0.7	ND						
Chrysene	None	ND						
Dibenzo(a,h)anthracene	None	ND						
Fluoranthene	TP	ND						
Fluorene	TP	ND						
Indeno(1,2,3-cd)pyrene	None	ND						
1-Methylnaphthalene	TP	180						
2-Methylnaphthalene	TP	220						
Naphthalene	30 *	220						
Phenanthrene	TP	ND						
Pyrene	TP	ND						

/PAH82701PAH8270.WQ2

**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	50
Anthracene	10	Chrysene	10	2-Methylnaphthalene	50
Benzo(a)anthracene	10	Dibenzo(a,h)anthracene	10	Naphthalene	50
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

WP-22  
 Brickland Refinery Site  
 Quarterly Analytical Results  
 (All results in ug/l)

Parameter	WQCC Std.	03/27/95							
PAHs									
Acenaphthene	None	ND							
Acenaphthylene	None	ND							
Anthracene	TP	ND							
Benzo(a)anthracene	None	ND							
Benzo(b)fluoranthene	None	ND							
Benzo(k)fluoranthene	TP	ND							
Benzo(g,h,i)perylene	None	ND							
Benzo(a)pyrene	0.7	ND							
Chrysene	None	ND							
Dibenzo(a,h)anthracene	None	ND							
Fluoranthene	TP	ND							
Fluorene	TP	ND							
Indeno(1,2,3-cd)pyrene	None	ND							
1-Methylnaphthalene	TP	22							
2-Methylnaphthalene	TP	ND							
Naphthalene	30 *	ND							
Phenanthrene	TP	ND							
Pyrene	TP	ND							

PAH827/1PAH827/0.W02

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



**WP-23**  
**Brickland Refinery Site**  
**Quarterly Analytical Results**  
 (All results in ug/l)

Parameter	WQCC Std.	03/28/95					
PAHs							
Acenaphthene	None	ND					
Acenaphthylene	None	ND					
Anthracene	TP	ND					
Benzo(a)anthracene	None	ND					
Benzo(b)fluoranthene	None	ND					
Benzo(k)fluoranthene	TP	ND					
Benzo(g,h,i)perylene	None	ND					
Benzo(a)pyrene	0.7	ND					
Chrysene	None	ND					
Dibenzo(a,h)anthracene	None	ND					
Fluoranthene	TP	ND					
Fluorene	TP	ND					
Indeno(1,2,3-cd)pyrene	None	ND					
1-Methylnaphthalene	TP	ND					
2-Methylnaphthalene	TP	ND					
Naphthalene	30 *	ND					
Phenanthrene	TP	ND					
Pyrene	TP	ND					

/PAH82701PAH8270.WQ2

**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

**WP-26d**  
**Brickland Refinery Site**  
**Quarterly Analytical Results**  
 (All results in ug/l)

Parameter	WQCC Std.	03/27/95					
PAHs							
Acenaphthene	None	ND					
Acenaphthylene	None	ND					
Anthracene	TP	ND					
Benzo(a)anthracene	None	ND					
Benzo(b)fluoranthene	None	ND					
Benzo(k)fluoranthene	TP	ND					
Benzo(g,h,i)perylene	None	ND					
Benzo(a)pyrene	0.7	ND					
Chrysene	None	ND					
Dibenzo(a,h)anthracene	None	ND					
Fluoranthene	TP	ND					
Fluorene	TP	ND					
Indeno(1,2,3-cd)pyrene	None	ND					
1-Methylnaphthalene	TP	120					
2-Methylnaphthalene	TP	ND					
Naphthalene	30 *	ND					
Phenanthrene	TP	85					
Pyrene	TP	ND					

/PAH827W1PAH827W.Q02

**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

**WP-27d**  
**Brickland Refinery Site**  
**Quarterly Analytical Results**  
 (All results in ug/l)

Parameter	WQCC Std.	03/28/95					
<b>PAHs</b>							
Acenaphthene	None	ND					
Acenaphthylene	None	ND					
Anthracene	TP	ND					
Benzo(a)anthracene	None	ND					
Benzo(b)fluoranthene	None	ND					
Benzo(k)fluoranthene	TP	ND					
Benzo(g,h,i)perylene	None	ND					
Benzo(a)pyrene	0.7	ND					
Chrysene	None	ND					
Dibenzo(a,h)anthracene	None	ND					
Fluoranthene	TP	ND					
Fluorene	TP	ND					
Indeno(1,2,3-cd)pyrene	None	ND					
1-Methylnaphthalene	TP	160					
2-Methylnaphthalene	TP	120					
Naphthalene	30 *	ND					
Phenanthrene	TP	ND					
Pyrene	TP	ND					

/PAH82701PAH8270WQ2

**Detection Limits (ug/l):**

Acenaphthene	100	Benzo(g,h,i)perylene	100	Indeno(1,2,3-cd)pyrene	100
Acenaphthylene	100	Benzo(a)pyrene	100	1-Methylnaphthalene	100
Anthracene	100	Chrysene	100	2-Methylnaphthalene	100
Benzo(a)anthracene	100	Dibenzo(a,h)anthracene	100	Naphthalene	100
Benzo(b)fluoranthene	100	Fluoranthene	100	Phenanthrene	100
Benzo(k)fluoranthene	100	Fluorene	100	Pyrene	100

\*Standard for naphthalene includes monomethylnaphthalenes

NS = Not sampled

ND = Not detected

NA = Not analyzed

TP = WQCC toxic pollutant

**WP-29**  
**Brickland Refinery Site**  
**Quarterly Analytical Results**  
 (All results in ug/l)

Parameter	WQCC Std.	03/28/95					
PAHs							
Acenaphthene	None	ND					
Acenaphthylene	None	ND					
Anthracene	TP	ND					
Benzo(a)anthracene	None	ND					
Benzo(b)fluoranthene	None	ND					
Benzo(k)fluoranthene	TP	ND					
Benzo(g,h,i)perylene	None	ND					
Benzo(a)pyrene	0.7	ND					
Chrysene	None	ND					
Dibenzo(a,h)anthracene	None	ND					
Fluoranthene	TP	ND					
Fluorene	TP	ND					
Indeno(1,2,3-cd)pyrene	None	ND					
1-Methylnaphthalene	TP	70					
2-Methylnaphthalene	TP	110					
Naphthalene	30 *	160					
Phenanthrene	TP	ND					
Pyrene	TP	ND					

/PAH82701PAH8270WQ2

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

**WP-30**  
**Brickland Refinery Site**  
**Quarterly Analytical Results**  
 (All results in ug/l)

Parameter	WQCC Std.	03/28/95						
PAHs								
Acenaphthene	None	ND						
Acenaphthylene	None	ND						
Anthracene	TP	ND						
Benzo(a)anthracene	None	ND						
Benzo(b)fluoranthene	None	ND						
Benzo(k)fluoranthene	TP	ND						
Benzo(g,h,i)perylene	None	ND						
Benzo(a)pyrene	0.7	ND						
Chrysene	None	ND						
Dibenzo(a,h)anthracene	None	ND						
Fluoranthene	TP	ND						
Fluorene	TP	ND						
Indeno(1,2,3-cd)pyrene	None	ND						
1-Methylnaphthalene	TP	48						
2-Methylnaphthalene	TP	12						
Naphthalene	30 *	ND						
Phenanthrene	TP	ND						
Pyrene	TP	ND						

/PAH8270/PAH8270.WQ2

**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-3D**  
**Brickland Refinery Site**  
**Quarterly Analytical Results**

(All results in ug/l except TPH)

Parameter	WQCC Std.	12/08/93	03/23/94	07/12/94	09/28/94	12/13/94	03/28/95
Benzene	10	ND	ND	0.6	ND	ND	ND
Toluene	750	ND	ND	ND	ND	ND	ND
Ethyl Benzene	750	ND	ND	ND	ND	ND	ND
Xylenes	620	ND	ND	ND	ND	ND	ND
Total Vol. Petroleum Hydrocarbon	None	0.1	ND	NA	NA	NA	NA

Detection Limits (ug/l):

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

(All results in mg/l)

Parameter	WQCC Std.	12/08/93	03/23/94	06/27/94	09/28/94	12/12/94	03/28/95
Calcium	None	NS	473	460	396	367	NS
Magnesium	None	NS	246	220	224	207	NS
Potassium	None	NS	36	61	21	17	NS
Sodium	None	NS	3830	2760	3230	3210	NS
Bicarbonate	None	NS	468	473	460	464	NS
Chloride	250	NS	4720	6560	4750	4800	NS
Nitrate (N)	10	NS	ND	0.1	ND	0.7	NS
Sulfate	600	NS	2630	2550	2330	2270	NS

Detection Limits (mg/l):

Calcium	1.0	Bicarbonate	5.0
Magnesium	0.1	Chloride	25
Potassium	0.1	Nitrate (N)	0.1
Sodium	5	Sulfate	50

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

**DSMW-3D**  
**Brickland Refinery Site**  
**Quarterly Analytical Results**

(All results in ug/l except TPH)

Parameter	WQCC Std.	03/28/95	Ethyl Benzene Xylenes	0.5	Total Vol. Petroleum Hydrocarbons	0.1 mg/l
Benzene	10	ND				
Toluene	750	ND				
Ethyl Benzene	750	ND				
Xylenes	620	ND				
Total Vol. Petroleum Hydrocarbon	None	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.	03/28/95				
Calcium	None	NS				
Magnesium	None	NS				
Potassium	None	NS				
Sodium	None	NS				
Bicarbonate	None	NS				
Chloride	250	NS				
Nitrate (N)	10	NS				
Sulfate	600	NS				

Detection Limits (mg/l):

Calcium 1.0 Bicarbonate 5.0  
 Magnesium 0.1 Chloride 25  
 Potassium 0.1 Nitrate (N) 0.1  
 Sodium 5 Sulfate 50

IBTEX602/IBTEX602.WQ2

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

**MW-3S**  
**Brickland Refinery Site**  
**Quarterly Analytical Results**

(All results in ug/l except TPH)

Parameter	WQCC Std.	12/08/93	03/25/94	07/12/94	09/28/94	12/13/94	03/28/95
Benzene	10	ND	ND	0.8	ND	ND	ND
Toluene	750	ND	4.9	ND	ND	ND	ND
Ethyl Benzene	750	ND	ND	ND	ND	ND	ND
Xylenes	620	ND	18	ND	ND	ND	ND
Total Vol. Petroleum Hydrocarbon	None	0.1	ND	NA	NA	NA	NA

Detection Limits (ug/l):

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

(All results in mg/l)

Parameter	WQCC Std.	12/08/93	03/25/94	06/27/94	09/28/94	12/13/94	03/28/95
Calcium	None	NS	143	157	97.3	97.7	NS
Magnesium	None	NS	70.6	75.9	41.9	39.8	NS
Potassium	None	NS	13.3	28	8.6	8.5	NS
Sodium	None	NS	1390	1040	1050	985	NS
Bicarbonate	None	NS	624	756	692	854	NS
Chloride	250	NS	2030	2630	1240	1250	NS
Nitrate (N)	10	NS	ND	0.4	0.1	0.3	NS
Sulfate	600	NS	720	1010	620	573	NS

Detection Limits (mg/l):

Calcium 1.0 Bicarbonate 5.0  
Magnesium 0.1 Chloride 25  
Potassium 0.1 Nitrate (N) 0.1  
Sodium 5 Sulfate 50

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

/BTEX602/IBTEX602.W02



**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	12/13/94	03/27/95
Benzene	10	NS	130,110	1800	2000	220	220
Toluene	750	NS	ND,ND	12	ND	ND	ND
Ethyl Benzene	750	NS	2.5,1.6	50	ND	ND	6
Xylenes	620	NS	ND,ND	ND	ND	ND	ND
Total Vol. Petroleum Hydrocarbon	None	NS	ND,ND	NA	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	03/23/94	06/27/94	09/27/94	12/13/94	03/27/95
Calcium	None	NS	740,755	430	370	298	NS
Magnesium	None	NS	262,247	217	225	219	NS
Potassium	None	NS	57,69	66	65	27	NS
Sodium	None	NS	2920,2930	2050	2340	2360	NS
Bicarbonate	None	NS	924,908	1350	1470	1020	NS
Chloride	250	NS	4010,4330	4300	4360	4680	NS
Nitrate (N)	10	NS	ND,ND	2.8	0.4	ND	NS
Sulfate	600	NS	1820,2100	932	364	3060	NS

Detection Limits (mg/l):

Calcium 20.0 Bicarbonate 5.0  
Magnesium 0.5 Chloride 25.0  
Potassium 5.0 Nitrate (N) 0.1  
Sodium 20 Sulfate 100

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

/BTEX602/BTEX602.W02

**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	12/13/94	03/27/95
Benzene	10	NS	7100	5000,4200	5600	4600	4700
Toluene	750	NS	160	ND,ND	ND	84	100
Ethyl Benzene	750	NS	53	ND,ND	ND	ND	70
Xylenes	620	NS	420	130,130	160	140	280
Total Vol. Petroleum Hydrocarbon	None	NS	12	NA,NA	NA	NA	NA

Detection Limits (ug/l):

Benzene	50	Ethyl Benzene	50	Total Vol. Petroleum	0.1 mg/l
Toluene	50	Xylenes	50	Hydrocarbons	

(All results in mg/l)

Parameter	WQCC Std.	12/08/93	03/23/94	06/27/94	09/27/94	12/13/94	03/27/95
Calcium	None	NS	402	500	620	503	NS
Magnesium	None	NS	180	160	186	184	NS
Potassium	None	NS	24.2	58	60	21	NS
Sodium	None	NS	2880	2230	3040	3070	NS
Bicarbonate	None	NS	1860	1710	1630	1830	NS
Chloride	250	NS	5280	5450	4310	2430	NS
Nitrate (N)	10	NS	ND	0.3	ND	1.1	NS
Sulfate	600	NS	505	962	904	705	NS

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	NA = Not analyzed
Sodium	20	Sulfate	200	

/BTEX602/BTEX602.W02

**MW-6D**  
**Brickland Refinery Site**  
**Quarterly Analytical Results**

(All results in ug/l except TPH)

Parameter	WQCC Std.	12/08/93	03/23/94	07/12/94	09/28/94	12/13/94	03/28/95
Benzene	10	ND	ND	ND	ND	ND	ND
Toluene	750	ND	ND	ND	ND	ND	ND
Ethyl Benzene	750	ND	ND	ND	ND	ND	ND
Xylenes	620	ND	1.6	ND	ND	ND	ND
Total Vol. Petroleum Hydrocarbon	None	0.1	ND	NA	NA	NA	NA

Detection Limits (ug/l):

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

(All results in mg/l)

Parameter	WQCC Std.	12/08/93	03/23/94	06/27/94	09/28/94	12/13/94	03/28/95
Calcium	None	NS	510	530	411	379	NS
Magnesium	None	NS	218	188	190	177	NS
Potassium	None	NS	25	62	21	16	NS
Sodium	None	NS	3520	3100	3270	3410	NS
Bicarbonate	None	NS	475	739	506	525	NS
Chloride	250	NS	5600	3990	5000	5210	NS
Nitrate (N)	10	NS	ND	10	ND	1.0	NS
Sulfate	600	NS	2360	2420	2150	2490	NS

Detection Limits (mg/l):

Calcium 1.0 Bicarbonate 5.0 ND = Not detected  
Magnesium 0.5 Chloride 25 NS = Not sampled  
Potassium 5.0 Nitrate (N) 0.1 NA = Not analyzed  
Sodium 20 Sulfate 500

**DSMW-6D  
Brickland Refinery Site  
Quarterly Analytical Results**

(All results in ug/l except TPH)

Parameter	WQCC Std.	03/28/95				
Benzene	10	ND				
Toluene	750	ND				
Ethyl Benzene	750	ND				
Xylenes	620	ND				
Total Vol. Petroleum Hydrocarbon	None	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.	03/28/95				
Calcium	None	NS				
Magnesium	None	NS				
Potassium	None	NS				
Sodium	None	NS				
Bicarbonate	None	NS				
Chloride	250	NS				
Nitrate (N)	10	NS				
Sulfate	600	NS				

Detection Limits (mg/l):

Calcium 1.0 Bicarbonate 5.0 ND = Not detected  
Magnesium 0.1 Chloride 25 NS = Not sampled  
Potassium 0.1 Nitrate (N) 0.1 NA = Not analyzed  
Sodium 5 Sulfate 50

15TEX602/15TEX602.WQ2

**MW-6S**  
**Brickland Refinery Site**  
**Quarterly Analytical Results**

(All results in ug/l except TPH)

Parameter	WQCC Std.	12/08/93	03/25/94	07/12/94	09/28/94	12/13/94	03/28/95*
Benzene	10	71	74	110	4.8	59	110
Toluene	750	ND	ND	ND	2.8	ND	7
Ethyl Benzene	750	52	12	30	34	ND	31.5
Xylenes	620	ND	7.6	88	16	ND	43.5
Total Vol. Petroleum Hydrocarbon	None	2.9	1.8	NA	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

\*Detection limit for BTEX constituents = 5 ug/l

(All results in mg/l)

Parameter	WQCC Std.	12/08/93	03/25/94	06/27/94	09/28/94	12/13/94	03/28/95
Calcium	None	NS	244	259	155	150	NS
Magnesium	None	NS	104	101	125	82.3	NS
Potassium	None	NS	19.4	40	25	14	NS
Sodium	None	NS	1550	1120	2980	1840	NS
Bicarbonate	None	NS	1690	2020	2550	2710	NS
Chloride	250	NS	5280	2090	1650	2180	NS
Nitrate (N)	10	NS	ND	0.4	ND	ND	NS
Sulfate	600	NS	505	84	130	209	NS

/BTEX602/BTEX602.W02

Detection Limits (mg/l):

Calcium 1.0 Bicarbonate 5.0  
 Magnesium 0.1 Chloride 25  
 Potassium 0.1 Nitrate (N) 0.1  
 Sodium 5 Sulfate 50

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

**MW-7**  
**Brickland Refinery Site**  
**Quarterly Analytical Results**

(All results in ug/l except TPH)

Parameter	WQCC Std.	12/08/93	03/24/94	07/12/94	09/27/94	12/13/94	03/27/95
Benzene	10	NS	31	ND	ND	36	100
Toluene	750	NS	ND	ND	ND	ND	ND
Ethyl Benzene	750	NS	2.1	ND	3.6	ND	ND
Xylenes	620	NS	0.6	3.2	1.3	ND	ND
Total Vol. Petroleum Hydrocarbon	None	NS	ND	NA	NA	NA	NA

**Detection Limits (ug/l):**

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

(All results in mg/l)

Parameter	WQCC Std.	12/08/93	03/23/94	06/27/94	09/27/94	12/13/94	03/27/95
Calcium	None	NS	300	248	320	229	NS
Magnesium	None	NS	72.3	66.8	73	77.4	NS
Potassium	None	NS	22.1	37	41.5	15	NS
Sodium	None	NS	1620	710	1230	1100	NS
Bicarbonate	None	NS	1320	1330	1300	1500	NS
Chloride	250	NS	2220	1210	1580	1570	NS
Nitrate (N)	10	NS	ND	0.3	0.1	5.1	NS
Sulfate	600	NS	755	575	548	333	NS

**Detection Limits (mg/l):**

Calcium	1.0	Bicarbonate	5.0
Magnesium	0.5	Chloride	5.0
Potassium	5.0	Nitrate (N)	0.2
Sodium	5.0	Sulfate	30

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

**MW-8**  
**Brickland Refinery Site**  
**Quarterly Analytical Results**

(All results in ug/l except TPH)

Parameter	WQCC Std.	12/08/93	03/24/94	07/12/94	09/27/94	12/13/94	03/27/95
Benzene	10	NS	9600	2400	13000	5300	14000
Toluene	750	NS	ND	ND	ND	ND	ND
Ethyl Benzene	750	NS	ND	ND	ND	ND	ND
Xylenes	620	NS	720	ND	ND	140	1100
Total Vol. Petroleum Hydrocarbon	None	NS	ND	NA	NA	NA	NA

Detection Limits (ug/l):

Benzene	125	Ethyl Benzene	125	Total Vol. Petroleum	0.1 mg/l
Toluene	125	Xylenes	125	Hydrocarbons	

(All results in mg/l)

Parameter	WQCC Std.	12/08/93	03/23/94	06/27/94	09/27/94	12/13/94	03/27/95
Calcium	None	NS	46.5	89.9	47.2	60.0	NS
Magnesium	None	NS	33.9	36.1	38.2	36.4	NS
Potassium	None	NS	10.2	20.0	29.8	13.1	NS
Sodium	None	NS	1560	1150	1550	1870	NS
Bicarbonate	None	NS	2680	2670	2930	2940	NS
Chloride	250	NS	1210	1380	1450	831	NS
Nitrate (N)	10	NS	ND	0.5	0.1	5.5	NS
Sulfate	600	NS	20	60	73	72	NS

Detection Limits (mg/l):

Calcium	0.5	Bicarbonate	5.0	ND = Not detected
Magnesium	0.1	Chloride	5.0	NS = Not sampled
Potassium	0.2	Nitrate (N)	0.2	NA = Not analyzed
Sodium	20	Sulfate	10	

/BTEX602/BTEX602.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	12/13/94	03/28/95
Benzene	10	ND	ND	ND	ND	ND	ND
Toluene	750	ND	ND	ND	ND	ND	ND
Ethyl Benzene	750	ND	ND	ND	ND	ND	ND
Xylenes	620	ND	ND	0.6	ND	ND	ND
Total Vol. Petroleum Hydrocarbon	None	0.1	ND	NA	NA	NA	NA

Detection Limits (ug/l):

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

(All results in mg/l)

Parameter	WQCC Std.	12/08/93	03/25/94	06/27/94	09/27/94	12/13/94	03/28/95
Calcium	None	NS	305	245	322	255	NS
Magnesium	None	NS	104	87.3	95.6	88.9	NS
Potassium	None	NS	13.7	27	32	11	NS
Sodium	None	NS	1450	1090	1510	1520	NS
Bicarbonate	None	NS	628	820	830	866	NS
Chloride	250	NS	1280	1350	1500	1440	NS
Nitrate (N)	10	NS	ND	1.4	ND	0.4	NS
Sulfate	600	NS	1800	2010	1760	978	NS

Detection Limits (mg/l):

Calcium	1.0	Bicarbonate	5.0
Magnesium	0.5	Chloride	5.0
Potassium	5.0	Nitrate (N)	0.1
Sodium	20	Sulfate	100

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

/BTEX602/IBTEX602.WQ2



**MW-11**  
**Brickland Refinery Site**  
**Quarterly Analytical Results**

(All results in ug/l except TPH)

Parameter	WQCC Std.	12/08/93	03/24/94	07/12/94	09/27/94	12/13/94	03/27/95*
Benzene	10	NS	120	ND	15	15	15
Toluene	750	NS	0.7	ND	2.3	ND	ND
Ethyl Benzene	750	NS	4.7	ND	8.9	ND	ND
Xylenes	620	NS	4.4	ND	9.4	2.5	ND
Total Vol. Petroleum Hydrocarbon	None	NS	1.0	ND	NA	NA	NA

Detection Limits (ug/l):

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

\*Detection limit for BTEX constituents = 5 ug/l

(All results in mg/l)

Parameter	WQCC Std.	12/08/93	03/23/94	06/27/94	09/27/94	12/13/94	03/27/95
Calcium	None	NS	79	116	201	93.4	NS
Magnesium	None	NS	62.3	69.5	72.2	60.8	NS
Potassium	None	NS	18.3	29	39.4	12	NS
Sodium	None	NS	1050	820	950	985	NS
Bicarbonate	None	NS	1620	1830	2100	1980	NS
Chloride	250	NS	959	927	792	924	NS
Nitrate (N)	10	NS	0.2	1.3	0.6	0.2	NS
Sulfate	600	NS	ND	18	22	35	NS

Detection Limits (mg/l):

Calcium 1.0 Bicarbonate 5.0 ND = Not detected  
Magnesium 0.5 Chloride 3.0 NS = Not sampled  
Potassium 5.0 Nitrate (N) 0.1 NA = Not analyzed  
Sodium 5.0 Sulfate 20

/BTEX602/BTEX602.W02

**USMW-12  
Brickland Refinery Site  
Quarterly Analytical Results**

(All results in ug/l except TPH)

Parameter	WQCC Std.	03/28/95				
Benzene	10	ND				
Toluene	750	ND				
Ethyl Benzene	750	ND				
Xylenes	620	ND				
Total Vol. Petroleum Hydrocarbon	None	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.	03/28/95				
Calcium	None	NS				
Magnesium	None	NS				
Potassium	None	NS				
Sodium	None	NS				
Bicarbonate	None	NS				
Chloride	250	NS				
Nitrate (N)	10	NS				
Sulfate	600	NS				

/BTEX602/IBTEX602.WQ2

Detection Limits (mg/l):

Calcium	5.0	Bicarbonate	5.0	ND = Not detected
Magnesium	5.0	Chloride	50	NS = Not sampled
Potassium	5.0	Nitrate (N)	0.1	NA = Not analyzed
Sodium	20	Sulfate	200	

MW-14  
Brickland Refinery Site  
Quarterly Analytical Results

(All results in ug/l except TPH)

Parameter	WQCC Std.	07/12/94	09/27/94	12/13/94	03/27/95*
Benzene	10	23000	2900	930	1100
Toluene	750	ND	ND	ND	ND
Ethyl Benzene	750	ND	ND	ND	25
Xylenes	620	ND	ND	ND	ND
Total Vol. Petroleum Hydrocarbon	None	NA	NA	NA	NA

Detection Limits (ug/l):

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

\*Detection limit for BTEX constituents = 25 ug/l

(All results in mg/l)

Parameter	WQCC Std.	07/12/94	09/27/94	12/13/94	03/27/95
Calcium	None	165	625	413	NS
Magnesium	None	81.3	154	154	NS
Potassium	None	11.4	42	19	NS
Sodium	None	730	1800	1720	NS
Bicarbonate	None	1490	1160	1510	NS
Chloride	250	910	3190	2430	NS
Nitrate (N)	10	ND	ND	ND	NS
Sulfate	600	200	986	1460	NS

/BTEX602/BTEX602.W02

Detection Limits (mg/l):

Calcium	1.0	Bicarbonate	5.0	ND = Not detected
Magnesium	0.5	Chloride	25	NS = Not sampled
Potassium	5.0	Nitrate (N)	0.1	NA = Not analyzed
Sodium	20	Sulfate	5.0	

**MW-15**  
**Brickland Refinery Site**  
**Quarterly Analytical Results**

(All results in ug/l except TPH)

Parameter	WQCC Std.	07/12/94	09/27/94	12/13/94	03/27/95
Benzene	10	23000	2900	930	NS
Toluene	750	ND	ND	ND	NS
Ethyl Benzene	750	ND	ND	ND	NS
Xylenes	620	ND	ND	ND	NS
Total Vol. Petroleum Hydrocarbon	None	NA	NA	NA	NS

Detection Limits (ug/l):

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

(All results in mg/l)

Parameter	WQCC Std.	07/12/94	09/27/94	12/13/94	03/27/95
Calcium	None	165	625	413	NS
Magnesium	None	81.3	154	154	NS
Potassium	None	11.4	42	19	NS
Sodium	None	730	1800	1720	NS
Bicarbonate	None	1490	1160	1510	NS
Chloride	250	910	3190	2430	NS
Nitrate (N)	10	ND	ND	ND	NS
Sulfate	600	200	986	1460	NS

Detection Limits (mg/l):

Calcium 1.0      Bicarbonate 5.0      ND = Not detected  
Magnesium 0.5      Chloride 25      NS = Not sampled  
Potassium 5.0      Nitrate (N) 0.1      NA = Not analyzed  
Sodium 20      Sulfate 5.0

/BTEX600/BTEX602.W02

**MW-16**  
**Brickland Refinery Site**  
**Quarterly Analytical Results**

(All results in ug/l except TPH)

Parameter	WQCC Std.	06/28/94	09/27/94	12/13/94	03/27/95
Benzene	10	ND,ND	ND	ND	ND
Toluene	750	ND,ND	ND	ND	ND
Ethyl Benzene	750	ND,ND	ND	ND	ND
Xylenes	620	2,11	ND	ND	ND
Total Vol. Petroleum Hydrocarbon	None	NA	NA	NA	NA

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

(All results in mg/l)

Parameter	WQCC Std.	07/12/94	09/27/94	09/27/94	03/27/95
Calcium	None	237,243	261	224	NS
Magnesium	None	96.7,99.5	108	98.3	NS
Potassium	None	35,30	33.5	15	NS
Sodium	None	1500,1490	1510	1870	NS
Bicarbonate	None	1100,1090	1130	1160	NS
Chloride	250	1910,1870	1950	1980	NS
Nitrate (N)	10	ND,ND	0.9	ND	NS
Sulfate	600	1510,1780	2340	1840	NS

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

**MW-17**  
**Brickland Refinery Site**  
**Quarterly Analytical Results**

(All results in ug/l except TPH)

Parameter	WQCC Std.	06/28/94	09/27/94	12/13/94	03/27/95
Benzene	10	17	46,68	460	67
Toluene	750	ND	21,25	ND	ND
Ethyl Benzene	750	19	35,41	10	ND
Xylenes	620	30	8,9.2	10	ND
Total Vol. Petroleum Hydrocarbon	None	NA	NA	NA	NA

Detection Limits (ug/l):

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

(All results in mg/l)

Parameter	WQCC Std.	06/28/94	09/27/94	12/13/94	03/27/95
Calcium	None	218	241,237	278	NS
Magnesium	None	63.8	77,76.3	80	NS
Potassium	None	38	36.4,36.7	13	NS
Sodium	None	610	136,800	2090	NS
Bicarbonate	None	1100	1590,1650	1700	NS
Chloride	250	1350	2110,1930	2430	NS
Nitrate (N)	10	0.3	0.1,ND	ND	NS
Sulfate	600	318	239,198	407	NS

Detection Limits (mg/l):

Calcium	1.0	Bicarbonate	5.0
Magnesium	0.5	Chloride	5.0
Potassium	5.0	Nitrate (N)	0.1
Sodium	20	Sulfate	100

/BTEX602/BTEX602.W02

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

**WP-1**  
**Brickland Refinery Site**  
**Quarterly Analytical Results**

(All results in ug/l except TPH)

Parameter	WQCC Std.	03/27/95							
Benzene	10	300							
Toluene	750	14							
Ethyl Benzene	750	25							
Xylenes	620	45							
Total Vol. Petroleum Hydrocarbon	None	NA							

Detection Limits (ug/l):

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

(All results in mg/l)

Parameter	WQCC Std.	03/27/95							
Calcium	None	NS							
Magnesium	None	NS							
Potassium	None	NS							
Sodium	None	NS							
Bicarbonate	None	NS							
Chloride	250	NS							
Nitrate (N)	10	NS							
Sulfate	600	NS							

/BTEX602/1BTEX602.WQ2

Detection Limits (mg/l):

Calcium	1.0	Bicarbonate	5.0	ND = Not detected
Magnesium	0.1	Chloride	25	NS = Not sampled
Potassium	0.1	Nitrate (N)	0.1	NA = Not analyzed
Sodium	5	Sulfate	50	

**WP-2**  
**Brickland Refinery Site**  
**Quarterly Analytical Results**

(All results in ug/l except TPH)

Parameter	WQCC Std.	03/27/95				
Benzene	10	500				
Toluene	750	320				
Ethyl Benzene	750	72				
Xylenes	620	110				
Total Vol. Petroleum Hydrocarbon	None	NA				

Detection Limits (ug/l):

Benzene	25	Ethyl Benzene	25	Total Vol. Petroleum	0.1 mg/l
Toluene	25	Xylenes	25	Hydrocarbons	

(All results in mg/l)

Parameter	WQCC Std.	03/27/95				
Calcium	None	NS				
Magnesium	None	NS				
Potassium	None	NS				
Sodium	None	NS				
Bicarbonate	None	NS				
Chloride	250	NS				
Nitrate (N)	10	NS				
Sulfate	600	NS				

/BTEX602/IBTEX602.WQ2

Detection Limits (mg/l):

Calcium	1.0	Bicarbonate	5.0	ND = Not detected
Magnesium	0.1	Chloride	25	NS = Not sampled
Potassium	0.1	Nitrate (N)	0.1	NA = Not analyzed
Sodium	5	Sulfate	50	



**WP-3**  
**Brickland Refinery Site**  
**Quarterly Analytical Results**

(All results in ug/l except TPH)

Parameter	WQCC Std.	03/27/95					
Benzene	10	ND					
Toluene	750	ND					
Ethyl Benzene	750	ND					
Xylenes	620	ND					
Total Vol. Petroleum Hydrocarbon	None	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.	03/27/95					
Calcium	None	NS					
Magnesium	None	NS					
Potassium	None	NS					
Sodium	None	NS					
Bicarbonate	None	NS					
Chloride	250	NS					
Nitrate (N)	10	NS					
Sulfate	600	NS					

Detection Limits (mg/l):  
 Calcium 1.0 Bicarbonate 5.0 ND = Not detected  
 Magnesium 0.1 Chloride 25 NS = Not sampled  
 Potassium 0.1 Nitrate (N) 0.1 NA = Not analyzed  
 Sodium 5 Sulfate 50

**WP-4  
Brickland Refinery Site  
Quarterly Analytical Results**

(All results in ug/l except TPH)

Parameter	WQCC Std.	03/27/95				
Benzene	10	ND				
Toluene	750	ND				
Ethyl Benzene	750	ND				
Xylenes	620	26				
Total Vol. Petroleum Hydrocarbon	None	NA				

Detection Limits (ug/l):

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

(All results in mg/l)

Parameter	WQCC Std.	03/27/95				
Calcium	None	NS				
Magnesium	None	NS				
Potassium	None	NS				
Sodium	None	NS				
Bicarbonate	None	NS				
Chloride	250	NS				
Nitrate (N)	10	NS				
Sulfate	600	NS				

Detection Limits (mg/l):

Calcium	1.0	Bicarbonate	5.0
Magnesium	0.1	Chloride	25
Potassium	0.1	Nitrate (N)	0.1
Sodium	5	Sulfate	50

/BTEX602/BTEX602.WQ2

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

**WP-5**  
**Brickland Refinery Site**  
**Quarterly Analytical Results**

(All results in ug/l except TPH)

Parameter	WQCC Std.	03/28/95					
Benzene	10	4500					
Toluene	750	ND					
Ethyl Benzene	750	130					
Xylenes	620	ND					
Total Vol. Petroleum Hydrocarbon	None	NA					

Detection Limits (ug/l):

Benzene	50	Ethyl Benzene	50	Total Vol. Petroleum	0.1 mg/l
Toluene	50	Xylenes	50	Hydrocarbons	

(All results in mg/l)

Parameter	WQCC Std.	03/28/95					
Calcium	None	NS					
Magnesium	None	NS					
Potassium	None	NS					
Sodium	None	NS					
Bicarbonate	None	NS					
Chloride	250	NS					
Nitrate (N)	10	NS					
Sulfate	600	NS					

Detection Limits (mg/l):

Calcium	1.0	Bicarbonate	5.0	ND = Not detected
Magnesium	0.1	Chloride	25	NS = Not sampled
Potassium	0.1	Nitrate (N)	0.1	NA = Not analyzed
Sodium	5	Sulfate	50	

/BTEX602/BTEX602.WQZ

**WP-6**  
**Brickland Refinery Site**  
**Quarterly Analytical Results**

(All results in ug/l except TPH)

Parameter	WQCC Std.	03/28/95					
Benzene	10	17000 E					
Toluene	750	ND					
Ethyl Benzene	750	1400					
Xylenes	620	160					
Total Vol. Petroleum Hydrocarbon	None	NA					

Detection Limits (ug/l):

Benzene	125	Ethyl Benzene	125	Total Vol. Petroleum	0.1 mg/l
Toluene	125	Xylenes	125	Hydrocarbons	

(All results in mg/l)

Parameter	WQCC Std.	03/28/95					
Calcium	None	NS					
Magnesium	None	NS					
Potassium	None	NS					
Sodium	None	NS					
Bicarbonate	None	NS					
Chloride	250	NS					
Nitrate (N)	10	NS					
Sulfate	600	NS					

/BTEX602/BTEX602.W02

Detection Limits (mg/l):

Calcium	1.0	Bicarbonate	5.0	ND = Not detected
Magnesium	0.1	Chloride	25	NS = Not sampled
Potassium	0.1	Nitrate (N)	0.1	NA = Not analyzed
Sodium	5	Sulfate	50	E = Sample result is an estimate because the concentration exceeded the calibration range of the instrument.

**WP-7**  
**Brickland Refinery Site**  
**Quarterly Analytical Results**

(All results in ug/l except TPH)

Parameter	WQCC Std.	03/27/95				
Benzene	10	5				
Toluene	750	ND				
Ethyl Benzene	750	ND				
Xylenes	620	ND				
Total Vol. Petroleum Hydrocarbon	None	NA				

Detection Limits (ug/l):

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

(All results in mg/l)

Parameter	WQCC Std.	03/27/95				
Calcium	None	NS				
Magnesium	None	NS				
Potassium	None	NS				
Sodium	None	NS				
Bicarbonate	None	NS				
Chloride	250	NS				
Nitrate (N)	10	NS				
Sulfate	600	NS				

Detection Limits (mg/l):

Calcium 1.0 Bicarbonate 5.0 ND = Not detected  
 Magnesium 0.1 Chloride 25 NS = Not sampled  
 Potassium 0.1 Nitrate (N) 0.1 NA = Not analyzed  
 Sodium 5 Sulfate 50

/BTEX602/BTEX602.W02

**WP-8**  
**Brickland Refinery Site**  
**Quarterly Analytical Results**

(All results in ug/l except TPH)

Parameter	WQCC Std.	03/27/95					
Benzene	10	5300					
Toluene	750	ND					
Ethyl Benzene	750	100					
Xylenes	620	100					
Total Vol. Petroleum Hydrocarbon	None	NA					

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

(All results in mg/l)

Parameter	WQCC Std.	03/27/95					
Calcium	None	NS					
Magnesium	None	NS					
Potassium	None	NS					
Sodium	None	NS					
Bicarbonate	None	NS					
Chloride	250	NS					
Nitrate (N)	10	NS					
Sulfate	600	NS					

Detection Limits (mg/l):  
 Calcium 1.0 Bicarbonate 5.0 ND = Not detected  
 Magnesium 0.1 Chloride 25 NS = Not sampled  
 Potassium 0.1 Nitrate (N) 0.1 NA = Not analyzed  
 Sodium 5 Sulfate 50

**WP-9  
Brickland Refinery Site  
Quarterly Analytical Results**

(All results in ug/l except TPH)

Parameter	WQCC Std.	03/27/95					
Benzene	10	6600					
Toluene	750	200					
Ethyl Benzene	750	500					
Xylenes	620	1400					
Total Vol. Petroleum Hydrocarbon	None	NA					

Detection Limits (ug/l):  
 Benzene 125 Ethyl Benzene 125 Total Vol. Petroleum 0.1 mg/l  
 Toluene 125 Xylenes 125 Hydrocarbons

(All results in mg/l)

Parameter	WQCC Std.	03/27/95					
Calcium	None	NS					
Magnesium	None	NS					
Potassium	None	NS					
Sodium	None	NS					
Bicarbonate	None	NS					
Chloride	250	NS					
Nitrate (N)	10	NS					
Sulfate	600	NS					

/BTEX602/IBTEX602.WQ2

Detection Limits (mg/l):  
 Calcium 1.0 Bicarbonate 5.0 ND = Not detected  
 Magnesium 0.1 Chloride 25 NS = Not sampled  
 Potassium 0.1 Nitrate (N) 0.1 NA = Not analyzed  
 Sodium 5 Sulfate 50

**WP-15  
Brickland Refinery Site  
Quarterly Analytical Results**

(All results in ug/l except TPH)

Parameter	WQCC Std.	03/28/95				
Benzene	10	ND				
Toluene	750	ND				
Ethyl Benzene	750	ND				
Xylenes	620	ND				
Total Vol. Petroleum Hydrocarbon	None	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.	03/28/95				
Calcium	None	NS				
Magnesium	None	NS				
Potassium	None	NS				
Sodium	None	NS				
Bicarbonate	None	NS				
Chloride	250	NS				
Nitrate (N)	10	NS				
Sulfate	600	NS				

Detection Limits (mg/l):

Calcium	1.0	Bicarbonate	5.0	ND = Not detected
Magnesium	0.1	Chloride	25	NS = Not sampled
Potassium	0.1	Nitrate (N)	0.1	NA = Not analyzed
Sodium	5	Sulfate	50	

/BTEX602/BTEX602.WQ2



**WP-18**  
**Brickland Refinery Site**  
**Quarterly Analytical Results**

(All results in ug/l except TPH)

Parameter	WQCC Std.	03/28/95				
Benzene	10	76				
Toluene	750	ND				
Ethyl Benzene	750	14				
Xylenes	620	8				
Total Vol. Petroleum Hydrocarbon	None	NA				

Detection Limits (ug/l):

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

(All results in mg/l)

Parameter	WQCC Std.	03/28/95				
Calcium	None	NS				
Magnesium	None	NS				
Potassium	None	NS				
Sodium	None	NS				
Bicarbonate	None	NS				
Chloride	250	NS				
Nitrate (N)	10	NS				
Sulfate	600	NS				

/BTEX602/1BTEX602.WQ2

Detection Limits (mg/l):

Calcium	1.0	Bicarbonate	5.0	ND = Not detected
Magnesium	0.1	Chloride	25	NS = Not sampled
Potassium	0.1	Nitrate (N)	0.1	NA = Not analyzed
Sodium	5	Sulfate	50	

**WP-19**  
**Brickland Refinery Site**  
**Quarterly Analytical Results**

(All results in ug/l except TPH)

Parameter	WQCC Std.	03/28/95				
Benzene	10	9400				
Toluene	750	ND				
Ethyl Benzene	750	670				
Xylenes	620	380				
Total Vol. Petroleum Hydrocarbon	None	NA				

Detection Limits (ug/l):

Benzene	125	Ethyl Benzene	125	Total Vol. Petroleum	0.1 mg/l
Toluene	125	Xylenes	125	Hydrocarbons	

(All results in mg/l)

Parameter	WQCC Std.	03/28/95				
Calcium	None	NS				
Magnesium	None	NS				
Potassium	None	NS				
Sodium	None	NS				
Bicarbonate	None	NS				
Chloride	250	NS				
Nitrate (N)	10	NS				
Sulfate	600	NS				

Detection Limits (mg/l):

Calcium	1.0	Bicarbonate	5.0	ND = Not detected
Magnesium	0.1	Chloride	25	NS = Not sampled
Potassium	0.1	Nitrate (N)	0.1	NA = Not analyzed
Sodium	5	Sulfate	50	

/BTEX602/BTEX602.W02

**WP-20**  
**Brickland Refinery Site**  
**Quarterly Analytical Results**

(All results in ug/l except TPH)

Parameter	WQCC Std.	03/27/95					
Benzene	10	1700					
Toluene	750	ND					
Ethyl Benzene	750	ND					
Xylenes	620	ND					
Total Vol. Petroleum Hydrocarbon	None	NA					

Detection Limits (ug/l):

Benzene	25	Ethyl Benzene	25	Total Vol. Petroleum	0.1 mg/l
Toluene	25	Xylenes	25	Hydrocarbons	

(All results in mg/l)

Parameter	WQCC Std.	03/27/95					
Calcium	None	NS					
Magnesium	None	NS					
Potassium	None	NS					
Sodium	None	NS					
Bicarbonate	None	NS					
Chloride	250	NS					
Nitrate (N)	10	NS					
Sulfate	600	NS					

Detection Limits (mg/l):

Calcium	1.0	Bicarbonate	5.0	ND = Not detected
Magnesium	0.1	Chloride	25	NS = Not sampled
Potassium	0.1	Nitrate (N)	0.1	NA = Not analyzed
Sodium	5	Sulfate	50	

/BTEX602/IBTEX602.WQ2

**WP-22**  
**Brickland Refinery Site**  
**Quarterly Analytical Results**

(All results in ug/l except TPH)

Parameter	WQCC Std.	03/27/95				
Benzene	10	1800				
Toluene	750	ND				
Ethyl Benzene	750	88				
Xylenes	620	ND				
Total Vol. Petroleum Hydrocarbon	None	NA				

Detection Limits (ug/l):

Benzene	50	Ethyl Benzene	50	Total Vol. Petroleum	0.1 mg/l
Toluene	50	Xylenes	50	Hydrocarbons	

(All results in mg/l)

Parameter	WQCC Std.	03/27/95				
Calcium	None	NS				
Magnesium	None	NS				
Potassium	None	NS				
Sodium	None	NS				
Bicarbonate	None	NS				
Chloride	250	NS				
Nitrate (N)	10	NS				
Sulfate	600	NS				

/BTEX6021BTEX602.W02

Detection Limits (mg/l):

Calcium	1.0	Bicarbonate	5.0	ND = Not detected
Magnesium	0.1	Chloride	25	NS = Not sampled
Potassium	0.1	Nitrate (N)	0.1	NA = Not analyzed
Sodium	5	Sulfate	50	

**WP-23**  
**Brickland Refinery Site**  
**Quarterly Analytical Results**

(All results in ug/l except TPH)

Parameter	WQCC Std.	03/28/95					
Benzene	10	0.9					
Toluene	750	ND					
Ethyl Benzene	750	ND					
Xylenes	620	ND					
Total Vol. Petroleum Hydrocarbon	None	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.	03/28/95					
Calcium	None	NS					
Magnesium	None	NS					
Potassium	None	NS					
Sodium	None	NS					
Bicarbonate	None	NS					
Chloride	250	NS					
Nitrate (N)	10	NS					
Sulfate	600	NS					

/BTEX602/IBTEX602.WQ2

Detection Limits (mg/l):

Calcium	1.0	Bicarbonate	5.0	ND = Not detected
Magnesium	0.1	Chloride	25	NS = Not sampled
Potassium	0.1	Nitrate (N)	0.1	NA = Not analyzed
Sodium	5	Sulfate	50	

**WP-24**  
**Brickland Refinery Site**  
**Quarterly Analytical Results**

(All results in ug/l except TPH)

Parameter	WQCC Std.	03/27/95				
Benzene	10	160				
Toluene	750	ND				
Ethyl Benzene	750	ND				
Xylenes	620	ND				
Total Vol. Petroleum Hydrocarbon	None	NA				

Detection Limits (ug/l):

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

(All results in mg/l)

Parameter	WQCC Std.	03/27/95				
Calcium	None	NS				
Magnesium	None	NS				
Potassium	None	NS				
Sodium	None	NS				
Bicarbonate	None	NS				
Chloride	250	NS				
Nitrate (N)	10	NS				
Sulfate	600	NS				

Detection Limits (mg/l):

Calcium	1.0	Bicarbonate	5.0	ND = Not detected
Magnesium	0.1	Chloride	25	NS = Not sampled
Potassium	0.1	Nitrate (N)	0.1	NA = Not analyzed
Sodium	5	Sulfate	50	

/BTEX602/IBTEX602.WQ2

**WP-26d**  
**Brickland Refinery Site**  
**Quarterly Analytical Results**

(All results in ug/l except TPH)

Parameter	WQCC Std.	03/27/95					
Benzene	10	20					
Toluene	750	ND					
Ethyl Benzene	750	ND					
Xylenes	620	16					
Total Vol. Petroleum Hydrocarbon	None	NA					

Detection Limits (ug/l):

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

(All results in mg/l)

Parameter	WQCC Std.	03/27/95					
Calcium	None	NS					
Magnesium	None	NS					
Potassium	None	NS					
Sodium	None	NS					
Bicarbonate	None	NS					
Chloride	250	NS					
Nitrate (N)	10	NS					
Sulfate	600	NS					

Detection Limits (mg/l):

Calcium	1.0	Bicarbonate	5.0	ND = Not detected
Magnesium	0.1	Chloride	25	NS = Not sampled
Potassium	0.1	Nitrate (N)	0.1	NA = Not analyzed
Sodium	5	Sulfate	50	

/BTEX602/BTEX602.WQ2

**WP-29**  
**Brickland Refinery Site**  
**Quarterly Analytical Results**

(All results in ug/l except TPH)

Parameter	WQCC Std.	03/28/95				
Benzene	10	1900				
Toluene	750	ND				
Ethyl Benzene	750	95				
Xylenes	620	210				
Total Vol. Petroleum Hydrocarbon	None	NA				

Detection Limits (ug/l):

Benzene	50	Ethyl Benzene	50	Total Vol. Petroleum	0.1 mg/l
Toluene	50	Xylenes	50	Hydrocarbons	

(All results in mg/l)

Parameter	WQCC Std.	03/28/95				
Calcium	None	NS				
Magnesium	None	NS				
Potassium	None	NS				
Sodium	None	NS				
Bicarbonate	None	NS				
Chloride	250	NS				
Nitrate (N)	10	NS				
Sulfate	600	NS				

/BTEX602/BTEX602.W02

Detection Limits (mg/l):

Calcium	1.0	Bicarbonate	5.0	ND = Not detected
Magnesium	0.1	Chloride	25	NS = Not sampled
Potassium	0.1	Nitrate (N)	0.1	NA = Not analyzed
Sodium	5	Sulfate	50	



WP-30  
Brickland Refinery Site  
Quarterly Analytical Results

(All results in ug/l except TPH)

Parameter	WQCC Std.	03/28/95				
Benzene	10	8.6				
Toluene	750	ND				
Ethyl Benzene	750	ND				
Xylenes	620	0.8				
Total Vol. Petroleum Hydrocarbon	None	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.	03/28/95				
Calcium	None	NS				
Magnesium	None	NS				
Potassium	None	NS				
Sodium	None	NS				
Bicarbonate	None	NS				
Chloride	250	NS				
Nitrate (N)	10	NS				
Sulfate	600	NS				

Detection Limits (mg/l):

Calcium	1.0	Bicarbonate	5.0	ND = Not detected
Magnesium	0.1	Chloride	25	NS = Not sampled
Potassium	0.1	Nitrate (N)	0.1	NA = Not analyzed
Sodium	5	Sulfate	50	

IBTEX-602/IBTEX-602 WQ2

**MW-3D  
Brickland Refinery Site  
Quarterly Analytical Results**

(All results in ug/l except TPH)

Parameter	WQCC Std.	12/08/93	03/23/94	07/12/94	09/28/94	12/13/94	03/28/95
Benzene	10	ND	ND	0.6	ND	ND	ND
Toluene	750	ND	ND	ND	ND	ND	ND
Ethyl Benzene	750	ND	ND	ND	ND	ND	ND
Xylenes	620	ND	ND	ND	ND	ND	ND
Total Vol. Petroleum Hydrocarbon	None	0.1	ND	NA	NA	NA	NA

Detection Limits (ug/l):

Benzene 0.5 Ethyl Benzene 0.5 Total Vol. Petroleum 0.1 mg/l

Toluene 0.5 Xylenes 0.5 Hydrocarbons

(All results in mg/l)

Parameter	WQCC Std.	12/08/93	03/23/94	06/27/94	09/28/94	12/12/94	03/28/95
Calcium	None	NS	473	460	396	367	NS
Magnesium	None	NS	246	220	224	207	NS
Potassium	None	NS	36	61	21	17	NS
Sodium	None	NS	3830	2760	3230	3210	NS
Bicarbonate	None	NS	468	473	460	464	NS
Chloride	250	NS	4720	6560	4750	4800	NS
Nitrate (N)	10	NS	ND	0.1	ND	0.7	NS
Sulfate	600	NS	2630	2550	2330	2270	NS

Detection Limits (mg/l):

Calcium 1.0 Bicarbonate 5.0

Magnesium 0.1 Chloride 25

Potassium 0.1 Nitrate (N) 0.1

Sodium 5 Sulfate 50

ND = Not detected

NS = Not sampled

NA = Not analyzed

/BTEX602/BTEX602.WQ2

**Appendix B**

**5th Quarter Groundwater Monitoring Data  
Laboratory Reports**



RECEIVED APR 14 1995

CORE LABORATORIES

CORE LABORATORIES  
ANALYTICAL REPORT

Job Number: 950717  
Prepared For:

GEOSCIENCE CONSULTANTS, LTD.

505 MARQUETTE NW, SUITE 1100  
ALBUQUERQUE, NM 87102

Date: 04/12/95

*Linda L. Benkers*  
Signature

4-12-95  
Date:

Name: Linda L. Benkers

Core Laboratories  
10703 East Bethany Drive  
Aurora, CO 80014

Title: QA/QC Coordinator



Albuquerque  
505 Marquette NW, Ste. 1100  
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(505) 842-0001  
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4221 Forbes Blvd., Ste. 240  
Lanham, MD 20706-4325  
(301) 459-9677  
FAX: (301) 459-3064

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

No 8966

# Chain of Custody

Date 3/28/95 Page 1 of 1

Lab Name <b>CORE LABORATORIES</b>				Analysis Request																Relinquished By						
Address <b>10703 East Bethany Drive Aurora, CO 80014-2696</b>																				2. Relinquished By						
Telephone <b>303/751-1780</b>																				3. Relinquished By						
Samplers (SIGNATURES) <b>D. NEE</b>																				3. Received By						
Sample Number	Matrix	Location	Number of Containers	Hydrogenated Volatiles 601/8010	Aromatic Volatiles 602/8020	Phenols, Sub Phenols 604/8040	Pesticides/PCB 608/8080	Polynuclear Aromatic Hydrocarbons 610/8310	Volatile Compounds GC/MS 624/8240	Base/Near/Acid Compounds GC/MS 625/8270	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 (19) TL/SLC	Flash Point	Conductivity	Reactivity	Oil & Grease	Cyanide Total/Amenable	Chemical Oxygen Demand (COD)	Number of Containers	
9503280815	H2O	WP-5	4																							4
9503280835	H2O	WP-30	4																							4
9503280855	H2O	WP-23	4																							4
9503280915	H2O	WP-6	4																							4
9503270945	H2O	WP-7	4																							4
9503271015	H2O	WP-26d	4																							4
9503271045	H2O	WP-9	4																							4
9503271115	H2O	WP-20	4																							4
9503281145	H2O	WP-29	4																							4
9503281205	H2O	WP-19	4																							4
Project Information			Sample Receipt				1. Relinquished By				2. Relinquished By				3. Relinquished By											
Project	REXENE		Total No. of Containers	40			Signature	D. NEE 1:500			Signature				Signature											
Project Director	TREN		Chain of Custody Seals	OK			(Printed Name)	DAVID NEE 3/28/95			(Printed Name)				(Printed Name)											
Charge Code No.	3031-006		Rec'd Good Condition/Cold	OK			(Date)	3/28/95			(Date)				(Date)											
Shipping ID. No.	3238365432		Conforms to Record	OK			(Company)	GCL			(Company)				(Company)											
Via:	FED X		Lab No.	950717			Received By		1. Received By				2. Received By (Laboratory)				3. Received By (Laboratory)									
Special Instructions/Comments:						(Signature)				(Signature)	M. J. ...			(Signature)	M. J. ...			(Signature)	M. J. ...							
						(Time)				(Time)				(Time)				(Time)								
						(Date)				(Date)				(Date)				(Date)								
						(Company)				(Company)				(Company)				(Company)								

Distribution: White, Canary-Laboratory • Pink, GCL



SAMPLE DELIVERY GROUP NARRATIVE

April 12, 1995

Customer: Geoscience Consultants, Ltd.  
Project: Rexene COC #8966  
Core Laboratories Project Number: 950717

Method 8270 Organic Analysis:

Multiple samples on this job displayed low internal standard areas which indicates matrix interference. These samples were reanalyzed diluted with acceptable internal standard areas (see below).

Sample 950717-4 (9503280915) had three internal standards outside method acceptance criteria in the undiluted run. Some of the analytes are being reported from this run as they were below detection limits in the 5x run. All internal standards were within acceptance criteria in the 5x diluted run.

Sample 950717-5 (9503270945) had two internal standards and the surrogate terphenyl outside method acceptance criteria in the undiluted run. Some of the analytes are being reported from the undiluted run as they were below detection limits in the 5x run. All internal standards and surrogates were within acceptance criteria in the 5x diluted run.

Sample 950717-7 (9503271045) had two internal standards-outside method acceptance criteria in the undiluted run. Some of the analytes are being reported from the undiluted run as they were below detection limits in the 10x run. All internal standards were within acceptance criteria in the 10x run.

Sample 950717-9 (9503281145) had one internal standard outside method acceptance criteria in the undiluted run. Some of the analytes are being reported from the undiluted run as they were below detection limits in the 50x run. All internal standards were within acceptance criteria in the 50x run.



## CORE LABORATORIES

The spike blank/spike blank duplicate analyzed with this set of samples had the surrogate 2-fluorophenol recoveries outside method acceptance criteria. Reanalysis confirmed the low surrogate recoveries. Other analytes in the spike blank/spike blank duplicate showed poor recoveries indicating an extraction problem occurred with both of these QC samples.

### 602 GC Analysis for BTEX

The benzene result for sample 950717-4 (9503280915) is flagged with an "E" for an estimated result. The benzene result was at 70 ug/L in the diluted run which is just above the upper calibration limit of 60 ug/L. Past history with this instrument indicates the linearity for benzene continues above 70 ug/L. The sample could not be reanalyzed since all three vials provided were used during previous runs.

Linda L. Benkers  
QA/QC Coordinator

James H. Travis  
Laboratory Supervisor



**EXPLANATION OF DATA FLAGS**

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





# CORE LABORATORIES

## LABORATORY TESTS RESULTS

04/12/95

JOB NUMBER: 950717      CUSTOMER: GEOSCIENCE CONSULTANTS, LTD.      ATTN:

CLIENT I.D.: REXENE COC #8966  
 DATE SAMPLED: 03/28/95  
 TIME SAMPLED: 08:15  
 WORK DESCRIPTION: 9503280815

LABORATORY I.D.: 950717-0001  
 DATE RECEIVED: 03/29/95  
 TIME RECEIVED: 10:15  
 REMARKS: WP-5

TEST DESCRIPTION	FINAL RESULT	LIMITS/*DILUTION	UNITS OF MEASURE	TEST METHOD	DATE	TECHN
602 - VOLATILE AROMATIC ORGANICS		*100		602 (6)	04/09/95	JHT
Benzene	4500	50	ug/L			
Toluene	ND	50	ug/L			
Ethyl benzene	130	50	ug/L			
Xylenes	ND	50	ug/L			
4-Bromofluorobenzene (Surrogate)	98	0	% Recovery	89-110% Limit		
Time Analyzed	1539	0				
PAH AND PHENOLS LIST BY 8270		*1		8270 (2)	04/05/95	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	24	10	ug/L			
2-Methylnaphthalene	27	10	ug/L			
Naphthalene	73	10	ug/L			
Phenanthrene	ND	10	ug/L			
Pyrene	ND	10	ug/L			
4-Chloro-3-methylphenol	ND	10	ug/L			
2-Chlorophenol	ND	10	ug/L			
2,4-Dichlorophenol	ND	10	ug/L			
2,4-Dimethylphenol	ND	10	ug/L			
2,4-Dinitrophenol	ND	50	ug/L			
2-Methyl-4,6-dinitrophenol	ND	50	ug/L			
2-Nitrophenol	ND	10	ug/L			
4-Nitrophenol	ND	50	ug/L			
Pentachlorophenol	ND	50	ug/L			
Phenol	ND	10	ug/L			
2,4,6-Trichlorophenol	ND	10	ug/L			
Nitrobenzene-d5 (Surrogate)	68	0	% Recovery	35-114% Limit		
2-Fluorobiphenyl (Surrogate)	57	0	% Recovery	43-116% Limit		
4-Terphenyl-d14 (Surrogate)	121	0	% Recovery	33-141% Limit		
Phenol-d6 (Surrogate)	58	0	% Recovery	10-94% Limit		
2-Fluorophenol (Surrogate)	39	0	% Recovery	21-100% Limit		

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 Aurora, CO 80014  
 (303) 751-1780



# CORE LABORATORIES

## LABORATORY TESTS RESULTS 04/12/95

JOB NUMBER: 950717      CUSTOMER: GEOSCIENCE CONSULTANTS, LTD.      ATTN:

CLIENT I.D.: REXENE COC #8966  
DATE SAMPLED: 03/28/95  
TIME SAMPLED: 08:15  
WORK DESCRIPTION: 9503280815

LABORATORY I.D.: 950717-0001  
DATE RECEIVED: 03/29/95  
TIME RECEIVED: 10:15  
REMARKS: WP-5

TEST DESCRIPTION	FINAL RESULT	LIMITS/*DILUTION	UNITS OF MEASURE	TEST METHOD	DATE	TECHN
2,4,6-Tribromophenol (Surrogate) Time Analyzed Date Extracted	74 1413 03/31/95	0 0 0	% Recovery	10-123% Limit		

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Aurora, CO 80014  
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# CORE LABORATORIES

## LABORATORY TESTS RESULTS 04/12/95

JOB NUMBER: 950717

CUSTOMER: GEOSCIENCE CONSULTANTS, LTD.

ATTN:

CLIENT I.D.: REXENE COC #8966

LABORATORY I.D.: 950717-0002

DATE SAMPLED: 03/28/95

DATE RECEIVED: 03/29/95

TIME SAMPLED: 08:35

TIME RECEIVED: 10:15

WORK DESCRIPTION: 9503280835

REMARKS: WP-30

TEST DESCRIPTION	FINAL RESULT	LIMITS/*DILUTION	UNITS OF MEASURE	TEST METHOD	DATE	TECHN
602 - VOLATILE AROMATIC ORGANICS		*1		602 (6)	04/07/95	JHT
Benzene	8.6	0.5	ug/L			
Toluene	ND	0.5	ug/L			
Ethyl benzene	ND	0.5	ug/L			
Xylenes	0.8	0.5	ug/L			
4-Bromofluorobenzene (Surrogate)	97	0	% Recovery	89-110% Limit		
Time Analyzed	1828	0				
PAH AND PHENOLS LIST BY 8270		*1		8270 (2)	04/05/95	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	48	10	ug/L			
2-Methylnaphthalene	12	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)	95	0	% Recovery	35-114% Limit		
2-Fluorobiphenyl (Surrogate)	62	0	% Recovery	43-116% Limit		
4-Terphenyl-d14 (Surrogate)	111	0	% Recovery	33-141% Limit		
Phenol-d6 (Surrogate)	77	0	% Recovery	10-94% Limit		
2-Fluorophenol (Surrogate)	65	0	% Recovery	21-100% Limit		

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Aurora, CO 80014  
(303) 751-1780



# CORE LABORATORIES

## LABORATORY TESTS RESULTS 04/12/95

JOB NUMBER: 950717      CUSTOMER: GEOSCIENCE CONSULTANTS, LTD.      ATTN:

CLIENT I.D.: REXENE COC #8966  
DATE SAMPLED: 03/28/95  
TIME SAMPLED: 08:35  
WORK DESCRIPTION: 9503280835

LABORATORY I.D.: 950717-0002  
DATE RECEIVED: 03/29/95  
TIME RECEIVED: 10:15  
REMARKS: WP-30

TEST DESCRIPTION	FINAL RESULT	LIMITS/*DILUTION	UNITS OF MEASURE	TEST METHOD	DATE	TECHN
2,4,6-Tribromophenol (Surrogate)	119	0	% Recovery	10-123% Limit		
Time Analyzed	1511	0				
Date Extracted	03/31/95	0				

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## LABORATORY TESTS RESULTS 04/12/95

JOB NUMBER: 950717

CUSTOMER: GEOSCIENCE CONSULTANTS, LTD.

ATTN:

CLIENT I.D.....: REXENE COC #8966  
 DATE SAMPLED.....: 03/28/95  
 TIME SAMPLED.....: 08:55  
 WORK DESCRIPTION...: 9503280855

LABORATORY I.D....: 950717-0003  
 DATE RECEIVED.....: 03/29/95  
 TIME RECEIVED.....: 10:15  
 REMARKS.....: WP-23

TEST DESCRIPTION	FINAL RESULT	LIMITS/*DILUTION	UNITS OF MEASURE	TEST METHOD	DATE	TECHN
602 - VOLATILE AROMATIC ORGANICS		*1		602 (6)	04/07/95	JHT
Benzene	0.9	0.5	ug/L			
Toluene	ND	0.5	ug/L			
Ethyl benzene	ND	0.5	ug/L			
Xylenes	ND	0.5	ug/L			
4-Bromofluorobenzene (Surrogate)	101	0	% Recovery	89-110% Limit		
Time Analyzed	1903	0				
PAH AND PHENOLS LIST BY 8270		*1		8270 (2)	04/05/95	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)	78	0	% Recovery	35-114% Limit		
2-Fluorobiphenyl (Surrogate)	44	0	% Recovery	43-116% Limit		
4-Terphenyl-d14 (Surrogate)	54	0	% Recovery	33-141% Limit		
Phenol-d6 (Surrogate)	60	0	% Recovery	10-94% Limit		
2-Fluorophenol (Surrogate)	45	0	% Recovery	21-100% Limit		

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# CORE LABORATORIES

## LABORATORY TESTS RESULTS 04/12/95

JOB NUMBER: 950717      CUSTOMER: GEOSCIENCE CONSULTANTS, LTD.      ATTN:

CLIENT I.D.....: REXENE COC #8966  
DATE SAMPLED.....: 03/28/95  
TIME SAMPLED.....: 08:55  
WORK DESCRIPTION...: 9503280855

LABORATORY I.D....: 950717-0003  
DATE RECEIVED....: 03/29/95  
TIME RECEIVED....: 10:15  
REMARKS.....: WP-23

TEST DESCRIPTION	FINAL RESULT	LIMITS/*DILUTION	UNITS OF MEASURE	TEST METHOD	DATE	TECHN
2,4,6-Tribromophenol (Surrogate)	88	0	% Recovery	10-123% Limit		
Time Analyzed	1609	0				
Date Extracted	03/31/95	0				

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# CORE LABORATORIES

## LABORATORY TESTS RESULTS 04/12/95

JOB NUMBER: 950717      CUSTOMER: GEOSCIENCE CONSULTANTS, LTD.      ATTN:

CLIENT I.D.....: REXENE COC #8966  
 DATE SAMPLED.....: 03/28/95  
 TIME SAMPLED.....: 09:15  
 WORK DESCRIPTION...: 9503280915

LABORATORY I.D....: 950717-0004  
 DATE RECEIVED.....: 03/29/95  
 TIME RECEIVED.....: 10:15  
 REMARKS.....: WP-6

TEST DESCRIPTION	FINAL RESULT	LIMITS/*DILUTION	UNITS OF MEASURE	TEST METHOD	DATE	TECHN
602 - VOLATILE AROMATIC ORGANICS		*250		602 (6)	04/09/95	JHT
Benzene	17000 E	125	ug/L			
Toluene	ND	125	ug/L			
Ethyl benzene	1400	125	ug/L			
Xylenes	160	125	ug/L			
4-Bromofluorobenzene (Surrogate)	100	0	% Recovery	89-110% Limit		
Time Analyzed	1614	0				
PAH AND PHENOLS LIST BY 8270		*1		8270 (2)	04/05/95	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	160	10	ug/L			
2-Methylnaphthalene	200	50	ug/L			
Naphthalene	290	50	ug/L			
Phenanthrene	20	10	ug/L			
Pyrene	35	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)	65	0	% Recovery	35-114% Limit		
2-Fluorobiphenyl (Surrogate)	56	0	% Recovery	43-116% Limit		
4-Terphenyl-d14 (Surrogate)	129	0	% Recovery	33-141% Limit		
Phenol-d6 (Surrogate)	35	0	% Recovery	10-94% Limit		
2-Fluorophenol (Surrogate)	58	0	% Recovery	21-100% Limit		

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# CORE LABORATORIES

## LABORATORY TESTS RESULTS 04/12/95

JOB NUMBER: 950717      CUSTOMER: GEOSCIENCE CONSULTANTS, LTD.      ATTN:

CLIENT I.D.....: REXENE COC #8966	LABORATORY I.D....: 950717-0004
DATE SAMPLED.....: 03/28/95	DATE RECEIVED....: 03/29/95
TIME SAMPLED.....: 09:15	TIME RECEIVED....: 10:15
WORK DESCRIPTION...: 9503280915	REMARKS.....: WP-6

TEST DESCRIPTION	FINAL RESULT	LIMITS/*DILUTION	UNITS OF MEASURE	TEST METHOD	DATE	TECHN
2,4,6-Tribromophenol (Surrogate)	73	0	% Recovery	10-123% Limit		
Time Analyzed	2056	0				
Date Extracted	03/31/95	0				
Semi-Volatile Organic - Surrogates		*5		8270(2)/625(6)	04/09/95	JMC
Nitrobenzene-d5 (Surrogate)	75	0	% Recovery	35-114% Limit		
2-Fluorobiphenyl (Surrogate)	78	0	% Recovery	43-116% Limit		
4-Terphenyl-d14 (Surrogate)	57	0	% Recovery	33-141% Limit		
Phenol-d6 (Surrogate)	80	0	% Recovery	10-94% Limit		
2-Fluorophenol (Surrogate)	55	0	% Recovery	21-100% Limit		
2,4,6-Tribromophenol (Surrogate)	85	0	% Recovery	10-123% Limit		
Date Extracted	03/31/95	0				
Time Analyzed	2010	0				

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# CORE LABORATORIES

## LABORATORY TESTS RESULTS

04/12/95

JOB NUMBER: 950717      CUSTOMER: GEOSCIENCE CONSULTANTS, LTD.      ATTN:

CLIENT I.D.: REXENE COC #8966

LABORATORY I.D.: 950717-0005

DATE SAMPLED: 03/27/95

DATE RECEIVED: 03/29/95

TIME SAMPLED: 09:45

TIME RECEIVED: 10:15

WORK DESCRIPTION: 9503270945

REMARKS: WP-7

TEST DESCRIPTION	FINAL RESULT	LIMITS/*DILUTION	UNITS OF MEASURE	TEST METHOD	DATE	TECHN
602 - VOLATILE AROMATIC ORGANICS		*10		602 (6)	04/09/95	JHT
Benzene	5	5	ug/L			
Toluene	ND	5	ug/L			
Ethyl benzene	ND	5	ug/L			
Xylenes	ND	5	ug/L			
4-Bromofluorobenzene (Surrogate)	101	0	% Recovery	89-110% Limit		
Time Analyzed	1320	0				
PAH AND PHENOLS LIST BY 8270		*1		8270 (2)	04/05/95	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	12	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)	82	0	% Recovery	35-114% Limit		
2-Fluorobiphenyl (Surrogate)	57	0	% Recovery	43-116% Limit		
4-Terphenyl-d14 (Surrogate)	178 *	0	% Recovery	33-141% Limit		
Phenol-d6 (Surrogate)	65	0	% Recovery	10-94% Limit		
2-Fluorophenol (Surrogate)	58	0	% Recovery	21-100% Limit		

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# CORE LABORATORIES

## LABORATORY TESTS RESULTS 04/12/95

JOB NUMBER: 950717      CUSTOMER: GEOSCIENCE CONSULTANTS, LTD.      ATTN:

CLIENT I.D.: REXENE COC #8966  
DATE SAMPLED: 03/27/95  
TIME SAMPLED: 09:45  
WORK DESCRIPTION: 9503270945

LABORATORY I.D.: 950717-0005  
DATE RECEIVED: 03/29/95  
TIME RECEIVED: 10:15  
REMARKS: WP-7

TEST DESCRIPTION	FINAL RESULT	LIMITS/*DILUTION	UNITS OF MEASURE	TEST METHOD	DATE	TECHN
2,4,6-Tribromophenol (Surrogate)	94	0	% Recovery	10-123% Limit		
Time Analyzed	1901	0				
Date Extracted	03/31/95	0				
Semi-Volatile Organic - Surrogates		*5		8270(2)/625(6)	04/09/95	JMC
Nitrobenzene-d5 (Surrogate)	79	0	% Recovery	35-114% Limit		
2-Fluorobiphenyl (Surrogate)	60	0	% Recovery	43-116% Limit		
4-Terphenyl-d14 (Surrogate)	64	0	% Recovery	33-141% Limit		
Phenol-d6 (Surrogate)	88	0	% Recovery	10-94% Limit		
2-Fluorophenol (Surrogate)	70	0	% Recovery	21-100% Limit		
2,4,6-Tribromophenol (Surrogate)	65	0	% Recovery	10-123% Limit		
Date Extracted	03/31/95	0				
Time Analyzed	1721	0				

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# CORE LABORATORIES

## LABORATORY TESTS RESULTS 04/12/95

JOB NUMBER: 950717      CUSTOMER: GEOSCIENCE CONSULTANTS, LTD.      ATTN:

CLIENT I.D.: REXENE COC #8966  
 DATE SAMPLED: 03/27/95  
 TIME SAMPLED: 10:15  
 WORK DESCRIPTION: 9503271015

LABORATORY I.D.: 950717-0006  
 DATE RECEIVED: 03/29/95  
 TIME RECEIVED: 10:15  
 REMARKS: WP-26d

TEST DESCRIPTION	FINAL RESULT	LIMITS/*DILUTION	UNITS OF MEASURE	TEST METHOD	DATE	TECHN
602 - VOLATILE AROMATIC ORGANICS		*10		602 (6)	04/09/95	JHT
Benzene	20	5	ug/L			
Toluene	ND	5	ug/L			
Ethyl benzene	ND	5	ug/L			
Xylenes	16	5	ug/L			
4-Bromofluorobenzene (Surrogate)	101	0	% Recovery	89-110% Limit		
Time Analyzed	1355	0				
PAH AND PHENOLS LIST BY 8270		*5		8270 (2)	04/09/95	JMC
Acenaphthene	ND	50	ug/L			
Acenaphthylene	ND	50	ug/L			
Anthracene	ND	50	ug/L			
Benzo(a)anthracene	ND	50	ug/L			
Benzo(b)fluoranthene	ND	50	ug/L			
Benzo(k)fluoranthene	ND	50	ug/L			
Benzo(ghi)perylene	ND	50	ug/L			
Benzo(a)pyrene	ND	50	ug/L			
Chrysene	ND	50	ug/L			
Dibenzo(a,h)anthracene	ND	50	ug/L			
Fluoranthene	ND	50	ug/L			
Fluorene	ND	50	ug/L			
Indeno(1,2,3-cd)pyrene	ND	50	ug/L			
1-Methylnaphthalene	120	50	ug/L			
2-Methylnaphthalene	ND	50	ug/L			
Naphthalene	ND	50	ug/L			
Phenanthrene	85	50	ug/L			
Pyrene	ND	50	ug/L			
4-Chloro-3-methylphenol	ND	50	ug/L			
2-Chlorophenol	ND	50	ug/L			
2,4-Dichlorophenol	ND	50	ug/L			
2,4-Dimethylphenol	55	50	ug/L			
2,4-Dinitrophenol	ND	250	ug/L			
2-Methyl-4,6-dinitrophenol	ND	250	ug/L			
2-Nitrophenol	ND	50	ug/L			
4-Nitrophenol	ND	250	ug/L			
Pentachlorophenol	ND	250	ug/L			
Phenol	ND	50	ug/L			
2,4,6-Trichlorophenol	ND	50	ug/L			
Nitrobenzene-d5 (Surrogate)	76	0	% Recovery	35-114% Limit		
2-Fluorobiphenyl (Surrogate)	83	0	% Recovery	43-116% Limit		
4-Terphenyl-d14 (Surrogate)	90	0	% Recovery	33-141% Limit		
Phenol-d6 (Surrogate)	76	0	% Recovery	10-94% Limit		
2-Fluorophenol (Surrogate)	57	0	% Recovery	21-100% Limit		

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## LABORATORY TESTS RESULTS 04/12/95

JOB NUMBER: 950717      CUSTOMER: GEOSCIENCE CONSULTANTS, LTD.      ATTN:

CLIENT I.D.: REXENE COC #8966  
DATE SAMPLED: 03/27/95  
TIME SAMPLED: 10:15  
WORK DESCRIPTION: 9503271015

LABORATORY I.D.: 950717-0006  
DATE RECEIVED: 03/29/95  
TIME RECEIVED: 10:15  
REMARKS: WP-26d

TEST DESCRIPTION	FINAL RESULT	LIMITS/*DILUTION	UNITS OF MEASURE	TEST METHOD	DATE	TECHN
2,4,6-Tribromophenol (Surrogate) Time Analyzed Date Extracted	63 1107 03/31/95	0 0 0	% Recovery	10-123% Limit		

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# CORE LABORATORIES

## LABORATORY TESTS RESULTS 04/12/95

JOB NUMBER: 950717      CUSTOMER: GEOSCIENCE CONSULTANTS, LTD.      ATTN:

CLIENT I.D.....: REXENE COC #8966  
 DATE SAMPLED.....: 03/27/95  
 TIME SAMPLED.....: 10:45  
 WORK DESCRIPTION...: 9503271045

LABORATORY I.D....: 950717-0007  
 DATE RECEIVED.....: 03/29/95  
 TIME RECEIVED.....: 10:15  
 REMARKS.....: WP-9

TEST DESCRIPTION	FINAL RESULT	LIMITS/*DILUTION	UNITS OF MEASURE	TEST METHOD	DATE	TECHN
602 - VOLATILE AROMATIC ORGANICS		*250		602 (6)	04/09/95	JHT
Benzene	6600	125	ug/L			
Toluene	200	125	ug/L			
Ethyl benzene	500	125	ug/L			
Xylenes	1400	125	ug/L			
4-Bromofluorobenzene (Surrogate)	101	0	% Recovery	89-110% Limit		
Time Analyzed	1758	0				
PAH AND PHENOLS LIST BY 8270		*1		8270 (2)	04/05/95	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	190	100	ug/L			
2-Methylnaphthalene	250	100	ug/L			
Naphthalene	220	100	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	380	100	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	170	50	ug/L			
Phenol	ND	10	ug/L			
2,4,6-Trichlorophenol	12	10	ug/L			
Nitrobenzene-d5 (Surrogate)	63	0	% Recovery	35-114% Limit		
2-Fluorobiphenyl (Surrogate)	59	0	% Recovery	43-116% Limit		
4-Terphenyl-d14 (Surrogate)	124	0	% Recovery	33-141% Limit		
Phenol-d6 (Surrogate)	81	0	% Recovery	10-94% Limit		
2-Fluorophenol (Surrogate)	61	0	% Recovery	21-100% Limit		

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# CORE LABORATORIES

## LABORATORY TESTS RESULTS 04/12/95

JOB NUMBER: 950717

CUSTOMER: GEOSCIENCE CONSULTANTS, LTD.

ATTN:

CLIENT I.D.: REXENE COC #8966

DATE SAMPLED: 03/27/95

TIME SAMPLED: 10:45

WORK DESCRIPTION: 9503271045

LABORATORY I.D.: 950717-0007

DATE RECEIVED: 03/29/95

TIME RECEIVED: 10:15

REMARKS: WP-9

TEST DESCRIPTION	FINAL RESULT	LIMITS/*DILUTION	UNITS OF MEASURE	TEST METHOD	DATE	TECHN
2,4,6-Tribromophenol (Surrogate)	114	0	% Recovery	10-123% Limit		
Time Analyzed	1958	0				
Date Extracted	03/31/95	0				
Semi-Volatile Organic - Surrogates		*10		8270(2)/625(6)	04/09/95	JMC
Nitrobenzene-d5 (Surrogate)	73	0	% Recovery	35-114% Limit		
2-Fluorobiphenyl (Surrogate)	55	0	% Recovery	43-116% Limit		
4-Terphenyl-d14 (Surrogate)	69	0	% Recovery	33-141% Limit		
Phenol-d6 (Surrogate)	91	0	% Recovery	10-94% Limit		
2-Fluorophenol (Surrogate)	66	0	% Recovery	21-100% Limit		
2,4,6-Tribromophenol (Surrogate)	88	0	% Recovery	10-123% Limit		
Date Extracted	03/31/95	0				
Time Analyzed	1819	0				

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# CORE LABORATORIES

## LABORATORY TESTS RESULTS

04/12/95

JOB NUMBER: 950717      CUSTOMER: GEOSCIENCE CONSULTANTS, LTD.      ATTN:

CLIENT I.D.: REXENE COC #8966  
 DATE SAMPLED: 03/27/95  
 TIME SAMPLED: 11:15  
 WORK DESCRIPTION: 9503271115

LABORATORY I.D.: 950717-0008  
 DATE RECEIVED: 03/29/95  
 TIME RECEIVED: 10:15  
 REMARKS: WP-20

TEST DESCRIPTION	FINAL RESULT	LIMITS/*DILUTION	UNITS OF MEASURE	TEST METHOD	DATE	TECHN
602 - VOLATILE AROMATIC ORGANICS		*50		602 (6)	04/09/95	JHT
Benzene	1700	25	ug/L			
Toluene	ND	25	ug/L			
Ethyl benzene	ND	25	ug/L			
Xylenes	ND	25	ug/L			
4-Bromofluorobenzene (Surrogate)	100	0	% Recovery	89-110% Limit		
Time Analyzed	1832	0				
PAH AND PHENOLS LIST BY 8270		*1		8270 (2)	04/05/95	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	180	50	ug/L			
2-Methylnaphthalene	220	50	ug/L			
Naphthalene	220	50	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)	58	0	% Recovery	35-114% Limit		
2-Fluorobiphenyl (Surrogate)	52	0	% Recovery	43-116% Limit		
4-Terphenyl-d14 (Surrogate)	105	0	% Recovery	33-141% Limit		
Phenol-d6 (Surrogate)	80	0	% Recovery	10-94% Limit		
2-Fluorophenol (Surrogate)	68	0	% Recovery	21-100% Limit		

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# CORE LABORATORIES

## LABORATORY TESTS RESULTS 04/12/95

JOB NUMBER: 950717      CUSTOMER: GEOSCIENCE CONSULTANTS, LTD.      ATTN:

CLIENT I.D.: REXENE COC #8966  
DATE SAMPLED: 03/27/95  
TIME SAMPLED: 11:15  
WORK DESCRIPTION: 9503271115

LABORATORY I.D.: 950717-0008  
DATE RECEIVED: 03/29/95  
TIME RECEIVED: 10:15  
REMARKS: WP-20

TEST DESCRIPTION	FINAL RESULT	LIMITS/*DILUTION	UNITS OF MEASURE	TEST METHOD	DATE	TECHN
2,4,6-Tribromophenol (Surrogate)	87	0	% Recovery	10-123% Limit		
Time Analyzed	1706	0				
Date Extracted	03/31/95	0				
Semi-Volatile Organic - Surrogates		*5		8270(2)/625(6)	04/09/95	JMC
Nitrobenzene-d5 (Surrogate)	82	0	% Recovery	35-114% Limit		
2-Fluorobiphenyl (Surrogate)	55	0	% Recovery	43-116% Limit		
4-Terphenyl-d14 (Surrogate)	54	0	% Recovery	33-141% Limit		
Phenol-d6 (Surrogate)	82	0	% Recovery	10-94% Limit		
2-Fluorophenol (Surrogate)	78	0	% Recovery	21-100% Limit		
2,4,6-Tribromophenol (Surrogate)	66	0	% Recovery	10-123% Limit		
Date Extracted	03/31/95	0				
Time Analyzed	1526	0				

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# CORE LABORATORIES

## LABORATORY TESTS RESULTS 04/12/95

JOB NUMBER: 950717      CUSTOMER: GEOSCIENCE CONSULTANTS, LTD      ATTN:

CLIENT I.D.: REXENE COC #8966  
 DATE SAMPLED: 03/28/95  
 TIME SAMPLED: 11:45  
 WORK DESCRIPTION: 9503281145

LABORATORY I.D.: 950717-0009  
 DATE RECEIVED: 03/29/95  
 TIME RECEIVED: 10:15  
 REMARKS: WP-29

TEST DESCRIPTION	FINAL RESULT	LIMITS/*DILUTION	UNITS OF MEASURE	TEST METHOD	DATE	TECHN
602 - VOLATILE AROMATIC ORGANICS		*100		602 (6)	04/09/95	JHT
Benzene	1900	50	ug/L			
Toluene	ND	50	ug/L			
Ethyl benzene	95	50	ug/L			
Xylenes	210	50	ug/L			
4-Bromofluorobenzene (Surrogate)	102	0	% Recovery	89-110% Limit		
Time Analyzed	1907	0				
PAH AND PHENOLS LIST BY 8270		*1		8270 (2)	04/05/95	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	70	10	ug/L			
2-Methylnaphthalene	110	10	ug/L			
Naphthalene	160	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	2200	500	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)	52	0	% Recovery	43-116% Limit		
4-Terphenyl-d14 (Surrogate)	78	0	% Recovery	33-141% Limit		
Phenol-d6 (Surrogate)	78	0	% Recovery	10-94% Limit		
2-Fluorophenol (Surrogate)	69	0	% Recovery	21-100% Limit		

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CORE LABORATORIES

LABORATORY TESTS RESULTS  
04/12/95

JOB NUMBER: 950717      CUSTOMER: GEOSCIENCE CONSULTANTS, LTD.      ATTN:

CLIENT I.D.: REXENE COC #8966      LABORATORY I.D.: 950717-0009  
DATE SAMPLED: 03/28/95      DATE RECEIVED: 03/29/95  
TIME SAMPLED: 11:45      TIME RECEIVED: 10:15  
WORK DESCRIPTION: 9503281145      REMARKS: WP-29

TEST DESCRIPTION	FINAL RESULT	LIMITS/*DILUTION	UNITS OF MEASURE	TEST METHOD	DATE	TECHN
2,4,6-Tribromophenol (Surrogate)	92	0	% Recovery	10-123% Limit		
Time Analyzed	1804	0				
Date Extracted	03/31/95	0				
Semivolatile Organic - Surrogates		*50		8270 (2)/625 (6)	04/09/95	JMC
Nitrobenzene-d5 (Surrogate)	74	0	% Recovery	35-114% Limit		
2-Fluorobiphenyl (Surrogate)	42	0	% Recovery	43-116% Limit		
4-Terphenyl-d14 (Surrogate)	46	0	% Recovery	33-141% Limit		
Phenol-d6 (Surrogate)	73	0	% Recovery	10-94% Limit		
2-Fluorophenol (Surrogate)	55	0	% Recovery	21-100% Limit		
2,4,6-Tribromophenol (Surrogate)	50	0	% Recovery	10-123% Limit		
Date Extracted	03/31/95	0				
Time Analyzed	1623	0				

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# CORE LABORATORIES

## LABORATORY TESTS RESULTS 04/12/95

JOB NUMBER: 950717

CUSTOMER: GEOSCIENCE CONSULTANTS, LTD.

ATTN:

CLIENT I.D.: REXENE COC #8966

LABORATORY I.D.: 950717-0010

DATE SAMPLED: 03/28/95

DATE RECEIVED: 03/29/95

TIME SAMPLED: 12:05

TIME RECEIVED: 10:15

WORK DESCRIPTION: 9503281205

REMARKS: WP-19

TEST DESCRIPTION	FINAL RESULT	LIMITS/*DILUTION	UNITS OF MEASURE	TEST METHOD	DATE	TECHN
02 - VOLATILE AROMATIC ORGANICS		*250		602 (6)	04/09/95	JHT
Benzene	9400	125	ug/L			
Toluene	ND	125	ug/L			
Ethyl benzene	670	125	ug/L			
Xylenes	380	125	ug/L			
4-Bromofluorobenzene (Surrogate)	101	0	% Recovery	89-110% Limit		
Time Analyzed	1942	0				
PAH AND PHENOLS LIST BY 8270		*1		8270 (2)	04/05/95	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	75	10	ug/L			
2-Methylnaphthalene	87	10	ug/L			
Naphthalene	120	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	28	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	78	10	ug/L			
2,4,6-Trichlorophenol	ND	10	ug/L			
Nitrobenzene-d5 (Surrogate)	59	0	% Recovery	35-114% Limit		
2-Fluorobiphenyl (Surrogate)	50	0	% Recovery	43-116% Limit		
4-Terphenyl-d14 (Surrogate)	98	0	% Recovery	33-141% Limit		
Phenol-d6 (Surrogate)	54	0	% Recovery	10-94% Limit		
2-Fluorophenol (Surrogate)	37	0	% Recovery	21-100% Limit		

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## LABORATORY TESTS RESULTS 04/12/95

JOB NUMBER: 950717      CUSTOMER: GEOSCIENCE CONSULTANTS, LTD.      ATTN:

CLIENT I.D.: REXENE COC #8966  
DATE SAMPLED: 03/28/95  
TIME SAMPLED: 12:05  
WORK DESCRIPTION: 9503281205

LABORATORY I.D.: 950717-0010  
DATE RECEIVED: 03/29/95  
TIME RECEIVED: 10:15  
REMARKS: WP-19

TEST DESCRIPTION	FINAL RESULT	LIMITS/*DILUTION	UNITS OF MEASURE	TEST METHOD	DATE	TECHN
2,4,6-Tribromophenol (Surrogate)	90	0	% Recovery	10-123% Limit		
Time Analyzed	1316	0				
Date Extracted	03/31/95	0				

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## LABORATORY TESTS RESULTS 04/12/95

JOB NUMBER: 950717

CUSTOMER: GEOSCIENCE CONSULTANTS, LTD.

ATTN:

CLIENT I.D.....:

DATE SAMPLED.....: / /

TIME SAMPLED.....: :

WORK DESCRIPTION...: METHOD BLANK

LABORATORY I.D....: 950717-0011

DATE RECEIVED.....: / /

TIME RECEIVED.....: :

REMARKS.....:

TEST DESCRIPTION	FINAL RESULT	LIMITS/*DILUTION	UNITS OF MEASURE	TEST METHOD	DATE	TECHN
802 - VOLATILE AROMATIC ORGANICS		*1		602 (6)	04/09/95	JHT
Benzene	ND	0.5	ug/L			
Toluene	ND	0.5	ug/L			
Ethyl benzene	ND	0.5	ug/L			
Xylenes	ND	0.5	ug/L			
4-Bromofluorobenzene (Surrogate)	102	0	% Recovery	89-110% Limit		
Time Analyzed	1136	0				
PAH AND PHENOLS LIST BY 8270		*1		8270 (2)	04/05/95	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)	89	0	% Recovery	35-114% Limit		
2-Fluorobiphenyl (Surrogate)	65	0	% Recovery	43-116% Limit		
4-Terphenyl-d14 (Surrogate)	109	0	% Recovery	33-141% Limit		
Phenol-d6 (Surrogate)	31	0	% Recovery	10-94% Limit		
2-Fluorophenol (Surrogate)	23	0	% Recovery	21-100% Limit		

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# CORE LABORATORIES

## LABORATORY TESTS RESULTS

04/12/95

JOB NUMBER: 950717      CUSTOMER: GEOSCIENCE CONSULTANTS, LTD.      ATTN:

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

LABORATORY I.D.: 950717-0011  
DATE RECEIVED: / /  
TIME RECEIVED: :  
REMARKS:

TEST DESCRIPTION	FINAL RESULT	LIMITS/*DILUTION	UNITS OF MEASURE	TEST METHOD	DATE	TECHN
2,4,6-Tribromophenol (Surrogate)	37	0	% Recovery	10-123% Limit		
Time Analyzed	1022	0				
Date Extracted	03/31/95	0				

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## LABORATORY TESTS RESULTS 04/12/95

JOB NUMBER: 950717      CUSTOMER: GEOSCIENCE CONSULTANTS, LTD.      ATTN:

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

LABORATORY I.D.: 950717-0012  
DATE RECEIVED: / /  
TIME RECEIVED: :  
REMARKS:

TEST DESCRIPTION	FINAL RESULT	LIMITS/*DILUTION	UNITS OF MEASURE	TEST METHOD	DATE	TECHN
502 - VOLATILE AROMATIC ORGANICS		*1		602 (6)	04/07/95	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	89-110% Limit		
Time Analyzed	1753	0				

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# CORE LABORATORIES

## QUALITY CONTROL REPORT 04/12/95

JOB NUMBER: 950717

CUSTOMER: GEOSCIENCE CONSULTANTS, LTD.

ATTN:

ANA SPIKED ANALYSIS-WATER

DATE ANALYZED: 04/05/95 TIME ANALYZED: 09:05 METHOD: 8270 (2)

QC NUMBER: 325940

### B L A N K S

TEST DESCRIPTION	ANALY	SUB-TYPE	ANALYSIS I.D.	DILUTION FACTOR	ANALYZED VALUE	DETECTION LIMIT	UNITS OF MEASURE
Time Analyzed	SB		1120	1	0	0	
	SBD		1218	1	0	0	
ate Extracted	SB		03/31/95	1	0	0	
	SBD		03/31/95	1	0	0	

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# CORE LABORATORIES

## QUALITY CONTROL REPORT 04/12/95

JOB NUMBER: 950717

CUSTOMER: GEOSCIENCE CONSULTANTS, LTD.

ATTN:

BNA SPIKED ANALYSIS-WATER

DATE ANALYZED: 04/05/95 TIME ANALYZED: 09:05 METHOD: 8270 (2)

QC NUMBER: 325940

### REFERENCE STANDARDS

TEST DESCRIPTION	ANALYSIS SUB-TYPE	ANALYSIS I. D.	DILUTION FACTOR	ANALYZED VALUE	TRUE VALUE	PERCENT RECOVERY	DETECTION LIMITS	UNITS OF MEASURE
Phenol	SB	B940331A	1	15	143	10	10	ug/L
	SBD	B940331A	1	41	143	29	10	ug/L
2-Chlorophenol	SB	B940331A	1	11	143	8	10	ug/L
	SBD	B940331A	1	26	143	18	10	ug/L
1,4-Dichlorobenzene	SB	B940331A	1	91	143	64	10	ug/L
	SBD	B940331A	1	102	143	71	10	ug/L
N-Nitrosodi-n-propylamine	SB	B940331A	1	106	143	74	10	ug/L
	SBD	B940331A	1	115	143	80	10	ug/L
1,2,4-Trichlorobenzene	SB	B940331A	1	98	143	69	10	ug/L
	SBD	B940331A	1	107	143	75	10	ug/L
4-Chloro-3-methylphenol	SB	B940331A	1	36	143	25	10	ug/L
	SBD	B940331A	1	73	143	51	10	ug/L
Acenaphthene	SB	B940331A	1	123	143	86	10	ug/L
	SBD	B940331A	1	129	143	90	10	ug/L
4-Nitrophenol	SB	B940331A	1	1	143	1	50	ug/L
	SBD	B940331A	1	31	143	22	50	ug/L
2,4-Dinitrotoluene	SB	B940331A	1	6	143	4	10	ug/L
	SBD	B940331A	1	133	143	93	10	ug/L
Pentachlorophenol	SB	B940331A	1	2	143	1	50	ug/L
	SBD	B940331A	1	17	143	12	50	ug/L
Pyrene	SB	B940331A	1	158	143	110	10	ug/L
	SBD	B940331A	1	172	143	120	10	ug/L
Nitrobenzene-d5 (Surrogate)	SB	B940331A	1	66	100	66	0	35-114% Limit
	SBD	B940331A	1	90	100	90	0	35-114% Limit
2-Fluorobiphenyl (Surrogate)	SB	B940331A	1	68	100	68	0	43-116% Limit
	SBD	B940331A	1	71	100	71	0	43-116% Limit
4-Terphenyl-d14 (Surrogate)	SB	B940331A	1	103	100	103	0	33-141% Limit
	SBD	B940331A	1	112	100	112	0	33-141% Limit
Phenol-d6 (Surrogate)	SB	B940331A	1	10	100	10	0	10-94% Limit
	SBD	B940331A	1	28	100	28	0	10-94% Limit
2-Fluorophenol (Surrogate)	SB	B940331A	1	3	100	3	0	21-100% Limit
	SBD	B940331A	1	14	100	14	0	21-100% Limit
2,4,6-Tribromophenol (Surrogate)	SB	B940331A	1	11	100	11	0	10-123% Limit
	SBD	B940331A	1	22	100	22	0	10-123% Limit

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# CORE LABORATORIES

## QUALITY CONTROL REPORT 04/12/95

JOB NUMBER: 950717

CUSTOMER: GEOSCIENCE CONSULTANTS, LTD.

ATTN:

NA SPIKED ANALYSIS-WATER

DATE ANALYZED: 04/09/95 TIME ANALYZED: 12:12 METHOD: 8270 (2)

QC NUMBER: 325942

### B L A N K S

TEST DESCRIPTION	ANALY SUB-TYPE	ANALYSIS I.D.	DILUTION FACTOR	ANALYZED VALUE	DETECTION LIMIT	UNITS OF MEASURE
Time Analyzed	SB	1330	1	0	0	
	SBD	1428	1	0	0	
ate Extracted	SB	03/31/95	1	0	0	
	SBD	03/31/95	1	0	0	

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# CORE LABORATORIES

## QUALITY CONTROL REPORT 04/12/95

JOB NUMBER: 950717

CUSTOMER: GEOSCIENCE CONSULTANTS, LTD.

ATTN:

BNA SPIKED ANALYSIS-WATER

DATE ANALYZED: 04/09/95 TIME ANALYZED: 12:12 METHOD: 8270 (2)

QC NUMBER: 325942

### REFERENCE STANDARDS

TEST DESCRIPTION	ANALYSIS SUB-TYPE	ANALYSIS I. D.	DILUTION FACTOR	ANALYZED VALUE	TRUE VALUE	PERCENT RECOVERY	DETECTION LIMITS	UNITS OF MEASURE
Nitrobenzene-d5 (Surrogate)	SB	B940331A	1	57	100	57	0	35-114% Limit
	SBD	B940331A	1	74	100	74	0	35-114% Limit
2-Fluorobiphenyl (Surrogate)	SB	B940331A	1	69	100	69	0	43-116% Limit
	SBD	B940331A	1	65	100	65	0	43-116% Limit
4-Terphenyl-d14 (Surrogate)	SB	B940331A	1	92	100	92	0	33-141% Limit
	SBD	B940331A	1	85	100	85	0	33-141% Limit
Phenol-d6 (Surrogate)	SB	B940331A	1	16	100	16	0	10-94% Limit
	SBD	B940331A	1	39	100	39	0	10-94% Limit
2-Fluorophenol (Surrogate)	SB	B940331A	1	5	100	5	0	21-100% Limit
	SBD	B940331A	1	20	100	20	0	21-100% Limit
2,4,6-Tribromophenol (Surrogate)	SB	B940331A	1	10	100	10	0	10-123% Limit
	SBD	B940331A	1	20	100	20	0	10-123% Limit

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# CORE LABORATORIES

## QUALITY CONTROL REPORT 04/12/95

JOB NUMBER: 950717

CUSTOMER: GEOSCIENCE CONSULTANTS, LTD.

ATTN:

602 - VOLATILE AROMATIC ORGANICS

DATE ANALYZED: 04/10/95

TIME ANALYZED: 00:00

METHOD: 602 (6)

QC NUMBER: 325959

### B L A N K S

TEST DESCRIPTION	ANALY SUB-TYPE	ANALYSIS I.D.	DILUTION FACTOR	ANALYZED VALUE	DETECTION LIMIT	UNITS OF MEASURE
Time Analyzed	SB	0420	1	0	0	
	SBD	0455	1	0	0	

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# CORE LABORATORIES

## QUALITY CONTROL REPORT 04/12/95

JOB NUMBER: 950717

CUSTOMER: GEOSCIENCE CONSULTANTS, LTD.

ATTN:

02 - VOLATILE AROMATIC ORGANICS

DATE ANALYZED: 04/10/95 TIME ANALYZED: 00:00 METHOD: 602 (6)

QC NUMBER: 325959

### REFERENCE STANDARDS

TEST DESCRIPTION	ANALYSIS SUB-TYPE	ANALYSIS I. D.	DILUTION FACTOR	ANALYZED VALUE	TRUE VALUE	PERCENT RECOVERY	DETECTION LIMITS	UNITS OF MEASURE
Benzene	SB	T950409A	1	19.3	20.0	97	0.5	ug/L
	SBD	T950409A	1	20.1	20.0	101	0.5	ug/L
Toluene	SB	T950409A	1	19.4	20.0	97	0.5	ug/L
	SBD	T950409A	1	20.2	20.0	101	0.5	ug/L
Ethyl benzene	SB	T950409A	1	19.3	20.0	97	0.5	ug/L
	SBD	T950409A	1	20.0	20.0	100	0.5	ug/L
Xylenes	SB	T950409A	1	60.4	60.0	101	0.5	ug/L
	SBD	T950409A	1	62.6	60.0	104	0.5	ug/L
4-Bromofluorobenzene (Surrogate)	SB	T950409A	1	104	100	104	0	89-110% Limit
	SBD	T950409A	1	102	100	102	0	89-110% Limit

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# CORE LABORATORIES

## QUALITY CONTROL REPORT 04/12/95

JOB NUMBER: 950717

CUSTOMER: GEOSCIENCE CONSULTANTS, LTD.

ATTN:

602 - VOLATILE AROMATIC ORGANICS

DATE ANALYZED: 04/07/95

TIME ANALYZED: 16:08

METHOD: 602 (6)

QC NUMBER: 325962

### B L A N K S

TEST DESCRIPTION	ANALY SUB-TYPE	ANALYSIS I.D.	DILUTION FACTOR	ANALYZED VALUE	DETECTION LIMIT	UNITS OF MEASURE
Time Analyzed	SB SBD	1643 1718	1 1	0 0	0 0	

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# CORE LABORATORIES

## QUALITY CONTROL REPORT 04/12/95

JOB NUMBER: 950717

CUSTOMER: GEOSCIENCE CONSULTANTS, LTD.

ATTN:

602 - VOLATILE AROMATIC ORGANICS

DATE ANALYZED: 04/07/95 TIME ANALYZED: 16:08 METHOD: 602 (6)

QC NUMBER: 325962

### REFERENCE STANDARDS

TEST DESCRIPTION	ANALYSIS SUB-TYPE	ANALYSIS I. D.	DILUTION FACTOR	ANALYZED VALUE	TRUE VALUE	PERCENT RECOVERY	DETECTION LIMITS	UNITS OF MEASURE
Benzene	SB	T950407A	1	20.0	20.0	100	0.5	ug/L
	SBD	T950407A	1	19.1	20.0	96	0.5	ug/L
Toluene	SB	T950407A	1	20.5	20.0	102	0.5	ug/L
	SBD	T950407A	1	19.4	20.0	97	0.5	ug/L
Ethyl benzene	SB	T950407A	1	20.9	20.0	104	0.5	ug/L
	SBD	T950407A	1	19.6	20.0	98	0.5	ug/L
Xylenes	SB	T950407A	1	66.1	60.0	110	0.5	ug/L
	SBD	T950407A	1	62.1	60.0	103	0.5	ug/L
4-Bromofluorobenzene (Surrogate)	SB	T950407A	1	104	100	104	0	89-110% Limit
	SBD	T950407A	1	105	100	105	0	89-110% Limit

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## QUALITY CONTROL FOOTER

### METHOD REFERENCES

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

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

#### Blank QC Sample Identification

MB Method Blank  
 ICB Initial Calibration Blank  
 CCB Continuing Calibration Blank

#### Reference Standard QC Sample Identification

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

#### Spike QC Sample Identification

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

#### Duplicate QC Sample Identification

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

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

<u>Subcontract Laboratory</u>	<u>Code</u>	<u>Subcontract Laboratory</u>	<u>Code</u>
Core Laboratories - Anaheim, CA	* AN	Core Laboratories - Lake Charles, LA	* LC
Core Laboratories - Casper, WY	* CA	Core Laboratories - Long Beach, CA	* LB
Core Laboratories - Corpus Christi, TX	* CC	Other Subcontract Laboratories	* XX
Core Laboratories - Houston, TX	* HP		

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CORE LABORATORIES

CORE LABORATORIES  
ANALYTICAL REPORT  
Job Number: 950714  
Prepared For:  
GEOSCIENCE CONSULTANTS, LTD.  
505 MARQUETTE NW, SUITE 1100  
ALBUQUERQUE, NM 87102  
Date: 04/05/95

*Linda L. Benkers*  
Signature

4-5-95  
Date:

Name: Linda L. Benkers

Core Laboratories  
10703 East Bethany Drive  
Aurora, CO 80014

Title: QA/QC Coordinator



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505 Marquette NW, Ste. 1100  
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FAX: (301) 459-3064

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

No 8965

# Chain of Custody

Date 3/28/95 Page 1 of 1

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

Samplers (SIGNATURES)	Matrix	Location
<u>D. NEE</u>	<u>H2O</u>	<u>WP-27d</u>
	<u>H2O</u>	<u>WP-1B</u>
	<u>H2O</u>	<u>WP-15</u>

Analysis Request																					
Halogenated Volatiles 501/8010	Aromatic Volatiles 502/8020 (STX)	Phenols, Sub Phenols 604/8040	Pesticides/CB 608/8080	Polynuclear Aromatic Hydrocarbons 619/8310	Volatile Compounds GCMS 624/8240	Base/Neu/Acid Compounds GCMS 625/8270	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) Tl,Cd,Pb,C	Flash Point	Concreity	Reactivity	Oil & Grease	Cyanide Total/Available	Chemical Oxygen Demand (COD)	Number of Containers	
3	3	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	4
<i>NEE 3/28/95</i>																					

Project Information	Sample Receipt				1. Relinquished By			2. Relinquished By			3. Relinquished By			
	Total No. of Containers	Chain of Custody Seals	Rec'd Good Condition/Cold	Conforms to Record	Lab No.	Signature	(Date)	(Company)	Signature	(Date)	(Company)	Signature	(Date)	(Company)
Project <u>PEXENE</u>	<u>12</u>	<u>OK</u>	<u>OK</u>	<u>OK</u>	<u>950714</u>	<u>D. NEE</u>	<u>1500</u>	<u>GCL</u>	<u>DAVID NEE</u>	<u>3/28/95</u>	<u>GCL</u>	<u>Umyaam</u>	<u>10/15</u>	<u>GCL</u>
Project Director <u>TRENT</u>														
Charge Code No. <u>3031-006</u>														
Shipping ID. No. <u>3238365432</u>														
Via: <u>FED X</u>														
Special Instructions/Comments:														

Distribution: White, Canary-Laboratory • Pink, GCL



CORE LABORATORIES


SAMPLE DELIVERY GROUP NARRATIVE

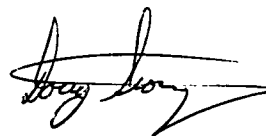
April 4, 1995

Customer: Geoscience Consultants, Ltd.  
Project: Rexene COC #8965  
Core Laboratories Project Number: 950714

Method 8270 Organic Analysis:

Due to a matrix interference present in sample 9503281235 (Core ID 950714-1), dilutions were necessary to bring the internal standards into method control. Percent surrogate recoveries were acceptable for the diluted reanalyses.

  
Linda L. Benkers  
QA/QC Coordinator

  
Douglas Georgic  
Laboratory Supervisor



**EXPLANATION OF DATA FLAGS**

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



# CORE LABORATORIES

## LABORATORY TESTS RESULTS 04/05/95

JOB NUMBER: 950714      CUSTOMER: GEOSCIENCE CONSULTANTS, LTD.      ATTN:

CLIENT I.D.: REXENE COC #8965  
 DATE SAMPLED: 03/28/95  
 TIME SAMPLED: 12:35  
 WORK DESCRIPTION: 9503281235

LABORATORY I.D.: 950714-0001  
 DATE RECEIVED: 03/29/95  
 TIME RECEIVED: 10:15  
 REMARKS: WP-27d

TEST DESCRIPTION	FINAL RESULT	LIMITS/*DILUTION	UNITS OF MEASURE	TEST METHOD	DATE	TECHN
602 - VOLATILE AROMATIC ORGANICS		*50		602 (6)	03/30/95	DMJ
Benzene	950	25	ug/L			
Toluene	30	25	ug/L			
Ethyl benzene	250	25	ug/L			
Xylenes	370	25	ug/L			
4-Bromofluorobenzene (Surrogate)	110	0	% Recovery	89-110% Limit		
Time Analyzed	2155	0				
PAH AND PHENOLS LIST BY 8270		*10		8270 (2)	04/01/95	JMC
Acenaphthene	ND	100	ug/L			
Acenaphthylene	ND	100	ug/L			
Anthracene	ND	100	ug/L			
Benzo(a)anthracene	ND	100	ug/L			
Benzo(b)fluoranthene	ND	100	ug/L			
Benzo(k)fluoranthene	ND	100	ug/L			
Benzo(ghi)perylene	ND	100	ug/L			
Benzo(a)pyrene	ND	100	ug/L			
Chrysene	ND	100	ug/L			
Dibenzo(a,h)anthracene	ND	100	ug/L			
Fluoranthene	ND	100	ug/L			
Fluorene	ND	100	ug/L			
Indeno(1,2,3-cd)pyrene	ND	100	ug/L			
1-Methylnaphthalene	160	100	ug/L			
2-Methylnaphthalene	120	100	ug/L			
Naphthalene	ND	100	ug/L			
Phenanthrene	ND	100	ug/L			
Pyrene	ND	100	ug/L			
4-Chloro-3-methylphenol	ND	100	ug/L			
2-Chlorophenol	ND	100	ug/L			
2,4-Dichlorophenol	ND	100	ug/L			
2,4-Dimethylphenol	6000	400	ug/L			
2,4-Dinitrophenol	ND	500	ug/L			
2-Methyl-4,6-dinitrophenol	ND	500	ug/L			
2-Nitrophenol	ND	100	ug/L			
4-Nitrophenol	ND	500	ug/L			
Pentachlorophenol	ND	500	ug/L			
Phenol	ND	100	ug/L			
2,4,6-Trichlorophenol	ND	100	ug/L			
Nitrobenzene-d5 (Surrogate)	79	0	% Recovery	35-114% Limit		
2-Fluorobiphenyl (Surrogate)	74	0	% Recovery	43-116% Limit		
4-Terphenyl-d14 (Surrogate)	105	0	% Recovery	33-141% Limit		
Phenol-d6 (Surrogate)	37	0	% Recovery	10-94% Limit		
2-Fluorophenol (Surrogate)	65	0	% Recovery	21-100% Limit		

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# CORE LABORATORIES

## LABORATORY TESTS RESULTS 04/05/95

JOB NUMBER: 950714      CUSTOMER: GEOSCIENCE CONSULTANTS, LTD.      ATTN:

CLIENT I.D.: REXENE COC #8965  
 DATE SAMPLED: 03/28/95  
 TIME SAMPLED: 12:35  
 WORK DESCRIPTION: 9503281235

LABORATORY I.D.: 950714-0001  
 DATE RECEIVED: 03/29/95  
 TIME RECEIVED: 10:15  
 REMARKS: WP-27d

TEST DESCRIPTION	FINAL RESULT	LIMITS/*DILUTION	UNITS OF MEASURE	TEST METHOD	DATE	TECHN
2,4,6-Tribromophenol (Surrogate)	77	0	% Recovery	10-123% Limit		
Time Analyzed	2127	0				
Date Extracted	03/30/95	0				
Semi-Volatile Organic - Surrogates		*40		8270(2)/625(6)	04/01/95	JMC
Nitrobenzene-d5 (Surrogate)	93	0	% Recovery	35-114% Limit		
2-Fluorobiphenyl (Surrogate)	81	0	% Recovery	43-116% Limit		
4-Terphenyl-d14 (Surrogate)	94	0	% Recovery	33-141% Limit		
Phenol-d6 (Surrogate)	21	0	% Recovery	10-94% Limit		
2-Fluorophenol (Surrogate)	27	0	% Recovery	21-100% Limit		
2,4,6-Tribromophenol (Surrogate)	79	0	% Recovery	10-123% Limit		
Date Extracted	03/30/95	0				
Time Analyzed	1536	0				

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# CORE LABORATORIES

## LABORATORY TESTS RESULTS

04/05/95

JOB NUMBER: 950714

CUSTOMER: GEOSCIENCE CONSULTANTS, LTD.

ATTN:

CLIENT I.D.: REXENE COC #8965  
 DATE SAMPLED: 03/28/95  
 TIME SAMPLED: 13:05  
 WORK DESCRIPTION: 9503281305

LABORATORY I.D.: 950714-0002  
 DATE RECEIVED: 03/29/95  
 TIME RECEIVED: 10:15  
 REMARKS: WP-18

TEST DESCRIPTION	FINAL RESULT	LIMITS/*DILUTION	UNITS OF MEASURE	TEST METHOD	DATE	TECHN
02 - VOLATILE AROMATIC ORGANICS		*10		602 (6)	03/30/95	DMJ
4-Bromofluorobenzene (Surrogate)	79*	0	% Recovery	89-110% Limit		
Time Analyzed	0239	0				
02 - VOLATILE AROMATIC ORGANICS		*10		602 (6)	03/30/95	DMJ
Benzene	76	5	ug/L			
Toluene	ND	5	ug/L			
Ethyl benzene	14	5	ug/L			
Xylenes	8	5	ug/L			
4-Bromofluorobenzene (Surrogate)	78*	0	% Recovery	89-110% Limit		
Time Analyzed	2114	0				
PAH AND PHENOLS LIST BY 8270		*1		8270 (2)	03/31/95	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	52	10	ug/L			
2-Methylnaphthalene	66	10	ug/L			
Naphthalene	60	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			

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LABORATORY TESTS RESULTS  
04/05/95

JOB NUMBER: 950714      CUSTOMER: GEOSCIENCE CONSULTANTS, LTD.      ATTN:

CLIENT I.D.: REXENE COC #8965  
DATE SAMPLED: 03/28/95  
TIME SAMPLED: 13:05  
WORK DESCRIPTION: 9503281305

LABORATORY I.D.: 950714-0002  
DATE RECEIVED: 03/29/95  
TIME RECEIVED: 10:15  
REMARKS: WP-18

TEST DESCRIPTION	FINAL RESULT	LIMITS/*DILUTION	UNITS OF MEASURE	TEST METHOD	DATE	TECHN
Nitrobenzene-d5 (Surrogate)	76	0	% Recovery	35-114% Limit		
2-Fluorobiphenyl (Surrogate)	70	0	% Recovery	43-116% Limit		
4-Terphenyl-d14 (Surrogate)	94	0	% Recovery	33-141% Limit		
Phenol-d6 (Surrogate)	37	0	% Recovery	10-94% Limit		
2-Fluorophenol (Surrogate)	46	0	% Recovery	21-100% Limit		
2,4,6-Tribromophenol (Surrogate)	109	0	% Recovery	10-123% Limit		
Time Analyzed	1917	0				
Date Extracted	03/30/95	0				

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## LABORATORY TESTS RESULTS 04/05/95

JOB NUMBER: 950714      CUSTOMER: GEOSCIENCE CONSULTANTS, LTD.      ATTN:

CLIENT I.D.: REXENE COC #8965      LABORATORY I.D.: 950714-0003  
 DATE SAMPLED: 03/28/95      DATE RECEIVED: 03/29/95  
 TIME SAMPLED: 13:35      TIME RECEIVED: 10:15  
 WORK DESCRIPTION: 9503281335      REMARKS: WP-15

TEST DESCRIPTION	FINAL RESULT	LIMITS/*DILUTION	UNITS OF MEASURE	TEST METHOD	DATE	TECHN
602 - VOLATILE AROMATIC ORGANICS		*1		602 (6)	03/30/95	DMJ
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)	98	0	% Recovery	89-110% Limit		
Time Analyzed	2033	0				
PAH AND PHENOLS LIST BY 8270		*1		8270 (2)	03/31/95	JMC
Acenaphthene	ND	10	ug/L			
Acenaphthylene	ND	10	ug/L			
Anthracene	ND	10	ug/L			
Benzo(a)anthracene	ND	10	ug/L			
Benzo(b)fluoranthene	ND	10	ug/L			
Benzo(k)fluoranthene	ND	10	ug/L			
Benzo(ghi)perylene	ND	10	ug/L			
Benzo(a)pyrene	ND	10	ug/L			
Chrysene	ND	10	ug/L			
Dibenzo(a,h)anthracene	ND	10	ug/L			
Fluoranthene	ND	10	ug/L			
Fluorene	ND	10	ug/L			
Indeno(1,2,3-cd)pyrene	ND	10	ug/L			
1-Methylnaphthalene	ND	10	ug/L			
2-Methylnaphthalene	ND	10	ug/L			
Naphthalene	ND	10	ug/L			
Phenanthrene	ND	10	ug/L			
Pyrene	ND	10	ug/L			
4-Chloro-3-methylphenol	ND	10	ug/L			
2-Chlorophenol	ND	10	ug/L			
2,4-Dichlorophenol	ND	10	ug/L			
2,4-Dimethylphenol	ND	10	ug/L			
2,4-Dinitrophenol	ND	50	ug/L			
2-Methyl-4,6-dinitrophenol	ND	50	ug/L			
2-Nitrophenol	ND	10	ug/L			
4-Nitrophenol	ND	50	ug/L			
Pentachlorophenol	ND	50	ug/L			
Phenol	ND	10	ug/L			
2,4,6-Trichlorophenol	ND	10	ug/L			
Nitrobenzene-d5 (Surrogate)	69	0	% Recovery	35-114% Limit		
2-Fluorobiphenyl (Surrogate)	65	0	% Recovery	43-116% Limit		
4-Terphenyl-d14 (Surrogate)	93	0	% Recovery	33-141% Limit		
Phenol-d6 (Surrogate)	32	0	% Recovery	10-94% Limit		
2-Fluorophenol (Surrogate)	39	0	% Recovery	21-100% Limit		

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## LABORATORY TESTS RESULTS 04/05/95

JOB NUMBER: 950714      CUSTOMER: GEOSCIENCE CONSULTANTS, LTD.      ATTN:

CLIENT I.D.....: REXENE COC #8965  
DATE SAMPLED.....: 03/28/95  
TIME SAMPLED.....: 13:35  
WORK DESCRIPTION...: 9503281335

LABORATORY I.D....: 950714-0003  
DATE RECEIVED....: 03/29/95  
TIME RECEIVED....: 10:15  
REMARKS.....: WP-15

TEST DESCRIPTION	FINAL RESULT	LIMITS/*DILUTION	UNITS OF MEASURE	TEST METHOD	DATE	TECHN
2,4,6-Tribromophenol (Surrogate)	101	0	% Recovery	10-123% Limit		
Time Analyzed	1819	0				
Date Extracted	03/30/95	0				

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Aurora, CO 80014  
(303) 751-1780



# CORE LABORATORIES

## LABORATORY TESTS RESULTS

04/05/95

JOB NUMBER: 950714      CUSTOMER: GEOSCIENCE CONSULTANTS, LTD.      ATTN:

CLIENT I.D.....:      LABORATORY I.D....: 950714-0004  
 DATE SAMPLED.....: / /      DATE RECEIVED.....: / /  
 TIME SAMPLED.....: :      TIME RECEIVED.....: :  
 WORK DESCRIPTION....: METHOD BLANK      REMARKS.....:

TEST DESCRIPTION	FINAL RESULT	LIMITS/*DILUTION	UNITS OF MEASURE	TEST METHOD	DATE	TECHN
602 - VOLATILE AROMATIC ORGANICS		*1		602 (6)	03/30/95	DMJ
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	89-110% Limit		
Time Analyzed	1219	0				
PAH AND PHENOLS LIST BY 8270		*1		8270 (2)	03/31/95	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)	57	0	% Recovery	43-116% Limit		
4-Terphenyl-d14 (Surrogate)	84	0	% Recovery	33-141% Limit		
Phenol-d6 (Surrogate)	21	0	% Recovery	10-94% Limit		
2-Fluorophenol (Surrogate)	36	0	% Recovery	21-100% Limit		

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# CORE LABORATORIES

## LABORATORY TESTS RESULTS

04/05/95

JOB NUMBER: 950714

CUSTOMER: GEOSCIENCE CONSULTANTS, LTD.

ATTN:

CLIENT I.D.....:

LABORATORY I.D....: 950714-0004

DATE SAMPLED.....: / /

DATE RECEIVED....: / /

TIME SAMPLED.....: :

TIME RECEIVED....: :

WORK DESCRIPTION...: METHOD BLANK

REMARKS.....:

TEST DESCRIPTION	FINAL RESULT	LIMITS/*DILUTION	UNITS OF MEASURE	TEST METHOD	DATE	TECHN
2,4,6-Tribromophenol (Surrogate)	71	0	% Recovery	10-123% Limit		
Time Analyzed	1621	0				
Date Extracted	03/30/95	0				

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# CORE LABORATORIES

## LABORATORY TESTS RESULTS

04/05/95

JOB NUMBER: 950714      CUSTOMER: GEOSCIENCE CONSULTANTS, LTD.      ATTN:

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

LABORATORY I.D....: 950714-0005  
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)	03/29/95	DMJ
Benzene	ND	0.5	ug/L			
Toluene	ND	0.5	ug/L			
Ethyl benzene	ND	0.5	ug/L			
Xylenes	ND	0.5	ug/L			
4-Bromofluorobenzene (Surrogate)	103	0	% Recovery	89-110% Limit		
Time Analyzed	1501	0				

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# CORE LABORATORIES

## QUALITY CONTROL REPORT 04/05/95

JOB NUMBER: 950714      CUSTOMER: GEOSCIENCE CONSULTANTS, LTD.      ATTN:

8270 - BASE/NEUTRAL/ACID ORGANICS      DATE ANALYZED: 03/31/95      TIME ANALYZED: 15:03      METHOD: 8270 (2)      QC NUMBER: 325399

### B L A N K S

TEST DESCRIPTION	ANALY SUB-TYPE	ANALYSIS I.D.	DILUTION FACTOR	ANALYZED VALUE	DETECTION LIMIT	UNITS OF MEASURE
Time Analyzed	RS	1720	1	0	0	
Date Extracted	RS	03/30/95	1	0	0	

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# CORE LABORATORIES

## QUALITY CONTROL REPORT 04/05/95

JOB NUMBER: 950714      CUSTOMER: GEOSCIENCE CONSULTANTS, LTD.      ATTN:  
 8270 - BASE/NEUTRAL/ACID ORGANICS      DATE ANALYZED: 03/31/95      TIME ANALYZED: 15:03      METHOD: 8270 (2)      QC NUMBER: 325399

### REFERENCE STANDARDS

TEST DESCRIPTION	ANALYSIS SUB-TYPE	ANALYSIS I. D.	DILUTION FACTOR	ANALYZED VALUE	TRUE VALUE	PERCENT RECOVERY	DETECTION LIMITS	UNITS OF MEASURE
Acenaphthene	RS	950145	1	29	41	71	10	ug/L
Anthracene	RS	950145	1	67	74	91	10	ug/L
Benzo(b)fluoranthene	RS	950145	1	58	73	79	10	ug/L
Bis(2-ethylhexyl)phthalate	RS	950145	1	34	35	97	10	ug/L
Chrysene	RS	950145	1	92	114	81	10	ug/L
Indenobenzofuran	RS	950145	1	47	64	73	10	ug/L
1,2-Dichlorobenzene	RS	950145	1	10	25	40	10	ug/L
1,4-Dichlorobenzene	RS	950145	1	12	32	38	10	ug/L
2,4-Dinitrotoluene	RS	950145	1	106	129	82	10	ug/L
Fluorene	RS	950145	1	106	148	72	10	ug/L
Naphthalene	RS	950145	1	32	57	56	10	ug/L
Phenanthrene	RS	950145	1	21	23	91	10	ug/L
Pyrene	RS	950145	1	28	31	90	10	ug/L
1,2,4-Trichlorobenzene	RS	950145	1	54	130	42	10	ug/L
Nitrobenzene-d5 (Surrogate)	RS	950145	1	65	100	65	0	35-114% Limit
2-Fluorobiphenyl (Surrogate)	RS	950145	1	65	100	65	0	43-116% Limit
4-Terphenyl-d14 (Surrogate)	RS	950145	1	89	100	89	0	33-141% Limit
Phenol-d6 (Surrogate)	RS	950145	1	25	100	25	0	10-94% Limit
2-Fluorophenol (Surrogate)	RS	950145	1	40	100	40	0	21-100% Limit
2,4,6-Tribromophenol (Surrogate)	RS	950145	1	78	100	78	0	10-123% Limit

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## QUALITY CONTROL REPORT 04/05/95

JOB NUMBER: 950714      CUSTOMER: GEOSCIENCE CONSULTANTS, LTD.      ATTN:

602 - VOLATILE AROMATIC ORGANICS      DATE ANALYZED: 03/29/95      TIME ANALYZED: 14:21      METHOD: 602 (6)      QC NUMBER: 325424

### B L A N K S

TEST DESCRIPTION	ANALY SUB-TYPE	ANALYSIS I.D.	DILUTION FACTOR	ANALYZED VALUE	DETECTION LIMIT	UNITS OF MEASURE
Time Analyzed	SB	1826	1	0	0	
	SBD	1907	1	0	0	

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# Certification

## PriorityPollutnT™/CLP Quality Control Standards

Organics in Water  
Catalog No. PP- 41

Lot No. 561

Parameter	Certified Value	Performance Acceptance Limits™
<b>VOLATILES</b> (Catalog No. 710)	<b>µg/l</b>	<b>µg/l</b>
Benzene	50.0	36.7 - 62.0
Bromodichloromethane	44.8	34.5 - 56.0
Bromoform	85.5	62.3 - 110
Carbon tetrachloride	143	103 - 182
Chlorobenzene	42.0	32.1 - 50.8
Dibromochloromethane	137	104 - 170
1,2-Dichlorobenzene	69.3	52.6 - 83.9
1,4-Dichlorobenzene	112	85.1 - 139
1,2-Dichloroethane	74.4	57.4 - 93.0
Ethylbenzene	17.9	13.2 - 22.2
Methylene chloride	49.5	33.6 - 65.8
4-Methyl-2-pentanone	27.9	18.0 - 38.8
1,1,1,2-Tetrachloroethane	52.3	35.9 - 66.4
Tetrachloroethylene	41.4	30.2 - 50.5
Toluene	72.6	56.0 - 87.8
1,1,1-Trichloroethane	67.3	47.1 - 80.8
Trichloroethylene	57.2	42.5 - 69.2
o-Xylene	29.1	17.9 - 37.5
<b>BASE/NEUTRALS</b> (Catalog No. 711)	<b>µg/l</b>	<b>µg/l</b>
Acenaphthene ACENAP	41.1	15.0 - 45.6
Anthracene ANATHR	73.8	34.5 - 85.6
Benzo(b)fluoranthene BbFLUR	72.7	25.2 - 91.6
Chrysene CHRYS	114	52.8 - 139
Dibenzofuran DbFURA	64.0	30.7 - 73.6
1,2-Dichlorobenzene 1,2 DCLB	24.9	6.55 - 28.1
1,4-Dichlorobenzene 1,4 DCLB	32.0	11.1 - 35.8
2,4-Dinitrotoluene 2,4 DNTD	129	47.0 - 154
bis(2-Ethylhexyl)phthalate B2 EHPH	35.2	13.6 - 45.1
Fluorene FLUORE	148	72.0 - 180
Naphthalene NAPTH	56.7	22.1 - 65.8
Phenanthrene PHENAN	23.2	11.7 - 26.4
Pyrene PYRENE	31.2	13.8 - 39.6
1,2,4-Trichlorobenzene 1,2,4 TCLB	130	42.0 - 153
<b>ACIDS</b> (Catalog No. 712)	<b>µg/l</b>	<b>µg/l</b>
4-Chloro-3-methylphenol	48.6	25.0 - 55.4
2-Chlorophenol	88.3	38.0 - 98.9
2,4-Dichlorophenol	105	45.3 - 118
2,4-Dimethylphenol	164	55.6 - 200
2-Methylphenol	105	32.1 - 125
Pentachlorophenol	128	39.9 - 161
Phenol	73.8	7.53 - 89.3
2,4,6-Trichlorophenol	87.8	38.5 - 98.3

continued on back





QUALITY CONTROL FOOTER

METHOD REFERENCES

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

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

Blank QC Sample Identification

MB Method Blank  
 ICB Initial Calibration Blank  
 CCB Continuing Calibration Blank

Reference Standard QC Sample Identification

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

Spike QC Sample Identification

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

Duplicate QC Sample Identification

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

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

Subcontract Laboratory

Core Laboratories - Anaheim, CA \* AN  
 Core Laboratories - Casper, WY \* CA  
 Core Laboratories - Corpus Christi, TX \* CC  
 Core Laboratories - Houston, TX \* HP

Subcontract Laboratory

Core Laboratories - Lake Charles, LA \* LC  
 Core Laboratories - Long Beach, CA \* LB  
 Other Subcontract Laboratories \* XX

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2

CORE LABORATORIES

CORE LABORATORIES  
ANALYTICAL REPORT  
Job Number: 950716  
Prepared For:  
GEOSCIENCE CONSULTANTS, LTD.  
505 MARQUETTE NW, SUITE 1100  
ALBUQUERQUE, NM 87102  
Date: 04/13/95

*Linda L. Benkers*  
Signature

*4-13-95*  
Date:

Name: Linda L. Benkers

Core Laboratories  
10703 East Bethany Drive  
Aurora, CO 80014

Title: QA/QC COORDINATOR



Albuquerque  
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Lanham, MD 20706-4325  
(301) 459-9677  
FAX: (301) 459-3064

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

No 8968

# Chain of Custody

Date 3/28/95 Page 1 of 1

Lab Name <u>CORE LABORATORIES</u>		Analysis Request													Sample Receipt										
Address <u>10703 East Bethany Drive</u>															Total No. of Containers <u>36</u>										
Telephone <u>303/751-1780</u>															Chain of Custody Seals <u>OIL</u>										
Samplers (SIGNATURES) <u>Linda Lou Tracy</u>															Rec'd Good Condition/Cold <u>OIL</u>										
Sample Number	Matrix	Location	Halogenated Volatiles 601/8010	Aromatic Volatiles 602/8020	Phenols, Sub Phenols 604/8040	Pesticides/PCB 608/8080	Polynuclear Aromatic Hydrocarbons 610/8310	Volatile Compounds GCM/S 624/8240	Base/Neu/Acid Compounds GCM/S 625/8270	Total Organic Carbon (TOC) 415/9060	Total Organic Halides (TOX) 9020	Petroleum Hydrocarbons 418.1 Modified 6015	TCLP - Vol., Semi-Vol. Herbicides, Pesticides	TCLP - Metals	RCRA Metals (6)	Priority Pollutant Metals (13)	CAM Metals (18) TML/STLC	Flash Point	Corrosivity	Reactivity	Oil & Grease	Cyanide Total/Amenable	Chemical Oxygen Demand (COD)	PHH/PHEXYS	Number of Containers
9503280930	WATER	US MW-12	✓	RIVER								X													3
9503281000	"	MW-3S	✓									X												X	4
9503281030	"	MW-3D	✓									X												X	4
9503281040	"	DS MW3D	X	RIVER								X												X	3
9503281100	"	MW-6S	✓									X												X	4
9503281110	"	MW-8S	✓									X												X	4
9503281120	"	MW-6D	✓									X												X	4
9503281130	"	MW-8D	✓									X												X	3
9503281140	"	DS MW-6D		RIVER								X												X	3
9503281200	"	MW-9S	✓									X												X	4

Project <u>LeXene</u>		Relinquished By	
Project Director <u>Thommas</u>	Signature	Signature	(Time)
Charge Code No. <u>3-31-006</u>	<u>Linda Lou Tracy 03/28/95</u>		
Shipping ID. No. <u>3238365432</u>	<u>GCL</u>		
	<u>MTG</u>		
	<u>MTG</u>		
Received By		Received By (Laboratory)	
Lab No. <u>950716</u>	Signature	Signature	(Time)
	<u>Fed X</u>	<u>Linda Lou Tracy 10/15</u>	
		<u>FEARY</u>	<u>3/29/95</u>
		<u>CORE</u>	



CORE LABORATORIES

SAMPLE DELIVERY GROUP NARRATIVE

April 13, 1995

Customer: Geoscience Consultants, Ltd.  
Project: Rexene COC #8968  
Core Laboratories Project Number: 950716

Method 8270 Organic Analysis:

On the reference standard analyzed with this set of samples, the surrogate 2-fluorobiphenyl was low at 38% with method acceptance criteria set at 43%. All other surrogates, internal standards, and analytes were within acceptable limits.

Linda L. Benkers  
QA/QC Coordinator

James H. Travis  
Laboratory Supervisor



# CORE LABORATORIES

## LABORATORY TESTS RESULTS 04/13/95

JOB NUMBER: 950716      CUSTOMER: GEOSCIENCE CONSULTANTS, LTD.      ATTN:

CLIENT I.D.: REXENE COC #8968  
DATE SAMPLED: 03/28/95  
TIME SAMPLED: 09:30  
WORK DESCRIPTION: 9503280930

LABORATORY I.D.: 950716-0001  
DATE RECEIVED: 03/29/95  
TIME RECEIVED: 10:15  
REMARKS: US MW-12

TEST DESCRIPTION	FINAL RESULT	LIMITS/*DILUTION	UNITS OF MEASURE	TEST METHOD	DATE	TECHN
602 - VOLATILE AROMATIC ORGANICS		*1		602 (6)	04/09/95	JHT
Benzene	ND	0.5	ug/L			
Toluene	ND	0.5	ug/L			
Ethyl benzene	ND	0.5	ug/L			
Xylenes	ND	0.5	ug/L			
4-Bromofluorobenzene (Surrogate)	103	0	% Recovery	89-110% Limit		
Time Analyzed	2344	0				

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# CORE LABORATORIES

## LABORATORY TESTS RESULTS 04/13/95

JOB NUMBER: 950716

CUSTOMER: GEOSCIENCE CONSULTANTS, LTD.

ATTN:

CLIENT I.D.: REXENE COC #8968

LABORATORY I.D.: 950716-0002

DATE SAMPLED: 03/28/95

DATE RECEIVED: 03/29/95

TIME SAMPLED: 10:00

TIME RECEIVED: 10:15

WORK DESCRIPTION: 9503281000

REMARKS: MW-3S

TEST DESCRIPTION	FINAL RESULT	LIMITS/*DILUTION	UNITS OF MEASURE	TEST METHOD	DATE	TECHN
602 - VOLATILE AROMATIC ORGANICS		*1		602 (6)	04/10/95	JHT
Benzene	ND	0.5	ug/L			
Toluene	ND	0.5	ug/L			
Ethyl benzene	ND	0.5	ug/L			
Xylenes	ND	0.5	ug/L			
4-Bromofluorobenzene (Surrogate)	102	0	% Recovery	89-110% Limit		
Time Analyzed	0018	0				
PAH AND PHENOLS LIST BY 8270		*1		8270 (2)	04/10/95	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)	72	0	% Recovery	35-114% Limit		
2-Fluorobiphenyl (Surrogate)	49	0	% Recovery	43-116% Limit		
4-Terphenyl-d14 (Surrogate)	85	0	% Recovery	33-141% Limit		
Phenol-d6 (Surrogate)	46	0	% Recovery	10-94% Limit		
2-Fluorophenol (Surrogate)	28	0	% Recovery	21-100% Limit		

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# CORE LABORATORIES

## LABORATORY TESTS RESULTS 04/13/95

JOB NUMBER: 950716      CUSTOMER: GEOSCIENCE CONSULTANTS, LTD.      ATTN:

CLIENT I.D.: REXENE COC #8968  
DATE SAMPLED: 03/28/95  
TIME SAMPLED: 10:00  
WORK DESCRIPTION: 9503281000

LABORATORY I.D.: 950716-0002  
DATE RECEIVED: 03/29/95  
TIME RECEIVED: 10:15  
REMARKS: MW-3S

TEST DESCRIPTION	FINAL RESULT	LIMITS/*DILUTION	UNITS OF MEASURE	TEST METHOD	DATE	TECHN
2,4,6-Tribromophenol (Surrogate)	43	0	% Recovery	10-123% Limit		
Time Analyzed	1346	0				
Date Extracted	04/02/95	0				

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





# CORE LABORATORIES

## LABORATORY TESTS RESULTS 04/13/95

JOB NUMBER: 950716

CUSTOMER: GEOSCIENCE CONSULTANTS, LTD.

ATTN:

CLIENT I.D.: REXENE COC #8968

DATE SAMPLED: 03/28/95

TIME SAMPLED: 10:30

WORK DESCRIPTION: 9503281030

LABORATORY I.D.: 950716-0003

DATE RECEIVED: 03/29/95

TIME RECEIVED: 10:15

REMARKS: MW-3D

TEST DESCRIPTION	FINAL RESULT	LIMITS/*DILUTION	UNITS OF MEASURE	TEST METHOD	DATE	TECHN
02 - VOLATILE AROMATIC ORGANICS		*1		602 (6)	04/10/95	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 (\$urrogate)	103	0	% Recovery	89-110% Limit		
Time Analyzed	0053	0				
PAH AND PHENOLS LIST BY 8270		*1		8270 (2)	04/10/95	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)	74	0	% Recovery	35-114% Limit		
2-Fluorobiphenyl (Surrogate)	65	0	% Recovery	43-116% Limit		
4-Terphenyl-d14 (Surrogate)	93	0	% Recovery	33-141% Limit		
Phenol-d6 (Surrogate)	72	0	% Recovery	10-94% Limit		
2-Fluorophenol (Surrogate)	54	0	% Recovery	21-100% Limit		

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# CORE LABORATORIES

## LABORATORY TESTS RESULTS 04/13/95

JOB NUMBER: 950716

CUSTOMER: GEOSCIENCE CONSULTANTS, LTD.

ATTN:

CLIENT I.D.: REXENE COC #8968

LABORATORY I.D.: 950716-0003

DATE SAMPLED: 03/28/95

DATE RECEIVED: 03/29/95

TIME SAMPLED: 10:30

TIME RECEIVED: 10:15

WORK DESCRIPTION: 9503281030

REMARKS: MW-3D

TEST DESCRIPTION	FINAL RESULT	LIMITS/*DILUTION	UNITS OF MEASURE	TEST METHOD	DATE	TECHN
2,4,6-Tribromophenol (Surrogate)	63	0	% Recovery	10-123% Limit		
Time Analyzed	1447	0				
Date Extracted	04/02/95	0				

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# CORE LABORATORIES

## LABORATORY TESTS RESULTS 04/13/95

JOB NUMBER: 950716      CUSTOMER: GEOSCIENCE CONSULTANTS, LTD.      ATTN:

CLIENT I.D.: REXENE COC #8968  
DATE SAMPLED: 03/28/95  
TIME SAMPLED: 10:40  
WORK DESCRIPTION: 9503281040

LABORATORY I.D.: 950716-0004  
DATE RECEIVED: 03/29/95  
TIME RECEIVED: 10:15  
REMARKS: DSMW3D

TEST DESCRIPTION	FINAL RESULT	LIMITS/*DILUTION	UNITS OF MEASURE	TEST METHOD	DATE	TECHN
602 - VOLATILE AROMATIC ORGANICS		*1		602 (6)	04/10/95	JHT
Benzene	ND	0.5	ug/L			
Toluene	ND	0.5	ug/L			
Ethyl benzene	ND	0.5	ug/L			
Xylenes	ND	0.5	ug/L			
4-Bromofluorobenzene (Surrogate)	102	0	% Recovery	89-110% Limit		
Time Analyzed	0127	0				

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# CORE LABORATORIES

## LABORATORY TESTS RESULTS

04/13/95

JOB NUMBER: 950716 CUSTOMER: GEOSCIENCE CONSULTANTS, LTD. ATTN:

CLIENT I.D.: REXENE COC #8968  
 DATE SAMPLED: 03/28/95  
 TIME SAMPLED: 11:00  
 WORK DESCRIPTION: 9503281100

LABORATORY I.D.: 950716-0005  
 DATE RECEIVED: 03/29/95  
 TIME RECEIVED: 10:15  
 REMARKS: MW-6S

TEST DESCRIPTION	FINAL RESULT	LIMITS/*DILUTION	UNITS OF MEASURE	TEST METHOD	DATE	TECHN
602 - VOLATILE AROMATIC ORGANICS		*10		602 (6)	04/09/95	JHT
Benzene	110	5	ug/L			
Toluene	7	5	ug/L			
Ethyl benzene	32	5	ug/L			
Xylenes	43	5	ug/L			
4-Bromofluorobenzene (Surrogate)	101	0	% Recovery	89-110% Limit		
Time Analyzed	2051	0				
PAH AND PHENOLS LIST BY 8270		*1		8270 (2)	04/10/95	JMC
Acenaphthene	ND	10	ug/L			
Acenaphthylene	ND	10	ug/L			
Anthracene	ND	10	ug/L			
Benzo(a)anthracene	ND	10	ug/L			
Benzo(b)fluoranthene	ND	10	ug/L			
Benzo(k)fluoranthene	ND	10	ug/L			
Benzo(ghi)perylene	ND	10	ug/L			
Benzo(a)pyrene	ND	10	ug/L			
Chrysene	ND	10	ug/L			
Dibenzo(a,h)anthracene	ND	10	ug/L			
Fluoranthene	ND	10	ug/L			
Fluorene	ND	10	ug/L			
Indeno(1,2,3-cd)pyrene	ND	10	ug/L			
1-Methylnaphthalene	ND	10	ug/L			
2-Methylnaphthalene	ND	10	ug/L			
Naphthalene	ND	10	ug/L			
Phenanthrene	ND	10	ug/L			
Pyrene	ND	10	ug/L			
4-Chloro-3-methylphenol	ND	10	ug/L			
2-Chlorophenol	ND	10	ug/L			
2,4-Dichlorophenol	ND	10	ug/L			
2,4-Dimethylphenol	ND	10	ug/L			
2,4-Dinitrophenol	ND	50	ug/L			
2-Methyl-4,6-dinitrophenol	ND	50	ug/L			
2-Nitrophenol	ND	10	ug/L			
4-Nitrophenol	ND	50	ug/L			
Pentachlorophenol	ND	50	ug/L			
Phenol	ND	10	ug/L			
2,4,6-Trichlorophenol	ND	10	ug/L			
Nitrobenzene-d5 (Surrogate)	85	0	% Recovery	35-114% Limit		
2-Fluorobiphenyl (Surrogate)	54	0	% Recovery	43-116% Limit		
4-Terphenyl-d14 (Surrogate)	99	0	% Recovery	33-141% Limit		
Phenol-d6 (Surrogate)	41	0	% Recovery	10-94% Limit		
2-Fluorophenol (Surrogate)	38	0	% Recovery	21-100% Limit		

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# CORE LABORATORIES

## LABORATORY TESTS RESULTS

04/13/95

JOB NUMBER: 950716

CUSTOMER: GEOSCIENCE CONSULTANTS, LTD.

ATTN:

CLIENT I.D.: REXENE COC #8968

LABORATORY I.D.: 950716-0005

DATE SAMPLED: 03/28/95

DATE RECEIVED: 03/29/95

TIME SAMPLED: 11:00

TIME RECEIVED: 10:15

WORK DESCRIPTION: 9503281100

REMARKS: MW-6S

TEST DESCRIPTION	FINAL RESULT	LIMITS/*DILUTION	UNITS OF MEASURE	TEST METHOD	DATE	TECHN
2,4,6-Tribromophenol (Surrogate)	52	0	% Recovery	10-123% Limit		
Time Analyzed	1549	0				
Date Extracted	04/02/95	0				

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# CORE LABORATORIES

## LABORATORY TESTS RESULTS 04/13/95

JOB NUMBER: 950716      CUSTOMER: GEOSCIENCE CONSULTANTS, LTD.      ATTN:

CLIENT I.D.....: REXENE COC #8968      LABORATORY I.D....: 950716-0006  
 DATE SAMPLED.....: 03/28/95      DATE RECEIVED.....: 03/29/95  
 TIME SAMPLED.....: 11:10      TIME RECEIVED.....: 10:15  
 WORK DESCRIPTION...: 9503281110      REMARKS.....: MW-8S

TEST DESCRIPTION	FINAL RESULT	LIMITS/*DILUTION	UNITS OF MEASURE	TEST METHOD	DATE	TECHN
602 - VOLATILE AROMATIC ORGANICS		*10		602 (6)	04/09/95	JHT
Benzene	110	5	ug/L			
Toluene	7	5	ug/L			
Ethyl benzene	31	5	ug/L			
Xylenes	44	5	ug/L			
4-Bromofluorobenzene (Surrogate)	101	0	% Recovery	89-110% Limit		
Time Analyzed	2125	0				
PAH AND PHENOLS LIST BY 8270		*1		8270 (2)	04/10/95	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)	67	0	% Recovery	35-114% Limit		
2-Fluorobiphenyl (Surrogate)	50	0	% Recovery	43-116% Limit		
4-Terphenyl-d14 (Surrogate)	65	0	% Recovery	33-141% Limit		
Phenol-d6 (Surrogate)	54	0	% Recovery	10-94% Limit		
2-Fluorophenol (Surrogate)	50	0	% Recovery	21-100% Limit		

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# CORE LABORATORIES

## LABORATORY TESTS RESULTS 04/13/95

JOB NUMBER: 950716      CUSTOMER: GEOSCIENCE CONSULTANTS, LTD.      ATTN:

CLIENT I.D.....: REXENE COC #8968  
DATE SAMPLED.....: 03/28/95  
TIME SAMPLED.....: 11:10  
WORK DESCRIPTION...: 9503281110

LABORATORY I.D....: 950716-0006  
DATE RECEIVED....: 03/29/95  
TIME RECEIVED....: 10:15  
REMARKS.....: MW-8S

TEST DESCRIPTION	FINAL RESULT	LIMITS/*DILUTION	UNITS OF MEASURE	TEST METHOD	DATE	TECHN
2,4,6-Tribromophenol (Surrogate)	53	0	% Recovery	10-123% Limit		
Time Analyzed	1650	0				
Date Extracted	04/02/95	0				

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# CORE LABORATORIES

## LABORATORY TESTS RESULTS 04/13/95

JOB NUMBER: 950716      CUSTOMER: GEOSCIENCE CONSULTANTS, LTD.      ATTN:

CLIENT I.D.....: REXENE COC #8968  
 DATE SAMPLED.....: 03/28/95  
 TIME SAMPLED.....: 11:20  
 WORK DESCRIPTION...: 9503281120

LABORATORY I.D....: 950716-0007  
 DATE RECEIVED....: 03/29/95  
 TIME RECEIVED....: 10:15  
 REMARKS.....: MW-6D

TEST DESCRIPTION	FINAL RESULT	LIMITS/*DILUTION	UNITS OF MEASURE	TEST METHOD	DATE	TECHN
602 - VOLATILE AROMATIC ORGANICS		*1		602 (6)	04/10/95	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	89-110% Limit		
Time Analyzed	0202	0				
PAH AND PHENOLS LIST BY 8270		*1		8270 (2)	04/10/95	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)	68	0	% Recovery	43-116% Limit		
4-Terphenyl-d14 (Surrogate)	97	0	% Recovery	33-141% Limit		
Phenol-d6 (Surrogate)	59	0	% Recovery	10-94% Limit		
2-Fluorophenol (Surrogate)	33	0	% Recovery	21-100% Limit		

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# CORE LABORATORIES

## LABORATORY TESTS RESULTS 04/13/95

JOB NUMBER: 950716

CUSTOMER: GEOSCIENCE CONSULTANTS, LTD.

ATTN:

CLIENT I.D.: REXENE COC #8968

LABORATORY I.D.: 950716-0007

DATE SAMPLED: 03/28/95

DATE RECEIVED: 03/29/95

TIME SAMPLED: 11:20

TIME RECEIVED: 10:15

WORK DESCRIPTION: 9503281120

REMARKS: MW-6D

TEST DESCRIPTION	FINAL RESULT	LIMITS/*DILUTION	UNITS OF MEASURE	TEST METHOD	DATE	TECHN
2,4,6-Tribromophenol (Surrogate)	16	0	% Recovery	10-123% Limit		
Time Analyzed	1751	0				
Date Extracted	04/02/95	0				

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# CORE LABORATORIES

## LABORATORY TESTS RESULTS 04/13/95

JOB NUMBER: 950716      CUSTOMER: GEOSCIENCE CONSULTANTS, LTD.      ATTN:

CLIENT I.D.: REXENE COC #8968  
DATE SAMPLED: 03/28/95  
TIME SAMPLED: 11:30  
WORK DESCRIPTION: 9503281130

LABORATORY I.D.: 950716-0008  
DATE RECEIVED: 03/29/95  
TIME RECEIVED: 10:15  
REMARKS: MW-8D

TEST DESCRIPTION	FINAL RESULT	LIMITS/*DILUTION	UNITS OF MEASURE	TEST METHOD	DATE	TECHN
602 - VOLATILE AROMATIC ORGANICS		*1		602 (6)	04/10/95	JHT
Benzene	ND	0.5	ug/L			
Toluene	ND	0.5	ug/L			
Ethyl benzene	ND	0.5	ug/L			
Xylenes	ND	0.5	ug/L			
4-Bromofluorobenzene (Surrogate)	102	0	% Recovery	89-110% Limit		
Time Analyzed	0237	0				

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# CORE LABORATORIES

## LABORATORY TESTS RESULTS

04/13/95

JOB NUMBER: 950716      CUSTOMER: GEOSCIENCE CONSULTANTS, LTD.      ATTN:

CLIENT I.D.: REXENE COC #8968  
DATE SAMPLED: 03/28/95  
TIME SAMPLED: 11:40  
WORK DESCRIPTION: 9503281140

LABORATORY I.D.: 950716-0009  
DATE RECEIVED: 03/29/95  
TIME RECEIVED: 10:15  
REMARKS: DSMW-6D

TEST DESCRIPTION	FINAL RESULT	LIMITS/*DILUTION	UNITS OF MEASURE	TEST METHOD	DATE	TECHN
602 - VOLATILE AROMATIC ORGANICS		*1		602 (6)	04/10/95	JHT
Benzene	ND	0.5	ug/L			
Toluene	ND	0.5	ug/L			
Ethyl benzene	ND	0.5	ug/L			
Xylenes	ND	0.5	ug/L			
4-Bromofluorobenzene (Surrogate)	101	0	% Recovery	89-110% Limit		
Time Analyzed	0311	0				

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# CORE LABORATORIES

## LABORATORY TESTS RESULTS 04/13/95

JOB NUMBER: 950716      CUSTOMER: GEOSCIENCE CONSULTANTS, LTD.      ATTN:

CLIENT I.D.: REXENE COC #8968  
 DATE SAMPLED: 03/28/95  
 TIME SAMPLED: 12:00  
 WORK DESCRIPTION: 9503281200

LABORATORY I.D.: 950716-0010  
 DATE RECEIVED: 03/29/95  
 TIME RECEIVED: 10:15  
 REMARKS: MW-9S

TEST DESCRIPTION	FINAL RESULT	LIMITS/*DILUTION	UNITS OF MEASURE	TEST METHOD	DATE	TECHN
602 - VOLATILE AROMATIC ORGANICS		*1		602 (6)	04/10/95	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)	100	0	% Recovery	89-110% Limit		
Time Analyzed	0346	0				
PAH AND PHENOLS LIST BY 8270		*1		8270 (2)	04/10/95	JMC
Acenaphthene	ND	10	ug/L			
Acenaphthylene	ND	10	ug/L			
Anthracene	ND	10	ug/L			
Benzo(a)anthracene	ND	10	ug/L			
Benzo(b)fluoranthene	ND	10	ug/L			
Benzo(k)fluoranthene	ND	10	ug/L			
Benzo(ghi)perylene	ND	10	ug/L			
Benzo(a)pyrene	ND	10	ug/L			
Chrysene	ND	10	ug/L			
Dibenzo(a,h)anthracene	ND	10	ug/L			
Fluoranthene	ND	10	ug/L			
Fluorene	ND	10	ug/L			
Indeno(1,2,3-cd)pyrene	ND	10	ug/L			
1-Methylnaphthalene	ND	10	ug/L			
2-Methylnaphthalene	ND	10	ug/L			
Naphthalene	ND	10	ug/L			
Phenanthrene	ND	10	ug/L			
Pyrene	ND	10	ug/L			
4-Chloro-3-methylphenol	ND	10	ug/L			
2-Chlorophenol	ND	10	ug/L			
2,4-Dichlorophenol	ND	10	ug/L			
2,4-Dimethylphenol	ND	10	ug/L			
2,4-Dinitrophenol	ND	50	ug/L			
2-Methyl-4,6-dinitrophenol	ND	50	ug/L			
2-Nitrophenol	ND	10	ug/L			
4-Nitrophenol	ND	50	ug/L			
Pentachlorophenol	ND	50	ug/L			
Phenol	ND	10	ug/L			
2,4,6-Trichlorophenol	ND	10	ug/L			
Nitrobenzene-d5 (Surrogate)	68	0	% Recovery	35-114% Limit		
2-Fluorobiphenyl (Surrogate)	51	0	% Recovery	43-116% Limit		
4-Terphenyl-d14 (Surrogate)	101	0	% Recovery	33-141% Limit		
Phenol-d6 (Surrogate)	69	0	% Recovery	10-94% Limit		
2-Fluorophenol (Surrogate)	55	0	% Recovery	21-100% Limit		

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# CORE LABORATORIES

## LABORATORY TESTS RESULTS 04/13/95

JOB NUMBER: 950716

CUSTOMER: GEOSCIENCE CONSULTANTS, LTD.

ATTN:

CLIENT I.D.: REXENE COC #8968  
DATE SAMPLED: 03/28/95  
TIME SAMPLED: 12:00  
WORK DESCRIPTION: 9503281200

LABORATORY I.D.: 950716-0010  
DATE RECEIVED: 03/29/95  
TIME RECEIVED: 10:15  
REMARKS: MW-9S

TEST DESCRIPTION	FINAL RESULT	LIMITS/*DILUTION	UNITS OF MEASURE	TEST METHOD	DATE	TECHN
2,4,6-Tribromophenol (Surrogate) Time Analyzed Date Extracted	72 1853 04/02/95	0 0 0	% Recovery	10-123% Limit		

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# CORE LABORATORIES

## LABORATORY TESTS RESULTS

04/13/95

JOB NUMBER: 950716

CUSTOMER: GEOSCIENCE CONSULTANTS, LTD.

ATTN:

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

LABORATORY I.D....: 950716-0011  
 DATE RECEIVED....: / /  
 TIME RECEIVED....: :  
 REMARKS.....:

TEST DESCRIPTION	FINAL RESULT	LIMITS/*DILUTION	UNITS OF MEASURE	TEST METHOD	DATE	TECHN
02 - VOLATILE AROMATIC ORGANICS		*1		602 (6)	04/09/95	JHT
Benzene	ND	0.5	ug/L			
Toluene	ND	0.5	ug/L			
Ethyl benzene	ND	0.5	ug/L			
Xylenes	ND	0.5	ug/L			
4-Bromofluorobenzene (Surrogate)	102	0	% Recovery	89-110% Limit		
Time Analyzed	1136	0				
PAH AND PHENOLS LIST BY 8270		*1		8270 (2)	04/10/95	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)	74	0	% Recovery	35-114% Limit		
2-Fluorobiphenyl (Surrogate)	48	0	% Recovery	43-116% Limit		
4-Terphenyl-d14 (Surrogate)	89	0	% Recovery	33-141% Limit		
Phenol-d6 (Surrogate)	76	0	% Recovery	10-94% Limit		
2-Fluorophenol (Surrogate)	75	0	% Recovery	21-100% Limit		

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# CORE LABORATORIES

## QUALITY CONTROL REPORT 04/13/95

JOB NUMBER: 950716

CUSTOMER: GEOSCIENCE CONSULTANTS, LTD.

ATTN:

8270 - BASE/NEUTRAL/ACID ORGANICS

DATE ANALYZED: 04/10/95

TIME ANALYZED: 09:55

METHOD: 8270 (2)

QC NUMBER: 325938

### REFERENCE STANDARDS

TEST DESCRIPTION	ANALYSIS SUB-TYPE	ANALYSIS I. D.	DILUTION FACTOR	ANALYZED VALUE	TRUE VALUE	PERCENT RECOVERY	DETECTION LIMITS	UNITS OF MEASURE
2-Chlorophenol	RS	950146	1	30	42	71	10	ug/L
2,4-Dimethylphenol	RS	950146	1	61	125	49	10	ug/L
o-Cresol (2-Methylphenol)	RS	950146	1	47	111	42	10	ug/L
Pentachlorophenol	RS	950146	1	21	57	37	50	ug/L
Phenol	RS	950146	1	41	90	46	10	ug/L
2,4,6-Trichlorophenol	RS	950146	1	67	131	51	10	ug/L
Nitrobenzene-d5 (Surrogate)	RS	950146	1	46	100	46	0	35-114% Limit
2-Fluorobiphenyl (Surrogate)	RS	950146	1	38	100	38	0	43-116% Limit
4-Terphenyl-d14 (Surrogate)	RS	950146	1	89	100	89	0	33-141% Limit
Phenol-d6 (Surrogate)	RS	950146	1	44	100	44	0	10-94% Limit
2-Fluorophenol (Surrogate)	RS	950146	1	35	100	35	0	21-100% Limit
2,4,6-Tribromophenol (Surrogate)	RS	950146	1	64	100	64	0	10-123% Limit

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# CORE LABORATORIES

## QUALITY CONTROL REPORT 04/13/95

JOB NUMBER: 950716

CUSTOMER: GEOSCIENCE CONSULTANTS, LTD.

ATTN:

602 - VOLATILE AROMATIC ORGANICS

DATE ANALYZED: 04/10/95

TIME ANALYZED: 00:00

METHOD: 602 (6)

QC NUMBER: 325959

### B L A N K S

TEST DESCRIPTION	ANALY SUB-TYPE	ANALYSIS I.D.	DILUTION FACTOR	ANALYZED VALUE	DETECTION LIMIT	UNITS OF MEASURE
Time Analyzed	SB	0420	1	0	0	
	SBD	0455	1	0	0	

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# CORE LABORATORIES

## QUALITY CONTROL REPORT 04/13/95

JOB NUMBER: 950716

CUSTOMER: GEOSCIENCE CONSULTANTS, LTD.

ATTN:

602 - VOLATILE AROMATIC ORGANICS

DATE ANALYZED: 04/10/95

TIME ANALYZED: 00:00

METHOD: 602 (6)

QC NUMBER: 325959

### REFERENCE STANDARDS

TEST DESCRIPTION	ANALYSIS SUB-TYPE	ANALYSIS I. D.	DILUTION FACTOR	ANALYZED VALUE	TRUE VALUE	PERCENT RECOVERY	DETECTION LIMITS	UNITS OF MEASURE
Benzene	SB	T950409A	1	19.3	20.0	97	0.5	ug/L
	SBD	T950409A	1	20.1	20.0	101	0.5	ug/L
Toluene	SB	T950409A	1	19.4	20.0	97	0.5	ug/L
	SBD	T950409A	1	20.2	20.0	101	0.5	ug/L
Ethyl benzene	SB	T950409A	1	19.3	20.0	97	0.5	ug/L
	SBD	T950409A	1	20.0	20.0	100	0.5	ug/L
Xylenes	SB	T950409A	1	60.4	60.0	101	0.5	ug/L
	SBD	T950409A	1	62.6	60.0	104	0.5	ug/L
4-Bromofluorobenzene (Surrogate)	SB	T950409A	1	104	100	104	0	89-110% Limit
	SBD	T950409A	1	102	100	102	0	89-110% Limit

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# Certification

## PriorityPollutnT™/CLP Quality Control Standards

Organics in Water  
Catalog No. PP- 41

Lot No. 562

Parameter	Certified Value	Performance Acceptance Limits™
<b>VOLATILES</b>		
(Catalog No. 710)	µg/l	µg/l
Benzene	34.8	26.9 - 43.2
Bromodichloromethane	24.7	19.0 - 30.9
Bromoform	44.0	32.1 - 56.8
Carbon tetrachloride	110	79.1 - 140
Chlorobenzene	129	98.6 - 156
Chloroform	74.1	55.9 - 91.1
Chlorodibromomethane	60.5	45.7 - 75.0
1,2-Dichlorobenzene	60.4	45.8 - 73.1
1,3-Dichlorobenzene	81.1	60.6 - 96.9
1,4-Dichlorobenzene	129	98.0 - 160
1,2-Dichloroethane	52.5	40.5 - 65.6
Ethylbenzene	58.9	43.5 - 73.0
Methylene chloride	23.4	15.9 - 31.1
4-Methyl-2-pentanone (MIBK)	141	81.1 - 196
Tetrachloroethylene	30.1	21.9 - 36.7
Toluene	127	97.9 - 154
1,1,1-Trichloroethane	18.4	12.9 - 22.1
Trichloroethylene	58.3	43.3 - 70.5
<b>BASE/NEUTRALS</b>		
(Catalog No. 711)	µg/l	µg/l
Acenaphthylene	64.3	29.8 - 73.3
Anthracene	29.1	13.6 - 33.8
4-Bromophenyl-phenylether	90.8	42.8 - 109
Chrysene	48.1	22.3 - 58.7
Dibenzofuran	111	53.3 - 128
1,2-Dichlorobenzene	38.0	9.99 - 42.9
2,4-Dinitrotoluene	79.0	28.8 - 94.0
bis(2-Ethylhexyl)phthalate	142	54.7 - 182
Fluoranthene	121	52.3 - 163
Isophorone	140	61.2 - 161
Naphthalene	24.7	9.61 - 28.7
N-Nitroso-di-n-propylamine	73.1	36.8 - 89.9
Pyrene	74.2	32.7 - 94.2
1,2,4-Trichlorobenzene	60.9	19.7 - 71.9
<b>ACIDS</b>		
(Catalog No. 712)	µg/l	µg/l
2-Chlorophenol 2CLPHE	42.0	18.1 - 47.0
2,4-Dimethylphenol 24DMPH	125	42.4 - 153
2-Methylphenol 2MPHEN	111	34.0 - 132
Pentachlorophenol PENTCL	56.8	17.7 - 71.6
Phenol PHENOL	89.9	9.17 - 109
2,4,6-Trichlorophenol 246 TCP	131	57.4 - 147

continued on back





# CORE LABORATORIES

## QUALITY CONTROL FOOTER

### METHOD REFERENCES

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

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

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

#### Blank QC Sample Identification

MB Method Blank  
 ICB Initial Calibration Blank  
 CCB Continuing Calibration Blank

#### Reference Standard QC Sample Identification

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

#### Spike QC Sample Identification

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

#### Duplicate QC Sample Identification

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

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

#### Subcontract Laboratory

Core Laboratories - Anaheim, CA	• AN
Core Laboratories - Casper, WY	• CA
Core Laboratories - Corpus Christi, TX	• CC
Core Laboratories - Houston, TX	• HP

#### Subcontract Laboratory

Core Laboratories - Lake Charles, LA	• LC
Core Laboratories - Long Beach, CA	• LB
Other Subcontract Laboratories	• XX

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12  
CORE LABORATORIES

CORE LABORATORIES  
ANALYTICAL REPORT

Job Number: 950715  
Prepared For:

GEOSCIENCE CONSULTANTS, LTD.

505 MARQUETTE NW, SUITE 1100  
ALBUQUERQUE, NM 87102

Date: 04/05/95

Linda L. Benkers  
Signature

4-5-95  
Date:

Name: Linda L. Benkers

Core Laboratories  
10703 East Bethany Drive  
Aurora, CO 80014

Title: QA/QC Coordinator



Albuquerque  
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Lanham, MD 20706-4325  
(301) 459-9677  
FAX: (301) 459-3064

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

No 8964

# Chain of Custody

Date 3/27/95 Page 1 of 1

Lab Name		CORE LABORATORIES	
Address		10703 East Bethany Drive	Aurora, CO 80014-2696
Telephone		303/751-1780	
Samplers (SIGNATURES)			
Sample Number	Matrix	Location	
9503271545	H2O	WP-24	
9503271605	H2O	WP-8	
9503271625	H2O	WP-4	
9503271645	H2O	WP-3	
9503271705	H2O	WP-2	
9503271725	H2O	WP-1	
9503271745	H2O	WP-22	
Note: 3/28/95			
A			

Analysis Request		Relinquished By		2. Relinquished By		3.															
Halogenated Volatiles 601/8010	Aromatic Volatiles 602/8020	Phenols, Sub Phenols 604/8040	Pesticides/CB 608/8080	Poly-nuclear Aromatic Hydrocarbons 618/810	Volatiles Compounds GC/MS 624/8240	Base/Neu/Acid Compounds GC/MS 625/8270	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 (9)	Priority Pollutant Metals (13)	CAM Metals (18) TITG/STLC	Flash Point	Corrosivity	Reactivity	Oil & Grease	Cyanide Total/Amenable	Chemical Oxygen Demand (COD)	Number of Containers
3	3	3	3	3	3	3	3	3	3												4
																					4
																					4
																					4
																					4
																					4
																					4

Project Information		Sample Receipt	
Project	PEXENE	Total No. of Containers	28
Project Director	TRENT	Chain of Custody Seals	OK
Charge Code No.	3031.006	Rec'd Good Condition/Cold	OK
Shipping ID. No.		Conforms to Record	OK
		Lab No.	950715
		Via:	Fed x
Special Instructions/Comments:			

1. Relinquished By		2. Relinquished By		3.	
(Signature)	(Date)	(Signature)	(Date)	(Signature)	(Date)
D. Lee	1500				
DAVID NEE	3/28/95				
GCL					
Received By		1. Received By		2. Received By (Laboratory)	
(Signature)	(Date)	(Signature)	(Date)	(Signature)	(Date)
				Imaginary	1015
				J. F. RAY	3/28/95
					CORE
(Company)		(Company)		(Laboratory)	



CORE LABORATORIES


SAMPLE DELIVERY GROUP NARRATIVE

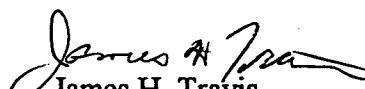
April 6, 1995

Customer: Geoscience Consultants, Ltd.  
Project: Rexene COC #8964  
Core Laboratories Project Number: 950715

Method 8270 Organic Analysis:

Due to a matrix interference present in samples 9503271605, 9503271625, 9503271725 (Core IDs 950715-2,3,6), dilutions were necessary to bring the internal standards into control and the target analytes into the range of calibration. All QA/QC was acceptable for these samples.

  
Linda L. Benkers  
QA/QC Coordinator

  
James H. Travis  
Laboratory Supervisor



**EXPLANATION OF DATA FLAGS**

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





# CORE LABORATORIES

## LABORATORY TESTS RESULTS 04/05/95

JOB NUMBER: 950715      CUSTOMER: GEOSCIENCE CONSULTANTS, LTD.      ATTN:

CLIENT I.D.: REXENE COC #8964  
 DATE SAMPLED: 03/27/95  
 TIME SAMPLED: 15:45  
 WORK DESCRIPTION: 9503271545

LABORATORY I.D.: 950715-0001  
 DATE RECEIVED: 03/29/95  
 TIME RECEIVED: 10:15  
 REMARKS: WP-24

TEST DESCRIPTION	FINAL RESULT	LIMITS/*DILUTION	UNITS OF MEASURE	TEST METHOD	DATE	TECHN
602 - VOLATILE AROMATIC ORGANICS		*20		602 (6)	03/29/95	DMJ
Benzene	160	10	ug/L			
Toluene	ND	10	ug/L			
Ethyl benzene	ND	10	ug/L			
Xylenes	ND	10	ug/L			
4-Bromofluorobenzene (Surrogate)	96	0	% Recovery	89-110% Limit		
Time Analyzed	2029	0				
PAH AND PHENOLS LIST BY 8270		*1		8270 (2)	03/31/95	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	57	10	ug/L			
2-Methylnaphthalene	32	10	ug/L			
Naphthalene	19	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)	78	0	% Recovery	43-116% Limit		
4-Terphenyl-d14 (Surrogate)	92	0	% Recovery	33-141% Limit		
Phenol-d6 (Surrogate)	32	0	% Recovery	10-94% Limit		
2-Fluorophenol (Surrogate)	50	0	% Recovery	21-100% Limit		

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# CORE LABORATORIES

## LABORATORY TESTS RESULTS 04/05/95

JOB NUMBER: 950715      CUSTOMER: GEOSCIENCE CONSULTANTS, LTD.      ATTN:

CLIENT I.D.....: REXENE COC #8964  
DATE SAMPLED.....: 03/27/95  
TIME SAMPLED.....: 15:45  
WORK DESCRIPTION...: 9503271545

LABORATORY I.D....: 950715-0001  
DATE RECEIVED....: 03/29/95  
TIME RECEIVED....: 10:15  
REMARKS.....: WP-24

TEST DESCRIPTION	FINAL RESULT	LIMITS/*DILUTION	UNITS OF MEASURE	TEST METHOD	DATE	TECHN
2,4,6-Tribromophenol (Surrogate)	99	0	% Recovery	10-123% Limit		
Time Analyzed	2016	0				
Date Extracted	03/30/95	0				

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# CORE LABORATORIES

## LABORATORY TESTS RESULTS

04/05/95

JOB NUMBER: 950715      CUSTOMER: GEOSCIENCE CONSULTANTS, LTD.      ATTN:

CLIENT I.D.: REXENE COC #8964      LABORATORY I.D.: 950715-0002  
 DATE SAMPLED: 03/27/95      DATE RECEIVED: 03/29/95  
 TIME SAMPLED: 16:05      TIME RECEIVED: 10:15  
 WORK DESCRIPTION: 9503271605      REMARKS: WP-8

TEST DESCRIPTION	FINAL RESULT	LIMITS/*DILUTION	UNITS OF MEASURE	TEST METHOD	DATE	TECHN
602 - VOLATILE AROMATIC ORGANICS		*100		602 (6)	03/30/95	DMJ
Benzene	5300	50	ug/L			
Toluene	ND	50	ug/L			
Ethyl benzene	100	50	ug/L			
Xylenes	100	50	ug/L			
4-Bromofluorobenzene (Surrogate)	91	0	% Recovery	89-110% Limit		
Time Analyzed	2237	0				
PAH AND PHENOLS LIST BY 8270		*1		8270 (2)	04/01/95	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	40	10	ug/L			
2-Methylnaphthalene	59	10	ug/L			
Naphthalene	73	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	78	10	ug/L			
2,4-Dinitrophenol	ND	50	ug/L			
2-Methyl-4,6-dinitrophenol	ND	50	ug/L			
2-Nitrophenol	ND	10	ug/L			
4-Nitrophenol	ND	50	ug/L			
Pentachlorophenol	ND	50	ug/L			
Phenol	ND	10	ug/L			
2,4,6-Trichlorophenol	ND	10	ug/L			
Nitrobenzene-d5 (Surrogate)	83	0	% Recovery	35-114% Limit		
2-Fluorobiphenyl (Surrogate)	79	0	% Recovery	43-116% Limit		
4-Terphenyl-d14 (Surrogate)	99	0	% Recovery	33-141% Limit		
Phenol-d6 (Surrogate)	44	0	% Recovery	10-94% Limit		
2-Fluorophenol (Surrogate)	48	0	% Recovery	21-100% Limit		

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# CORE LABORATORIES

## LABORATORY TESTS RESULTS 04/05/95

JOB NUMBER: 950715      CUSTOMER: GEOSCIENCE CONSULTANTS, LTD.      ATTN:

CLIENT I.D.: REXENE COC #8964  
DATE SAMPLED: 03/27/95  
TIME SAMPLED: 16:05  
WORK DESCRIPTION: 9503271605

LABORATORY I.D.: 950715-0002  
DATE RECEIVED: 03/29/95  
TIME RECEIVED: 10:15  
REMARKS: WP-8

TEST DESCRIPTION	FINAL RESULT	LIMITS/*DILUTION	UNITS OF MEASURE	TEST METHOD	DATE	TECHN
2,4,6-Tribromophenol (Surrogate)	111	0	% Recovery	10-123% Limit		
Time Analyzed	0010	0				
Date Extracted	03/30/95	0				

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# CORE LABORATORIES

## LABORATORY TESTS RESULTS 04/05/95

JOB NUMBER: 950715      CUSTOMER: GEOSCIENCE CONSULTANTS, LTD.      ATTN:

CLIENT I.D.: REXENE COC #8964      LABORATORY I.D.: 950715-0003  
 DATE SAMPLED: 03/27/95      DATE RECEIVED: 03/29/95  
 TIME SAMPLED: 16:25      TIME RECEIVED: 10:15  
 WORK DESCRIPTION: 9503271625      REMARKS: WP-4

TEST DESCRIPTION	FINAL RESULT	LIMITS/*DILUTION	UNITS OF MEASURE	TEST METHOD	DATE	TECHN
602 - VOLATILE AROMATIC ORGANICS		*10		602 (6)	03/31/95	DMJ
Benzene	ND	5	ug/L			
Toluene	ND	5	ug/L			
Ethyl benzene	ND	5	ug/L			
Xylenes	26	5	ug/L			
4-Bromofluorobenzene (Surrogate)	101	0	% Recovery	89-110% Limit		
Time Analyzed	1546	0				
PAH AND PHENOLS LIST BY 8270		*1		8270 (2)	04/01/95	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	48	10	ug/L			
2-Methylnaphthalene	39	10	ug/L			
Naphthalene	14	10	ug/L			
Phenanthrene	28	10	ug/L			
Pyrene	24	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	37	10	ug/L			
2,4-Dinitrophenol	ND	50	ug/L			
2-Methyl-4,6-dinitrophenol	ND	50	ug/L			
2-Nitrophenol	ND	10	ug/L			
4-Nitrophenol	ND	50	ug/L			
Pentachlorophenol	ND	50	ug/L			
Phenol	ND	10	ug/L			
2,4,6-Trichlorophenol	ND	10	ug/L			
Nitrobenzene-d5 (Surrogate)	90	0	% Recovery	35-114% Limit		
2-Fluorobiphenyl (Surrogate)	87	0	% Recovery	43-116% Limit		
4-Terphenyl-d14 (Surrogate)	141	0	% Recovery	33-141% Limit		
Phenol-d6 (Surrogate)	41	0	% Recovery	10-94% Limit		
2-Fluorophenol (Surrogate)	48	0	% Recovery	21-100% Limit		

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# CORE LABORATORIES

## LABORATORY TESTS RESULTS 04/05/95

JOB NUMBER: 950715      CUSTOMER: GEOSCIENCE CONSULTANTS, LTD.      ATTN:

CLIENT I.D.: REXENE COC #8964  
DATE SAMPLED: 03/27/95  
TIME SAMPLED: 16:25  
WORK DESCRIPTION: 9503271625

LABORATORY I.D.: 950715-0003  
DATE RECEIVED: 03/29/95  
TIME RECEIVED: 10:15  
REMARKS: WP-4

TEST DESCRIPTION	FINAL RESULT	LIMITS/*DILUTION	UNITS OF MEASURE	TEST METHOD	DATE	TECHN
2,4,6-Tribromophenol (Surrogate)	100	0	% Recovery	10-123% Limit		
Time Analyzed	0207	0				
Date Extracted	03/30/95	0				

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# CORE LABORATORIES

## LABORATORY TESTS RESULTS 04/05/95

JOB NUMBER: 950715      CUSTOMER: GEOSCIENCE CONSULTANTS, LTD.      ATTN:

CLIENT I.D.: REXENE COC #8964  
 DATE SAMPLED: 03/27/95  
 TIME SAMPLED: 16:45  
 WORK DESCRIPTION: 9503271645

LABORATORY I.D.: 950715-0004  
 DATE RECEIVED: 03/29/95  
 TIME RECEIVED: 10:15  
 REMARKS: WP-3

TEST DESCRIPTION	FINAL RESULT	LIMITS/*DILUTION	UNITS OF MEASURE	TEST METHOD	DATE	TECHN
602 - VOLATILE AROMATIC ORGANICS		*1		602 (6)	03/30/95	DMJ
Benzene	ND	0.5	ug/L			
Toluene	ND	0.5	ug/L			
Ethyl benzene	ND	0.5	ug/L			
Xylenes	ND	0.5	ug/L			
4-Bromofluorobenzene (Surrogate)	101	0	% Recovery	89-110% Limit		
Time Analyzed	0524	0				
PAH AND PHENOLS LIST BY 8270		*1		8270 (2)	03/31/95	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)	82	0	% Recovery	35-114% Limit		
2-Fluorobiphenyl (Surrogate)	72	0	% Recovery	43-116% Limit		
4-Terphenyl-d14 (Surrogate)	91	0	% Recovery	33-141% Limit		
Phenol-d6 (Surrogate)	36	0	% Recovery	10-94% Limit		
2-Fluorophenol (Surrogate)	52	0	% Recovery	21-100% Limit		

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## LABORATORY TESTS RESULTS 04/05/95

JOB NUMBER: 950715      CUSTOMER: GEOSCIENCE CONSULTANTS, LTD.      ATTN:

CLIENT I.D.: REXENE COC #8964      LABORATORY I.D.: 950715-0004  
DATE SAMPLED: 03/27/95      DATE RECEIVED: 03/29/95  
TIME SAMPLED: 16:45      TIME RECEIVED: 10:15  
WORK DESCRIPTION: 9503271645      REMARKS: WP-3

TEST DESCRIPTION	FINAL RESULT	LIMITS/*DILUTION	UNITS OF MEASURE	TEST METHOD	DATE	TECHN
2,4,6-Tribromophenol (Surrogate)	107	0	% Recovery	10-123% Limit		
Time Analyzed	2115	0				
Date Extracted	03/30/95	0				

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## LABORATORY TESTS RESULTS

04/05/95

JOB NUMBER: 950715

CUSTOMER: GEOSCIENCE CONSULTANTS, LTD.

ATTN:

CLIENT I.D.: REXENE COC #8964

LABORATORY I.D.: 950715-0005

DATE SAMPLED: 03/27/95

DATE RECEIVED: 03/29/95

TIME SAMPLED: 17:05

TIME RECEIVED: 10:15

WORK DESCRIPTION: 9503271705

REMARKS: WP-2

TEST DESCRIPTION	FINAL RESULT	LIMITS/*DILUTION	UNITS OF MEASURE	TEST METHOD	DATE	TECHN
602 - VOLATILE AROMATIC ORGANICS		*50		602 (6)	03/31/95	DMJ
Benzene	500	25	ug/L			
Toluene	320	25	ug/L			
Ethyl benzene	72	25	ug/L			
Xylenes	110	25	ug/L			
4-Bromofluorobenzene (Surrogate)	99	0	% Recovery	89-110% Limit		
Time Analyzed	0324	0				
PAH AND PHENOLS LIST BY 8270		*1		8270 (2)	03/31/95	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	19	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	3200	200	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)	58	0	% Recovery	43-116% Limit		
4-Terphenyl-d14 (Surrogate)	100	0	% Recovery	33-141% Limit		
Phenol-d6 (Surrogate)	35	0	% Recovery	10-94% Limit		
2-Fluorophenol (Surrogate)	52	0	% Recovery	21-100% Limit		

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## LABORATORY TESTS RESULTS 04/05/95

JOB NUMBER: 950715      CUSTOMER: GEOSCIENCE CONSULTANTS, LTD.      ATTN:

CLIENT I.D.: REXENE COC #8964  
DATE SAMPLED: 03/27/95  
TIME SAMPLED: 17:05  
WORK DESCRIPTION: 9503271705

LABORATORY I.D.: 950715-0005  
DATE RECEIVED: 03/29/95  
TIME RECEIVED: 10:15  
REMARKS: WP-2

TEST DESCRIPTION	FINAL RESULT	LIMITS/*DILUTION	UNITS OF MEASURE	TEST METHOD	DATE	TECHN
2,4,6-Tribromophenol (Surrogate)	107	0	% Recovery	10-123% Limit		
Time Analyzed	2312	0				
Date Extracted	03/30/95	0				
Semivolatile Organic - Surrogates		*20		8270 (2)/625 (6)	04/01/95	JMC
Nitrobenzene-d5 (Surrogate)	92	0	% Recovery	35-114% Limit		
2-Fluorobiphenyl (Surrogate)	98	0	% Recovery	43-116% Limit		
4-Terphenyl-d14 (Surrogate)	120	0	% Recovery	33-141% Limit		
Phenol-d6 (Surrogate)	47	0	% Recovery	10-94% Limit		
2-Fluorophenol (Surrogate)	52	0	% Recovery	21-100% Limit		
2,4,6-Tribromophenol (Surrogate)	87	0	% Recovery	10-123% Limit		
Date Extracted	03/30/95	0				
Time Analyzed	1832	0				

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## LABORATORY TESTS RESULTS 04/05/95

JOB NUMBER: 950715      CUSTOMER: GEOSCIENCE CONSULTANTS, LTD.      ATTN:

CLIENT I.D.: REXENE COC #8964  
 DATE SAMPLED: 03/27/95  
 TIME SAMPLED: 17:25  
 WORK DESCRIPTION: 9503271725

LABORATORY I.D.: 950715-0006  
 DATE RECEIVED: 03/29/95  
 TIME RECEIVED: 10:15  
 REMARKS: WP-1

TEST DESCRIPTION	FINAL RESULT	LIMITS/*DILUTION	UNITS OF MEASURE	TEST METHOD	DATE	TECHN
602 - VOLATILE AROMATIC ORGANICS		*10		602 (6)	03/31/95	DMJ
Benzene	300	5	ug/L			
Toluene	14	5	ug/L			
Ethyl benzene	25	5	ug/L			
Xylenes	45	5	ug/L			
4-Bromofluorobenzene (Surrogate)	90	0	% Recovery	89-110% Limit		
Time Analyzed	0446	0				
PAH AND PHENOLS LIST BY 8270		*1		8270 (2)	04/01/95	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	36	10	ug/L			
2-Methylnaphthalene	33	10	ug/L			
Naphthalene	26	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	1200	100	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)	126 *	0	% Recovery	35-114% Limit		
2-Fluorobiphenyl (Surrogate)	54	0	% Recovery	43-116% Limit		
4-Terphenyl-d14 (Surrogate)	190 *	0	% Recovery	33-141% Limit		
Phenol-d6 (Surrogate)	35	0	% Recovery	10-94% Limit		
2-Fluorophenol (Surrogate)	46	0	% Recovery	21-100% Limit		

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## LABORATORY TESTS RESULTS 04/05/95

JOB NUMBER: 950715      CUSTOMER: GEOSCIENCE CONSULTANTS, LTD.      ATTN:

CLIENT I.D.: REXENE COC #8964  
 DATE SAMPLED: 03/27/95  
 TIME SAMPLED: 17:25  
 WORK DESCRIPTION: 9503271725

LABORATORY I.D.: 950715-0006  
 DATE RECEIVED: 03/29/95  
 TIME RECEIVED: 10:15  
 REMARKS: WP-1

TEST DESCRIPTION	FINAL RESULT	LIMITS/*DILUTION	UNITS OF MEASURE	TEST METHOD	DATE	TECHN
2,4,6-Tribromophenol (Surrogate)	84	0	% Recovery	10-123% Limit		
Time Analyzed	0305	0				
Date Extracted	03/30/95	0				
Semi-Volatile Organic - Surrogates		*10		8270(2)/625(6)	04/01/95	JMC
Nitrobenzene-d5 (Surrogate)	90	0	% Recovery	35-114% Limit		
2-Fluorobiphenyl (Surrogate)	67	0	% Recovery	43-116% Limit		
4-Terphenyl-d14 (Surrogate)	101	0	% Recovery	33-141% Limit		
Phenol-d6 (Surrogate)	38	0	% Recovery	10-94% Limit		
2-Fluorophenol (Surrogate)	52	0	% Recovery	21-100% Limit		
2,4,6-Tribromophenol (Surrogate)	72	0	% Recovery	10-123% Limit		
Date Extracted	03/30/95	0				
Time Analyzed	1930	0				

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# CORE LABORATORIES

## LABORATORY TESTS RESULTS

04/05/95

JOB NUMBER: 950715

CUSTOMER: GEOSCIENCE CONSULTANTS, LTD.

ATTN:

CLIENT I.D.: REXENE COC #8964

LABORATORY I.D.: 950715-0007

DATE SAMPLED: 03/27/95

DATE RECEIVED: 03/29/95

TIME SAMPLED: 17:45

TIME RECEIVED: 10:15

WORK DESCRIPTION: 9503271745

REMARKS: WP-22

TEST DESCRIPTION	FINAL RESULT	LIMITS/*DILUTION	UNITS OF MEASURE	TEST METHOD	DATE	TECHN
602 - VOLATILE AROMATIC ORGANICS		*100		602 (6)	03/30/95	DMJ
Benzene	1800	50	ug/L			
Toluene	ND	50	ug/L			
Ethyl benzene	88	50	ug/L			
Xylenes	ND	50	ug/L			
4-Bromofluorobenzene (Surrogate)	101	0	% Recovery	89-110% Limit		
Time Analyzed	0117	0				
PAH AND PHENOLS LIST BY 8270		*1		8270 (2)	03/31/95	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	22	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)	65	0	% Recovery	43-116% Limit		
4-Terphenyl-d14 (Surrogate)	98	0	% Recovery	33-141% Limit		
Phenol-d6 (Surrogate)	39	0	% Recovery	10-94% Limit		
2-Fluorophenol (Surrogate)	55	0	% Recovery	21-100% Limit		

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# CORE LABORATORIES

## LABORATORY TESTS RESULTS

04/05/95

JOB NUMBER: 950715

CUSTOMER: GEOSCIENCE CONSULTANTS, LTD.

ATTN:

CLIENT I.D.: REXENE COC #8964

LABORATORY I.D.: 950715-0007

DATE SAMPLED: 03/27/95

DATE RECEIVED: 03/29/95

TIME SAMPLED: 17:45

TIME RECEIVED: 10:15

WORK DESCRIPTION: 9503271745

REMARKS: WP-22

TEST DESCRIPTION	FINAL RESULT	LIMITS/*DILUTION	UNITS OF MEASURE	TEST METHOD	DATE	TECHN
2,4,6-Tribromophenol (Surrogate)	80	0	% Recovery	10-123% Limit		
Time Analyzed	2213	0				
Date Extracted	03/30/95	0				

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## LABORATORY TESTS RESULTS

04/05/95

JOB NUMBER: 950715      CUSTOMER: GEOSCIENCE CONSULTANTS, LTD.      ATTN:

CLIENT I.D.:      LABORATORY I.D.: 950715-0008  
 DATE SAMPLED: / /      DATE RECEIVED: / /  
 TIME SAMPLED: :      TIME RECEIVED: :  
 WORK DESCRIPTION: METHOD BLANK      REMARKS:

TEST DESCRIPTION	FINAL RESULT	LIMITS/*DILUTION	UNITS OF MEASURE	TEST METHOD	DATE	TECHN
602 - VOLATILE AROMATIC ORGANICS		*1		602 (6)	03/29/95	DMJ
Benzene	ND	0.5	ug/L			
Toluene	ND	0.5	ug/L			
Ethyl benzene	ND	0.5	ug/L			
Xylenes	ND	0.5	ug/L			
4-Bromofluorobenzene (Surrogate)	103	0	% Recovery	89-110% Limit		
Time Analyzed	1501	0				
PAH AND PHENOLS LIST BY 8270		*1		8270 (2)	03/31/95	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)	57	0	% Recovery	43-116% Limit		
4-Terphenyl-d14 (Surrogate)	84	0	% Recovery	33-141% Limit		
Phenol-d6 (Surrogate)	21	0	% Recovery	10-94% Limit		
2-Fluorophenol (Surrogate)	36	0	% Recovery	21-100% Limit		

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# CORE LABORATORIES

## LABORATORY TESTS RESULTS 04/05/95

JOB NUMBER: 950715      CUSTOMER: GEOSCIENCE CONSULTANTS, LTD.      ATTN:

CLIENT I.D.....:      LABORATORY I.D....: 950715-0008  
DATE SAMPLED.....: / /      DATE RECEIVED.....: / /  
TIME SAMPLED.....: :      TIME RECEIVED.....: :  
WORK DESCRIPTION...: METHOD BLANK      REMARKS.....:

TEST DESCRIPTION	FINAL RESULT	LIMITS/*DILUTION	UNITS OF MEASURE	TEST METHOD	DATE	TECHN
2,4,6-Tribromophenol (Surrogate)	71	0	% Recovery	10-123% Limit		
Time Analyzed	1621	0				
Date Extracted	03/30/95	0				

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# CORE LABORATORIES

## LABORATORY TESTS RESULTS

04/05/95

JOB NUMBER: 950715

CUSTOMER: GEOSCIENCE CONSULTANTS, LTD.

ATTN:

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

LABORATORY I.D....: 950715-0009  
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)	03/30/95	DMJ
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	89-110% Limit		
Time Analyzed	1219	0				

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# CORE LABORATORIES

## QUALITY CONTROL REPORT 04/05/95

JOB NUMBER: 950715

CUSTOMER: GEOSCIENCE CONSULTANTS, LTD.

ATTN:

02 - VOLATILE AROMATIC ORGANICS

DATE ANALYZED: 03/30/95

TIME ANALYZED: 11:38

METHOD: 602 (6)

QC NUMBER: 325251

### B L A N K S

TEST DESCRIPTION	ANALY SUB-TYPE	ANALYSIS I.D.	DILUTION FACTOR	ANALYZED VALUE	DETECTION LIMIT	UNITS OF MEASURE
Time Analyzed	MS	1300	1	0	0	
	MSD	1342	1	0	0	

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# CORE LABORATORIES

## QUALITY CONTROL REPORT 04/05/95

JOB NUMBER: 950715

CUSTOMER: GEOSCIENCE CONSULTANTS, LTD.

ATTN:

602 - VOLATILE AROMATIC ORGANICS

DATE ANALYZED: 03/30/95

TIME ANALYZED: 11:38

METHOD: 602 (6)

QC NUMBER: 325251

### MATRIX SPIKES

TEST DESCRIPTION	ANALYSIS SUB-TYPE	ANALYSIS I. D.	DILUTION FACTOR	ANALYZED VALUE	ORIGINAL VALUE	SPIKE ADDED	PERCENT RECOVERY	DETECTION LIMITS	UNITS OF MEASURE
Benzene	MS	950715-4	1	23.2	0	20.0	116	0.5	ug/L
	MSD	950715-4	1	21.6	0	20.0	108	0.5	ug/L
Toluene	MS	950715-4	1	23.6	0	20.0	118	0.5	ug/L
	MSD	950715-4	1	21.5	0	20.0	108	0.5	ug/L
Ethyl benzene	MS	950715-4	1	23.2	0	20.0	116	0.5	ug/L
	MSD	950715-4	1	21.1	0	20.0	106	0.5	ug/L
Xylenes	MS	950715-4	1	68.7	0	60.0	114	0.5	ug/L
	MSD	950715-4	1	62.3	0	60.0	104	0.5	ug/L
4-Bromofluorobenzene (Surrogat	MS	950715-4	1	108	0	100	108	0	89-110% Limit
	MSD	950715-4	1	103	0	100	103	0	89-110% Limit

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# CORE LABORATORIES

## QUALITY CONTROL REPORT 04/05/95

JOB NUMBER: 950715

CUSTOMER: GEOSCIENCE CONSULTANTS, LTD.

ATTN:

602 - VOLATILE AROMATIC ORGANICS

DATE ANALYZED: 03/29/95

TIME ANALYZED: 14:21

METHOD: 602 (6)

QC NUMBER: 325252

### B L A N K S

TEST DESCRIPTION	ANALY SUB-TYPE	ANALYSIS I.D.	DILUTION FACTOR	ANALYZED VALUE	DETECTION LIMIT	UNITS OF MEASURE
Time Analyzed	SB	1826	1	0	0	
	SBD	1907	1	0	0	

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# CORE LABORATORIES

## QUALITY CONTROL REPORT 04/05/95

JOB NUMBER: 950715

CUSTOMER: GEOSCIENCE CONSULTANTS, LTD.

ATTN:

602 - VOLATILE AROMATIC ORGANICS

DATE ANALYZED: 03/29/95

TIME ANALYZED: 14:21

METHOD: 602 (6)

QC NUMBER: 325252

### REFERENCE STANDARDS

TEST DESCRIPTION	ANALYSIS SUB-TYPE	ANALYSIS I. D.	DILUTION FACTOR	ANALYZED VALUE	TRUE VALUE	PERCENT RECOVERY	DETECTION LIMITS	UNITS OF MEASURE
Benzene	SB	T950329B	1	21.9	20.0	110	0.5	ug/L
	SBD	T950329B	1	21.5	20.0	108	0.5	ug/L
Toluene	SB	T950329B	1	21.6	20.0	108	0.5	ug/L
	SBD	T950329B	1	21.2	20.0	106	0.5	ug/L
Ethyl benzene	SB	T950329B	1	21.9	20.0	110	0.5	ug/L
	SBD	T950329B	1	21.5	20.0	108	0.5	ug/L
Xylenes	SB	T950329B	1	64.4	60.0	107	0.5	ug/L
	SBD	T950329B	1	63.5	60.0	106	0.5	ug/L
4-Bromofluorobenzene (Surrogate)	SB	T950329B	1	102	100	102	0	89-110% Limit
	SBD	T950329B	1	102	100	102	0	89-110% Limit

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# CORE LABORATORIES

## QUALITY CONTROL REPORT 04/05/95

JOB NUMBER: 950715      CUSTOMER: GEOSCIENCE CONSULTANTS, LTD.      ATTN:  
8270 - BASE/NEUTRAL/ACID ORGANICS      DATE ANALYZED: 03/31/95      TIME ANALYZED: 15:03      METHOD: 8270 (2)      QC NUMBER: 325399

### B L A N K S

TEST DESCRIPTION	ANALY	SUB-TYPE	ANALYSIS I.D.	DILUTION FACTOR	ANALYZED VALUE	DETECTION LIMIT	UNITS OF MEASURE
Time Analyzed	RS		1720	1	0	0	
Date Extracted	RS		03/30/95	1	0	0	

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# CORE LABORATORIES

## QUALITY CONTROL REPORT 04/05/95

JOB NUMBER: 950715

CUSTOMER: GEOSCIENCE CONSULTANTS, LTD.

ATTN:

8270 - BASE/NEUTRAL/ACID ORGANICS

DATE ANALYZED: 03/31/95

TIME ANALYZED: 15:03

METHOD: 8270 (2)

QC NUMBER:325399

### REFERENCE STANDARDS

TEST DESCRIPTION	ANALYSIS SUB-TYPE	ANALYSIS I. D.	DILUTION FACTOR	ANALYZED VALUE	TRUE VALUE	PERCENT RECOVERY	DETECTION LIMITS	UNITS OF MEASURE
Acenaphthene	RS	950145	1	29	41	71	10	ug/L
Anthracene	RS	950145	1	67	74	91	10	ug/L
Benzo(b)fluoranthene	RS	950145	1	58	73	79	10	ug/L
Bis(2-ethylhexyl)phthalate	RS	950145	1	34	35	97	10	ug/L
Chrysene	RS	950145	1	92	114	81	10	ug/L
Dibenzofuran	RS	950145	1	47	64	73	10	ug/L
1,2-Dichlorobenzene	RS	950145	1	10	25	40	10	ug/L
1,4-Dichlorobenzene	RS	950145	1	12	32	38	10	ug/L
2,4-Dinitrotoluene	RS	950145	1	106	129	82	10	ug/L
Fluorene	RS	950145	1	106	148	72	10	ug/L
Naphthalene	RS	950145	1	32	57	56	10	ug/L
Phenanthrene	RS	950145	1	21	23	91	10	ug/L
Pyrene	RS	950145	1	28	31	90	10	ug/L
1,2,4-Trichlorobenzene	RS	950145	1	54	130	42	10	ug/L
Dinitrobenzene-d5 (Surrogate)	RS	950145	1	65	100	65	0	35-114% Limit
2-Fluorobiphenyl (Surrogate)	RS	950145	1	65	100	65	0	43-116% Limit
4-Terphenyl-d14 (Surrogate)	RS	950145	1	89	100	89	0	33-141% Limit
Phenol-d6 (Surrogate)	RS	950145	1	25	100	25	0	10-94% Limit
2-Fluorophenol (Surrogate)	RS	950145	1	40	100	40	0	21-100% Limit
2,4,6-Tribromophenol (Surrogate)	RS	950145	1	78	100	78	0	10-123% Limit

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# Certification

## PriorityPollutnT™/CLP Quality Control Standards

Organics in Water  
Catalog No. PP- 41

Lot No. 561

Parameter	Certified Value	Performance Acceptance Limits™
<b>VOLATILES</b>		
(Catalog No. 710)	µg/l	µg/l
Benzene	50.0	36.7 - 62.0
Bromodichloromethane	44.8	34.5 - 56.0
Bromoform	85.5	62.3 - 110
Carbon tetrachloride	143	103 - 182
Chlorobenzene	42.0	32.1 - 50.8
Dibromochloromethane	137	104 - 170
1,2-Dichlorobenzene	69.3	52.6 - 83.9
1,4-Dichlorobenzene	112	85.1 - 139
1,2-Dichloroethane	74.4	57.4 - 93.0
Ethylbenzene	17.9	13.2 - 22.2
Methylene chloride	49.5	33.6 - 65.8
4-Methyl-2-pentanone	27.9	16.0 - 38.8
1,1,1,2-Tetrachloroethane	52.3	35.9 - 66.4
Tetrachloroethylene	41.4	30.2 - 50.5
Toluene	72.6	56.0 - 87.8
1,1,1-Trichloroethane	67.3	47.1 - 80.8
Trichloroethylene	57.2	42.5 - 69.2
o-Xylene	29.1	17.9 - 37.5
<b>BASE/NEUTRALS</b>		
(Catalog No. 711)	µg/l	µg/l
Acenaphthene ACENAP	41.1	15.0 - 45.6
Anthracene ANATHR	73.8	34.5 - 85.6
Benzo(b)fluoranthene BbFLUR	72.7	25.2 - 91.6
Chrysene CHRYS	114	52.8 - 139
Dibenzofuran DBFURA	64.0	30.7 - 73.6
1,2-Dichlorobenzene 1,2 DCB	24.9	6.55 - 28.1
1,4-Dichlorobenzene 1,4 DCB	32.0	11.1 - 35.8
2,4-Dinitrotoluene 2,4 DNTD	129	47.0 - 154
bis(2-Ethylhexyl)phthalate B2 EHPH	35.2	13.6 - 45.1
Fluorene FLUORE	148	72.0 - 180
Naphthalene NAPTH	56.7	22.1 - 65.8
Phenanthrene PHENAN	23.2	11.7 - 28.4
Pyrene PYRENE	31.2	13.8 - 39.6
1,2,4-Trichlorobenzene 1,2,4 TCB	130	42.0 - 153
<b>ACIDS</b>		
(Catalog No. 712)	µg/l	µg/l
4-Chloro-3-methylphenol	48.6	25.0 - 55.4
2-Chlorophenol	88.3	36.0 - 98.9
2,4-Dichlorophenol	105	45.3 - 118
2,4-Dimethylphenol	164	55.8 - 200
2-Methylphenol	105	32.1 - 125
Pentachlorophenol	128	39.9 - 161
Phenol	73.8	7.53 - 89.3
2,4,6-Trichlorophenol	87.8	38.5 - 98.3

continued on back





# CORE LABORATORIES

## QUALITY CONTROL FOOTER

### METHOD REFERENCES

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

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

#### Blank QC Sample Identification

MB Method Blank  
 ICB Initial Calibration Blank  
 CCB Continuing Calibration Blank

#### Reference Standard QC Sample Identification

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

#### Spike QC Sample Identification

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

#### Duplicate QC Sample Identification

SBD Spiked Blank Duplicate  
 MD Method (Matrix) Duplicate  
 ED Extraction Duplicate  
 DD Digestion Duplicate

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

#### Subcontract Laboratory

Core Laboratories - Anaheim, CA	• AN
Core Laboratories - Casper, WY	• CA
Core Laboratories - Corpus Christi, TX	• CC
Core Laboratories - Houston, TX	• HP

#### Subcontract Laboratory

Core Laboratories - Lake Charles, LA	• LC
Core Laboratories - Long Beach, CA	• LB
Other Subcontract Laboratories	• XX

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CORE LABORATORIES

CORE LABORATORIES  
ANALYTICAL REPORT  
Job Number: 950718  
Prepared For:  
GEOSCIENCE CONSULTANTS, LTD.  
505 MARQUETTE NW, SUITE 1100  
ALBUQUERQUE, NM 87102  
Date: 04/13/95

*Linda L. Benkers*  
Signature

4-13-95  
Date:

Name: Linda L. Benkers

Core Laboratories  
10703 East Bethany Drive  
Aurora, CO 80014

Title: QA/QC Coordinator





CORE LABORATORIES


SAMPLE DELIVERY GROUP NARRATIVE

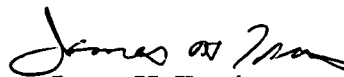
April 13, 1995

Customer: Geoscience Consultants, Ltd.  
Project: Rexene COC #8398  
Core Laboratories Project Number: 950718

Method 8270 Organic Analysis:

On the reference standard analyzed with this set of samples, the surrogate 2-fluorobiphenyl was low at 38% with method acceptance criteria set at 43%. All other surrogates, internal standards, and analytes were within acceptable limits.

  
Linda L. Benkers  
QA/QC Coordinator

  
James H. Travis  
Laboratory Supervisor



**EXPLANATION OF DATA FLAGS**

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



# CORE LABORATORIES

## LABORATORY TESTS RESULTS 04/13/95

JOB NUMBER: 950718      CUSTOMER: GEOSCIENCE CONSULTANTS, LTD.      ATTN:

CLIENT I.D.....: REXENE COC #8398	LABORATORY I.D....: 950718-0001
DATE SAMPLED.....: 03/27/95	DATE RECEIVED....: 03/29/95
TIME SAMPLED.....: 12:00	TIME RECEIVED....: 10:15
WORK DESCRIPTION...: 9503271200	REMARKS.....: MW-4

TEST DESCRIPTION	FINAL RESULT	LIMITS/*DILUTION	UNITS OF MEASURE	TEST METHOD	DATE	TECHN
602 - VOLATILE AROMATIC ORGANICS		*10		602 (6)	04/09/95	JHT
Benzene	220	5	ug/L			
Toluene	ND	5	ug/L			
Ethyl benzene	6	5	ug/L			
Xylenes	ND	5	ug/L			
4-Bromofluorobenzene (Surrogate)	104	0	% Recovery	89-110% Limit		
Time Analyzed	1211	0				

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# CORE LABORATORIES

## LABORATORY TESTS RESULTS

04/13/95

JOB NUMBER: 950718      CUSTOMER: GEOSCIENCE CONSULTANTS, LTD.      ATTN:

CLIENT I.D.....: REXENE COC #8398  
 DATE SAMPLED.....: 03/27/95  
 TIME SAMPLED.....: 12:30  
 WORK DESCRIPTION...: 9503271230

LABORATORY I.D....: 950718-0002  
 DATE RECEIVED....: 03/29/95  
 TIME RECEIVED....: 10:15  
 REMARKS.....: MW-5

TEST DESCRIPTION	FINAL RESULT	LIMITS/*DILUTION	UNITS OF MEASURE	TEST METHOD	DATE	TECHN
602 - VOLATILE AROMATIC ORGANICS		*100		602 (6)	04/08/95	JHT
Benzene	4700	50	ug/L			
Toluene	100	50	ug/L			
Ethyl benzene	70	50	ug/L			
Xylenes	280	50	ug/L			
4-Bromofluorobenzene (Surrogate)	100	0	% Recovery	89-110% Limit		
Time Analyzed	0527	0				
PAH AND PHENOLS LIST BY 8270		*1		8270 (2)	04/10/95	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	65	10	ug/L			
2-Methylnaphthalene	15	10	ug/L			
Naphthalene	37	10	ug/L			
Phenanthrene	ND	10	ug/L			
Pyrene	ND	10	ug/L			
4-Chloro-3-methylphenol	ND	10	ug/L			
2-Chlorophenol	ND	10	ug/L			
2,4-Dichlorophenol	ND	10	ug/L			
2,4-Dimethylphenol	ND	10	ug/L			
2,4-Dinitrophenol	ND	50	ug/L			
2-Methyl-4,6-dinitrophenol	ND	50	ug/L			
2-Nitrophenol	ND	10	ug/L			
4-Nitrophenol	ND	50	ug/L			
Pentachlorophenol	ND	50	ug/L			
Phenol	ND	10	ug/L			
2,4,6-Trichlorophenol	ND	10	ug/L			
Nitrobenzene-d5 (Surrogate)	40	0	% Recovery	35-114% Limit		
2-Fluorobiphenyl (Surrogate)	77	0	% Recovery	43-116% Limit		
4-Terphenyl-d14 (Surrogate)	83	0	% Recovery	33-141% Limit		
Phenol-d6 (Surrogate)	13	0	% Recovery	10-94% Limit		
2-Fluorophenol (Surrogate)	31	0	% Recovery	21-100% Limit		

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# CORE LABORATORIES

## LABORATORY TESTS RESULTS 04/13/95

JOB NUMBER: 950718      CUSTOMER: GEOSCIENCE CONSULTANTS, LTD.      ATTN:

CLIENT I.D.: REXENE COC #8398  
DATE SAMPLED: 03/27/95  
TIME SAMPLED: 12:30  
WORK DESCRIPTION: 9503271230

LABORATORY I.D.: 950718-0002  
DATE RECEIVED: 03/29/95  
TIME RECEIVED: 10:15  
REMARKS: MW-5

TEST DESCRIPTION	FINAL RESULT	LIMITS/*DILUTION	UNITS OF MEASURE	TEST METHOD	DATE	TECHN
2,4,6-Tribromophenol (Surrogate)	0 *	0	% Recovery	10-123% Limit		
Time Analyzed	1309	0				
Date Extracted	04/02/95	0				
Semi-Volatile Organic - Surrogates		*1		8270(2)/625(6)	04/10/95	JMC
Nitrobenzene-d5 (Surrogate)	42	0	% Recovery	35-114% Limit		
2-Fluorobiphenyl (Surrogate)	78	0	% Recovery	43-116% Limit		
4-Terphenyl-d14 (Surrogate)	85	0	% Recovery	33-141% Limit		
Phenol-d6 (Surrogate)	13	0	% Recovery	10-94% Limit		
2-Fluorophenol (Surrogate)	31	0	% Recovery	21-100% Limit		
2,4,6-Tribromophenol (Surrogate)	0 *	0	% Recovery	10-123% Limit		
Date Extracted	04/02/95	0				
Time Analyzed	1856	0				

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# CORE LABORATORIES

## LABORATORY TESTS RESULTS 04/13/95

JOB NUMBER: 950718      CUSTOMER: GEOSCIENCE CONSULTANTS, LTD.      ATTN:

CLIENT I.D.: REXENE COC #8398  
DATE SAMPLED: 03/27/95  
TIME SAMPLED: 13:00  
WORK DESCRIPTION: 9503271300

LABORATORY I.D.: 950718-0003  
DATE RECEIVED: 03/29/95  
TIME RECEIVED: 10:15  
REMARKS: MW-7

TEST DESCRIPTION	FINAL RESULT	LIMITS/*DILUTION	UNITS OF MEASURE	TEST METHOD	DATE	TECHN
602 - VOLATILE AROMATIC ORGANICS		*10		602 (6)	04/08/95	JHT
Benzene	100	5	ug/L			
Toluene	ND	5	ug/L			
Ethyl benzene	ND	5	ug/L			
Xylenes	ND	5	ug/L			
4-Bromofluorobenzene (Surrogate)	103	0	% Recovery	89-110% Limit		
Time Analyzed	0601	0				

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# CORE LABORATORIES

## LABORATORY TESTS RESULTS

04/13/95

JOB NUMBER: 950718

CUSTOMER: GEOSCIENCE CONSULTANTS, LTD.

ATTN:

CLIENT I.D.: REXENE COC #8398

LABORATORY I.D.: 950718-0004

DATE SAMPLED: 03/27/95

DATE RECEIVED: 03/29/95

TIME SAMPLED: 13:30

TIME RECEIVED: 10:15

WORK DESCRIPTION: 9503271330

REMARKS: MW-17

TEST DESCRIPTION	FINAL RESULT	LIMITS/*DILUTION	UNITS OF MEASURE	TEST METHOD	DATE	TECHN
602 - VOLATILE AROMATIC ORGANICS		*10		602 (6)	04/08/95	JHT
Benzene	67	5	ug/L			
Toluene	ND	5	ug/L			
Ethyl benzene	ND	5	ug/L			
Xylenes	ND	5	ug/L			
4-Bromofluorobenzene (Surrogate)	98	0	% Recovery	89-110% Limit		
Time Analyzed	0636	0				
PAH AND PHENOLS LIST BY 8270		*1		8270 (2)	04/10/95	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)	63	0	% Recovery	43-116% Limit		
4-Terphenyl-d14 (Surrogate)	70	0	% Recovery	33-141% Limit		
Phenol-d6 (Surrogate)	67	0	% Recovery	10-94% Limit		
2-Fluorophenol (Surrogate)	52	0	% Recovery	21-100% Limit		

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# CORE LABORATORIES

## LABORATORY TESTS RESULTS 04/13/95

JOB NUMBER: 950718      CUSTOMER: GEOSCIENCE CONSULTANTS, LTD.      ATTN:

CLIENT I.D.....: REXENE COC #8398  
DATE SAMPLED.....: 03/27/95  
TIME SAMPLED.....: 13:30  
WORK DESCRIPTION...: 9503271330

LABORATORY I.D....: 950718-0004  
DATE RECEIVED....: 03/29/95  
TIME RECEIVED....: 10:15  
REMARKS.....: MW-17

TEST DESCRIPTION	FINAL RESULT	LIMITS/*DILUTION	UNITS OF MEASURE	TEST METHOD	DATE	TECHN
2,4,6-Tribromophenol (Surrogate)	86	0	% Recovery	10-123% Limit		
Time Analyzed	1407	0				
Date Extracted	04/02/95	0				

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# CORE LABORATORIES

## LABORATORY TESTS RESULTS 04/13/95

JOB NUMBER: 950718      CUSTOMER: GEOSCIENCE CONSULTANTS, LTD.      ATTN:

CLIENT I.D.: REXENE COC #8398  
 DATE SAMPLED: 03/27/95  
 TIME SAMPLED: 15:00  
 WORK DESCRIPTION: 9503271500

LABORATORY I.D.: 950718-0005  
 DATE RECEIVED: 03/29/95  
 TIME RECEIVED: 10:15  
 REMARKS: MW-8

TEST DESCRIPTION	FINAL RESULT	LIMITS/*DILUTION	UNITS OF MEASURE	TEST METHOD	DATE	TECHN
<b>602 - VOLATILE AROMATIC ORGANICS</b>		<b>*250</b>		<b>602 (6)</b>	<b>04/09/95</b>	<b>JHT</b>
Benzene	14000	125	ug/L			
Toluene	ND	125	ug/L			
Ethyl benzene	ND	125	ug/L			
Xylenes	1100	125	ug/L			
4-Bromofluorobenzene (Surrogate)	99	0	% Recovery	89-110% Limit		
Time Analyzed	1505	0				
<b>PAH AND PHENOLS LIST BY 8270</b>		<b>*1</b>		<b>8270 (2)</b>	<b>04/10/95</b>	<b>JMC</b>
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	50	10	ug/L			
2-Methylnaphthalene	42	10	ug/L			
Naphthalene	88	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	87	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)	94	0	% Recovery	35-114% Limit		
2-Fluorobiphenyl (Surrogate)	49	0	% Recovery	43-116% Limit		
4-Terphenyl-d14 (Surrogate)	54	0	% Recovery	33-141% Limit		
Phenol-d6 (Surrogate)	59	0	% Recovery	10-94% Limit		
2-Fluorophenol (Surrogate)	53	0	% Recovery	21-100% Limit		

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# CORE LABORATORIES

## LABORATORY TESTS RESULTS 04/13/95

JOB NUMBER: 950718      CUSTOMER: GEOSCIENCE CONSULTANTS, LTD.      ATTN:

CLIENT I.D.: REXENE COC #8398  
DATE SAMPLED: 03/27/95  
TIME SAMPLED: 15:00  
WORK DESCRIPTION: 9503271500

LABORATORY I.D.: 950718-0005  
DATE RECEIVED: 03/29/95  
TIME RECEIVED: 10:15  
REMARKS: MW-8

TEST DESCRIPTION	FINAL RESULT	LIMITS/*DILUTION	UNITS OF MEASURE	TEST METHOD	DATE	TECHN
2,4,6-Tribromophenol (Surrogate)	55	0	% Recovery	10-123% Limit		
Time Analyzed	1504	0				
Date Extracted	04/02/95	0				

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# CORE LABORATORIES

## LABORATORY TESTS RESULTS 04/13/95

JOB NUMBER: 950718      CUSTOMER: GEOSCIENCE CONSULTANTS, LTD.      ATTN:

CLIENT I.D.....: REXENE COC #8398  
 DATE SAMPLED.....: 03/27/95  
 TIME SAMPLED.....: 15:20  
 WORK DESCRIPTION...: 9503271520

LABORATORY I.D....: 950718-0006  
 DATE RECEIVED....: 03/29/95  
 TIME RECEIVED....: 10:15  
 REMARKS.....: MW-11

TEST DESCRIPTION	FINAL RESULT	LIMITS/*DILUTION	UNITS OF MEASURE	TEST METHOD	DATE	TECHN
602 - VOLATILE AROMATIC ORGANICS		*10		602 (6)	04/09/95	JHT
Benzene	15	5	ug/L			
Toluene	ND	5	ug/L			
Ethyl benzene	ND	5	ug/L			
Xylenes	ND	5	ug/L			
4-Bromofluorobenzene (Surrogate)	100	0	% Recovery	89-110% Limit		
Time Analyzed	2016	0				
PAH AND PHENOLS LIST BY 8270		*1		8270 (2)	04/10/95	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)	94	0	% Recovery	35-114% Limit		
2-Fluorobiphenyl (Surrogate)	98	0	% Recovery	43-116% Limit		
4-Terphenyl-d14 (Surrogate)	76	0	% Recovery	33-141% Limit		
Phenol-d6 (Surrogate)	33	0	% Recovery	10-94% Limit		
2-Fluorophenol (Surrogate)	26	0	% Recovery	21-100% Limit		

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# CORE LABORATORIES

## LABORATORY TESTS RESULTS 04/13/95

JOB NUMBER: 950718      CUSTOMER: GEOSCIENCE CONSULTANTS, LTD.      ATTN:

CLIENT I.D.: REXENE COC #8398  
DATE SAMPLED: 03/27/95  
TIME SAMPLED: 15:20  
WORK DESCRIPTION: 9503271520

LABORATORY I.D.: 950718-0006  
DATE RECEIVED: 03/29/95  
TIME RECEIVED: 10:15  
REMARKS: MW-11

TEST DESCRIPTION	FINAL RESULT	LIMITS/*DILUTION	UNITS OF MEASURE	TEST METHOD	DATE	TECHN
2,4,6-Tribromophenol (Surrogate)	83	0	% Recovery	10-123% Limit		
Time Analyzed	1602	0				
Date Extracted	04/02/95	0				

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# CORE LABORATORIES

## LABORATORY TESTS RESULTS 04/13/95

JOB NUMBER: 950718      CUSTOMER: GEOSCIENCE CONSULTANTS, LTD.      ATTN:

CLIENT I.D.: REXENE COC #8398  
DATE SAMPLED: 03/27/95  
TIME SAMPLED: 15:50  
WORK DESCRIPTION: 9503271550

LABORATORY I.D.: 950718-0007  
DATE RECEIVED: 03/29/95  
TIME RECEIVED: 10:15  
REMARKS: MW-16

TEST DESCRIPTION	FINAL RESULT	LIMITS/*DILUTION	UNITS OF MEASURE	TEST METHOD	DATE	TECHN
602 - VOLATILE AROMATIC ORGANICS		*1		602 (6)	04/07/95	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)	99	0	% Recovery	89-110% Limit		
Time Analyzed	2341	0				

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# CORE LABORATORIES

## LABORATORY TESTS RESULTS 04/13/95

JOB NUMBER: 950718      CUSTOMER: GEOSCIENCE CONSULTANTS, LTD.      ATTN:

CLIENT I.D.: REXENE COC #8398  
 DATE SAMPLED: 03/27/95  
 TIME SAMPLED: 16:20  
 WORK DESCRIPTION: 9503271620

LABORATORY I.D.: 950718-0008  
 DATE RECEIVED: 03/29/95  
 TIME RECEIVED: 10:15  
 REMARKS: MW-14

TEST DESCRIPTION	FINAL RESULT	LIMITS/*DILUTION	UNITS OF MEASURE	TEST METHOD	DATE	TECHN
602 - VOLATILE AROMATIC ORGANICS		*50		602 (6)	04/08/95	JHT
Benzene	1100	25	ug/L			
Toluene	ND	25	ug/L			
Ethyl benzene	25	25	ug/L			
Xylenes	ND	25	ug/L			
4-Bromofluorobenzene (Surrogate)	102	0	% Recovery	89-110% Limit		
Time Analyzed	0745	0				
PAH AND PHENOLS LIST BY 8270		*1		8270 (2)	04/10/95	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	28	10	ug/L			
2,4,6-Trichlorophenol	ND	10	ug/L			
Nitrobenzene-d5 (Surrogate)	79	0	% Recovery	35-114% Limit		
2-Fluorobiphenyl (Surrogate)	68	0	% Recovery	43-116% Limit		
4-Terphenyl-d14 (Surrogate)	82	0	% Recovery	33-141% Limit		
Phenol-d6 (Surrogate)	69	0	% Recovery	10-94% Limit		
2-Fluorophenol (Surrogate)	55	0	% Recovery	21-100% Limit		

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# CORE LABORATORIES

## LABORATORY TESTS RESULTS 04/13/95

JOB NUMBER: 950718      CUSTOMER: GEOSCIENCE CONSULTANTS, LTD.      ATTN:

CLIENT I.D.: REXENE COC #8398  
DATE SAMPLED: 03/28/95  
TIME SAMPLED: 17:00  
WORK DESCRIPTION: 9503281700

LABORATORY I.D.: 950718-0010  
DATE RECEIVED: 03/29/95  
TIME RECEIVED: 10:15  
REMARKS: TRIP BLANK

TEST DESCRIPTION	FINAL RESULT	LIMITS/*DILUTION	UNITS OF MEASURE	TEST METHOD	DATE	TECHN
602 - VOLATILE AROMATIC ORGANICS		*1		602 (6)	04/05/95	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	89-110% Limit		
Time Analyzed	1328	0				

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# CORE LABORATORIES

## LABORATORY TESTS RESULTS 04/13/95

JOB NUMBER: 950718      CUSTOMER: GEOSCIENCE CONSULTANTS, LTD.      ATTN:

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

LABORATORY I.D....: 950718-0011  
DATE RECEIVED.....: / /  
TIME RECEIVED.....: :  
REMARKS.....:

TEST DESCRIPTION	FINAL RESULT	LIMITS/*DILUTION	UNITS OF MEASURE	TEST METHOD	DATE	TECHN
2,4,6-Tribromophenol (Surrogate) Time Analyzed Date Extracted	82 1113 04/02/95	0 0 0	% Recovery	10-123% Limit		

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# CORE LABORATORIES

## LABORATORY TESTS RESULTS 04/13/95

JOB NUMBER: 950718      CUSTOMER: GEOSCIENCE CONSULTANTS, LTD.      ATTN:

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

LABORATORY I.D....: 950718-0012  
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)	04/07/95	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	89-110% Limit		
Time Analyzed	1753	0				

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# CORE LABORATORIES

## QUALITY CONTROL REPORT 04/13/95

JOB NUMBER: 950718

CUSTOMER: GEOSCIENCE CONSULTANTS, LTD.

ATTN:

8270 - BASE/NEUTRAL/ACID ORGANICS

DATE ANALYZED: 04/10/95

TIME ANALYZED: 09:55

METHOD: 8270 (2)

QC NUMBER: 325938

### B L A N K S

TEST DESCRIPTION	ANALY SUB-TYPE	ANALYSIS I.D.	DILUTION FACTOR	ANALYZED VALUE	DETECTION LIMIT	UNITS OF MEASURE
Time Analyzed	RS	1211	1	0	0	
ate Extracted	RS	04/02/95	1	0	0	

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# CORE LABORATORIES

## QUALITY CONTROL REPORT 04/13/95

JOB NUMBER: 950718      CUSTOMER: GEOSCIENCE CONSULTANTS, LTD.      ATTN:

8270 - BASE/NEUTRAL/ACID ORGANICS      DATE ANALYZED: 04/10/95      TIME ANALYZED: 09:55      METHOD: 8270 (2)      QC NUMBER: 325938

### REFERENCE STANDARDS

TEST DESCRIPTION	ANALYSIS SUB-TYPE	ANALYSIS I. D.	DILUTION FACTOR	ANALYZED VALUE	TRUE VALUE	PERCENT RECOVERY	DETECTION LIMITS	UNITS OF MEASURE
2-Chlorophenol	RS	950146	1	30	42	71	10	ug/L
2,4-Dimethylphenol	RS	950146	1	61	125	49	10	ug/L
o-Cresol (2-Methylphenol)	RS	950146	1	47	111	42	10	ug/L
Pentachlorophenol	RS	950146	1	21	57	37	50	ug/L
Phenol	RS	950146	1	41	90	46	10	ug/L
2,4,6-Trichlorophenol	RS	950146	1	67	131	51	10	ug/L
Nitrobenzene-d5 (Surrogate)	RS	950146	1	46	100	46	0	35-114% Limit
2-Fluorobiphenyl (Surrogate)	RS	950146	1	38	100	38	0	43-116% Limit
4-Terphenyl-d14 (Surrogate)	RS	950146	1	89	100	89	0	33-141% Limit
Phenol-d6 (Surrogate)	RS	950146	1	44	100	44	0	10-94% Limit
2-Fluorophenol (Surrogate)	RS	950146	1	35	100	35	0	21-100% Limit
2,4,6-Tribromophenol (Surrogate)	RS	950146	1	64	100	64	0	10-123% Limit

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# CORE LABORATORIES

## QUALITY CONTROL REPORT 04/13/95

JOB NUMBER: 950718

CUSTOMER: GEOSCIENCE CONSULTANTS, LTD.

ATTN:

602 - VOLATILE AROMATIC ORGANICS

DATE ANALYZED: 04/10/95

TIME ANALYZED: 00:00

METHOD: 602 (6)

QC NUMBER: 325959

### B L A N K S

TEST DESCRIPTION	ANALY SUB-TYPE	ANALYSIS I.D.	DILUTION FACTOR	ANALYZED VALUE	DETECTION LIMIT	UNITS OF MEASURE
Time Analyzed	SB SBD	0420 0455	1 1	0 0	0 0	

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# CORE LABORATORIES

## QUALITY CONTROL REPORT 04/13/95

JOB NUMBER: 950718      CUSTOMER: GEOSCIENCE CONSULTANTS, LTD.      ATTN:

602 - VOLATILE AROMATIC ORGANICS      DATE ANALYZED: 04/07/95      TIME ANALYZED: 16:08      METHOD: 602 (6)      QC NUMBER: 325962

### B L A N K S

TEST DESCRIPTION	ANALY SUB-TYPE	ANALYSIS I.D.	DILUTION FACTOR	ANALYZED VALUE	DETECTION LIMIT	UNITS OF MEASURE
Time Analyzed	SB	1643	1	0	0	
	SBD	1718	1	0	0	

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# CORE LABORATORIES

## QUALITY CONTROL REPORT 04/13/95

JOB NUMBER: 950718

CUSTOMER: GEOSCIENCE CONSULTANTS, LTD.

ATTN:

602 - VOLATILE AROMATIC ORGANICS

DATE ANALYZED: 04/07/95 TIME ANALYZED: 16:08 METHOD: 602 (6)

QC NUMBER: 325962

### REFERENCE STANDARDS

TEST DESCRIPTION	ANALYSIS SUB-TYPE	ANALYSIS I. D.	DILUTION FACTOR	ANALYZED VALUE	TRUE VALUE	PERCENT RECOVERY	DETECTION LIMITS	UNITS OF MEASURE
Benzene	SB	T950407A	1	20.0	20.0	100	0.5	ug/L
	SBD	T950407A	1	19.1	20.0	96	0.5	ug/L
Toluene	SB	T950407A	1	20.5	20.0	102	0.5	ug/L
	SBD	T950407A	1	19.4	20.0	97	0.5	ug/L
Ethyl benzene	SB	T950407A	1	20.9	20.0	104	0.5	ug/L
	SBD	T950407A	1	19.6	20.0	98	0.5	ug/L
Xylenes	SB	T950407A	1	66.1	60.0	110	0.5	ug/L
	SBD	T950407A	1	62.1	60.0	103	0.5	ug/L
4-Bromofluorobenzene (Surrogate)	SB	T950407A	1	104	100	104	0	89-110% Limit
	SBD	T950407A	1	105	100	105	0	89-110% Limit

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# CORE LABORATORIES

## QUALITY CONTROL REPORT 04/13/95

JOB NUMBER: 950718

CUSTOMER: GEOSCIENCE CONSULTANTS, LTD.

ATTN:

602 - VOLATILE AROMATIC ORGANICS

DATE ANALYZED: 04/05/95

TIME ANALYZED: 12:05

METHOD: 602 (6)

QC NUMBER: 326245

### B L A N K S

TEST DESCRIPTION	ANALY SUB-TYPE	ANALYSIS I.D.	DILUTION FACTOR	ANALYZED VALUE	DETECTION LIMIT	UNITS OF MEASURE
Time Analyzed	SB	0029 04/06	1	0	0	
	SBD	0110 04/06	1	0	0	

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# CORE LABORATORIES

## QUALITY CONTROL REPORT 04/13/95

JOB NUMBER: 950718

CUSTOMER: GEOSCIENCE CONSULTANTS, LTD.

ATTN:

602 - VOLATILE AROMATIC ORGANICS

DATE ANALYZED: 04/05/95

TIME ANALYZED: 12:05

METHOD: 602 (6)

QC NUMBER: 326245

### REFERENCE STANDARDS

TEST DESCRIPTION	ANALYSIS SUB-TYPE	ANALYSIS I. D.	DILUTION FACTOR	ANALYZED VALUE	TRUE VALUE	PERCENT RECOVERY	DETECTION LIMITS	UNITS OF MEASURE
Benzene	SB	T950405A	1	21.9	20.0	110	0.5	ug/L
	SBD	T950405A	1	22.2	20.0	111	0.5	ug/L
Toluene	SB	T950405A	1	22.3	20.0	112	0.5	ug/L
	SBD	T950405A	1	22.7	20.0	114	0.5	ug/L
Ethyl benzene	SB	T950405A	1	22.4	20.0	112	0.5	ug/L
	SBD	T950405A	1	23.0	20.0	115	0.5	ug/L
Xylenes	SB	T950405A	1	66.3	60.0	110	0.5	ug/L
	SBD	T950405A	1	67.5	60.0	112	0.5	ug/L
4-Bromofluorobenzene (Surrogate)	SB	T950405A	1	110	100	110	0	89-110% Limit
	SBD	T950405A	1	110	100	110	0	89-110% Limit

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# Certification

## PriorityPollutnT™/CLP Quality Control Standards

Organics in Water  
Catalog No. PP- 41

Lot No. 562

Parameter	Certified Value	Performance Acceptance Limits™
<b>VOLATILES</b>		
(Catalog No. 710)	µg/l	µg/l
Benzene	34.8	28.9 - 43.2
Bromodichloromethane	24.7	19.0 - 30.9
Bromoform	44.0	32.1 - 56.8
Carbon tetrachloride	110	79.1 - 140
Chlorobenzene	129	96.6 - 156
Chloroform	74.1	55.9 - 91.1
Chlorodibromomethane	60.5	45.7 - 75.0
1,2-Dichlorobenzene	60.4	45.8 - 73.1
1,3-Dichlorobenzene	81.1	60.6 - 98.9
1,4-Dichlorobenzene	129	96.0 - 160
1,2-Dichloroethane	52.5	40.5 - 65.6
Ethylbenzene	58.9	43.5 - 73.0
Methylene chloride	23.4	15.9 - 31.1
4-Methyl-2-pentanone (MIBK)	141	81.1 - 196
Tetrachloroethylene	30.1	21.9 - 36.7
Toluene	127	97.9 - 154
1,1,1-Trichloroethane	18.4	12.9 - 22.1
Trichloroethylene	58.3	43.3 - 70.5
<b>BASE/NEUTRALS</b>		
(Catalog No. 711)	µg/l	µg/l
Acenaphthylene	64.3	29.8 - 73.3
Anthracene	29.1	13.6 - 33.8
4-Bromophenyl-phenylether	90.8	42.8 - 109
Chrysene	48.1	22.3 - 58.7
Dibenzofuran	111	53.3 - 128
1,2-Dichlorobenzene	38.0	9.99 - 42.9
2,4-Dinitrotoluene	79.0	28.8 - 94.0
bis(2-Ethylhexyl)phthalate	142	54.7 - 182
Fluoranthene	121	52.3 - 163
Isophorone	140	61.2 - 161
Naphthalene	24.7	9.61 - 28.7
N-Nitroso-di-n-propylamine	73.1	36.6 - 89.9
Pyrene	74.2	32.7 - 94.2
1,2,4-Trichlorobenzene	60.9	19.7 - 71.9
<b>ACIDS</b>		
(Catalog No. 712)	µg/l	µg/l
2-Chlorophenol 2CLPHE	42.0	18.1 - 47.0
2,4-Dimethylphenol 24DMPH	125	42.4 - 153
2-Methylphenol 2MPHEN	111	34.0 - 132
Pentachlorophenol PENTCL	56.8	17.7 - 71.6
Phenol PHENOL	89.9	9.17 - 109
2,4,6-Trichlorophenol 246 TCP	131	57.4 - 147

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# CORE LABORATORIES

## QUALITY CONTROL FOOTER

### METHOD REFERENCES

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

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

#### Blank QC Sample Identification

MB Method Blank  
 ICB Initial Calibration Blank  
 CCB Continuing Calibration Blank

#### Reference Standard QC Sample Identification

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

#### Spike QC Sample Identification

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

#### Duplicate QC Sample Identification

SBD Spiked Blank Duplicate  
 MD Method (Matrix) Duplicate  
 ED Extraction Duplicate  
 DD Digestion Duplicate

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

<u>Subcontract Laboratory</u>	<u>Code</u>	<u>Subcontract Laboratory</u>	<u>Code</u>
Core Laboratories - Anaheim, CA	• AN	Core Laboratories - Lake Charles, LA	• LC
Core Laboratories - Casper, WY	• CA	Core Laboratories - Long Beach, CA	• LB
Core Laboratories - Corpus Christi, TX	• CC	Other Subcontract Laboratories	• XX
Core Laboratories - Houston, TX	• HP		

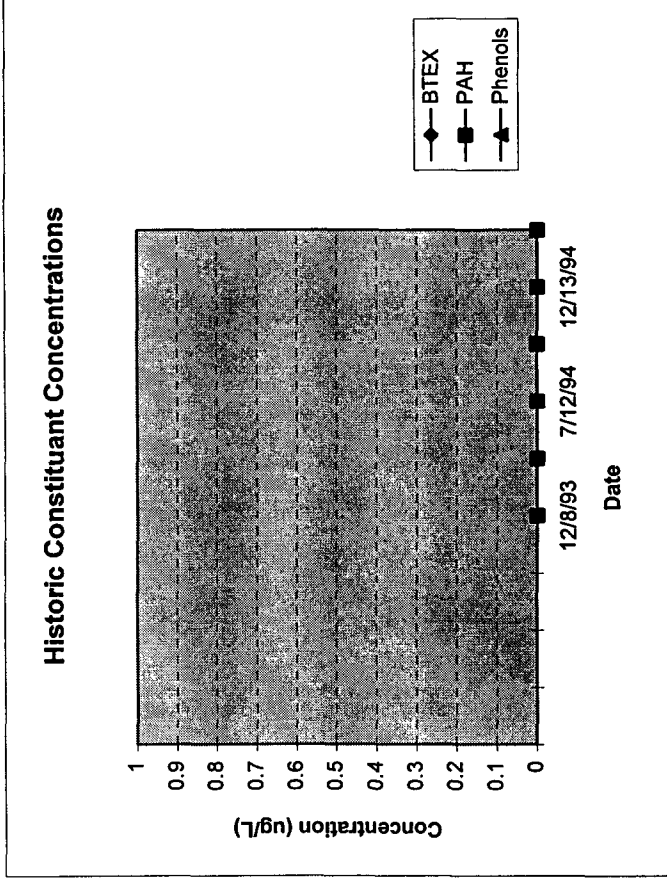
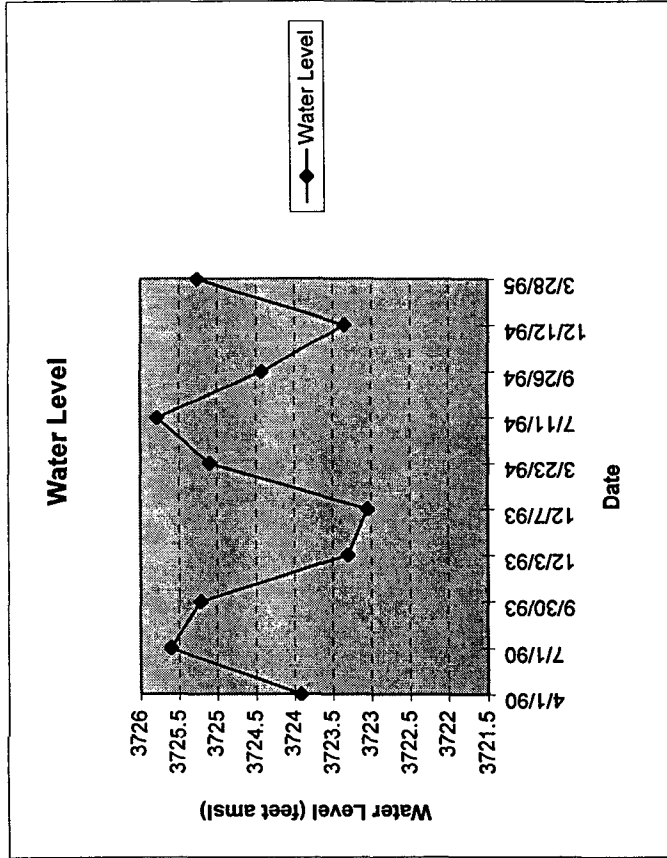
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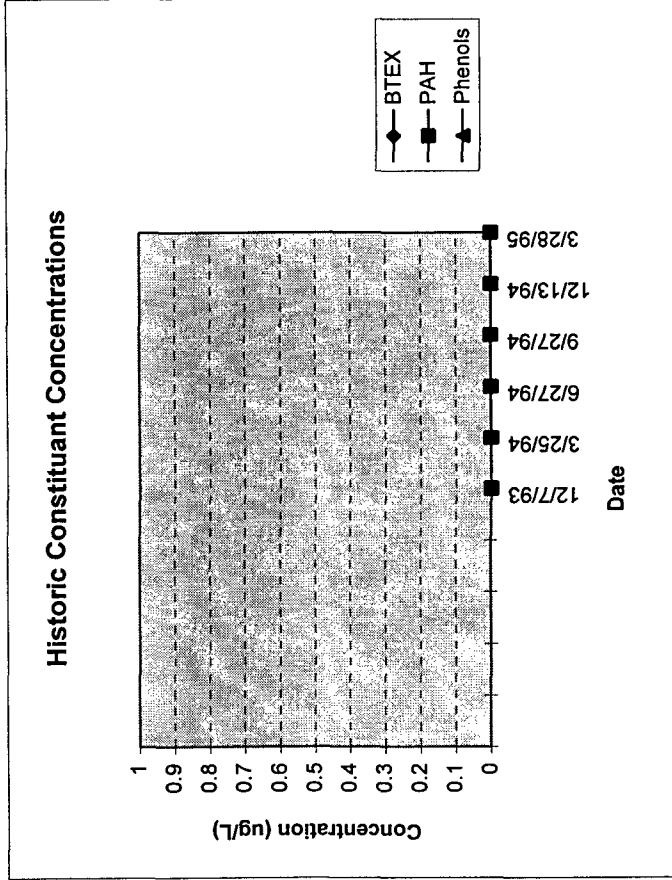
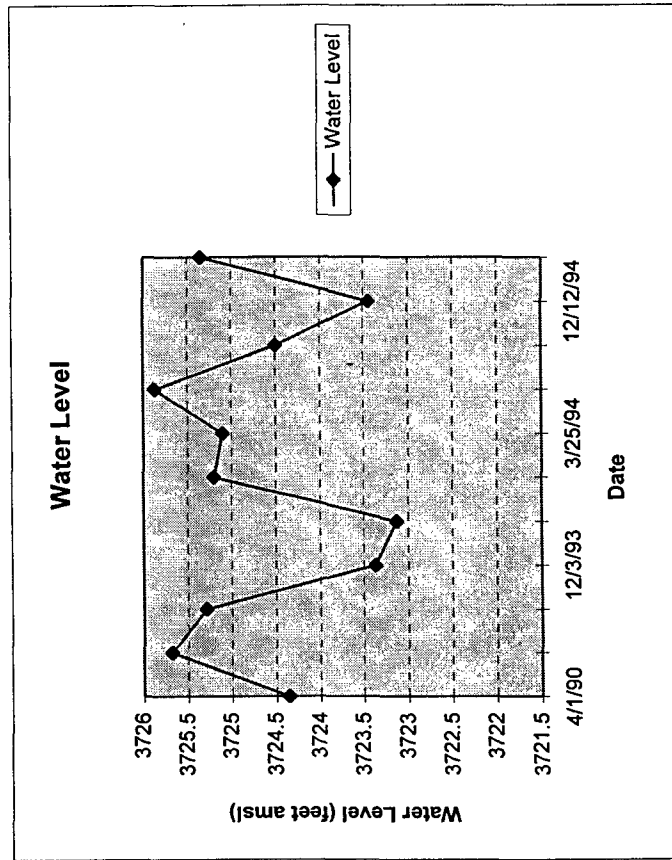
**Appendix C**

Groundwater Monitoring Data  
Concentration vs. Time Plots

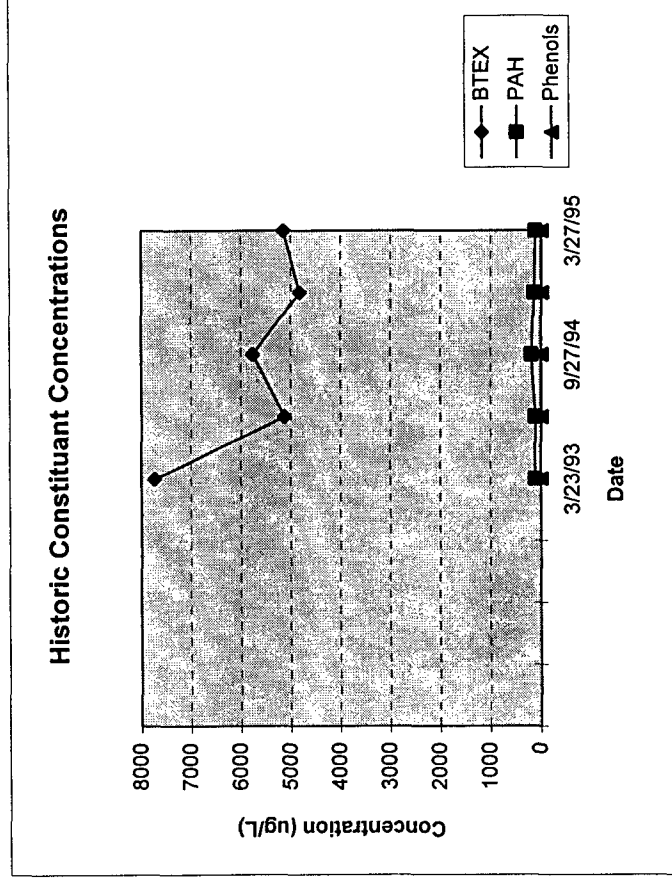
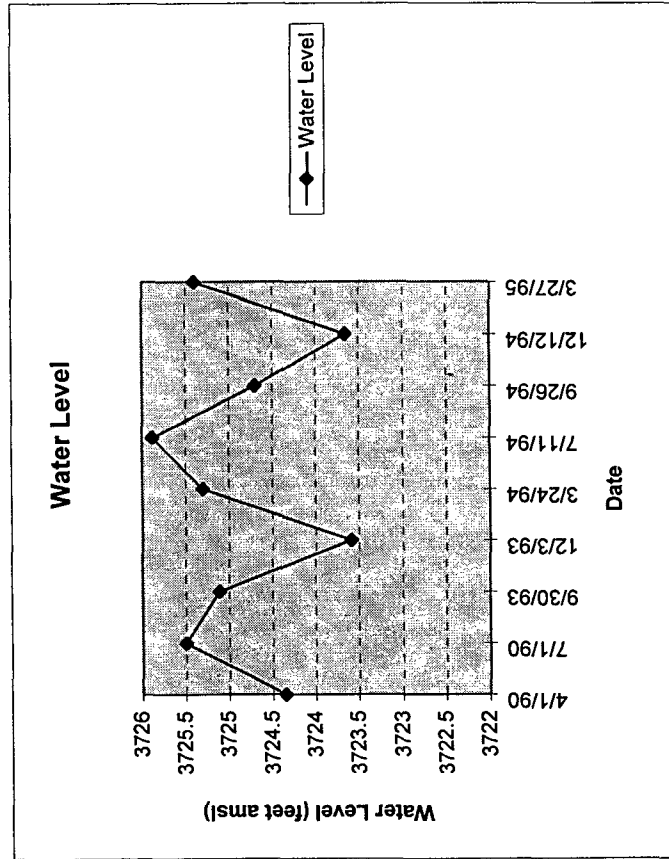
MW-3D	Date	Water Level	Date	BTEX	PAH	Phenols
	4/1/90	3723.92				
	7/1/90	3725.6				
	9/30/93	3725.22				
	12/3/93	3723.3				
	12/7/93	3723.05	12/8/93	0	0	0
	3/23/94	3725.1	3/23/94	0	0	0
	7/11/94	3725.78	7/12/94	0	0	0
	9/26/94	3724.42	9/28/94	0	0	0
	12/12/94	3723.35	12/13/94	0	0	0
	3/28/95	3725.26	3/28/95	0	0	0



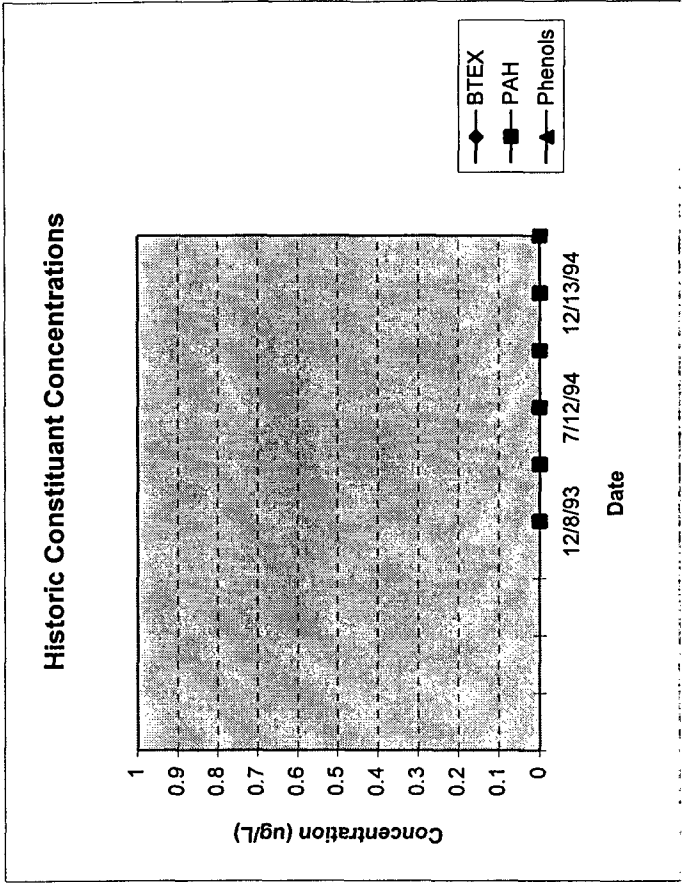
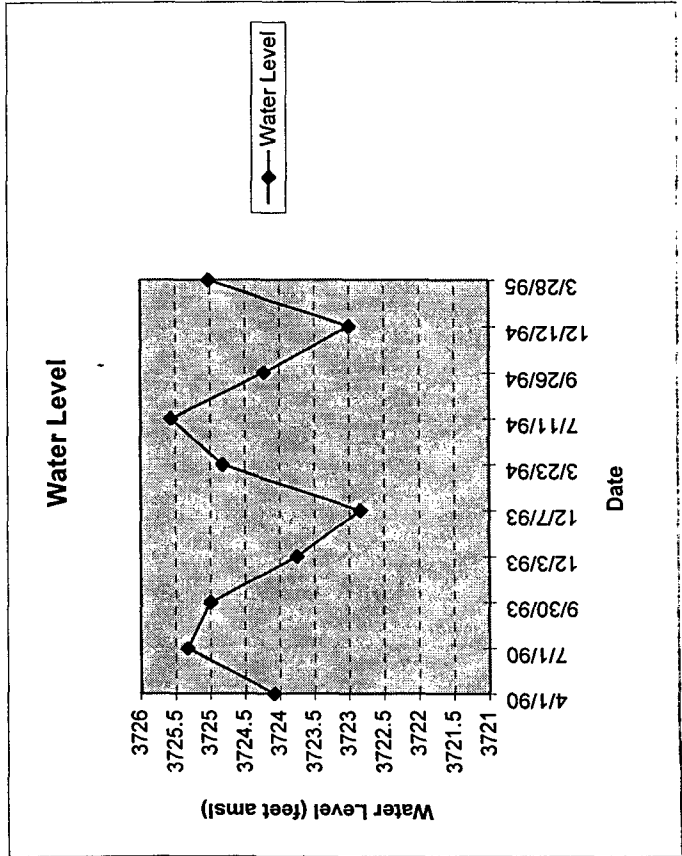
MW-3S	Date	Water Level	Date	BTEX	PAH	Phenols
	4/1/90	3724.36				
	7/1/90	3725.68				
	9/30/93	3725.29				
	12/3/93	3723.37				
	12/7/93	3723.13				
	3/23/94	3725.2	12/7/93	0	0	0
	3/25/94	3725.1	3/25/94	0	0	0
	7/11/94	3725.87	6/27/94	0	0	0
	9/26/94	3724.5	9/27/94	0	0	0
	12/12/94	3723.44	12/13/94	0	0	0
	3/27/95	3725.35	3/28/95	0	0	0



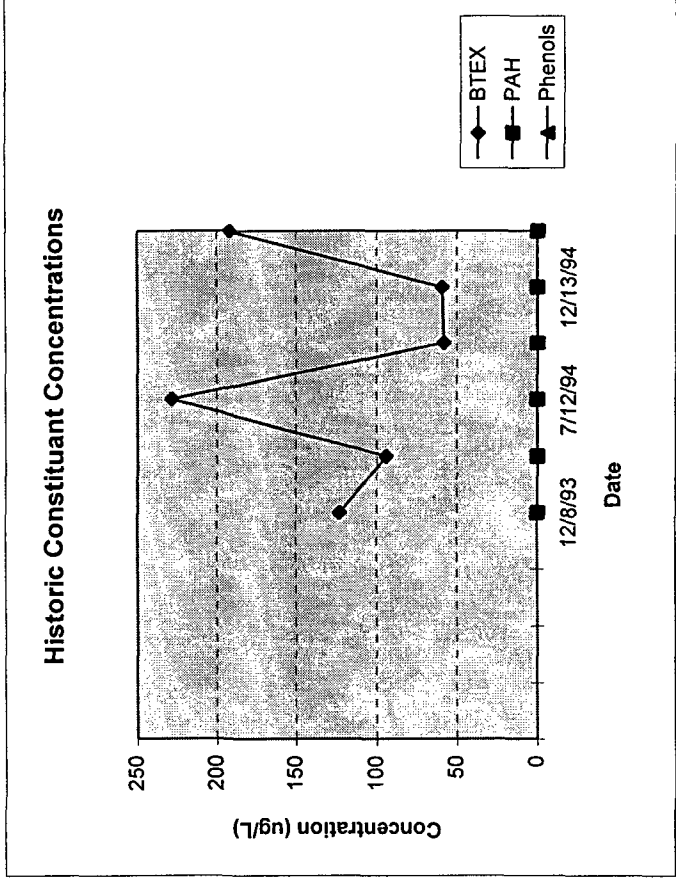
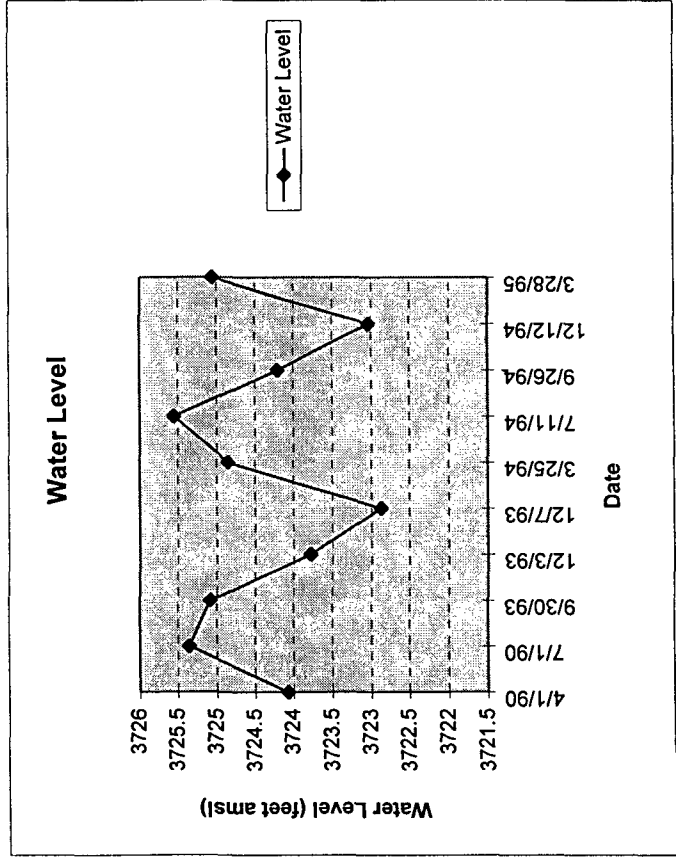
MW-5					
Date	Water Level	Date	BTEX	PAH	Phenols
4/1/90	3724.35				
7/1/90	3725.5				
9/30/93	3725.11				
12/3/93	3723.59				
3/24/94	3725.3	3/23/93	7733	107	0
7/11/94	3725.88	6/27/94	5130	117	0
9/26/94	3724.7	9/27/94	5760	191	0
12/12/94	3723.65	12/13/94	4824	139	0
3/27/95	3725.4	3/27/95	5150	117	0



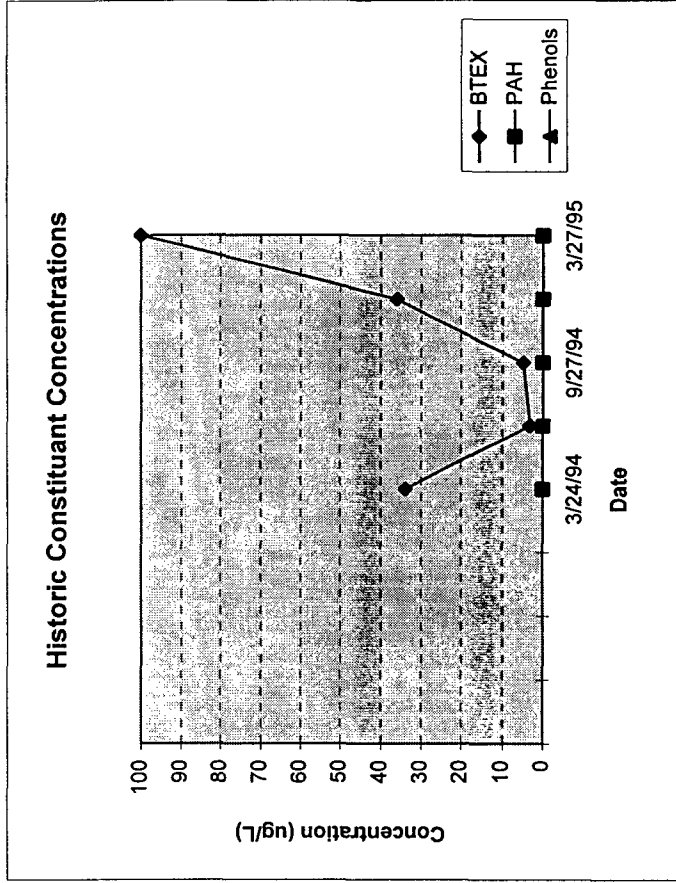
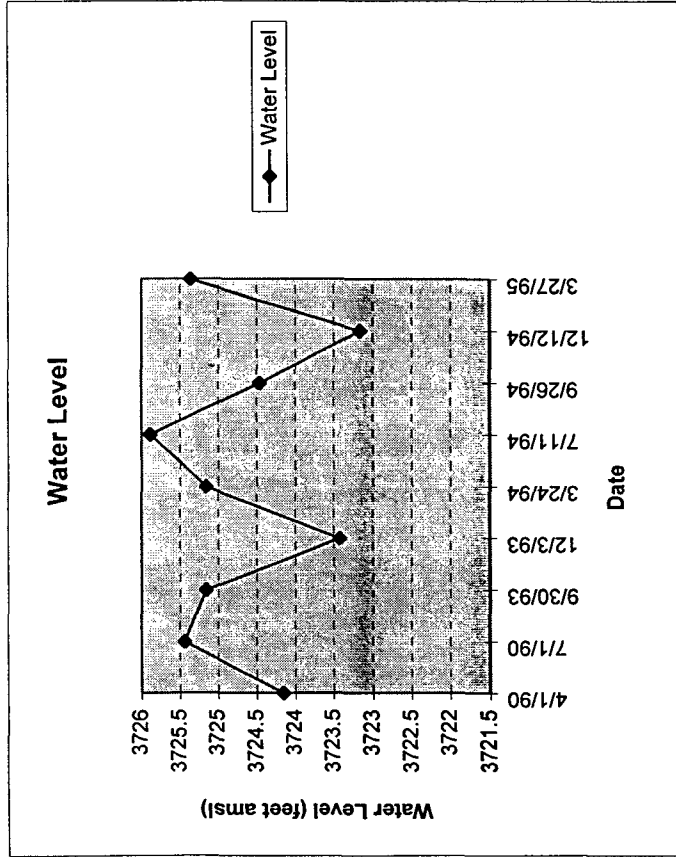
MW-6D						
Date	Water Level	Date	BTEX	PAH	Phenols	
4/1/90	3724.08					
7/1/90	3725.33					
9/30/93	3725					
12/3/93	3723.75					
12/7/93	3722.84	12/8/93	0	0	0	
3/23/94	3724.82	3/23/94	0	0	0	
7/11/94	3725.57	7/12/94	0	0	0	
9/26/94	3724.22	9/28/94	0	0	0	
12/12/94	3723	12/13/94	0	0	0	
3/28/95	3725.02	3/28/95	0	0	0	



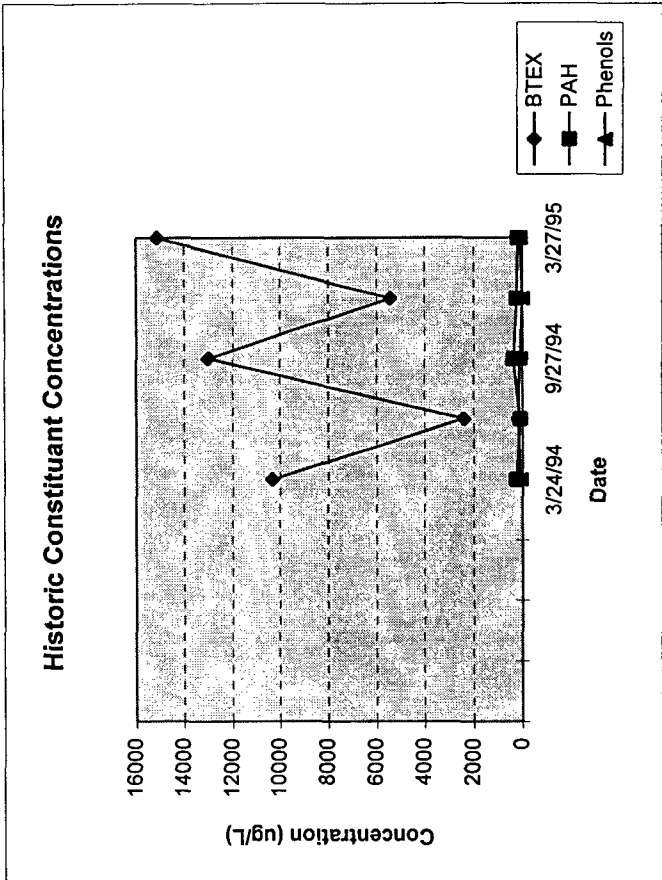
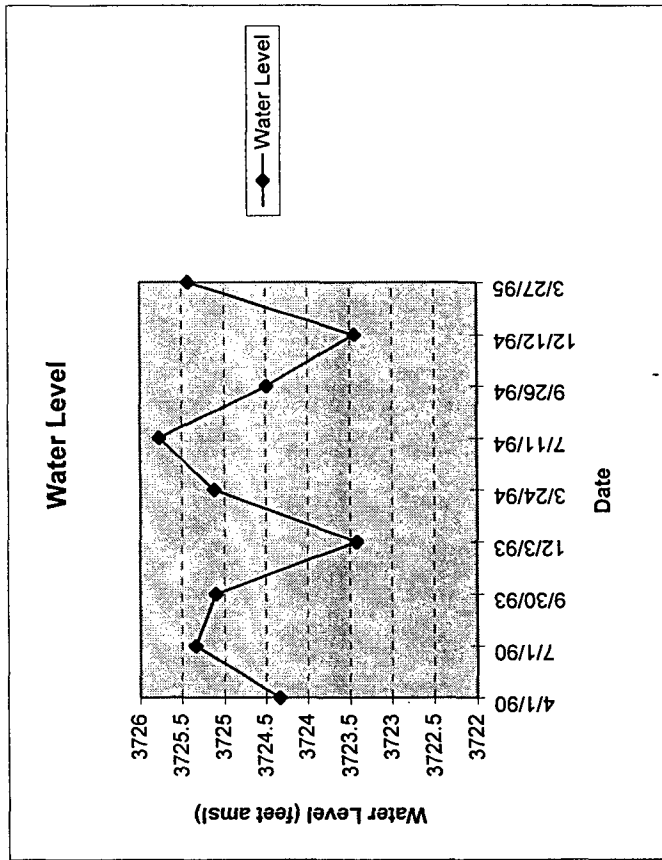
Date	Water Level	Date	BTEX	PAH	Phenols
4/1/90	3724.07				
7/1/90	3725.35				
9/30/93	3725.08				
12/3/93	3723.78				
12/7/93	3722.87	12/8/93	123	0	0
3/25/94	3724.85	3/25/94	94	0	0
7/11/94	3725.55	7/12/94	228	0	0
9/26/94	3724.2	9/28/94	58	0	0
12/12/94	3723.03	12/13/94	59	0	0
3/28/95	3725.05	3/28/95	192	0	0



MW-7	Date	Water Level	Date	BTEX	PAH	Phenols
	4/1/90	3724.16				
	7/1/90	3725.44				
	9/30/93	3725.16				
	12/3/93	3723.42				
	3/24/94	3725.16	3/24/94	33.9	0	0
	7/11/94	3725.89	7/12/94	3.2	0	0
	9/26/94	3724.46	9/27/94	4.9	0	0
	12/12/94	3723.16	12/13/94	36	0	0
	3/27/95	3725.36	3/27/95	100	0	0

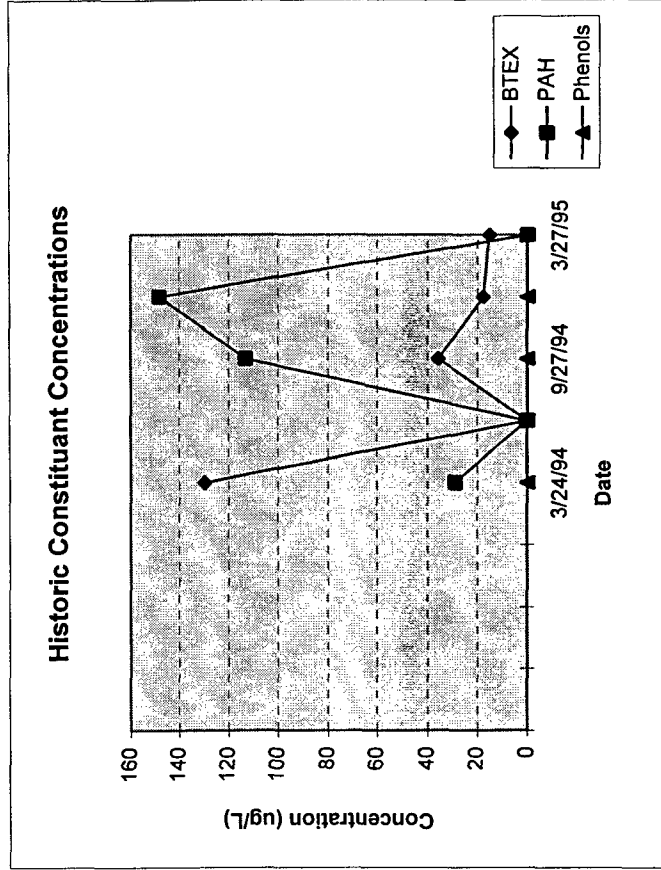
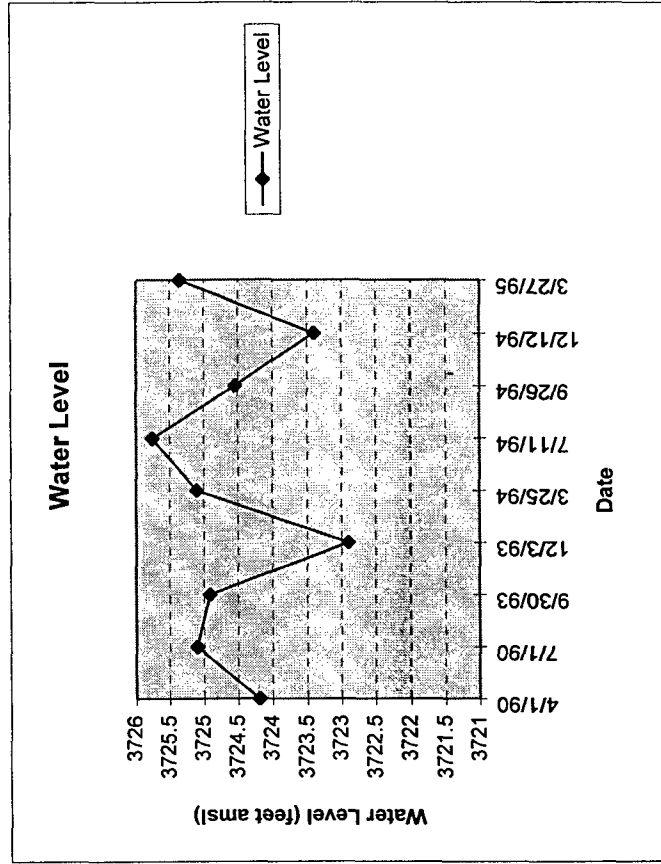


MW-8	Date	Water Level	Date	BTEX	PAH	Phenols
	4/1/90	3724.33				
	7/1/90	3725.34				
	9/30/93	3725.1				
	12/3/93	3723.42				
	3/24/94	3725.12	3/24/94	10320	250	96
	7/11/94	3725.77	7/12/94	2400	93	166
	9/26/94	3724.49	9/27/94	13000	366	110
	12/12/94	3723.45	12/13/94	5440	236	0
	3/27/95	3725.42	3/27/95	15100	180	87

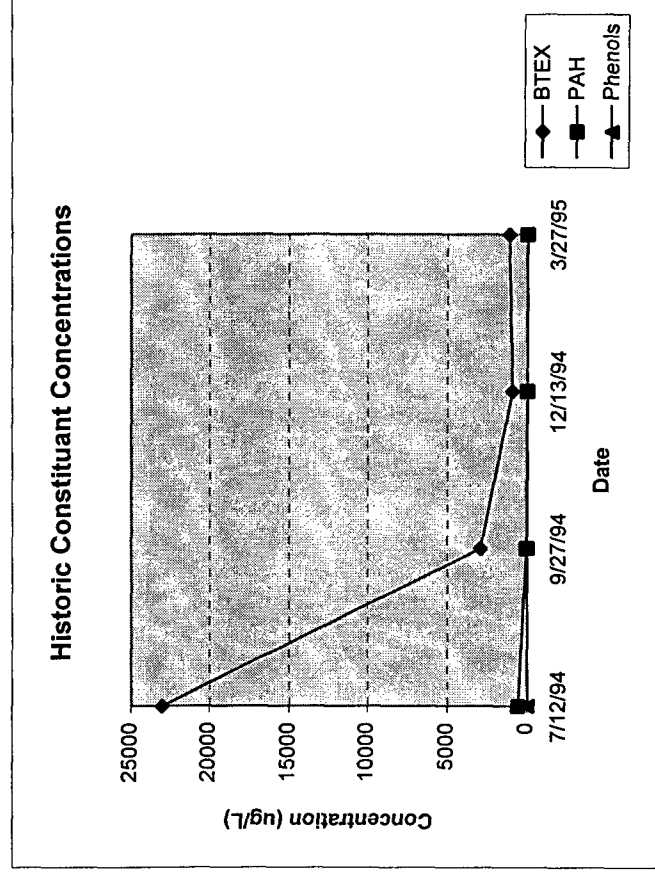
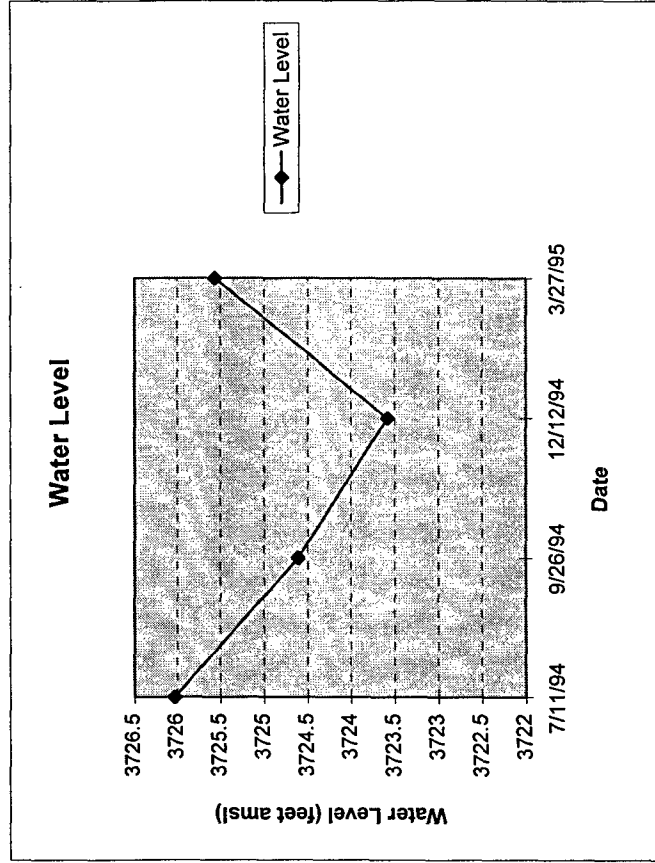




MW-11	Date	Water Level	Date	BTEX	PAH	Phenols
	4/1/90	3724.19				
	7/1/90	3725.1				
	9/30/93	3724.91				
	12/3/93	3722.9				
	3/25/94	3725.1	3/24/94	129.8	29	0
	7/11/94	3725.75	7/12/94	0	0	0
	9/26/94	3724.54	9/27/94	35.6	113	0
	12/12/94	3723.4	12/13/94	17.5	148	0
	3/27/95	3725.35	3/27/95	15	0	0

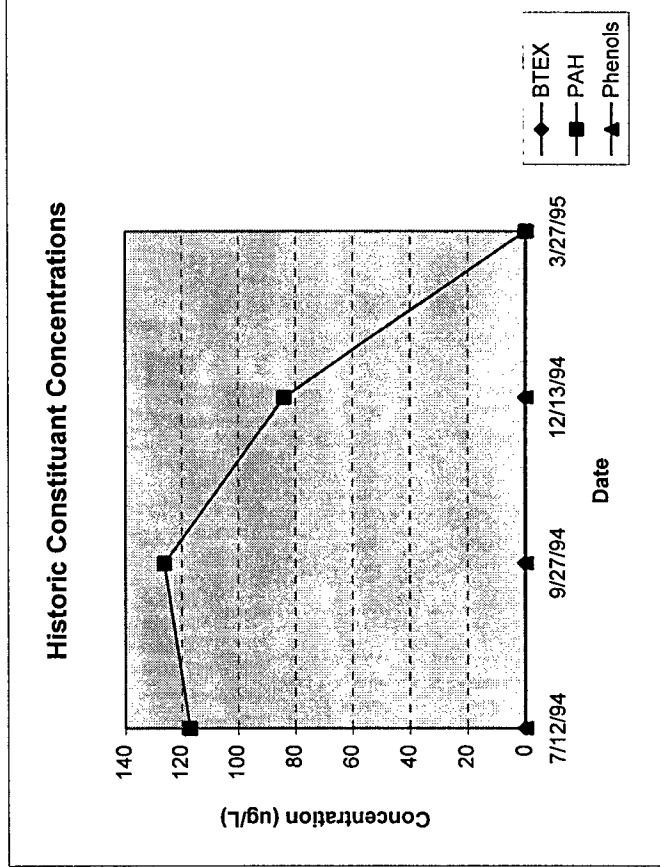
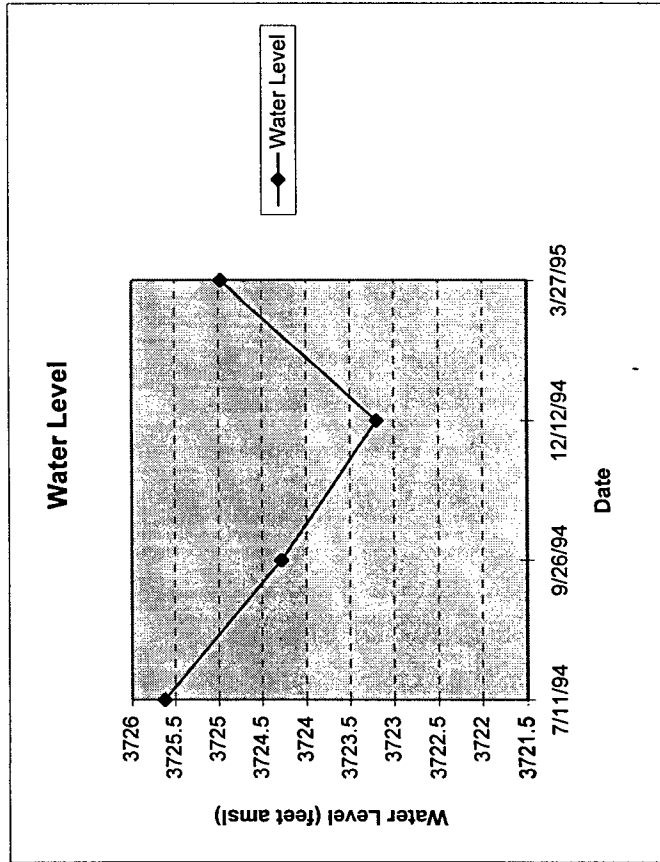


MW-14	Date	Water Level	Date	BTEX	PAH	Phenols
	7/11/94	3726.03	7/12/94	23000	570	0
	9/26/94	3724.61	9/27/94	2900	40	0
	12/12/94	3723.58	12/13/94	930	0	0
	3/27/95	3725.56	3/27/95	1125	0	0

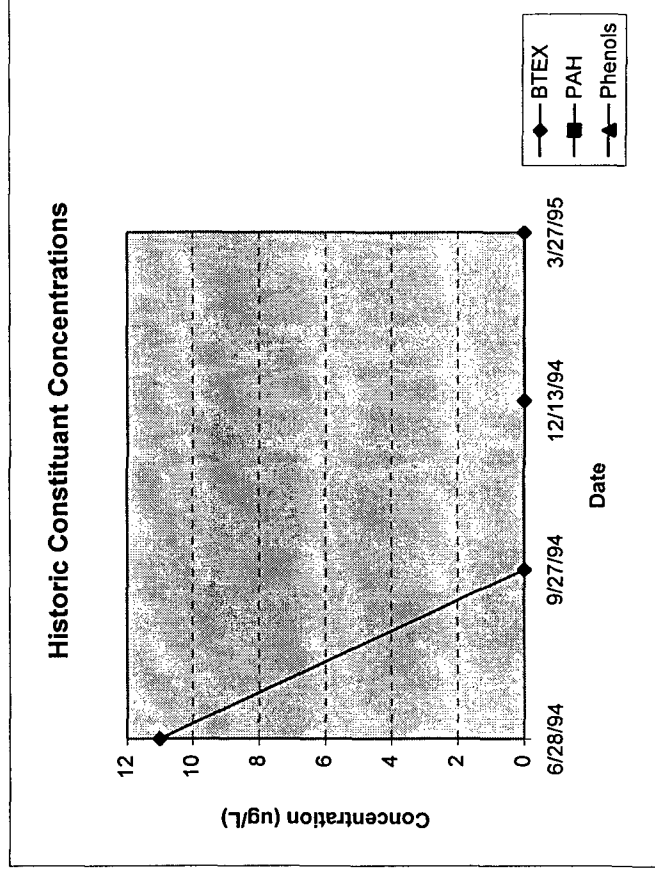
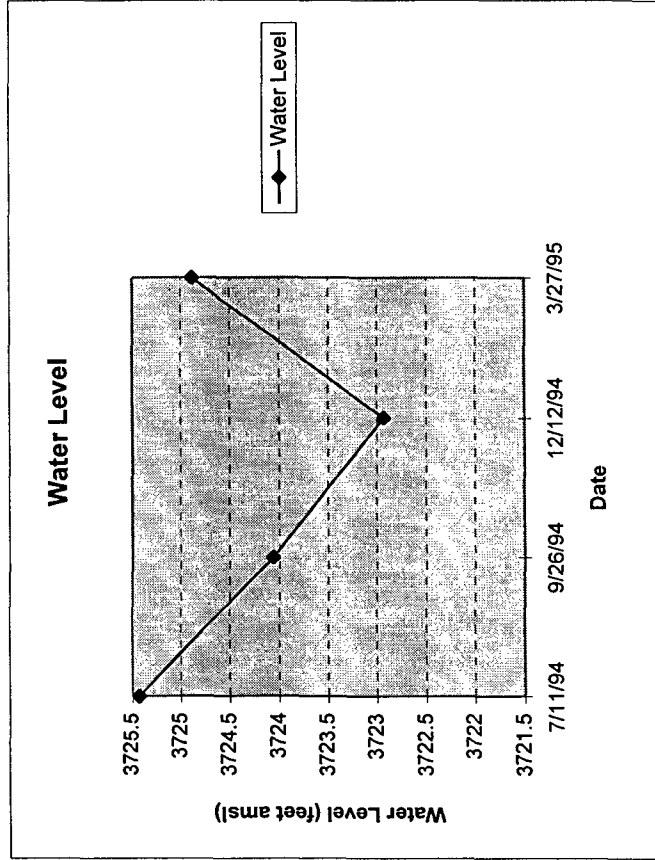


MW-15

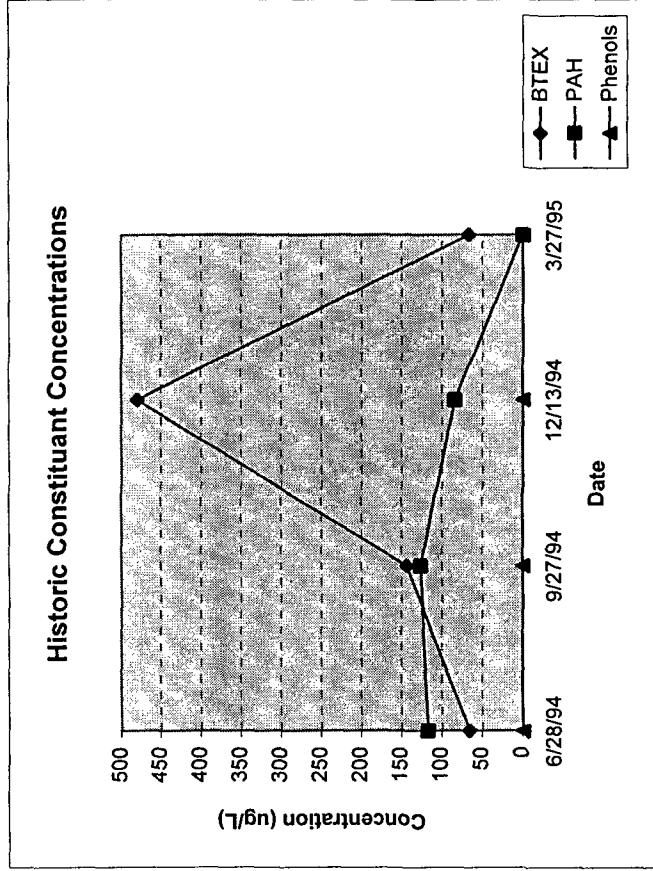
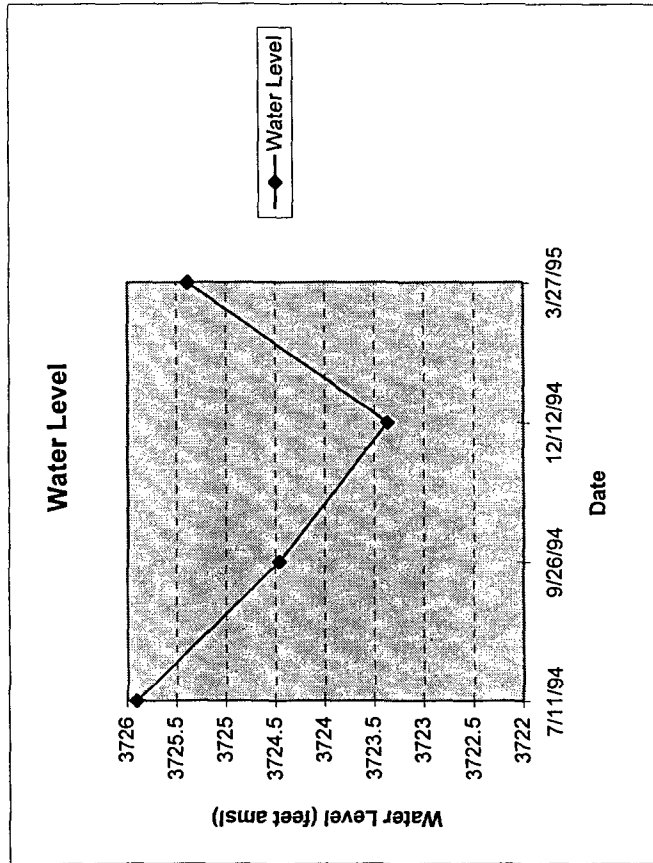
MW-15	Date	Water Level	BTEX	PAH	Phenols
	7/11/94	3725.62		117	0
	9/26/94	3724.28		126	0
	12/12/94	3723.19		84	0
	3/27/95	3724.97		0	0



MW-16	Date	Water Level	Date	BTEX	PAH	Phenols
	7/11/94	3725.43	6/28/94	11		
	9/26/94	3724.06	9/27/94	0		
	12/12/94	3722.93	12/13/94	0		
	3/27/95	3724.88	3/27/95	0		



MW-17	Date	Water Level	Date	BTEX	PAH	Phenols
	7/11/94	3725.9	6/28/94	66	117	0
	9/26/94	3724.46	9/27/94	143.2	126	0
	12/12/94	3723.36	12/13/94	480	84	0
	3/27/95	3725.38	3/27/95	67	0	0



Water Level Data at Rexene - Brickland Facility

Well ID	TOC Elevation (ft. AMSL)	Ground Elevation (ft. AMSL)	TOS Elevation (ft. AMSL)	Measure Date	Depth to Product (ft. BTOC)	Depth to WL (ft. BTOC)	WL Elevation (ft. AMSL)	WL to TOS (ft.)	Screen Length (ft.)
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Water Level Data at Rexene - Brickland Facility

Well ID	TOC Elevation (ft. AMSL)	Ground Elevation (ft. AMSL)	TOS Elevation (ft. AMSL)	Measure Date	Depth to Product (ft. BTOC)	Depth to WL (ft. BTOC)	WL Elevation (ft. AMSL)	WL to TOS (ft.)	Screen Length (ft.)
MW-1	3730.57	3728.87	3723.92	04/01/90	--	--	3724.91	-0.99	10.00
MW-1	3730.57		3723.92	07/01/90	--	--	3726.19	-2.27	
MW-1	3730.57		3723.92	09/30/93	--	--	3725.78	-1.86	
MW-1	3730.57		3723.92	12/03/93	--	6.27	3724.30	-0.38	
MW-1	3730.57		3723.92	12/07/93	--	6.44	3724.13	-0.21	
MW-1	3730.57		3723.92	03/23/94	NP	5.30	3725.27	-1.35	
MW-1	3730.57		3723.92	07/11/94	NP	4.03	3726.54	-2.62	
MW-1	3730.57		3723.92	09/26/94	NP	5.20	3725.37	-1.45	
MW-1	3730.57		3723.92	12/12/94	NP	6.22	3724.35	-0.43	
MW-2	3730.49	3729.33	NA	04/01/90	--	--	3726.74	NA	
MW-2	3730.49		NA	07/01/90	--	--	3727.92	NA	
MW-2	3730.49		NA	09/30/93	NM	NM			
MW-2	3730.49		NA	12/03/93	NM	NM			
MW-2	3730.49		NA	03/23/94	NP	4.10	3726.39	NA	
MW-2	3730.49		NA	07/11/94	NP	3.95	3726.54	NA	
MW-2	3730.49		NA	09/26/94	NP	4.60	3725.89	NA	
MW-2	3730.49		NA	12/12/94	NP	6.52	3723.97	NA	
MW-3s	3730.00	3727.81	3723.50	04/01/90	--	--	3724.36	-0.86	10.00
MW-3s	3730.00		3723.50	07/01/90	--	--	3725.68	-2.18	
MW-3s	3730.00		3723.50	09/30/93	--	--	3725.29	-1.79	
MW-3s	3730.00		3723.50	12/03/93	--	6.63	3723.37	0.13	
MW-3s	3730.00		3723.50	12/07/93	--	6.87	3723.13	0.37	
MW-3s	3730.00		3723.50	03/23/94	NP	4.80	3725.20	-1.70	
MW-3s	3730.00		3723.50	03/25/94	NP	4.90	3725.10	-1.60	
MW-3s	3730.00		3723.50	07/11/94	NP	4.13	3725.87	-2.37	
MW-3s	3730.00		3723.50	09/26/94	NP	5.50	3724.50	-1.00	
MW-3s	3730.00		3723.50	12/12/94	NP	6.56	3723.44	0.06	
MW-3s	3730.00		3723.50	03/27/95	NP	4.65	3725.35	-1.85	

Water Level Data at Rexene - Brickland Facility

Well ID	TOC Elevation (ft. AMSL)	Ground Elevation (ft. AMSL)	TOS Elevation (ft. AMSL)	Measure Date	Depth to Product (ft. BTOC)	Depth to WL (ft. BTOC)	WL Elevation (ft. AMSL)	WL to TOS (ft.)	Screen Length (ft.)
MW-3d	3730.00	3727.93	3707.00	04/01/90	--	--	3723.92	-16.92	10.00
MW-3d	3730.00		3707.00	07/01/90	--	--	3725.60	-18.60	
MW-3d	3730.00		3707.00	09/30/93	--	--	3725.22	-18.22	
MW-3d	3730.00		3707.00	12/03/93	--	6.70	3723.30	-16.30	
MW-3d	3730.00		3707.00	12/07/93	--	6.95	3723.05	-16.05	
MW-3d	3730.00		3707.00	03/23/94	NP	4.90	3725.10	-18.10	
MW-3d	3730.00		3707.00	07/11/94	NP	4.22	3725.78	-18.78	
MW-3d	3730.00		3707.00	09/26/94	NP	5.58	3724.42	-17.42	
MW-3d	3730.00		3707.00	12/12/94	NP	6.65	3723.35	-16.35	
MW-3d	3730.00		3707.00	03/28/95	NP	4.74	3725.26	-18.26	
MW-4	3728.86	3727.50	3722.76	04/01/90	--	--	3724.37	-1.61	10.00
MW-4	3728.86		3722.76	07/01/90	--	--	3725.59	-2.83	
MW-4	3728.86		3722.76	09/30/93	--	--	3725.21	-2.45	
MW-4	3728.86		3722.76	12/03/93	--	5.27	3723.59	-0.83	
MW-4	3728.86		3722.76	03/23/94	NP	3.50	3725.36	-2.60	
MW-4	3728.86		3722.76	07/11/94	NP	3.30	3725.56	-2.80	
MW-4	3728.86		3722.76	09/26/94	NP	4.18	3724.68	-1.92	
MW-4	3728.86		3722.76	12/12/94	NP	5.22	3723.64	-0.88	
MW-4	3728.86		3722.76	03/27/95	NP	3.30	3725.56	-2.80	
MW-5	3729.70	3728.29	3725.20	04/01/90	--	--	3724.35	0.85	10.00
MW-5	3729.70		3725.20	07/01/90	--	--	3725.50	-0.30	
MW-5	3729.70		3725.20	09/30/93	--	--	3725.11	0.09	
MW-5	3729.70		3725.20	12/03/93	--	6.11	3723.59	1.61	
MW-5	3729.70		3725.20	03/24/94	NP	4.40	3725.30	-0.10	
MW-5	3729.70		3725.20	07/11/94	NP	3.82	3725.88	-0.68	
MW-5	3729.70		3725.20	09/26/94	NP	5.00	3724.70	0.50	
MW-5	3729.70		3725.20	12/12/94	NP	6.05	3723.65	1.55	
MW-5	3729.70		3725.20	03/27/95	NP	4.30	3725.40	-0.20	

Water Level Data at Rexene - Brickland Facility

Well ID	TOC Elevation (ft. AMSL)	Ground Elevation (ft. AMSL)	TOS Elevation (ft. AMSL)	Measure Date	Depth to Product (ft. BTOC)	Depth to WL (ft. BTOC)	WL Elevation (ft. AMSL)	WL to TOS (ft.)	Screen Length (ft.)
MW-6s	3730.65	3728.46	3724.05	04/01/90	--	--	3724.07	-0.02	10.00
MW-6s	3730.65		3724.05	07/01/90	--	--	3725.35	-1.30	
MW-6s	3730.65		3724.05	09/30/93	--	--	3725.08	-1.03	
MW-6s	3730.65		3724.05	12/03/93	--	--	3723.78	0.27	
MW-6s	3730.65		3724.05	12/07/93	--	7.78	3722.87	1.18	
MW-6s	3730.65		3724.05	03/25/94	NP	5.80	3724.85	-0.80	
MW-6s	3730.65		3724.05	07/11/94	NP	5.10	3725.55	-1.50	
MW-6s	3730.65		3724.05	09/26/94	NP	6.45	3724.20	-0.15	
MW-6s	3730.65		3724.05	12/12/94	NP	7.62	3723.03	1.02	
MW-6s	3730.65		3724.05	03/28/95	NP	5.60	3725.05	-1.00	
MW-6d	3730.62	3728.59	3703.12	04/01/90	--	--	3724.08	-20.96	10.00
MW-6d	3730.62		3703.12	07/01/90	--	--	3725.33	-22.21	
MW-6d	3730.62		3703.12	09/30/93	--	--	3725.00	-21.88	
MW-6d	3730.62		3703.12	12/03/93	--	--	3723.75	-20.63	
MW-6d	3730.62		3703.12	12/07/93	--	7.78	3722.84	-19.72	
MW-6d	3730.62		3703.12	03/23/94	NP	5.80	3724.82	-21.70	
MW-6d	3730.62		3703.12	07/11/94	NP	5.05	3725.57	-22.45	
MW-6d	3730.62		3703.12	09/26/94	NP	6.40	3724.22	-21.10	
MW-6d	3730.62		3703.12	12/12/94	NP	7.62	3723.00	-19.88	
MW-6d	3730.62		3703.12	03/28/95	NP	5.60	3725.02	-21.90	
MW-7	3728.96	3727.75	3723.16	04/01/90	--	--	3724.16	-1.00	10.00
MW-7	3728.96		3723.16	07/01/90	--	--	3725.44	-2.28	
MW-7	3728.96		3723.16	09/30/93	--	--	3725.16	-2.00	
MW-7	3728.96		3723.16	12/03/93	--	5.54	3723.42	-0.26	
MW-7	3728.96		3723.16	03/24/94	NP	3.80	3725.16	-2.00	
MW-7	3728.96		3723.16	07/11/94	NP	3.07	3725.89	-2.73	
MW-7	3728.96		3723.16	09/26/94	NP	4.50	3724.46	-1.30	
MW-7	3728.96		3723.16	12/12/94	NP	5.80	3723.16	0.00	
MW-7	3728.96		3723.16	03/27/95	NP	3.60	3725.36	-2.20	



Water Level Data at Rexene - Brickland Facility

Well ID	TOC Elevation (ft. AMSL)	Ground Elevation (ft. AMSL)	TOS Elevation (ft. AMSL)	Measure Date	Depth to Product (ft. BTOC)	Depth to WL (ft. BTOC)	WL Elevation (ft. AMSL)	WL to TOS (ft.)	Screen Length (ft.)
MW-8	3729.22	3727.72	3724.52	04/01/90	--	--	3724.33	0.19	10.00
MW-8	3729.22		3724.52	07/01/90	--	--	3725.34	-0.82	
MW-8	3729.22		3724.52	09/30/93	--	--	3725.10	-0.58	
MW-8	3729.22		3724.52	12/03/93	--	5.80	3723.42	1.10	
MW-8	3729.22		3724.52	03/24/94	NP	4.10	3725.12	-0.60	
MW-8	3729.22		3724.52	07/11/94	NP	3.45	3725.77	-1.25	
MW-8	3729.22		3724.52	09/26/94	NP	4.73	3724.49	0.03	
MW-8	3729.22		3724.52	12/12/94	NP	5.77	3723.45	1.07	
MW-8	3729.22		3724.52	03/27/95	NP	3.80	3725.42	-0.90	
MW-9s	3730.01	3728.24	3724.31	04/01/90	--	--	3723.75	0.56	10.00
MW-9s	3730.01		3724.31	07/01/90	--	--	3724.98	-0.67	
MW-9s	3730.01		3724.31	09/30/93	--	--	3724.84	-0.53	
MW-9s	3730.01		3724.31	12/03/93	--	--	3723.52	0.79	
MW-9s	3730.01		3724.31	12/07/93	--	7.30	3722.71	1.60	
MW-9s	3730.01		3724.31	03/25/94	NP	5.45	3724.56	-0.25	
MW-9s	3730.01		3724.31	07/11/94	NP	4.72	3725.29	-0.98	
MW-9s	3730.01		3724.31	09/26/94	NP	6.10	3723.91	0.40	
MW-9s	3730.01		3724.31	12/12/94	NP	7.20	3722.81	1.50	
MW-9s	3730.01		3724.31	03/28/95	NP	5.20	3724.81	-0.50	
MW-9d	3730.08	3728.59	3703.48	04/01/90	--	--	3723.74	-20.26	10.00
MW-9d	3730.08		3703.48	07/01/90	--	--	3724.94	-21.46	
MW-9d	3730.08		3703.48	09/30/93	--	--	Silted in		
MW-9d	3730.08		3703.48	12/03/93	--	--	Silted in		
MW-9d	3730.08		3703.48	07/11/94	--	--	Obstructed		
MW-9d	3730.08		3703.48	09/26/94	--	--	Obstructed		
MW-9d	3730.08		3703.48	12/12/94	--	--	Obstructed		

Water Level Data at Rexene - Brickland Facility

Well ID	TOC Elevation (ft. AMSL)	Ground Elevation (ft. AMSL)	TOS Elevation (ft. AMSL)	Measure Date	Depth to Product (ft. BTOC)	Depth to WL (ft. BTOC)	WL Elevation (ft. AMSL)	WL to TOS (ft.)	Screen Length (ft.)
MW-10	3732.54	3731.12	3723.54	04/01/90	--	--	3723.81	-0.27	10.00
MW-10	3732.54		3723.54	07/01/90	--	--	3725.32	-1.78	
MW-10	3732.54		3723.54	09/30/93	7.00	12.42	3724.46	-0.92	
MW-10	3732.54		3723.54	12/03/93	9.07	12.65	3722.75	0.79	
MW-10	3732.54		3723.54	07/11/94	6.55	10.00	3725.30	-1.76	
MW-10	3732.54		3723.54	09/26/94	8.00	10.40	3724.06	-0.52	
MW-10	3732.54		3723.54	12/12/94	8.26	10.72	3723.79	-0.25	
MW-11	3731.40	3729.84	3721.60	04/01/90	--	--	3724.19	-2.59	10.00
MW-11	3731.40		3721.60	07/01/90	--	--	3725.10	-3.50	
MW-11	3731.40		3721.60	09/30/93	--	--	3724.91	-3.31	
MW-11	3731.40		3721.60	12/03/93	--	8.50	3722.90	-1.30	
MW-11	3731.40		3721.60	03/25/94	NP	6.30	3725.10	-3.50	
MW-11	3731.40		3721.60	07/11/94	NP	5.65	3725.75	-4.15	
MW-11	3731.40		3721.60	09/26/94	6.85	6.90	3724.54	-2.94	
MW-11	3731.40		3721.60	12/12/94	--	8.00	3723.40	-1.80	
MW-11	3731.40		3721.60	03/27/95	--	6.05	3725.35	-3.75	
MW-12	3730.35	3728.88	3713.45	04/01/90	--	--	3723.53	-10.08	10.00
MW-12	3730.35		3713.45	07/01/90	--	--	3726.68	-13.23	
MW-12	3730.35		3713.45	09/30/93	--	--	3726.09	-12.64	
MW-12	3730.35		3713.45	12/03/93	--	--	3724.91	-11.46	
MW-12	3730.35		3713.45	12/06/93	--	7.80	3722.55	-9.10	
MW-12	3730.35		3713.45	03/23/94	NP	3.90	3726.45	-13.00	
MW-12	3730.35		3713.45	07/11/94	NP	3.30	3727.05	-13.60	
MW-12	3730.35		3713.45	09/26/94	NP	4.65	3725.70	-12.25	
MW-12	3730.35		3713.45	12/12/94	NP	6.70	3723.65	-10.20	

Water Level Data at Rexene - Brickland Facility

Well ID	TOC Elevation (ft. AMSL)	Ground Elevation (ft. AMSL)	TOS Elevation (ft. AMSL)	Measure Date	Depth to Product (ft. BTOC)	Depth to WL (ft. BTOC)	WL Elevation (ft. AMSL)	WL to TOS (ft.)	Screen Length (ft.)
MW-13	3732.36	3729.53	NA	04/01/90	--	--	3724.41	NA	
MW-13	3732.36		NA	07/01/90	--	--	3725.50	NA	
MW-13	3732.36		NA	09/30/93	--	--	3725.22	NA	
MW-13	3732.36		NA	12/03/93	--	NM			
MW-13	3732.36		NA	07/11/94	NP	6.54	3725.82	NA	
MW-13	3732.36		NA	09/26/94	NP	7.65	3724.71	NA	
MW-13	3732.36		NA	12/12/94	NP	7.92	3724.44	NA	
MW-14	3730.46	3727.91	3725.46	07/11/94	NP	4.43	3726.03	-0.57	
MW-14	3730.46		3725.46	09/26/94	NP	5.85	3724.61	0.85	
MW-14	3730.46		3725.46	12/12/94	NP	6.88	3723.58	1.88	
MW-14	3730.46		3725.46	03/27/95	NP	4.90	3725.56	-0.10	
MW-15	3738.62	3735.64	3724.92	07/11/94	NP	13.00	3725.62	-0.70	
MW-15	3738.62		3724.92	09/26/94	NP	14.34	3724.28	0.64	
MW-15	3738.62		3724.92	12/12/94	NP	15.43	3723.19	1.73	
MW-15	3738.62		3724.92	03/27/95	NP	13.65	3724.97	-0.05	
MW-16	3736.78	3734.35	3726.78	07/11/94	NP	11.35	3725.43	1.35	
MW-16	3736.78		3726.78	09/26/94	NP	12.72	3724.06	2.72	
MW-16	3736.78		3726.78	12/12/94	NP	13.85	3722.93	3.85	
MW-16	3736.78		3726.78	03/27/95	NP	11.90	3724.88	1.90	
MW-17	3731.98	3731.98	3726.58	07/11/94	NP	6.08	3725.90	0.68	
MW-17	3731.98		3726.58	09/26/94	NP	7.52	3724.46	2.12	
MW-17	3731.98		3726.58	12/12/94	NP	8.62	3723.36	3.22	
MW-17	3731.98		3726.58	03/27/95	NP	6.60	3725.38	1.20	

Water Level Data at Rexene - Brickland Facility

Well ID	TOC Elevation (ft. AMSL)	Ground Elevation (ft. AMSL)	TOS Elevation (ft. AMSL)	Measure Date	Depth to Product (ft. BTOC)	Depth to WL (ft. BTOC)	WL Elevation (ft. AMSL)	WL to TOS (ft.)	Screen Length (ft.)
WP-1	3733.40	3730.15	3722.37	10/06/93	--	6.97	3726.43	-4.06	5.60
WP-1	3733.40	3730.15	3722.37	12/03/93	--	7.96	3723.27	-0.90	
WP-1	3733.40	3730.15	3726.99	07/11/94	NP	8.28	3725.12	1.87	
WP-1	3733.40	3730.15	3726.99	09/26/94	NP	9.05	3724.35	2.64	
WP-1	3733.40	3730.15	3726.99	12/12/94	NP	10.13	3723.27	3.72	
WP-2	3731.65	3730.40	3718.64	10/06/93	--	8.08	3723.57	-4.93	5.60
WP-2	3731.65	3730.40	3718.64	12/03/93	--	8.53	3723.17	-4.53	
WP-2	3731.65	3730.40	3718.64	07/11/94	NP	6.50	3725.15	-6.51	
WP-2	3731.65	3730.40	3718.64	09/26/94	NP	9.34	3722.31	-3.67	
WP-2	3731.65	3730.40	3718.64	12/12/94	NP	8.43	3723.22	-4.58	
WP-3	3731.17	3728.50	3720.27	10/06/93	--	5.66	3725.51	-5.24	6.02
WP-3	3731.17	3728.50	3720.27	12/03/93	--	6.48	3724.28	-4.01	
WP-3	3731.17	3728.50	3726.77	07/11/94	NP	5.54	3725.63	1.14	
WP-3	3731.17	3728.50	3726.77	09/26/94	NP	6.10	3725.07	1.70	
WP-3	3731.17	3728.50	3726.77	12/12/94	NP	7.93	3723.24	3.53	
WP-4	3731.85	3727.74	3715.84	10/06/93	--	--	NM	NA	5.20
WP-4	3731.85	3727.74	3715.84	12/03/93	--	5.27	3726.58	-10.74	
WP-4	3731.85	3727.74	3726.84	07/11/94	NP	6.46	3725.39	1.45	
WP-4	3731.85	3727.74	3726.84	09/26/94	NP	7.50	3724.35	2.49	
WP-4	3731.85	3727.74	3726.84	12/12/94	NP	8.65	3723.20	3.64	
WP-5	3731.99	3727.58	3718.92	10/06/93	--	4.71	3727.28	-8.36	5.69
WP-5	3731.99	3727.58	3718.92	12/03/93	--	5.53	3726.46	-7.54	
WP-5	3731.99	3727.58	3726.92	07/11/94	NP	6.46	3725.53	1.39	
WP-5	3731.99	3727.58	3726.92	09/26/94	NP	7.35	3724.64	2.28	
WP-5	3731.99	3727.58	3726.92	12/12/94	NP	8.40	3723.59	3.33	
WP-6	3731.70	3728.35	3716.86	10/06/93	--	6.50	3725.20	-8.34	5.70
WP-6	3731.70	3728.35	3716.86	12/03/93	--	6.32	3725.38	-8.52	
WP-6	3731.70	3728.35	3727.26	07/11/94	NP	5.98	3725.72	1.54	
WP-6	3731.70	3728.35	3727.26	09/26/94	NP	7.07	3724.63	2.63	
WP-6	3731.70	3728.35	3727.26	12/12/94	NP	8.22	3723.48	3.78	

Water Level Data at Rexene - Brickland Facility

Well ID	TOC Elevation (ft. AMSL)	Ground Elevation (ft. AMSL)	TOS Elevation (ft. AMSL)	Measure Date	Depth to Product (ft. BTOC)	Depth to WL (ft. BTOC)	WL Elevation (ft. AMSL)	WL to TOS (ft.)	Screen Length (ft.)
WP-7	3733.12	3730.70	3720.71	10/06/93	--	8.26	3724.86	-4.15	4.71
WP-7	3733.12	3730.70	3720.71	12/03/93	--	9.21	3723.91	-3.20	
WP-7	3733.12	3730.70	3720.71	07/11/94	NP	7.27	3725.85	-5.14	
WP-7	3733.12	3730.70	3720.71	09/26/94	NP	7.93	3725.19	-4.48	
WP-7	3733.12	3730.70	3720.71	12/12/94	NP	9.33	3723.79	-3.08	
WP-8	3729.67	3727.00	3719.57	10/06/93	--	4.17	3725.50	-5.93	4.71
WP-8	3729.67	3727.00	3719.57	12/03/93	--	5.11	3724.56	-4.99	
WP-8	3729.67	3727.00	3726.77	07/11/94	NP	3.85	3725.82	0.95	
WP-8	3729.67	3727.00	3726.77	09/26/94	NP	4.90	3724.77	2.00	
WP-8	3729.67	3727.00	3726.77	12/12/94	NP	6.03	3723.64	3.13	
WP-9	3730.89	3727.24	3720.47	10/06/93	4.43	4.44	3726.46	-5.99	4.71
WP-9	3730.89	3727.24	3720.47	12/03/93	--	5.22	3725.67	-5.20	
WP-9	3730.89	3727.24	3725.87	07/11/94	NP	5.13	3725.76	0.11	
WP-9	3730.89	3727.24	3725.87	09/26/94	NP	6.33	3724.56	1.31	
WP-9	3730.89	3727.24	3725.87	12/12/94	NP	7.40	3723.49	2.38	
WP-10	3731.37	3727.30	3721.46	10/06/93	--	4.32	3727.05	-5.59	3.71
WP-10	3731.37	3727.30	3721.46	12/03/93	--	5.14	3726.23	-4.77	
WP-10	3731.37	3727.30	3726.51	07/11/94	NP	5.96	3725.41	1.10	
WP-10	3731.37	3727.30	3726.51	09/26/94	8.70	8.90	3722.63	3.88	
WP-10	3731.37	3727.30	3726.51	12/12/94	DRY	--			
WP-11	3731.50	3727.49	3724.21	10/06/93	4.66	4.67	3726.84	-2.63	3.71
WP-11	3731.50	3727.49	3724.21	12/03/93	--	5.49	3726.01	-1.80	
WP-11	3731.50	3727.49	3726.61	07/11/94	NP	5.50	3726.00	0.61	
WP-11	3731.50	3727.49	3726.61	09/26/94	DRY	--			
WP-11	3731.50	3727.49	3726.61	12/12/94	DRY	--			
WP-12	3731.35	3727.40	3724.09	10/06/93	--	4.29	3727.06	-2.97	3.69
WP-12	3731.35	3727.40	3724.09	12/03/93	--	5.20	3726.15	-2.06	
WP-12	3731.35	3727.40	3726.59	07/11/94	NP	5.54	3725.81	0.78	
WP-12	3731.35	3727.40	3726.59	09/26/94	DRY	--			
WP-12	3731.35	3727.40	3726.59	12/12/94	--	6.75	3724.60	1.99	

Water Level Data at Rexene - Brickland Facility

Well ID	TOC Elevation (ft. AMSL)	Ground Elevation (ft. AMSL)	TOS Elevation (ft. AMSL)	Measure Date	Depth to Product (ft. BTOC)	Depth to WL (ft. BTOC)	WL Elevation (ft. AMSL)	WL to TOS (ft.)	Screen Length (ft.)
WP-13	3730.82	3726.72	3723.19	10/06/93	--	3.80	3727.02	-3.83	3.67
WP-13	3730.82	3726.72	3723.19	12/03/93	--	4.54	3726.28	-3.09	
WP-13	3730.82	3726.72	3725.39	07/11/94	NP	4.95	3725.87	-0.48	
WP-13	3730.82	3726.72	3725.39	09/26/94	NP	6.25	3724.57	0.82	
WP-13	3730.82	3726.72	3725.39	12/12/94	NP	6.53	3724.29	1.10	
WP-14	3730.50	3727.38	3724.32	10/06/93	--	3.84	3726.66	-2.34	3.70
WP-14	3730.50	3727.38	3724.32	12/03/93	--	4.66	3725.84	-1.52	
WP-14	3730.50	3727.38	3726.42	07/11/94	NP	4.22	3726.28	0.14	
WP-14	3730.50	3727.38	3726.42	09/26/94	TAR	--			
WP-14	3730.50	3727.38	3726.42	12/12/94	--	5.96	3724.54	1.88	
WP-15	3732.97	3729.57	3723.61	10/06/93	--	6.13	3726.84	-3.23	3.69
WP-15	3732.97	3729.57	3723.61	12/03/93	--	6.99	3725.98	-2.37	
WP-15	3732.97	3729.57	3726.31	07/11/94	NP	7.21	3725.76	0.55	
WP-15	3732.97	3729.57	3726.31	09/26/94	NP	8.07	3724.90	1.41	
WP-15	3732.97	3729.57	3726.31	12/12/94	NP	8.76	3724.21	2.10	
WP-16	3730.25	3728.60	3722.00	10/06/93	--	6.32	3723.93	-1.93	3.69
WP-16	3730.25	3728.60	3722.00	12/03/93	--	7.21	3723.04	-1.04	
WP-16	3730.25	3728.60	3726.20	07/11/94	NP	5.03	3725.22	0.98	
WP-16	3730.25	3728.60	3726.20	09/26/94	IN SILT	5.54	3724.71	1.49	
WP-16	3730.25	3728.60	3726.20	12/12/94	IN SILT	--			

Water Level Data at Rexene - Brickland Facility

Well ID	TOC Elevation (ft. AMSL)	Ground Elevation (ft. AMSL)	TOS Elevation (ft. AMSL)	Measure Date	Depth to Product (ft. BTOC)	Depth to WL (ft. BTOC)	WL Elevation (ft. AMSL)	WL to TOS (ft.)	Screen Length (ft.)
WP-17	3731.28	3727.93	3719.88	10/06/93	--	4.90	3726.38	-6.50	3.69
WP-17	3731.28	3727.93	3719.88	12/03/93	--	4.98	3726.30	-6.42	
WP-17	3731.28	3727.93	3726.21	07/11/94	NP	5.38	3725.90	0.31	
WP-17	3731.28	3727.93	3726.21	09/26/94	DRY	--			
WP-17	3731.28	3727.93	3726.21	12/12/94	DRY	--			
WP-18	3728.56	3727.34	3718.34	10/06/93	--	4.18	3724.38	-6.04	3.69
WP-18	3728.56	3727.34	3718.34	12/03/93	--	7.00	3721.56	-3.22	
WP-18	3728.56	3727.34	3718.34	07/11/94	NP	2.58	3725.98	-7.64	
WP-18	3728.56	3727.34	3718.34	09/26/94	NP	3.85	3724.71	-6.37	
WP-18	3728.56	3727.34	3718.34	12/12/94	NP	4.90	3723.66	-5.32	
WP-19	3729.65	3728.29	3724.59	10/06/93	--	5.16	3724.49	0.10	3.71
WP-19	3729.65	3728.29	3724.59	12/03/93	6.99	7.00	3722.66	1.93	
WP-19	3729.65	3728.29	3724.59	07/11/94	NP	3.71	3725.94	-1.35	
WP-19	3729.65	3728.29	3724.59	09/26/94	NP	4.97	3724.68	-0.09	
WP-19	3729.65	3728.29	3724.59	12/12/94	NP	5.97	3723.68	0.91	
WP-20	3731.46	3727.60	3723.77	10/06/93	--	4.34	3727.12	-3.35	4.67
WP-20	3731.46	3727.60	3723.77	12/03/93	--	5.36	3726.10	-2.33	
WP-20	3731.46	3727.60	3726.57	07/11/94	NP	3.22	3728.24	-1.67	
WP-20	3731.46	3727.60	3726.57	09/26/94	PRODUCT	6.70	3724.76	1.81	
WP-20	3731.46	3727.60	3726.57	12/12/94	NP	7.80	3723.66	2.91	
WP-21	3730.38	3727.38	3718.77	10/06/93	--	4.69	3725.69	-6.92	3.69
WP-21	3730.38	3727.38	3718.77	12/03/93	--	5.57	3724.81	-6.04	
WP-21	3730.38	3727.38	3725.90	07/11/94	NP	4.95	3725.43	0.47	
WP-21	3730.38	3727.38	3725.90	09/26/94	NP	5.77	3724.61	1.29	
WP-21	3730.38	3727.38	3725.90	12/12/94	NP	6.78	3723.60	2.30	
WP-22	3728.85	3727.50	3713.90	10/06/93	--	5.00	3723.85	-9.95	3.69
WP-22	3728.85	3727.50	3713.90	12/03/93	--	5.79	3723.06	-9.16	
WP-22	3728.85	3727.50	3718.70	07/11/94	NP	3.00	3725.85	-7.15	
WP-22	3728.85	3727.50	3718.70	09/26/94	NP	4.33	3724.52	-5.82	
WP-22	3728.85	3727.50	3718.70	12/12/94	NP	5.43	3723.42	-4.72	

Water Level Data at Rexene - Brickland Facility

Well ID	TOC Elevation (ft. AMSL)	Ground Elevation (ft. AMSL)	TOS Elevation (ft. AMSL)	Measure Date	Depth to Product (ft. BTOC)	Depth to WL (ft. BTOC)	WL Elevation (ft. AMSL)	WL to TOS (ft.)	Screen Length (ft.)
WP-23	3729.11	3728.00	3724.03	10/06/93	--	5.38	3723.73	0.30	3.69
WP-23	3729.11	3728.00	3724.03	12/03/93	--	5.96	3723.15	0.88	
WP-23	3729.11	3728.00	3724.03	07/11/94	NP	5.00	3724.11	-0.08	
WP-23	3729.11	3728.00	3724.03	09/26/94	NP	5.43	3723.68	0.35	
WP-23	3729.11	3728.00	3724.03	12/12/94	NP	5.90	3723.21	0.82	
WP-24	3731.75	3727.40	3718.77	10/06/93	--	4.70	3727.05	-8.28	5.69
WP-24	3731.75	3727.40	3718.77	12/03/93	--	5.61	3726.14	-7.37	
WP-24	3731.75	3727.40	3726.77	07/11/94	NP	6.22	3725.53	1.24	
WP-24	3731.75	3727.40	3726.77	09/26/94	NP	5.41	3726.34	0.43	
WP-24	3731.75	3727.40	3726.77	12/12/94	NP	8.38	3723.37	3.40	
WP-25	3733.54	3730.48	3721.69	10/06/93	9.94	9.99	3723.59	-1.90	3.69
WP-25	3733.54	3730.48	3721.69	12/03/93	9.89	9.94	3723.64	-1.95	
WP-25	3733.54	3730.48	3721.69	07/11/94	7.70	7.92	3725.80	-4.11	
WP-25	3733.54	3730.48	3721.69	09/26/94	PRODUCT	PRODUCT			
WP-25	3733.54	3730.48	3721.69	12/12/94	9.75	9.95	3723.75	-2.06	
WP-26s	3732.44	3730.40	3727.15	12/03/93	10.07	10.19	3722.35	4.80	5.50
WP-26s	3732.44	3730.40	3727.15	07/11/94	6.80	9.00	3725.20	1.95	
WP-26s	3732.44	3730.40	3727.15	09/26/94	7.73	10.32	3724.19	2.96	
WP-26s	3732.44	3730.40	3727.15	12/12/94	8.77	10.30	3723.36	3.79	
WP-26d	3733.28	3730.30	3717.90	12/03/93	--	10.14	3723.14	-5.24	3.50
WP-26d	3733.28	3730.30	3717.90	07/11/94	NP	7.70	3725.58	-7.68	
WP-26d	3733.28	3730.30	3717.90	09/26/94	NP	8.74	3724.54	-6.64	
WP-26d	3733.28	3730.30	3717.90	12/12/94	NP	9.80	3723.48	-5.58	



Water Level Data at Rexene - Brickland Facility

Well ID	TOC Elevation (ft. AMSL)	Ground Elevation (ft. AMSL)	TOS Elevation (ft. AMSL)	Measure Date	Depth to Product (ft. BTOC)	Depth to WL (ft. BTOC)	WL Elevation (ft. AMSL)	WL to TOS (ft.)	Screen Length (ft.)
WP-27s	3736.82	3732.77	3726.47	12/03/93	--	13.78	3723.04	3.43	5.50
WP-27s	3736.82	3732.77	3726.47	07/11/94	NP	11.70	3725.12	1.35	
WP-27s	3736.82	3732.77	3726.47	09/26/94	NP	12.70	3724.12	2.35	
WP-27s	3736.82	3732.77	3726.47	12/12/94	NP	13.77	3723.05	3.42	
WP-27d	3736.86	3732.77	3725.46	12/03/93	--	13.83	3723.03	2.43	3.50
WP-27d	3736.86	3732.77	3725.46	07/11/94	11.87	11.98	3724.97	0.49	
WP-27d	3736.86	3732.77	3725.46	09/26/94	12.75	13.20	3724.02	1.44	
WP-27d	3736.86	3732.77	3725.46	12/12/94	13.76	14.25	3723.00	2.46	
WP-28	3731.62	3727.39	3726.39	07/11/94	NP	7.67	3723.95	2.44	3.60
WP-28	3731.62	3727.39	3726.39	09/26/94	NP	6.64	3724.98	1.41	
WP-28	3731.62	3727.39	3726.39	12/12/94	NP	7.65	3723.97	2.42	
WP-29	3731.19	3726.97	3725.97	07/11/94	NP	5.78	3725.41	0.56	3.63
WP-29	3731.19	3726.97	3725.97	09/26/94	NP	6.53	3724.66	1.31	
WP-29	3731.19	3726.97	3725.97	12/12/94	NP	7.53	3723.66	2.31	
WP-30	3733.41	3729.60	3725.20	07/11/94	NP	10.46	3722.95	2.25	5.70
WP-30	3733.41	3729.60	3725.20	09/26/94	NP	9.54	3723.87	1.33	
WP-30	3733.41	3729.60	3725.20	12/12/94	NP	9.57	3723.84	1.36	
WP-31	3737.21	3734.47	3726.57	07/11/94	NP	11.73	3725.48	1.09	5.60
WP-31	3737.21	3734.47	3726.57	09/26/94	NP	12.65	3724.56	2.01	
WP-31	3737.21	3734.47	3726.57	12/12/94	NP	13.58	3723.63	2.94	
WP-32	3736.80	3735.30	3726.30	07/11/94	--	Dry			3.60
WP-32	3736.80	3735.30	3726.30	09/26/94	--	Dry			
WP-32	3736.80	3735.30	3726.30	12/12/94	--	Dry			

Water Level Data at Rexene - Brickland Facility

Well ID	TOC Elevation (ft. AMSL)	Ground Elevation (ft. AMSL)	TOS Elevation (ft. AMSL)	Measure Date	Depth to Product (ft. BTOC)	Depth to WL (ft. BTOC)	WL Elevation (ft. AMSL)	WL to TOS (ft.)	Screen Length (ft.)
WP-33	3732.74	3729.00	3722.65	07/11/94	NP	7.08	3725.66	-3.01	5.65
WP-33	3732.74	3729.00	3722.65	09/26/94	NP	8.25	3724.49	-1.84	
WP-33	3732.74	3729.00	3722.65	12/12/94	NP	9.36	3723.38	-0.73	
WP-34	3731.53	3727.20	3726.32	07/11/94	NP	7.32	3724.21	2.11	5.62
WP-34	3731.53	3727.20	3726.32	09/26/94	NP	6.81	3724.72	1.60	
WP-34	3731.53	3727.20	3726.32	12/12/94	NP	7.44	3724.09	2.23	
WP-35	3728.71	3727.08	3723.68	07/11/94	NP	3.30	3725.41	-1.73	3.60
WP-35	3728.71	3727.08	3723.68	09/26/94	NP	4.17	3724.54	-0.86	
WP-35	3728.71	3727.08	3723.68	12/12/94	NP	5.23	3723.48	0.20	
WP-36	3729.52	3726.87	3724.50	07/11/94	NP	3.63	3725.89	-1.39	3.63
WP-36	3729.52	3726.87	3724.50	09/26/94	NP	4.75	3724.77	-0.27	
WP-36	3729.52	3726.87	3724.50	12/12/94	NP	5.21	3724.31	0.19	
WP-37	3730.13	3727.70	3725.28	07/11/94	NP	4.44	3725.69	-0.41	3.61
WP-37	3730.13	3727.70	3725.28	09/26/94	NP	5.62	3724.51	0.77	
WP-37	3730.13	3727.70	3725.28	12/12/94	NP	6.50	3723.63	1.65	
Water N	3724.00	On 11/16/94							
Water M	3724.38								
Water S	3722.97								
Trench A	3733.70								
Trench B	3731.40								
Trench C	3727.10								
Trench D	3727.90								
Trench E	3727.40								
Trench F	3727.30								

TOC - Top of Casing

AMSL - Above Mean Sea Level

TOS - Top of Screen

BTOC - Below Top Of Casing

NA - Not Applicable/Available

NM - Not Measured

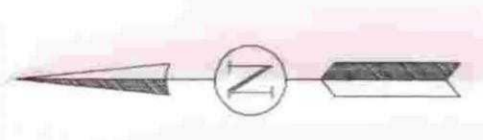
NP - Not Present

All TOC Elevations using Botsford 11/16/94 survey

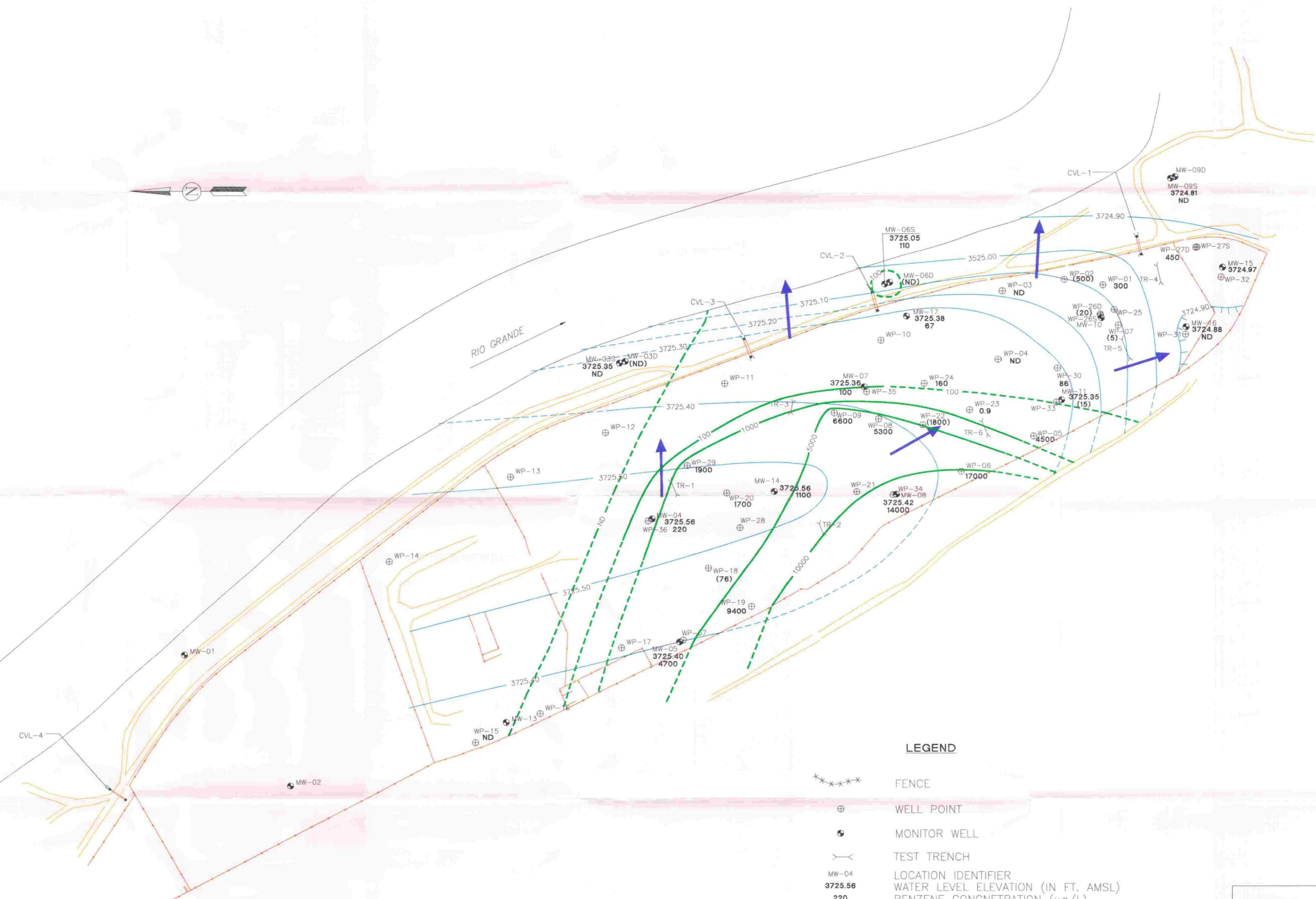
Water level elevations adjusted for product thickness using specific gravity of 0.8.

**Appendix D**

Water Level Elevation Map  
5th Quarter — March 1995

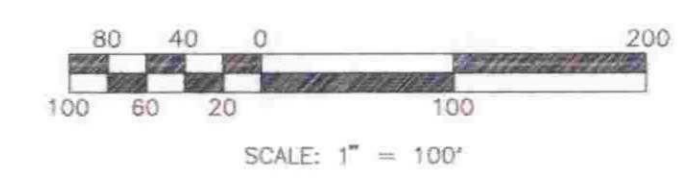


RIO GRANDE



**LEGEND**

- FENCE
- WELL POINT
- MONITOR WELL
- TEST TRENCH
- MW-04  
3725.56  
220  
ND  
(15)  
LOCATION IDENTIFIER  
WATER LEVEL ELEVATION (IN FT. AMSL)  
BENZENE CONCENTRATION ( $\mu\text{g/L}$ )  
NOT DETECTED ( $<0.5 \mu\text{g/L}$ )  
CONCENTRATIONS IN PARENTHESIS WERE NOT USED IN CONTOURING BECAUSE SCREEN INTERVALS WERE AT A DEEPER DEPTH
- WATER LEVEL CONTOUR (IN FT. AMSL)  
(DASHED WHERE INFERRED)
- DIRECTION OF GROUNDWATER FLOW
- BENZENE CONCENTRATION CONTOUR ( $\mu\text{g/L}$ )  
(DASHED WHERE INFERRED)
- NOTE: CONTOUR INTERVALS ARE VARIABLE



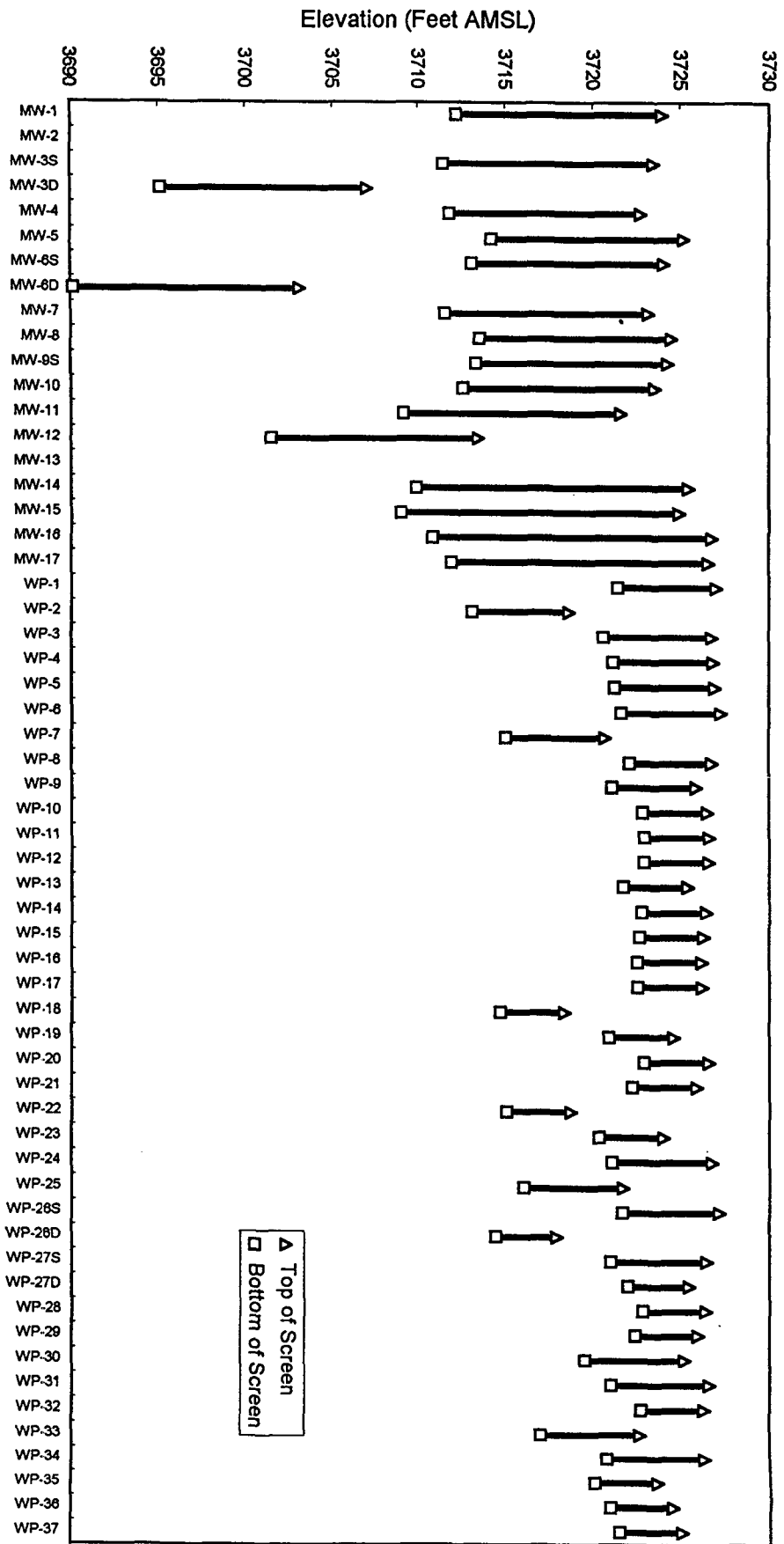
MW-12

**GCL**

**PLATE A**  
WATER LEVEL AND BENZENE  
CONCENTRATION CONTOUR MAP IN  
5TH QUARTER (MARCH 1995) FOR THE  
FORMER BRICKLAND REFINERY SITE

CLIENT: REXENE  
DATE: 5/23/95  
DRAWN BY: MP  
CHECKED BY: JN  
DWG. NO.: \REXENE\1STQTR95.DWG

Screened Interval of Wells  
at the Former Brickland Refinery Site

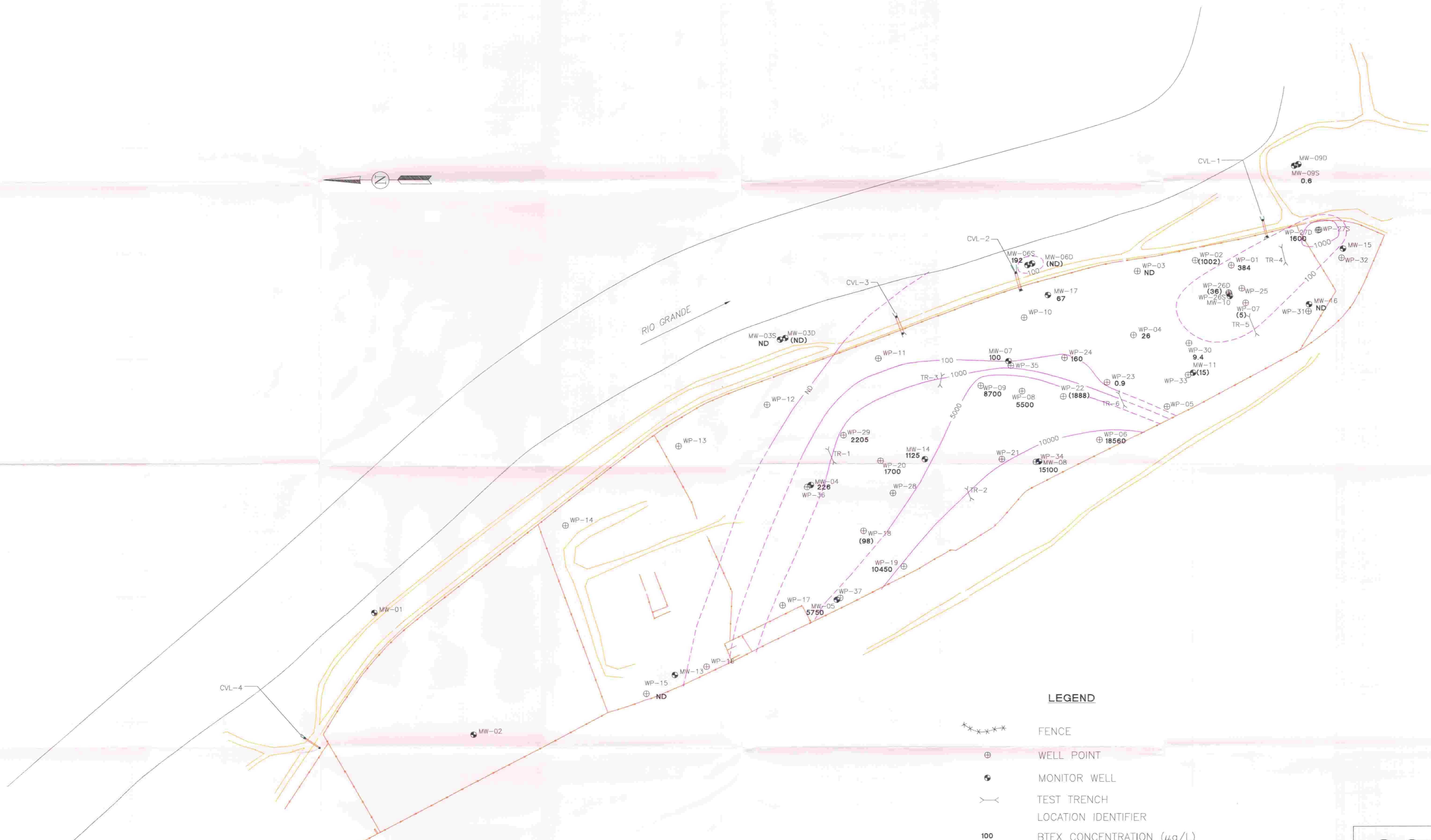


**Appendix E**

**Product Thickness Map and Contamination  
Isoconcentration Maps**

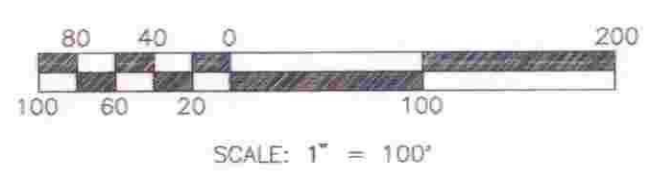


RIO GRANDE

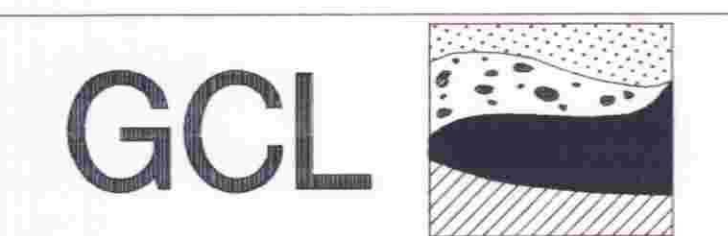


**LEGEND**

- FENCE
- WELL POINT
- MONITOR WELL
- TEST TRENCH
- LOCATION IDENTIFIER
- 100 BTEX CONCENTRATION ( $\mu\text{g/L}$ )
- ND NOT DETECTED ( $< 0.5 \mu\text{g/L}$ )
- (98) CONCENTRATIONS IN PARENTHESIS WERE NOT USED IN CONTOURING BECAUSE SCREEN INTERVALS WERE AT A DEEPER DEPTH
- BTEX CONCENTRATION CONTOUR (IN FT. AMSL) (DASHED WHERE INFERRED)



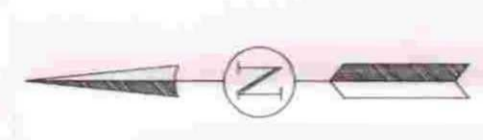
MW-12



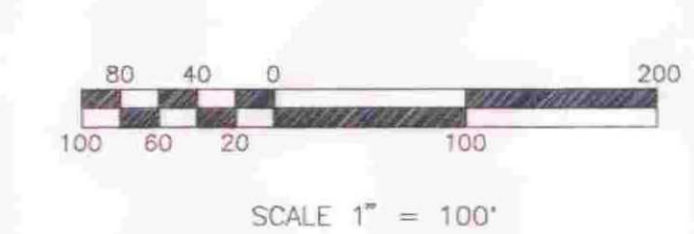
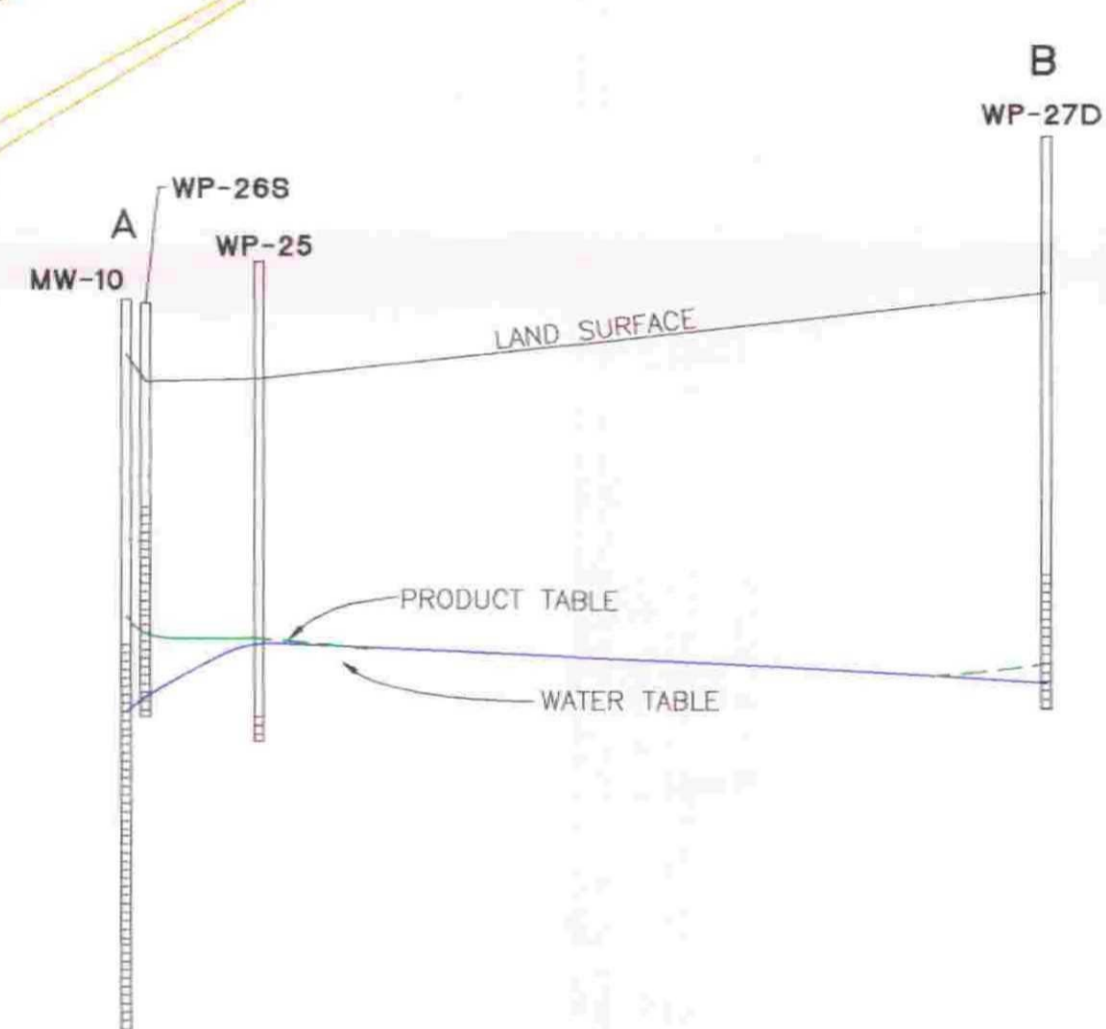
**PLATE B**  
BTEX CONCENTRATION  
CONTOUR MAP IN  
5TH QUARTER (MARCH 1995) FOR THE  
FORMER BRICKLAND REFINERY SITE

CLIENT: REXENE
DATE: 5/23/95
DRAWN BY: MP
CHECKED BY: JN
DWG. NO.: \REXENE\151QTR95.DWG

**RECEIVED**  
MAY 30 1995  
Environmental Bureau  
Oil Conservation Division



RIO GRANDE



**LEGEND**

- \*\*\*\*\* FENCE
- ⊕ WELL POINT
- ⊙ MONITOR WELL
- > TEST TRENCH
- APPROXIMATE RIVER SAMPLING LOCATION
- ⌋ WELL SCREEN
- MW-10  
2.46  
(12/12/94) LOCATION IDENTIFIER  
PRODUCT THICKNESS (FT)  
DATE OF MEASUREMENT
- (0.2) PRODUCT THICKNESS IN PARENTHESIS FOR WELLS  
WITH DEEPER SCREENED INTERVAL
- NP PRODUCT NOT PRESENT



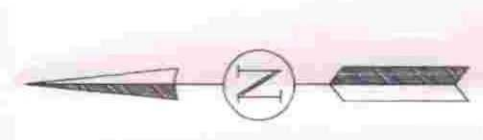
**PLATE C  
PRODUCT THICKNESS  
MAP OF THE  
FORMER BRICKLAND REFINERY SITE**

CLIENT: REXENE
DATE: 5/17/95
DRAWN BY: MP
CHECKED BY: JN
DWG. NO.: \REXENE\FPRDCT1.DWG

**RECEIVED**  
MAY 30 1995  
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Oil Conservation Division

MW-12

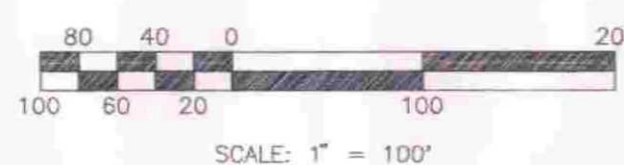




RIO GRANDE

**LEGEND**

- FENCE
- WELL POINT
- MONITOR WELL
- TEST TRENCH
- MW-08  
172  
ND  
(178)
- POLYAROMATIC HYDROCARBON (PAH) CONCENTRATION ( $\mu\text{g/L}$ )
- NOT DETECTED ( $<10 \mu\text{g/L}$ )
- CONCENTRATIONS IN PARENTHESIS WERE NOT USED IN CONTOURING BECAUSE SCREEN INTERVALS WERE AT A DEEPER DEPTH
- PAH CONCENTRATION CONTOUR (DASHED WHERE INFERRED)



MW-12

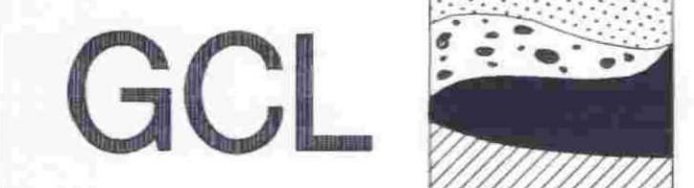
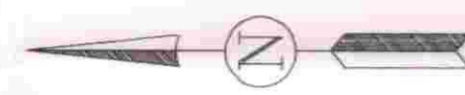


PLATE D  
POLYAROMATIC HYDROCARBON (PAH)  
CONCENTRATION CONTOUR MAP IN  
5TH QUARTER (MARCH 1995) FOR THE  
FORMER BRICKLAND REFINERY SITE

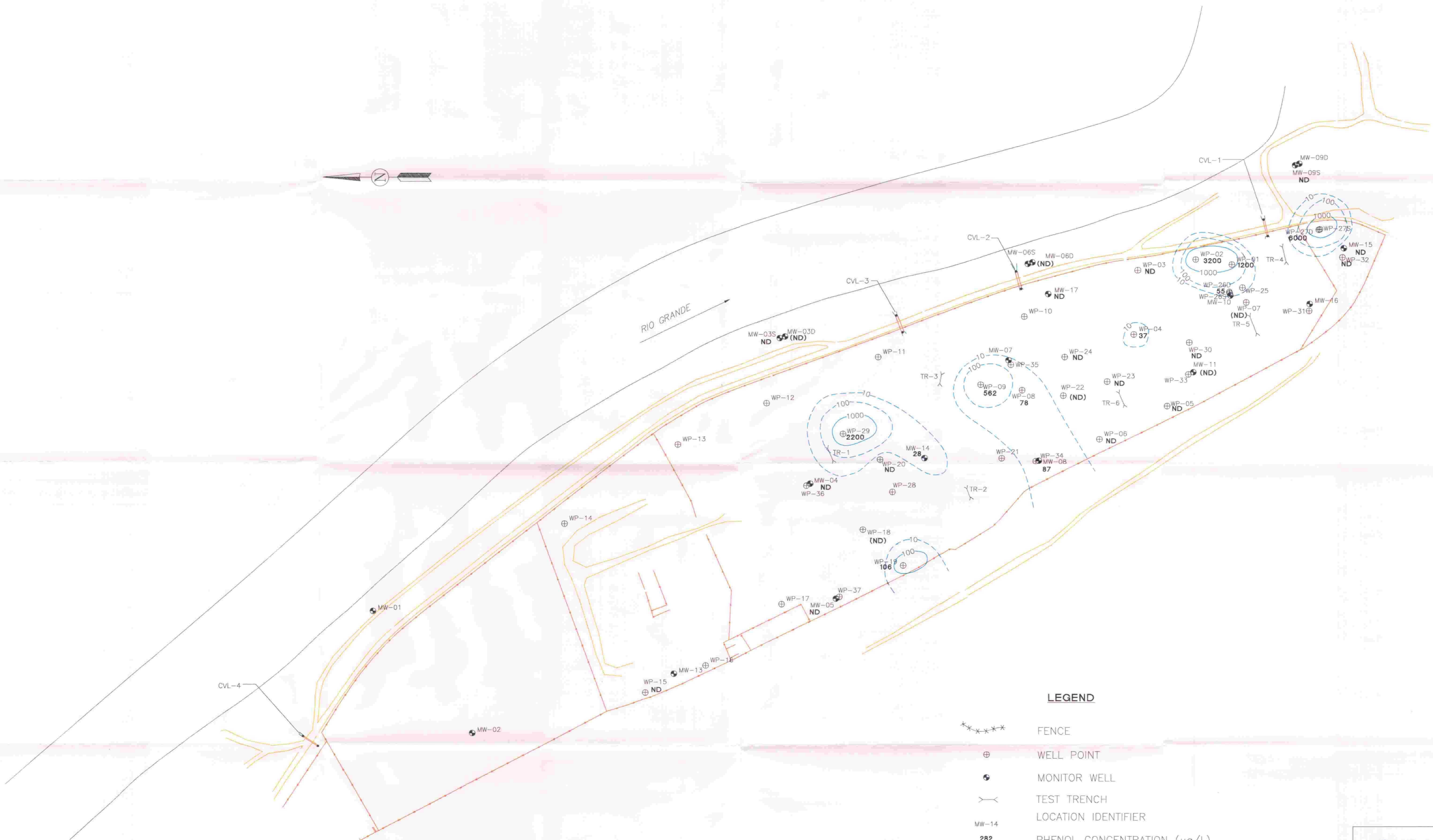
**RECEIVED**

MAY 3 0 1995  
Environmental Bureau  
Oil Conservation Division

CLIENT:	REXENE
DATE:	5/23/95
DRAWN BY:	MP
CHECKED BY:	JN
DWG. NO.:	\\REXENE\1STQTR95.DWG

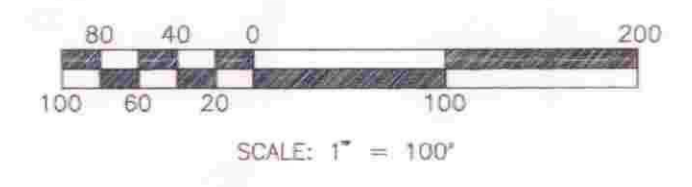


RIO GRANDE



**LEGEND**

- \*\*\*\*\* FENCE
- ⊕ WELL POINT
- ⊙ MONITOR WELL
- > TEST TRENCH
- MW-14 LOCATION IDENTIFIER
- 282 PHENOL CONCENTRATION (μg/L)
- ND NOT DETECTED (<10 μg/L)
- PHENOL CONCENTRATION CONTOUR (DASHED WHERE INFERRED)



MW-12

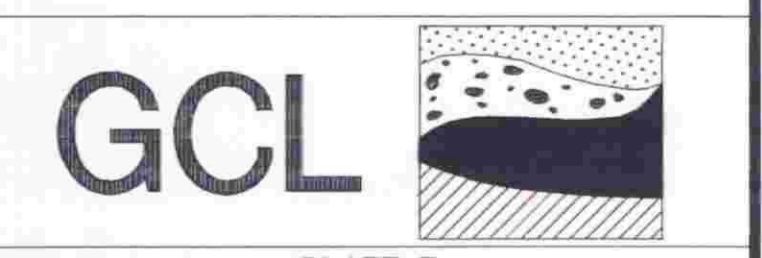


PLATE E  
 PHENOL CONCENTRATION  
 CONTOUR MAP IN  
 5TH QUARTER (MARCH 1995) FOR THE  
 FORMER BRICKLAND REFINERY SITE

**RECEIVED**  
 MAY 30 1995  
 Environmental Bureau  
 Oil Conservation Division

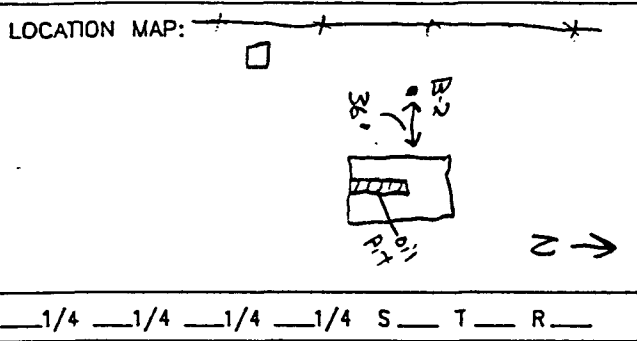
CLIENT: REXENE
DATE: 5/23/95
DRAWN BY: MP
CHECKED BY: JN
DWG. NO.: \REXENE\1STQTR95.DWG

**Appendix F**

Photoionization Measurements Results  
June 1994



# LITHOLOGIC LOG (CORE)



Breckland

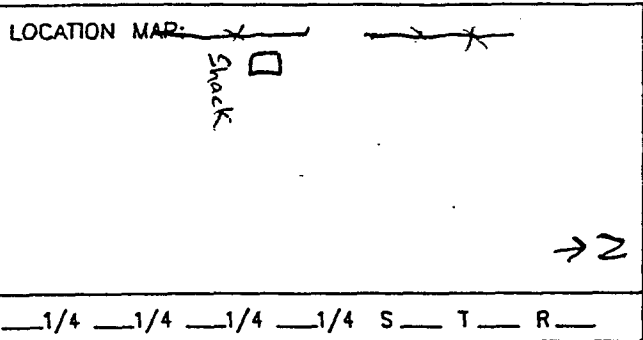
SITE ID: Pexene LOCATION ID: B-2  
 SITE COORDINATES (ft.):  
 N 289205.02307 E 1551753.27625  
 GROUND ELEVATION (ft. MSL): 3727.37  
 STATE: New Mexico COUNTY: \_\_\_\_\_  
 DRILLING METHOD: Hollow Stem, Loran Tube  
 DRILLING CONTR.: GE Geo Projects  
 DATE STARTED: 6/17/94 DATE COMPLETED: 6/17/94  
 FIELD REP.: Dale L. H. H. H.  
 COMMENTS: Barrel to be plugged

LOCATION DESCRIPTION: \_\_\_\_\_

DEPTH	WELL CONST.	LITH.	RUN			RECOV	SAMPLE		SAMPLE INTERVAL	LITHOLOGIC DESCRIPTION (LITH., USCS, GRAIN SIZE PROPORTIONS, WET COLOR, RNDG., SORT., CONSOL., DIST. FEATURES)
			#	FROM	TO		TYPE	P. I.D. OR READING (ppm)		
0		00 ----- -----	Asst Push	6"	2'	60		700		Gravel Fill 6" Silt w/ angular frag of gravel. 1+ brn 10YR. 6/2 Clay w/ 5% fine sand, blk, heavy stain, & odor. NR
4		----- ----- -----	"	2'	4'	60				Clay (as above) less stain & odor slightly w/ depth, no sand stringers, - NR
6		----- ----- -----	"	4'	6'	100		280		Sand (at 4 1/2 ft) with clay & 30% dk brn. (HC stain) fine grain, w/s, sub rounded - rounded, (wtr sand) Btm of sand @ 5.75' (wet) SY 4/1
8		----- ----- -----	"	6'	8'	70		400		Clay, brn - dk brn, < 5% sand inc. w/ depth. (wet) TD Lith hole @ 8' SYR 5/2
10		----- ----- -----		8	10	50				Clay, SYR 5/2, < 5% sand, sh gr w/s, sub angular
35										Fluid Level in hole recovered to $\pm$

# LITHOLOGIC LOG (CORE)

Page      of     



Brickland

SITE ID: Rexene LOCATION ID: B-3  
 SITE COORDINATES (ft.):  
 N 289259.71087 E 1551876.13827  
 GROUND ELEVATION (ft. MSL): 3727.29  
 STATE: NM COUNTY:       
 DRILLING METHOD: Hollow Stem Lexan  
 DRILLING CONTR.: FE Geo Projects  
 DATE STARTED: 6/17/94 DATE COMPLETED: 6/17/94  
 FIELD REP.:  Dale Littlejohn  
 COMMENTS:     

LOCATION DESCRIPTION:     

DEPTH	WELL CONST.	LITH.	RUN		RECOV	SAMPLE		SAMPLE INTERVAL	LITHOLOGIC DESCRIPTION (LITH., USCS, GRAIN SIZE PROPORTIONS, WET COLOR, RNDG., SORT., CONSOL., DIST. FEATURES)
			#	FROM		TO	TYPE		
0		o o							Gravel, debris, fill
5	W.P. 28 SCREEN		1	6"	2'	40		110	Sand, silt, vfn gr ≈ 10% sd div, lt brn 10 yr old, angular, w/s, rounded to angular gravel, dec. w/depth.
10									Sand, fn grain - v. fn grain, ≈ 15% clay moist, pale brn. 5 YR 5/2, sub rnd, w/s, relatively clean.
15		"	2'	4'	40		55	Clay, no grains, LS 90 sd, moist, black, heavy stain, & heavy odor, dense, sticky.	
20									Silty Sand, v. fn. gr, 10-20% silt, with minor clay, wet, pale brn 5 YR 5/2, sub rnd - sub ang., well sorted, unconsolid. H.C. odor. (slight)
25		"	4'	6'	100		225		
30									Silty Clay, vfn, 10% silt, wet pale brown. 5 YR 5/2, some hydroc. staining
35									Silty Sand, vfn, brn, 20-30% silt, w/minor clay, wet, pale brn 5 YR 5/2, sub rnd - sub ang. "
40									
45									
50									Water Level recovered to ≈ 2' below surf.









LITHOLOGIC LOG (CORE)

LOCATION MAP: See Map

\_\_\_\_ 1/4 \_\_\_\_ 1/4 \_\_\_\_ 1/4 \_\_\_\_ 1/4 S \_\_\_\_ T \_\_\_\_ R \_\_\_\_

Brickland

SITE ID: Revere LOCATION ID: B-6  
 SITE COORDINATES (ft.):  
 N 289163.91590 E 1552009.77426  
 GROUND ELEVATION (ft. MSL): 3726.77  
 STATE: NM COUNTY: Dona Ana  
 DRILLING METHOD: Hollow Stem  
 DRILLING CONTR.: Geo Projects  
 DATE STARTED: 6-18-94 DATE COMPLETED: 6-18-94  
 FIELD REP.: Dale Littlejohn  
 COMMENTS: \_\_\_\_\_

LOCATION DESCRIPTION: \_\_\_\_\_

DEPTH	WELL CONST.	LITH.	RUN			RECOV	SAMPLE		SAMPLE INTERVAL	LITHOLOGIC DESCRIPTION (LITH., USCS, GRAIN SIZE PROPORTIONS, WET COLOR, RNDG., SORT., CONSOL., DIST. FEATURES)
			#	FROM	TO		TYPE	P.L.D. OR READING (ft)		
1	Well Point 29 Screen	0.0%							Gravel, debris & fill.	
2			6"	2'	30		ND		Sandy silt, v. fn grain, ~10% sand dry, lt brn (10yr 1/2) angular, m/s, consolid. angular gravel, salt.	
3			2'	4'	100		275		Silty clay, v. fn grain, <10% silt, moist. near bottom, graysh brn, (5 YR 3/2) sub-rnd, w/s, HC odor. No signif. staining	
4									Silty sand, v. fn gr. 20-30% silt, wet, pale brn (5 YR 5/2) sub-ang, w/s, (HC odor) unconsolid, NO signif. stain.	
5			4'	6'	80		850		Silty clay v. fn gr. ~20% silt, wet pale brn (5 YR 5/2) sub-rd, w/s	
6									Silty sand (as above 3-5')	
7									Silty clay (as 5-5.5')	
8				6'	8'	100		350		Sand, fn grain, <10% silt, wet, pale brn (5 YR 5/2) rnd, w/s, HC odor. No stain.
9										* LEL to 10% During drilling
10										Fluid Level after drill ~ 1.0' B.S.

LITHOLOGIC LOG (CORE)

LOCATION MAP: See Map

\_\_\_\_ 1/4 \_\_\_\_ 1/4 \_\_\_\_ 1/4 \_\_\_\_ 1/4 S \_\_\_\_ T \_\_\_\_ R \_\_\_\_

Site ID: Buckland LOCATION ID: B-7  
 SITE COORDINATES (ft.):  
 N 289125.39645 E 1552085.19176  
 GROUND ELEVATION (ft. MSL): 3726.69  
 STATE: NM COUNTY: Dona Ana  
 DRILLING METHOD: Hollow Stem  
 DRILLING CONTR.: Geo Projects  
 DATE STARTED: 6-18-94 DATE COMPLETED: 6-18-94  
 FIELD REP.: Deke Littlejohn  
 COMMENTS: \_\_\_\_\_

LOCATION DESCRIPTION: Sage brush + debris, apparent silt at Surf.

DEPTH	WELL CONST.	LITH.	RUN			RECOV	SAMPLE		SAMPLE INTERVAL	LITHOLOGIC DESCRIPTION (LITH., USCS, GRAIN SIZE PROPORTIONS, WET COLOR, RNDG., SORT., CONSOL., DIST. FEATURES)
			#	FROM	TO		TYPE	LD. OR READING		
5		600 Push w/ Auger	6"	2'	15		55		Gravel, fill material.	
10									Sandy silt, fn grain, 20% sand, dry, yellowish brn (10YR 5/4), angular, med sort (m/s), mod. consolid. sand inc. w/depth. HC stain at base of unit.	
15			2'	4'	70		570		Silty clay, dfn grn, <10% silt, dry, grayish brn (5YR 3/2), rnd, w/s, mod. consolid. Mottled HC staining	
20			wet.							
25			4'	6'	90		375		Silty sand, fn grn, 10% silt, wet, yellowish brn (10YR 4/2), rnd, to well round, w/s, unconsolid, thin zone, water sand.	
30									grn, <10% silt, wet, grayish brn (5YR 3/2), rnd-subhd, w/s, sli HC odor, no signif stain.	
35		No Rec. Poss. sand	6'	8'	10		200		Could not catch wet sample, appeared sandier than above unit, (cuttings) wet.	
40										
45										
50									FL $\approx$ 1.0 ft BS	

LITHOLOGIC LOG (CORE)

LOCATION MAP: See Map

Brickland

SITE ID: Rescue LOCATION ID: B-8  
 SITE COORDINATES (ft.):  
 N 288706.33384 E 1552194.38446  
 GROUND ELEVATION (ft. MSL): 3728.09  
 STATE: NC COUNTY: Dartm Am  
 DRILLING METHOD: Hollow Stem  
 DRILLING CONTR.: Geo Projects  
 DATE STARTED: 6/18/94 DATE COMPLETED: 6/18/94  
 FIELD REP.: D. C. Pfejohw  
 COMMENTS: Near Damp Site

1/4 1/4 1/4 1/4 S T R

LOCATION DESCRIPTION:

DEPTH	WELL CONST.	LITH.	RUN			RECOV	SAMPLE		SAMPLE INTERVAL	LITHOLOGIC DESCRIPTION (LITH., USCS, GRAIN SIZE PROPORTIONS, WET COLOR, RNDG., SORT., CONSOL., DIST. FEATURES)
			#	FROM	TO		TYPE	P.L.D. OR READING (ft)		
5		○○○		6"	2' 50			15	Gravel, debris, Sandy Silt, brown, NO stain or odor.	
40		<del>XXXX</del>							Sandy Silt, fine grain sd, 20% sand, dry, yellow brn. (10YR 5/4) angular, M/S, consolid. w/ angular, pebble gravel	
45		----		2'	4' 25"			200	Silty Clay, vfn grain, 20-30% silt, minor sand, dry, dusky yellowish brn (10YR 2/2) (HC stained), angular grns, w/s, consolid. strong HC odor & stain.	
20		----							Silt, vfn grain, (w/interbedded 6" silty clay beds) wet, black (HC stain) ang-sub rhd, w/s, grains, mod. consolid, strong HC odor & stain.	
25		----		4'	6' 80			50		
30		----								
35		----		6'	8' 90			450	Silty Sand, vfn gr, 10-20% silt, minor clay, wet, grayish brn, (5YR 3/2) rnd-subrhd, w/s, grn unconsolid. HC stain & odor in upper unit, NO stain in lower foot.	
40		----								
45		----								
50		----								

# LITHOLOGIC LOG (CORE)

Page \_\_\_ of \_\_\_

LOCATION MAP: See map

SITE ID: Buckland LOCATION ID: B-9  
 SITE COORDINATES (ft.):  
 N 288610.06756 E 1552150.73295  
 GROUND ELEVATION (ft. MSL): 3726.81  
 STATE: NM COUNTY: Dona Ana  
 DRILLING METHOD: Hollow Stem  
 DRILLING CONTR.: Geo Propts  
 DATE STARTED: 6/18/94 DATE COMPLETED: 6/19/94  
 FIELD REP.: Dale Littlejohn  
 COMMENTS: Heavy Brush, No gravel, 1955  
depos

— 1/4 — 1/4 — 1/4 — 1/4 S — T — R —

LOCATION DESCRIPTION: \_\_\_\_\_

DEPTH	WELL CONST.	LITH.	RUN			RECOV	SAMPLE		SAMPLE INTERVAL	LITHOLOGIC DESCRIPTION (LITH., USCS, GRAIN SIZE PROPORTIONS, WET COLOR, RNDG., SORT., CONSOL., DIST. FEATURES)
			#	FROM	TO		TYPE	% LD. OR READING (ppm)		
5				6"	2'	30		1		Silty fill, organic material, debris. Sandy silt, u.f.n gr, 20% sand, dry dk yellowish brn (10yr 5/4) angular, med/sort, consolid. No stain, or odor.
10				2'	4'	30		5		Silty Sand, fn grain, 30% silt, dry, grayish brn (SYR 5/2), rnd-sub rnd, w/s, mod. consolid, NO odor or stain. Wet at btm of unit.
20				4'	6'	100		2		Silty clay, u.f. sng, 30-40% silt wet, gray (N4) (HC stain), well sort, mod. consolid, lenses of light gray clay.
30				6'	8'	40		3		Silty sand v.f. sng, 20% silt, wet grayish brn (SYR 5/2) rnd-sub rnd, w/s, mod consolid, NO stain, odor or odor.
40				8'	10'	40		ND		Silty clay, u.f. sng, 10% silt wet, grayish brn (SYR 5/2), w/s. NO stain or odor. Silt increase slightly w/depth. To TD of 12'
50						90		ND		





# LITHOLOGIC LOG (CORE)

LOCATION MAP:

Buckland

SITE ID: Revere LOCATION ID: B-12 (MW 16)  
 SITE COORDINATES (ft.):  
 N 288177.93754 E 1552282.50963  
 GROUND ELEVATION (ft. MSL): 3734.27  
 STATE: New Mex COUNTY: Doña Ana  
 DRILLING METHOD: Hollow Stem Auger  
 DRILLING CONTR.: G-E  
 DATE STARTED: 6/21/99 DATE COMPLETED: 6/21/99  
 FIELD REP.: Dale Littlejohn  
 COMMENTS: Lith hole for MW-16.

1/4 1/4 1/4 1/4 S    T    R   

LOCATION DESCRIPTION:

DEPTH	WELL CONST.	LITH.	RUN			RECOV	SAMPLE		SAMPLE INTERVAL	LITHOLOGIC DESCRIPTION (LITH., USCS, GRAIN SIZE PROPORTIONS, WET COLOR, RNDG., SORT., CONSOL., DIST. FEATURES)
			#	FROM	TO		TYPE	P. I.D. OR READING (ft.)		
0				0	2	30		ND		Sand, med gr, dry, Pale Yellowish brn (10YR 6/2), Sub-angular, Mod. sorted, unconsolid, NO stain or odor.
5				2	4	30		ND		
10				4	6	70		ND		
15				6	8	60		ND		Sand, fn gr, Mod, Yellow brn, (10YR 5/4), Angular, well sorted, unconsolid, No odor or stain
20				8	10	20		18		Clay, (v. fn s. silt) < 10% silt, dk, yellow brn (10YR 4/2) consolid, HC stain at base of unit only. HC odor at base of unit.
25										Silt, v. fn gr, 30% clay, moist, gray, HC stain & odor, w/s consolidation
30										
35										Silty Sand, fn gr, 50% silt, wet, gray, HC stain & odor, mod, consolid, sub rnl, med sort.
40										* This interval was NOT stained but saturated with prod. Same interval in mon well (10's.) did NOT
45										
50										Silty Sand, v. fn gr, wet, 30% silt, Pale brn, (5YR 5/2), ang-sub ang, well sorted, consolid. No HC stain or odor.
										Sand, fn grain, < 5% silt, wet, grayish brown (5YR 3/2), sub rnl, lys, mod. consolid. NO stain, or HC odor,

Note: 8' to 16' logged from lith. hole, other samp. desc determ from Mon. well.



LITHOLOGIC LOG (CORE)

LOCATION ID: ~~W-16~~ T6  
 6-12

DEPTH	WELL CONST.	LITH.	RUN			RECOV	SAMPLE		SAMPLE INTERVAL	LITHOLOGIC DESCRIPTION (LTH., USCS, GRAIN SIZE PROPORTIONS, WET COLOR, RNDG., SORT., CONSOL., DIST. FEATURES)
			#	FROM	TO		TYPE	I.D. OR READING		
22										
24										
26										
28										
30										
32										
34										
36										
38										
40										
42										
44										
46										
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146										
148										
150										

TO

\* Aquifer appears to be confined by clay at 8-11 ft B.S.

# LITHOLOGIC LOG (CORE)

LOCATION MAP: See Map

Brickland  
Barre

SITE ID: Barre LOCATION ID: B-14 (MW-17)  
 SITE COORDINATES (ft.):  
 N 288729.75934 E 1552306.19121  
 GROUND ELEVATION (ft. MSL): 3728.64  
 STATE: New Mexico COUNTY: Doña Ana  
 DRILLING METHOD: Hollow Stem  
 DRILLING CONTR.: GE Projects Geo Projects  
 DATE STARTED: 6/20/94 DATE COMPLETED: 6/20/94  
 FIELD REP.: Dale Littlejohn  
 COMMENTS: Let hole for MW-17.

1/4 1/4 1/4 1/4 S T R

LOCATION DESCRIPTION: Site Located on sand & gravel hill ≈ 1 ft above surrounding area

DEPTH	WELL CONST.	LITH.	RUN			RECOV	SAMPLE		SAMPLE INTERVAL	LITHOLOGIC DESCRIPTION (LITH., USCS, GRAIN SIZE PROPORTIONS, WET COLOR, RNDG., SORT., CONSOL., DIST. FEATURES)
			#	FROM	TO		TYPE	P.L.D. OR READING (ppm)		
2-5			Push w/ Auger	0	2'	60		ND		Silty Sand, v. fn gr, ≈ 20% silt, dry pale yellowish brn (10YR 6/2), angular, w/s, unconsolid, Blow Sand,
2-4				2	4'	30		ND		Silty Sand, v. fn gr ≈ 30-40% silt, dry, pale brn (5YR 5/2), sub round, w/s, unconsolid. w/sm gravel
4-6				4'	6'	100		>1000		Mississ, believe to be sandy silt, pale yellowish brn (10YR 6/2), consolid
6-8				6	8	100		>1000		Silty Clay, 20% silt, v. fn gr, dry, grayish brn (5YR 7/2), consolid. ang. w/s
8-10				8	10	100		528		Clayey silt, v. fn gr, 30-40% clay, < 5% sand, wet, dk yellowish brn (10YR 4/2), sub rnd. w/s, HC stain
10-12										Silty Sand, v. fn grain, 20% silt, wet, dk yellowish brn (10YR 4/2), sub rnd. w/s, NO staining
12-14										Silty Clay, 40% silt, wet. (10YR 4/2)
14-16										Silty Sand, 30% silt (dec. w/depth) wet, dk yellowish brn (10YR 4/2), rnd- to sub-rounded, w/s, unconsolid, no stain or odor.
16-18										v. fn grain sand at 12' intervals to fn gr at TD. silt content dec. to ≈ 10% at TD
18-20										Sand See No.:
20-22										
22-24										
24-26										
26-28										
28-30										
30-32										
32-34										
34-36										
36-38										
38-40										
40-42										
42-44										
44-46										
46-48										
48-50										
50-52										
52-54										
54-56										
56-58										
58-60										
60-62										
62-64										
64-66										
66-68										
68-70										
70-72										
72-74										
74-76										
76-78										
78-80										
80-82										
82-84										
84-86										
86-88										
88-90										
90-92										
92-94										
94-96										
96-98										
98-100										


Flowing Sand, No Catch Samp.

Sample descrip based oil split Spoon attempts (sand flowing out of auger) and, soil on bottom slight of Auger.

# LITHOLOGIC LOG (CORE)

Page \_\_\_ of \_\_\_

LOCATION ID: B-14

DEPTH	WELL CONST.	LITH.	RUN			RECOV	SAMPLE		SAMPLE INTERVAL	LITHOLOGIC DESCRIPTION (LITH., USCS, GRAIN SIZE PROPORTIONS, WET COLOR, RNDG., SORT., CONSOL., DIST. FEATURES)
			#	FROM	TO		TYPE	I.D. OR READING		
<div style="position: absolute; left: -20px; top: 20px;">24</div> <div style="position: absolute; left: -20px; top: 70px;">6</div> <div style="position: absolute; left: -20px; top: 215px;">65</div> <div style="position: absolute; left: -20px; top: 275px;">70</div> <div style="position: absolute; left: -20px; top: 330px;">75</div> <div style="position: absolute; left: -20px; top: 385px;">80</div> <div style="position: absolute; left: -20px; top: 440px;">85</div> <div style="position: absolute; left: -20px; top: 495px;">90</div> <div style="position: absolute; left: -20px; top: 550px;">95</div> <div style="position: absolute; left: -20px; top: 605px;">100</div> <div style="position: absolute; left: -20px; top: 660px;">105</div> <div style="position: absolute; left: -20px; top: 715px;">110</div> <div style="position: absolute; left: -20px; top: 770px;">115</div> <div style="position: absolute; left: -20px; top: 825px;">120</div> <div style="position: absolute; left: -20px; top: 880px;">125</div>									Sand. As Above.	

**Appendix G**

**TCLP and Waste Characterization Results**

RECEIVED AUG 16 1994



Core Laboratories

CORE LABORATORIES  
ANALYTICAL REPORT

Job Number: 941585  
Prepared For:

GEOSCIENCE CONSULTANTS, LTD.

505 MARQUETTE NW, SUITE 1100  
ALBUQUERQUE, NM 87102

Date: 08/15/94

*Linda L. Benkers*  
Signature

*8-15-94*  
Date:

Name: Linda L. Benkers

Core Laboratories  
10703 East Bethany Drive  
Aurora, CO 80014

Title: QA/QC COORDINATOR

---

Core Laboratories

**SAMPLE DELIVERY GROUP NARRATIVE**

**August 15, 1994**

Customer: Geoscience Consultants, Ltd.

Project: Rexene COC # 8121

Core Laboratories Project Number: 941585

---

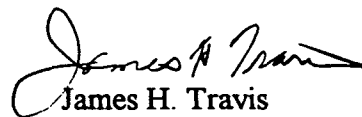
On 6-28-94 Core Laboratories received samples for analysis. The following information is pertinent to the interpretation of the data package.

**Method 8240 TCLP Volatiles Analysis :**

The matrix spike for sample 941585-4 (9406241000) showed no detection for vinyl chloride and 19% recovery for 1,1-dichloroethylene with internal acceptable limits of 49-155%.



Linda L. Benkers  
QA/QC Coordinator



James H. Travis  
Laboratory Supervisor



Albuquerque  
505 Marquette NW, Ste. 1100  
Albuquerque, NM 87102  
(505) 842-0001  
FAX: (505) 842-0595

Mid Atlantic Region  
4221 Forbes Blvd., Ste. 240  
Lanham, MD 20706-4325  
(301) 459-9677  
FAX: (301) 459-3064

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

No 8121

# Chain of Custody

Date 6-27-94 Page 1 of 1

## Analysis Request

Lab Name <u>CORE LABORATORIES</u>		Location	
Address <u>10703 EAST BETHANY DRIVE</u>			
Telephone <u>ALBUQUA, CO 80014-2696</u>			
Sample Number		Matrix	Location
9406240950	SOIL	CUTTINGS COMPOSITE	
9406241045	SOIL	CUTTINGS COMPOSITE	
9406241110	SOIL	CUTTINGS COMPOSITE	
9406241000	SOIL	CUTTINGS COMPOSITE	
9406271510	HRD	TRIP	
<p>Per Annette Moberg, they want TCLP metals volatility, semivolatiles, pesticides + herbicides. They also need ignitability, corrosivity, MSD corrosivity, and HEN reactivity.</p>			
Project Information		Sample Receipt	
Project <u>TEXCO</u>		Total No. of Containers	<u>9</u>
Project Director <u>T. THOMAS</u>		Chain of Custody Seals	<u>Y</u>
Charge Code No. <u>3031-004</u>		Rec'd Good Condition/Cold	<u>Y</u>
Shipping ID. No. <u>0214074044</u>		Conforms to Record	<u>Y</u>
Via: <u>Fed Ex.</u>		Lab No. <u>941585</u>	
Special Instructions/Comments:			
<p>Relinquished By 1. <u>BT. Squires</u> 1530 (Time) Signature: <u>BT. Squires</u> (Printed Name) Date: <u>6-27-94</u> (Date) Company: <u>GCL</u> (Company)</p> <p>Relinquished By 2. <u>Received By (Laboratory)</u> Signature: _____ (Time) (Printed Name) _____ (Date) (Company) _____ (Date)</p> <p>Relinquished By 3. _____ (Time) Signature: _____ (Time) (Printed Name) _____ (Date) (Company) _____ (Date)</p>			
Halogenated Volatiles 601/8010			
Aromatic Volatiles 602/8020			
Phenols, Sub Phenols 604/8040			
Pesticides/PCB 606/8060			
Polynuclear Aromatic Hydrocarbons 810/8310			
Volatile Compounds GC/MS 824/8240			
Basic/Neutral/Acid Compounds GC/MS 825/8270			
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	<input checked="" type="checkbox"/>		
TCLP - Metals	<input checked="" type="checkbox"/>		
RCRA Metals (6)			
Priority Pollutant Metals (13)			
CAM Metals (18) TMS/STC			
Flash Point			
Corrosivity			
Reactivity			
Oil & Grease			
Cyanide Total/Amenable			
Chemical Oxygen Demand (COD)			
Number of Containers			<u>2</u>

Distribution: White, Canary-Laboratory • Pink, GCL



Core Laboratories

LABORATORY TESTS RESULTS  
08/15/94

JOB NUMBER: 941585      CUSTOMER: GEOSCIENCE CONSULTANTS, LTD.      ATTN:

CLIENT I.D.: REXENE COC #8121  
DATE SAMPLED: 06/24/94  
TIME SAMPLED: 09:50  
WORK DESCRIPTION: 9406240950

LABORATORY I.D.: 941585-0001  
DATE RECEIVED: 06/28/94  
TIME RECEIVED: 10:00  
REMARKS: CUTTINGS COMPOSITE

TEST DESCRIPTION	FINAL RESULT	LIMITS/*DILUTION	UNITS OF MEASURE	TEST METHOD	DATE	TECHN
Corrosivity (pH-Solid)	8.2	0.1	pH	9045 (2)	07/11/94	SGM
Ignitability (Solids)	NEG		Pos/Neg	7-7.1.2.2 (2)	07/06/94	BPB
Reactivity (HCN)	<1	1	mg/Kg	9010 (2)	07/07/94	BPB
Reactivity (H2S)	100	10	mg/Kg	9030 (2)	07/07/94	BPB
Arsenic, TCLP (As)	<0.05	0.05	mg/L	TCLP 6010 (2)	07/05/94	WGL
Barium, TCLP (Ba)	<0.5	0.5	mg/L	TCLP 6010 (2)	07/05/94	WGL
Cadmium, TCLP (Cd)	0.03	0.01	mg/L	TCLP 6010 (2)	07/05/94	WGL
Chromium, TCLP (Cr)	<0.01	0.01	mg/L	TCLP 6010 (2)	07/05/94	WGL
Lead, TCLP (Pb)	0.38	0.05	mg/L	TCLP 6010 (2)	07/05/94	WGL
Mercury, TCLP (Hg)	<0.003	0.003	mg/L	TCLP 7470 (2)	07/14/94	LMT
Selenium, TCLP (Se)	<0.1	0.1	mg/L	TCLP 6010 (2)	07/05/94	WGL
Silver, TCLP (Ag)	<0.01	0.01	mg/L	TCLP 6010 (2)	07/05/94	WGL
TCLP - Volatile Organics		*10		8240 (2)	07/13/94	MLA
Benzene	ND	10	ug/L			
Carbon tetrachloride	ND	50	ug/L			
Chlorobenzene	ND	50	ug/L			
Chloroform	ND	50	ug/L			
1,2-Dichloroethane	ND	50	ug/L			
1,1-Dichloroethene	ND	50	ug/L			
2-Butanone	ND	1000	ug/L			
Tetrachloroethene	ND	50	ug/L			
Trichloroethene	ND	50	ug/L			
Vinyl chloride	ND	100	ug/L			
TCLP - Base/Neutral/Acid Organics		*10		8270 (2)	07/12/94	DMJ
1,4-Dichlorobenzene	ND	100	ug/L			
2,4-Dinitrotoluene	ND	100	ug/L			
Hexachlorobenzene	ND	100	ug/L			
Hexachlorobutadiene	ND	100	ug/L			
Hexachloroethane	ND	100	ug/L			
Nitrobenzene	ND	100	ug/L			

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LABORATORY TESTS RESULTS  
08/15/94

JOB NUMBER: 941585      CUSTOMER: GEOSCIENCE CONSULTANTS, LTD.      ATTN:

CLIENT I.D.: REXENE COC #8121  
DATE SAMPLED: 06/24/94  
TIME SAMPLED: 09:50  
WORK DESCRIPTION: 9406240950

LABORATORY I.D.: 941585-0001  
DATE RECEIVED: 06/28/94  
TIME RECEIVED: 10:00  
REMARKS: CUTTINGS COMPOSITE

TEST DESCRIPTION	FINAL RESULT	LIMITS/*DILUTION	UNITS OF MEASURE	TEST METHOD	DATE	TECHN
Pyridine	ND	100	ug/L			
o-Cresol (2-Methylphenol)	ND	100	ug/L			
m & p-Cresol (3 & 4-Methylphenol)	ND	100	ug/L			
Pentachlorophenol	ND	500	ug/L			
2,4,5-Trichlorophenol	ND	500	ug/L			
2,4,6-Trichlorophenol	ND	100	ug/L			
TCLP Pesticides		*10		8080 (2)	07/12/94	LB
Chlordane	ND	0.140	ug/L			
Endrin	ND	0.060	ug/L			
Heptachlor	ND	0.030	ug/L			
Heptachlor epoxide	ND	0.830	ug/L			
gamma-BHC	ND	0.040	ug/L			
Methoxychlor	ND	1.8	ug/L			
Toxaphene	ND	2.4	ug/L			
TCLP Herbicides		*1		8150 (2)	07/13/94	*AN
2,4-D	ND	0.005	mg/L			
2,4,5-TP (Silvex)	ND	0.001	mg/L			
TCLP ZHE Physical Characterization		*1		1311 (2)	07/15/94	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	07/06/94	0				
TCLP Physical Characterization		*1		1311 (2)	07/15/94	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	07/02/94	0				

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LABORATORY TESTS RESULTS  
08/15/94

JOB NUMBER: 941585      CUSTOMER: GEOSCIENCE CONSULTANTS, LTD.      ATTN:

CLIENT I.D.: REXENE COC #8121  
DATE SAMPLED: 06/24/94  
TIME SAMPLED: 10:45  
WORK DESCRIPTION: 9406241045

LABORATORY I.D.: 941585-0002  
DATE RECEIVED: 06/28/94  
TIME RECEIVED: 10:00  
REMARKS: CUTTINGS COMPOSITE

TEST DESCRIPTION	FINAL RESULT	LIMITS/*DILUTION	UNITS OF MEASURE	TEST METHOD	DATE	TECHN
Corrosivity (pH-Solid)	8.9	0.1	pH	9045 (2)	07/11/94	SGM
Ignitability (Solids)	NEG		Pos/Neg	7-7.1.2.2 (2)	07/06/94	BPB
Reactivity (HCN)	<1	1	mg/Kg	9010 (2)	07/07/94	BPB
Reactivity (H2S)	393	10	mg/Kg	9030 (2)	07/07/94	BPB
Arsenic, TCLP (As)	<0.05	0.05	mg/L	TCLP 6010 (2)	07/06/94	GAG
Barium, TCLP (Ba)	1.5	0.5	mg/L	TCLP 6010 (2)	07/06/94	GAG
Cadmium, TCLP (Cd)	0.01	0.01	mg/L	TCLP 6010 (2)	07/06/94	GAG
Chromium, TCLP (Cr)	<0.01	0.01	mg/L	TCLP 6010 (2)	07/06/94	GAG
Lead, TCLP (Pb)	62	2	mg/L	TCLP 6010 (2)	07/06/94	GAG
Mercury, TCLP (Hg)	<0.003	0.003	mg/L	TCLP 7470 (2)	07/14/94	LMT
Selenium, TCLP (Se)	<0.1	0.1	mg/L	TCLP 6010 (2)	07/06/94	GAG
Silver, TCLP (Ag)	<0.01	0.01	mg/L	TCLP 6010 (2)	07/06/94	GAG
TCLP - Volatile Organics		*10		8240 (2)	07/13/94	MLA
Benzene	ND	10	ug/L			
Carbon tetrachloride	ND	50	ug/L			
Chlorobenzene	ND	50	ug/L			
Chloroform	ND	50	ug/L			
1,2-Dichloroethane	ND	50	ug/L			
1,1-Dichloroethene	ND	50	ug/L			
2-Butanone	ND	1000	ug/L			
Tetrachloroethene	ND	50	ug/L			
Trichloroethene	ND	50	ug/L			
Vinyl chloride	ND	100	ug/L			
TCLP - Base/Neutral/Acid Organics		*10		8270 (2)	07/12/94	DMJ
1,4-Dichlorobenzene	ND	100	ug/L			
2,4-Dinitrotoluene	ND	100	ug/L			
Hexachlorobenzene	ND	100	ug/L			
Hexachlorobutadiene	ND	100	ug/L			
Hexachloroethane	ND	100	ug/L			
Nitrobenzene	ND	100	ug/L			

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LABORATORY TESTS RESULTS  
08/15/94

JOB NUMBER: 941585      CUSTOMER: GEOSCIENCE CONSULTANTS, LTD.      ATTN:

CLIENT I.D.: REXENE COC #8121      LABORATORY I.D.: 941585-0002  
 DATE SAMPLED: 06/24/94      DATE RECEIVED: 06/28/94  
 TIME SAMPLED: 10:45      TIME RECEIVED: 10:00  
 WORK DESCRIPTION: 9406241045      REMARKS: CUTTINGS COMPOSITE

TEST DESCRIPTION	FINAL RESULT	LIMITS/*DILUTION	UNITS OF MEASURE	TEST METHOD	DATE	TECH
Pyridine	ND	100	ug/L			
o-Cresol (2-Methylphenol)	ND	100	ug/L			
m & p-Cresol (3 & 4-Methylphenol)	ND	100	ug/L			
Pentachlorophenol	ND	500	ug/L			
2,4,5-Trichlorophenol	ND	500	ug/L			
2,4,6-Trichlorophenol	ND	100	ug/L			
TCLP Pesticides		*10		8080 (2)	07/11/94	LB
Chlordane	ND	0.140	ug/L			
Endrin	ND	0.060	ug/L			
Heptachlor	ND	0.030	ug/L			
Heptachlor epoxide	ND	0.830	ug/L			
gamma-BHC	ND	0.040	ug/L			
Methoxychlor	ND	1.8	ug/L			
Toxaphene	ND	2.4	ug/L			
TCLP Herbicides		*1		8150 (2)	07/13/94	*AN
2,4-D	ND	0.005	mg/L			
2,4,5-TP (Silvex)	ND	0.001	mg/L			
TCLP ZHE Physical Characterization		*1		1311 (2)	07/15/94	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	07/06/94	0				
TCLP Physical Characterization		*1		1311 (2)	07/15/94	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	07/02/94	0				

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LABORATORY TESTS RESULTS  
08/15/94

JOB NUMBER: 941585      CUSTOMER: GEOSCIENCE CONSULTANTS, LTD.      ATTN:

CLIENT I.D.: REXENE COC #8121  
DATE SAMPLED: 06/24/94  
TIME SAMPLED: 11:10  
WORK DESCRIPTION: 9406241110

LABORATORY I.D.: 941585-0003  
DATE RECEIVED: 06/28/94  
TIME RECEIVED: 10:00  
REMARKS: CUTTINGS COMPOSITE

TEST DESCRIPTION	FINAL RESULT	LIMITS/*DILUTION	UNITS OF MEASURE	TEST METHOD	DATE	TECHN
Corrosivity (pH-Solid)	8.6	0.1	pH	9045 (2)	07/11/94	SGM
Ignitability (Solids)	NEG		Pos/Neg	7-7.1.2.2 (2)	07/06/94	BPB
Reactivity (HCN)	<1	1	mg/Kg	9010 (2)	07/07/94	BPB
Reactivity (H2S)	602	10	mg/Kg	9030 (2)	07/07/94	BPB
Arsenic, TCLP (As)	<0.05	0.05	mg/L	TCLP 6010 (2)	07/06/94	GAG
Barium, TCLP (Ba)	0.7	0.5	mg/L	TCLP 6010 (2)	07/06/94	GAG
Cadmium, TCLP (Cd)	<0.01	0.01	mg/L	TCLP 6010 (2)	07/06/94	GAG
Chromium, TCLP (Cr)	<0.01	0.01	mg/L	TCLP 6010 (2)	07/06/94	GAG
Lead, TCLP (Pb)	<0.05	0.05	mg/L	TCLP 6010 (2)	07/06/94	GAG
Mercury, TCLP (Hg)	<0.003	0.003	mg/L	TCLP 7470 (2)	07/14/94	LMT
Selenium, TCLP (Se)	<0.1	0.1	mg/L	TCLP 6010 (2)	07/06/94	GAG
Silver, TCLP (Ag)	<0.01	0.01	mg/L	TCLP 6010 (2)	07/06/94	GAG
TCLP - Volatile Organics		*10		8240 (2)	07/13/94	MLA
Benzene	ND	10	ug/L			
Carbon tetrachloride	ND	50	ug/L			
Chlorobenzene	ND	50	ug/L			
Chloroform	ND	50	ug/L			
1,2-Dichloroethane	ND	50	ug/L			
1,1-Dichloroethene	ND	50	ug/L			
2-Butanone	ND	1000	ug/L			
Tetrachloroethene	ND	50	ug/L			
Trichloroethene	ND	50	ug/L			
Vinyl chloride	ND	100	ug/L			
TCLP - Base/Neutral/Acid Organics		*10		8270 (2)	07/12/94	DMJ
1,4-Dichlorobenzene	ND	100	ug/L			
2,4-Dinitrotoluene	ND	100	ug/L			
Hexachlorobenzene	ND	100	ug/L			
Hexachlorobutadiene	ND	100	ug/L			
Hexachloroethane	ND	100	ug/L			
Nitrobenzene	ND	100	ug/L			

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LABORATORY TESTS RESULTS  
08/15/94

JOB NUMBER: 941585      CUSTOMER: GEOSCIENCE CONSULTANTS, LTD.      ATTN:

CLIENT I.D.: REXENE COC #8121  
DATE SAMPLED: 06/24/94  
TIME SAMPLED: 11:10  
WORK DESCRIPTION: 9406241110

LABORATORY I.D.: 941585-0003  
DATE RECEIVED: 06/28/94  
TIME RECEIVED: 10:00  
REMARKS: CUTTINGS COMPOSITE

TEST DESCRIPTION	FINAL RESULT	LIMITS/*DILUTION	UNITS OF MEASURE	TEST METHOD	DATE	TECH
Pyridine	ND	100	ug/L			
o-Cresol (2-Methylphenol)	ND	100	ug/L			
m & p-Cresol (3 & 4-Methylphenol)	ND	100	ug/L			
Pentachlorophenol	ND	500	ug/L			
2,4,5-Trichlorophenol	ND	500	ug/L			
2,4,6-Trichlorophenol	ND	100	ug/L			
TCLP Pesticides		*10		8080 (2)	07/11/94	LB
Chlordane	ND	0.140	ug/L			
Endrin	ND	0.060	ug/L			
Heptachlor	ND	0.030	ug/L			
Heptachlor epoxide	ND	0.830	ug/L			
gamma-BHC	ND	0.040	ug/L			
Methoxychlor	ND	1.8	ug/L			
Toxaphene	ND	2.4	ug/L			
TCLP Herbicides		*1		8150 (2)	07/13/94	*AN
2,4-D	ND	0.005	mg/L			
2,4,5-TP (Silvex)	ND	0.001	mg/L			
TCLP ZHE Physical Characterization		*1		1311 (2)	07/15/94	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	07/06/94	0				
TCLP Physical Characterization		*1		1311 (2)	07/15/94	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	07/02/94	0				

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



Core Laboratories

LABORATORY TESTS RESULTS  
08/15/94

JOB NUMBER: 941585      CUSTOMER: GEOSCIENCE CONSULTANTS, LTD.      ATTN:

CLIENT I.D.....: REXENE COC #8121  
DATE SAMPLED.....: 06/24/94  
TIME SAMPLED.....: 10:00  
WORK DESCRIPTION...: 9406241000

LABORATORY I.D....: 941585-0004  
DATE RECEIVED....: 06/28/94  
TIME RECEIVED....: 10:00  
REMARKS.....: CUTTINGS COMPOSITE

TEST DESCRIPTION	FINAL RESULT	LIMITS/*DILUTION	UNITS OF MEASURE	TEST METHOD	DATE	TECHN
Corrosivity (pH-Solid)	8.6	0.1	pH	9045 (2)	07/11/94	SGM
Ignitability (Solids)	NEG		Pos/Neg	7-7.1.2.2 (2)	07/06/94	BPB
Reactivity (HCN)	<1	1	mg/Kg	9010 (2)	07/07/94	BPB
Reactivity (H2S)	52	10	mg/Kg	9030 (2)	07/07/94	BPB
Arsenic, TCLP (As)	<0.2	0.2	mg/L	TCLP 6010 (2)	07/06/94	GAG
Barium, TCLP (Ba)	<2	2	mg/L	TCLP 6010 (2)	07/06/94	GAG
Cadmium, TCLP (Cd)	<0.05	0.05	mg/L	TCLP 6010 (2)	07/06/94	GAG
Chromium, TCLP (Cr)	<0.05	0.05	mg/L	TCLP 6010 (2)	07/06/94	GAG
Lead, TCLP (Pb)	4.2	0.2	mg/L	TCLP 6010 (2)	07/06/94	GAG
Mercury, TCLP (Hg)	0.003	0.003	mg/L	TCLP 7470 (2)	07/14/94	LMT
Selenium, TCLP (Se)	<0.5	0.5	mg/L	TCLP 6010 (2)	07/06/94	GAG
Silver, TCLP (Ag)	<0.05	0.05	mg/L	TCLP 6010 (2)	07/06/94	GAG
TCLP - Volatile Organics		*10		8240 (2)	07/13/94	MLA
Benzene	ND	10	ug/L			
Carbon tetrachloride	ND	50	ug/L			
Chlorobenzene	ND	50	ug/L			
Chloroform	ND	50	ug/L			
1,2-Dichloroethane	ND	50	ug/L			
1,1-Dichloroethene	ND	50	ug/L			
2-Butanone	ND	1000	ug/L			
Tetrachloroethene	ND	50	ug/L			
Trichloroethene	ND	50	ug/L			
Vinyl chloride	ND	100	ug/L			
TCLP - Base/Neutral/Acid Organics		*10		8270 (2)	07/12/94	DMJ
1,4-Dichlorobenzene	ND	100	ug/L			
2,4-Dinitrotoluene	ND	100	ug/L			
Hexachlorobenzene	ND	100	ug/L			
Hexachlorobutadiene	ND	100	ug/L			
Hexachloroethane	ND	100	ug/L			
Nitrobenzene	ND	100	ug/L			

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LABORATORY TESTS RESULTS  
08/15/94

JOB NUMBER: 941585      CUSTOMER: GEOSCIENCE CONSULTANTS, LTD.      ATTN:

CLIENT I.D.: REXENE COC #8121  
DATE SAMPLED: 06/24/94  
TIME SAMPLED: 10:00  
WORK DESCRIPTION: 9406241000

LABORATORY I.D.: 941585-0004  
DATE RECEIVED: 06/28/94  
TIME RECEIVED: 10:00  
REMARKS: CUTTINGS COMPOSITE

TEST DESCRIPTION	FINAL RESULT	LIMITS/*DILUTION	UNITS OF MEASURE	TEST METHOD	DATE	TECHN
Pyridine	ND	100	ug/L			
o-Cresol (2-Methylphenol)	ND	100	ug/L			
m & p-Cresol (3 & 4-Methylphenol)	ND	100	ug/L			
Pentachlorophenol	ND	500	ug/L			
2,4,5-Trichlorophenol	ND	500	ug/L			
2,4,6-Trichlorophenol	ND	100	ug/L			
TCLP Pesticides		*10		8080 (2)	07/11/94	LB
Chlordane	ND	0.140	ug/L			
Endrin	ND	0.060	ug/L			
Heptachlor	ND	0.030	ug/L			
Heptachlor epoxide	ND	0.830	ug/L			
gamma-BHC	ND	0.040	ug/L			
Methoxychlor	ND	1.8	ug/L			
Toxaphene	ND	2.4	ug/L			
TCLP Herbicides		*1		8150 (2)	07/13/94	*AN
2,4-D	ND	0.005	mg/L			
2,4,5-TP (Silvex)	ND	0.001	mg/L			
TCLP ZHE Physical Characterization		*1		1311 (2)	07/15/94	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	07/06/94	0				
TCLP Physical Characterization		*1		1311 (2)	07/15/94	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	07/02/94	0				

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LABORATORY TESTS RESULTS  
08/15/94

JOB NUMBER: 941585      CUSTOMER: GEOSCIENCE CONSULTANTS, LTD.      ATTN:

CLIENT I.D.: REXENE COC #8121  
DATE SAMPLED: 06/27/94  
TIME SAMPLED: 15:10  
WORK DESCRIPTION: 9406271510

LABORATORY I.D.: 941585-0005  
DATE RECEIVED: 06/28/94  
TIME RECEIVED: 10:00  
REMARKS: TRIP BLANK

TEST DESCRIPTION	FINAL RESULT	LIMITS/*DILUTION	UNITS OF MEASURE	TEST METHOD	DATE	TECHN
TCLP - Volatile Organics		*1		8240 (2)	07/13/94	MLA
Benzene	ND	1	ug/L			
Carbon tetrachloride	ND	5	ug/L			
Chlorobenzene	ND	5	ug/L			
Chloroform	ND	5	ug/L			
1,2-Dichloroethane	ND	5	ug/L			
1,1-Dichloroethene	ND	5	ug/L			
2-Butanone	ND	100	ug/L			
Tetrachloroethene	ND	5	ug/L			
Trichloroethene	ND	5	ug/L			
Vinyl chloride	ND	10	ug/L			

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(303) 751-1780



4



Core Laboratories

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**

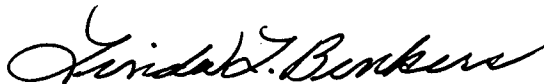
Customer: Geoscience Consultants, Ltd  
Project: Rexene COC #8280  
Core Laboratories Project Number: 942432

---

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



Albuquerque  
 505 Marquette NW, Ste. 1100  
 Albuquerque, NM 87102  
 (505) 842-0001  
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Mid Atlantic Region  
 4221 Forbes Blvd., Ste. 240  
 Lanham, MD 20706-4325  
 (301) 459-9677  
 FAX: (301) 459-3064

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

No 8280

# Chain of Custody

Date 9/26/94 Page 1 of 1

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

Sample Number	Matrix	Location
9409261325	Soil	TR-1
9409261405	Soil	TR-3
9409261440	Soil	TR-2
9409261515	Soil	TR-6
9409261600	Soil	TR-4
9409261650	Soil	TR-5
9409270530	H2O	MW-16
9409270625	H2O	MW-11
9409270720	H2O	MW-8
9409270805	H2O	MW-5

Analysis Request														
Halogenated Volatiles 601/8010	3													
Aromatic Volatiles 602/8020	3													
Phenols, Sub Phenols 604/8040														
Pesticides/CB 608/8080														
Polynuclear Aromatic Hydrocarbons 610/8310														
Volatile Compounds GC/MS 624/8240														
Base/Neu/Acid Compounds GC/MS 625/8270														
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 <b>Pb ONLY</b>	1													
RCA Metals (8)														
Priority Pollutant Metals (13)														
CAM Metals (18) TL/STL														
Flash Point														
Corrosivity														
Reactivity														
Oil & Grease														
Cyanide Total/Amenable														
Chemical Oxygen Demand (COD)														
WGL METALS														
CATIONS/ANIONS														
Number of Containers	1													

Project Information	Sample Receipt
Project <b>REXENE</b>	Total No. of Containers
Project Director <b>TRENT T.</b>	Chain of Custody Seals
Charge Code No. <b>3031-006</b>	Rec'd Good Condition/Cold
Shipping ID. No. <b>0214090984</b>	Conforms to Record
	Lab No.

1. Relinquished By	2. Relinquished By	3. Relinquished By
Signature: <b>DAVID MEE</b> (Printed Name) Date: <b>9/27/94</b> (Date)	Signature: _____ (Time) Date: _____ (Date)	Signature: _____ (Time) Date: _____ (Date)
Company: <b>GCL</b> (Company)	Company: _____ (Company)	Company: _____ (Company)
Received By: <b>Amey January</b> Signature: _____ (Time) Date: <b>10/15</b> (Date)	Received By: _____ Signature: _____ (Time) Date: _____ (Date)	Received By: _____ Signature: _____ (Time) Date: _____ (Date)
Company: <b>CURE</b> (Company)	Company: _____ (Company)	Company: _____ (Company)

Via: Fed X

Special Instructions/Comments:

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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*

Linda L. Benkers  
QA/QC Coordinator

*Douglas Georgic*

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

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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.

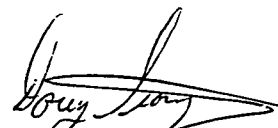
### Organic Analysis:

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      LABORATORY I.D.: 942432-0001  
 DATE SAMPLED: 09/26/94      DATE RECEIVED: 09/28/94  
 TIME SAMPLED: 13:25      TIME RECEIVED: 10:15  
 WORK DESCRIPTION: 9409261325      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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LABORATORY TESTS RESULTS  
10/18/94

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

CLIENT I.D.: REXENE COC#8280      LABORATORY I.D.: 942432-0004  
 DATE SAMPLED: 09/26/94      DATE RECEIVED: 09/28/94  
 TIME SAMPLED: 15:15      TIME RECEIVED: 10:15  
 WORK DESCRIPTION: 9409261515      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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Aurora, CO 80014  
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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....: 942432-0007  
 DATE SAMPLED.....: 09/27/94      DATE RECEIVED.....: 09/28/94  
 TIME SAMPLED.....: 05:30      TIME RECEIVED.....: 10:15  
 WORK DESCRIPTION...: 9409270530      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

LABORATORY I.D.: 942432-0007

DATE SAMPLED: 09/27/94

DATE RECEIVED: 09/28/94

TIME SAMPLED: 05:30

TIME RECEIVED: 10:15

WORK DESCRIPTION: 9409270530

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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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
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#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
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  
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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  
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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
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      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
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 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
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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LABORATORY TESTS RESULTS  
10/18/94

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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
inc, 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.....:      LABORATORY I.D....: 942432-0011  
 DATE SAMPLED.....: / /      DATE RECEIVED.....: / /  
 TIME SAMPLED.....: :      TIME RECEIVED.....: :  
 WORK DESCRIPTION...: METHOD BLANK      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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10/18/94

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CLIENT I.D.....:      LABORATORY I.D....: 942432-0011  
DATE SAMPLED.....: / /      DATE RECEIVED.....: / /  
TIME SAMPLED.....: :      TIME RECEIVED.....: :  
WORK DESCRIPTION...: METHOD BLANK      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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