GW - 55

MONITORING REPORTS

DATE: 2004

AES

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ANNUAL GROUNDWATER MONITORING AND SAMPLING REPORT

THRIFTWAY REFINERY
626 COUNTY ROAD 5500
BLOOMFIELD, NEW MEXICO

APRIL 25, 2005

PREPARED FOR
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AES PROJECT # 050204

TABLE OF CONTENTS

TABLES

FIGURES

APPENDICES

1.0 INTRODUCTION

Animas Environmental Services, LLC (AES) has prepared this annual groundwater monitoring and sampling report for the Thriftway Refinery, located at 626 County Road 5500, Bloomfield, San Juan County, New Mexico, in accordance with New Mexico Oil Conservation Division (NMOCD) and New Mexico Environment Department (NMED) Groundwater Quality Bureau regulations.

This Annual Groundwater Monitoring and Sampling Report details the groundwater monitoring and sampling activities in addition to groundwater remediation efforts at the site for 2004. A site plan is included as Figure 1.

2.0 GROUNDWATER MONITORING AND SAMPLING

BioTech Remediation, Inc. (BioTech) personnel conducted groundwater monitoring and sampling at the site in January, May, July and December, 2004. The January, 2004, sampling event was also incorporated into the 2003 Annual Groundwater Monitor Report, dated March, 2004. Additionally, influent and effluent water samples were collected from the on-site airstripper on a monthly basis, except during October, to monitor system efficiency.

2.1 MEASUREMENT OF GROUNDWATER ELEVATIONS

Before collection of groundwater samples, depth to groundwater in each well was measured with an electronic water level indicator, which has an accuracy of 0.01 foot. Depth to groundwater measurements were recorded onto a Water Sample Collection Form for each well.

2.2 MEASUREMENT OF FREE PRODUCT

Each well with free product was measured with a GeoTech interface probe, and the depth to top of product and the depth to the oil/water interface were recorded onto a groundwater measurement form. Free product was measured during 2004 within MW-2, MW-3, MW-12, MW-17, MW-28, MW-29, and RW-24 through RW-26.

2.3 GROUNDWATER SAMPLING

Once the depth to groundwater was measured in each well, the well was micro-purged with a new disposable bailer to remove stagnant water from the well. Groundwater samples were then collected. No groundwater samples were collected from monitoring wells found to contain free product. Groundwater sampling procedures included the following:

1. A new disposable bailer was used at each well. Samples were collected using a slow release valve attached to bottom of the bailer (to ensure a slow flow and less volatilization of contaminants from groundwater). Each sample container was filled, making sure there were no bubbles or headspace in VOA/VOC sample bottles.
2. Each bottle was labeled, and chain-of-custody documentation was filled out as each well was sampled. Only sample containers obtained from the analyzing laboratory were utilized during the sampling events.

3. Samples were placed in an insulated cooler and maintained at 4°C during transportation to the laboratory, Pinnacle Laboratories, Albuquerque, New Mexico.

Groundwater samples were collected from the least contaminated sampling location to the most contaminated sampling location in order to prevent cross-contamination.

2.4 *LABORATORY ANALYSES*

Groundwater samples collected during the January, May, July and December, 2004, sampling events were analyzed for benzene, toluene, ethylbenzene, and xylene (BTEX) and methyl-t-butyl ether (MTBE) and total petroleum hydrocarbons (TPH) gasoline range organics (GRO) per EPA Method 8021/8015M. Samples collected during the January and December, 2004, sampling events were also analyzed for the following:

- pH per EPA Method 150.1;
- Polynuclear aromatic hydrocarbons (PAHs) per EPA Method 8170 SIMS;
- RCRA 8 Metals per EPA Method 6010B and 7470A;
- Dissolved Metals (Calcium, Magnesium, Potassium, and Sodium) per EPA Method 6010B;
- Bromide per EPA Method 300.0;
- Chloride per EPA Method 4500E;
- Fluoride per EPA Method 340.2;
- Sulfate per EPA Method 375.4;
- Specific Conductance per EPA Method 120.1;
- Hardness as $CaCO_3$ per EPA Method 6010B;
- Total Dissolved Solids (TDS) per EPA Method 160.1;
- Carbon Dioxide and Forms of Alkalinity per EPA Method 4500D

All samples were analyzed at Pinnacle Laboratories in Albuquerque, New Mexico.

3.0 RESULTS

3.1 *HYDRAULIC GRADIENT*

Prior to sampling each well, depth to groundwater measurements were recorded on to a water sampling form. Groundwater elevations across the site during the most recent sampling event in December, 2004, range from 5436.70 feet above mean sea level (AMSL) in MW-15 down to 5423.71 feet AMSL in MW-5. Groundwater gradient is in a northwest direction across the site with a magnitude of 0.006 ft/ft. Table 1 includes depth to groundwater measurements and hydraulic elevations. Groundwater elevation contours are presented in Figure 2.

3.2 *FREE PRODUCT*

Free product was measured in several wells, including MW-2, MW-3, MW-12, MW-17, MW-28, MW-29, and RW-24 through RW-26, throughout the year. Measured thicknesses ranged from a sheen up to a maximum of 1.83 feet in MW-3. During 2004, a total of approximately 275 gallons of free product were recovered from the site through hand bailing of wells containing free product and from the oil/water separator

located upstream of the airstripper. Free product was stored in an on-site tank, labeled and then disposed of at Safety Kleen. Free product thickness contour maps are presented in Figure 3.

3.3 DISSOLVED PHASE CONTAMINANT CONCENTRATIONS

3.3.1 VOLATILE ORGANICS

Of all wells sampled, only MW-12 was found to have benzene concentrations which exceeded the WQCC standard of 10 µg/L benzene, with concentrations of 17 µg/L and 49 µg/L in January and May, 2004, respectively. Toluene, ethylbenzene and xylene concentrations were either below the laboratory detection limit or below applicable WQCC standards in all wells sampled. MTBE concentrations were above the WQCC standard of 100 µg/L in several wells, including MW-7, MW-12, MW-19 and MW-20. The highest MTBE concentration was reported at 680 µg/L in MW-20 in January, 2004. TPH-GRO concentrations were relatively low in wells sampled, ranging from below laboratory detection limit up to 0.91 mg/L in MW-20 in July, 2004. TPH-GRO concentration contour maps are presented as Figure 4. Dissolved phase benzene concentration contours and MTBE concentration contours are included as Figures 5 and 6, respectively. BTEX, MTBE and TPH-GRO analytical data are summarized in Table 2. Laboratory analytical reports are presented in Appendix A.

3.3.2 POLYNUCLEAR AROMATIC HYDROCARBONS (PAHS)

Monitor wells were sampled for PAHs per EPA Method 8270 SIMS during the January and December, 2004, sampling events. All PAH concentrations fell below laboratory detection limits or were below applicable WQCC standards, with the exception of total naphthalenes, which were reported at 387 µg/L in MW-12 during the January, 2004, event. PAH analytical data are summarized in Table 3, and dissolved phase naphthalene concentration contour maps are in Figure 7. Laboratory analytical results are included in Appendix A.

3.3.3 RCRA 8 METALS

RCRA 8 metals were analyzed by EPA Method 6010B and 7470A from groundwater samples collected during the January and December, 2004, sampling events. Four metals, including arsenic, barium, chromium and lead, were detected above applicable WQCC standards in several monitoring wells. The highest arsenic concentration was found in MW-18 with 1.0 mg/L, and the highest barium concentration was reported in MW-11 with 2.4 mg/L. Two wells had chromium concentrations above the WQCC standard, MW-11 with 0.12 mg/L and MW-18 with 0.11 mg/L. Four wells had lead concentrations above the WQCC standard, and the highest lead concentration was reported at 0.65 mg/L in MW-22. Laboratory results for cadmium, selenium, silver and mercury showed either trace concentrations or concentrations below the laboratory detection limit. Analytical results are summarized in Table 4, and laboratory analytical reports are included in Appendix A.

3.3.4 DISSOLVED METALS, CHLORIDES, CARBON DIOXIDE AND FORMS OF ALKALINITY

Groundwater samples were also analyzed for calcium, magnesium, potassium and sodium, bromide, chloride, fluoride, sulfate, specific conductance, hardness (as $CaCO_3$), TDS, carbon dioxide and forms of alkalinity during the January and December, 2004, sampling events. Sulfate and TDS concentrations were above the WQCC standards in

all wells, and chloride concentrations exceeded the WQCC standard in a few wells, MW-7, MW-13, MW-21, and MW-22. However, these concentrations are believed to be typical for shallow groundwater conditions in the vicinity. Laboratory data have been summarized and are presented within Tables 5 and 6. Dissolved phase chloride concentrations, groundwater specific conductance, and TDS are presented in Figures 8, 9, and 10, respectively. Laboratory analytical reports are found in Appendix A.

4.0 SITE REMEDIATION OPERATIONS

Airstripper influent and effluent samples were collected on a monthly basis, except October, 2004, for analysis of BTEX, MTBE and TPH-GRO per EPA Method 8021/8015M at Pinnacle Laboratories. Samples collected during the January and December, 2004, sampling events were also analyzed for the following:

- pH per EPA Method 150.1
- PAHs per EPA Method 8170 SIMS;
- RCRA 8 Metals per EPA Method 6010B and 7470A;
- Dissolved Metals (Calcium, Magnesium, Potassium, and Sodium) per EPA Method 6010B;
- Bromide per EPA Method 300.0;
- Chloride per EPA Method 4500E;
- Fluoride per EPA Method 340.2;
- Sulfate per EPA Method 375.4;
- Specific Conductance per EPA Method 120.1;
- Hardness as $CaCO_3$ per EPA Method 6010B;
- Total Dissolved Solids per EPA Method 160.1;
- Carbon Dioxide and Forms of Alkalinity per EPA Method 4500D

Analytical results indicate that the airstripper appears to be effectively removing light end petroleum hydrocarbons (BTEX and MTBE). Benzene concentrations were above the WQCC standard for all influent samples, with concentrations ranging from 81 µg/L to 1100 µg/L throughout the year. Effluent benzene concentrations were either below the laboratory detection limit or below the WQCC standard of 10 µg/L. Toluene and xylene concentrations in influent samples exceeded the WQCC standard in a few instances, with the highest toluene concentration at 1700 µg/L and the highest xylene concentration reported at 880 µg/L. Influent MTBE concentrations were also above WQCC standard of 100 µg/L for six of the eleven months sampled, with the highest MTBE concentration reported at 140 µg/L. Effluent concentrations for toluene, ethylbenzene, xylene and MTBE were either below the laboratory detection limit or well below applicable WQCC standards. BTEX, MTBE and TPH-GRO results are included in Table 2.

Results of the PAH analyses indicated that influent airstripper concentrations exceeded the WQCC standard for total naphthalenes during both the January and December, 2004, sampling events, with concentrations reported at 1,110 µg/L and 102 µg/L, respectively. Airstripper effluent concentrations for all PAHs, including total

naphthalenes, were either below laboratory detection limits or well below applicable standards. PAH analytical results are presented in Table 3.

Reported RCRA 8 metal concentrations for both airstripper influent and effluent samples were either below the laboratory detection limit or below the applicable WQCC standards, with the exception of lead in the effluent water samples for both the January and December, 2004, sampling events. RCRA 8 metals concentrations were tabulated and are found in Table 4.

Airstripper influent and effluent concentrations were found to exceed applicable WQCC standards for chloride, sulfate, and TDS. Analytical data are presented in Table 5 along with other dissolved metals, including calcium, magnesium, potassium, sodium, bromide, fluoride, specific conductance, and hardness. Carbon dioxide and forms of alkalinity are presented in Table 6.

All laboratory analytical reports for airstripper influent and effluent sampling are included within Appendix A.

5.0 SUMMARY AND CONCLUSIONS

Overall, groundwater elevations continue to be stable and appear to have fluctuated moderately throughout 2004 as part of seasonal variations noted previously at the site. Groundwater gradient was found to be in a northwest direction across the site with a magnitude of 0.006 ft/ft.

Free product was measured in several wells, including MW-2, MW-3, MW-12, MW-17, MW-28, MW-29, and RW-24 through RW-26. Measured thicknesses ranged from a sheen up to 1.83 feet in MW-3. A total of 275 gallons of free product were recovered during 2004 via hand bailing and from the oil/water separator located upstream of the airstipper. Free product was disposed of at Safety Kleen.

Based upon the results of the 2004 sampling events, dissolved phase contaminant concentrations in several wells exceeded applicable WQCC standards for benzene, MTBE, total naphthalene, arsenic, barium, chromium, lead, chloride, sulfate, total dissolved solids. The highest benzene and MTBE concentrations were reported at 49 µg/L in MW-12 and 680 µg/L in MW-20, respectively

Airstripper influent concentrations also exceeded the WQCC standards during various sampling events for benzene, toluene, xylene, MTBE, total naphthalene, lead, chloride, sulfate, and TDS. However, airstripper effluent concentrations were below applicable WQCC standards for all compounds, except lead, chloride, sulfate and TDS. Influent and effluent water concentrations show that the airstripper is effectively removing hydrocarbon mass from the contaminated water.

Groundwater monitoring and sampling activities completed in 2005 will be included within the next annual report, which will be submitted by March, 2006.

6.0 STATEMENT OF FAMILIARITY

I, the undersigned, am personally familiar with the information submitted in this annual groundwater monitoring report and attached documents for the Thriftway Refinery, located at 626 County Road 5500, Bloomfield, San Juan County, New Mexico, prepared on behalf of Thriftway Marketing Corporation. I attest that it is true and complete to the best of my knowledge.

Ross Kennemer, Project Manager

Elizabeth McNally, P.E.

TABLE 1.
SUMMARY OF GROUNDWATER MEASUREMENTS AND WATER QUALITY DATA
THRIFTWAY REFINERY, BLOOMFIELD, NEW MEXICO

Well ID	Date	T.O.C. (ft amsl)	Depth to Product (ft)	Depth to Water (ft)	Free Product Thickness (ft)	Groundwater Elevation (ft amsl)	pH	Conductivity (mS)	Dissolved Oxygen (mg/L)	Temperature (°F)	Purge Volume (gallons)
MW-1	21-Jan-04	5449.08	15.04	15.04		5434.04					No Sample
	26-May-04	5449.08	14.52	14.52		5434.56					No Sample
	29-Jul-04	5449.08	14.31	14.31		5434.77					No Sample
	03-Jan-05	5449.08	15.25	15.25		5433.83					No Sample
MW-2	21-Jan-04	5442.65	11.94	13.00	1.06	5428.88					No Sample
	26-May-04	5442.65	11.58	12.60	1.02	5429.31					No Sample
	28-Jul-04	5442.65	11.75	12.73	0.98	5429.21					No Sample
	03-Jan-05	5442.65	12.00	12.99	0.99	5428.94					No Sample
MW-3	24-Jan-04	5431.43	5.18	6.58	1.40	5423.83					No Sample
	26-May-04	5431.43	4.99	6.82	1.83	5423.28					No Sample
	28-Jul-04	5431.43	4.79	5.58	0.79	5425.27					No Sample
	3-Jan-05	5431.43	4.86	5.33	0.47	5425.76					
MW-4	19-Jan-04	5430.12	5.35	5.35		5424.77	7.00	1.119	1.86	48.70	P
	25-May-04	5430.12	5.11	5.11		5425.01	6.90	2.874	0.34	65.70	3.00
	27-Jul-04	5430.12	5.62	5.62		5424.50	7.36	2.71		72.10	B
	28-Dec-04	5430.12	5.16	5.16		5424.96	7.50				MP
MW-5	19-Jan-04	5428.97	5.25	5.25		5423.72	7.70	1.14	2.61	47.60	P
	25-May-04	5428.97	5.04	5.04		5423.93	7.50	3.21	0.45	60.40	3.00
	27-Jul-04	5428.97	5.43	5.43		5423.54	8.09	4.07		75.50	B
	28-Dec-04	5428.97	5.26	5.26		5423.71	8.0				MP
MW-6	19-Jan-04	5430.70	5.14	5.14		5425.56	7.60	2.235	1.64	52.20	P
	25-May-04	5430.70	5.04	5.04		5425.66	7.10	2.882	0.31	63.30	3.00
	27-Jul-04	5430.70	5.14	5.14		5425.56	7.67	3.90		72.10	B
	28-Dec-04	5430.70	5.01	5.01		5425.69	7.60				MP
MW-7	19-Jan-04	5435.28	9.06	9.06		5426.22	7.00	2.827	0.93	49.70	P
	25-May-04	5435.28	9.14	9.14		5426.14	6.8	3.76	0.27	63.2	3.00
	27-Jul-04	5435.28	9.08	9.08		5426.20	7.28	5.32		72.8	B
	28-Dec-04	5435.28	9.05	9.05		5426.23	7.8				MP
MW-8		5433.04	DESTROYED								
MW-9	19-Jan-04	5436.69	5.72	5.72		5430.97	7.3	3.23	1.71	47.1	P
	25-May-04	5436.69	5.72	5.72		5430.97	7.5	4.86	0.65	61.5	3.00
	28-Jul-04	5436.69	5.95	5.95		5430.74	7.57	6.73		72	B
	29-Dec-04	5436.69	5.47	5.47		5431.22					MP

TABLE 1.
SUMMARY OF GROUNDWATER MEASUREMENTS AND WATER QUALITY DATA
THRIFTWAY REFINERY, BLOOMFIELD, NEW MEXICO

Well ID	Date	T.O.C. (ft amsl)	Depth to Product (ft)	Depth to Water (ft)	Free Product Thickness (ft)	Groundwater Elevation (ft amsl)	pH	Conductivity (mS)	Dissolved Oxygen (mg/L)	Temperature (°F)	Purge Volume (gallons)
MW-10	19-Jan-04	5437.78	5.29	5.29		5432.49	7.3	2.96	1.38	45.8	P
	25-May-04	5437.78	5.19	5.19		5432.59	7.4	4.54	0.46	61.4	3.00
	28-Jul-04	5437.78	5.42	5.42		5432.36	8.31			69.7	B
	29-Dec-04	5437.78	5.08	5.08		5432.70					MP
MW-11	20-Jan-04	5439.67	5.62	5.62		5434.05	7.3	0.45	3.62	44.5	P
	25-May-04	5439.67	5.85	5.85		5433.82	7.6	4.04	2.16	70.4	3.00
	28-Jul-04	5439.67	6.11	6.11		5433.56	7.78	5		65.9	B
	29-Dec-04	5439.67	5.95	5.95		5433.72					MP
MW-12	20-Jan-04	5446.09	14.06	14.19	0.13	5431.81					No Sample
	25-May-04	5446.09	13.73	13.76	0.03	5432.31					MP
	28-Jul-04	5446.09	14.04	14.20	0.16	5431.77					No Sample
	30-Dec-04	5446.09	14.14	14.89	0.75	5430.65					MP
MW-13	20-Jan-04	5452.12	17.52	17.52		5434.60	7.3	2.39	1.48	48.5	P
	25-May-04	5452.12	17.20	17.20		5434.92	7.3	4.13	0.65	63.7	3.00
	28-Jul-04	5452.12	17.65	17.65		5434.47	7.56	5.79		68	B
	30-Dec-04	5452.12	17.66	17.66		5434.46					MP
MW-14	21-Jan-04	5446.93	12.40	12.40		5434.53					No Sample
	25-May-04	5446.93	12.14	12.14		5434.79					No Sample
	28-Jul-04	5446.93									No Sample
	03-Jan-05	5446.93	12.51	12.51		5434.42					No Sample
MW-15	20-Jan-04	5449.28	12.71	12.71		5436.57	7.3	2.17	1.91	48.2	P
	25-May-04	5449.28	12.49	12.49		5436.79	7.5	2.87	2.19	62.8	3.00
	28-Jul-04	5449.28	12.93	12.93		5436.35	7.48	4.4		60.8	B
	29-Dec-04	5449.28	12.58	12.58		5436.70					MP
MW-16		5442.63	DESTROYED								
MW-17	21-Jan-04	5435.20	5.85	5.85		5429.35					No Sample
	26-May-04	5435.20	5.69	5.69		5429.51					No Sample
	28-Jul-04	5435.20	5.99	6.07	0.08	5429.07					No Sample
	03-Jan-05	5435.20	5.83	5.83		5429.37					No Sample
MW-18	19-Jan-04	5428.95	4.62	4.62		5424.33	7.70	2.58	0.56	51.1	P
	25-May-04	5428.95	4.28	4.28		5424.67	7.70	3.55		64.9	4.00
	27-Jul-04	5428.95	5.54	5.54		5423.41	7.68	4.46		77.2	B
	28-Dec-04	5428.95	4.47	4.47		5424.48					MP

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Well ID	Date	T.O.C. (ft amsl)	Depth to Product (ft)	Depth to Water (ft)	Free Product Thickness (ft)	Groundwater Elevation (ft amsl)	pH	Conductivity (mS)	Dissolved Oxygen (mg/L)	Temperature (°F)	Purge Volume (gallons)
MW-19	19-Jan-04	5428.69	4.09	4.09		5424.60	7.40	0.29	2.89	46.6	P
	25-May-04	5428.69	3.90	3.90		5424.79	7.00	2.24	0.35	61.9	0.50
	27-Jul-04	5428.69	4.31	4.31		5424.38	7.09	5.14		71.1	B
	28-Dec-04	5428.69	4.04	4.04		5424.65	7.3				MP
MW-20	20-Jan-04	5430.45	6.08	6.08		5424.37	7.50	0.35	3.23	51.8	P
	25-May-04	5430.45	5.90	5.90		5424.55	7.10	4.01	1.2	72.3	1.50
	27-Jul-04	5430.45	6.29	6.29		5424.16	7.02	5.12		66.1	B
	29-Dec-04	5430.45	6.07	6.07		5424.38					MP
MW-21	20-Jan-04	5428.62	3.57	3.57		5425.05	7.40	0.31	3.40	46.7	P
	25-May-04	5428.62	3.49	3.49		5425.13	7.2	7.56	0.49	64.5	1.50
	28-Jul-04	5428.62	4.12	4.12		5424.50	7.28	11.42		67.1	B
	29-Dec-04	5428.62	3.36	3.36		5425.26					MP
MW-22	20-Jan-04	5430.75	4.49	4.49		5426.26	7.10	4.19	0.43	46.4	P
	25-May-04	5430.75	5.68	5.68		5425.07	7.2	6.95	0.16	63.3	1.50
	28-Jul-04	5430.75	5.29	5.29		5425.46	7.54	9.78		70.1	B
	29-Dec-04	5430.75	4.33	4.33		5426.42					MP
MW-23	21-Jan-04	5449.34	Dry	Dry							No Sample
	26-May-04	5449.34	Dry	Dry							No Sample
	28-Jul-04	5449.34	Dry	Dry							No Sample
	03-Jan-05	5449.34	Dry	Dry							No Sample
MW-24	21-Jan-04	5449.23	16.22	16.22		5433.01					No Sample
	26-May-04	5449.23	15.75	15.75		5433.48					No Sample
	28-Jul-04	5449.23	16.22	16.22		5433.01					No Sample
	03-Jan-05	5449.23	16.42	16.42		5432.81					No Sample
MW-25	21-Jan-04	5448.74	15.70	15.70		5433.04					No Sample
	26-May-04	5448.74	15.63	15.63		5433.11					No Sample
	28-Jul-04	5448.74	15.59	15.59		5433.15					No Sample
	03-Jan-05	5448.74	15.90	15.90		5432.84					No Sample
MW-26		5447.26	DESTROYED								
MW-27	21-Jan-04	5449.01	Dry	Dry							No Sample
	26-May-04	5449.01	Dry	Dry							No Sample
	28-Jul-04	5449.01	Dry	Dry							No Sample
	03-Jan-05	5449.01	Dry	Dry							No Sample

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Well ID	Date	T.O.C. (ft amsl)	Depth to Product (ft)	Depth to Water (ft)	Free Product Thickness (ft)	Groundwater Elevation (ft amsl)	pH	Conductivity (mS)	Dissolved Oxygen (mg/L)	Temperature (°F)	Purge Volume (gallons)
MW-28	21-Jan-04	5449.07	16.94	16.96	0.02	5432.10					No Sample
	26-May-04	5449.07	15.56	15.96	0.40	5432.82					No Sample
	28-Jul-04	5449.07	Dry	DRY							No Sample
	03-Jan-05	5449.07	16.01	16.01		5433.06					No Sample
MW-29	21-Jan-04	5447.94	15.28	16.05	0.77	5431.33					No Sample
	26-May-04	5447.94	14.91	15.09	0.18	5432.72					No Sample
	28-Jul-04	5447.94	15.29	15.75	0.46	5431.85					No Sample
	03-Jan-05	5447.94	15.34	16.31	0.97	5430.92					No Sample
RW-24	21-Jan-04	5447.73	15.77	16.54	0.77	5430.63					No Sample
	26-May-04	5447.73	15.50	15.50	0.00	5432.23					No Sample
	28-Jul-04	5447.73	15.70	16.35	0.65	5430.91					No Sample
	03-Jan-05	5447.73	15.85	16.90	1.05	5430.06					No Sample
RW-25	21-Jan-04	5448.68	16.51	16.83	0.32	5431.62					No Sample
	26-May-04	5448.68	16.23	16.25	0.02	5432.42					No Sample
	28-Jul-04	5448.68	16.50	16.52	0.02	5432.15					No Sample
	03-Jan-05	5448.68	16.63	17.65	1.02	5430.29					No Sample
RW-26	21-Jan-04	5443.98	14.24	14.54	0.30	5429.22					No Sample
	26-May-04	5443.98	13.85	13.85	0.00	5430.13					No Sample
	28-Jul-04	5443.98	14.24	14.29	0.05	5429.65					No Sample
	03-Jan-05	5443.98	14.35	14.90	0.55	5428.68					No Sample
T-17-1	21-Jan-04	5452.41	17.79	17.79		5434.62					No Sample
	26-May-04	5452.41	17.42	17.42		5434.99					No Sample
	29-Jul-04	5452.41	18.09	18.09		5434.32					No Sample
	03-Jan-05	5452.41	17.96	17.96		5434.45					No Sample

TABLE 2.
SUMMARY OF VOLATILE ORGANICS PER EPA METHOD 8021/8015
THRIFTWAY REFINERY, BLOOMFIELD, NEW MEXICO

Well	Date	Benzene (µg/L)	Toluene (µg/L)	Ethyl-benzene (µg/L)	Xylenes (µg/L)	MTBE (µg/L)	GRO (mg/L)
NM WQCC STANDARD		10	750	750	620	100	NE
Air Stripper Influent	1/20/2004	**300**	510	340	**790**	88	NA
	2/27/2004	**630**	700	270	**620**	**110**	7.6
	3/31/2004	**610**	220	260	410	**130**	6.1
	4/28/2004	**440**	700	340	**880**	82	8.2
	5/25/2004	**640**	150	270	380	**130**	5.9
	6/30/2004	**370**	59	210	220	**140**	3.8
	7/29/2004	**420**	170	350	540	**110**	6.8
	8/31/2004	**550**	390	250	310	95	4.9
	9/29/2004	**240**	120	190	150	49	3.2
	11/30/2004	**98**	120	150	170	57	2.7
	12/30/2004	**81**	44	120	170	78	2.5
	1/31/2005	**1100**	**1700**	260	600	**120**	9.1
Air Stripper Effluent	1/20/2004	0.9	3.3	1.4	4.8	2.9	NA
	2/27/2004	<0.5	0.8	<0.5	1.7	<2.5	<0.10
	3/31/2004	2.2	2.4	1.1	3.5	<2.5	<0.10
	4/28/2004	<0.5	0.6	<0.5	1.6	<2.5	<0.10
	5/25/2004	1.5	4.6	1.3	4.4	<2.5	0.12
	6/30/2004	0.7	0.6	0.7	1.8	<2.5	<0.10
	7/29/2004	<0.5	<0.5	0.5	<1.0	<2.5	<0.10
	8/31/2004	0.9	1.1	<0.5	1.0	<2.5	<0.10
	9/29/2004	<0.5	<0.5	<0.5	<1.0	<2.5	<0.10
	11/30/2004	0.5	5.4	3.0	7.8	<2.5	<0.10
	12/30/2004	<0.5	1.0	0.6	2.4	2.6	<0.10
	1/31/2005	1.1	1.9	<0.5	1.7	<2.5	<0.10
MW-4	1/19/2004	2.2	0.6	<0.5	1.3	27	NA
	5/25/2004	3.9	<0.5	<0.5	1.8	26	0.20
	7/27/2004	2.0	<0.5	<0.5	<1.0	15	0.12
	12/28/2004	1.5	<0.5	<0.5	<1.0	11	<0.10
MW-5	1/19/2004	3.8	0.9	<0.5	1.4	44	NA
	5/25/2004	1.8	0.5	<0.5	<1.0	36	0.14
	7/27/2004	<0.5	<0.5	<0.5	<1.0	29	<0.10
	12/28/2004	<0.5	<0.5	<0.5	<1.0	27	<0.10
MW-6	1/19/2004	<0.5	0.7	<0.5	<1.0	9.2	NA
	5/25/2004	<0.5	1.0	<0.5	<1.0	28	0.11
	7/27/2004	0.8	<0.5	<0.5	1.1	61	0.21
	12/28/2004	<0.5	<0.5	<0.5	<1.0	19	<0.10

TABLE 2.
SUMMARY OF VOLATILE ORGANICS PER EPA METHOD 8021/8015
THRIFTWAY REFINERY, BLOOMFIELD, NEW MEXICO

Well	Date	Benzene (µg/L)	Toluene (µg/L)	Ethyl-benzene (µg/L)	Xylenes (µg/L)	MTBE (µg/L)	GRO (mg/L)
NM WQCC STANDARD		10	750	750	620	100	NE
MW-7	1/19/2004	<0.5	<0.5	<0.5	1.6	**210**	NA
	5/25/2004	<0.5	<0.5	<0.5	<1.0	**190**	0.25
	7/27/2004	<0.5	<0.5	<0.5	1.3	**190**	0.27
	12/29/2004	<0.5	<0.5	<0.5	<1.0	**150**	0.14
MW-9	1/19/2004	<0.5	<0.5	<0.5	<1.0	<2.5	NA
	5/25/2004	<0.5	<0.5	<0.5	<1.0	<2.5	<0.10
	7/28/2004	<0.5	<0.5	<0.5	1.0	<2.5	<0.10
	12/29/2004	<0.5	<0.5	<0.5	<1.0	<2.5	<0.10
MW-10	1/19/2004	<0.5	<0.5	<0.5	<1.0	<2.5	NA
	5/25/2004	<0.5	<0.5	<0.5	<1.0	<2.5	<0.10
	7/28/2004	<0.5	<0.5	<0.5	<1.0	<2.5	<0.10
	12/29/2004	<0.5	1.6	0.6	3.1	<2.5	<0.10
MW-11	1/20/2004	<0.5	<0.5	<0.5	<1.0	<2.5	NA
	5/25/2004	<0.5	1.6	0.7	4.1	<2.5	0.12
	7/28/2004	<0.5	1.9	0.9	3.3	<2.5	<0.10
	12/29/2004	<0.5	<0.5	<0.5	<1.0	<2.5	<0.10
MW-12	1/20/2004	**17**	<2.5	34	43	**100**	NA
	5/25/2004	**49**	2.4	46	63	62	0.88
	12/30/2004	7.0	0.7	35	74	87	0.69
MW-13	1/20/2004	<0.5	<0.5	<0.5	<1.0	<2.5	NA
	7/28/2004	<0.5	<0.5	<0.5	<1.0	<2.5	<0.10
	12/30/2004	<0.5	<0.5	<0.5	<1.0	<2.5	<0.10
MW-14	5/25/2004	<0.5	<0.5	<0.5	<1.0	<2.5	<0.10
MW-15	1/20/2004	<0.5	<0.5	<0.5	<1.0	<2.5	NA
	5/25/2004	<0.5	<0.5	<0.5	<1.0	<2.5	<0.10
	7/28/2004	<0.5	<0.5	<0.5	<1.0	<2.5	<0.10
	12/29/2004	<0.5	0.6	<0.5	<1.0	<2.5	<0.10
MW-18	1/19/2004	0.7	<0.5	<0.5	<1.0	18	NA
	5/25/2004	2.6	<0.5	<0.5	1.2	32	0.16
	7/27/2004	<0.5	<0.5	<0.5	<1.0	<2.5	<0.10
	12/28/2004	<0.5	<0.5	<0.5	<1.0	18	<0.10
MW-19	1/19/2004	0.6	<0.5	<0.5	1.7	**310**	NA
	5/25/2004	<0.5	<0.5	<0.5	<1.0	**180**	0.25
	7/27/2004	<0.5	<0.5	<0.5	1.2	**210**	0.30
	12/28/2004	<0.5	0.6	<0.5	3.0	**250**	0.40
MW-20	1/19/2004	2.8	<0.5	1.4	3.3	**680**	NA
	5/25/2004	1.9	<0.5	3.3	7.6	**400**	0.82
	7/27/2004	2.1	<0.5	<0.5	2.3	**590**	0.91
	12/29/2004	2.0	<0.5	<0.5	7.2	**300**	0.89

TABLE 2.
SUMMARY OF VOLATILE ORGANICS PER EPA METHOD 8021/8015
THRIFTWAY REFINERY, BLOOMFIELD, NEW MEXICO

Well	*Date*	*Benzene (µg/L)*	*Toluene (µg/L)*	*Ethyl-benzene (µg/L)*	*Xylenes (µg/L)*	*MTBE (µg/L)*	*GRO (mg/L)*
NM WQCC STANDARD		10	750	750	620	100	NE
MW-21	1/20/2004	<0.5	<0.5	<0.5	<1.0	<2.5	NA
	5/25/2004	<0.5	<0.5	<0.5	<1.0	18	0.11
	7/28/2004	<0.5	<0.5	<0.5	<1.0	24	<0.10
	12/29/2004	<0.5	<0.5	<0.5	<1.0	25	<0.10
MW-22	1/20/2004	<0.5	<0.5	<0.5	<1.0	13	NA
	5/25/2004	<0.5	<0.5	<0.5	<1.0	13	0.11
	7/28/2004	<0.5	<0.5	<0.5	<1.0	14	<0.10
	12/29/2004	<0.5	<0.5	<0.5	<1.0	11	<0.10

Notes:

<	Analyte not detected above listed method limit
NA	Not analyzed
NE	Not established
µg/L	Micrograms per liter (ppb)
mg/L	Milligrams per liter (ppm)

TABLE 3.
SUMMARY OF POLYNUCLEAR AROMATIC HYDROCARBONS PER EPA METHOD 8270 SIMS
THRIFTWAY REFINERY, BLOOMFIELD, NEW MEXICO

Sample ID	Sample Date	1-Methyl naphthalene (µg/L)	2-Methyl naphthalene (µg/L)	Acenaphthene (µg/L)	Acenaphthylene (µg/L)	Anthracene (µg/L)	Benz(a) anthracene (µg/L)	Benzo(a) pyrene (µg/L)	Benzo(b) fluoranthene (µg/L)	Benzo(g,h,i) perylene (µg/L)	Benzo(k) fluoranthene (µg/L)	Chrysene (µg/L)	Dibenz(a,h) anthracene (µg/L)	Fluoranthene (µg/L)	Fluorene (µg/L)	Indeno(1,2,3-cd) pyrene (µg/L)	Naphthalene (µg/L)	Phenanthrene (µg/L)	Pyrene (µg/L)
NM WQCC Standard		30	30	NE	NE	NE	NE	0.7	NE	NE	NE	NE	NE	NE	NE	NE	30	NE	NE
Airstripper Influent	1/20/2004	280	290	<0.40	<0.40	<0.40	<0.40	<0.40	<0.40	<0.40	<0.40	<0.40	<0.40	<0.40	<0.40	<0.40	540	<0.40	<0.40
	12/30/2004	40	32	0.56	<0.40	<0.40	<0.40	<0.40	<0.40	<0.40	<0.40	<0.40	<0.40	<0.40	3.2	<0.40	30	2.3	<0.40
Airstripper Effluent	1/20/2004	3.2	3.0	<0.40	<0.40	<0.40	<0.40	<0.40	<0.40	<0.40	<0.40	<0.40	<0.40	<0.40	1.5	<0.40	4.7	2.1	<0.40
	12/30/2004	3.6	2.2	<0.40	<0.40	<0.40	<0.40	<0.40	<0.40	<0.40	<0.40	<0.40	<0.40	<0.40	1.8	<0.40	2.2	1.9	<0.40
MW-4	1/19/2004	<0.40	<0.40	<0.40	<0.40	<0.40	<0.40	<0.40	<0.40	<0.40	<0.40	<0.40	<0.40	<0.40	<0.40	<0.40	<0.40	<0.40	<0.40
	12/28/2004	<0.40	<0.40	<0.40	<0.40	<0.40	<0.40	<0.40	<0.40	<0.40	<0.40	<0.40	<0.40	<0.40	<0.40	<0.40	<0.40	<0.40	<0.40
MW-5	1/19/2004	<0.40	<0.40	<0.40	<0.40	<0.40	<0.40	<0.40	<0.40	<0.40	<0.40	<0.40	<0.40	<0.40	<0.40	<0.40	<0.40	<0.40	<0.40
	12/28/2004	<0.40	<0.40	<0.40	<0.40	<0.40	<0.40	<0.40	<0.40	<0.40	<0.40	<0.40	<0.40	<0.40	<0.40	<0.40	<0.40	<0.40	<0.40
MW-6	1/19/2004	<0.40	<0.40	<0.40	<0.40	<0.40	<0.40	<0.40	<0.40	<0.40	<0.40	<0.40	<0.40	<0.40	<0.40	<0.40	<0.40	<0.40	<0.40
	12/28/2004	<0.40	<0.40	<0.40	<0.40	<0.40	<0.40	<0.40	<0.40	<0.40	<0.40	<0.40	<0.40	<0.40	<0.40	<0.40	<0.40	<0.40	<0.40
MW-7	1/19/2004	<0.40	<0.40	<0.40	<0.40	<0.40	<0.40	<0.40	<0.40	<0.40	<0.40	<0.40	<0.40	<0.40	<0.40	<0.40	<0.40	<0.40	<0.40
	12/29/2004	<0.40	<0.40	<0.40	<0.40	<0.40	<0.40	<0.40	<0.40	<0.40	<0.40	<0.40	<0.40	<0.40	<0.40	<0.40	<0.40	<0.40	<0.40
MW-9	1/19/2004	<0.40	<0.40	<0.40	<0.40	<0.40	<0.40	<0.40	<0.40	<0.40	<0.40	<0.40	<0.40	<0.40	<0.40	<0.40	<0.40	<0.40	<0.40
	12/29/2004	<0.40	<0.40	<0.40	<0.40	<0.40	<0.40	<0.40	<0.40	<0.40	<0.40	<0.40	<0.40	<0.40	<0.40	<0.40	<0.40	<0.40	<0.40
MW-10	1/19/2004	<0.40	<0.40	<0.40	<0.40	<0.40	<0.40	<0.40	<0.40	<0.40	<0.40	<0.40	<0.40	<0.40	<0.40	<0.40	<0.40	<0.40	<0.40
	12/29/2004	<0.40	<0.40	<0.40	<0.40	<0.40	<0.40	<0.40	<0.40	<0.40	<0.40	<0.40	<0.40	<0.40	<0.40	<0.40	<0.40	<0.40	<0.40
MW-11	1/20/2004	<0.40	<0.40	<0.40	<0.40	<0.40	<0.40	<0.40	<0.40	<0.40	<0.40	<0.40	<0.40	<0.40	<0.40	<0.40	<0.40	<0.40	<0.40
	12/29/2004	<0.40	<0.40	<0.40	<0.40	<0.40	<0.40	<0.40	<0.40	<0.40	<0.40	<0.40	<0.40	<0.40	<0.40	<0.40	<0.40	<0.40	<0.40
MW-12	1/20/2004	140	170	2.8	4.7	<0.40	<0.40	<0.40	<0.40	<0.40	<0.40	<0.40	<0.40	0.68	14	<0.40	77	38	1
	12/30/2004	3,500	3,700	41	<0.40	<0.40	<0.40	<0.40	<0.40	<0.40	<0.40	15	<0.40	8.0	360	<0.40	730	650	<0.40
MW-13	1/20/2004	<0.40	<0.40	<0.40	<0.40	<0.40	<0.40	<0.40	<0.40	<0.40	<0.40	<0.40	<0.40	<0.40	<0.40	<0.40	<0.40	<0.40	<0.40
	12/30/2004	<0.40	<0.40	<0.40	<0.40	<0.40	<0.40	<0.40	<0.40	<0.40	<0.40	<0.40	<0.40	<0.40	<0.40	<0.40	<0.40	<0.40	<0.40
MW-15	1/20/2004	<0.40	<0.40	<0.40	<0.40	<0.40	<0.40	<0.40	<0.40	<0.40	<0.40	<0.40	<0.40	<0.40	<0.40	<0.40	<0.40	<0.40	<0.40
	12/29/2004	<0.40	<0.40	<0.40	<0.40	<0.40	<0.40	<0.40	<0.40	<0.40	<0.40	<0.40	<0.40	<0.40	<0.40	<0.40	<0.40	<0.40	<0.40
MW-18	1/19/2004	<0.40	<0.40	<0.40	<0.40	<0.40	<0.40	<0.40	<0.40	<0.40	<0.40	<0.40	<0.40	<0.40	<0.40	<0.40	<0.40	<0.40	<0.40
	12/28/2004	<0.40	<0.40	<0.40	<0.40	<0.40	<0.40	<0.40	<0.40	<0.40	<0.40	<0.40	<0.40	<0.40	<0.40	<0.40	<0.40	<0.40	<0.40
MW-19	1/19/2004	<0.40	<0.40	<0.40	<0.40	<0.40	<0.40	<0.40	<0.40	<0.40	<0.40	<0.40	<0.40	<0.40	<0.40	<0.40	<0.40	<0.40	<0.40
	12/28/2004	<0.40	<0.40	<0.40	<0.40	<0.40	<0.40	<0.40	<0.40	<0.40	<0.40	<0.40	<0.40	<0.40	<0.40	<0.40	<0.40	<0.40	<0.40
MW-20	1/20/2004	<0.40	<0.40	<0.40	<0.40	<0.40	<0.40	<0.40	<0.40	<0.40	<0.40	<0.40	<0.40	<0.40	<0.40	<0.40	<0.40	<0.40	<0.40
	12/29/2004	<0.40	<0.40	<0.40	<0.40	<0.40	<0.40	<0.40	<0.40	<0.40	<0.40	<0.40	<0.40	<0.40	<0.40	<0.40	<0.40	<0.40	<0.40
MW-21	1/20/2004	<0.40	<0.40	<0.40	<0.40	<0.40	<0.40	<0.40	<0.40	<0.40	<0.40	<0.40	<0.40	<0.40	<0.40	<0.40	<0.40	<0.40	<0.40
	12/29/2004	<0.40	<0.40	<0.40	<0.40	<0.40	<0.40	<0.40	<0.40	<0.40	<0.40	<0.40	<0.40	<0.40	<0.40	<0.40	<0.40	<0.40	<0.40
MW-22	1/20/2004	<0.40	<0.40	<0.40	<0.40	<0.40	<0.40	<0.40	<0.40	<0.40	<0.40	<0.40	<0.40	<0.40	<0.40	<0.40	<0.40	<0.40	<0.40
	12/29/2004	<0.40	<0.40	<0.40	<0.40	<0.40	<0.40	<0.40	<0.40	<0.40	<0.40	<0.40	<0.40	<0.40	<0.40	<0.40	<0.40	<0.40	<0.40

Notes:
< Analyte not detected above listed method limit
NA Not analyzed
NE Not established
µg/L Micrograms per liter (ppb)
mg/L Milligrams per liter (ppm)

TABLE 4.
SUMMARY OF RCRA 8 METALS PER EPA METHOD 6010B & 7470A
THRIFTWAY REFINERY, BLOOMFIELD, NEW MEXICO

Sample ID	Sample Date	Arsenic (mg/L)	Barium (mg/L)	Cadmium (mg/L)	Chromium (mg/L)	Lead (mg/L)	Selenium (mg/L)	Silver (mg/L)	Mercury (mg/L)
NM WQCC STANDARD		***0.10***	***1.0***	***0.01***	***0.05***	***0.05***	***0.05***	***0.05***	***0.002***
Airstripper Influent	1/20/2004	<0.0050	0.059	<0.0050	0.0050	<0.0050	<0.010	<0.0050	<0.00020
	12/30/2005	<0.0050	0.043	<0.0050	<0.0050	<0.0050	<0.010	<0.0050	<0.00020
Airstripper Effluent	1/20/2004	<0.0050	0.059	<0.0050	0.018	**0.23**	<0.010	<0.0050	<0.00020
	12/30/2005	<0.0050	0.043	<0.0050	<0.0050	**0.18**	<0.010	<0.0050	<0.00020
MW-4	1/19/2004	0.015	0.170	<0.0050	<0.0050	<0.0050	<0.010	<0.0050	<0.00020
	12/28/2004	**0.12**	0.070	<0.0050	<0.0050	<0.0050	<0.010	<0.0050	<0.00020
MW-5	1/19/2004	<0.0050	0.038	<0.0050	<0.0050	<0.0050	<0.010	<0.0050	<0.00020
	12/28/2004	<0.0050	0.077	<0.0050	<0.0050	<0.0050	<0.010	<0.0050	<0.00020
MW-6	1/19/2004	<0.0050	0.018	<0.0050	<0.0050	<0.0050	<0.010	<0.0050	<0.00020
	12/28/2004	<0.0050	0.015	<0.0050	<0.0050	<0.0050	<0.010	<0.0050	<0.00020
MW-7	1/19/2004	**0.14**	**2.0**	<0.0050	0.012	0.015	<0.010	<0.0050	<0.00020
	12/29/2004	0.013	0.083	<0.0050	<0.0050	<0.0050	<0.010	<0.0050	<0.00020
MW-9	1/19/2004	0.008	0.23	<0.0050	0.016	0.010	<0.010	<0.0050	<0.00020
	12/29/2004	<0.0050	0.013	<0.0050	<0.0050	<0.0050	<0.010	<0.0050	<0.00020
MW-10	1/19/2004	<0.0050	0.038	<0.0050	<0.0050	<0.0050	<0.010	<0.0050	<0.00020
	12/29/2004	<0.0050	0.024	<0.0050	<0.0050	<0.0050	<0.010	<0.0050	<0.00020
MW-11	1/20/2004	**0.14**	**2.4**	<0.0050	**0.12**	**0.094**	<0.010	<0.0050	<0.00020
	12/29/2004	0.0090	0.098	<0.0050	<0.0050	<0.0050	<0.010	<0.0050	<0.00020
MW-12	1/20/2004	0.017	0.18	<0.0050	0.030	0.013	<0.010	<0.0050	<0.00020
	12/30/2004	0.012	0.18	<0.0050	0.029	0.010	<0.010	<0.0050	<0.00020
MW-13	1/20/2004	<0.0050	<0.010	<0.0050	<0.0050	<0.0050	<0.010	<0.0050	<0.00020
	12/30/2004	<0.0050	0.021	<0.0050	<0.0050	<0.0050	<0.010	<0.0050	<0.00020
MW-15	1/20/2004	0.0050	0.32	<0.0050	0.020	0.010	<0.010	<0.0050	<0.00020
	12/29/2004	<0.0050	0.046	<0.0050	<0.0050	<0.0050	<0.010	<0.0050	<0.00020
MW-18	1/19/2004	**1.0**	**1.2**	<0.0050	**0.11**	**0.13**	<0.010	<0.0050	0.00028
	12/28/2004	**0.28**	0.12	<0.0050	0.0060	<0.0050	<0.010	<0.0050	<0.00020
MW-19	1/19/2004	0.0070	0.058	<0.0050	<0.0050	<0.0050	<0.010	<0.0050	<0.00020
	12/28/2004	<0.0050	0.058	<0.0050	<0.0050	<0.0050	<0.010	<0.0050	<0.00020
MW-20	1/19/2004	0.080	0.51	<0.0050	0.066	**0.075**	<0.010	<0.0050	0.00026
	12/29/2004	0.0080	0.055	<0.0050	<0.0050	<0.0050	<0.010	<0.0050	<0.00020
MW-21	1/19/2004	0.038	0.091	<0.0050	0.013	0.010	<0.010	<0.0050	<0.00020
	12/29/2004	**0.13**	0.065	<0.0050	0.0060	0.0060	<0.010	<0.0050	<0.00020
MW-22	1/20/2004	0.016	0.036	<0.0050	0.054	**0.65**	<0.010	<0.0050	<0.00020
	12/29/2004	0.0060	0.017	<0.0050	<0.0050	**0.20**	<0.010	<0.0050	<0.00020

Notes:

<	Analyte not detected above listed method limit
NA	Not analyzed
NE	Not established
µg/L	Micrograms per liter (ppb)
mg/L	Milligrams per liter (ppm)

TABLE 5.
SUMMARY OF DISSOLVED METALS, CHLORIDES, SULFATE, SPECIFIC CONDUCTANCE, HARDNESS, TDS
THRIFTWAY REFINERY, BLOOMFIELD, NEW MEXICO

Sample ID	Sample Date	Calcium (mg/L)	Magnesium (mg/L)	Potassium (mg/L)	Sodium (mg/L)	Bromide (mg/L)	Chloride (mg/L)	Fluoride (mg/L)	Sulfate as SO4 (mg/L)	Specific Conductance (mg/L)	Hardness as $CaCO_3$ (mg/L)	Total Dissolved Solids (mg/L)
Sample Method		6010B	6010B	6010B	6010B	300.0	4500E	340.2	375.4	120.1	6010B	160.1
NM WQCC STANDARDS		NE	NE	NE	NE	NE	250	1.6	600	NE	NE	1,000
Airstripper Influent	1/20/2004	400	60	7.3	970	0.50	**810**	0.53	**1,600**	5,700	1,100	**3,900**
	12/30/2004	350	55	8.6	910	0.74	**550**	1.2	**1,500**	1,500	1,100	**4,100**
Airstripper Effluent	1/20/2004	400	60	7.2	990	<0.20	**1,500**	0.47	**1,600**	8,000	1,100	**5,800**
	12/30/2004	340	54	8.8	870	0.79	**1,500**	0.87	**1,500**	7,900	1,100	**4,400**
MW-4	1/19/2004	270	32	6.7	800	<0.20	93	0.41	**1,300**	3,400	750	**2,500**
	12/30/2004	180	22	6.2	490	0.20	94	0.49	**970**	3,200	540	**2,300**
MW-5	1/19/2004	65	17	7.7	1,300	<0.20	160	0.59	**1,900**	4,900	260	**3,400**
	12/30/2004	67	19	8.8	1,100	0.35	140	0.57	**1,700**	5,800	260	**3,800**
MW-6	1/19/2004	190	32	6.9	960	<0.20	71	0.50	**1,600**	4,200	540	**3,000**
	12/30/2004	190	32	9.6	860	0.31	100	0.54	**1,600**	4,800	610	**3,500**
MW-7	1/19/2004	340	44	8.3	1,100	<0.20	**330**	0.48	**2,400**	5,500	990	**4,000**
	12/29/2004	330	44	10	900	0.36	**420**	0.49	**2,000**	5,600	1,100	**4,500**
MW-9	1/19/2004	410	61	6	1,500	0.31	86	0.73	**4,000**	7,000	1,200	**5,700**
	12/29/2004	420	64	6.6	1,400	0.64	100	0.76	**3,600**	7,000	1,300	**6,200**
MW-10	1/19/2004	380	50	6	1,400	0.47	150	0.68	**3,500**	6,300	1,000	**5,200**
	12/29/2004	340	53	5.6	1,100	0.99	160	0.71	**2,800**	5,700	1,100	**5,000**
MW-11	1/20/2004	150	15	<5.0	480	0.41	90	0.54	**2,800**	5,200	1,200	**3,900**
	12/29/2004	250	21	8.3	950	0.57	92	0.62	**2,300**	4,900	720	**4,000**
MW-12	1/20/2004	420	78	6.5	1,500	0.24	92	1.4	**3,700**	7,100	1,300	**5,600**
	12/30/2004	410	81	8.0	1,300	0.24	88	1.9	**3,500**	7,100	1,200	**6,100**
MW-13	1/20/2004	390	57	7.0	1,000	<0.20	**710**	0.94	**3,800**	6,400	1,200	**5,000**
	12/30/2004	480	63	9.5	1,100	0.21	70	1.3	**3,100**	6,100	1,400	**5,400**
MW-15	1/20/2004	130	15	<5.0	180	0.65	210	0.70	**2,600**	4,800	1,300	**3,800**
	12/29/2004	510	36	5.6	490	0.97	150	0.67	**1,900**	3,800	1,300	**3,400**
MW-18	1/19/2004	160	36	10	1,100	0.26	170	0.45	**1,400**	4,700	750	**4,000**
	12/28/2004	130	47	10	1,000	0.50	190	0.45	**1,300**	5,300	560	**3,700**
MW-19	1/19/2004	370	63	11	1,300	0.34	160	0.48	**2,700**	5,600	1,100	**4,500**
	12/30/2004	380	76	8.6	920	0.55	220	0.51	**2,300**	6,200	1,200	**4,800**

TABLE 5.
SUMMARY OF DISSOLVED METALS, CHLORIDES, SULFATE, SPECIFIC CONDUCTANCE, HARDNESS, TDS
THRIFTWAY REFINERY, BLOOMFIELD, NEW MEXICO

Sample ID	Sample Date	Calcium (mg/L)	Magnesium (mg/L)	Potassium (mg/L)	Sodium (mg/L)	Bromide (mg/L)	Chloride (mg/L)	Fluoride (mg/L)	Sulfate as SO4 (mg/L)	Specific Conductance (mg/L)	Hardness as $CaCO_3$ (mg/L)	Total Dissolved Solids (mg/L)
Sample Method		*6010B*	*6010B*	*6010B*	*6010B*	*300.0*	*4500E*	*340.2*	*375.4*	*120.1*	*6010B*	*160.1*
NM WQCC STANDARDS		*NE*	*NE*	*NE*	*NE*	*NE*	*250*	*1.6*	*600*	*NE*	*NE*	*1,000*
MW-20	1/19/2004	480	68	6	1,000	0.32	160	0.56	**2,400**	5,200	1,400	**3,900**
	12/29/2004	410	65	5.9	790	0.44	200	0.56	**1,900**	4,800	1,300	**4,000**
MW-21	1/19/2004	390	96	10	2,900	0.40	**300**	0.46	**6,000**	11,000	1,300	**8,000**
	12/29/2004	410	87	13	2,100	0.68	**280**	0.46	**4,600**	9,900	1,400	**8,500**
MW-22	1/20/2004	400	73	11	2,600	1.2	**380**	0.35	**5,100**	10,000	1,200	**8,000**
	12/29/2004	350	68	14	2,200	1.8	**340**	0.36	**4,900**	10,000	1,200	**8,700**

Notes:

<	Analyte not detected above listed method limit
NA	Not analyzed
NE	Not established
µg/L	Micrograms per liter (ppb)
mg/L	Milligrams per liter (ppm)

TABLE 6.
SUMMARY OF GROUNDWATER CARBON DIOXIDE AND FORMS OF ALKALINITY
THRIFTWAY REFINERY, BLOOMFIELD, NEW MEXICO

Sample ID	Sample Date	pH	Bi-carbonate (mg/L as $CaCO_3$)	Free Carbon Dioxide (mg/L as $CaCO_3$)	Carbonate (mg/L as $CaCO_3$)	Hydroxide (mg/L as $CaCO_3$)	Total Carbon Dioxide (mg/L as $CaCO_3$)	Alkalinity as $CaCO_3$ (mg/L)
Sample Method		150.1	4500D	4500D	4500D	4500D	4500D	2320B
Airstripper Influent	1/20/2004	6.9	570	70	1.0	<1.0	570	570
	12/30/2004	7.0	840	120	1.0	<1.0	860	840
Airstripper Effluent	1/20/2004	2.3	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0
	12/30/2004	2.4	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0
MW-4	1/19/2004	7.2	540	47	1.0	<1.0	520	540
	12/28/2004	7.5	530	56	1.0	<1.0	520	530
MW-5	1/19/2004	7.8	700	18	5.0	<1.0	630	700
	12/28/2004	8.0	720	22	4.0	<1.0	650	720
MW-6	1/19/2004	7.5	760	30	4.0	<1.0	700	760
	12/28/2004	7.5	770	40	3.0	<1.0	720	770
MW-7	1/19/2004	7.0	610	68	1	<1.0	610	610
	12/29/2004	7.0	590	110	1.0	<1.0	630	590
MW-9	1/19/2004	7.4	300	13	1	<1.0	280	300
	12/29/2004	7.3	310	26	1.0	<1.0	300	310
MW-10	1/19/2004	7.4	250	14	1.0	<1.0	230	250
	12/29/2004	7.4	240	20	1.0	<1.0	230	240
MW-11	1/20/2004	7.6	560	23	3	<1.0	520	560
	12/29/2004	7.5	240	20	1.0	<1.0	230	240
MW-12	1/20/2004	7.2	660	26	3	<1.0	610	660
	12/30/2004	7.0	570	57	1.0	<1.0	560	570
MW-13	1/20/2004	7.2	250	9	1	<1.0	230	250
	12/30/2004	6.0	300	25	1.0	<1.0	290	300
MW-15	1/20/2004	7.4	190	12	1	<1.0	180	190
	12/29/2004	7.3	170	18	<1.0	<1.0	170	170
MW-18	1/19/2004	7.5	1,100	46	5.0	<1.0	1,000	1100
	12/28/2004	7.8	990	34	6.0	<1.0	910	1000
MW-19	1/19/2004	7.1	830	76	2	<1.0	810	830
	12/28/2004	7.3	790	120	1.0	<1.0	820	790
MW-20	1/19/2004	7.2	900	94	2	<1.0	890	900
	12/29/2004	6.8	870	130	1	<1.0	900	870
MW-21	1/20/2004	7.0	630	60	1	<1.0	610	630
	12/29/2004	7.1	610	84	1.0	<1.0	620	610
MW-22	1/20/2004	6.9	440	67	1	<1.0	450	440
	12/29/2004	7.0	410	78	<1.0	<1.0	440	410

Notes:

<	Analyte not detected above listed method limit
NA	Not analyzed
NE	Not established
µg/L	Micrograms per liter (ppb)
mg/L	Milligrams per liter (ppm)

REVISIONS			
BY	DATE	DESCR.	

DRAWN BY	CHECKED BY
MRK	
02-25-05	APPROVED BY

MW-21
MW-22
MW-5
MW-4
MW-6
MW-7
GALLEGOS WASH
AIR STRIPPER BUILDING
MW-18
MW-3
MW-9
MW-20
MW-19
MW-10
MW-17
MW-11
EVAPORATION PONDS
SHOP
MW-2
RW-26
FIRE WATER POND
MW-14
FORMER LAB AND OFFICE
MW-25
MW-24
STORAGE TANKS
RW-24
MW-1
RW-25
MW-29
MW-28
MW-12
T-17-1
MW-15
C.R. 5500 (WEST HAMMOND)
MW-13
FORMER DISPATCH OFFICE
GATE
BM-01
SPIKE ON P.P.
ELEV: 5461.13

LEGEND

GROUNDWATER MONITORING WELL

NOTES

1. MISSING OR DESTROYED MONITORING WELLS NOT SHOWN;
2. SMALL STORAGE TANKS NOT SHOWN

N

SCALE
100 50 0 200
20
(1 INCH = 200 FEET)

FIGURE 1
GENERAL SITE MAP

THRIFTWAY REFINERY
626 ROAD 5500
BLOOMFIELD, NEW MEXICO

AES
Animas Environmental Services, LLC

2005/THRIFT/REFINERY/F1SITEPLAN.DWG

"DO NOT SCALE THIS DRAWING"

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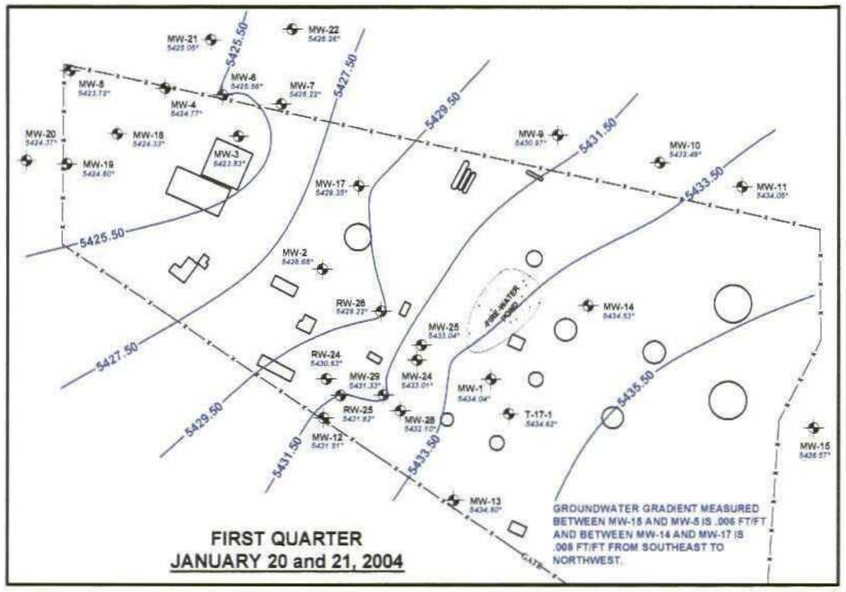
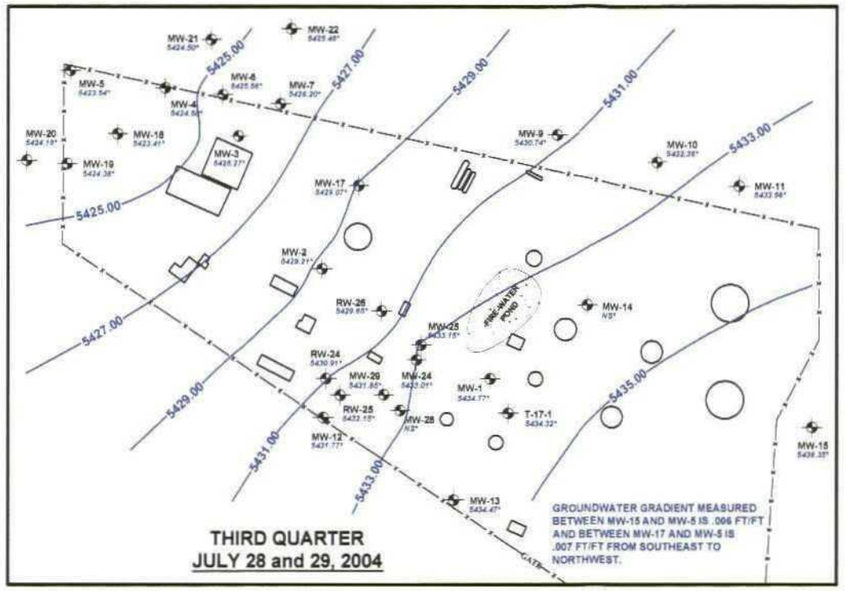
	02-25-05	APPROVED BY		BY DATE DESCR.



FIRST QUARTER
JANUARY 20 and 21, 2004



THIRD QUARTER
JULY 28 and 29, 2004

SECOND QUARTER
MAY 25 and 26, 2004

FOURTH QUARTER
DECEMBER 28, 2004 - JANUARY 3, 2005

LEGEND

- GROUNDWATER MONITORING WELL
- 5434.46' GROUNDWATER ELEVATION IN FEET A.M.S.L.
- 5429.50 GROUNDWATER ELEVATION CONTOUR IN FEET A.M.S.L.
- NS' WELL NOT MEASURED

NOTES

MISSING OR DESTROYED MONITORING WELLS NOT SHOWN;
SMALL STORAGE TANKS NOT SHOWN

N

SCALE
200 100 0 400
40
(1 INCH = 400 FEET)

FIGURE 2
GROUNDWATER GRADIENT DATA, 2004

THRIFTWAY REFINERY
626 ROAD 5500
BLOOMFIELD, NEW MEXICO

AES
Animas Environmental Services, LLC

2005/THRIFT/REFINERY/F2GWGRADIENT.DWG

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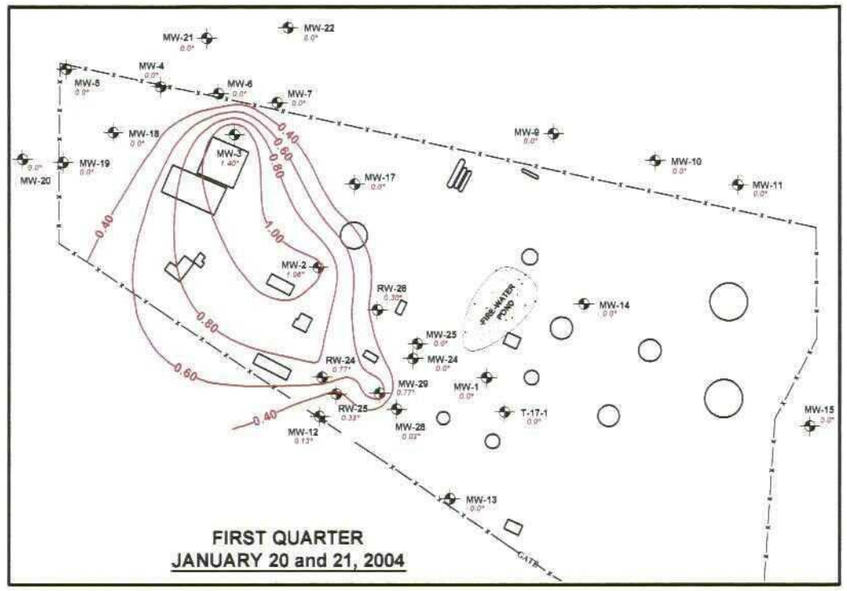
	02-25-05	APPROVED BY		BY DATE DESCR



FIRST QUARTER
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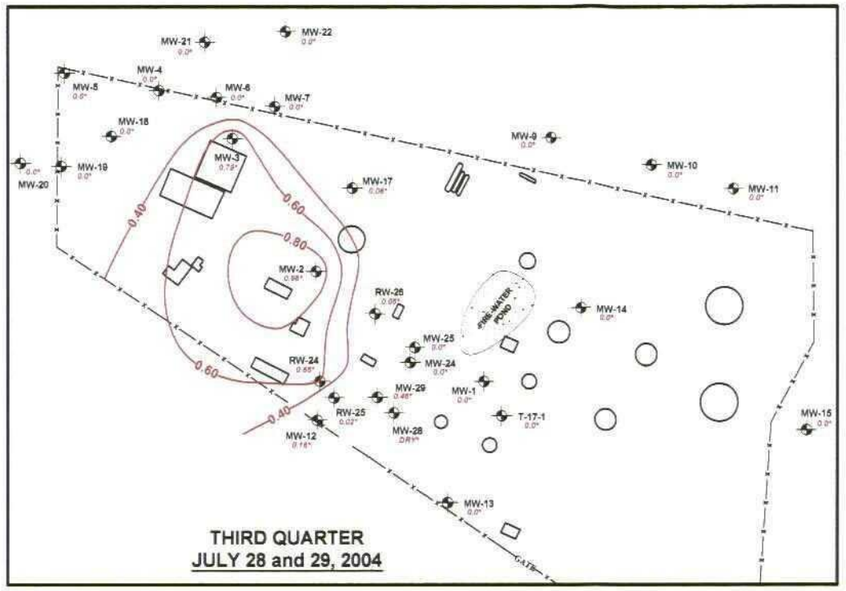


THIRD QUARTER
JULY 28 and 29, 2004

SECOND QUARTER
MAY 25 and 26, 2004

FOURTH QUARTER
DECEMBER 28, 2004 - JANUARY 3, 2005

LEGEND

- GROUNDWATER MONITORING WELL
- 0.03' NAPL THICKNESS IN FEET
- 0.40 NAPL THICKNESS CONTOUR IN FEET

NOTES

MISSING OR DESTROYED MONITORING WELLS NOT SHOWN;
SMALL STORAGE TANKS NOT SHOWN

N

SCALE
200 100 0 400
40
(1 INCH = 400 FEET)

FIGURE 3
NAPL PLUME
2004
THRIFTWAY REFINERY
626 ROAD 5500
BLOOMFIELD, NEW MEXICO

AES
Animas Environmental Services, LLC

2005/THRIFT/REFINERY/F3NAPLPLUME.DWG

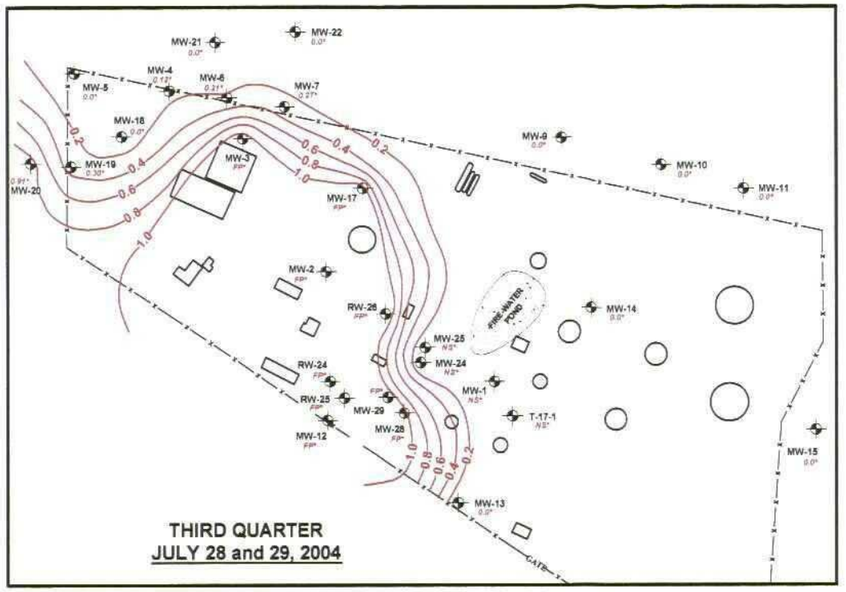
"DO NOT SCALE THIS DRAWING"

DRAWN BY	MRK	CHECKED BY	
	02-25-05	APPROVED BY	

REVISIONS			
	BY	DATE	DESCR.

NO DATA

FIRST QUARTER
JANUARY 20 and 21, 2004



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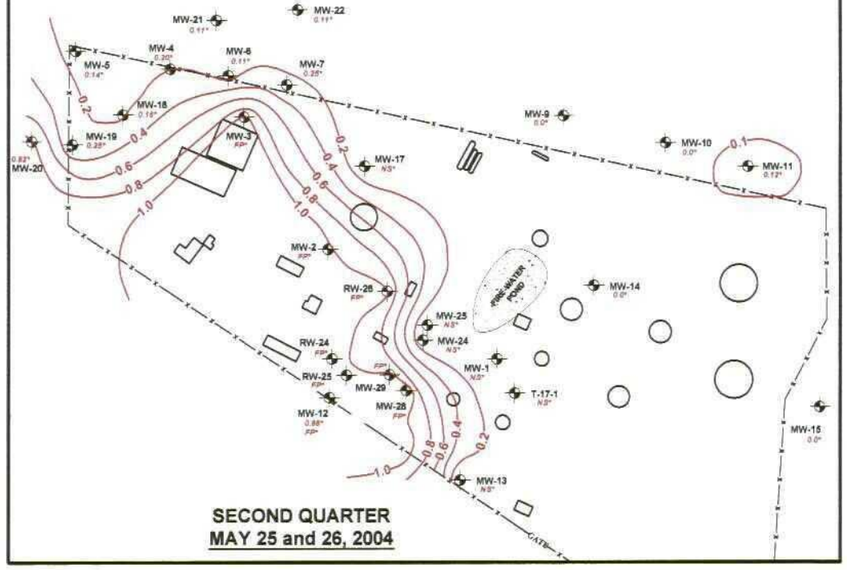

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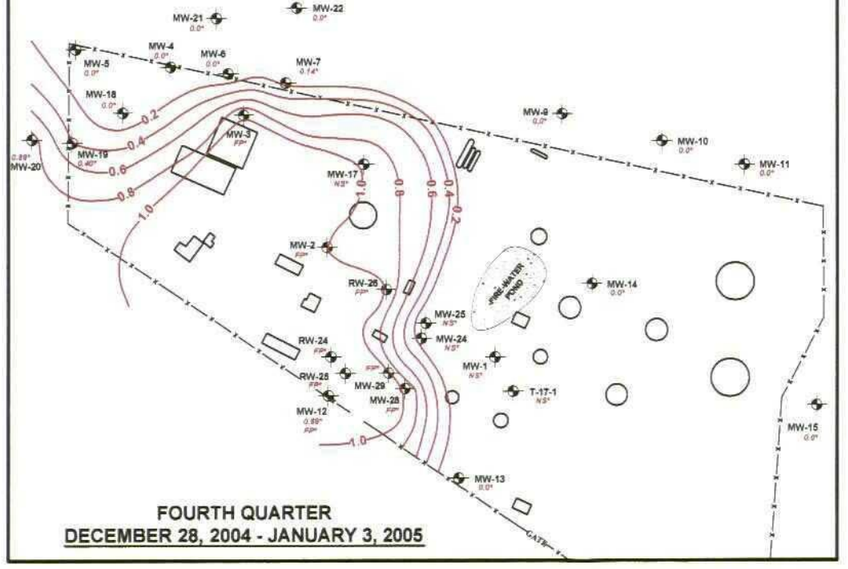
MAY 25 and 26, 2004



FOURTH QUARTER
DECEMBER 28, 2004 - JANUARY 3, 2005

LEGEND

- GROUNDWATER MONITORING WELL
- FP* — NAPL IN WELL (ASSUMED TPH OF 1 mg/L)
- 1.0 — TPH (GASOLINE RANGE) CONCENTRATION CONTOUR IN mg/L
- 0.88* — TPH (GASOLINE RANGE) CONCENTRATION IN WELL (mg/L)
- 0.0* — TPH (GASOLINE RANGE) CONCENTRATION LESS THAN METHOD DETECTION
- NS* — NO SAMPLE COLLECTED

NOTES

MISSING OR DESTROYED MONITORING WELLS NOT SHOWN;
SMALL STORAGE TANKS NOT SHOWN

N

SCALE
200 100 0 400
40
(1 INCH = 400 FEET)

FIGURE 4
DISSOLVED TPH PLUME
2004

THRIFTWAY REFINERY
626 ROAD 5500
BLOOMFIELD, NEW MEXICO

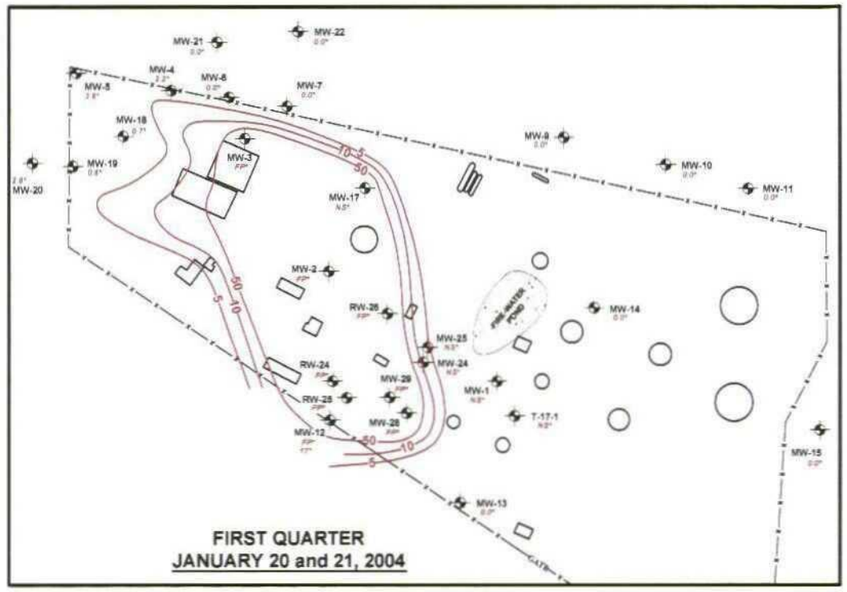
AES
Animas Environmental Services, LLC

2005/THRIFT/REFINERY/F3NAPLPLUME.DWG

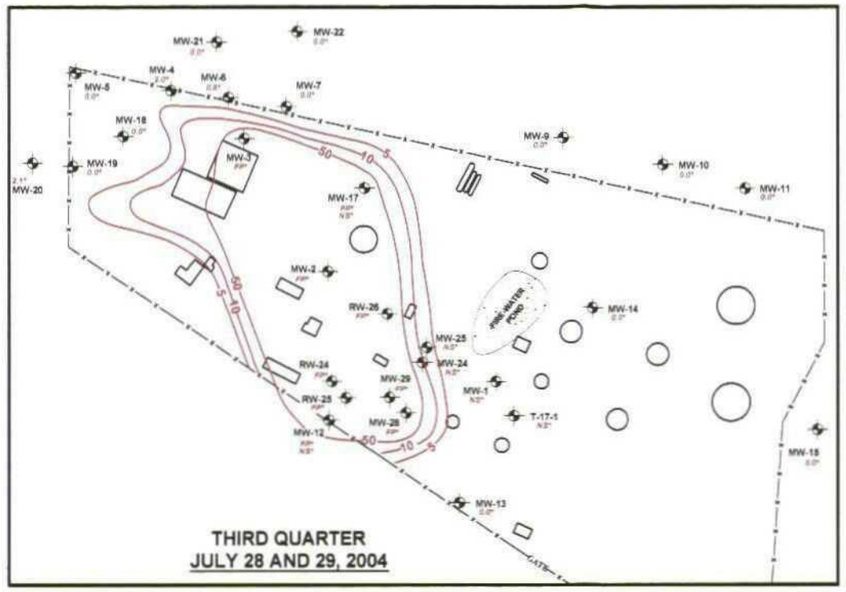
"DO NOT SCALE THIS DRAWING"

DRAWN BY	MRK	CHECKED BY	
	02-25-05	APPROVED BY	

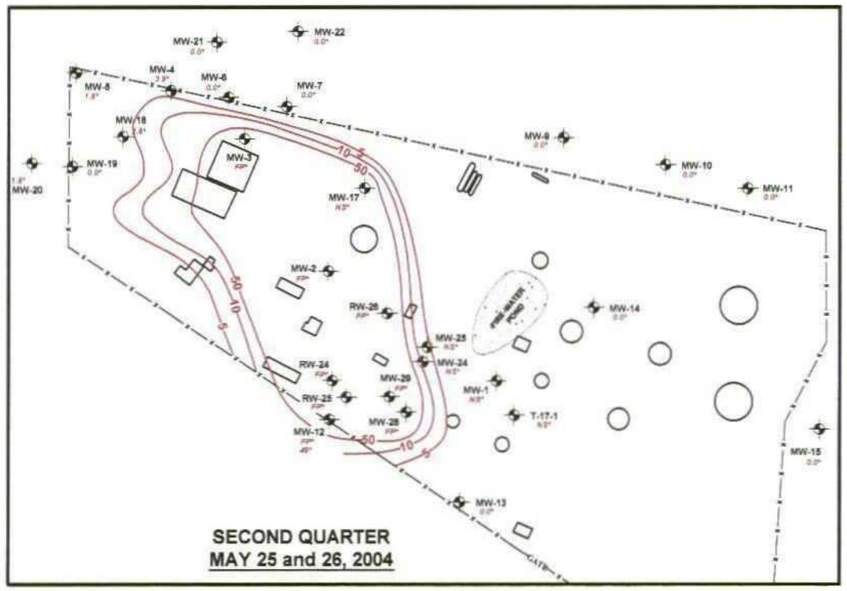
REVISIONS			
BY	DATE	DESCR.	



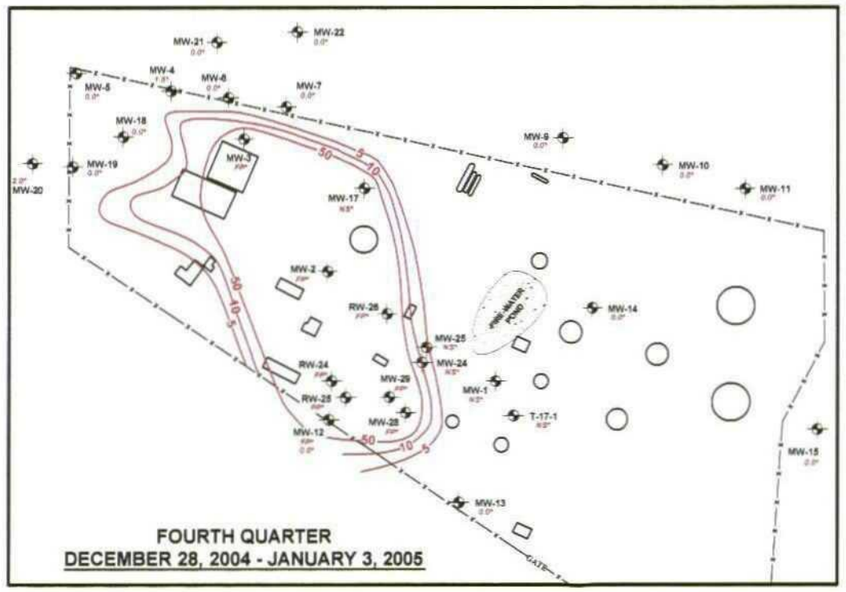
FIRST QUARTER
JANUARY 20 and 21, 2004



THIRD QUARTER
JULY 28 AND 29, 2004



SECOND QUARTER
MAY 25 and 26, 2004



FOURTH QUARTER
DECEMBER 28, 2004 - JANUARY 3, 2005

LEGEND

- GROUNDWATER MONITORING WELL
- FP* — NAPL IN WELL (ASSUMED BENZENE CONCENTRATION OF 50 µg/L)
- BENZENE CONCENTRATION CONTOUR IN µg/L
- 49* — BENZENE CONCENTRATION IN WELL (µg/L)
- 0.0* — BENZENE CONCENTRATION LESS THAN METHOD DETECTION
- NS* — NO SAMPLE COLLECTED

NOTES

MISSING OR DESTROYED MONITORING WELLS NOT SHOWN;
SMALL STORAGE TANKS NOT SHOWN

N

SCALE
200 100 0 400
40
(1 INCH = 400 FEET)

FIGURE 5
DISSOLVED BENZENE PLUME
2004

THRIFTWAY REFINERY
626 ROAD 5500
BLOOMFIELD, NEW MEXICO

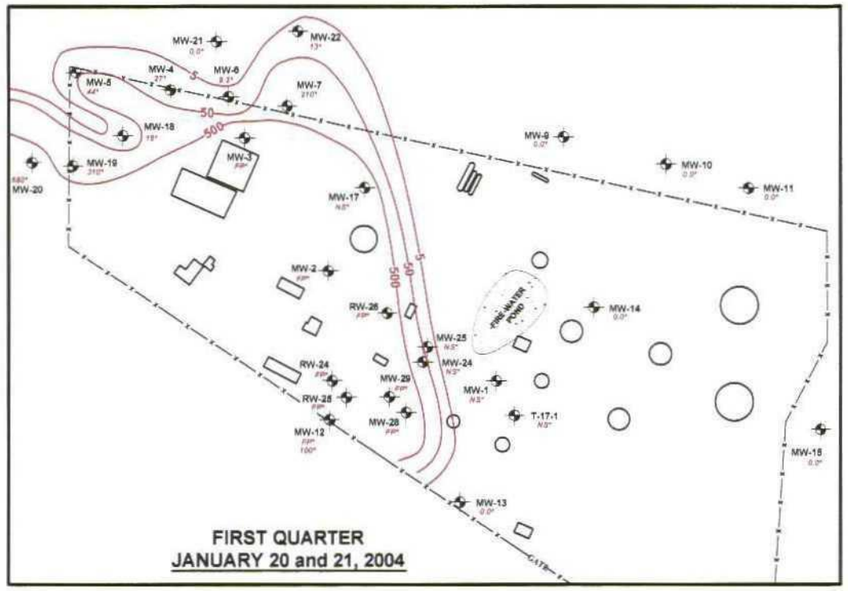
AES
Animas Environmental Services, LLC

2005/THRIFT/REFINERY/F5BENZENEPLUME.DWG

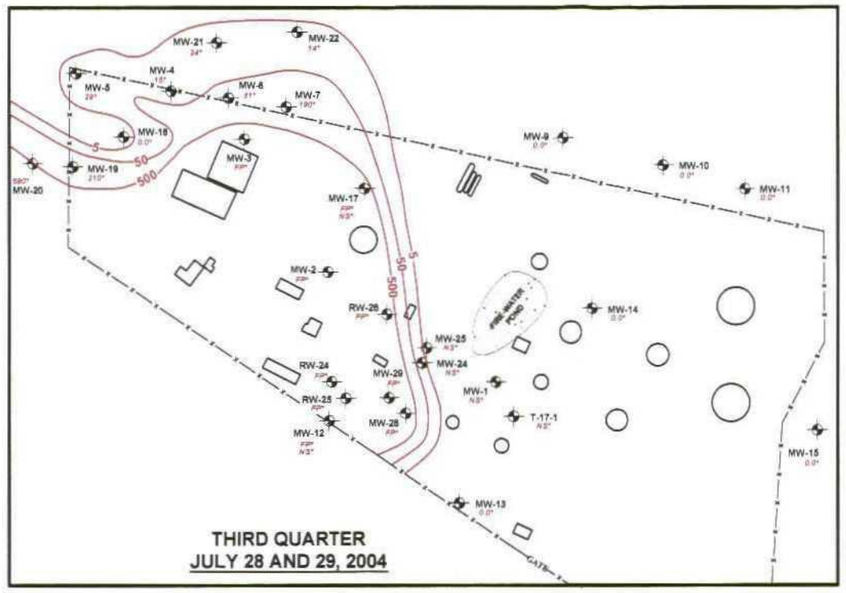
"DO NOT SCALE THIS DRAWING"

DRAWN BY	MRK	CHECKED BY	
	02-25-05	APPROVED BY	

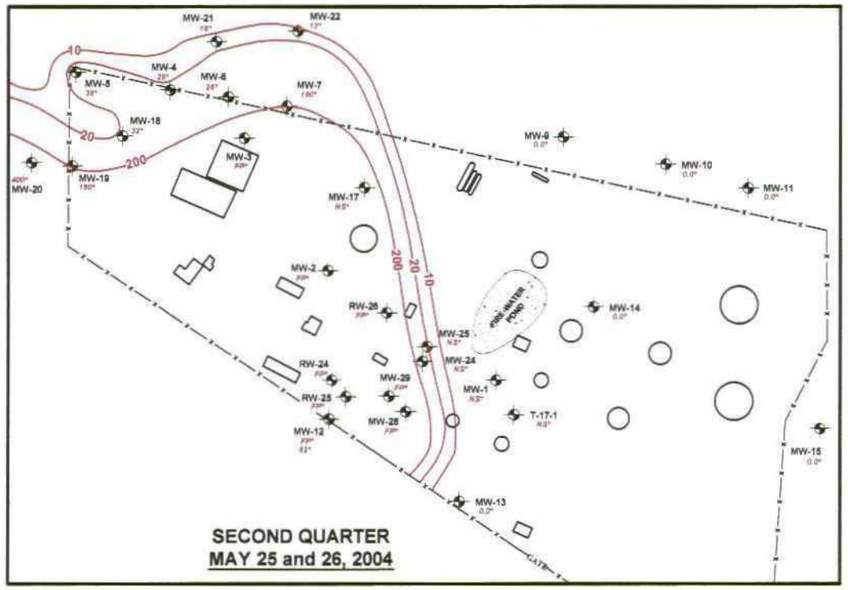
REVISIONS			
BY	DATE	DESCR.	



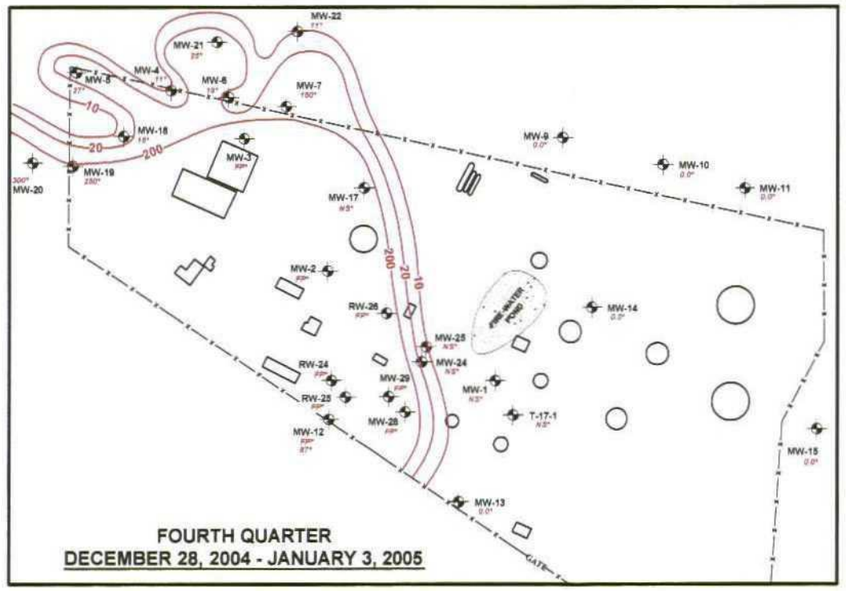
FIRST QUARTER
JANUARY 20 and 21, 2004



THIRD QUARTER
JULY 28 AND 29, 2004



SECOND QUARTER
MAY 25 and 26, 2004



FOURTH QUARTER
DECEMBER 28, 2004 - JANUARY 3, 2005

LEGEND

- GROUNDWATER MONITORING WELL
- FP* — NAPL IN WELL (ASSUMED MTBE CONCENTRATION OF 200 - 500 µg/L)
- 10 — MTBE CONCENTRATION CONTOUR IN µg/L
- 32* — MTBE CONCENTRATION IN WELL (µg/L)
- 0.0* — MTBE CONCENTRATION LESS THAN METHOD DETECTION
- NS* — NO SAMPLE COLLECTED

NOTES

MISSING OR DESTROYED MONITORING WELLS NOT SHOWN;
SMALL STORAGE TANKS NOT SHOWN

SCALE
200 100 0 400
40
(1 INCH = 400 FEET)

FIGURE 6
DISSOLVED MTBE PLUME
2004

THRIFTWAY REFINERY
626 ROAD 5500
BLOOMFIELD, NEW MEXICO

AES
Animas Environmental Services, LLC

2005/THRIFT/REFINERY/F6MTBEPLUME.DWG

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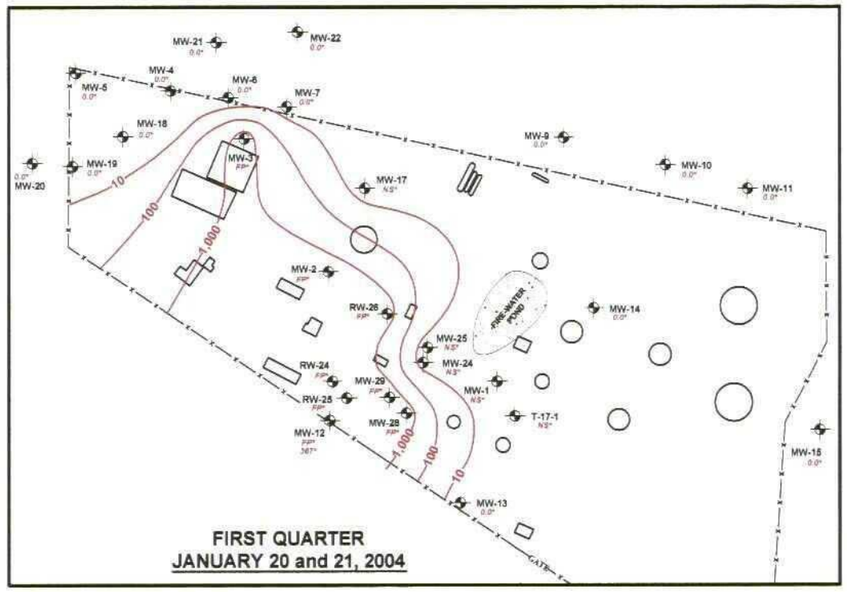
CHECKED BY | APPROVED BY

REVISIONS
BY ____ DATE ____ DESCR.



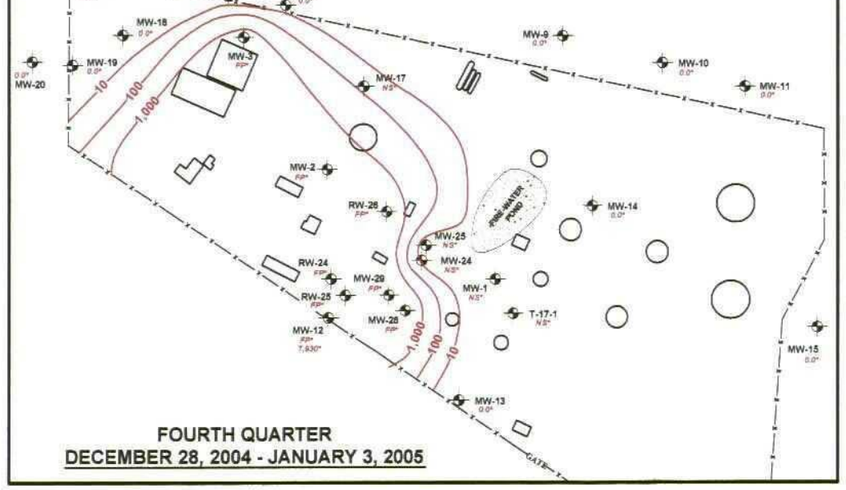
FIRST QUARTER
JANUARY 20 and 21, 2004

NO DATA
ANALYSIS NOT REQUIRED

THIRD QUARTER
JULY 28 AND 29, 2004

NO DATA
ANALYSIS NOT REQUIRED

SECOND QUARTER
MAY 25 and 26, 2004



FOURTH QUARTER
DECEMBER 28, 2004 - JANUARY 3, 2005

LEGEND

- GROUNDWATER MONITORING WELL
- FP* — NAPL IN WELL (ASSUMED NAPHTHALENE CONCENTRATION OF 1,000 µg/L)
- 10 — NAPHTHALENE CONCENTRATION CONTOUR IN µg/L
- 387* — NAPHTHALENE CONCENTRATION IN WELL (µg/L)
- 0.0* — NAPHTHALENE CONCENTRATION LESS THAN METHOD DETECTION
- NS* — NO SAMPLE COLLECTED

NOTES

MISSING OR DESTROYED MONITORING WELLS NOT SHOWN;
SMALL STORAGE TANKS NOT SHOWN

SCALE
200 100 0 400
40
(1 INCH = 400 FEET)

FIGURE 7
DISSOLVED NAPHTHALENE PLUME
2004

THRIFTWAY REFINERY
626 ROAD 5500
BLOOMFIELD, NEW MEXICO

AES
Animas Environmental Services, LLC

2005/THRIFT/REFINERY/IFTNAPHTHALENEPLUME.DWG

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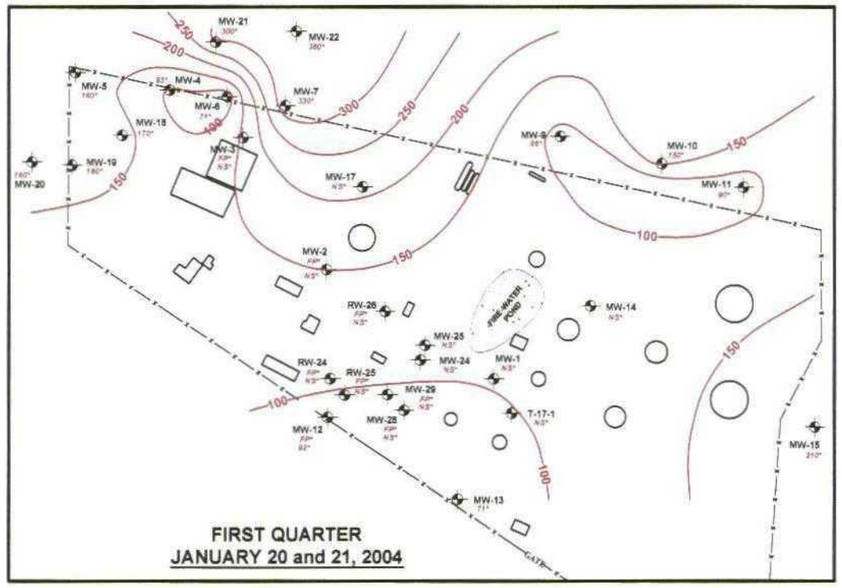
MRK		
02-25-05		

REVISIONS		
BY	DATE	DESCR.



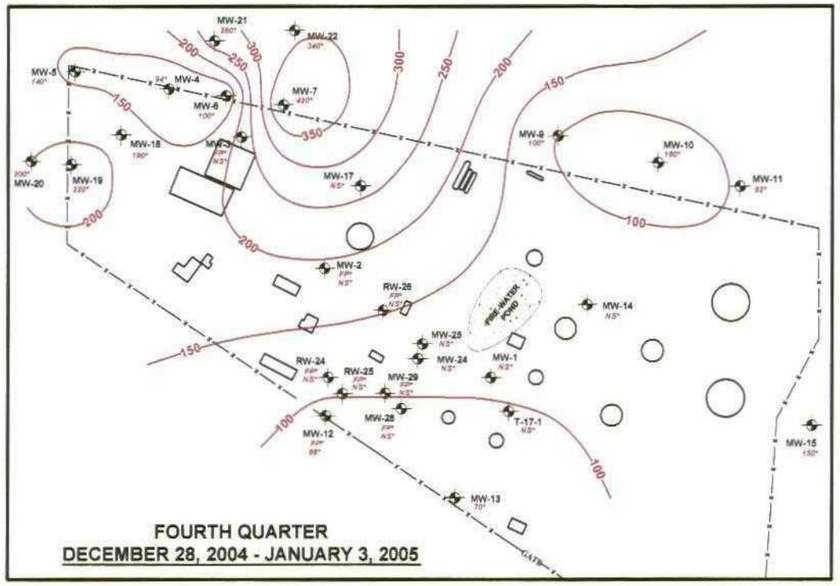
FIRST QUARTER
JANUARY 20 and 21, 2004

NO DATA
ANALYSIS NOT REQUIRED

THIRD QUARTER
JULY 28 AND 29, 2004

NO DATA
ANALYSIS NOT REQUIRED

SECOND QUARTER
MAY 25 and 26, 2004



FOURTH QUARTER
DECEMBER 28, 2004 - JANUARY 3, 2005

LEGEND

- GROUNDWATER MONITORING WELL
- FP" NAPL IN WELL
- 100 CHLORIDE CONCENTRATION CONTOUR IN µg/L
- 210" CHLORIDE CONCENTRATION IN WELL (µg/L)
- NS" NO SAMPLE COLLECTED

NOTES

MISSING OR DESTROYED MONITORING WELLS NOT SHOWN;
SMALL STORAGE TANKS NOT SHOWN

SCALE
200 100 0 400
40
(1 INCH = 400 FEET)

FIGURE 8
CHLORIDE IN GROUNDWATER
2004
THRIFTWAY REFINERY
626 ROAD 5500
BLOOMFIELD, NEW MEXICO

AES
Animas Environmental Services LLC

2005/THRIFT/REFINERY/F8CHLORIDE.DWG

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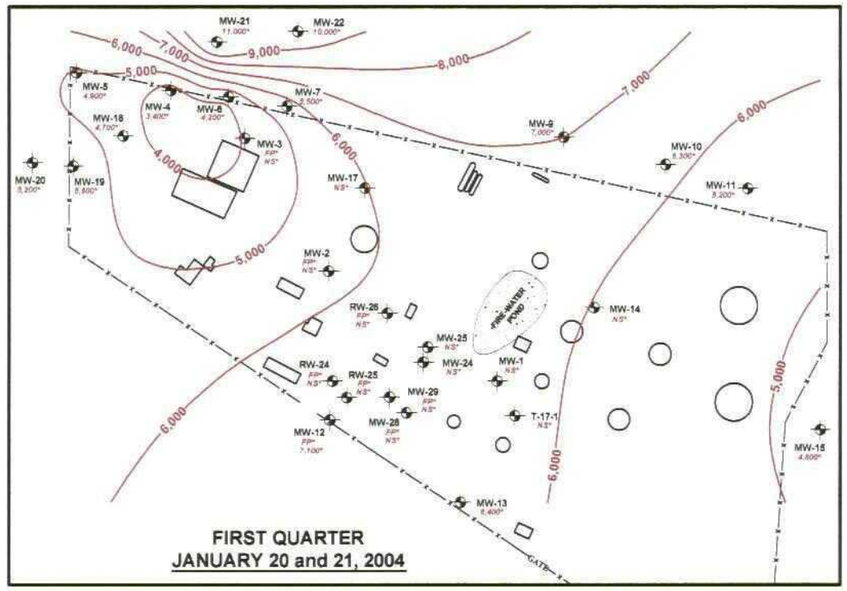
DRAWN BY	CHECKED BY		REVISIONS
MRK		BY	DATE
02-25-05	APPROVED BY		DESCR



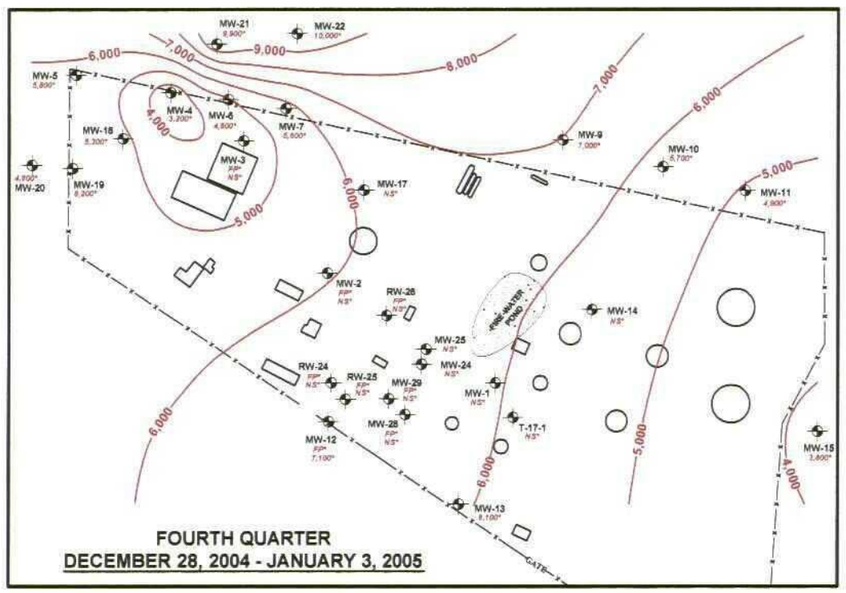
FIRST QUARTER
JANUARY 20 and 21, 2004

NO DATA
ANALYSIS NOT REQUIRED

THIRD QUARTER
JULY 28 AND 29, 2004

NO DATA
ANALYSIS NOT REQUIRED

SECOND QUARTER
MAY 25 and 26, 2004



FOURTH QUARTER
DECEMBER 28, 2004 - JANUARY 3, 2005

LEGEND

- GROUNDWATER MONITORING WELL
- FP* — NAPL IN WELL
- 5,000 — CONDUCTIVITY CONTOUR IN µmhos/cm
- 7,000* — CONDUCTIVITY IN WELL (µmhos/cm)
- NS* — NO SAMPLE COLLECTED

NOTES

MISSING OR DESTROYED MONITORING WELLS NOT SHOWN;
SMALL STORAGE TANKS NOT SHOWN

N

SCALE
200 100 0 400
40
(1 INCH = 400 FEET)

FIGURE 9
GROUNDWATER CONDUCTIVITY
2004

THRIFTWAY REFINERY
626 ROAD 5500
BLOOMFIELD, NEW MEXICO

AES
Animas Environmental Services LLC

2005/THRIFT/REFINERY/F9CONDUCTIVITY.DWG

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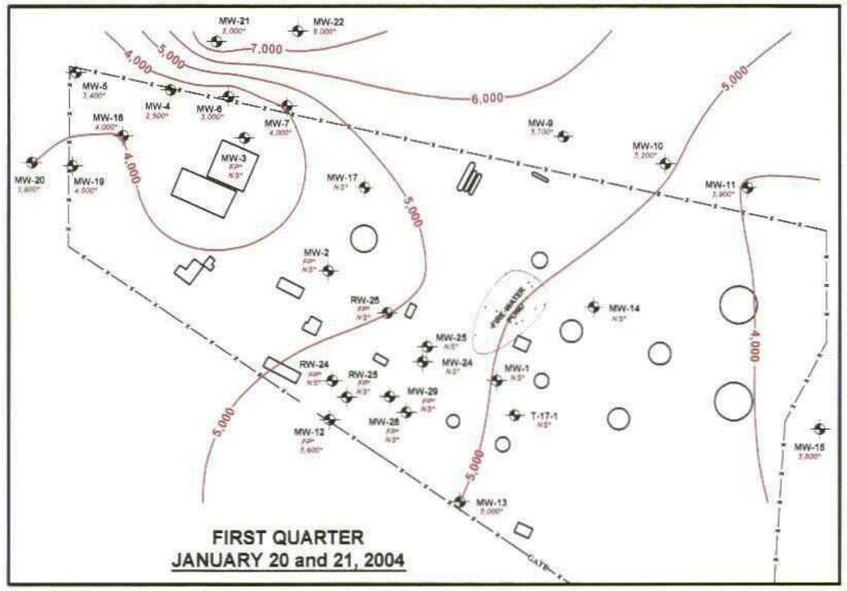
MRK		BY DATE DESCR.
02-25-05	APPROVED BY	



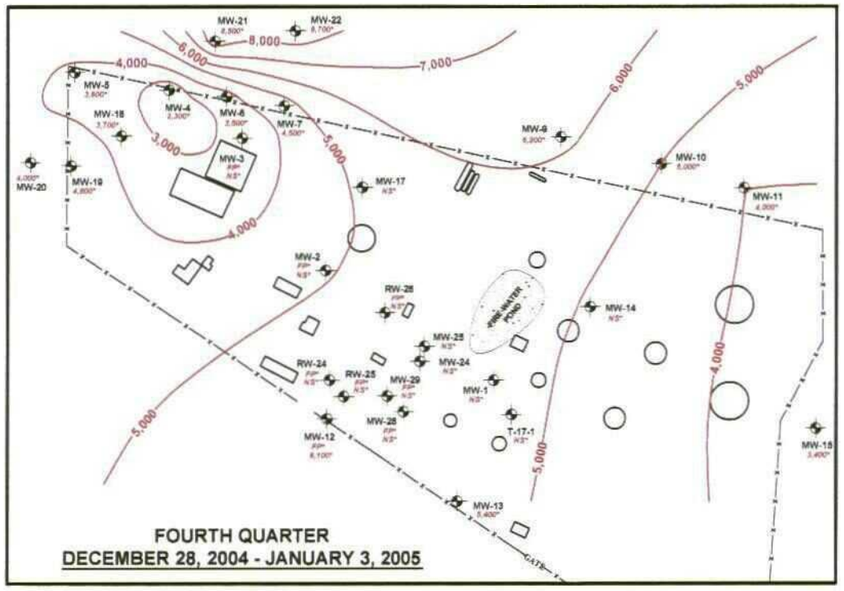
FIRST QUARTER
JANUARY 20 and 21, 2004

NO DATA
ANALYSIS NOT REQUIRED

THIRD QUARTER
JULY 28 AND 29, 2004

NO DATA
ANALYSIS NOT REQUIRED

SECOND QUARTER
MAY 25 and 26, 2004



FOURTH QUARTER
DECEMBER 28, 2004 - JANUARY 3, 2005

LEGEND

- GROUNDWATER MONITORING WELL
- FP* NAPL IN WELL
- 6,000 TDS CONTOUR IN mg/L
- 6,200* TDS IN WELL (mg/L)
- NS* NO SAMPLE COLLECTED

NOTES

MISSING OR DESTROYED MONITORING WELLS NOT SHOWN;
SMALL STORAGE TANKS NOT SHOWN

N

SCALE
200 100 0 400
40
(1 INCH = 400 FEET)

FIGURE 10
GROUNDWATER TDS 2004
THRIFTWAY REFINERY
626 ROAD 5500
BLOOMFIELD, NEW MEXICO

AES
Animas Environmental Services, LLC

2005/THRIFT/REFINERY/F10TDS.DWG

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PINNACLE LABORATORIES

2709-D Pan American Freeway NE
Albuquerque, New Mexico 87107
Phone (505) 344-3777
Fax (505) 344-4413

Pinnacle Lab ID number **401053**
February 09, 2004

BIOTECH REMEDIATION
501 AIRPORT DRIVE SUITE 104
FARMINGTON, NM 87401

Project Name T-WAY REFINERY
Project Number 810

Attention: TERRY GRIFFIN

On- 01/21/04 Pinnacle Laboratories Inc., (ADHS Lincense No. AZ0643), received a request to analyze **aqueous** samples. The samples were analyzed with EPA methodology or equivalent methods. The results of these analyses and the quality control data, which follow each set of analyses, are enclosed.

EPA method 8021 and pH analyses were performed by Pinnacle Laboratories, Inc. Albuquerque, NM.

EPA method 8270 SIMS analyses were performed by Environmental Services Laboratory, Inc. Portland, OR.

All remaining analyses were performed by Severn Trent Laboratories, Inc. Pensacola, FL.

If you have any questions or comments, please do not hesitate to contact us at (505) 344-3777.

H. Mitchell Rubenstein, Ph.D.
General Manager, Pinnacle Laboratories, Inc.

MR: jt

Enclosure

PINNACLE LABORATORIES

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Albuquerque, New Mexico 87107
Phone (505) 344-3777
Fax (505) 344-4413

CLIENT	: BIOTECH REMEDIATION	PINNACLE ID	: 401053
PROJECT #	: 810	DATE RECEIVED	: 01/21/04
PROJECT NAME	: T-WAY REFINERY	REPORT DATE	: 02/09/04

PINNACLE ID #	CLIENT DESCRIPTION	MATRIX	DATE COLLECTED
401053 - 01	MW-18	AQUEOUS	01/19/04
401053 - 02	MW-5	AQUEOUS	01/19/04
401053 - 03	MW-19	AQUEOUS	01/19/04
401053 - 04	MW-4	AQUEOUS	01/19/04
401053 - 05	MW-6	AQUEOUS	01/19/04
401053 - 06	MW-7	AQUEOUS	01/19/04
401053 - 07	MW-9	AQUEOUS	01/19/04
401053 - 08	MW-10	AQUEOUS	01/19/04
401053 - 09	MW-20	AQUEOUS	01/20/04
401053 - 10	MW-21	AQUEOUS	01/20/04
401053 - 11	MW-22	AQUEOUS	01/20/04
401053 - 12	MW-11	AQUEOUS	01/20/04
401053 - 13	MW-15	AQUEOUS	01/20/04
401053 - 14	MW-13	AQUEOUS	01/20/04
401053 - 15	MW-12	AQUEOUS	01/20/04
401053 - 16	INFLUENT	AQUEOUS	01/20/04
401053 - 17	EFFLUENT	AQUEOUS	01/20/04
401053 - 18	TRIP BLANK	AQUEOUS	12/30/03

PINNACLE LABORATORIES

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GENERAL CHEMISTRY RESULTS

CLIENT	: BIOTECH REMEDIATION	PINNACLE I.D.	: 401053
PROJECT #	: 810	DATE RECEIVED	: 01/21/04
PROJECT NAME	: T-WAY REFINERY	ANALYST	: BP

SAMPLE NO. #	CLIENT I.D.	MATRIX	DATE SAMPLED	DATE ANALYZED
	MW-18	AQUEOUS	01/19/04	01/21/04
2	MW-5	AQUEOUS	01/19/04	01/21/04
3	MW-19	AQUEOUS	01/19/04	01/21/04

PARAMETER	UNITS	MW-18	MW-5	MW-19
PH (150.1)	UNITS	7.5	7.8	7.1

CHEMIST NOTES:
NA

PINNACLE LABORATORIES

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Fax (505) 344-4413

GENERAL CHEMISTRY RESULTS

CLIENT	: BIOTECH REMEDIATION	PINNACLE I.D.	: 401053
PROJECT #	: 810	DATE RECEIVED	: 01/21/04
PROJECT NAME	: T-WAY REFINERY	ANALYST	: BP

SAMPLE I.D. #	CLIENT I.D.	MATRIX	DATE SAMPLED	DATE ANALYZED
4	MW-4	AQUEOUS	01/19/04	01/21/04
5	MW-6	AQUEOUS	01/19/04	01/21/04
6	MW-7	AQUEOUS	01/19/04	01/21/04

PARAMETER	UNITS	MW-4	MW-6	MW-7
PH (150.1)	UNITS	7.2	7.5	7.0

CHEMIST NOTES:
N/A

PINNACLE LABORATORIES

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Albuquerque, New Mexico 87107
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Fax (505) 344-4413

GENERAL CHEMISTRY RESULTS

CLIENT	: BIOTECH REMEDIATION	PINNACLE I.D.	: 401053
PROJECT #	: 810	DATE RECEIVED	: 01/21/04
PROJECT NAME	: T-WAY REFINERY	ANALYST	: BP

SAMPLE ID: #	CLIENT I.D.	MATRIX	DATE SAMPLED	DATE ANALYZED
17	MW-9	AQUEOUS	01/19/04	01/21/04
18	MW-10	AQUEOUS	01/19/04	01/21/04
19	MW-20	AQUEOUS	01/20/04	01/21/04

PARAMETER	UNITS	MW-9	MW-10	MW-20
PH (150.1)	UNITS	7.4	7.4	7.2

CHEMIST NOTES:
N/A

PINNACLE LABORATORIES

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Fax (505) 344-4413

GENERAL CHEMISTRY RESULTS

CLIENT	: BIOTECH REMEDIATION	PINNACLE I.D.	: 401053
PROJECT #	: 810	DATE RECEIVED	: 01/21/04
PROJECT NAME	: T-WAY REFINERY	ANALYST	: BP

SAMPLE I.D. #	CLIENT I.D.	MATRIX	DATE SAMPLED	DATE ANALYZED
0	MW-21	AQUEOUS	01/20/04	01/21/04
1	MW-22	AQUEOUS	01/20/04	01/21/04
2	MW-11	AQUEOUS	01/20/04	01/21/04

PARAMETER	UNITS	MW-21	MW-22	MW-11
PH (150.1)	UNITS	7.0	6.9	7.6

CHEMIST NOTES:
NA

PINNACLE LABORATORIES

2709-D Pan American Freeway NE
Albuquerque, New Mexico 87107
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Fax (505) 344-4413

GENERAL CHEMISTRY RESULTS

CLIENT	: BIOTECH REMEDIATION	PINNACLE I.D.	: 401053
PROJECT #	: 810	DATE RECEIVED	: 01/21/04
PROJECT NAME	: T-WAY REFINERY	ANALYST	: BP

SAMPLE I.D. #	CLIENT I.D.	MATRIX	DATE SAMPLED	DATE ANALYZED
3	MW-15	AQUEOUS	01/20/04	01/21/04
4	MW-13	AQUEOUS	01/20/04	01/21/04
5	MW-12	AQUEOUS	01/20/04	01/21/04

PARAMETER	UNITS	MW-15	MW-13	MW-12
PH (150.1)	UNITS	7.4	7.2	7.2

CHEMIST NOTES:
N/A

PINNACLE LABORATORIES

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Fax (505) 344-4413

GENERAL CHEMISTRY RESULTS

CLIENT	: BIOTECH REMEDIATION	PINNACLE I.D.	: 401053
PROJECT #	: 810	DATE RECEIVED	: 01/21/04
PROJECT NAME	: T-WAY REFINERY	ANALYST	: BP

SAMPLE I.D. #	CLIENT I.D.	MATRIX	DATE SAMPLED	DATE ANALYZED
6	INFLUENT	AQUEOUS	01/20/04	01/21/04
7	EFFLUENT	AQUEOUS	01/20/04	01/21/04

PARAMETER	UNITS	INFLUENT	EFFLUENT
PH (150.1)	UNITS	6.9	2.3

CHEMIST NOTES:
NA

PINNACLE LABORATORIES

2709-D Pan American Freeway NE
Albuquerque, New Mexico 87107
Phone (505) 344-3777
Fax (505) 344-4413

GENERAL CHEMISTRY - QUALITY CONTROL

CLIENT	: BIOTECH REMEDIATION	PINNACLE I.D.	: 401053
PROJECT #	: 810	SAMPLE MATRIX	: AQUEOUS
PROJECT NAME	: T-WAY REFINERY	DATE ANALYZED	: 01/21/04

PARAMETER	UNITS	PINNACLE I.D.	SAMPLE RESULT	DUP. RESULT	% RPD
PH	UNITS	401053-09	7.17	7.18	0

CHEMIST NOTES:
NA

$$\text{Recovery} = \frac{(\text{Spike Sample Result} - \text{Sample Result})}{\text{Spike Concentration}} \times 100$$

$$\text{RPD (Relative Percent Difference)} = \frac{(\text{Sample Result} - \text{Duplicate Result})}{\text{Average Result}} \times 100$$

PINNACLE LABORATORIES

2709-D Pan American Freeway NE
Albuquerque, New Mexico 87107
Phone (505) 344-3777
Fax (505) 344-4413

GAS CHROMATOGRAPHY RESULTS

'EST : EPA 8021B MODIFIED
CLIENT : BIOTECH REMEDIATION — PINNACLE I.D. : 401053
PROJECT # : 810 — ANALYST : BP
PROJECT NAME : T-WAY REFINERY

SAMPLE D. #	CLIENT I.D.	MATRIX	DATE SAMPLED	DATE EXTRACTED	DATE ANALYZED	DIL. FACTOR
1	MW-18	AQUEOUS	01/19/04	NA	01/22/04	1
2	MW-5	AQUEOUS	01/19/04	NA	01/22/04	1
3	MW-19	AQUEOUS	01/19/04	NA	01/26/04	1

ARAMETER	DET. LIMIT	UNITS	MW-18	MW-5	MW-19
ENZENE	**0.5**	**UG/L**	**0.7**	**3.8**	**0.6**
OLUENE	**0.5**	**UG/L**	< 0.5	**0.9**	< 0.5
THYLBENZENE	0.5	UG/L	< 0.5	< 0.5	< 0.5
OTAL XYLENES	**1.0**	**UG/L**	< 1.0	**1.4**	**1.7**
IETHYL-t-BUTYL ETHER	**2.5**	**UG/L**	**18**	**44**	**310 - D5**
URROGATE:					
ROMOFLUOROBENZENE (%)			102	104	114
URROGATE LIMITS	(80 - 120)				

HEMIST NOTES:
5 = Reported from a 5X dilution run on 01-26-03.

PINNACLE LABORATORIES

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GAS CHROMATOGRAPHY RESULTS

EST : EPA 8021B MODIFIED
:LIENT : BIOTECH REMEDIATION — PINNACLE I.D. : 401053
ROJECT # : 810 — ANALYST : BP
ROJECT NAME : T-WAY REFINERY

AMPLE). #	CLIENT I.D.	MATRIX	DATE SAMPLED	DATE EXTRACTED	DATE ANALYZED	DIL. FACTOR
4	MW-4	AQUEOUS	01/19/04	NA	01/22/04	1
5	MW-6	AQUEOUS	01/19/04	NA	01/22/04	1
3	MW-7	AQUEOUS	01/19/04	NA	01/25/04	1

ARAMETER	DET. LIMIT	UNITS	MW-4	MW-6	MW-7
ENZENE	**0.5**	**UG/L**	**2.2**	< 0.5	< 0.5
OLUENE	**0.5**	**UG/L**	**0.6**	**0.7**	< 0.5
THYLBENZENE	0.5	UG/L	< 0.5	< 0.5	< 0.5
OTAL XYLENES	**1.0**	**UG/L**	**1.3**	< 1.0	**1.6**
ETHYL-t-BUTYL ETHER	**2.5**	**UG/L**	**27**	**9.2**	**210 - D10**
JRROGATE:					
ROMOFLUOROBENZENE (%)			102	102	105
JRROGATE LIMITS	(80 - 120)				

HEMIST NOTES:
10 = Reported from a 10X dilution run on 01-25-03.

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GAS CHROMATOGRAPHY RESULTS

'EST : EPA 8021B MODIFIED
:LIENT : BIOTECH REMEDIATION — PINNACLE I.D. : 401053
'ROJECT # : 810 — ANALYST : BP
'ROJECT NAME : T-WAY REFINERY

:AMPLE D. #	CLIENT I.D.	MATRIX	DATE SAMPLED	DATE EXTRACTED	DATE ANALYZED	DIL. FACTOR
7	MW-9	AQUEOUS	01/19/04	NA	01/22/04	1
8	MW-10	AQUEOUS	01/19/04	NA	01/23/04	1
9	MW-20	AQUEOUS	01/20/04	NA	01/26/04	1

ARAMETER	DET. LIMIT	UNITS	MW-9	MW-10	MW-20
ENZENE	**0.5**	**UG/L**	< 0.5	< 0.5	**2.8**
OLUENE	0.5	UG/L	< 0.5	< 0.5	< 0.5
THYLBENZENE	**0.5**	**UG/L**	< 0.5	< 0.5	**1.4**
OTAL XYLENES	**1.0**	**UG/L**	< 1.0	< 1.0	**3.3**
ETHYL-t-BUTYL ETHER	**2.5**	**UG/L**	< 2.5	< 2.5	**680 - D5**
URROGATE:					
ROMOFLUOROBENZENE (%)			103	101	112
JRROGATE LIMITS	(80 - 120)				

HEMIST NOTES:
5 = Reported from a 5X dilution run on 01-26-03.

PINNACLE LABORATORIES

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Albuquerque, New Mexico 87107
Phone (505) 344-3777
Fax (505) 344-4413

GAS CHROMATOGRAPHY RESULTS

'EST : EPA 8021B MODIFIED
:LIENT : BIOTECH REMEDIATION — PINNACLE I.D. : 401053
'ROJECT # : 810 — ANALYST : BP
'ROJECT NAME : T-WAY REFINERY

:AMPLE D. #	CLIENT I.D.	MATRIX	DATE SAMPLED	DATE EXTRACTED	DATE ANALYZED	DIL. FACTOR
0	MW-21	AQUEOUS	01/20/04	NA	01/23/04	1
1	MW-22	AQUEOUS	01/20/04	NA	01/25/04	1
2	MW-11	AQUEOUS	01/20/04	NA	01/23/04	1

ARAMETER	DET. LIMIT	UNITS	MW-21	MW-22	MW-11
ENZENE	0.5	UG/L	< 0.5	< 0.5	< 0.5
OLUENE	0.5	UG/L	< 0.5	< 0.5	< 0.5
THYLBENZENE	0.5	UG/L	< 0.5	< 0.5	< 0.5
OTAL XYLENES	1.0	UG/L	< 1.0	< 1.0	< 1.0
ETHYL-t-BUTYL ETHER	**2.5**	**UG/L**	< 2.5	**13**	< 2.5
URROGATE:					
ROMOFLUOROBENZENE (%)			102	102	99
JRROGATE LIMITS	(80 - 120)				

HEMIST NOTES:
A

PINNACLE LABORATORIES

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GAS CHROMATOGRAPHY RESULTS

EST : EPA 8021B MODIFIED
LIENT : BIOTECH REMEDIATION — PINNACLE I.D. : 401053
ROJECT # : 810 — ANALYST : BP
ROJECT NAME : T-WAY REFINERY

AMPLE D. #	CLIENT I.D.	MATRIX	DATE SAMPLED	DATE EXTRACTED	DATE ANALYZED	DIL. FACTOR
3	MW-15	AQUEOUS	01/20/04	NA	01/23/04	1
4	MW-13	AQUEOUS	01/20/04	NA	01/23/04	1
5	MW-12	AQUEOUS	01/20/04	NA	01/26/04	5

ARAMETER	DET. LIMIT	UNITS	MW-15	MW-13	MW-12
ENZENE	**0.5**	**UG/L**	< 0.5	< 0.5	**17**
OLUENE	0.5	UG/L	< 0.5	< 0.5	< 2.5
THYLBENZENE	**0.5**	**UG/L**	< 0.5	< 0.5	**34**
OTAL XYLENES	**1.0**	**UG/L**	< 1.0	< 1.0	**43**
ETHYL-t-BUTYL ETHER	**2.5**	**UG/L**	< 2.5	< 2.5	**100**
URROGATE:					
ROMOFLUOROBENZENE (%)			102	101	104
JRROGATE LIMITS	(80 - 120)				

HEMIST NOTES:
'A

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GAS CHROMATOGRAPHY RESULTS

EST : EPA 8021B MODIFIED
LIENT : BIOTECH REMEDIATION — PINNACLE I.D. : 401053
ROJECT # : 810 — ANALYST : BP
ROJECT NAME : T-WAY REFINERY

AMPLE #	CLIENT I.D.	MATRIX	DATE SAMPLED	DATE EXTRACTED	DATE ANALYZED	DIL. FACTOR
5	INFLUENT	AQUEOUS	01/20/04	NA	01/26/04	10
	EFFLUENT	AQUEOUS	01/20/04	NA	01/23/04	1
	TRIP BLANK	AQUEOUS	12/30/04 **T1**	NA	01/22/04	1

ARAMETER	DET. LIMIT	UNITS	INFLUENT	EFFLUENT	TRIP BLANK
ENZENE	**0.5**	**UG/L**	**300**	**0.9**	< 0.5
OLUENE	**0.5**	**UG/L**	**510**	**3.3**	< 0.5
THYLBENZENE	**0.5**	**UG/L**	**340**	**1.4**	< 0.5
OTAL XYLENES	**1.0**	**UG/L**	**790**	**4.8**	< 1.0
ETHYL-t-BUTYL ETHER	**2.5**	**UG/L**	**88**	**2.9**	< 2.5

URROGATE:
ROMOFLUOROBENZENE (%) — 104 — 102 — 100
URROGATE LIMITS (80 - 120)

HEMIST NOTES:
= Trip Blank was received past the 14 day hold time.

PINNACLE LABORATORIES

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GAS CHROMATOGRAPHY RESULTS
REAGENT BLANK

EST	: EPA 8021B MODIFIED	PINNACLE I.D.	: 401053
LANK I. D.	: 012204	DATE EXTRACTED	: N/A
LIENT	: BIOTECH REMEDIATION	DATE ANALYZED	: 01/22/04
ROJECT #	: 810	SAMPLE MATRIX	: AQUEOUS
ROJECT NAME	: T-WAY REFINERY	ANALYST	: BP

ARAMETER	UNITS	
ENZENE	UG/L	<0.5
OLUENE	UG/L	<0.5
THYLBENZENE	UG/L	<0.5
OTAL XYLENES	UG/L	<1.0
ETHYL-t-BUTYL ETHER	UG/L	<2.5
URROGATE:		
ROMOFLUOROBENZENE (%)		101
URROGATE LIMITS:	(80 - 120)	

HEMIST NOTES:
/A

PINNACLE LABORATORIES

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GAS CHROMATOGRAPHY RESULTS
REAGENT BLANK

EST	: EPA 8021B MODIFIED	PINNACLE I.D.	: 401053
LANK I. D.	: 012504	DATE EXTRACTED	: N/A
LIENT	: BIOTECH REMEDIATION	DATE ANALYZED	: 01/25/04
ROJECT #	: 810	SAMPLE MATRIX	: AQUEOUS
ROJECT NAME	: T-WAY REFINERY	ANALYST	: BP

ARAMETER	UNITS	
ENZENE	UG/L	<0.5
OLUENE	UG/L	<0.5
THYLBENZENE	UG/L	<0.5
OTAL XYLENES	UG/L	<1.0
ETHYL-t-BUTYL ETHER	UG/L	<2.5
URROGATE:		
ROMOFLUOROBENZENE (%)		104
URROGATE LIMITS:	(80 - 120)	

EMIST NOTES:
A

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Albuquerque, New Mexico 87107
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GAS CHROMATOGRAPHY QUALITY CONTROL
MS/MSD

EST	: EPA 8021B MODIFIED	PINNACLE I.D.	: 401053
SMSD #	: 401052-01	DATE EXTRACTED	: N/A
LIENT	: BIOTECH REMEDIATION	DATE ANALYZED	: 01/22/04
ROJECT #	: 810	SAMPLE MATRIX	: AQUEOUS
ROJECT NAME	: T-WAY REFINERY	UNITS	: UG/L

ARAMETER	SAMPLE RESULT	CONC SPIKE	SPIKED SAMPLE	% REC	DUP SPIKE	DUP % REC	RPD	REC LIMITS	RPD LIMITS
ENZENE	<0.5	20.0	20.8	104	20.5	103	1	(80 - 120)	20
OLUENE	<0.5	20.0	20.1	101	19.8	99	2	(80 - 120)	20
THYLBENZENE	<0.5	20.0	20.3	102	19.9	100	2	(80 - 120)	20
OTAL XYLENES	<1.0	60.0	59.8	100	58.6	98	2	(80 - 120)	20
ETHYL-t-BUTYL ETHER	<2.5	20.0	20.3	102	20.7	104	2	(70 - 133)	20

HEMIST NOTES:
A

$$\text{Recovery} = \frac{\text{(Spike Sample Result - Sample Result)}}{\text{Spike Concentration}} \times 100$$

$$\text{D (Relative Percent Difference)} = \frac{\text{(Sample Result - Duplicate Result)}}{\text{Average Result}} \times 100$$

PINNACLE LABORATORIES

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GAS CHROMATOGRAPHY QUALITY CONTROL
LCS/LCSD

EST	: EPA 8021B MODIFIED	PINNACLE I.D.	: 401053
ATCH #	: 012504	DATE EXTRACTED	: N/A
IENT	: BIOTECH REMEDIATION	DATE ANALYZED	: 01/25/04
ROJECT #	: 810	SAMPLE MATRIX	: AQUEOUS
ROJECT NAME	: T-WAY REFINERY	UNITS	: UG/L

ARAMETER	SAMPLE RESULT	CONC SPIKE	SPIKED SAMPLE	% REC	DUP SPIKE	DUP % REC	RPD	REC LIMITS	RPD LIMIT
ENZENE	<0.5	20.0	21.0	105	21.5	108	2	(80 - 120)	20
LUENE	<0.5	20.0	20.1	101	20.5	103	2	(80 - 120)	20
HYLBENZENE	<0.5	20.0	20.4	102	20.9	105	2	(80 - 120)	20
TAL XYLENES	<1.0	60.0	59.9	100	61.2	102	2	(80 - 120)	20
THYL-t-BUTYL ETHER	<2.5	20.0	20.7	104	21.1	106	2	(70 - 133)	20

EMIST NOTES:
A

$$\text{Recovery} = \frac{(\text{Spike Sample Result} - \text{Sample Result})}{\text{Spike Concentration}} \times 100$$

$$\text{D (Relative Percent Difference)} = \frac{(\text{Sample Result} - \text{Duplicate Result})}{\text{Average Result}} \times 100$$

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Albuquerque, New Mexico 87107
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GAS CHROMATOGRAPHY QUALITY CONTROL
MS/MSD

EST	: EPA 8021B MODIFIED	PINNACLE I.D.	: 401053
MSD #	: 401052-01	DATE EXTRACTED	: N/A
ENT	: BIOTECH REMEDIATION	DATE ANALYZED	: 01/22/04
ROJECT #	: 810	SAMPLE MATRIX	: AQUEOUS
ROJECT NAME	: T-WAY REFINERY	UNITS	: UG/L

RAMETER	SAMPLE RESULT	CONC SPIKE	SPIKED SAMPLE	% REC	DUP SPIKE	DUP % REC	RPD	REC LIMITS	RPD LIMITS
ENZENE	<0.5	20.0	20.8	104	20.5	103	1	(80 - 120)	20
LUENE	<0.5	20.0	20.1	101	19.8	99	2	(80 - 120)	20
HYLBENZENE	<0.5	20.0	20.3	102	19.9	100	2	(80 - 120)	20
OTAL XYLENES	<1.0	60.0	59.8	100	58.6	98	2	(80 - 120)	20
THYL-t-BUTYL ETHER	<2.5	20.0	20.3	102	20.7	104	2	(70 - 133)	20

EMIST NOTES:
A

$$\text{ecovery} = \frac{\text{(Spike Sample Result - Sample Result)}}{\text{Spike Concentration}} \times 100$$

$$\text{D (Relative Percent Difference)} = \frac{\text{(Sample Result - Duplicate Result)}}{\text{Average Result}} \times 100$$

Environmental Services Laboratory, Inc.

17400 SW Upper Boones Ferry Road, Suite 270 • Portland, OR 97224 • (503) 670-8520

February 03, 2004

Jacinta A. Tenorio
Pinnacle Laboratories
2709-D Pan American Fwy NE
Albuquerque, NM 87107

TEL: 505 344-3777
FAX (505) 344-4413

RE: 401053/BIO

Order No.: 0401119

Dear Jacinta A. Tenorio:

Environmental Services Laboratory received 17 samples on 1/22/04 for the analyses presented in the following report.

There were no analytical problems encountered and all analytical data met requirements established under NELAC protocol or laboratory specifications except where noted in a Case Narrative. Results apply only to the samples analyzed. Reproduction of this report is permitted only in its entirety, without the written approval of the laboratory. The following checked data sections are included in this report.

✓Base Sample Report ✓Method Blank Report ✓Sample Duplicate Report __Matrix Spike/Matrix Spike Duplicate Report ✓Laboratory Control Spike/Spike Duplicate Report ✓Continuing Calibration Verification Report __Initial Calibration Verification Report

If you have any questions regarding these tests results, please feel free to call.

Project Manager

Keith Hunter
Technical Review

Environmental Services Laboratory

Date: *03-Feb-04*

CLIENT:	Pinnacle Laboratories	**Client Sample ID:**	MW-18/401053-01
Lab Order:	0401119	**Tag Number:**	
Project:	401053/BIO	**Collection Date:**	1/19/04
Lab ID:	0401119-01A	**Matrix:**	AQUEOUS

Analyses	Result	Limit	Qual	Units	DF	Date Analyzed
PAH BY SIM, AQUEOUS		**8270-SIM**		**(3510C)**		Analyst: rlr
1-Methylnaphthalene	ND	0.40		µg/L	4	1/27/04
2-Methylnaphthalene	ND	0.40		µg/L	4	1/27/04
Acenaphthene	ND	0.40		µg/L	4	1/27/04
Acenaphthylene	ND	0.40		µg/L	4	1/27/04
Anthracene	ND	0.40		µg/L	4	1/27/04
Benz(a)anthracene	ND	0.40		µg/L	4	1/27/04
Benzo(a)pyrene	ND	0.40		µg/L	4	1/27/04
Benzo(b)fluoranthene	ND	0.40		µg/L	4	1/27/04
Benzo(g,h,i)perylene	ND	0.40		µg/L	4	1/27/04
Benzo(k)fluoranthene	ND	0.40		µg/L	4	1/27/04
Chrysene	ND	0.40		µg/L	4	1/27/04
Dibenz(a,h)anthracene	ND	0.40		µg/L	4	1/27/04
Fluoranthene	ND	0.40		µg/L	4	1/27/04
Fluorene	ND	0.40		µg/L	4	1/27/04
Indeno(1,2,3-cd)pyrene	ND	0.40		µg/L	4	1/27/04
Naphthalene	ND	0.40		µg/L	4	1/27/04
Phenanthrene	ND	0.40		µg/L	4	1/27/04
Pyrene	ND	0.40		µg/L	4	1/27/04
Surr: 2-Fluorobiphenyl	45.0	43-116		%REC	4	1/27/04
Surr: 4-Terphenyl-d14	34.0	33-141		%REC	4	1/27/04
Surr: Nitrobenzene-d5	0	35-114	S, MI	%REC	4	1/27/04

Qualifiers:

ND - Not Detected at the Reporting Limit

J - Analyte detected below quantitation limits

B - Analyte detected in the associated Method Blank

* - Value exceeds Maximum Contaminant Level

S - Spike Recovery outside accepted recovery limits

R - RPD outside accepted recovery limits

E - Value above quantitation range

Environmental Services Laboratory

Date: *03-Feb-04*

CLIENT:	Pinnacle Laboratories	**Client Sample ID:**	MW-5/401053-02
Lab Order:	0401119	**Tag Number:**	
Project:	401053/BIO	**Collection Date:**	1/19/04
Lab ID:	0401119-02A	**Matrix:**	AQUEOUS

Analyses	Result	Limit	Qual	Units	DF	Date Analyzed
PAH BY SIM, AQUEOUS		**8270-SIM**		(3510C)		Analyst: rlr
1-Methylnaphthalene	ND	0.40		µg/L	4	1/27/04
2-Methylnaphthalene	ND	0.40		µg/L	4	1/27/04
Acenaphthene	ND	0.40		µg/L	4	1/27/04
Acenaphthylene	ND	0.40		µg/L	4	1/27/04
Anthracene	ND	0.40		µg/L	4	1/27/04
Benz(a)anthracene	ND	0.40		µg/L	4	1/27/04
Benzo(a)pyrene	ND	0.40		µg/L	4	1/27/04
Benzo(b)fluoranthene	ND	0.40		µg/L	4	1/27/04
Benzo(g,h,i)perylene	ND	0.40		µg/L	4	1/27/04
Benzo(k)fluoranthene	ND	0.40		µg/L	4	1/27/04
Chrysene	ND	0.40		µg/L	4	1/27/04
Dibenz(a,h)anthracene	ND	0.40		µg/L	4	1/27/04
Fluoranthene	ND	0.40		µg/L	4	1/27/04
Fluorene	ND	0.40		µg/L	4	1/27/04
Indeno(1,2,3-cd)pyrene	ND	0.40		µg/L	4	1/27/04
Naphthalene	ND	0.40		µg/L	4	1/27/04
Phenanthrene	ND	0.40		µg/L	4	1/27/04
Pyrene	ND	0.40		µg/L	4	1/27/04
Surr: 2-Fluorobiphenyl	63.0	43-116		%REC	4	1/27/04
Surr: 4-Terphenyl-d14	73.0	33-141		%REC	4	1/27/04
Surr: Nitrobenzene-d5	51.0	35-114		%REC	4	1/27/04

Qualifiers:

ND - Not Detected at the Reporting Limit

J - Analyte detected below quantitation limits

B - Analyte detected in the associated Method Blank

* - Value exceeds Maximum Contaminant Level

S - Spike Recovery outside accepted recovery limits

R - RPD outside accepted recovery limits

E - Value above quantitation range

Environmental Services Laboratory

Date: *03-Feb-04*

CLIENT:	Pinnacle Laboratories	**Client Sample ID:**	MW-19/401053-03
Lab Order:	0401119	**Tag Number:**	
Project:	401053/BIO	**Collection Date:**	1/19/04
Lab ID:	0401119-03A	**Matrix:**	AQUEOUS

Analyses	Result	Limit	Qual	Units	DF	Date Analyzed
PAH BY SIM, AQUEOUS		**8270-SIM**		**(3510C)**		Analyst: rlr
1-Methylnaphthalene	ND	0.40		µg/L	4	1/27/04
2-Methylnaphthalene	ND	0.40		µg/L	4	1/27/04
Acenaphthene	ND	0.40		µg/L	4	1/27/04
Acenaphthylene	ND	0.40		µg/L	4	1/27/04
Anthracene	ND	0.40		µg/L	4	1/27/04
Benz(a)anthracene	ND	0.40		µg/L	4	1/27/04
Benzo(a)pyrene	ND	0.40		µg/L	4	1/27/04
Benzo(b)fluoranthene	ND	0.40		µg/L	4	1/27/04
Benzo(g,h,i)perylene	ND	0.40		µg/L	4	1/27/04
Benzo(k)fluoranthene	ND	0.40		µg/L	4	1/27/04
Chrysene	ND	0.40		µg/L	4	1/27/04
Dibenz(a,h)anthracene	ND	0.40		µg/L	4	1/27/04
Fluoranthene	ND	0.40		µg/L	4	1/27/04
Fluorene	ND	0.40		µg/L	4	1/27/04
Indeno(1,2,3-cd)pyrene	ND	0.40		µg/L	4	1/27/04
Naphthalene	ND	0.40		µg/L	4	1/27/04
Phenanthrene	ND	0.40		µg/L	4	1/27/04
Pyrene	ND	0.40		µg/L	4	1/27/04
Surr: 2-Fluorobiphenyl	54.0	43-116		%REC	4	1/27/04
Surr: 4-Terphenyl-d14	70.0	33-141		%REC	4	1/27/04
Surr: Nitrobenzene-d5	47.0	35-114		%REC	4	1/27/04

Qualifiers:

ND - Not Detected at the Reporting Limit

J - Analyte detected below quantitation limits

B - Analyte detected in the associated Method Blank

* - Value exceeds Maximum Contaminant Level

S - Spike Recovery outside accepted recovery limits

R - RPD outside accepted recovery limits

E - Value above quantitation range

Environmental Services Laboratory

Date: *03-Feb-04*

CLIENT:	Pinnacle Laboratories	**Client Sample ID:**	MW-4/401053-04
Lab Order:	0401119	**Tag Number:**	
Project:	401053/BIO	**Collection Date:**	1/19/04
Lab ID:	0401119-04A	**Matrix:**	AQUEOUS

Analyses	Result	Limit	Qual	Units	DF	Date Analyzed
PAH BY SIM, AQUEOUS		**8270-SIM**		**(3510C)**		Analyst: rlr
1-Methylnaphthalene	ND	0.40		µg/L	4	1/27/04
2-Methylnaphthalene	ND	0.40		µg/L	4	1/27/04
Acenaphthene	ND	0.40		µg/L	4	1/27/04
Acenaphthylene	ND	0.40		µg/L	4	1/27/04
Anthracene	ND	0.40		µg/L	4	1/27/04
Benz(a)anthracene	ND	0.40		µg/L	4	1/27/04
Benzo(a)pyrene	ND	0.40		µg/L	4	1/27/04
Benzo(b)fluoranthene	ND	0.40		µg/L	4	1/27/04
Benzo(g,h,i)perylene	ND	0.40		µg/L	4	1/27/04
Benzo(k)fluoranthene	ND	0.40		µg/L	4	1/27/04
Chrysene	ND	0.40		µg/L	4	1/27/04
Dibenz(a,h)anthracene	ND	0.40		µg/L	4	1/27/04
Fluoranthene	ND	0.40		µg/L	4	1/27/04
Fluorene	ND	0.40		µg/L	4	1/27/04
Indeno(1,2,3-cd)pyrene	ND	0.40		µg/L	4	1/27/04
Naphthalene	ND	0.40		µg/L	4	1/27/04
Phenanthrene	ND	0.40		µg/L	4	1/27/04
Pyrene	ND	0.40		µg/L	4	1/27/04
Surr: 2-Fluorobiphenyl	60.0	43-116		%REC	4	1/27/04
Surr: 4-Terphenyl-d14	69.0	33-141		%REC	4	1/27/04
Surr: Nitrobenzene-d5	37.0	35-114		%REC	4	1/27/04

Qualifiers:

ND - Not Detected at the Reporting Limit

J - Analyte detected below quantitation limits

B - Analyte detected in the associated Method Blank

* - Value exceeds Maximum Contaminant Level

S - Spike Recovery outside accepted recovery limits

R - RPD outside accepted recovery limits

E - Value above quantitation range

Environmental Services Laboratory

Date: *03-Feb-04*

CLIENT:	Pinnacle Laboratories	**Client Sample ID:**	MW-6/401053-05
Lab Order:	0401119	**Tag Number:**	
Project:	401053/BIO	**Collection Date:**	1/19/04
Lab ID:	0401119-05A	**Matrix:**	AQUEOUS

Analyses	Result	Limit	Qual	Units	DF	Date Analyzed
PAH BY SIM, AQUEOUS		**8270-SIM**		**(3510C)**		Analyst: rlr
1-Methylnaphthalene	ND	0.40		µg/L	4	1/27/04
2-Methylnaphthalene	ND	0.40		µg/L	4	1/27/04
Acenaphthene	ND	0.40		µg/L	4	1/27/04
Acenaphthylene	ND	0.40		µg/L	4	1/27/04
Anthracene	ND	0.40		µg/L	4	1/27/04
Benz(a)anthracene	ND	0.40		µg/L	4	1/27/04
Benzo(a)pyrene	ND	0.40		µg/L	4	1/27/04
Benzo(b)fluoranthene	ND	0.40		µg/L	4	1/27/04
Benzo(g,h,i)perylene	ND	0.40		µg/L	4	1/27/04
Benzo(k)fluoranthene	ND	0.40		µg/L	4	1/27/04
Chrysene	ND	0.40		µg/L	4	1/27/04
Dibenz(a,h)anthracene	ND	0.40		µg/L	4	1/27/04
Fluoranthene	ND	0.40		µg/L	4	1/27/04
Fluorene	ND	0.40		µg/L	4	1/27/04
Indeno(1,2,3-cd)pyrene	ND	0.40		µg/L	4	1/27/04
Naphthalene	ND	0.40		µg/L	4	1/27/04
Phenanthrene	ND	0.40		µg/L	4	1/27/04
Pyrene	ND	0.40		µg/L	4	1/27/04
Surr: 2-Fluorobiphenyl	62.0	43-116		%REC	4	1/27/04
Surr: 4-Terphenyl-d14	73.0	33-141		%REC	4	1/27/04
Surr: Nitrobenzene-d5	57.0	35-114		%REC	4	1/27/04

Qualifiers:

ND - Not Detected at the Reporting Limit

J - Analyte detected below quantitation limits

B - Analyte detected in the associated Method Blank

* - Value exceeds Maximum Contaminant Level

S - Spike Recovery outside accepted recovery limits

R - RPD outside accepted recovery limits

E - Value above quantitation range

Environmental Services Laboratory

Date: *03-Feb-04*

CLIENT:	Pinnacle Laboratories	**Client Sample ID:**	MW-7/401053-06
Lab Order:	0401119	**Tag Number:**	
Project:	401053/BIO	**Collection Date:**	1/19/04
Lab ID:	0401119-06A	**Matrix:**	AQUEOUS

Analyses	Result	Limit	Qual	Units	DF	Date Analyzed
PAH BY SIM, AQUEOUS		**8270-SIM**		**(3510C)**		Analyst: rlr
1-Methylnaphthalene	ND	0.40		µg/L	4	1/27/04
2-Methylnaphthalene	ND	0.40		µg/L	4	1/27/04
Acenaphthene	ND	0.40		µg/L	4	1/27/04
Acenaphthylene	ND	0.40		µg/L	4	1/27/04
Anthracene	ND	0.40		µg/L	4	1/27/04
Benz(a)anthracene	ND	0.40		µg/L	4	1/27/04
Benzo(a)pyrene	ND	0.40		µg/L	4	1/27/04
Benzo(b)fluoranthene	ND	0.40		µg/L	4	1/27/04
Benzo(g,h,i)perylene	ND	0.40		µg/L	4	1/27/04
Benzo(k)fluoranthene	ND	0.40		µg/L	4	1/27/04
Chrysene	ND	0.40		µg/L	4	1/27/04
Dibenz(a,h)anthracene	ND	0.40		µg/L	4	1/27/04
Fluoranthene	ND	0.40		µg/L	4	1/27/04
Fluorene	ND	0.40		µg/L	4	1/27/04
Indeno(1,2,3-cd)pyrene	ND	0.40		µg/L	4	1/27/04
Naphthalene	ND	0.40		µg/L	4	1/27/04
Phenanthrene	ND	0.40		µg/L	4	1/27/04
Pyrene	ND	0.40		µg/L	4	1/27/04
Surr: 2-Fluorobiphenyl	59.0	43-116		%REC	4	1/27/04
Surr: 4-Terphenyl-d14	76.0	33-141		%REC	4	1/27/04
Surr: Nitrobenzene-d5	43.0	35-114		%REC	4	1/27/04

Qualifiers:

ND - Not Detected at the Reporting Limit

J - Analyte detected below quantitation limits

B - Analyte detected in the associated Method Blank

* - Value exceeds Maximum Contaminant Level

S - Spike Recovery outside accepted recovery limits

R - RPD outside accepted recovery limits

E - Value above quantitation range

Environmental Services Laboratory

Date: *03-Feb-04*

CLIENT:	Pinnacle Laboratories	**Client Sample ID:**	MW-9/401053-07
Lab Order:	0401119	**Tag Number:**	
Project:	401053/BIO	**Collection Date:**	1/19/04
Lab ID:	0401119-07A	**Matrix:**	AQUEOUS

Analyses	Result	Limit	Qual	Units	DF	Date Analyzed
PAH BY SIM, AQUEOUS		**8270-SIM**		**(3510C)**		Analyst: rlr
1-Methylnaphthalene	ND	0.40		µg/L	4	1/27/04
2-Methylnaphthalene	ND	0.40		µg/L	4	1/27/04
Acenaphthene	ND	0.40		µg/L	4	1/27/04
Acenaphthylene	ND	0.40		µg/L	4	1/27/04
Anthracene	ND	0.40		µg/L	4	1/27/04
Benz(a)anthracene	ND	0.40		µg/L	4	1/27/04
Benzo(a)pyrene	ND	0.40		µg/L	4	1/27/04
Benzo(b)fluoranthene	ND	0.40		µg/L	4	1/27/04
Benzo(g,h,i)perylene	ND	0.40		µg/L	4	1/27/04
Benzo(k)fluoranthene	ND	0.40		µg/L	4	1/27/04
Chrysene	ND	0.40		µg/L	4	1/27/04
Dibenz(a,h)anthracene	ND	0.40		µg/L	4	1/27/04
Fluoranthene	ND	0.40		µg/L	4	1/27/04
Fluorene	ND	0.40		µg/L	4	1/27/04
Indeno(1,2,3-cd)pyrene	ND	0.40		µg/L	4	1/27/04
Naphthalene	ND	0.40		µg/L	4	1/27/04
Phenanthrene	ND	0.40		µg/L	4	1/27/04
Pyrene	ND	0.40		µg/L	4	1/27/04
Surr: 2-Fluorobiphenyl	59.0	43-116		%REC	4	1/27/04
Surr: 4-Terphenyl-d14	77.0	33-141		%REC	4	1/27/04
Surr: Nitrobenzene-d5	50.0	35-114		%REC	4	1/27/04

Qualifiers:

ND - Not Detected at the Reporting Limit

J - Analyte detected below quantitation limits

B - Analyte detected in the associated Method Blank

* - Value exceeds Maximum Contaminant Level

S - Spike Recovery outside accepted recovery limits

R - RPD outside accepted recovery limits

E - Value above quantitation range

Environmental Services Laboratory

Date: *03-Feb-04*

CLIENT:	Pinnacle Laboratories	**Client Sample ID:**	MW-10/401053-08
Lab Order:	0401119	**Tag Number:**	
Project:	401053/BIO	**Collection Date:**	1/19/04
Lab ID:	0401119-08A	**Matrix:**	AQUEOUS

Analyses	Result	Limit	Qual	Units	DF	Date Analyzed
PAH BY SIM, AQUEOUS		**8270-SIM**		**(3510C)**		Analyst: rlr
1-Methylnaphthalene	ND	0.40		µg/L	4	1/27/04
2-Methylnaphthalene	ND	0.40		µg/L	4	1/27/04
Acenaphthene	ND	0.40		µg/L	4	1/27/04
Acenaphthylene	ND	0.40		µg/L	4	1/27/04
Anthracene	ND	0.40		µg/L	4	1/27/04
Benz(a)anthracene	ND	0.40		µg/L	4	1/27/04
Benzo(a)pyrene	ND	0.40		µg/L	4	1/27/04
Benzo(b)fluoranthene	ND	0.40		µg/L	4	1/27/04
Benzo(g,h,i)perylene	ND	0.40		µg/L	4	1/27/04
Benzo(k)fluoranthene	ND	0.40		µg/L	4	1/27/04
Chrysene	ND	0.40		µg/L	4	1/27/04
Dibenz(a,h)anthracene	ND	0.40		µg/L	4	1/27/04
Fluoranthene	ND	0.40		µg/L	4	1/27/04
Fluorene	ND	0.40		µg/L	4	1/27/04
Indeno(1,2,3-cd)pyrene	ND	0.40		µg/L	4	1/27/04
Naphthalene	ND	0.40		µg/L	4	1/27/04
Phenanthrene	ND	0.40		µg/L	4	1/27/04
Pyrene	ND	0.40		µg/L	4	1/27/04
Surr: 2-Fluorobiphenyl	61.0	43-116		%REC	4	1/27/04
Surr: 4-Terphenyl-d14	75.0	33-141		%REC	4	1/27/04
Surr: Nitrobenzene-d5	46.0	35-114		%REC	4	1/27/04

Qualifiers:

ND - Not Detected at the Reporting Limit

J - Analyte detected below quantitation limits

B - Analyte detected in the associated Method Blank

* - Value exceeds Maximum Contaminant Level

S - Spike Recovery outside accepted recovery limits

R - RPD outside accepted recovery limits

E - Value above quantitation range

Environmental Services Laboratory

Date: *03-Feb-04*

CLIENT:	Pinnacle Laboratories	**Client Sample ID:**	MW-20/401053-09
Lab Order:	0401119	**Tag Number:**	
Project:	401053/BIO	**Collection Date:**	1/20/04
Lab ID:	0401119-09A	**Matrix:**	AQUEOUS

Analyses	Result	Limit	Qual	Units	DF	Date Analyzed
PAH BY SIM, AQUEOUS		**8270-SIM**		**(3510C)**		Analyst: rlr
1-Methylnaphthalene	ND	0.40		µg/L	4	1/27/04
2-Methylnaphthalene	ND	0.40		µg/L	4	1/27/04
Acenaphthene	ND	0.40		µg/L	4	1/27/04
Acenaphthylene	ND	0.40		µg/L	4	1/27/04
Anthracene	ND	0.40		µg/L	4	1/27/04
Benz(a)anthracene	ND	0.40		µg/L	4	1/27/04
Benzo(a)pyrene	ND	0.40		µg/L	4	1/27/04
Benzo(b)fluoranthene	ND	0.40		µg/L	4	1/27/04
Benzo(g,h,i)perylene	ND	0.40		µg/L	4	1/27/04
Benzo(k)fluoranthene	ND	0.40		µg/L	4	1/27/04
Chrysene	ND	0.40		µg/L	4	1/27/04
Dibenz(a,h)anthracene	ND	0.40		µg/L	4	1/27/04
Fluoranthene	ND	0.40		µg/L	4	1/27/04
Fluorene	ND	0.40		µg/L	4	1/27/04
Indeno(1,2,3-cd)pyrene	ND	0.40		µg/L	4	1/27/04
Naphthalene	ND	0.40		µg/L	4	1/27/04
Phenanthrene	ND	0.40		µg/L	4	1/27/04
Pyrene	ND	0.40		µg/L	4	1/27/04
Surr: 2-Fluorobiphenyl	56.0	43-116		%REC	4	1/27/04
Surr: 4-Terphenyl-d14	66.0	33-141		%REC	4	1/27/04
Surr: Nitrobenzene-d5	30.0	35-114	S	%REC	4	1/27/04

Qualifiers:

ND - Not Detected at the Reporting Limit

J - Analyte detected below quantitation limits

B - Analyte detected in the associated Method Blank

* - Value exceeds Maximum Contaminant Level

S - Spike Recovery outside accepted recovery limits

R - RPD outside accepted recovery limits

E - Value above quantitation range

Environmental Services Laboratory

Date: *03-Feb-04*

CLIENT: Pinnacle Laboratories
Lab Order: 0401119
Project: 401053/BIO
Lab ID: 0401119-10A

Client Sample ID: MW-21/401053-10
Tag Number:
Collection Date: 1/20/04
Matrix: AQUEOUS

Analyses	Result	Limit	Qual	Units	DF	Date Analyzed
PAH BY SIM, AQUEOUS		**8270-SIM**		**(3510C)**		Analyst: rlr
1-Methylnaphthalene	ND	0.40		µg/L	4	1/27/04
2-Methylnaphthalene	ND	0.40		µg/L	4	1/27/04
Acenaphthene	ND	0.40		µg/L	4	1/27/04
Acenaphthylene	ND	0.40		µg/L	4	1/27/04
Anthracene	ND	0.40		µg/L	4	1/27/04
Benz(a)anthracene	ND	0.40		µg/L	4	1/27/04
Benzo(a)pyrene	ND	0.40		µg/L	4	1/27/04
Benzo(b)fluoranthene	ND	0.40		µg/L	4	1/27/04
Benzo(g,h,i)perylene	ND	0.40		µg/L	4	1/27/04
Benzo(k)fluoranthene	ND	0.40		µg/L	4	1/27/04
Chrysene	ND	0.40		µg/L	4	1/27/04
Dibenz(a,h)anthracene	ND	0.40		µg/L	4	1/27/04
Fluoranthene	ND	0.40		µg/L	4	1/27/04
Fluorene	ND	0.40		µg/L	4	1/27/04
Indeno(1,2,3-cd)pyrene	ND	0.40		µg/L	4	1/27/04
Naphthalene	ND	0.40		µg/L	4	1/27/04
Phenanthrene	ND	0.40		µg/L	4	1/27/04
Pyrene	ND	0.40		µg/L	4	1/27/04
Surr: 2-Fluorobiphenyl	57.0	43-116		%REC	4	1/27/04
Surr: 4-Terphenyl-d14	66.0	33-141		%REC	4	1/27/04
Surr: Nitrobenzene-d5	38.0	35-114		%REC	4	1/27/04

Qualifiers:

ND - Not Detected at the Reporting Limit
J - Analyte detected below quantitation limits
B - Analyte detected in the associated Method Blank
* - Value exceeds Maximum Contaminant Level
S - Spike Recovery outside accepted recovery limits
R - RPD outside accepted recovery limits
E - Value above quantitation range

Environmental Services Laboratory

Date: *03-Feb-04*

CLIENT:	Pinnacle Laboratories	**Client Sample ID:**	MW-22/401053-11
Lab Order:	0401119	**Tag Number:**	
Project:	401053/BIO	**Collection Date:**	1/20/04
Lab ID:	0401119-11A	**Matrix:**	AQUEOUS

Analyses	Result	Limit	Qual	Units	DF	Date Analyzed
PAH BY SIM, AQUEOUS		**8270-SIM**		**(3510C)**		Analyst: rlr
1-Methylnaphthalene	ND	0.40		µg/L	4	1/27/04
2-Methylnaphthalene	ND	0.40		µg/L	4	1/27/04
Acenaphthene	ND	0.40		µg/L	4	1/27/04
Acenaphthylene	ND	0.40		µg/L	4	1/27/04
Anthracene	ND	0.40		µg/L	4	1/27/04
Benz(a)anthracene	ND	0.40		µg/L	4	1/27/04
Benzo(a)pyrene	ND	0.40		µg/L	4	1/27/04
Benzo(b)fluoranthene	ND	0.40		µg/L	4	1/27/04
Benzo(g,h,i)perylene	ND	0.40		µg/L	4	1/27/04
Benzo(k)fluoranthene	ND	0.40		µg/L	4	1/27/04
Chrysene	ND	0.40		µg/L	4	1/27/04
Dibenz(a,h)anthracene	ND	0.40		µg/L	4	1/27/04
Fluoranthene	ND	0.40		µg/L	4	1/27/04
Fluorene	ND	0.40		µg/L	4	1/27/04
Indeno(1,2,3-cd)pyrene	ND	0.40		µg/L	4	1/27/04
Naphthalene	ND	0.40		µg/L	4	1/27/04
Phenanthrene	ND	0.40		µg/L	4	1/27/04
Pyrene	ND	0.40		µg/L	4	1/27/04
Surr: 2-Fluorobiphenyl	57.0	43-116		%REC	4	1/27/04
Surr: 4-Terphenyl-d14	68.0	33-141		%REC	4	1/27/04
Surr: Nitrobenzene-d5	43.0	35-114		%REC	4	1/27/04

Qualifiers:

ND - Not Detected at the Reporting Limit

J - Analyte detected below quantitation limits

B - Analyte detected in the associated Method Blank

* - Value exceeds Maximum Contaminant Level

S - Spike Recovery outside accepted recovery limits

R - RPD outside accepted recovery limits

E - Value above quantitation range

Environmental Services Laboratory

Date: *03-Feb-04*

CLIENT:	Pinnacle Laboratories	**Client Sample ID:**	MW-11/401053-12
Lab Order:	0401119	**Tag Number:**	
Project:	401053/BIO	**Collection Date:**	1/20/04
Lab ID:	0401119-12A	**Matrix:**	AQUEOUS

Analyses	Result	Limit	Qual	Units	DF	Date Analyzed
PAH BY SIM, AQUEOUS		**8270-SIM**		**(3510C)**		Analyst: rlr
1-Methylnaphthalene	ND	0.40		µg/L	4	1/27/04
2-Methylnaphthalene	ND	0.40		µg/L	4	1/27/04
Acenaphthene	ND	0.40		µg/L	4	1/27/04
Acenaphthylene	ND	0.40		µg/L	4	1/27/04
Anthracene	ND	0.40		µg/L	4	1/27/04
Benz(a)anthracene	ND	0.40		µg/L	4	1/27/04
Benzo(a)pyrene	ND	0.40		µg/L	4	1/27/04
Benzo(b)fluoranthene	ND	0.40		µg/L	4	1/27/04
Benzo(g,h,i)perylene	ND	0.40		µg/L	4	1/27/04
Benzo(k)fluoranthene	ND	0.40		µg/L	4	1/27/04
Chrysene	ND	0.40		µg/L	4	1/27/04
Dibenz(a,h)anthracene	ND	0.40		µg/L	4	1/27/04
Fluoranthene	ND	0.40		µg/L	4	1/27/04
Fluorene	ND	0.40		µg/L	4	1/27/04
Indeno(1,2,3-cd)pyrene	ND	0.40		µg/L	4	1/27/04
Naphthalene	ND	0.40		µg/L	4	1/27/04
Phenanthrene	ND	0.40		µg/L	4	1/27/04
Pyrene	ND	0.40		µg/L	4	1/27/04
Surr: 2-Fluorobiphenyl	56.0	43-116		%REC	4	1/27/04
Surr: 4-Terphenyl-d14	64.0	33-141		%REC	4	1/27/04
Surr: Nitrobenzene-d5	45.0	35-114		%REC	4	1/27/04

Qualifiers:

ND - Not Detected at the Reporting Limit

J - Analyte detected below quantitation limits

B - Analyte detected in the associated Method Blank

* - Value exceeds Maximum Contaminant Level

S - Spike Recovery outside accepted recovery limits

R - RPD outside accepted recovery limits

E - Value above quantitation range

Environmental Services Laboratory

Date: *03-Feb-04*

CLIENT:	Pinnacle Laboratories	**Client Sample ID:**	MW-15/401053-13
Lab Order:	0401119	**Tag Number:**	
Project:	401053/BIO	**Collection Date:**	1/20/04
Lab ID:	0401119-13A	**Matrix:**	AQUEOUS

Analyses	Result	Limit	Qual	Units	DF	Date Analyzed
PAH BY SIM, AQUEOUS		**8270-SIM**		**(3510C)**		Analyst: rlr
1-Methylnaphthalene	ND	0.40		µg/L	4	1/27/04
2-Methylnaphthalene	ND	0.40		µg/L	4	1/27/04
Acenaphthene	ND	0.40		µg/L	4	1/27/04
Acenaphthylene	ND	0.40		µg/L	4	1/27/04
Anthracene	ND	0.40		µg/L	4	1/27/04
Benz(a)anthracene	ND	0.40		µg/L	4	1/27/04
Benzo(a)pyrene	ND	0.40		µg/L	4	1/27/04
Benzo(b)fluoranthene	ND	0.40		µg/L	4	1/27/04
Benzo(g,h,i)perylene	ND	0.40		µg/L	4	1/27/04
Benzo(k)fluoranthene	ND	0.40		µg/L	4	1/27/04
Chrysene	ND	0.40		µg/L	4	1/27/04
Dibenz(a,h)anthracene	ND	0.40		µg/L	4	1/27/04
Fluoranthene	ND	0.40		µg/L	4	1/27/04
Fluorene	ND	0.40		µg/L	4	1/27/04
Indeno(1,2,3-cd)pyrene	ND	0.40		µg/L	4	1/27/04
Naphthalene	ND	0.40		µg/L	4	1/27/04
Phenanthrene	ND	0.40		µg/L	4	1/27/04
Pyrene	ND	0.40		µg/L	4	1/27/04
Surr: 2-Fluorobiphenyl	55.0	43-116		%REC	4	1/27/04
Surr: 4-Terphenyl-d14	70.0	33-141		%REC	4	1/27/04
Surr: Nitrobenzene-d5	42.0	35-114		%REC	4	1/27/04

Qualifiers:

ND - Not Detected at the Reporting Limit

J - Analyte detected below quantitation limits

B - Analyte detected in the associated Method Blank

* - Value exceeds Maximum Contaminant Level

S - Spike Recovery outside accepted recovery limits

R - RPD outside accepted recovery limits

E - Value above quantitation range

Environmental Services Laboratory

Date: *03-Feb-04*

CLIENT:	Pinnacle Laboratories	**Client Sample ID:**	MW-13/401053-14
Lab Order:	0401119	**Tag Number:**	
Project:	401053/BIO	**Collection Date:**	1/20/04
Lab ID:	0401119-14A	**Matrix:**	AQUEOUS

Analyses	Result	Limit	Qual	Units	DF	Date Analyzed
PAH BY SIM, AQUEOUS		**8270-SIM**		**(3510C)**		Analyst: rlr
1-Methylnaphthalene	ND	0.40		µg/L	4	1/27/04
2-Methylnaphthalene	ND	0.40		µg/L	4	1/27/04
Acenaphthene	ND	0.40		µg/L	4	1/27/04
Acenaphthylene	ND	0.40		µg/L	4	1/27/04
Anthracene	ND	0.40		µg/L	4	1/27/04
Benz(a)anthracene	ND	0.40		µg/L	4	1/27/04
Benzo(a)pyrene	ND	0.40		µg/L	4	1/27/04
Benzo(b)fluoranthene	ND	0.40		µg/L	4	1/27/04
Benzo(g,h,i)perylene	ND	0.40		µg/L	4	1/27/04
Benzo(k)fluoranthene	ND	0.40		µg/L	4	1/27/04
Chrysene	ND	0.40		µg/L	4	1/27/04
Dibenz(a,h)anthracene	ND	0.40		µg/L	4	1/27/04
Fluoranthene	ND	0.40		µg/L	4	1/27/04
Fluorene	ND	0.40		µg/L	4	1/27/04
Indeno(1,2,3-cd)pyrene	ND	0.40		µg/L	4	1/27/04
Naphthalene	ND	0.40		µg/L	4	1/27/04
Phenanthrene	ND	0.40		µg/L	4	1/27/04
Pyrene	ND	0.40		µg/L	4	1/27/04
Surr: 2-Fluorobiphenyl	59.0	43-116		%REC	4	1/27/04
Surr: 4-Terphenyl-d14	69.0	33-141		%REC	4	1/27/04
Surr: Nitrobenzene-d5	46.0	35-114		%REC	4	1/27/04

Qualifiers:

ND - Not Detected at the Reporting Limit

J - Analyte detected below quantitation limits

B - Analyte detected in the associated Method Blank

* - Value exceeds Maximum Contaminant Level

S - Spike Recovery outside accepted recovery limits

R - RPD outside accepted recovery limits

E - Value above quantitation range

Environmental Services Laboratory

Date: *03-Feb-04*

CLIENT:	Pinnacle Laboratories	**Client Sample ID:**	MW-12/401053-15
Lab Order:	0401119	**Tag Number:**	
Project:	401053/BIO	**Collection Date:**	1/20/04
Lab ID:	0401119-15A	**Matrix:**	AQUEOUS

Analyses	Result	Limit	Qual	Units	DF	Date Analyzed
PAH BY SIM, AQUEOUS		**8270-SIM**		**(3510C)**		Analyst: rlr
1-Methylnaphthalene	140	0.40		µg/L	4	1/27/04
2-Methylnaphthalene	170	0.40		µg/L	4	1/27/04
Acenaphthene	2.8	0.40		µg/L	4	1/27/04
Acenaphthylene	4.7	0.40		µg/L	4	1/27/04
Anthracene	ND	0.40		µg/L	4	1/27/04
Benz(a)anthracene	ND	0.40		µg/L	4	1/27/04
Benzo(a)pyrene	ND	0.40		µg/L	4	1/27/04
Benzo(b)fluoranthene	ND	0.40		µg/L	4	1/27/04
Benzo(g,h,i)perylene	ND	0.40		µg/L	4	1/27/04
Benzo(k)fluoranthene	ND	0.40		µg/L	4	1/27/04
Chrysene	ND	0.40		µg/L	4	1/27/04
Dibenz(a,h)anthracene	ND	0.40		µg/L	4	1/27/04
Fluoranthene	0.68	0.40		µg/L	4	1/27/04
Fluorene	14	0.40		µg/L	4	1/27/04
Indeno(1,2,3-cd)pyrene	ND	0.40		µg/L	4	1/27/04
Naphthalene	77	0.40		µg/L	4	1/27/04
Phenanthrene	38	0.40		µg/L	4	1/27/04
Pyrene	1.0	0.40		µg/L	4	1/27/04
Surr: 2-Fluorobiphenyl	61.0	43-116		%REC	4	1/27/04
Surr: 4-Terphenyl-d14	52.0	33-141		%REC	4	1/27/04
Surr: Nitrobenzene-d5	0	35-114	S, MI	%REC	4	1/27/04

387

Qualifiers:

ND - Not Detected at the Reporting Limit

J - Analyte detected below quantitation limits

B - Analyte detected in the associated Method Blank

* - Value exceeds Maximum Contaminant Level

S - Spike Recovery outside accepted recovery limits

R - RPD outside accepted recovery limits

E - Value above quantitation range

Environmental Services Laboratory

Date: *03-Feb-04*

CLIENT:	Pinnacle Laboratories	**Client Sample ID:**	Influent/401053-16
Lab Order:	0401119	**Tag Number:**	
Project:	401053/BIO	**Collection Date:**	1/20/04
Lab ID:	0401119-16A	**Matrix:**	AQUEOUS

Analyses	Result	Limit	Qual	Units	DF	Date Analyzed
PAH BY SIM, AQUEOUS		**8270-SIM**		**(3510C)**		Analyst: rlr
1-Methylnaphthalene	280	4.0		µg/L	40	1/27/04
2-Methylnaphthalene	290	4.0		µg/L	40	1/27/04
Acenaphthene	ND	4.0		µg/L	40	1/27/04
Acenaphthylene	ND	4.0		µg/L	40	1/27/04
Anthracene	ND	4.0		µg/L	40	1/27/04
Benz(a)anthracene	ND	4.0		µg/L	40	1/27/04
Benzo(a)pyrene	ND	4.0		µg/L	40	1/27/04
Benzo(b)fluoranthene	ND	4.0		µg/L	40	1/27/04
Benzo(g,h,i)perylene	ND	4.0		µg/L	40	1/27/04
Benzo(k)fluoranthene	ND	4.0		µg/L	40	1/27/04
Chrysene	ND	4.0		µg/L	40	1/27/04
Dibenz(a,h)anthracene	ND	4.0		µg/L	40	1/27/04
Fluoranthene	ND	4.0		µg/L	40	1/27/04
Fluorene	ND	4.0		µg/L	40	1/27/04
Indeno(1,2,3-cd)pyrene	ND	4.0		µg/L	40	1/27/04
Naphthalene	540	4.0		µg/L	40	1/27/04
Phenanthrene	ND	4.0		µg/L	40	1/27/04
Pyrene	ND	4.0		µg/L	40	1/27/04
Surr: 2-Fluorobiphenyl	0	43-116	S, X	%REC	40	1/27/04
Surr: 4-Terphenyl-d14	0	33-141	S, X	%REC	40	1/27/04
Surr: Nitrobenzene-d5	0	35-114	S, X	%REC	40	1/27/04

Qualifiers:

ND - Not Detected at the Reporting Limit

J - Analyte detected below quantitation limits

B - Analyte detected in the associated Method Blank

* - Value exceeds Maximum Contaminant Level

S - Spike Recovery outside accepted recovery limits

R - RPD outside accepted recovery limits

E - Value above quantitation range

Environmental Services Laboratory

Date: *03-Feb-04*

CLIENT:	Pinnacle Laboratories	**Client Sample ID:**	Effluent/401053-17
Lab Order:	0401119	**Tag Number:**	
Project:	401053/BIO	**Collection Date:**	1/20/04
Lab ID:	0401119-17A	**Matrix:**	AQUEOUS

Analyses	Result	Limit	Qual	Units	DF	Date Analyzed
PAH BY SIM, AQUEOUS		**8270-SIM**		**(3510C)**		Analyst: rlr
1-Methylnaphthalene	3.2	0.40		µg/L	4	1/27/04
2-Methylnaphthalene	3.0	0.40		µg/L	4	1/27/04
Acenaphthene	ND	0.40		µg/L	4	1/27/04
Acenaphthylene	ND	0.40		µg/L	4	1/27/04
Anthracene	ND	0.40		µg/L	4	1/27/04
Benz(a)anthracene	ND	0.40		µg/L	4	1/27/04
Benzo(a)pyrene	ND	0.40		µg/L	4	1/27/04
Benzo(b)fluoranthene	ND	0.40		µg/L	4	1/27/04
Benzo(g,h,i)perylene	ND	0.40		µg/L	4	1/27/04
Benzo(k)fluoranthene	ND	0.40		µg/L	4	1/27/04
Chrysene	ND	0.40		µg/L	4	1/27/04
Dibenz(a,h)anthracene	ND	0.40		µg/L	4	1/27/04
Fluoranthene	ND	0.40		µg/L	4	1/27/04
Fluorene	1.5	0.40		µg/L	4	1/27/04
Indeno(1,2,3-cd)pyrene	ND	0.40		µg/L	4	1/27/04
Naphthalene	4.7	0.40		µg/L	4	1/27/04
Phenanthrene	2.1	0.40		µg/L	4	1/27/04
Pyrene	ND	0.40		µg/L	4	1/27/04
Surr: 2-Fluorobiphenyl	64.0	43-116		%REC	4	1/27/04
Surr: 4-Terphenyl-d14	70.0	33-141		%REC	4	1/27/04
Surr: Nitrobenzene-d5	42.0	35-114		%REC	4	1/27/04

Qualifiers:

ND - Not Detected at the Reporting Limit

J - Analyte detected below quantitation limits

B - Analyte detected in the associated Method Blank

* - Value exceeds Maximum Contaminant Level

S - Spike Recovery outside accepted recovery limits

R - RPD outside accepted recovery limits

E - Value above quantitation range

CLIENT: Pinnacle Laboratories
Work Order: 0401119
Project: 401053/BIO

ANALYTICAL QC SUMMARY REPORT

TestCode: 06 PAH A

Sample ID: **MB-6680**	SampType: **MBLK**	TestCode: **06 PAH A**	Units: **µg/L**	Prep Date: **1/26/04**	Run ID: **HEISENBURG_040127B**
Client ID: **ZZZZZ**	Batch ID: **6680**	TestNo: **8270-SIM**	**(3510C)**	Analysis Date: **1/27/04**	SeqNo: **194268**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
1-Methylnaphthalene	ND	0.10									
2-Methylnaphthalene	ND	0.10									
Acenaphthene	ND	0.10									
Acenaphthylene	ND	0.10									
Anthracene	ND	0.10									
Benz(a)anthracene	ND	0.10									
Benzo(a)pyrene	ND	0.10									
Benzo(b)fluoranthene	ND	0.10									
Benzo(g,h,i)perylene	ND	0.10									
Benzo(k)fluoranthene	ND	0.10									
Chrysene	ND	0.10									
Dibenz(a,h)anthracene	ND	0.10									
Fluoranthene	ND	0.10									
Fluorene	ND	0.10									
Indeno(1,2,3-cd)pyrene	ND	0.10									
Naphthalene	ND	0.10									
Phenanthrene	ND	0.10									
Pyrene	ND	0.10									
Surr: 2-Fluorobiphenyl	0.53	0	1	0	53	43	116	0	0		
Surr: 4-Terphenyl-d14	0.82	0	1	0	82	33	141	0	0		
Surr: Nitrobenzene-d5	0.43	0	1	0	43	35	114	0	0		

Sample ID: **LCS-6680**	SampType: **LCS**	TestCode: **06 PAH A**	Units: **µg/L**	Prep Date: **1/26/04**	Run ID: **HEISENBURG_040127B**
Client ID: **ZZZZZ**	Batch ID: **6680**	TestNo: **8270-SIM**	**(3510C)**	Analysis Date: **1/27/04**	SeqNo: **194269**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
1-Methylnaphthalene	0.68	0.10	1	0	68	21	133	0	0		
2-Methylnaphthalene	0.54	0.10	1	0	54	21	133	0	0		
Acenaphthene	0.71	0.10	1	0	71	47	145	0	0		
Acenaphthylene	0.72	0.10	1	0	72	33	145	0	0		

Qualifiers: ND - Not Detected at the Reporting Limit
J - Analyte detected below quantitation limits
S - Spike Recovery outside accepted recovery limits
R - RPD outside accepted recovery limits
B - Analyte detected in the associated Method Blank

CLIENT: Pinnacle Laboratories
Work Order: 0401119
Project: 401053/BIO

ANALYTICAL QC SUMMARY REPORT

TestCode: 06 PAH A

Sample ID: LCS-6680	SampType: LCS	TestCode: 06 PAH A	Units: µg/L	Prep Date: 1/26/04	Run ID: HEISENBURG_040127B
Client ID: ZZZZZ	Batch ID: 6680	TestNo: 8270-SIM	(3510C)	Analysis Date: 1/27/04	SeqNo: 194269

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Anthracene	0.66	0.10	1	0	66	27	133	0	0		
Benz(a)anthracene	0.49	0.10	1	0	49	33	143	0	0		
Benzo(a)pyrene	0.58	0.10	1	0	58	17	163	0	0		
Benzo(b)fluoranthene	0.41	0.10	1	0	41	24	159	0	0		
Benzo(g,h,i)perylene	0.67	0.10	1	0	67	1	219	0	0		
Benzo(k)fluoranthene	0.76	0.10	1	0	76	11	162	0	0		
Chrysene	0.82	0.10	1	0	82	17	168	0	0		
Dibenz(a,h)anthracene	0.65	0.10	1	0	65	1	227	0	0		
Fluoranthene	0.66	0.10	1	0	66	26	137	0	0		
Fluorene	0.67	0.10	1	0	67	59	121	0	0		
Indeno(1,2,3-cd)pyrene	0.68	0.10	1	0	68	1	171	0	0		
Naphthalene	0.64	0.10	1	0	64	21	133	0	0		
Phenanthrene	0.66	0.10	1	0	66	54	120	0	0		
Pyrene	0.79	0.10	1	0	79	52	115	0	0		
Surr: 2-Fluorobiphenyl	0.62	0	1	0	62	43	116	0	0		
Surr: 4-Terphenyl-d14	0.84	0	1	0	84	33	141	0	0		
Surr: Nitrobenzene-d5	0.48	0	1	0	48	35	114	0	0		

Sample ID: LCSD-6680	SampType: LCSD	TestCode: 06 PAH A	Units: µg/L	Prep Date: 1/26/04	Run ID: HEISENBURG_040127B
Client ID: ZZZZZ	Batch ID: 6680	TestNo: 8270-SIM	(3510C)	Analysis Date: 1/27/04	SeqNo: 194270

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
1-Methylnaphthalene	0.72	0.10	1	0	72	21	133	0.68	5.71	30	
2-Methylnaphthalene	0.57	0.10	1	0	57	21	133	0.54	5.41	30	
Acenaphthene	0.77	0.10	1	0	77	47	145	0.71	8.11	30	
Acenaphthylene	0.78	0.10	1	0	78	33	145	0.72	8.00	30	
Anthracene	0.71	0.10	1	0	71	27	133	0.66	7.30	30	
Benz(a)anthracene	0.53	0.10	1	0	53	33	143	0.49	7.84	30	
Benzo(a)pyrene	0.6	0.10	1	0	60	17	163	0.58	3.39	30	
Benzo(b)fluoranthene	0.43	0.10	1	0	43	24	159	0.41	4.76	30	
Benzo(g,h,i)perylene	0.77	0.10	1	0	77	1	219	0.67	13.9	30	

Qualifiers: ND - Not Detected at the Reporting Limit
J - Analyte detected below quantitation limits
S - Spike Recovery outside accepted recovery limits
R - RPD outside accepted recovery limits
B - Analyte detected in the associated Method Blank

CLIENT: Pinnacle Laboratories
Work Order: 0401119
Project: 401053/BIO

ANALYTICAL QC SUMMARY REPORT

TestCode: 06 PAH A

Sample ID: LCSD-6680	SampType: LCSD	TestCode: 06 PAH A	Units: µg/L	Prep Date: 1/26/04	Run ID: HEISENBURG_040127B
Client ID: ZZZZZ	Batch ID: 6680	TestNo: 8270-SIM	(3510C)	Analysis Date: 1/27/04	SeqNo: 194270

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Benzo(k)fluoranthene	0.81	0.10	1	0	81	11	162	0.76	6.37	30	
Chrysene	0.88	0.10	1	0	88	17	168	0.82	7.06	30	
Dibenz(a,h)anthracene	0.72	0.10	1	0	72	1	227	0.65	10.2	30	
Fluoranthene	0.73	0.10	1	0	73	26	137	0.66	10.1	30	
Fluorene	0.69	0.10	1	0	69	59	121	0.67	2.94	30	
Indeno(1,2,3-cd)pyrene	0.78	0.10	1	0	78	1	171	0.68	13.7	30	
Naphthalene	0.69	0.10	1	0	69	21	133	0.64	7.52	30	
Phenanthrene	0.71	0.10	1	0	71	54	120	0.66	7.30	30	
Pyrene	0.81	0.10	1	0	81	52	115	0.79	2.50	30	
Surr: 2-Fluorobiphenyl	0.64	0	1	0	64	43	116	0	0	30	
Surr: 4-Terphenyl-d14	0.84	0	1	0	84	33	141	0	0	30	
Surr: Nitrobenzene-d5	0.51	0	1	0	51	35	114	0	0	30	

Sample ID: 0401119-01A DUP	SampType: DUP	TestCode: 06 PAH A	Units: µg/L	Prep Date: 1/26/04	Run ID: HEISENBURG_040127B
Client ID: MW-18/401053-01	Batch ID: 6680	TestNo: 8270-SIM	(3510C)	Analysis Date: 1/27/04	SeqNo: 194272

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
1-Methylnaphthalene	ND	0.40	0	0	0	0	0	0	0	20	
2-Methylnaphthalene	ND	0.40	0	0	0	0	0	0	0	20	
Acenaphthene	ND	0.40	0	0	0	0	0	0	0	20	
Acenaphthylene	ND	0.40	0	0	0	0	0	0	0	20	
Anthracene	ND	0.40	0	0	0	0	0	0	0	20	
Benz(a)anthracene	ND	0.40	0	0	0	0	0	0	0	20	
Benzo(a)pyrene	ND	0.40	0	0	0	0	0	0	0	20	
Benzo(b)fluoranthene	ND	0.40	0	0	0	0	0	0	0	20	
Benzo(g,h,i)perylene	ND	0.40	0	0	0	0	0	0	0	20	
Benzo(k)fluoranthene	ND	0.40	0	0	0	0	0	0	0	20	
Chrysene	ND	0.40	0	0	0	0	0	0	0	20	
Dibenz(a,h)anthracene	ND	0.40	0	0	0	0	0	0	0	20	
Fluoranthene	ND	0.40	0	0	0	0	0	0	0	20	
Fluorene	ND	0.40	0	0	0	0	0	0	0	20	

Qualifiers: ND - Not Detected at the Reporting Limit
J - Analyte detected below quantitation limits
S - Spike Recovery outside accepted recovery limits
R - RPD outside accepted recovery limits
B - Analyte detected in the associated Method Blank

CLIENT: Pinnacle Laboratories
Work Order: 0401119
Project: 401053/BIO

ANALYTICAL QC SUMMARY REPORT

TestCode: 06 PAH A

Sample ID: 0401119-01A DUP	SampType: DUP	TestCode: 06 PAH A	Units: µg/L	Prep Date: 1/26/04	Run ID: HEISENBURG_040127B
Client ID: MW-18/401053-01	Batch ID: 6680	TestNo: 8270-SIM	(3510C)	Analysis Date: 1/27/04	SeqNo: 194272

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Indeno(1,2,3-cd)pyrene	ND	0.40	0	0	0	0	0	0	0	20	
Naphthalene	ND	0.40	0	0	0	0	0	0	0	20	
Phenanthrene	ND	0.40	0	0	0	0	0	0	0	20	
Pyrene	ND	0.40	0	0	0	0	0	0	0	20	
Surr: 2-Fluorobiphenyl	2.64	0	4	0	66	43	116	0	0	0	
Surr: 4-Terphenyl-d14	3.4	0	4	0	85	33	141	0	0	0	
Surr: Nitrobenzene-d5	ND	0	4	0	0	35	114	0	0	0	S, MI

Sample ID: 0401119-11A DUP	SampType: DUP	TestCode: 06 PAH A	Units: µg/L	Prep Date: 1/26/04	Run ID: HEISENBURG_040127B
Client ID: MW-22/401053-11	Batch ID: 6680	TestNo: 8270-SIM	(3510C)	Analysis Date: 1/27/04	SeqNo: 194283

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
1-Methylnaphthalene	ND	0.40	0	0	0	0	0	0	0	20	
2-Methylnaphthalene	ND	0.40	0	0	0	0	0	0	0	20	
Acenaphthene	ND	0.40	0	0	0	0	0	0	0	20	
Acenaphthylene	ND	0.40	0	0	0	0	0	0	0	20	
Anthracene	ND	0.40	0	0	0	0	0	0	0	20	
Benz(a)anthracene	ND	0.40	0	0	0	0	0	0	0	20	
Benzo(a)pyrene	ND	0.40	0	0	0	0	0	0	0	20	
Benzo(b)fluoranthene	ND	0.40	0	0	0	0	0	0	0	20	
Benzo(g,h,i)perylene	ND	0.40	0	0	0	0	0	0	0	20	
Benzo(k)fluoranthene	ND	0.40	0	0	0	0	0	0	0	20	
Chrysene	ND	0.40	0	0	0	0	0	0	0	20	
Dibenz(a,h)anthracene	ND	0.40	0	0	0	0	0	0	0	20	
Fluoranthene	ND	0.40	0	0	0	0	0	0	0	20	
Fluorene	ND	0.40	0	0	0	0	0	0	0	20	
Indeno(1,2,3-cd)pyrene	ND	0.40	0	0	0	0	0	0	0	20	
Naphthalene	ND	0.40	0	0	0	0	0	0	0	20	
Phenanthrene	ND	0.40	0	0	0	0	0	0	0	20	
Pyrene	ND	0.40	0	0	0	0	0	0	0	20	
Surr: 2-Fluorobiphenyl	2.4	0	4	0	60	43	116	0	0	0	

Qualifiers:
ND - Not Detected at the Reporting Limit
J - Analyte detected below quantitation limits
S - Spike Recovery outside accepted recovery limits
R - RPD outside accepted recovery limits
B - Analyte detected in the associated Method Blank

CLIENT: Pinnacle Laboratories
Work Order: 0401119
Project: 401053/BIO

ANALYTICAL QC SUMMARY REPORT

TestCode: 06 PAH A

Sample ID: 0401119-11A DUP	SampType: DUP	TestCode: 06 PAH A	Units: µg/L	Prep Date: 1/26/04	Run ID: HEISENBURG_040127B
Client ID: MW-22/401053-11	Batch ID: 6680	TestNo: 8270-SIM	(3510C)	Analysis Date: 1/27/04	SeqNo: 194283

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Surr: 4-Terphenyl-d14	2.96	0	4	0	74	33	141	0	0	0	
Surr: Nitrobenzene-d5	1.76	0	4	0	44	35	114	0	0	0	

Sample ID: CCV	SampType: CCV	TestCode: 06 PAH A	Units: µg/L	Prep Date:	Run ID: HEISENBURG_040127B
Client ID: ZZZZZ	Batch ID: R16007	TestNo: 8270-SIM		Analysis Date: 1/27/04	SeqNo: 194267

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
1-Methylnaphthalene	2.14	0.10	2.5	0	85.6	80	120	0	0		
2-Methylnaphthalene	2.04	0.10	2.5	0	81.6	80	120	0	0		
Acenaphthene	2.7	0.10	2.5	0	108	80	120	0	0		
Acenaphthylene	2.75	0.10	2.5	0	110	80	120	0	0		
Anthracene	2.55	0.10	2.5	0	102	80	120	0	0		
Benz(a)anthracene	2.26	0.10	2.5	0	90.4	80	120	0	0		
Benzo(a)pyrene	2.81	0.10	2.5	0	112	80	120	0	0		
Benzo(b)fluoranthene	2.26	0.10	2.5	0	90.4	80	120	0	0		
Benzo(g,h,i)perylene	2.69	0.10	2.5	0	108	80	120	0	0		
Benzo(k)fluoranthene	2.76	0.10	2.5	0	110	80	120	0	0		
Chrysene	2.81	0.10	2.5	0	112	80	120	0	0		
Dibenz(a,h)anthracene	2.66	0.10	2.5	0	106	80	120	0	0		
Fluoranthene	2.29	0.10	2.5	0	91.6	80	120	0	0		
Fluorene	2.18	0.10	2.5	0	87.2	80	120	0	0		
Indeno(1,2,3-cd)pyrene	2.6	0.10	2.5	0	104	80	120	0	0		
Naphthalene	2.56	0.10	2.5	0	102	80	120	0	0		
Phenanthrene	2.61	0.10	2.5	0	104	80	120	0	0		
Pyrene	2.65	0.10	2.5	0	106	80	120	0	0		
Surr: 2-Fluorobiphenyl	2.46	0	2.5	0	98.4	43	116	0	0		
Surr: 4-Terphenyl-d14	2.74	0	2.5	0	110	33	141	0	0		
Surr: Nitrobenzene-d5	2.31	0	2.5	0	92.4	35	114	0	0		

Qualifiers:
ND - Not Detected at the Reporting Limit
J - Analyte detected below quantitation limits
S - Spike Recovery outside accepted recovery limits
R - RPD outside accepted recovery limits
B - Analyte detected in the associated Method Blank

ENVIRONMENTAL SERVICES LABORATORY – GLOSSARY OF FLAGS

QUALIFIER	DESCRIPTION
AA	This sample was analyzed after the holding time had expired.
AB	The hydrocarbon pattern in this sample is not typical of gasoline.
AC	The hydrocarbon pattern in this sample is not typical of diesel.
AD	The hydrocarbon pattern in this sample is not typical of oil.
AE	The hydrocarbon pattern in this sample extends into the gasoline range.
AF	The hydrocarbon pattern in this sample extends into the diesel range.
AG	The hydrocarbon pattern in this sample extends into the oil range.
A	This analysis was performed on a VOA sample containing headspace.
B	Analyte detected in the Method Blank above the reporting level.
C	The Relative Percent Difference (RPD) for the primary result and confirmation result was greater than 40%. The higher result was reported.
D	The sample was supplied in an inappropriate container according to method criteria.
E	This value is above the quantitation limit. It is considered an estimate.
H	The Matrix Spike/Matrix Spike Duplicate (MS/MSD) result was outside control limits. The Laboratory Control Standard/Duplicate (LCS/LCSD) result was in control validating the batch.
J	The result is above the Method Detection Limit (MDL) and below the Reporting level (RL). It is considered an estimate.
M	The MS/MSD recoveries are not calculable due to a high amount of analyte in sample.
MI	This indicates a high level of matrix interference affecting the spike or surrogate recovery.
N	See case narrative.
O	Detection Limits are elevated due to sample dilution. See case narrative.
Q	Further inspection of the sample confirms a non-homogenous sample matrix affecting RPD result.
R	The RPD result is outside method control limits. See other qualifiers or case narrative.
S	The spike recovery is outside method control limits. See other qualifiers or case narrative.
T	The RPD between the sample result and duplicate result was greater than 20%. The original result was less than three times the reporting level, therefore the RPD is not applicable.
X	Unable to quantitate surrogate recovery due to sample dilution.

Pinnacle Laboratories, Inc.

CH2M11.14

Interlab Chain of Custody

Date: 1/21/04 Page: 1 of 2

Network Project Manager: Jacinta Tenorio

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(505) 344-3777 Fax (505) 344-4413

ANALYSIS REQUEST

SAMPLE ID	DATE	TIME	MATRIX	LAB ID	Metals (8) RCRA	TCLP RCRA (8) Metals	Metals-13 PP List	Metals-TAL (23 Metals)	Dissolved Fe, Mn, Pb (6010)		TOC	Gen Chemistry:			Volatile Organics GC/MS (8260)	BOD	COD	Pesticides/PCB (608/8081/8082)	Herbicides (615/8151)	PNA (8310/8270 SIMS)	8260 (TCLP 1311) ZHE		Base/Neutral Acid Compounds GC/MS (625/8270)	Uranium (ICP-MS)	Radium 226+228	Gross Alpha/Beta	TO-14	NUMBER OF CONTAINERS
MW-18/401053-01	1/19/04	1025	AQ	01																X								
MW-5/401053-02		1116		02																X								
MW-19/401053-03		1144		03																X								
MW-4/401053-04		1349		04																X								
MW-6/401053-05		1415		05																X								
MW-7/401053-06		1446		06																X								
MW-9/401053-07		1513		07																X								
MW-10/401053-08	↓	1537		08																X								
MW-20/401053-09	1/20/04	0942		09																X								
MW-21/401053-10	↓	1020	↓	10																X								

PROJECT INFORMATION		SAMPLE RECEIPT	
PROJECT #:	401053	Total Number of Containers	
PROJ. NAME:	BIO	Chain of Custody Seals	
QC LEVEL:	STD IV	Received Intact?	
QC REQUIRED:	MS MSD BLANK	Received Good Cond./Cold	
TAT:	STANDARD RUSH!!	LAB NUMBER:	

DUE DATE:	2/4
RUSH SURCHARGE:	—
CLIENT DISCOUNT:	
SPECIAL CERTIFICATION REQUIRED:	YES NO

COMMENTS:

SAMPLES SENT TO:	
PENSACOLA - STL-FL	
ESL - OR	X
ATEL - AZ	
ATEL - MARION	
ATEL - MELMORE	
EHL	
GEL	
U OF MIAMI	
WCAS	
WOHL	

RELINQUISED BY: 1.		RELINQUISED BY: 2.	
Signature: Francine Jenno	Time: 1700	Signature:	Time:
Printed Name: Francine Tenorio	Date: 1/21/04	Printed Name:	Date:
Pinnacle Laboratories, Inc.		Company	
RECEIVED BY: 1.		**RECEIVED BY: 2.**	
Signature: D. Thomas	Time: 1000	Signature:	Time:
Printed Name:	Date: 1/22/04	Printed Name:	Date:
Company ESL		Company	

Pinnacle Laboratories, Inc.

Interlab Chain of Custody 040114

Date: 1/21/04 Page: 2 of 2

PINNACLE LABORATORIES

Network Project Manager: Jacinta Tenorio

Pinnacle Laboratories, Inc.
2709-D Pan American Freeway, NE
Albuquerque, NM 87107
(505) 344-3777 Fax (505) 344-4413

ANALYSIS REQUEST

SAMPLE ID	DATE	TIME	MATRIX	LAB ID	Metals (8) RCRA	TCLP RCRA (8) Metals	Metals-13 PP List	Metals-TAL (23 Metals)	Dissolved Fe, Mn, Pb (6010)		TOC	Gen Chemistry:			Volatile Organics GC/MS (8260)	BOD	COD	Pesticides/PCB (608/8081/8082)	Herbicides (615/8151)	PNA (8310)/8270 SIMS	8260 (TCLP 1311) ZHE		Base/Neutral Acid Compounds GC/MS (625/8270)	Uranium (ICP-MS)	Radium 226+228	Gross Alpha/Beta	TO-14	NUMBER OF CONTAINERS
MW-22 / 401053-11	1/20/04	1056	AQ	01																X								
MW-11 / 401053-12		1136		02																X								
MW-15 / 401053-13		1209		03																X								
MW-13 / 401053-14		1244		04																X								
MW-12 / 401053-15		1420		05																X								
Influent / 401053-16		1452		06																X								
Effluent / 401053-17	↓	1512	↓	07																X								

PROJECT INFORMATION		SAMPLE RECEIPT	
PROJECT #:	401053	Total Number of Containers	
PROJ. NAME:	BIO	Chain of Custody Seals	
QC LEVEL:	(STD) IV	Received Intact?	
QC REQUIRED:	(MS) MSD BLANK	Received Good Cond./Cold	
TAT:	(STANDARD) RUSH!!	LAB NUMBER:	
DUE DATE:	2/4		
RUSH SURCHARGE:	—		
CLIENT DISCOUNT:	—		
SPECIAL CERTIFICATION REQUIRED:	YES (NO)		

COMMENTS:

SAMPLES SENT TO:
- PENSACOLA - STL-FL
- ESL - OR
- ATEL - AZ
- ATEL - MARION
- ATEL - MELMORE
- EHL
- GEL
- U OF MIAMI
- WCAS
- WOHL

RELINQUISED BY: 1.	RELINQUISED BY: 2.
Signature: Francine Tanno Time: 1700	Signature: Time:
Printed Name: Francine Tanno Date: 1/21/04	Printed Name: Date:
Pinnacle Laboratories, Inc.	Company
RECEIVED BY: 1.	**RECEIVED BY: 2.**
Signature: Time:	Signature: Time:
Printed Name: Date:	Printed Name: Date:
Company	Company

SEVERN TRENT STL

STL Pensacola 3355 McLemore Drive - Pensacola FL 32514 Telephone:(850) 474-1001 Fax:(850) 478-2671

Analytical Report

For: Ms. Jacinta Tenorio
Pinnacle Laboratories
2709-D Pan American Freeway Northeast
Albuquerque, NM 87107
CC:

Order Number: C401481
SDG Number:
Client Project ID:
Project: 401053-BIO/T-WAY REFINERY
Report Date: 02/04/2004
Sampled By: Client
Sample Received Date: 01/22/2004
Requisition Number:
Purchase Order:

Lance Larson, Project Manager
llarson@stl-inc.com

Sample Summary

Order: C401481
Date Received: 01/22/2004

Client: Pinnacle Laboratories
Project: 401053-BIO/T-WAY REFINERY

Client Sample ID	Lab Sample ID	Matrix	Date Sampled
MW-18/401053-01	C401481*1	Liquid	01/19/2004 10:25
MW-5/401053-02	C401481*2	Liquid	01/19/2004 11:16
MW-19/401053-03	C401481*3	Liquid	01/19/2004 11:44
MW-4/401053-04	C401481*4	Liquid	01/19/2004 13:49
MW-6/401053-05	C401481*5	Liquid	01/19/2004 14:15
MW-7/401053-06	C401481*6	Liquid	01/19/2004 14:46
MW-9/401053-07	C401481*7	Liquid	01/19/2004 15:13
MW-10/401053-08	C401481*8	Liquid	01/19/2004 15:37
MW-20/401063-09	C401481*9	Liquid	01/20/2004 09:42
MW-21/401053-10	C401481*10	Liquid	01/20/2004 10:20
MW-22/401053-11	C401481*11	Liquid	01/20/2004 10:56
MW-11/401053-12	C401481*12	Liquid	01/20/2004 11:36
MW-15/401053-13	C401481*13	Liquid	01/20/2004 12:09
MW-13/401053-14	C401481*14	Liquid	01/20/2004 12:44
MW-12/401053-15	C401481*15	Liquid	01/20/2004 14:20
INFLUENT/401053-16	C401481*16	Liquid	01/20/2004 14:52
EFFLUENT/401053-17	C401481*17	Liquid	01/20/2004 15:12

STL

STL Pensacola 3355 McLemore Drive - Pensacola FL 32514 Telephone:(850) 474-1001 Fax:(850) 478-2671

Analytical Data Report

Lab Sample ID	Description	Matrix	Date Received	Date Sampled	SDG#
01481-1	MW-18/401053-01	Liquid	01/22/04	01/19/04 10:25	
01481-2	MW-5/401053-02	Liquid	01/22/04	01/19/04 11:16	
01481-3	MW-19/401053-03	Liquid	01/22/04	01/19/04 11:44	
01481-4	MW-4/401053-04	Liquid	01/22/04	01/19/04 13:49	
01481-5	MW-6/401053-05	Liquid	01/22/04	01/19/04 14:15	

Parameter	Units	Lab Sample IDs 01481-1	01481-2	01481-3	01481-4	01481-5
		MW-18	MW-5	MW-19	MW-4	MW-6
Specific Conductance (120.1)						
Specific Conductance	umhos/cm	4700	4900	5600	3400	4200
Dilution Factor		1	1	1	1	1
Analysis Date		01/28/04	01/28/04	01/28/04	01/28/04	01/28/04
Batch ID		CDW005	CDW005	CDW005	CDW005	CDW005
Analyst		ST	ST	ST	ST	ST
Total Dissolved Solids (160.1)						
Total Dissolved Solids	mg/l	4000	3400	4500	2500	3000
Dilution Factor		1	1	1	1	1
Analysis Date		01/26/04	01/26/04	01/26/04	01/26/04	01/26/04
Batch ID		TDW008	TDW008	TDW008	TDW008	TDW008
Analyst		ST	ST	ST	ST	ST
Chloride (4500E)						
Chloride	mg/l	170	160	160	93	71
Dilution Factor		5	5	5	1	1
Analysis Date		01/28/04	01/28/04	01/28/04	01/28/04	01/28/04
Batch ID		CKW009	CKW009	CKW009	CKW009	CKW009
Analyst		CR	CR	CR	CR	CR

SEVERN TRENT STL

STL Pensacola 3355 McLemore Drive - Pensacola FL 32514 Telephone:(850) 474-1001 Fax:(850) 478-2671

Analytical Data Report

Lab Sample ID	Description	Matrix	Date Received	Date Sampled	SDG#
01481-1	MW-18/401053-01	Liquid	01/22/04	01/19/04 10:25	
01481-2	MW-5/401053-02	Liquid	01/22/04	01/19/04 11:16	
01481-3	MW-19/401053-03	Liquid	01/22/04	01/19/04 11:44	
01481-4	MW-4/401053-04	Liquid	01/22/04	01/19/04 13:49	
01481-5	MW-6/401053-05	Liquid	01/22/04	01/19/04 14:15	

Parameter	Units	Lab Sample IDs 01481-1 (MW-18)	01481-2 (MW-5)	01481-3 (MW-19)	01481-4 (MW-4)	01481-5 (MW-6)
Sulfate as SO4 (375.4)						
Sulfate as SO4	mg/l	1400	1900	2700	1300	1600
Dilution Factor		50	50	75	50	50
Analysis Date		01/28/04	01/28/04	01/28/04	01/28/04	01/28/04
Batch ID		SEW006	SEW006	SEW006	SEW006	SEW006
Analyst		CR	CR	CR	CR	CR
CO2 and Forms of Alkalinity (4500D)						
Bicarbonate (2320/4500)	mg/l as CaCO3	1100	700	830	540	760
Carbon Dioxide, Free	mg/l as CaCO3	46	18	76	47	30
Carbonate (2320/4500)	mg/l as CaCO3	5.0	5.0	2.0	1.0	4.0
Hydroxide	mg/l as CaCO3	<1.0	<1.0	<1.0	<1.0	<1.0
Carbon Dioxide, Total	mg/l as CaCO3	1000	630	810	520	700
Analysis Date		01/30/04	01/30/04	01/30/04	01/30/04	01/30/04
Batch ID		AEW004	AEW004	AEW004	AEW004	AEW004
Analyst		ST	ST	ST	ST	ST
Alkalinity (to pH 4.5) as CaCO3 (2320B)						
Alkalinity (to pH 4.5) as CaCO3	mg/l	1100	700	830	540	760
Dilution Factor		1	1	1	1	1
Analysis Date		01/30/04	01/30/04	01/30/04	01/30/04	01/30/04
Batch ID		AEW004	AEW004	AEW004	AEW004	AEW004
Analyst		ST	ST	ST	ST	ST

SEVERN TRENT STL

STL Pensacola 3355 McLemore Drive - Pensacola FL 32514 Telephone:(850) 474-1001 Fax:(850) 478-2671

Analytical Data Report

Lab Sample ID	Description	Matrix	Date Received	Date Sampled	SDG#
01481-1	MW-18/401053-01	Liquid	01/22/04	01/19/04 10:25	
01481-2	MW-5/401053-02	Liquid	01/22/04	01/19/04 11:16	
01481-3	MW-19/401053-03	Liquid	01/22/04	01/19/04 11:44	
01481-4	MW-4/401053-04	Liquid	01/22/04	01/19/04 13:49	
01481-5	MW-6/401053-05	Liquid	01/22/04	01/19/04 14:15	

Parameter	Units	Lab Sample IDs 01481-1	01481-2	01481-3	01481-4	01481-5
Fluoride (340.2)						
Fluoride	mg/l	0.45	0.59	0.48	0.41	0.50
Dilution Factor		1	1	1	1	1
Analysis Date		02/03/04	02/03/04	02/03/04	02/03/04	02/03/04
Batch ID		FLW005	FLW005	FLW005	FLW005	FLW005
Analyst		ST	ST	ST	ST	ST
Bromide (300.0)						
Bromide	mg/l	0.26	<0.20	0.34	<0.20	<0.20
Dilution Factor		1.0	1.0	1.0	1.0	1.0
Prep Date		01/26/04	01/26/04	01/26/04	01/26/04	01/26/04
Analysis Date		01/26/04	01/26/04	01/26/04	01/26/04	01/26/04
Batch ID		ICW047	ICW047	ICW047	ICW047	ICW047
Prep Method		300.0	300.0	300.0	300.0	300.0
Analyst		SGB	SGB	SGB	SGB	SGB
RCRA Metals (6010B)						
Arsenic	mg/l	1.0	<0.0050	0.0070	0.015	<0.0050
Barium	mg/l	1.2	0.038	0.058	0.17	0.018
Cadmium	mg/l	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050
Chromium	mg/l	0.11	<0.0050	<0.0050	<0.0050	<0.0050
Lead	mg/l	0.13	<0.0050	<0.0050	<0.0050	<0.0050
Selenium	mg/l	<0.010	<0.010	<0.010	<0.010	<0.010
Silver	mg/l	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050
Dilution Factor		1	1	1	1	1
Prep Date		01/23/04	01/23/04	01/23/04	01/23/04	01/23/04
Analysis Date		01/27/04	01/27/04	01/27/04	01/27/04	01/27/04
Batch ID		PW041	PW041	PW041	PW041	PW041
Prep Method		3010A	3010A	3010A	3010A	3010A
Analyst		GSP	GSP	GSP	GSP	GSP

SEVERN TRENT STL

STL Pensacola 3355 McLemore Drive - Pensacola FL 32514 Telephone:(850) 474-1001 Fax:(850) 478-2671

Analytical Data Report

Lab Sample ID	Description	Matrix	Date Received	Date Sampled	SDG#
01481-1	MW-18/401053-01	Liquid	01/22/04	01/19/04 10:25	
01481-2	MW-5/401053-02	Liquid	01/22/04	01/19/04 11:16	
01481-3	MW-19/401053-03	Liquid	01/22/04	01/19/04 11:44	
01481-4	MW-4/401053-04	Liquid	01/22/04	01/19/04 13:49	
01481-5	MW-6/401053-05	Liquid	01/22/04	01/19/04 14:15	

Parameter	Units	Lab Sample IDs 01481-1	01481-2	01481-3	01481-4	01481-5
Mercury (7470A)						
Mercury	mg/l	0.00028	<0.00020	<0.00020	<0.00020	<0.00020
Dilution Factor		1	1	1	1	1
Prep Date		01/27/04	01/27/04	01/27/04	01/27/04	01/27/04
Analysis Date		01/27/04	01/27/04	01/27/04	01/27/04	01/27/04
Batch ID		HGW007	HGW007	HGW007	HGW007	HGW007
Prep Method		7470A	7470A	7470A	7470A	7470A
Analyst		JDE	JDE	JDE	JDE	JDE
Metals, Dissolved (6010B)						
Calcium, Dissolved	mg/l	160	65	370	270	190
Magnesium, Dissolved	mg/l	36	17	63	32	32
Potassium, Dissolved	mg/l	10	7.7	11	6.7	6.9
Sodium, Dissolved	mg/l	1100	1300	1300	800	960
Dilution Factor		1	1	1	5	5
Analysis Date		01/23/04	01/23/04	01/23/04	01/26/04	01/26/04
Batch ID		PD012	PD012	PD012	PD012	PD012
Analyst		GSP	GSP	GSP	GSP	GSP
Hardness by calculation (6010B)						
Hardness as CaCO3	mg/l	750	260	1100	750	540
Dilution Factor		1	1	1	1	1
Prep Date		01/23/04	01/23/04	01/23/04	01/23/04	01/23/04
Analysis Date		01/27/04	01/27/04	01/27/04	01/27/04	01/27/04
Batch ID		PW041	PW041	PW041	PW041	PW041
Prep Method		3010A	3010A	3010A	3010A	3010A
Analyst		GSP	GSP	GSP	GSP	GSP

SEVERN TRENT STL

STL Pensacola 3355 McLemore Drive - Pensacola FL 32514 Telephone:(850) 474-1001 Fax:(850) 478-2671

Analytical Data Report

Lab Sample ID	Description	Matrix	Date Received	Date Sampled	SDG#
01481-6	MW-7/401053-06	Liquid	01/22/04	01/19/04 14:46	
01481-7	MW-9/401053-07	Liquid	01/22/04	01/19/04 15:13	
01481-8	MW-10/401053-08	Liquid	01/22/04	01/19/04 15:37	
01481-9	MW-20/401063-09	Liquid	01/22/04	01/20/04 09:42	
01481-10	MW-21/401053-10	Liquid	01/22/04	01/20/04 10:20	

Parameter	Units	Lab Sample IDs 01481-6 MW-7	01481-7 MW-9	01481-8 MW-10	01481-9 MW-20	01481-10 MW-21
Specific Conductance (120.1)						
Specific Conductance	umhos/cm	5500	7000	6300	5200	11000
Dilution Factor		1	1	1	1	1
Analysis Date		01/28/04	01/28/04	01/28/04	01/28/04	01/28/04
Batch ID		CDW005	CDW005	CDW005	CDW005	CDW005
Analyst		ST	ST	ST	ST	ST
Total Dissolved Solids (160.1)						
Total Dissolved Solids	mg/l	4000	5700	5200	3900	8000
Dilution Factor		1	1	1	1	1
Analysis Date		01/26/04	01/26/04	01/26/04	01/26/04	01/26/04
Batch ID		TDW008	TDW008	TDW008	TDW008	TDW008
Analyst		ST	ST	ST	ST	ST
Chloride (4500E)						
Chloride	mg/l	330	86	150	160	300
Dilution Factor		10	1	5	5	10
Analysis Date		01/28/04	01/28/04	01/28/04	01/28/04	01/28/04
Batch ID		CKW009	CKW009	CKW009	CKW009	CKW009
Analyst		CR	CR	CR	CR	CR

SEVERN TRENT STL

STL Pensacola 3355 McLemore Drive - Pensacola FL 32514 Telephone:(850) 474-1001 Fax:(850) 478-2671

Analytical Data Report

Lab Sample ID	Description	Matrix	Date Received	Date Sampled	SDG#
01481-6	MW-7/401053-06	Liquid	01/22/04	01/19/04 14:46	
01481-7	MW-9/401053-07	Liquid	01/22/04	01/19/04 15:13	
01481-8	MW-10/401053-08	Liquid	01/22/04	01/19/04 15:37	
01481-9	MW-20/401063-09	Liquid	01/22/04	01/20/04 09:42	
01481-10	MW-21/401053-10	Liquid	01/22/04	01/20/04 10:20	

Parameter	Units	Lab Sample IDs 01481-6	01481-7	01481-8	01481-9	01481-10
		7	9	3	2	5
Sulfate as SO4 (375.4)						
Sulfate as SO4	mg/l	2400	4000	3500	2400	6000
Dilution Factor		75	100	100	75	1000
Analysis Date		01/28/04	01/28/04	01/28/04	01/28/04	01/28/04
Batch ID		SEW006	SEW006	SEW006	SEW006	SEW006
Analyst		CR	CR	CR	CR	CR
CO2 and Forms of Alkalinity (4500D)						
Bicarbonate (2320/4500)	mg/l as CaCO3	610	300	250	900	630
Carbon Dioxide, Free	mg/l as CaCO3	68	13	14	94	60
Carbonate (2320/4500)	mg/l as CaCO3	1.0	1.0	1.0	2.0	1.0
Hydroxide	mg/l as CaCO3	<1.0	<1.0	<1.0	<1.0	<1.0
Carbon Dioxide, Total	mg/l as CaCO3	610	280	230	890	610
Analysis Date		01/30/04	01/30/04	01/30/04	01/30/04	01/30/04
Batch ID		AEW004	AEW004	AEW004	AEW004	AEW004
Analyst		ST	ST	ST	ST	ST
Alkalinity (to pH 4.5) as CaCO3 (2320B)						
Alkalinity (to pH 4.5) as CaCO3	mg/l	610	300	250	900	630
Dilution Factor		1	1	1	1	1
Analysis Date		01/30/04	01/30/04	01/30/04	01/30/04	01/30/04
Batch ID		AEW004	AEW004	AEW004	AEW004	AEW004
Analyst		ST	ST	ST	ST	ST

SEVERN TRENT STL

STL Pensacola 3355 McLemore Drive - Pensacola FL 32514 Telephone:(850) 474-1001 Fax:(850) 478-2671

Analytical Data Report

Lab Sample ID	Description	Matrix	Date Received	Date Sampled	SDG#
01481-6	MW-7/401053-06	Liquid	01/22/04	01/19/04 14:46	
01481-7	MW-9/401053-07	Liquid	01/22/04	01/19/04 15:13	
01481-8	MW-10/401053-08	Liquid	01/22/04	01/19/04 15:37	
01481-9	MW-20/401063-09	Liquid	01/22/04	01/20/04 09:42	
01481-10	MW-21/401053-10	Liquid	01/22/04	01/20/04 10:20	

Parameter	Units	Lab Sample IDs 01481-6	01481-7	01481-8	01481-9	01481-10
		7	9	10	20	21
Fluoride (340.2)						
Fluoride	mg/l	0.48	0.73	0.68	0.56	0.46
Dilution Factor		1	1	1	1	1
Analysis Date		02/03/04	02/03/04	02/03/04	02/03/04	02/03/04
Batch ID		FLW005	FLW005	FLW005	FLW005	FLW005
Analyst		ST	ST	ST	ST	ST
Bromide (300.0)						
Bromide	mg/l	<0.20	0.31	0.47	0.32	0.40
Dilution Factor		1.0	1.0	1.0	1.0	1.0
Prep Date		01/26/04	01/26/04	01/26/04	01/26/04	01/26/04
Analysis Date		01/26/04	01/26/04	01/26/04	01/26/04	01/26/04
Batch ID		ICW047	ICW047	ICW047	ICW047	ICW047
Prep Method		300.0	300.0	300.0	300.0	300.0
Analyst		SGB	SGB	SGB	SGB	SGB
RCRA Metals (6010B)						
Arsenic	mg/l	0.14	0.0080	<0.0050	0.080	0.038
Barium	mg/l	2.0	0.23	0.038	0.51	0.091
Cadmium	mg/l	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050
Chromium	mg/l	0.012	0.016	<0.0050	0.066	0.013
Lead	mg/l	0.015	0.010	<0.0050	0.075	0.010
Selenium	mg/l	<0.010	<0.010	<0.010	<0.010	<0.010
Silver	mg/l	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050
Dilution Factor		1	1	1	1	1
Prep Date		01/23/04	01/23/04	01/23/04	01/23/04	01/23/04
Analysis Date		01/27/04	01/27/04	01/27/04	01/27/04	01/27/04
Batch ID		PW041	PW041	PW041	PW041	PW041
Prep Method		3010A	3010A	3010A	3010A	3010A
Analyst		GSP	GSP	GSP	GSP	GSP

SEVERN TRENT STL

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Analytical Data Report

Lab Sample ID	Description	Matrix	Date Received	Date Sampled	SDG#
01481-6	MW-7/401053-06	Liquid	01/22/04	01/19/04 14:46	
01481-7	MW-9/401053-07	Liquid	01/22/04	01/19/04 15:13	
01481-8	MW-10/401053-08	Liquid	01/22/04	01/19/04 15:37	
01481-9	MW-20/401063-09	Liquid	01/22/04	01/20/04 09:42	
01481-10	MW-21/401053-10	Liquid	01/22/04	01/20/04 10:20	

Parameter	Units	Lab Sample IDs 01481-6	01481-7	01481-8	01481-9	01481-10
		7	9	10	21	22
Mercury (7470A)						
Mercury	mg/l	<0.00020	<0.00020	<0.00020	0.00026	<0.00020
Dilution Factor		1	1	1	1	1
Prep Date		01/27/04	01/27/04	01/27/04	01/27/04	01/27/04
Analysis Date		01/27/04	01/27/04	01/27/04	01/27/04	01/27/04
Batch ID		HGW007	HGW007	HGW007	HGW007	HGW007
Prep Method		7470A	7470A	7470A	7470A	7470A
Analyst		JDE	JDE	JDE	JDE	JDE
Metals, Dissolved (6010B)						
Calcium, Dissolved	mg/l	340	410	380	480	390
Magnesium, Dissolved	mg/l	44	61	50	68	96
Potassium, Dissolved	mg/l	8.3	5.7	6.0	5.6	10
Sodium, Dissolved	mg/l	1100	1500	1400	1000	2900
Dilution Factor		5	5	5	5	5
Analysis Date		01/26/04	01/26/04	01/26/04	01/26/04	01/26/04
Batch ID		PD012	PD012	PD012	PD012	PD012
Analyst		GSP	GSP	GSP	GSP	GSP
Hardness by calculation (6010B)						
Hardness as CaCO3	mg/l	990	1200	1000	1400	1300
Dilution Factor		1	1	1	1	1
Prep Date		01/23/04	01/23/04	01/23/04	01/23/04	01/23/04
Analysis Date		01/27/04	01/27/04	01/27/04	01/27/04	01/27/04
Batch ID		PW041	PW041	PW041	PW041	PW041
Prep Method		3010A	3010A	3010A	3010A	3010A
Analyst		GSP	GSP	GSP	GSP	GSP

SEVERN TRENT STL

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Analytical Data Report

Lab Sample ID	Description	Matrix	Date Received	Date Sampled	SDG#
01481-11	MW-22/401053-11	Liquid	01/22/04	01/20/04 10:56	
01481-12	MW-11/401053-12	Liquid	01/22/04	01/20/04 11:36	
01481-13	MW-15/401053-13	Liquid	01/22/04	01/20/04 12:09	
01481-14	MW-13/401053-14	Liquid	01/22/04	01/20/04 12:44	
01481-15	MW-12/401053-15	Liquid	01/22/04	01/20/04 14:20	

Parameter	Units	Lab Sample IDs 01481-11	01481-12	01481-13	01481-14	01481-15
		22	4	15	13	
Specific Conductance (120.1)						
Specific Conductance	umhos/cm	10000	5200	4800	6400	7100
Dilution Factor		1	1	1	1	1
Analysis Date		01/28/04	01/28/04	01/28/04	01/28/04	01/28/04
Batch ID		CDW005	CDW005	CDW005	CDW005	CDW005
Analyst		ST	ST	ST	ST	ST
Total Dissolved Solids (160.1)						
Total Dissolved Solids	mg/l	8000	3900	3800	5000	5600
Dilution Factor		1	1	1	1	1
Analysis Date		01/26/04	01/26/04	01/26/04	01/26/04	01/26/04
Batch ID		TDW008	TDW008	TDW008	TDW008	TDW008
Analyst		ST	ST	ST	ST	ST
Chloride (4500E)						
Chloride	mg/l	380	90	210	71	92
Dilution Factor		10	1	10	1	1
Analysis Date		01/28/04	01/28/04	01/28/04	01/28/04	01/28/04
Batch ID		CKW009	CKW009	CKW009	CKW009	CKW009
Analyst		CR	CR	CR	CR	CR

SEVERN TRENT STL

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Analytical Data Report

Lab Sample ID	Description	Matrix	Date Received	Date Sampled	SDG#
01481-11	MW-22/401053-11	Liquid	01/22/04	01/20/04 10:56	
01481-12	MW-11/401053-12	Liquid	01/22/04	01/20/04 11:36	
01481-13	MW-15/401053-13	Liquid	01/22/04	01/20/04 12:09	
01481-14	MW-13/401053-14	Liquid	01/22/04	01/20/04 12:44	
01481-15	MW-12/401053-15	Liquid	01/22/04	01/20/04 14:20	

Parameter	Units	Lab Sample IDs 01481-11	01481-12	01481-13	01481-14	01481-15
		12	1	15	3	
Sulfate as SO4 (375.4)						
Sulfate as SO4	mg/l	5100	2800	2600	3800	3700
Dilution Factor		1000	75	75	100	100
Analysis Date		01/28/04	01/28/04	01/28/04	01/28/04	01/28/04
Batch ID		SEW006	SEW006	SEW006	SEW006	SEW006
Analyst		CR	CR	CR	CR	CR
CO2 and Forms of Alkalinity (4500D)						
Bicarbonate (2320/4500)	mg/l as CaCO3	440	560	190	250	660
Carbon Dioxide, Free	mg/l as CaCO3	67	23	12	9.0	26
Carbonate (2320/4500)	mg/l as CaCO3	1.0	3.0	1.0	1.0	3.0
Hydroxide	mg/l as CaCO3	<1.0	<1.0	<1.0	<1.0	<1.0
Carbon Dioxide, Total	mg/l as CaCO3	450	520	180	230	610
Analysis Date		01/30/04	01/30/04	01/30/04	01/30/04	01/30/04
Batch ID		AEW004	AEW004	AEW004	AEW004	AEW004
Analyst		ST	ST	ST	ST	ST
Alkalinity (to pH 4.5) as CaCO3 (2320B)						
Alkalinity (to pH 4.5) as CaCO3	mg/l	440	560	190	250	660
Dilution Factor		1	1	1	1	1
Analysis Date		01/30/04	01/30/04	01/30/04	01/30/04	01/30/04
Batch ID		AEW004	AEW004	AEW004	AEW004	AEW004
Analyst		ST	ST	ST	ST	ST

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Analytical Data Report

Lab Sample ID	Description	Matrix	Date Received	Date Sampled	SDG#
01481-11	MW-22/401053-11	Liquid	01/22/04	01/20/04 10:56	
01481-12	MW-11/401053-12	Liquid	01/22/04	01/20/04 11:36	
01481-13	MW-15/401053-13	Liquid	01/22/04	01/20/04 12:09	
01481-14	MW-13/401053-14	Liquid	01/22/04	01/20/04 12:44	
01481-15	MW-12/401053-15	Liquid	01/22/04	01/20/04 14:20	

Parameter	Units	Lab Sample IDs 01481-11	01481-12	01481-13	01481-14	01481-15
		22	11	15	13	12
Fluoride (340.2)						
Fluoride	mg/l	0.35	0.54	0.70	0.94	1.4
Dilution Factor		1	1	1	1	1
Analysis Date		02/03/04	02/03/04	02/03/04	02/03/04	02/03/04
Batch ID		FLW005	FLW005	FLW005	FLW005	FLW005
Analyst		ST	ST	ST	ST	ST
Bromide (300.0)						
Bromide	mg/l	1.2	0.41	0.65	<0.20	0.24
Dilution Factor		1.0	1.0	1.0	1.0	1.0
Prep Date		01/26/04	01/26/04	01/26/04	01/26/04	01/26/04
Analysis Date		01/26/04	01/26/04	01/26/04	01/26/04	01/26/04
Batch ID		ICW047	ICW047	ICW047	ICW047	ICW047
Prep Method		300.0	300.0	300.0	300.0	300.0
Analyst		SGB	SGB	SGB	SGB	SGB
RCRA Metals (6010B)						
Arsenic	mg/l	0.016	0.14	0.0050	<0.0050	0.017
Barium	mg/l	0.036	2.4	0.32	<0.010	0.18
Cadmium	mg/l	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050
Chromium	mg/l	0.054	0.12	0.020	<0.0050	0.030
Lead	mg/l	0.65	0.094	0.010	<0.0050	0.013
Selenium	mg/l	<0.010	<0.010	<0.010	<0.010	<0.010
Silver	mg/l	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050
Dilution Factor		1	1	1	1	1
Prep Date		01/23/04	01/23/04	01/23/04	01/23/04	01/23/04
Analysis Date		01/27/04	01/27/04	01/27/04	01/27/04	01/27/04
Batch ID		PW041	PW041	PW041	PW041	PW041
Prep Method		3010A	3010A	3010A	3010A	3010A
Analyst		GSP	GSP	GSP	GSP	GSP

SEVERN TRENT STL

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Analytical Data Report

Lab Sample ID	Description	Matrix	Date Received	Date Sampled	SDG#
01481-11	MW-22/401053-11	Liquid	01/22/04	01/20/04 10:56	
01481-12	MW-11/401053-12	Liquid	01/22/04	01/20/04 11:36	
01481-13	MW-15/401053-13	Liquid	01/22/04	01/20/04 12:09	
01481-14	MW-13/401053-14	Liquid	01/22/04	01/20/04 12:44	
01481-15	MW-12/401053-15	Liquid	01/22/04	01/20/04 14:20	

Parameter	Units	Lab Sample IDs 01481-11	01481-12	01481-13	01481-14	01481-15
Mercury (7470A)						
Mercury	mg/l	<0.00020	<0.00020	<0.00020	<0.00020	<0.00020
Dilution Factor		1	1	1	1	1
Prep Date		01/27/04	01/27/04	01/27/04	01/27/04	01/27/04
Analysis Date		01/27/04	01/27/04	01/27/04	01/27/04	01/27/04
Batch ID		HGW007	HGW007	HGW007	HGW007	HGW007
Prep Method		7470A	7470A	7470A	7470A	7470A
Analyst		JDE	JDE	JDE	JDE	JDE
Metals, Dissolved (6010B)						
Calcium, Dissolved	mg/l	400	150	130	390	420
Magnesium, Dissolved	mg/l	73	15	15	57	78
Potassium, Dissolved	mg/l	11	<5.0	<5.0	7.0	6.5
Sodium, Dissolved	mg/l	2600	480	180	1000	1500
Dilution Factor		5	5	5	5	5
Analysis Date		01/26/04	01/26/04	01/26/04	01/26/04	01/26/04
Batch ID		PD012	PD012	PD012	PD012	PD012
Analyst		GSP	GSP	GSP	GSP	GSP
Hardness by calculation (6010B)						
Hardness as CaCO3	mg/l	1200	1200	1300	1200	1300
Dilution Factor		1	1	1	1	1
Prep Date		01/23/04	01/23/04	01/23/04	01/23/04	01/23/04
Analysis Date		01/27/04	01/27/04	01/27/04	01/27/04	01/27/04
Batch ID		PW041	PW041	PW041	PW041	PW041
Prep Method		3010A	3010A	3010A	3010A	3010A
Analyst		GSP	GSP	GSP	GSP	GSP

SEVERN TRENT STL

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Analytical Data Report

Lab Sample ID	Description	Matrix	Date Received	Date Sampled	SDG#
01481-16	INFLUENT/401053-16	Liquid	01/22/04	01/20/04 14:52	
01481-17	EFFLUENT/401053-17	Liquid	01/22/04	01/20/04 15:12	

Parameter	Units	Lab Sample IDs 01481-16	01481-17
Specific Conductance (120.1)			
Specific Conductance	umhos/cm	5700	8000
Dilution Factor		1	1
Analysis Date		01/28/04	01/28/04
Batch ID		CDW005	CDW005
Analyst		ST	ST
Total Dissolved Solids (160.1)			
Total Dissolved Solids	mg/l	3900	5800
Dilution Factor		1	1
Analysis Date		01/26/04	01/26/04
Batch ID		TDW008	TDW008
Analyst		ST	ST
Chloride (4500E)			
Chloride	mg/l	810	1500
Dilution Factor		10	20
Analysis Date		01/28/04	01/28/04
Batch ID		CKW009	CKW009
Analyst		CR	CR
Sulfate as SO4 (375.4)			
Sulfate as SO4	mg/l	1600	1600
Dilution Factor		50	50
Analysis Date		01/28/04	01/28/04
Batch ID		SEW006	SEW006
Analyst		CR	CR

Analytical Data Report

Lab Sample ID	Description	Matrix	Date Received	Date Sampled	SDG#
01481-16	INFLUENT/401053-16	Liquid	01/22/04	01/20/04 14:52	
01481-17	EFFLUENT/401053-17	Liquid	01/22/04	01/20/04 15:12	

Parameter	Units	Lab Sample IDs 01481-16	01481-17
CO2 and Forms of Alkalinity (4500D)			
Bicarbonate (2320/4500)	mg/l as CaCO3	570	<1.0
Carbon Dioxide, Free	mg/l as CaCO3	70	<1.0
Carbonate (2320/4500)	mg/l as CaCO3	1.0	<1.0
Hydroxide	mg/l as CaCO3	<1.0	<1.0
Carbon Dioxide, Total	mg/l as CaCO3	570	<1.0
Analysis Date		01/30/04	01/30/04
Batch ID		AEW004	AEW004
Analyst		ST	ST
Alkalinity (to pH 4.5) as CaCO3 (2320B)			
Alkalinity (to pH 4.5) as CaCO3	mg/l	570	<1.0
Dilution Factor		1	1
Analysis Date		01/30/04	01/30/04
Batch ID		AEW004	AEW004
Analyst		ST	ST
Fluoride (340.2)			
Fluoride	mg/l	0.53	0.47
Dilution Factor		1	1
Analysis Date		02/03/04	02/03/04
Batch ID		FLW005	FLW005
Analyst		ST	ST

SEVERN TRENT STL

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Analytical Data Report

Lab Sample ID	Description	Matrix	Date Received	Date Sampled	SDG#
01481-16	INFLUENT/401053-16	Liquid	01/22/04	01/20/04 14:52	
01481-17	EFFLUENT/401053-17	Liquid	01/22/04	01/20/04 15:12	

Parameter	Units	Lab Sample IDs 01481-16	01481-17
Bromide (300.0)			
Bromide	mg/l	0.50	<0.20
Dilution Factor		1.0	1.0
Prep Date		01/26/04	01/26/04
Analysis Date		01/26/04	01/26/04
Batch ID		ICW047	ICW047
Prep Method		300.0	300.0
Analyst		SGB	SGB
RCRA Metals (6010B)			
Arsenic	mg/l	<0.0050	<0.0050
Barium	mg/l	0.059	0.059
Cadmium	mg/l	<0.0050	<0.0050
Chromium	mg/l	0.0050	0.018
Lead	mg/l	<0.0050	0.23
Selenium	mg/l	<0.010	<0.010
Silver	mg/l	<0.0050	<0.0050
Dilution Factor		1	1
Prep Date		01/23/04	01/23/04
Analysis Date		01/27/04	01/27/04
Batch ID		PW041	PW041
Prep Method		3010A	3010A
Analyst		GSP	GSP

SEVERN TRENT STL

STL Pensacola 3355 McLemore Drive - Pensacola FL 32514 Telephone:(850) 474-1001 Fax:(850) 478-2671

Analytical Data Report

Lab Sample ID	Description	Matrix	Date Received	Date Sampled	SDG#
01481-16	INFLUENT/401053-16	Liquid	01/22/04	01/20/04 14:52	
01481-17	EFFLUENT/401053-17	Liquid	01/22/04	01/20/04 15:12	

Parameter	Units	Lab Sample IDs 01481-16	01481-17
Mercury (7470A)			
Mercury	mg/l	<0.00020	<0.00020
Dilution Factor		1	1
Prep Date		01/27/04	01/27/04
Analysis Date		01/27/04	01/27/04
Batch ID		HGW007	HGW007
Prep Method		7470A	7470A
Analyst		JDE	JDE
Metals, Dissolved (6010B)			
Calcium, Dissolved	mg/l	400	400
Magnesium, Dissolved	mg/l	60	60
Potassium, Dissolved	mg/l	7.3	7.2
Sodium, Dissolved	mg/l	970	990
Dilution Factor		5	5
Analysis Date		01/26/04	01/26/04
Batch ID		PD012	PD012
Analyst		GSP	GSP
Hardness by calculation (6010B)			
Hardness as CaCO3	mg/l	1100	1100
Dilution Factor		1	1
Prep Date		01/23/04	01/23/04
Analysis Date		01/27/04	01/27/04
Batch ID		PW041	PW041
Prep Method		3010A	3010A
Analyst		GSP	GSP

SEVERN TRENT STL

STL Pensacola 3355 McLemore Drive - Pensacola FL 32514 Telephone:(850) 474-1001 Fax:(850) 478-2671

Analytical Data Report

Lab Sample ID	Description	Matrix	Date Received	Date Sampled	SDG#
01481-18	Method Blank	Liquid	01/22/04		
01481-19	Lab Control Standard % Recovery	Liquid	01/22/04		
01481-20	Matrix Spike % Recovery	Liquid	01/22/04		
01481-21	Matrix Spike Duplicate % Recovery	Liquid	01/22/04		

Parameter	Units	Lab Sample IDs 01481-18	01481-19	01481-20	01481-21
Specific Conductance (120.1)					
Specific Conductance	umhos/cm	<1.0	100 %	N/A	N/A
Dilution Factor		1			
Analysis Date		01/28/04			
Batch ID		CDW005	CDW005		
Analyst		ST			
Total Dissolved Solids (160.1)					
Total Dissolved Solids	mg/l	<5.0	94 %	N/A	N/A
Dilution Factor		1			
Analysis Date		01/26/04			
Batch ID		TDW008	TDW008		
Analyst		ST			
Chloride (4500E)					
Chloride	mg/l	<2.0	101 %	76 %N	76 %N
Dilution Factor		1			
Analysis Date		01/28/04			
Batch ID		CKW009	CKW009	CKW009	CKW009
Analyst		CR			

Analytical Data Report

Lab Sample ID	Description	Matrix	Date Received	Date Sampled	SDG#
01481-18	Method Blank	Liquid	01/22/04		
01481-19	Lab Control Standard % Recovery	Liquid	01/22/04		
01481-20	Matrix Spike % Recovery	Liquid	01/22/04		
01481-21	Matrix Spike Duplicate % Recovery	Liquid	01/22/04		

Parameter	Units	Lab Sample IDs 01481-18	01481-19	01481-20	01481-21
Sulfate as SO4 (375.4)					
Sulfate as SO4	mg/l	<5.0	102 %	0 %N/C	0 %N/C
Dilution Factor		1			
Analysis Date		01/28/04			
Batch ID		SEW006	SEW006	SEW006	SEW006
Analyst		CR			
CO2 and Forms of Alkalinity (4500D)					
Bicarbonate (2320/4500)	mg/l as CaCO3	N/A	N/A	N/A	N/A
Alkalinity (to pH 4.5) as CaCO3 (2320B)					
Alkalinity (to pH 4.5) as CaCO3	mg/l	<1.0	97 %	92 %	82 %
Dilution Factor		1			
Analysis Date		01/30/04			
Batch ID		AEW004	AEW004	AEW004	AEW004
Analyst		ST			
Fluoride (340.2)					
Fluoride	mg/l	<0.20	96 %	91 %	93 %
Dilution Factor		1			
Analysis Date		02/03/04			
Batch ID		FLW005			
Analyst		ST			

SEVERN TRENT STL

STL Pensacola 3355 McLemore Drive - Pensacola FL 32514 Telephone:(850) 474-1001 Fax:(850) 478-2671

Analytical Data Report

Lab Sample ID	Description	Matrix	Date Received	Date Sampled	SDG#
01481-18	Method Blank	Liquid	01/22/04		
01481-19	Lab Control Standard % Recovery	Liquid	01/22/04		
01481-20	Matrix Spike % Recovery	Liquid	01/22/04		
01481-21	Matrix Spike Duplicate % Recovery	Liquid	01/22/04		

Parameter	Units	Lab Sample IDs 01481-18	01481-19	01481-20	01481-21
Bromide (300.0)					
Bromide	mg/l	<0.20	94 %	94 %	93 %
Dilution Factor		1.0			
Prep Date		01/26/04			
Analysis Date		01/26/04			
Batch ID		ICW047	ICW047	ICW047	ICW047
Prep Method		300.0			
Analyst		SGB			
RCRA Metals (6010B)					
Arsenic	mg/l	<0.0050	102 %	107 %	109 %
Barium	mg/l	<0.010	106 %	100 %	102 %
Cadmium	mg/l	<0.0050	101 %	102 %	104 %
Chromium	mg/l	<0.0050	103 %	102 %	104 %
Lead	mg/l	<0.0050	104 %	105 %	107 %
Selenium	mg/l	<0.010	96 %	89 %	90 %
Silver	mg/l	<0.0050	106 %	111 %	110 %
Dilution Factor		1			
Prep Date		01/23/04			
Analysis Date		01/27/04			
Batch ID		PW041	PW041	PW041	PW041
Prep Method		3010A			
Analyst		GSP			

SEVERN TRENT STL

STL Pensacola 3355 McLemore Drive - Pensacola FL 32514 Telephone:(850) 474-1001 Fax:(850) 478-2671

Analytical Data Report

Lab Sample ID	Description	Matrix	Date Received	Date Sampled	SDG#
01481-18	Method Blank	Liquid	01/22/04		
01481-19	Lab Control Standard % Recovery	Liquid	01/22/04		
01481-20	Matrix Spike % Recovery	Liquid	01/22/04		
01481-21	Matrix Spike Duplicate % Recovery	Liquid	01/22/04		

Parameter	Units	Lab Sample IDs 01481-18	01481-19	01481-20	01481-21
Mercury (7470A)					
Mercury	mg/l	<0.00020	101 %	95 %	95 %
Dilution Factor		1			
Prep Date		01/27/04			
Analysis Date		01/27/04			
Batch ID		HGW007	HGW007	HGW007	HGW007
Prep Method		7470A			
Analyst		JDE			
Metals, Dissolved (6010B)					
Calcium, Dissolved	mg/l	<0.50	100 %	93 %	99 %
Magnesium, Dissolved	mg/l	<0.50	99 %	98 %	101 %
Potassium, Dissolved	mg/l	<1.0	99 %	118 %	119 %
Sodium, Dissolved	mg/l	<1.0	98 %	111 %	115 %
Dilution Factor		1			
Analysis Date		01/23/04			
Batch ID		PD012	PD012	PD012	PD012
Analyst		GSP			
Hardness by calculation (6010B)					
Hardness as CaCO3	mg/l	<3.3			
Dilution Factor		1			
Prep Date		01/23/04			
Analysis Date		01/27/04			
Batch ID		PW041	PW041	PW041	PW041
Prep Method		3010A			
Analyst		GSP			

STL Pensacola

TRENT STL

PROJECT SAMPLE INSPECTION FORM

Lab Order #: C401481

Date Received: 01/22/

1.	Was there a Chain of Custody?	(Yes)	No*	
2.	Was Chain of Custody properly filled out and relinquished?	(Yes)	No*	
3.	Were all samples properly labeled and identified?	Yes	(No*)	
4.	Were samples received cold? (Criteria: 2° - 6°C: STL-SOP 1055)	(Yes)	No*	N/A
5.	Did samples require splitting or compositing◆?	Yes*	(No)	
6.	Were samples received in proper containers for analysis requested?	(Yes)	No*	
7.	Were all sample containers received intact?	(Yes)	No*	
8.	Were samples checked for preservative? *(Check pH of all H_2O requiring preservative (STL-PN SOP 917) except VOA vials that require zero headspace)+*	Yes	(No*)	N/A
9.	Is there sufficient volume for analysis requested?	(Yes)	No*	N/A (Can)
10.	Were samples received within Holding Time? (REFER TO STL-SOP 1040)	(Yes)	No*	
11.	Is Headspace visible > ¼" in diameter in VOA vials?*	Yes*	No	(N/A)
12.	**Were Trip Blanks Received?**	Yes	No	(N/A)
13.	If sent, were matrix spike bottles returned?	Yes	No*	(N/A)
14.	If sent, were T-Handles returned?	Yes	No*	(N/A)
15.	If any issues, how was PM notified?	PSIF ☒	Verbal ☐	

Airbill Number(s): 12 878 168 01 4359 3008
12 878 168 01 4324 0219
12 878 168 01 4314 2591

Shipped By: (UPS) FedX HD BUS ABX
(HD – Hand Delivery)

Cooler Numbers & Temp(s) (°C): Client 3.0°C, 3.0°C, 3.5°C Tel#1, CCIC3
(IE. 340L-4°C-CCK8 -- LIST THERMOMETER NUMBER FOR VERIFICATION)

Out of Control Events and Inspection Comments (list sample IDs/Tests where appropriate):

1-3. COC/Sample ID/COC discrepancy: 2) 32oz plastic bottles for wet chem were labeled to have HCl but are not preserved (samples 2+3) (3) 16oz for samples 1, 2, + 3 are labeled for plastics

4. Insufficient Ice ☐ Delay in delivery ☐ Other ☐ _____

5. Samples were Split ☐ Composited ☐ Requested by: Client ☐ PM ☐ Other: _____

6. Improper Containers (ID/Size/desc): _____

7. Broken bottles/Test: _____

8. Incorrect pH: _____

9. Test/Matrix/Volume: _____

10. Out of Holding Time/Test: _____

11. VOA headspace >1/4"
(list ~ size) _____

List additional comments by above number: HCl
both HCl and HNO3. (2) 4oz plastic bottles received for sample 2, 3 were labeled for HCl and HNO3.

(USE BACK OF PSIF FOR ADDITIONAL NOTES AND COMMENTS) ☞

Inspected By: RH **Date:** 01/22/04 **Logged By:** LK **Date:** 22-JAN-04

◆ *Note all Out-of-Control and/or questionable events on Comment Section of this form. For holding times, the analytical department will flag immediate hold time samples(pH, Dissolved O2, Residual Cl) as out of hold time, therefore, these samples will not be documented on this PSIF.*

◆ *All volatile samples requested to be split or composited must be done in the Volatile Lab. Document: "Volatile sample values may be compromised due to sample splitting (compositing)"*

\+ *All pH results for North Carolina, New York, and other requested samples are to be recorded on the pH log provided (STL-SOP 938).*

• *According to EPA, ¼" of headspace is acceptable in 40 ml vials requiring volatile analysis.*

SEVERN TRENT STL

Organic Data Qualifiers for Final Report

B	The analyte was detected in the method blank and in the client's sample.
D	The result was obtained from a dilution.
E	The result exceeds the calibration range.
J	Estimated value because the analyte concentration is less than the reporting limit.
M	A matrix effect was present.
N	Presumptive evidence of a compound. The compound was identified qualitatively or as a Tentatively Identified Compound.
N/C	Not Calculable. Either the sample spiked was > 4X spike concentration, or the compound was diluted out, or the results of sample duplicate analysis were <RL.
P	Second-column or detector confirmation exceeded method criteria. Appropriate value is reported and data is flagged/qualified as instructed by method/regulation.
U or < or ND	The analyte was not detected.
*	The result is not within control limit(s).

Inorganic Data Qualifiers for Final Report

B	The analyte was detected in the method blank and in the client's sample.
E	The reported value is estimated because of the presence of interference.
J	Estimated value because the analyte concentration is less than the reporting limit.
N	The spiked sample recovery is not within control limits.
N/C	Not Calculable. Either the sample spiked was > 4X spike concentration, or the compound was diluted out, or the results of sample duplicate analysis were <RL.
U or < or ND	The analyte was not detected.
*	Duplicate analysis not within control limits
M	The duplicate injection precision was not met.
S	The reported value was determined by the Method of Standard Addition (MSA).
W	Post-digestion spike for Furnace AA analysis is out of control limits (85-115%), while sample absorbance is less than 50% of spike absorbance and post spike recovery is greater than or equal to 40%, the sample is flagged with a "W" and no further action is required.
+	The Standard Additions Correlation Coefficient is <0.995.

It is permissible to submit an Out-of-Control Events/Corrective Action form and/or Case Narrative in lieu of using above qualifiers.

When the laboratory receives a sample that does not meet EPA requirements for sample collection, preservation or holding time, the laboratory is required to reject the samples. The client must be notified and asked whether the lab should proceed with analysis. Data from any samples that do not meet sample acceptance criteria (collection, preservation and holding time), must be flagged, or noted on a corrective action form or case narrative, or addressed on the Project Sample Inspection Form (PSIF) in an unambiguous manner clearly defining the nature and substance of the variation. NPDES samples from North Carolina that do not meet EPA requirements for sample collection, preservation or holding time are non-reportable for NPDES compliance monitoring.

Abbreviations

ND	Not Detected at or above the STL Pensacola reporting limit (RL)
NS	Not Submitted
NA	Not Applicable
MDL	STL Pensacola Method Detection Limit
RL	STL Pensacola Reporting Limit
NoMS	Not enough sample provided to prepare and/or analyze a method-required matrix spike (MS) and/or duplicate (MSD)

Florida Projects Inorganic/Organic

Refer to FL DEP 62-160; Table 4 Data Qualifier Codes. FL DEP Rule 62-160, Table 1 lists the Florida sites which require data qualifiers.

Arizona DEQ Projects

Any qualified data submitted to Arizona DEQ (ADEQ) after January 1, 2001 must be designated using the Arizona Data Qualifiers as developed by the Arizona ELAC technical subcommittee. Refer to the ADEQ qualifier list.

Severn Trent Laboratories Inc.
STL Pensacola • 3355 McLemore Dr • Pensacola, FL 32514
Tel 850 474 1001 Fax 850 484 5315 • *www.stl-inc.com*

Revised/Effective: 10-24-03.

SEVERN TRENT STL

STL PENSACOLA
Certifications, Memberships & Affiliations

Alabama Department of Environmental Management, Laboratory ID No. 40150 (Drinking Water by Reciprocity with FL)

Arizona Department of Health Services, Lab ID No. AZ0589 (Hazardous Waste & Wastewater)

Arkansas Department of Pollution Control and Ecology, (88-0689) (Environmental)

California Department of Health Services, **ELAP** Laboratory ID No. I-2510 (Hazardous Waste and Wastewater)

Connecticut Department of Health Services, Connecticut Lab Approval No. PH-0697 (D W, H W and Wastewater)

Florida DOH, **NELAP** Laboratory ID No. E81010 (Drinking Water, Hazardous Waste and Wastewater)

Florida DEP/DOH CompQAP # 980156

Iowa Department of Natural Resources, Laboratory ID No. 367 (WW & UST)

Kansas Department of Health & Environment, **NELAP** Laboratory ID No. E10253 (Wastewater and Hazardous Waste)

Kentucky NR&EPC, Laboratory ID No. 90043 (Drinking Water)

Louisiana DEQ, LELAP, **NELAP** Laboratory ID No. 02075, Agency Interest ID 30748 (Environmental)

Maryland DH&MH Laboratory ID No. 233 (Drinking Water by Reciprocity with Florida)

Massachusetts DEP, Laboratory ID No. M-FL094 (Wastewater)

Michigan Bureau of E&OccH, Laboratory ID No.9912 (Drinking Water by Reciprocity with Florida)

New Hampshire DES ELAP, **NELAP** Laboratory ID No. 250502 (Drinking Water & Wastewater)

New Jersey DEP&E, **NELAP** Laboratory ID No. FL006 (Wastewater and Hazardous Waster)

North Carolina DENR, Laboratory ID No. 314 (Hazardous Waste and Wastewater)

North Dakota DH&Consol Labs, Laboratory ID No. R-108 Wastewater and Hazardous Waste by Reciprocity with Florida)

Oklahoma Department of Environmental Quality, Laboratory ID No. 9810 (Hazardous Waste and Wastewater)

Pennsylvania Department of Environmental Resources, **NELAP** Laboratory ID No. 68-467 (Drinking Water & Wastewater)

South Carolina DH&EC, Laboratory ID No. 96026 (Wastewater & Solids/Hazardous Waste by Reciprocity with FL)

Tennessee Department of Health & Environment, Laboratory ID No. 02907 (Drinking Water)

Virginia Department of General Services, Laboratory ID No. 00008 (Drinking Water by Reciprocity with FL)

West Virginia DOE, Office of Water Resources, Laboratory ID No. 136 (Haz Waste and Wastewater)

AIHA (American Industrial Hygiene Association) Accredited Laboratory, Laboratory ID No. 100704. Participant in AIHA sponsored Laboratory PAT Rounds

EPA ICR (Information Collection Rule) Approved Laboratory, Laboratory ID No. ICRFL031

NFESC (Naval Facilities Engineering Services Center)

USACE (United States Army Corps. of Engineers), MRD

STL Pensacola also has a foreign soil permit to accept soils from locations other than the continental United States. Permit No. S-37599

Pinnacle Laboratories, Inc. — Interlab Chain of Custody

Date: 1/21/04 Page: 2 of 2

Network Project Manager: Jacinta Tenorio	ANALYSIS REQUEST

Pinnacle Laboratories, Inc.
2709-D Pan American Freeway, NE
Albuquerque, NM 87107 C401481
(505) 344-3777 Fax (505) 344-4413

SAMPLE ID	DATE	TIME	MATRIX	LAB ID	Metals (8) RCRA (Total)	TCLP RCRA (8) Metals	Metals-13 PP List	Metals-TAL (23 Metals)	Dissolved Fe, Mn, Pb (6010)	Dissolved Ca, Mg, K, Na (600)	TOC	Gen Chemistry: EC, TDS, Cl, SO4	Br, F, Total Hardness	Alk + Bicarb/Carb/OH	Volatile Organics GC/MS (8260)	BOD	COD	Pesticides/PCB (608/8081/8082)	Herbicides (615/8151)	PNA (8310)/8270 SIMS	8260 (TCLP 1311) ZHE		Base/Neutral Acid Compounds GC/MS (625/8270)	Uranium (ICP-MS)	Radium 226+228	Gross Alpha/Beta	TO-14	NUMBER OF CONTAINERS
MW-22/401053-11	1/20/04	1056	AQ		X					X		X	X	X													
MW-11/401053-12		1136			X					X		X	X	X													
MW-15/401053-13		1209			X					X		X	X	X													
MW-13/401053-14		1244			X					X		X	X	X													
MW-12/401053-15		1420			X					X		X	X	X													
Influent/401053-16		1452			X					X		X	X	X													
Effluent/401053-17	↓	1512	↓		X					X		X	X	X													

PROJECT INFORMATION		SAMPLE RECEIPT		SAMPLES SENT TO:	
PROJECT #: 401053		Total Number of Containers		PENSACOLA - STL-FL	X
PROJ. NAME: BIO		Chain of Custody Seals		ESL - OR	
QC LEVEL: (STD.) IV		Received Intact?		ATEL - AZ	
QC REQUIRED: MS MSD BLANK		Received Good Cond./Cold		ATEL - MARION	
TAT: (STANDARD) RUSH!!		LAB NUMBER:		ATEL - MELMORE	
				EHL	
DUE DATE: 2/4	COMMENTS:			GEL	
RUSH SURCHARGE: —				U OF MIAMI	
CLIENT DISCOUNT: —				WCAS	
SPECIAL CERTIFICATION REQUIRED: YES (NO)				WOHL	

RELINQUISED BY: 1.	RELINQUISED BY: 2.
Signature: Francine Tavio Time: 1700	Signature: Time:
Printed Name: Francine Tavio Date: 1/21/04	Printed Name: Date:
Pinnacle Laboratories, Inc.	Company
RECEIVED BY: 1.	**RECEIVED BY: 2.**
Signature: Karen Hedaire Time: 940	Signature: Time:
Printed Name: Date: 01/22/04	Printed Name: Date:
Company STL	Company

[redacted] Pinnacle Laboratories, Inc. **Interlab Chain of Custody** Date: 1/21/04 Page: 2 of 2

PINNACLE LABORATORIES

Network Project Manager: Jacinta Tenorio

Pinnacle Laboratories, Inc.
2709-D Pan American Freeway, NE
Albuquerque, NM 87107 C401481
(505) 344-3777 Fax (505) 344-4413

ANALYSIS REQUEST

SAMPLE ID	DATE	TIME	MATRIX	LAB ID	Metals (8) RCRA (Total)	TCLP RCRA (8) Metals	Metals-13 PP List	Metals-TAL (23 Metals)	Dissolved Fe, Mn, Pb (6010)	Dissolved Ca, Mg, K, Na (6010)	TOC	Gen Chemistry: EC, TDS, Cl, SO4	Br, F, Total Hardness	Alk + Bicarb/Carb/OH	Volatile Organics GC/MS (8260)	BOD	COD	Pesticides/PCB (608/8081/8082)	Herbicides (615/8151)	PNA (8310)/8270 SIMS	8260 (TCLP 1311) ZHE		Base/Neutral Acid Compounds GC/MS (625/8270)	Uranium (ICP-MS)	Radium 226+228	Gross Alpha/Beta	TO-14	NUMBER OF CONTAINERS
MW-22/401053-11	1/20/04	1056	AQ		X					X		X	X	X													
MW-11/401053-12		1136			X					X		X	X	X													
MW-15/401053-13		1209			X					X		X	X	X													
MW-13/401053-14		1244			X					X		X	X	X													
MW-12/401053-15		1420			X					X		X	X	X													
Influent/401053-16		1452			X					X		X	X	X													
Effluent/401053-17	↓	1512	↓		X					X		X	X	X													

PROJECT INFORMATION		SAMPLE RECEIPT	
PROJECT #:	401053	Total Number of Containers	
PROJ. NAME:	BIO	Chain of Custody Seals	
QC LEVEL:	(STD) IV	Received Intact?	
QC REQUIRED:	MS MSD BLANK	Received Good Cond./Cold	
TAT:	(STANDARD) RUSH!!	LAB NUMBER:	

DUE DATE:	2/4
RUSH SURCHARGE:	—
CLIENT DISCOUNT:	—
SPECIAL CERTIFICATION REQUIRED: YES (NO)	

COMMENTS:

SAMPLES SENT TO:	
PENSACOLA - STL-FL	X
ESL - OR	
ATEL - AZ	
ATEL - MARION	
ATEL - MELMORE	
EHL	
GEL	
U OF MIAMI	
WCAS	
WOHL	

RELINQUISED BY: 1.	RELINQUISED BY: 2.
Signature: Francine Tenio Time: 1700	Signature: Time:
Printed Name: Francine Tenio Date: 1/21/04	Printed Name: Date:
Pinnacle Laboratories, Inc.	Company
RECEIVED BY: 1.	**RECEIVED BY: 2.**
Signature: Raven Hedaire Time: 940	Signature: Time:
Printed Name: Date: 01/22/04	Printed Name: Date:
Company STL	Company

Pinnacle Laboratories Inc.

CHAIN OF CUSTODY

DATE: 1-21-4 PAGE: 1 OF 2

LAB ACCESSION # 401053

SHADED AREAS ARE FOR LAB USE ONLY

PLEASE FILL THIS FORM IN COMPLETELY.

PROJECT MANAGER: Teddy Griffin

COMPANY: Biotech Remediation Inc.

ADDRESS: 501 Airport Dr. Suite 109
Farmington, NM. 87401

PHONE: 505-327-4968

FAX:

BILL TO:

COMPANY:

ADDRESS:

ANALYSIS REQUEST

SAMPLE ID	DATE	TIME	MATRIX	LAB ID	Petroleum Hydrocarbons (418.1) TRPH	(MOD.8015) Diesel/Direct Inject	(M8015) Gas/Purge & Trap	8021 (BTEX)/8015 (Gasoline) MTBE	8021 (BTEX) MTBE ☐TMB ☐PCE	8021 (TCL)	8021 (EDX)	8021 (HALO)	8021 (CUST)	504.1 EDB ☐/DBCP ☐	PH	8260 (TCL) Volatile Organics	8260 (Full) Volatile Organics ☐PBMS	8260 (CUST) Volatile Organics	8260 (Landfill) Volatile Organics	Pesticides/PCB (608/8081/8082)	Herbicides (615/8151) -	Base/Neutral/Acid Compounds GC/MS (625/8270)	Polynuclear Aromatics (610/8310/8270-SIMS)	General Chemistry: EC, TDS, Cl	SO4, Br, F, Alk + Bicarb Carb/Bi	Priority Pollutant Metals (13)	Target Analyte List Metals (23)	RCRA Metals (8) + Hardness	RCRA Metals by TCLP (Method1311)	Metals: Diss. Ca, Mg, K, Na	NUMBER OF CONTAINERS
MW-18	1-19-4	1025	H2O	01				X	X						X								X	X	X			X		X	
MW-5		1116		02					X						X								X	X	X			X		X	
MW-19		1144		03					X						X								X	X	X			X		X	
MW-4		1349		04					X						X								X	X	X			X		X	
MW-6		1415		05					X						X								X	X	X			X		X	
MW-7		1446		06					X						X								X	X	X			X		X	
MW-9		1513		07					X						X								X	X	X			X		X	
MW-10		1537		08					X						X								X	X	X			X		X	
MW-20	1-20-4	0942		09					X						X								X	X	X			X		X	
MW-21		1020		10					X						X								X	X	X			X		X	

WEEKEND ANALYSES MAY RESULT IN AN ADDITIONAL SURCHARGE - PLEASE INQUIRE.

PROJECT INFORMATION

PROJ. NO.: 810

PROJ. NAME: T-Way Refinery

P.O. NO.:

SHIPPED VIA: Bus.

SAMPLE RECEIPT

PRIOR AUTHORIZATION IS REQUIRED FOR RUSH PROJECTS

(RUSH) ☐24hr* ☐48hr* ☐72hr* ☐ 1 WEEK (NORMAL) ☐
*NOT AVAILABLE ON ALL ANALYSES

CERTIFICATION REQUIRED ☐ NM ☐ SDWA ☐ AZ ☐ OTHER

METHANOL PRESERVATION ☐ METALS ☐ TOTAL ☐ DISSOLVED

COMMENTS:

53° Temp Blank

RELINQUISHED BY: 1.

Signature: Time: 0900

Printed Name: Mike Beauregard Date: 1-21-4

Company: Biotech

See Reverse side (Force Majeure)

RECEIVED BY: 1.

Signature: Time:

Printed Name: Date:

Company:

RELINQUISHED BY: 2.

Signature: Time:

Printed Name: Date:

Company:

RECEIVED BY: (LAB) 2.

Signature: Time: 1535

Printed Name: Yvonne Tarin Date: 1/21/04

American Environmental Network (NM), Inc.

CHAIN OF CUSTODY

(Continuation Shee

CLIENT: Biotech Remediation, Inc.

P.O. NUMBER: T-Way Refinery 810

AEN(NM) Accession #: 401053

PARAMETERS

PAGE 2 OF 2

CLIENT SAMPLE ID	LAB ID	DATE AND TIME	MATRIX	8021 BTEX	pH, Kona K	8270 SIMS	504, Be, Fe, C	TDS, Cl, Hard	Ca, Mg, K, Na	Alkalr	BOTTLE TYPE & NO.	$ NET PRICE
MW-22		1-20-4 1056	H2O	X	X	X	X	X	X			
MW-11		1136		X	X	X	X	X	X			
MW-15		1209		X	X	X	X	X	X			
MW-13		1244		X	X	X	X	X	X			
MW-12		1420		X	X	X	X	X	X			
INFLUENT		1452		X	X	X	X	X	X			
EFLUENT		1512		X	X	X	X	X	X			
Trip Blank		12/30/03 - 0950	AQ	X								
Rec'd 57												

SAMPLES RELINQUISHED BY (SIGNATURE)	DATE AND TIME	SAMPLES RELINQUISHED BY (SIGNATURE)	DATE AND TIME
	1-21-4- 0900		
SAMPLES RECEIVED BY (SIGNATURE)	DATE AND TIME		

DISTRIBUTION: White - AEN (NM), Canary - Originato

1/5/98 AEN Inc.: American Environmental Network (NM), Inc.
2709-D Pan American Freeway, NE • Albuquerque, New Mexico 87107 • (505) 344-3777 • Fax (505) 344-4413

entered

PINNACLE LABORATORIES

2709-D Pan American Freeway NE
Albuquerque, New Mexico 87107
Phone (505) 344-3777
Fax (505) 344-4413

Pinnacle Lab ID number **403006**
March 09, 2004

BIOTECH REMEDIATION
501 AIRPORT DRIVE SUITE 104
FARMINGTON, NM 87401

Project Name AIRSTRIPPER
Project Number 810

Attention: TERRY GRIFFIN

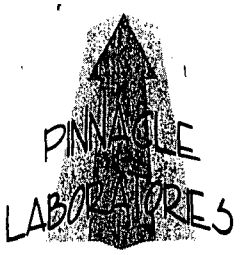
On 03/01/04 Pinnacle Laboratories Inc., (ADHS License No. AZ0643), received a request to analyze **aqueous** samples. The samples were analyzed with EPA methodology or equivalent methods. The results of these analyses and the quality control data, which follow each set of analyses, are enclosed.

If you have any questions or comments, please do not hesitate to contact us at (505) 344-3777.

H. Mitchell Rubenstein, Ph.D.
General Manager, Pinnacle Laboratories, Inc.

MR: jt

Enclosure



2709-D Pan American Freeway NE
Albuquerque, New Mexico 87107
Phone (505) 344-3777
Fax (505) 344-4413

CLIENT	: BIOTECH REMEDIATION	PINNACLE ID	: 403006
PROJECT #	: 810	DATE RECEIVED	: 03/01/04
PROJECT NAME	: AIRSTRIPPER	REPORT DATE	: 03/09/04

PINNACLE ID #	CLIENT DESCRIPTION	MATRIX	DATE COLLECTED
403006 - 01	INFLUENT	AQUEOUS	02/27/04
403006 - 02	EFFLUENT	AQUEOUS	02/27/04

PINNACLE LABORATORIES

2709-D Pan American Freeway NE
Albuquerque, New Mexico 87107
Phone (505) 344-3777
Fax (505) 344-4413

GAS CHROMATOGRAPHY RESULTS

TEST : EPA 8021B MODIFIED / 8015B GRO
CLIENT : BIOTECH REMEDIATION — PINNACLE I.D. : 403006
PROJECT # : 810 — ANALYST : BP
PROJECT NAME : AIRSTRIPPER

SAMPLE I.D. #	CLIENT I.D.	MATRIX	DATE SAMPLED	DATE EXTRACTED	DATE ANALYZED	DIL. FACTOR
01	INFLUENT	AQUEOUS	02/27/04	NA	03/03/04	10
02	EFFLUENT	AQUEOUS	02/27/04	NA	03/03/04	1

PARAMETER	DET. LIMIT	UNITS	INFLUENT	EFFLUENT
FUEL HYDROCARBONS	**0.10**	**MG/L**	**7.6**	< 0.10
HYDROCARBON RANGE			**C6-C10**	C6-C10
HYDROCARBONS QUANTITATED USING			**GASOLINE**	GASOLINE
BENZENE	**0.5**	**UG/L**	**630**	< 0.5
TOLUENE	**0.5**	**UG/L**	**700**	**0.8**
ETHYLBENZENE	**0.5**	**UG/L**	**270**	< 0.5
TOTAL XYLENES	**1.0**	**UG/L**	**620**	**1.7**
METHYL-t-BUTYL ETHER	**2.5**	**UG/L**	**110**	< 2.5
SURROGATE:				
BROMOFLUOROBENZENE (%)			102	98
SURROGATE LIMITS	(80 - 120)			

CHEMIST NOTES:
N/A

PINNACLE LABORATORIES

2709-D Pan American Freeway NE
Albuquerque, New Mexico 87107
Phone (505) 344-3777
Fax (505) 344-4413

GAS CHROMATOGRAPHY RESULTS
REAGENT BLANK

TEST	: EPA 8021B MODIFIED / 8015B GRO	PINNACLE I.D.	: 403006
BLANK I.D.	: 030204	DATE EXTRACTED	: N/A
CLIENT	: BIOTECH REMEDIATION	DATE ANALYZED	: 03/02/04
PROJECT #	: 810	SAMPLE MATRIX	: AQUEOUS
PROJECT NAME	: AIRSTRIPPER	ANALYST	: BP

PARAMETER	UNITS	
FUEL HYDROCARBONS	MG/L	<0.10
HYDROCARBON RANGE		C6-C10
HYDROCARBONS QUANTITATED USING		GASOLINE
BENZENE	UG/L	<0.5
TOLUENE	UG/L	<0.5
ETHYLBENZENE	UG/L	<0.5
TOTAL XYLENES	UG/L	<1.0
METHYL-t-BUTYL ETHER	UG/L	<2.5
SURROGATE:		
BROMOFLUOROBENZENE (%)		100
SURROGATE LIMITS (80 - 120)		

CHEMIST NOTES:
N/A

PINNACLE LABORATORIES

2709-D Pan American Freeway NE
Albuquerque, New Mexico 87107
Phone (505) 344-3777
Fax (505) 344-4413

GAS CHROMATOGRAPHY QUALITY CONTROL
LCS/LCSD

EST	: EPA 8015B GRO	PINNACLE I.D.	: 403006
ATCH #	: 030204	DATE EXTRACTED	: N/A
CLIENT	: BIOTECH REMEDIATION	DATE ANALYZED	: 03/02/04
ROJECT #	: 810	SAMPLE MATRIX	: AQUEOUS
ROJECT NAME	: AIRSTRIPPER	UNITS	: MG/L

PARAMETER	SAMPLE RESULT	CONC SPIKE	SPIKED SAMPLE	% REC	DUP SPIKE	DUP % REC	RPD	REC LIMITS	RPD LIMITS
UEL HYDROCARBONS	<0.10	1.00	1.02	102	0.990	99	3	(70 - 130)	20
YDROCARBON RANGE		C6-C10							

HYDROCARBONS QUANTITATED USING GASOLINE

CHEMIST NOTES:
N/A

$$\frac{\text{(Spike Sample Result - Sample Result)}}{\text{Spike Concentration}} \times 100$$

$$\text{RPD (Relative Percent Difference)} = \frac{\text{(Sample Result - Duplicate Result)}}{\text{Average Result}} \times 100$$

PINNACLE LABORATORIES

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Albuquerque, New Mexico 87107
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GAS CHROMATOGRAPHY QUALITY CONTROL
LCS/LCSD

TEST	: EPA 8021B MODIFIED	PINNACLE I.D.	: 403006
BATCH #	: 030204	DATE EXTRACTED	: N/A
CLIENT	: BIOTECH REMEDIATION	DATE ANALYZED	: 03/02/04
PROJECT #	: 810	SAMPLE MATRIX	: AQUEOUS
PROJECT NAME	: AIRSTRIPPER	UNITS	: UG/L

PARAMETER	SAMPLE RESULT	CONC SPIKE	SPIKED SAMPLE	% REC	DUP SPIKE	DUP % REC	RPD	REC LIMITS	RPD LIMITS
BENZENE	<0.5	20.0	21.2	106	21.0	105	1	(80 - 120)	20
TOLUENE	<0.5	20.0	20.5	103	20.4	102	0	(80 - 120)	20
ETHYLBENZENE	<0.5	20.0	21.0	105	20.7	104	1	(80 - 120)	20
TOTAL XYLENES	<1.0	60.0	61.5	103	61.0	102	1	(80 - 120)	20
METHYL-t-BUTYL ETHER	<2.5	20.0	21.5	108	20.4	102	5	(70 - 133)	20

CHEMIST NOTES:
N/A

$$\% \text{ Recovery} = \frac{(\text{Spike Sample Result} - \text{Sample Result})}{\text{Spike Concentration}} \times 100$$

$$\text{RPD (Relative Percent Difference)} = \frac{(\text{Sample Result} - \text{Duplicate Result})}{\text{Average Result}} \times 100$$

PINNACLE LABORATORIES

2709-D Pan American Freeway NE
Albuquerque, New Mexico 87107
Phone (505) 344-3777
Fax (505) 344-4413

GAS CHROMATOGRAPHY QUALITY CONTROL
MS/MSD

EST	: EPA 8015B GRO	PINNACLE I.D.	: 403006
SMSD #	: 403006-02	DATE EXTRACTED	: N/A
CLIENT	: BIOTECH REMEDIATION	DATE ANALYZED	: 03/03/04
ROJECT #	: 810	SAMPLE MATRIX	: AQUEOUS
ROJECT NAME	: AIRSTRIPPER	UNITS	: MG/L

PARAMETER	SAMPLE RESULT	CONC SPIKE	SPIKED SAMPLE	% REC	DUP SPIKE	DUP % REC	RPD	REC LIMITS	RPD LIMITS
UEL HYDROCARBONS	<0.10	1.00	1.06	106	1.01	101	5	(70 - 130)	20
YDROCARBON RANGE		C6-C10							

HYDROCARBONS QUANTITATED USING GASOLINE

HEMIST NOTES:
N/A

$$\frac{\text{(Spike Sample Result - Sample Result)}}{\text{Spike Concentration}} \times 100$$

$$\text{RPD (Relative Percent Difference)} = \frac{\text{(Sample Result - Duplicate Result)}}{\text{Average Result}} \times 100$$

PINNACLE LABORATORIES

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Albuquerque, New Mexico 87107
Phone (505) 344-3777
Fax (505) 344-4413

GAS CHROMATOGRAPHY QUALITY CONTROL
MS/MSD

TEST	: EPA 8021B MODIFIED	PINNACLE I.D.	: 403006
MSMSD #	: 403006-02	DATE EXTRACTED	: N/A
CLIENT	: BIOTECH REMEDIATION	DATE ANALYZED	: 03/03/04
PROJECT #	: 810	SAMPLE MATRIX	: AQUEOUS
PROJECT NAME	: AIRSTRIPPER	UNITS	: UG/L

PARAMETER	SAMPLE RESULT	CONC SPIKE	SPIKED SAMPLE	% REC	DUP SPIKE	DUP % REC	RPD	REC LIMITS	RPD LIMITS
BENZENE	<0.5	20.0	21.2	106	21.1	106	0	(80 - 120)	20
TOLUENE	0.8	20.0	21.0	101	20.6	99	2	(80 - 120)	20
ETHYLBENZENE	<0.5	20.0	20.6	103	20.3	102	1	(80 - 120)	20
TOTAL XYLENES	1.7	60.0	61.1	99	59.7	97	2	(80 - 120)	20
METHYL-t-BUTYL ETHER	<2.5	20.0	20.3	102	20.0	100	1	(70 - 133)	20

CHEMIST NOTES:
N/A

$$\% \text{ Recovery} = \frac{(\text{Spike Sample Result} - \text{Sample Result})}{\text{Spike Concentration}} \times 100$$

$$\text{RPD (Relative Percent Difference)} = \frac{(\text{Sample Result} - \text{Duplicate Result})}{\text{Average Result}} \times 100$$

Pinnacle Laboratories Inc.

CHAIN OF CUSTODY

DATE: 2-27-4 PAGE: 1 OF 1

PLI Accession #: 403006

SHADED AREAS ARE FOR LAB USE ONLY

PLEASE FILL THIS FORM IN COMPLETELY.

PROJECT MANAGER: Terry Griffin

COMPANY: Biotech Remediation

ADDRESS: 501 Airport Dr.
Farmington NM. 87401

PHONE: 505-327-4965

FAX:

BILL TO:

COMPANY:

ADDRESS:

ANALYSIS REQUEST

SAMPLE ID	DATE	TIME	MATRIX	LAB ID
Influent	2-27-4	0931	H2O	
Effluent	/	0935	/	

Petroleum Hydrocarbons (418.1) TRPH	(MOD.8015) Diesel/Direct Inject	(M8015) Gas/Purge & Trap	8021 (BTEX)/8015 (Gasoline) MTBE	8021 (BTEX) ☐MTBE ☐TMB ☐PCE	8021 (TCL)	8021 (EDX)	8021 (HALO)	8021 (CUST)	504.1 EDB ☐/DBCP ☐		8260 (TCL) Volatile Organics	8260 (Full) Volatile Organics ☐PBMS	8260 (CUST) Volatile Organics	8260 (Landfill) Volatile Organics	Pesticides/PCB (608/8081/8082)	Herbicides (615/8151)	Base/Neutral/Acid Compounds GC/MS (625/8270)	Polynuclear Aromatics (610/8310/8270-SIMS)	General Chemistry:		Priority Pollutant Metals (13)	Target Analyte List Metals (23)	RCRA Metals (8)	RCRA Metals by TCLP (Method1311)	Metals:		# CONTAINERS
			✓																								2
			✓																								2

WEEKEND ANALYSES MAY RESULT IN AN ADDITIONAL SURCHARGE - PLEASE INQUIRE.

PROJECT INFORMATION

PROJ. NO.: 810

PROJ. NAME: Air Stripper

P.O. NO.:

SHIPPED VIA:

SAMPLE RECEIPT

CONTAINERS

CUSTODY SEALS

RECEIVED INTACT

BOTTLES

PRIOR AUTHORIZATION IS REQUIRED FOR RUSH PROJECTS

(RUSH) ☐24hr* ☐48hr* ☐72hr* ☐ 1 WEEK (NORMAL) ☑

*NOT AVAILABLE ON ALL ANALYSES

CERTIFICATION REQUIRED ☐ NM ☐ SDWA ☐ AZ ☐ OTHER

METHANOL PRESERVATION ☐ METALS ☐ TOTAL ☐ DISSOLVED

COMMENTS:

RELINQUISHED BY: 1.	RELINQUISHED BY: 2.
Signature: Time: 1000	Signature: Time:
Printed Name: Mike Bearpaw Date: 2-27-4	Printed Name: Date:
Company:	Company:
See Reverse side (Force Majeure)	
RECEIVED BY: 1.	**RECEIVED BY: (LAB) 2.**
Signature: Time:	Signature: Time:
Printed Name: Date:	Printed Name: Date:
Company:	Pinnacle Laboratories Inc.

entered

PINNACLE LABORATORIES

2709-D Pan American Freeway NE
Albuquerque, New Mexico 87107
Phone (505) 344-3777
Fax (505) 344-4413

Pinnacle Lab ID number **404005**
April 12, 2004

BIOTECH REMEDIATION
501 AIRPORT DRIVE SUITE 104
FARMINGTON, NM 87401

Project Name AIRSTRIPPER
Project Number 810

Attention: TERRY GRIFFIN

On 04/01/04 Pinnacle Laboratories Inc., (ADHS License No. AZ0643), received a request to analyze **aqueous** samples. The samples were analyzed with EPA methodology or equivalent methods. The results of these analyses and the quality control data, which follow each set of analyses, are enclosed.

If you have any questions or comments, please do not hesitate to contact us at (505) 344-3777.

H. Mitchell Rubenstein, Ph.D.
General Manager, Pinnacle Laboratories, Inc.

MR: jt

Enclosure

PINNACLE LABORATORIES

2709-D Pan American Freeway NE
Albuquerque, New Mexico 87107
Phone (505) 344-3777
Fax (505) 344-4413

CLIENT	: BIOTECH REMEDIATION	PINNACLE ID	: 404005
PROJECT #	: 810	DATE RECEIVED	: 04/01/04
PROJECT NAME	: AIRSTRIPPER	REPORT DATE	: 04/12/04

PINNACLE ID #	CLIENT DESCRIPTION	MATRIX	DATE COLLECTED
404005 - 01	AIR STRIPPER INFLUENT	AQUEOUS	03/31/04
404005 - 02	AIR STRIPPER EFFLUENT	AQUEOUS	03/31/04

PINNACLE LABORATORIES

2709-D Pan American Freeway NE
Albuquerque, New Mexico 87107
Phone (505) 344-3777
Fax (505) 344-4413

GAS CHROMATOGRAPHY RESULTS

TEST : EPA 8021B MODIFIED / 8015B GRO
CLIENT : BIOTECH REMEDIATION — PINNACLE I.D. : 404005
PROJECT # : 810 — ANALYST : BP
PROJECT NAME : AIRSTRIPPER

SAMPLE I.D. #	CLIENT I.D.	MATRIX	DATE SAMPLED	DATE EXTRACTED	DATE ANALYZED	DIL. FACTOR
01	AIR STRIPPER INFLUENT	AQUEOUS	03/31/04	NA	04/07/04	10
02	AIR STRIPPER EFFLUENT	AQUEOUS	03/31/04	NA	04/07/04	1

PARAMETER	DET. LIMIT	UNITS	AIR STRIPPER INFLUENT	AIR STRIPPER EFFLUENT
FUEL HYDROCARBONS	**0.10**	**MG/L**	**6.1**	< 0.10
HYDROCARBON RANGE			**C6-C10**	C6-C10
HYDROCARBONS QUANTITATED USING			**GASOLINE**	GASOLINE
BENZENE	**0.5**	**UG/L**	**610**	**2.2**
TOLUENE	**0.5**	**UG/L**	**220**	**2.4**
ETHYLBENZENE	**0.5**	**UG/L**	**260**	**1.1**
TOTAL XYLENES	**1.0**	**UG/L**	**410**	**3.5**
METHYL-t-BUTYL ETHER	**2.5**	**UG/L**	**130**	< 2.5
SURROGATE: BROMOFLUOROBENZENE (%)			96	95
SURROGATE LIMITS	(80 - 120)			

CHEMIST NOTES:
N/A

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GAS CHROMATOGRAPHY RESULTS
REAGENT BLANK

TEST	: EPA 8021B MODIFIED / 8015B GRO	PINNACLE I.D.	: 404005
BLANK I.D.	: 040704	DATE EXTRACTED	: N/A
CLIENT	: BIOTECH REMEDIATION	DATE ANALYZED	: 04/07/04
PROJECT #	: 810	SAMPLE MATRIX	: AQUEOUS
PROJECT NAME	: AIRSTRIPPER	ANALYST	: BP

PARAMETER	UNITS	
FUEL HYDROCARBONS	MG/L	<0.10
HYDROCARBON RANGE		C6-C10
HYDROCARBONS QUANTITATED USING		GASOLINE
BENZENE	UG/L	<0.5
TOLUENE	UG/L	<0.5
ETHYLBENZENE	UG/L	<0.5
TOTAL XYLENES	UG/L	<1.0
SURROGATE:		
BROMOFLUOROBENZENE (%)		99
SURROGATE LIMITS (80 - 120)		

CHEMIST NOTES:
N/A

PINNACLE LABORATORIES

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Albuquerque, New Mexico 87107
Phone (505) 344-3777
Fax (505) 344-4413

GAS CHROMATOGRAPHY QUALITY CONTROL
LCS/LCSD

TEST	: EPA 8015B GRO	PINNACLE I.D.	: 404005
BATCH #	: 040704	DATE EXTRACTED	: N/A
CLIENT	: BIOTECH REMEDIATION	DATE ANALYZED	: 04/07/04
PROJECT #	: 810	SAMPLE MATRIX	: AQUEOUS
PROJECT NAME	: AIRSTRIPPER	UNITS	: MG/L

PARAMETER	SAMPLE RESULT	CONC SPIKE	SPIKED SAMPLE	% REC	DUP SPIKE	DUP % REC	RPD	REC LIMITS	RPD LIMITS
FUEL HYDROCARBONS	<0.10	1.00	1.03	103	1.06	106	3	(70 - 130)	20
HYDROCARBON RANGE		C6-C10							

HYDROCARBONS QUANTITATED USING GASOLINE

CHEMIST NOTES:
N/A

$$\frac{\text{(Spike Sample Result - Sample Result)}}{\text{Spike Concentration}} \times 100$$

$$\text{RPD (Relative Percent Difference)} = \frac{\text{(Sample Result - Duplicate Result)}}{\text{Average Result}} \times 100$$

PINNACLE LABORATORIES

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Albuquerque, New Mexico 87107
Phone (505) 344-3777
Fax (505) 344-4413

GAS CHROMATOGRAPHY QUALITY CONTROL
LCS/LCSD

TEST	: EPA 8021B MODIFIED	PINNACLE I.D.	: 404005
BATCH #	: 040704	DATE EXTRACTED	: N/A
CLIENT	: BIOTECH REMEDIATION	DATE ANALYZED	: 04/07/04
PROJECT #	: 810	SAMPLE MATRIX	: AQUEOUS
PROJECT NAME	: AIRSTRIPPER	UNITS	: UG/L

PARAMETER	SAMPLE RESULT	CONC SPIKE	SPIKED SAMPLE	% REC	DUP SPIKE	DUP % REC	RPD	REC LIMITS	RPD LIMITS
BENZENE	<0.5	20.0	19.9	100	20.7	104	4	(80 - 120)	20
TOLUENE	<0.5	20.0	19.6	98	20.3	102	4	(80 - 120)	20
ETHYLBENZENE	<0.5	20.0	20.0	100	20.7	104	3	(80 - 120)	20
TOTAL XYLENES	<1.0	60.0	59.1	99	60.9	102	3	(80 - 120)	20
METHYL-t-BUTYL ETHER	<2.5	20.0	18.9	95	19.7	99	4	(70 - 133)	20

CHEMIST NOTES:
N/A

$$\%\ \text{Recovery} = \frac{(\text{Spike Sample Result} - \text{Sample Result})}{\text{Spike Concentration}} \times 100$$

$$\text{RPD (Relative Percent Difference)} = \frac{(\text{Sample Result} - \text{Duplicate Result})}{\text{Average Result}} \times 100$$

PINNACLE LABORATORIES

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Albuquerque, New Mexico 87107
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Fax (505) 344-4413

GAS CHROMATOGRAPHY QUALITY CONTROL
MS/MSD

TEST	: EPA 8015B GRO	PINNACLE I.D.	: 404005
MSMSD #	: 404005-02	DATE EXTRACTED	: N/A
CLIENT	: BIOTECH REMEDIATION	DATE ANALYZED	: 04/07/04
PROJECT #	: 810	SAMPLE MATRIX	: AQUEOUS
PROJECT NAME	: AIRSTRIPPER	UNITS	: MG/L

PARAMETER	SAMPLE RESULT	CONC SPIKE	SPIKED SAMPLE	% REC	DUP SPIKE	DUP % REC	RPD	REC LIMITS	RPD LIMITS
FUEL HYDROCARBONS	<0.10	1.00	1.09	109	1.06	106	3	(70 - 130)	20
HYDROCARBON RANGE		C6-C10							

HYDROCARBONS QUANTITATED USING GASOLINE

CHEMIST NOTES:
N/A

$$\frac{\text{(Spike Sample Result - Sample Result)}}{\text{Spike Concentration}} \times 100$$

$$\text{RPD (Relative Percent Difference)} = \frac{\text{(Sample Result - Duplicate Result)}}{\text{Average Result}} \times 100$$

PINNACLE LABORATORIES

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Albuquerque, New Mexico 87107
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Fax (505) 344-4413

GAS CHROMATOGRAPHY QUALITY CONTROL
MS/MSD

TEST	: EPA 8021B MODIFIED	PINNACLE I.D.	: 404005
MSMSD #	: 404005-02	DATE EXTRACTED	: N/A
CLIENT	: BIOTECH REMEDIATION	DATE ANALYZED	: 04/07/04
PROJECT #	: 810	SAMPLE MATRIX	: AQUEOUS
PROJECT NAME	: AIRSTRIPPER	UNITS	: UG/L

PARAMETER	SAMPLE RESULT	CONC SPIKE	SPIKED SAMPLE	% REC	DUP SPIKE	DUP % REC	RPD	REC LIMITS	RPD LIMITS
BENZENE	2.2	20.0	22.6	102	22.3	101	1	(80 - 120)	20
TOLUENE	2.4	20.0	22.2	99	22.2	99	0	(80 - 120)	20
ETHYLBENZENE	1.1	20.0	21.4	102	21.2	101	1	(80 - 120)	20
TOTAL XYLENES	3.5	60.0	63.4	100	62.8	99	1	(80 - 120)	20
METHYL-t-BUTYL ETHER	<2.5	20.0	19.9	100	20.2	101	1	(70 - 133)	20

CHEMIST NOTES:
N/A

$$\%\ \text{Recovery} = \frac{(\text{Spike Sample Result} - \text{Sample Result})}{\text{Spike Concentration}} \times 100$$

$$\text{RPD (Relative Percent Difference)} = \frac{(\text{Sample Result} - \text{Duplicate Result})}{\text{Average Result}} \times 100$$

Pinnacle Laboratories Inc.

CHAIN OF CUSTODY

DATE: 3-31-04 PAGE: 1 OF 1

PLI ACCESSION #: 404005

SHADED AREAS ARE FOR LAB USE ONLY

PLEASE FILL THIS FORM IN COMPLETELY.

PROJECT MANAGER: Terry Griffin

COMPANY: Biotech Remediation Inc.

ADDRESS: 501 Airport Dr. Suite 104
Farmington, NM. 87401

PHONE: 505-327-4965

FAX:

BILL TO:

COMPANY:

ADDRESS:

ANALYSIS REQUEST

SAMPLE ID	DATE	TIME	MATRIX	LAB ID	NUMBER OF CONTAINERS
Air Stripper-Influent	3-31-04	1040	H2O	01	2
Air Stripper-Effluent	1	1045	1	02	2

Petroleum Hydrocarbons (418.1) TRPH
(MOD.8015) Diesel/Direct inject
(M8015) Gas/Purge & Trap
8021 (BTEX)/8015 (Gasoline) MTBE ✓ ✓
8021 (BTEX) ☐MTBE ☐TMB ☐PCE
8021 (TCL)
8021 (EDX)
8021 (HALO)
8021 (CUST)
504.1 EDB ☐/DBCP ☐
8260 (TCL) Volatile Organics
8260 (Full) Volatile Organics ☐PBMS
8260 (CUST) Volatile Organics
8260 (Landfill) Volatile Organics
Pesticides/PCB (608/8081/8082)
Herbicides (615/8151)
Base/Neutral/Acid Compounds GC/MS (625/8270)
Polynuclear Aromatics (610/8310/8270-SIMS)
General Chemistry:
Priority Pollutant Metals (13)
Target Analyte List Metals (23)
RCRA Metals (8)
RCRA Metals by TCLP (Method1311)
Metals:

WEEKEND ANALYSES MAY RESULT IN AN ADDITIONAL SURCHARGE - PLEASE INQUIRE.

PROJECT INFORMATION

PROJ. NO.: 810

PROJ. NAME: Air Stripper

P.O. NO.:

SHIPPED VIA: Bus

SAMPLE RECEIPT

ACCEPTABLE: Y / N

CUSTODY SEALS: Y / N

RECEIVED INTACT: Y / N

BLUE ICE / ICE: Y / N

PRIOR AUTHORIZATION IS REQUIRED FOR RUSH PROJECTS

(RUSH) ☐24hr* ☐48hr* ☐72hr* ☐ 1 WEEK (NORMAL) ☐
*NOT AVAILABLE ON ALL ANALYSES

CERTIFICATION REQUIRED ☐ NM ☐ SDWA ☐ AZ ☐ OTHER

METHANOL PRESERVATION ☐ METALS ☐ TOTAL ☐ DISSOLVED

COMMENTS:

RELINQUISHED BY: 1.

Signature: [signature] Time: 0930

Printed Name: M. Beauparlant Date: 4-1-4

Company: Biotech

See Reverse side (Force Majeure)

RECEIVED BY: 1.

Signature: Time:

Printed Name: Date:

Company:

RELINQUISHED BY: 2.

Signature: Time:

Printed Name: Date:

Company:

RECEIVED BY: (LAB) 2.

Signature: Time: 1540

Printed Name: Date: 4/1/04

Pinnacle Laboratories Inc.

entered

PINNACLE LABORATORIES

2709-D Pan American Freeway NE
Albuquerque, New Mexico 87107
Phone (505) 344-3777
Fax (505) 344-4413

Pinnacle Lab ID number **404183**
May 17, 2004

BIOTECH REMEDIATION
501 AIRPORT DRIVE SUITE 104
FARMINGTON, NM 87401

Project Name AIRSTRIPPER
Project Number 810

Attention: TERRY GRIFFIN

On 04/28/04 Pinnacle Laboratories Inc., (ADHS License No. AZ0643), received a request to analyze **aqueous** samples. The samples were analyzed with EPA methodology or equivalent methods. The results of these analyses and the quality control data, which follow each set of analyses, are enclosed.

If you have any questions or comments, please do not hesitate to contact us at (505) 344-3777.

H. Mitchell Rubenstein, Ph.D.
General Manager, Pinnacle Laboratories, Inc.

MR: jt

Enclosure

PINNACLE LABORATORIES

2709-D Pan American Freeway NE
Albuquerque, New Mexico 87107
Phone (505) 344-3777
Fax (505) 344-4413

CLIENT	: BIOTECH REMEDIATION	PINNACLE ID	: 404183
PROJECT #	: 810	DATE RECEIVED	: 04/28/04
PROJECT NAME	: AIRSTRIPPER	REPORT DATE	: 05/17/04

PINNACLE ID #	CLIENT DESCRIPTION	MATRIX	DATE COLLECTED
404183 - 01	AIRSTRIPPER-INFLUENT	AQUEOUS	04/28/04
404183 - 02	AIRSTRIPPER-EFFLUENT	AQUEOUS	04/28/04

PINNACLE LABORATORIES

2709-D Pan American Freeway NE
Albuquerque, New Mexico 87107
Phone (505) 344-3777
Fax (505) 344-4413

GAS CHROMATOGRAPHY RESULTS

TEST : EPA 8021B MODIFIED / 8015B GRO
CLIENT : BIOTECH REMEDIATION
PROJECT # : 810
PROJECT NAME : AIRSTRIPPER

PINNACLE I.D. : 404183
ANALYST : BP

SAMPLE I.D. #	CLIENT I.D.	MATRIX	DATE SAMPLED	DATE EXTRACTED	DATE ANALYZED	DIL. FACTOR
01	AIRSTRIPPER-INFLUENT	AQUEOUS	04/28/04	NA	05/03/04	10
02	AIRSTRIPPER-EFFLUENT	AQUEOUS	04/28/04	NA	05/03/04	1

PARAMETER	DET. LIMIT	UNITS	AIRSTRIPPER-INFLUENT	AIRSTRIPPER-EFFLUENT
FUEL HYDROCARBONS	**0.10**	**MG/L**	**8.2**	< 0.10
HYDROCARBON RANGE			**C6-C10**	C6-C10
HYDROCARBONS QUANTITATED USING			**GASOLINE**	GASOLINE
BENZENE	**0.5**	**UG/L**	**440**	< 0.5
TOLUENE	**0.5**	**UG/L**	**700**	**0.6**
ETHYLBENZENE	**0.5**	**UG/L**	**340**	< 0.5
TOTAL XYLENES	**1.0**	**UG/L**	**880**	**1.6**
METHYL-t-BUTYL ETHER	**2.5**	**UG/L**	**82**	< 2.5
SURROGATE:				
BROMOFLUOROBENZENE (%)			97	100
SURROGATE LIMITS	(80 - 120)			

CHEMIST NOTES:
N/A

PINNACLE LABORATORIES

2709-D Pan American Freeway NE
Albuquerque, New Mexico 87107
Phone (505) 344-3777
Fax (505) 344-4413

GAS CHROMATOGRAPHY RESULTS
REAGENT BLANK

TEST	: EPA 8021B MODIFIED / 8015B GRO	PINNACLE I.D.	: 404183
BLANK I.D.	: 050204	DATE EXTRACTED	: N/A
CLIENT	: BIOTECH REMEDIATION	DATE ANALYZED	: 05/02/04
PROJECT #	: 810	SAMPLE MATRIX	: AQUEOUS
PROJECT NAME	: AIRSTRIPPER	ANALYST	: BP

PARAMETER	UNITS	
FUEL HYDROCARBONS	MG/L	<0.10
HYDROCARBON RANGE		C6-C10
HYDROCARBONS QUANTITATED USING		GASOLINE
BENZENE	UG/L	<0.5
TOLUENE	UG/L	<0.5
ETHYLBENZENE	UG/L	<0.5
TOTAL XYLENES	UG/L	<1.0
METHYL-t-BUTYL ETHER	UG/L	<2.5
SURROGATE:		
BROMOFLUOROBENZENE (%)		100
SURROGATE LIMITS	(80 - 120)	

CHEMIST NOTES:
N/A

PINNACLE LABORATORIES

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GAS CHROMATOGRAPHY QUALITY CONTROL
LCS/LCSD

TEST	: EPA 8015B GRO	PINNACLE I.D.	: 404183
BATCH #	: 050204	DATE EXTRACTED	: N/A
CLIENT	: BIOTECH REMEDIATION	DATE ANALYZED	: 05/02/04
PROJECT #	: 810	SAMPLE MATRIX	: AQUEOUS
PROJECT NAME	: AIRSTRIPPER	UNITS	: MG/L

PARAMETER	SAMPLE RESULT	CONC SPIKE	SPIKED SAMPLE	% REC	DUP SPIKE	DUP % REC	RPD	REC LIMITS	RPD LIMITS
FUEL HYDROCARBONS	<0.10	1.00	1.04	104	1.03	103	1	(70 - 130)	20
HYDROCARBON RANGE		C6-C10							

HYDROCARBONS QUANTITATED USING GASOLINE

CHEMIST NOTES:
N/A

$$\frac{\text{(Spike Sample Result - Sample Result)}}{\text{Spike Concentration}} \times 100$$

$$\text{RPD (Relative Percent Difference)} = \frac{\text{(Sample Result - Duplicate Result)}}{\text{Average Result}} \times 100$$

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GAS CHROMATOGRAPHY QUALITY CONTROL
LCS/LCSD

TEST	: EPA 8021B MODIFIED	PINNACLE I.D.	: 404183
BATCH #	: 050204	DATE EXTRACTED	: N/A
CLIENT	: BIOTECH REMEDIATION	DATE ANALYZED	: 05/02/04
PROJECT #	: 810	SAMPLE MATRIX	: AQUEOUS
PROJECT NAME	: AIRSTRIPPER	UNITS	: UG/L

PARAMETER	SAMPLE RESULT	CONC SPIKE	SPIKED SAMPLE	% REC	DUP SPIKE	DUP % REC	RPD	REC LIMITS	RPD LIMITS
BENZENE	<0.5	20.0	20.4	102	20.5	103	0	(80 - 120)	20
TOLUENE	<0.5	20.0	20.1	101	20.1	101	0	(80 - 120)	20
ETHYLBENZENE	<0.5	20.0	20.8	104	20.6	103	1	(80 - 120)	20
TOTAL XYLENES	<1.0	60.0	60.4	101	60.8	101	1	(80 - 120)	20
METHYL-t-BUTYL ETHER	<2.5	20.0	19.0	95	19.4	97	2	(70 - 133)	20

CHEMIST NOTES:
N/A

$$\%\ \text{Recovery} = \frac{(\text{Spike Sample Result} - \text{Sample Result})}{\text{Spike Concentration}} \times 100$$

$$\text{RPD (Relative Percent Difference)} = \frac{(\text{Sample Result} - \text{Duplicate Result})}{\text{Average Result}} \times 100$$

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GAS CHROMATOGRAPHY QUALITY CONTROL
MS/MSD

TEST	: EPA 8015B GRO	PINNACLE I.D.	: 404183
MSMSD #	: 404149-27	DATE EXTRACTED	: N/A
CLIENT	: BIOTECH REMEDIATION	DATE ANALYZED	: 05/03/04
PROJECT #	: 810	SAMPLE MATRIX	: AQUEOUS
PROJECT NAME	: AIRSTRIPPER	UNITS	: MG/L

PARAMETER	SAMPLE RESULT	CONC SPIKE	SPIKED SAMPLE	% REC	DUP SPIKE	DUP % REC	RPD	REC LIMITS	RPD LIMITS
FUEL HYDROCARBONS	<0.10	1.00	1.03	103	1.00	100	3	(70 - 130)	20
HYDROCARBON RANGE		C6-C10							

HYDROCARBONS QUANTITATED USING GASOLINE

CHEMIST NOTES:
N/A

$$\frac{\text{(Spike Sample Result - Sample Result)}}{\text{Spike Concentration}} \times 100$$

$$\text{RPD (Relative Percent Difference)} = \frac{\text{(Sample Result - Duplicate Result)}}{\text{Average Result}} \times 100$$

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GAS CHROMATOGRAPHY QUALITY CONTROL
MS/MSD

TEST	: EPA 8021B MODIFIED	PINNACLE I.D.	: 404183
MSMSD #	: 404149-27	DATE EXTRACTED	: N/A
CLIENT	: BIOTECH REMEDIATION	DATE ANALYZED	: 05/03/04
PROJECT #	: 810	SAMPLE MATRIX	: AQUEOUS
PROJECT NAME	: AIRSTRIPPER	UNITS	: UG/L

PARAMETER	SAMPLE RESULT	CONC SPIKE	SPIKED SAMPLE	% REC	DUP SPIKE	DUP % REC	RPD	REC LIMITS	RPD LIMITS
BENZENE	0.9	20.0	21.3	102	21.1	101	1	(80 - 120)	20
TOLUENE	<0.5	20.0	20.5	103	20.2	101	1	(80 - 120)	20
ETHYLBENZENE	<0.5	20.0	20.7	104	20.6	103	0	(80 - 120)	20
TOTAL XYLENES	<1.0	60.0	61.2	102	60.7	101	1	(80 - 120)	20
METHYL-t-BUTYL ETHER	<2.5	20.0	21.3	107	20.0	100	6	(70 - 133)	20

CHEMIST NOTES:
N/A

$$\% \text{ Recovery} = \frac{(\text{Spike Sample Result} - \text{Sample Result})}{\text{Spike Concentration}} \times 100$$

$$\text{RPD (Relative Percent Difference)} = \frac{(\text{Sample Result} - \text{Duplicate Result})}{\text{Average Result}} \times 100$$

Pinnacle Laboratories Inc.

CHAIN OF CUSTODY

DATE: 4-28-4 PAGE: 1 OF 1

PLLAccession #: 704185

SHADED AREAS ARE FOR LAB USE ONLY

PLEASE FILL THIS FORM IN COMPLETELY.

PROJECT MANAGER: Terry Griffin

COMPANY: Biotech Remediation Inc.

ADDRESS: 501 Airport Dr. Suite 104
Farmington, NM. 87401

PHONE:

FAX:

BILL TO:

COMPANY:

ADDRESS:

SAMPLE ID	DATE	TIME	MATRIX	LAB ID	# CONTAINERS
AirStripper - Influent	4-28-4	0922	H_2O		3
AirStripper - Effluent	"	0928	"		3

ANALYSIS REQUEST

Petroleum Hydrocarbons (418.1) TRPH	(MOD.8015) Diesel/Direct Inject		(M8015) Gas/Purge & Trap	8021 (BTEX)/8015 (Gasoline) MTBE	8021 (BTEX) ☐MTBE ☐TMB ☐PCE	8021 (TCL)	8021 (EDX)	8021 (HALO)	8021 (CUST)	504.1 EDB ☐/DBCP ☐		8260 (TCL) Volatile Organics	8260 (Full) Volatile Organics ☐PBMS	8260 (CUST) Volatile Organics	8260 (Landfill) Volatile Organics	Pesticides/PCB (608/8081/8082)	Herbicides (615/8151)	Base/Neutral/Acid Compounds GC/MS (625/8270)	Polynuclear Aromatics (610/8310/8270-SIMS)	General Chemistry:		Priority Pollutant Metals (13)	Target Analyte List Metals (23)	RCRA Metals (8)	RCRA Metals by TCLP (Method1311)	Metals:	
				1																						
				1																						

WEEKEND ANALYSES MAY RESULT IN AN ADDITIONAL SURCHARGE - PLEASE INQUIRE.

PROJECT INFORMATION

PROJ. NO.: 810

PROJ. NAME: AirStripper

P.O. NO.:

SHIPPED VIA: Bus

LAB USE ONLY SAMPLE RECEIPT

NO. CONTAINERS	6 / 6
CUSTODY SEALS	N / N
RECEIVED INTACT	Y / Y
BLUE ICE (OLD)	ICE / ICE

PRIOR AUTHORIZATION IS REQUIRED FOR RUSH PROJECTS

(RUSH) ☐24hr* ☐48hr* ☐72hr* ☐ 1 WEEK (NORMAL) ☐
*NOT AVAILABLE ON ALL ANALYSES

CERTIFICATION REQUIRED ☐ NM ☐ SDWA ☐ AZ ☐ OTHER

METHANOL PRESERVATION ☐ METALS ☐ TOTAL ☐ DISSOLVED

COMMENTS:

RELINQUISHED BY: 1

Signature: [signature] Time: 1000

Printed Name: Mike Beauregard Date: 4-28-4

Company: Biotech

See Reverse side (Force Majeure)

RECEIVED BY:

Signature: Time:

Printed Name: Date:

Company:

RELINQUISHED BY: 2

Signature: Time:

Printed Name: Date:

Company:

RECEIVED BY: (LAB) 2

Signature: [signature] Time: 1525

Printed Name: [signature] Date: 4/28/04

Company: Pinnacle Laboratories Inc.

entered 810

2709-D Pan American Freeway NE
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Pinnacle Lab ID number **405161**
June 17, 2004

BIOTECH REMEDIATION
501 AIRPORT DRIVE SUITE 104
FARMINGTON, NM 87401

Project Name THRIFTWAY REFINERY
Project Number 810

Attention: TERRY GRIFFIN

On 05/26/04 Pinnacle Laboratories Inc., (ADHS License No. AZ0643), received a request to analyze **aqueous** samples. The samples were analyzed with EPA methodology or equivalent methods. The results of these analyses and the quality control data, which follow each set of analyses, are enclosed.

If you have any questions or comments, please do not hesitate to contact us at (505) 344-3777.

H. Mitchell Rubenstein, Ph.D.
General Manager, Pinnacle Laboratories, Inc.

MR: jt

Enclosure

PINNACLE LABORATORIES

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CLIENT	: BIOTECH REMEDIATION	PINNACLE ID	: 405161
PROJECT #	: 810	DATE RECEIVED	: 05/26/04
PROJECT NAME	: THRIFTWAY REFINERY	REPORT DATE	: 06/17/04

PINNACLE ID #	CLIENT DESCRIPTION	MATRIX	DATE COLLECTED
05161 - 01	MW-18	AQUEOUS	05/25/04
05161 - 02	MW-19	AQUEOUS	05/25/04
05161 - 03	MW-5	AQUEOUS	05/25/04
05161 - 04	MW-4	AQUEOUS	05/25/04
05161 - 05	MW-6	AQUEOUS	05/25/04
05161 - 06	MW-7	AQUEOUS	05/25/04
05161 - 07	MW-20	AQUEOUS	05/25/04
05161 - 08	MW-21	AQUEOUS	05/25/04
05161 - 09	MW-22	AQUEOUS	05/25/04
05161 - 10	MW-9	AQUEOUS	05/25/04
05161 - 11	MW-10	AQUEOUS	05/25/04
05161 - 12	MW-11	AQUEOUS	05/25/04
05161 - 13	MW-15	AQUEOUS	05/25/04
05161 - 14	MW-14	AQUEOUS	05/25/04
05161 - 15	MW-12	AQUEOUS	05/25/04
05161 - 16	AIR STRIPPER INFLUENT	AQUEOUS	05/25/04
05161 - 17	AIR STRIPPER EFFLUENT	AQUEOUS	05/25/04
05161 - 18	TRIP BLANK	AQUEOUS	05/18/04

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GAS CHROMATOGRAPHY RESULTS

TEST : EPA 8021B MODIFIED / 8015B GRO
CLIENT : BIOTECH REMEDIATION
PROJECT # : 810
PROJECT NAME : THRIFTWAY REFINERY

PINNACLE I.D. : 405161
ANALYST : BP/GAB

SAMPLE ID. #	CLIENT I.D.	MATRIX	DATE SAMPLED	DATE EXTRACTED	DATE ANALYZED	DIL. FACTOR
01	MW-18	AQUEOUS	05/25/04	NA	06/03/04	1
02	MW-19	AQUEOUS	05/25/04	NA	06/03/04	1
03	MW-5	AQUEOUS	05/25/04	NA	06/03/04	1

PARAMETER	DET. LIMIT	UNITS	MW-18	MW-19	MW-5
FUEL HYDROCARBONS	**0.10**	**MG/L**	**0.16**	**0.25**	**0.14**
HYDROCARBON RANGE			**C6-C10**	**C6-C10**	**C6-C10**
HYDROCARBONS QUANTITATED USING			**GASOLINE**	**GASOLINE**	**GASOLINE**
BENZENE	**0.5**	**UG/L**	**2.6**	< 0.5	**1.8**
TOLUENE	**0.5**	**UG/L**	< 0.5	< 0.5	**0.5**
ETHYLBENZENE	0.5	UG/L	< 0.5	< 0.5	< 0.5
TOTAL XYLENES	**1.0**	**UG/L**	**1.2**	< 1.0	< 1.0
METHYL-t-BUTYL ETHER	**2.5**	**UG/L**	**32**	**180**	**36**
SURROGATE:					
BROMOFLUOROBENZENE (%)			98	100	99
SURROGATE LIMITS	(80 - 120)				

CHEMIST NOTES:
N/A

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GAS CHROMATOGRAPHY RESULTS

TEST : EPA 8021B MODIFIED / 8015B GRO
CLIENT : BIOTECH REMEDIATION
PROJECT # : 810
PROJECT NAME : THRIFTWAY REFINERY

PINNACLE I.D. : 405161
ANALYST : BP/GAB

SAMPLE ID. #	CLIENT I.D.	MATRIX	DATE SAMPLED	DATE EXTRACTED	DATE ANALYZED	DIL. FACTOR
04	MW-4	AQUEOUS	05/25/04	NA	06/03/04	1
05	MW-6	AQUEOUS	05/25/04	NA	06/03/04	1
06	MW-7	AQUEOUS	05/25/04	NA	06/03/04	1

PARAMETER	DET. LIMIT	UNITS	MW-4	MW-6	MW-7
FUEL HYDROCARBONS	**0.10**	**MG/L**	**0.20**	**0.11**	**0.25**
HYDROCARBON RANGE			**C6-C10**	**C6-C10**	**C6-C10**
HYDROCARBONS QUANTITATED USING			**GASOLINE**	**GASOLINE**	**GASOLINE**
BENZENE	**0.5**	**UG/L**	**3.9**	< 0.5	< 0.5
TOLUENE	0.5	UG/L	< 0.5	**1.0**	< 0.5
ETHYLBENZENE	0.5	UG/L	< 0.5	< 0.5	< 0.5
TOTAL XYLENES	**1.0**	**UG/L**	**1.8**	< 1.0	< 1.0
METHYL-t-BUTYL ETHER	**2.5**	**UG/L**	**26**	**28**	**190**
SURROGATE:					
BROMOFLUOROBENZENE (%)			97	99	102
SURROGATE LIMITS	(80 - 120)				

CHEMIST NOTES:
N/A

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GAS CHROMATOGRAPHY RESULTS

TEST : EPA 8021B MODIFIED / 8015B GRO
CLIENT : BIOTECH REMEDIATION — PINNACLE I.D. : 405161
PROJECT # : 810 — ANALYST : BP/GAB
PROJECT NAME : THRIFTWAY REFINERY

SAMPLE ID. #	CLIENT I.D.	MATRIX	DATE SAMPLED	DATE EXTRACTED	DATE ANALYZED	DIL. FACTOR
07	MW-20	AQUEOUS	05/25/04	NA	06/03/04	1
08	MW-21	AQUEOUS	05/25/04	NA	06/03/04	1
09	MW-22	AQUEOUS	05/25/04	NA	06/03/04	1

PARAMETER	DET. LIMIT	UNITS	MW-20	MW-21	MW-22
FUEL HYDROCARBONS	**0.10**	**MG/L**	**0.82**	**0.11**	**0.11**
HYDROCARBON RANGE			**C6-C10**	**C6-C10**	**C6-C10**
HYDROCARBONS QUANTITATED USING			**GASOLINE**	**GASOLINE**	**GASOLINE**
BENZENE	**0.5**	**UG/L**	**1.9**	< 0.5	< 0.5
TOLUENE	0.5	UG/L	< 0.5	< 0.5	< 0.5
ETHYLBENZENE	**0.5**	**UG/L**	**3.3**	< 0.5	< 0.5
TOTAL XYLENES	**1.0**	**UG/L**	**7.6**	< 1.0	< 1.0
METHYL-t-BUTYL ETHER	**2.5**	**UG/L**	**400 - D5**	**18**	**13**
SURROGATE:					
BROMOFLUOROBENZENE (%)			103	99	100
SURROGATE LIMITS	(80 - 120)				

CHEMIST NOTES:
D5 = Reported from a 5X dilution run on 6-3-04.

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GAS CHROMATOGRAPHY RESULTS

TEST : EPA 8021B MODIFIED / 8015B GRO
CLIENT : BIOTECH REMEDIATION — PINNACLE I.D. : 405161
PROJECT # : 810 — ANALYST : BP/GAB
PROJECT NAME : THRIFTWAY REFINERY

SAMPLE ID. #	CLIENT I.D.	MATRIX	DATE SAMPLED	DATE EXTRACTED	DATE ANALYZED	DIL. FACTOR
10	MW-9	AQUEOUS	05/25/04	NA	06/04/04	1
11	MW-10	AQUEOUS	05/25/04	NA	06/04/04	1
12	MW-11	AQUEOUS	05/25/04	NA	06/04/04	1

PARAMETER	DET. LIMIT	UNITS	MW-9	MW-10	MW-11
FUEL HYDROCARBONS	**0.10**	**MG/L**	< 0.10	< 0.10	**0.12**
HYDROCARBON RANGE			C6-C10	C6-C10	**C6-C10**
HYDROCARBONS QUANTITATED USING			GASOLINE	GASOLINE	**GASOLINE**
BENZENE	0.5	UG/L	< 0.5	< 0.5	< 0.5
TOLUENE	**0.5**	**UG/L**	< 0.5	< 0.5	**1.6**
ETHYLBENZENE	**0.5**	**UG/L**	< 0.5	< 0.5	**0.7**
TOTAL XYLENES	**1.0**	**UG/L**	< 1.0	< 1.0	**4.1**
METHYL-t-BUTYL ETHER	2.5	UG/L	< 2.5	< 2.5	< 2.5
SURROGATE:					
BROMOFLUOROBENZENE (%)			100	97	97
SURROGATE LIMITS	(80 - 120)				

CHEMIST NOTES:
N/A

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GAS CHROMATOGRAPHY RESULTS

TEST : EPA 8021B MODIFIED / 8015B GRO
CLIENT : BIOTECH REMEDIATION — PINNACLE I.D. : 405161
PROJECT # : 810 — ANALYST : BP/GAB
PROJECT NAME : THRIFTWAY REFINERY

SAMPLE ID. #	CLIENT I.D.	MATRIX	DATE SAMPLED	DATE EXTRACTED	DATE ANALYZED	DIL. FACTOR
13	MW-15	AQUEOUS	05/25/04	NA	06/04/04	1
14	MW-14	AQUEOUS	05/25/04	NA	06/04/04	1
15	MW-12	AQUEOUS	05/25/04	NA	06/04/04	1

PARAMETER	DET. LIMIT	UNITS	MW-15	MW-14	MW-12
FUEL HYDROCARBONS	0.10	MG/L	< 0.10	< 0.10	**0.88**
HYDROCARBON RANGE			C6-C10	C6-C10	**C6-C10**
HYDROCARBONS QUANTITATED USING			GASOLINE	GASOLINE	**GASOLINE**
BENZENE	0.5	UG/L	< 0.5	< 0.5	**49**
TOLUENE	0.5	UG/L	< 0.5	< 0.5	**2.4**
ETHYLBENZENE	0.5	UG/L	< 0.5	< 0.5	**46**
TOTAL XYLENES	1.0	UG/L	< 1.0	< 1.0	**63**
METHYL-t-BUTYL ETHER	2.5	UG/L	< 2.5	< 2.5	**62**
SURROGATE:					
BROMOFLUOROBENZENE (%)			96	103	107
SURROGATE LIMITS	(80 - 120)				

CHEMIST NOTES:
N/A

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GAS CHROMATOGRAPHY RESULTS

TEST : EPA 8021B MODIFIED / 8015B GRO
CLIENT : BIOTECH REMEDIATION — PINNACLE I.D. : 405161
PROJECT # : 810 — ANALYST : BP/GAB
PROJECT NAME : THRIFTWAY REFINERY

SAMPLE ID. #	CLIENT I.D.	MATRIX	DATE SAMPLED	DATE EXTRACTED	DATE ANALYZED	DIL. FACTOR
16	AIR STRIPPER INFLUENT	AQUEOUS	05/25/04	NA	06/07/04	10
17	AIR STRIPPER EFFLUENT	AQUEOUS	05/25/04	NA	06/07/04	1
18	TRIP BLANK	AQUEOUS	05/18/04	NA	06/04/04	1

PARAMETER	DET. LIMIT	UNITS	AIR STRIPPER INFLUENT	AIR STRIPPER EFFLUENT	TRIP BLANK
FUEL HYDROCARBONS	**0.10**	**MG/L**	**5.9**	**0.12**	< 0.10
HYDROCARBON RANGE			**C6-C10**	**C6-C10**	C6-C10
HYDROCARBONS QUANTITATED USING			**GASOLINE**	**GASOLINE**	GASOLINE
BENZENE	**0.5**	**UG/L**	**640**	**1.5**	< 0.5
TOLUENE	**0.5**	**UG/L**	**150**	**4.6**	< 0.5
ETHYLBENZENE	**0.5**	**UG/L**	**270**	**1.3**	< 0.5
TOTAL XYLENES	**1.0**	**UG/L**	**380**	**4.4**	< 1.0
METHYL-t-BUTYL ETHER	**2.5**	**UG/L**	**130**	< 2.5	< 2.5
SURROGATE:					
BROMOFLUOROBENZENE (%)			98	98	99
SURROGATE LIMITS	(80 - 120)				

CHEMIST NOTES:
N/A

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GAS CHROMATOGRAPHY RESULTS
REAGENT BLANK

TEST	: EPA 8021B MODIFIED / 8015B GRO	PINNACLE I.D.	: 405161
BLANK I.D.	: 060304	DATE EXTRACTED	: N/A
CLIENT	: BIOTECH REMEDIATION	DATE ANALYZED	: 06/03/04
PROJECT #	: 810	SAMPLE MATRIX	: AQUEOUS
PROJECT NAME	: THRIFTWAY REFINERY	ANALYST	: BP/GAB

PARAMETER	UNITS	
FUEL HYDROCARBONS	MG/L	<0.10
HYDROCARBON RANGE		C6-C10
HYDROCARBONS QUANTITATED USING		GASOLINE
BENZENE	UG/L	<0.5
TOLUENE	UG/L	<0.5
ETHYLBENZENE	UG/L	<0.5
TOTAL XYLENES	UG/L	<1.0
METHYL-t-BUTYL ETHER	UG/L	<2.5
SURROGATE:		
BROMOFLUOROBENZENE (%)		101
SURROGATE LIMITS (80 - 120)		

CHEMIST NOTES:
N/A

PINNACLE LABORATORIES

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GAS CHROMATOGRAPHY RESULTS
REAGENT BLANK

TEST	: EPA 8021B MODIFIED / 8015B GRO	PINNACLE I.D.	: 405161
BLANK I.D.	: 060704	DATE EXTRACTED	: N/A
CLIENT	: BIOTECH REMEDIATION	DATE ANALYZED	: 06/07/04
PROJECT #	: 810	SAMPLE MATRIX	: AQUEOUS
PROJECT NAME	: THRIFTWAY REFINERY	ANALYST	: BP/GAB

PARAMETER	UNITS	
FUEL HYDROCARBONS	MG/L	<0.10
HYDROCARBON RANGE		C6-C10
HYDROCARBONS QUANTITATED USING		GASOLINE
BENZENE	UG/L	<0.5
TOLUENE	UG/L	<0.5
ETHYLBENZENE	UG/L	<0.5
TOTAL XYLENES	UG/L	<1.0
METHYL-t-BUTYL ETHER	UG/L	<2.5
SURROGATE:		
BROMOFLUOROBENZENE (%)		101
SURROGATE LIMITS (80 - 120)		

CHEMIST NOTES:
N/A

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Phone (505) 344-3777
Fax (505) 344-4413

GAS CHROMATOGRAPHY RESULTS
REAGENT BLANK

TEST	: EPA 8021B MODIFIED / 8015B GRO	PINNACLE I.D.	: 405161
BLANK I.D.	: 060404	DATE EXTRACTED	: N/A
CLIENT	: BIOTECH REMEDIATION	DATE ANALYZED	: 06/04/04
PROJECT #	: 810	SAMPLE MATRIX	: AQUEOUS
PROJECT NAME	: THRIFTWAY REFINERY	ANALYST	: BP/GAB

PARAMETER	UNITS	
FUEL HYDROCARBONS	MG/L	0.11
HYDROCARBON RANGE		C6-C10
HYDROCARBONS QUANTITATED USING		GASOLINE
BENZENE	UG/L	<0.5
TOLUENE	UG/L	<0.5
ETHYLBENZENE	UG/L	<0.5
TOTAL XYLENES	UG/L	<1.0
METHYL-t-BUTYL ETHER	UG/L	<2.5
SURROGATE:		
BROMOFLUOROBENZENE (%)		100
SURROGATE LIMITS (80 - 120)		

CHEMIST NOTES:
Subsequent Trip Blank is BDL, indicating system was in control for sample analysis. Carryover is suspected.

PINNACLE LABORATORIES

2709-D Pan American Freeway NE
Albuquerque, New Mexico 87107
Phone (505) 344-3777
Fax (505) 344-4413

GAS CHROMATOGRAPHY QUALITY CONTROL
LCS/LCSD

TEST	: EPA 8015B GRO	PINNACLE I.D.	: 405161
BATCH #	: 060304	DATE EXTRACTED	: N/A
CLIENT	: BIOTECH REMEDIATION	DATE ANALYZED	: 06/03/04
PROJECT #	: 810	SAMPLE MATRIX	: AQUEOUS
PROJECT NAME	: THRIFTWAY REFINERY	UNITS	: MG/L

PARAMETER	SAMPLE RESULT	CONC SPIKE	SPIKED SAMPLE	% REC	DUP SPIKE	DUP % REC	RPD	REC LIMITS	RPD LIMITS
FUEL HYDROCARBONS	<0.10	1.00	0.966	97	0.948	95	2	(70 - 130)	20
HYDROCARBON RANGE		C6-C10							
HYDROCARBONS QUANTITATED USING	GASOLINE								

CHEMIST NOTES:
N/A

$$\% \text{ Recovery} = \frac{(\text{Spike Sample Result} - \text{Sample Result})}{\text{Spike Concentration}} \times 100$$

$$\text{RPD (Relative Percent Difference)} = \frac{(\text{Sample Result} - \text{Duplicate Result})}{\text{Average Result}} \times 100$$

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GAS CHROMATOGRAPHY QUALITY CONTROL
LCS/LCSD

TEST	: EPA 8015B GRO	PINNACLE I.D.	: 405161
BATCH #	: 060704	DATE EXTRACTED	: N/A
CLIENT	: BIOTECH REMEDIATION	DATE ANALYZED	: 06/07/04
PROJECT #	: 810	SAMPLE MATRIX	: AQUEOUS
PROJECT NAME	: THRIFTWAY REFINERY	UNITS	: MG/L

PARAMETER	SAMPLE RESULT	CONC SPIKE	SPIKED SAMPLE	% REC	DUP SPIKE	DUP % REC	RPD	REC LIMITS	RPD LIMITS
FUEL HYDROCARBONS	<0.10	1.00	0.958	96	0.903	90	6	(70 - 130)	20
HYDROCARBON RANGE		C6-C10							

HYDROCARBONS QUANTITATED USING GASOLINE

CHEMIST NOTES:
N/A

$$\% \text{ Recovery} = \frac{(\text{Spike Sample Result} - \text{Sample Result})}{\text{Spike Concentration}} \times 100$$

$$\text{RPD (Relative Percent Difference)} = \frac{(\text{Sample Result} - \text{Duplicate Result})}{\text{Average Result}} \times 100$$

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Fax (505) 344-4413

GAS CHROMATOGRAPHY QUALITY CONTROL
LCS/LCSD

TEST	: EPA 8015B GRO	PINNACLE I.D.	: 405161
BATCH #	: 060404	DATE EXTRACTED	: N/A
CLIENT	: BIOTECH REMEDIATION	DATE ANALYZED	: 06/04/04
PROJECT #	: 810	SAMPLE MATRIX	: AQUEOUS
PROJECT NAME	: THRIFTWAY REFINERY	UNITS	: MG/L

PARAMETER	SAMPLE RESULT	CONC SPIKE	SPIKED SAMPLE	% REC	DUP SPIKE	DUP % REC	RPD	REC LIMITS	RPD LIMITS
FUEL HYDROCARBONS	<0.10	1.00	0.930	93	0.913	91	2	(70 - 130)	20
HYDROCARBON RANGE		C6-C10							
HYDROCARBONS QUANTITATED USING	GASOLINE								

CHEMIST NOTES:
N/A

$$\% \text{ Recovery} = \frac{(\text{Spike Sample Result} - \text{Sample Result})}{\text{Spike Concentration}} \times 100$$

$$\text{RPD (Relative Percent Difference)} = \frac{(\text{Sample Result} - \text{Duplicate Result})}{\text{Average Result}} \times 100$$

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GAS CHROMATOGRAPHY QUALITY CONTROL
LCS/LCSD

TEST	: EPA 8021B MODIFIED	PINNACLE I.D.	: 405161
BATCH #	: 060304	DATE EXTRACTED	: N/A
CLIENT	: BIOTECH REMEDIATION	DATE ANALYZED	: 06/03/04
PROJECT #	: 810	SAMPLE MATRIX	: AQUEOUS
PROJECT NAME	: THRIFTWAY REFINERY	UNITS	: UG/L

PARAMETER	SAMPLE RESULT	CONC SPIKE	SPIKED SAMPLE	% REC	DUP SPIKE	DUP % REC	RPD	REC LIMITS	RPD LIMITS
BENZENE	<0.5	20.0	20.3	102	20.2	101	0	(80 - 120)	20
TOLUENE	<0.5	20.0	20.2	101	20.0	100	1	(80 - 120)	20
ETHYLBENZENE	<0.5	20.0	20.8	104	20.4	102	2	(80 - 120)	20
TOTAL XYLENES	<1.0	60.0	61.1	102	60.4	101	1	(80 - 120)	20
METHYL-t-BUTYL ETHER	<2.5	20.0	18.4	92	17.9	90	3	(70 - 133)	20

CHEMIST NOTES:
N/A

$$\% \text{ Recovery} = \frac{(\text{Spike Sample Result} - \text{Sample Result})}{\text{Spike Concentration}} \times 100$$

$$\text{RPD (Relative Percent Difference)} = \frac{(\text{Sample Result} - \text{Duplicate Result})}{\text{Average Result}} \times 100$$

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GAS CHROMATOGRAPHY QUALITY CONTROL
LCS/LCSD

TEST	: EPA 8021B MODIFIED	PINNACLE I.D.	: 405161
BATCH #	: 060704	DATE EXTRACTED	: N/A
CLIENT	: BIOTECH REMEDIATION	DATE ANALYZED	: 06/07/04
PROJECT #	: 810	SAMPLE MATRIX	: AQUEOUS
PROJECT NAME	: THRIFTWAY REFINERY	UNITS	: UG/L

PARAMETER	SAMPLE RESULT	CONC SPIKE	SPIKED SAMPLE	% REC	DUP SPIKE	DUP % REC	RPD	REC LIMITS	RPD LIMITS
BENZENE	<0.5	20.0	21.0	105	20.6	103	2	(80 - 120)	20
TOLUENE	<0.5	20.0	20.6	103	20.3	102	1	(80 - 120)	20
ETHYLBENZENE	<0.5	20.0	21.0	105	20.8	104	1	(80 - 120)	20
TOTAL XYLENES	<1.0	60.0	62.1	104	61.4	102	1	(80 - 120)	20
METHYL-t-BUTYL ETHER	<2.5	20.0	18.5	93	17.7	89	5	(70 - 133)	20

CHEMIST NOTES:
N/A

$$\%\ \text{Recovery} = \frac{(\text{Spike Sample Result} - \text{Sample Result})}{\text{Spike Concentration}} \times 100$$

$$\text{RPD (Relative Percent Difference)} = \frac{(\text{Sample Result} - \text{Duplicate Result})}{\text{Average Result}} \times 100$$

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GAS CHROMATOGRAPHY QUALITY CONTROL
LCS/LCSD

TEST	: EPA 8021B MODIFIED	PINNACLE I.D.	: 405161
BATCH #	: 060404	DATE EXTRACTED	: N/A
CLIENT	: BIOTECH REMEDIATION	DATE ANALYZED	: 06/04/04
PROJECT #	: 810	SAMPLE MATRIX	: AQUEOUS
PROJECT NAME	: THRIFTWAY REFINERY	UNITS	: UG/L

PARAMETER	SAMPLE RESULT	CONC SPIKE	SPIKED SAMPLE	% REC	DUP SPIKE	DUP % REC	RPD	REC LIMITS	RPD LIMITS
BENZENE	<0.5	20.0	20.8	104	20.6	103	1	(80 - 120)	20
TOLUENE	<0.5	20.0	20.6	103	20.3	102	1	(80 - 120)	20
ETHYLBENZENE	<0.5	20.0	21.0	105	20.8	104	1	(80 - 120)	20
TOTAL XYLENES	<1.0	60.0	62.3	104	61.3	102	2	(80 - 120)	20
METHYL-t-BUTYL ETHER	<2.5	20.0	19.0	95	19.5	98	3	(70 - 133)	20

CHEMIST NOTES:
N/A

$$\%\ \text{Recovery} = \frac{(\text{Spike Sample Result} - \text{Sample Result})}{\text{Spike Concentration}} \times 100$$

$$\text{RPD (Relative Percent Difference)} = \frac{(\text{Sample Result} - \text{Duplicate Result})}{\text{Average Result}} \times 100$$

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GAS CHROMATOGRAPHY QUALITY CONTROL
MS/MSD

TEST	: EPA 8015B GRO	PINNACLE I.D.	: 405161
MSMSD #	: 405161-01	DATE EXTRACTED	: N/A
CLIENT	: BIOTECH REMEDIATION	DATE ANALYZED	: 06/03/04
PROJECT #	: 810	SAMPLE MATRIX	: AQUEOUS
PROJECT NAME	: THRIFTWAY REFINERY	UNITS	: MG/L

PARAMETER	SAMPLE RESULT	CONC SPIKE	SPIKED SAMPLE	% REC	DUP SPIKE	DUP % REC	RPD	REC LIMITS	RPD LIMITS
FUEL HYDROCARBONS	0.16	1.00	1.04	88	1.06	90	2	(70 - 130)	20
HYDROCARBON RANGE		C6-C10							
HYDROCARBONS QUANTITATED USING	GASOLINE								

CHEMIST NOTES:
N/A

$$\% \text{ Recovery} = \frac{(\text{Spike Sample Result} - \text{Sample Result})}{\text{Spike Concentration}} \times 100$$

$$\text{RPD (Relative Percent Difference)} = \frac{(\text{Sample Result} - \text{Duplicate Result})}{\text{Average Result}} \times 100$$

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GAS CHROMATOGRAPHY QUALITY CONTROL
MS/MSD

TEST	: EPA 8021B MODIFIED	PINNACLE I.D.	: 405161
MSMSD #	: 405161-01	DATE EXTRACTED	: N/A
CLIENT	: BIOTECH REMEDIATION	DATE ANALYZED	: 06/03/04
PROJECT #	: 810	SAMPLE MATRIX	: AQUEOUS
PROJECT NAME	: THRIFTWAY REFINERY	UNITS	: UG/L

PARAMETER	SAMPLE RESULT	CONC SPIKE	SPIKED SAMPLE	% REC	DUP SPIKE	DUP % REC	RPD	REC LIMITS	RPD LIMITS
BENZENE	2.6	20.0	23.6	105	22.3	99	6	(80 - 120)	20
TOLUENE	<0.5	20.0	20.9	105	19.7	99	6	(80 - 120)	20
ETHYLBENZENE	<0.5	20.0	21.3	107	20.1	101	6	(80 - 120)	20
TOTAL XYLENES	1.2	60.0	63.8	104	60.2	98	6	(80 - 120)	20
METHYL-t-BUTYL ETHER	32	20.0	50.9	95	51.0	95	0	(70 - 133)	20

CHEMIST NOTES:
N/A

$$\% \text{ Recovery} = \frac{(\text{Spike Sample Result} - \text{Sample Result})}{\text{Spike Concentration}} \times 100$$

$$\text{RPD (Relative Percent Difference)} = \frac{(\text{Sample Result} - \text{Duplicate Result})}{\text{Average Result}} \times 100$$

Pinnacle Laboratories Inc.

CHAIN OF CUSTODY

DATE: 5-26-4 PAGE: 1 OF 2

PLI Accession #: 405161

SHADED AREAS ARE FOR LAB USE ONLY

PLEASE FILL THIS FORM IN COMPLETELY.

PROJECT MANAGER: Terry Griffin

COMPANY: Biotech Remediation Inc.

ADDRESS: 501 Airport Dr. Suite 104
Farmington, NM. 87401

PHONE: 505-327-4965

FAX:

BILL TO:

COMPANY:

ADDRESS:

SAMPLE ID	DATE	TIME	MATRIX	LAB #
MW-18	5-25-4	1024	H2O	
MW-19		1046		
MW-5		1101		
MW-4		1127		
MW-6		1143		
MW-7		1155		
MW-20		1909		
MW-21		1426		
MW-22		1444		
MW-9		1511		

ANALYSIS REQUEST

Petroleum Hydrocarbons (418.1) TRPH	
(MOD.8015) Diesel/Direct Inject	
(M8015) Gas/Purge & Trap	
8021 (BTEX)/8015 (Gasoline) MTBE	✓
8021 (BTEX) ☐MTBE ☐TMB ☐PCE	
8021 (TCL)	
8021 (EDX)	
8021 (HALO)	
8021 (CUST)	
504.1 EDB ☐/DBCP ☐	
8260 (TCL) Volatile Organics	
8260 (Full) Volatile Organics ☐PBMS	
8260 (CUST) Volatile Organics	
8260 (Landfill) Volatile Organics	
Pesticides/PCB (608/8081/8082)	
Herbicides (615/8151)	
Base/Neutral/Acid Compounds GC/MS (625/8270)	
Polynuclear Aromatics (610/8310/8270-SIMS)	
General Chemistry:	
Priority Pollutant Metals (13)	
Target Analyte List Metals (23)	
RCRA Metals (8)	
RCRA Metals by TCLP (Method1311)	
Metals:	
NO. OF CONTAINERS	

WEEKEND ANALYSES MAY RESULT IN AN ADDITIONAL SURCHARGE - PLEASE INQUIRE.

PROJECT INFORMATION

PROJ. NO.: 810

PROJ. NAME: Thriftway Refinery

P.O. NO.:

SHIPPED VIA:

SAMPLE RECEIPT

GOOD CONDITION

CUSTODY SEALS

RECEIVED ON ICE

BLUE ICE/ICE

PRIOR AUTHORIZATION IS REQUIRED FOR RUSH PROJECTS

(RUSH) ☐24hr* ☐48hr* ☐72hr* ☐ 1 WEEK (NORMAL) ☐
*NOT AVAILABLE ON ALL ANALYSES

CERTIFICATION REQUIRED ☐ NM ☐ SDWA ☐ AZ ☐ OTHER

METHANOL PRESERVATION ☐ METALS ☐ TOTAL ☐ DISSOLVED

COMMENTS:

Ice present

RELINQUISHED BY: 1

Signature: Time: 0920

Printed Name: Mike Bergman Date: 5-26-4

Company: Biotech

See Reverse side (Force Majeure)

RECEIVED BY: 1

Signature: Time:

Printed Name: Date:

Company:

RELINQUISHED BY: 2

Signature: Time:

Printed Name: Date:

Company:

RECEIVED BY: (LAB) 2

Signature: Time: 1516

Printed Name: Date: 5-26-4

Company: Pinnacle Laboratories Inc.

American Environmental Network (NM), Inc.

CHAIN OF CUSTODY

(Continuation Sheet)

PAGE 2 OF 2

CLIENT: BIOTECH REMEDIATION

P.O. NUMBER

AEN(NM) Accession #: 405161

SAMPLE IDENTIFICATION	LAB NUMBER	DATE/TIME COLLECTED	MATRIX	8015/8021						BTEX EPA 602	CHLORIDE
MW-10		5-25-4 1526	H_2O								
MW-11		1516									
MW-15		1610									
MW-13		1634									
MW-12		1651									
AIR STRIPPER INFLUENT		1700									
AIR STRIPPER EFFLUENT		1705									
TRIP BLANK		5.18.04 1611									

SAMPLES RELINQUISHED BY (SIGNATURE)	DATE AND TIME	SAMPLES RELINQUISHED BY (SIGNATURE)	DATE AND TIME
	5-26-4 0920		
SAMPLES RECEIVED BY (SIGNATURE)	DATE AND TIME		

DISTRIBUTION: White - AEN (NM), Canary - Originator

entered

PINNACLE LABORATORIES

2709-D Pan American Freeway NE
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Pinnacle Lab ID number **407018**
July 13, 2004

BIOTECH REMEDIATION
501 AIRPORT DRIVE SUITE 104
FARMINGTON, NM 87401

Project Name Air Stripper
Project Number 810

Attention: Terry Griffin

On 07/02/04 Pinnacle Laboratories Inc., (ADHS License No. AZ0643), received a request to analyze **aqueous** samples. The samples were analyzed with EPA methodology or equivalent methods. The results of these analyses and the quality control data, which follow each set of analyses, are enclosed.

If you have any questions or comments, please do not hesitate to contact us at (505) 344-3777.

H. Mitchell Rubenstein, Ph.D.
General Manager, Pinnacle Laboratories, Inc.

MR: jt

Enclosure

PINNACLE LABORATORIES

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Phone (505) 344-3777
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CLIENT	: BIOTECH REMEDIATION	PINNACLE ID	: 407018
PROJECT #	: 810	DATE RECEIVED	: 07/02/04
PROJECT NAME	: Air Stripper	REPORT DATE	: 07/13/04

PINNACLE ID #	CLIENT DESCRIPTION	MATRIX	DATE COLLECTED
407018 - 01	Air Stripper (Influent)	AQUEOUS	06/30/04
407018 - 02	Air Stripper (Effluent)	AQUEOUS	06/30/04

PINNACLE LABORATORIES

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GAS CHROMATOGRAPHY RESULTS

TEST : EPA 8021B MODIFIED / 8015B GRO
CLIENT : BIOTECH REMEDIATION — PINNACLE I.D. : 407018
PROJECT # : 810 — ANALYST : GAB
PROJECT NAME : Air Stripper

SAMPLE I.D. #	CLIENT I.D.	MATRIX	DATE SAMPLED	DATE EXTRACTED	DATE ANALYZED	DIL. FACTOR
01	Air Stripper (Influent)	AQUEOUS	06/30/04	NA	07/08/04	10
02	Air Stripper (Effluent)	AQUEOUS	06/30/04	NA	07/08/04	1

PARAMETER	DET. LIMIT	UNITS	Air Stripper (Influent)	Air Stripper (Effluent)
FUEL HYDROCARBONS	**0.10**	**MG/L**	**3.8**	< 0.10
HYDROCARBON RANGE			**C6-C10**	C6-C10
HYDROCARBONS QUANTITATED USING			**GASOLINE**	GASOLINE
BENZENE	**0.5**	**UG/L**	**370**	**0.7**
TOLUENE	**0.5**	**UG/L**	**59**	**0.6**
ETHYLBENZENE	**0.5**	**UG/L**	**210**	**0.7**
TOTAL XYLENES	**1.0**	**UG/L**	**220**	**1.8**
METHYL-t-BUTYL ETHER	**2.5**	**UG/L**	**140**	< 2.5
SURROGATE:				
BROMOFLUOROBENZENE (%)			99	95
SURROGATE LIMITS	(80 - 120)			

CHEMIST NOTES:
N/A

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GAS CHROMATOGRAPHY RESULTS
REAGENT BLANK

TEST	: EPA 8021B MODIFIED / 8015B GRO	PINNACLE I.D.	: 407018
BLANK I.D.	: 070804	DATE EXTRACTED	: N/A
CLIENT	: BIOTECH REMEDIATION	DATE ANALYZED	: 07/08/04
PROJECT #	: 810	SAMPLE MATRIX	: AQUEOUS
PROJECT NAME	: Air Stripper	ANALYST	: GAB

PARAMETER	UNITS	
FUEL HYDROCARBONS	MG/L	<0.10
HYDROCARBON RANGE		C6-C10
HYDROCARBONS QUANTITATED USING		GASOLINE
BENZENE	UG/L	<0.5
TOLUENE	UG/L	<0.5
ETHYLBENZENE	UG/L	<0.5
TOTAL XYLENES	UG/L	<1.0
METHYL-t-BUTYL ETHER	UG/L	<2.5
SURROGATE:		
BROMOFLUOROBENZENE (%)		103
SURROGATE LIMITS (80 - 120)		

CHEMIST NOTES:
N/A

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GAS CHROMATOGRAPHY QUALITY CONTROL
LCS/LCSD

TEST	: EPA 8015B GRO	PINNACLE I.D.	: 407018
BATCH #	: 070804	DATE EXTRACTED	: N/A
CLIENT	: BIOTECH REMEDIATION	DATE ANALYZED	: 07/08/04
PROJECT #	: 810	SAMPLE MATRIX	: AQUEOUS
PROJECT NAME	: Air Stripper	UNITS	: MG/L

PARAMETER	SAMPLE RESULT	CONC SPIKE	SPIKED SAMPLE	% REC	DUP SPIKE	DUP % REC	RPD	REC LIMITS	RPD LIMITS
FUEL HYDROCARBONS	<0.10	1.00	1.05	105	1.06	106	1	(70 - 130)	20
HYDROCARBON RANGE		C6-C10							

HYDROCARBONS QUANTITATED USING GASOLINE

CHEMIST NOTES:
N/A

$$\frac{\text{(Spike Sample Result - Sample Result)}}{\text{Spike Concentration}} \times 100$$

$$\text{RPD (Relative Percent Difference)} = \frac{\text{(Sample Result - Duplicate Result)}}{\text{Average Result}} \times 100$$

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GAS CHROMATOGRAPHY QUALITY CONTROL
LCS/LCSD

TEST	: EPA 8021B MODIFIED	PINNACLE I.D.	: 407018
BATCH #	: 070804	DATE EXTRACTED	: N/A
CLIENT	: BIOTECH REMEDIATION	DATE ANALYZED	: 07/08/04
PROJECT #	: 810	SAMPLE MATRIX	: AQUEOUS
PROJECT NAME	: Air Stripper	UNITS	: UG/L

PARAMETER	SAMPLE RESULT	CONC SPIKE	SPIKED SAMPLE	% REC	DUP SPIKE	DUP % REC	RPD	REC LIMITS	RPD LIMITS
BENZENE	<0.5	20.0	21.7	109	21.4	107	1	(80 - 120)	20
TOLUENE	<0.5	20.0	21.4	107	21.3	107	0	(80 - 120)	20
ETHYLBENZENE	<0.5	20.0	21.4	107	21.5	108	0	(80 - 120)	20
TOTAL XYLENES	<1.0	60.0	64.6	108	64.5	108	0	(80 - 120)	20
METHYL-t-BUTYL ETHER	<2.5	20.0	19.9	100	19.3	97	3	(70 - 133)	20

CHEMIST NOTES:
N/A

$$\% \text{ Recovery} = \frac{(\text{Spike Sample Result} - \text{Sample Result})}{\text{Spike Concentration}} \times 100$$

$$\text{RPD (Relative Percent Difference)} = \frac{(\text{Sample Result} - \text{Duplicate Result})}{\text{Average Result}} \times 100$$

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GAS CHROMATOGRAPHY QUALITY CONTROL
MS/MSD

TEST	: EPA 8015B GRO	PINNACLE I.D.	: 407018
MSMSD #	: 407018-02	DATE EXTRACTED	: N/A
CLIENT	: BIOTECH REMEDIATION	DATE ANALYZED	: 07/08/04
PROJECT #	: 810	SAMPLE MATRIX	: AQUEOUS
PROJECT NAME	: Air Stripper	UNITS	: MG/L

PARAMETER	SAMPLE RESULT	CONC SPIKE	SPIKED SAMPLE	% REC	DUP SPIKE	DUP % REC	RPD	REC LIMITS	RPD LIMITS
FUEL HYDROCARBONS	<0.10	1.00	1.01	101	1.08	108	7	(70 - 130)	20
HYDROCARBON RANGE		C6-C10							

HYDROCARBONS QUANTITATED USING GASOLINE

CHEMIST NOTES:
N/A

$$\frac{\text{(Spike Sample Result - Sample Result)}}{\text{Spike Concentration}} \times 100$$

$$\text{RPD (Relative Percent Difference)} = \frac{\text{(Sample Result - Duplicate Result)}}{\text{Average Result}} \times 100$$

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GAS CHROMATOGRAPHY QUALITY CONTROL
MS/MSD

TEST	: EPA 8021B MODIFIED	PINNACLE I.D.	: 407018
MSMSD #	: 407018-02	DATE EXTRACTED	: N/A
CLIENT	: BIOTECH REMEDIATION	DATE ANALYZED	: 07/08/04
PROJECT #	: 810	SAMPLE MATRIX	: AQUEOUS
PROJECT NAME	: Air Stripper	UNITS	: UG/L

PARAMETER	SAMPLE RESULT	CONC SPIKE	SPIKED SAMPLE	% REC	DUP SPIKE	DUP % REC	RPD	REC LIMITS	RPD LIMITS
BENZENE	0.7	20.0	22.2	108	22.0	107	1	(80 - 120)	20
TOLUENE	0.6	20.0	22.4	109	22.1	108	1	(80 - 120)	20
ETHYLBENZENE	0.7	20.0	22.2	108	22.1	107	0	(80 - 120)	20
TOTAL XYLENES	1.8	60.0	68.1	111	67.6	110	1	(80 - 120)	20
METHYL-t-BUTYL ETHER	<2.5	20.0	20.6	103	20.7	104	0	(70 - 133)	20

CHEMIST NOTES:
N/A

$$\% \text{ Recovery} = \frac{(\text{Spike Sample Result} - \text{Sample Result})}{\text{Spike Concentration}} \times 100$$

$$\text{RPD (Relative Percent Difference)} = \frac{(\text{Sample Result} - \text{Duplicate Result})}{\text{Average Result}} \times 100$$

Pinnacle Laboratories Inc.

CHAIN OF CUSTODY

DATE: 6-30-04 PAGE: 1 OF 1

PLL Access No: 40701 8

SHADED AREAS ARE FOR LAB USE ONLY

PLEASE FILL THIS FORM IN COMPLETELY.

PROJECT MANAGER: Terry Griffin

COMPANY: BioTech Remediation Inc.

ADDRESS: 501 Airport Dr. Suite 104

PHONE: 505-327-4965

FAX:

BILL TO:

COMPANY:

ADDRESS:

SAMPLE ID	DATE	TIME	MATRIX	LAB ID
Air Stripper (Influent)	6-30-04	0930	AQ	-01
Air Stripper (Effluent)	6-30-04	0935	AQ	-02

ANALYSIS REQUEST

Petroleum Hydrocarbons (418.1) TRPH	(MOD.8015) Diesel/Direct Inject	(M8015) Gas/Purge & Trap	8021 (BTEX)/8015 (Gasoline) MTBE	8021 (BTEX) ☐MTBE ☐TMB ☐PCE	8021 (TCL)	8021 (EDX)	8021 (HALO)	8021 (CUST)	504.1 EDB ☐/DBCP ☐	8260 (TCL) Volatile Organics	8260 (Full) Volatile Organics ☐PBMS	8260 (CUST) Volatile Organics	8260 (Landfill) Volatile Organics	Pesticides/PCB (608/8081/8082)	Herbicides (615/8151)	Base/Neutral/Acid Compounds GC/MS (625/8270)	Polynuclear Aromatics (610/8310/8270-SIMS)	General Chemistry:	Priority Pollutant Metals (13)	Target Analyte List Metals (23)	RCRA Metals (8)	RCRA Metals by TCLP (Method1311)	Metals:	# CONTAINERS
			✓																					2
			✓																					2

WEEKEND ANALYSES MAY RESULT IN AN ADDITIONAL SURCHARGE - PLEASE INQUIRE.

PROJECT INFORMATION

PROJ. NO.: 810

PROJ. NAME: Air Stripper

P.O. NO.:

SHIPPED VIA:

SAMPLE RECEIPT

NO. CONTAINERS: 2

CUSTODY SEALS: N/A

RECEIVED INTACT: Y

BLUE ICE/ICE: Y

PRIOR AUTHORIZATION IS REQUIRED FOR RUSH PROJECTS

(RUSH) ☐24hr* ☐48hr* ☐72hr* ☐ 1 WEEK (NORMAL) ☐

*NOT AVAILABLE ON ALL ANALYSES

CERTIFICATION REQUIRED ☐ NM ☐ SDWA ☐ AZ ☐ OTHER

METHANOL PRESERVATION ☐ | METALS ☐ TOTAL ☐ DISSOLVED

COMMENTS:

RELINQUISHED BY: 1.

Signature: [signature] Time: 1545

Printed Name: JOHN SANDOVAL Date: 7-1-04

Company: BioTech

See Reverse Side (Force Majeure)

RECEIVED BY: 1.

Signature: Time:

Printed Name: Date:

Company:

RELINQUISHED BY: 2.

Signature: Time:

Printed Name: Date:

Company:

RECEIVED BY: (LAB) 2

Signature: Time: 1545

Printed Name: Date: 7/1/04

Company: Pinnacle Laboratories Inc.

Entered

PINNACLE LABORATORIES

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Pinnacle Lab ID number **407234**
August 19, 2004

BIOTECH REMEDIATION
501 AIRPORT DRIVE SUITE 104
FARMINGTON, NM 87401

Project Name REFINERY
Project Number 810

Attention: TERRY GRIFFIN

On 07/30/2004 Pinnacle Laboratories Inc., (ADHS License No. AZ0643), received a request to analyze **aqueous** samples. The samples were analyzed with EPA methodology or equivalent methods. The results of these analyses and the quality control data, which follow each set of analyses, are enclosed.

If you have any questions or comments, please do not hesitate to contact us at (505) 344-3777.

H. Mitchell Rubenstein, Ph.D.
General Manager, Pinnacle Laboratories, Inc.

MR: jt

Enclosure

PINNACLE LABORATORIES

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CLIENT	: BIOTECH REMEDIATION	PINNACLE ID	: 407234
PROJECT #	: 810	DATE RECEIVED	: 07/30/2004
PROJECT NAME	: REFINERY	REPORT DATE	: 08/19/2004

PINNACLE ID #	CLIENT DESCRIPTION	MATRIX	DATE COLLECTED
407234 - 01	REFINERY-MW-18	AQUEOUS	07/27/2004
407234 - 02	REFINERY-MW-05	AQUEOUS	07/27/2004
407234 - 03	REFINERY-MW-19	AQUEOUS	07/27/2004
407234 - 04	REFINERY-MW-04	AQUEOUS	07/27/2004
407234 - 05	REFINERY-MW-06	AQUEOUS	07/27/2004
407234 - 06	REFINERY-MW-07	AQUEOUS	07/27/2004
407234 - 07	REFINERY-MW-20	AQUEOUS	07/27/2004
407234 - 08	REFINERY-MW-21	AQUEOUS	07/28/2004
407234 - 09	REFINERY-MW-22	AQUEOUS	07/28/2004
407234 - 10	REFINERY-MW-09	AQUEOUS	07/28/2004
407234 - 11	REFINERY-MW-10	AQUEOUS	07/28/2004
407234 - 12	REFINERY-MW-11	AQUEOUS	07/28/2004
407234 - 13	REFINERY-MW-15	AQUEOUS	07/28/2004
407234 - 14	REFINERY-MW-13	AQUEOUS	07/28/2004
407234 - 15	AIRSTRIPPER-INFLUENT	AQUEOUS	07/29/2004
407234 - 16	AIRSTRIPPER-EFFLUENT	AQUEOUS	07/29/2004
407234 - 17	TRIP BLANK	AQUEOUS	07/23/2004

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GAS CHROMATOGRAPHY RESULTS

TEST : EPA 8021B MODIFIED / 8015B GRO
CLIENT : BIOTECH REMEDIATION — PINNACLE I.D. : 407234
PROJECT # : 810 — ANALYST : BP
PROJECT NAME : REFINERY

SAMPLE I.D. #	CLIENT I.D.	MATRIX	DATE SAMPLED	DATE EXTRACTED	DATE ANALYZED	DIL. FACTOR
01	REFINERY-MW-18	AQUEOUS	07/27/2004	NA	08/06/2004	1
02	REFINERY-MW-05	AQUEOUS	07/27/2004	NA	08/06/2004	1
03	REFINERY-MW-19	AQUEOUS	07/27/2004	NA	08/06/2004	1

PARAMETER	DET. LIMIT	UNITS	REFINERY-MW-18	REFINERY-MW-05	REFINERY-MW-19
FUEL HYDROCARBONS	**0.10**	**MG/L**	< 0.10	< 0.10	**0.30**
HYDROCARBON RANGE			C6-C10	C6-C10	**C6-C10**
HYDROCARBONS QUANTITATED USING			GASOLINE	GASOLINE	**GASOLINE**
BENZENE	0.5	UG/L	< 0.5	< 0.5	< 0.5
TOLUENE	0.5	UG/L	< 0.5	< 0.5	< 0.5
ETHYLBENZENE	0.5	UG/L	< 0.5	< 0.5	< 0.5
TOTAL XYLENES	**1.0**	**UG/L**	< 1.0	< 1.0	**1.2**
METHYL-t-BUTYL ETHER	**2.5**	**UG/L**	< 2.5	**29**	**210 - D5**
SURROGATE:					
BROMOFLUOROBENZENE (%)			102	102	109
SURROGATE LIMITS	(80 - 120)				

CHEMIST NOTES:
D5 = Reported from a 5X dilution run on 08-10-04.

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GAS CHROMATOGRAPHY RESULTS

TEST : EPA 8021B MODIFIED / 8015B GRO
CLIENT : BIOTECH REMEDIATION — PINNACLE I.D. : 407234
PROJECT # : 810 — ANALYST : BP
PROJECT NAME : REFINERY

SAMPLE I.D. #	CLIENT I.D.	MATRIX	DATE SAMPLED	DATE EXTRACTED	DATE ANALYZED	DIL. FACTOR
04	REFINERY-MW-04	AQUEOUS	07/27/2004	NA	08/06/2004	1
05	REFINERY-MW-06	AQUEOUS	07/27/2004	NA	08/06/2004	1
6	REFINERY-MW-07	AQUEOUS	07/27/2004	NA	08/06/2004	1

PARAMETER	DET. LIMIT	UNITS	REFINERY-MW-04	REFINERY-MW-06	REFINERY-MW-07
FUEL HYDROCARBONS	**0.10**	**MG/L**	**0.12**	**0.21**	**0.27**
HYDROCARBON RANGE			**C6-C10**	**C6-C10**	**C6-C10**
HYDROCARBONS QUANTITATED USING			**GASOLINE**	**GASOLINE**	**GASOLINE**
BENZENE	**0.5**	**UG/L**	**2.0**	**0.8**	< 0.5
TOLUENE	0.5	UG/L	< 0.5	< 0.5	< 0.5
ETHYLBENZENE	0.5	UG/L	< 0.5	< 0.5	< 0.5
TOTAL XYLENES	**1.0**	**UG/L**	< 1.0	**1.1**	**1.3**
METHYL-t-BUTYL ETHER	**2.5**	**UG/L**	**15**	**61**	**190**
SURROGATE:					
BROMOFLUOROBENZENE (%)			107	104	106
SURROGATE LIMITS	(80 - 120)				

CHEMIST NOTES:
N/A

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GAS CHROMATOGRAPHY RESULTS

TEST : EPA 8021B MODIFIED / 8015B GRO
CLIENT : BIOTECH REMEDIATION — PINNACLE I.D. : 407234
PROJECT # : 810 — ANALYST : BP
PROJECT NAME : REFINERY

SAMPLE I.D. #	CLIENT I.D.	MATRIX	DATE SAMPLED	DATE EXTRACTED	DATE ANALYZED	DIL. FACTOR
07	REFINERY-MW-20	AQUEOUS	07/27/2004	NA	08/10/2004	1
08	REFINERY-MW-21	AQUEOUS	07/28/2004	NA	08/06/2004	1
09	REFINERY-MW-22	AQUEOUS	07/28/2004	NA	08/06/2004	1

PARAMETER	DET. LIMIT	UNITS	REFINERY-MW-20	REFINERY-MW-21	REFINERY-MW-22
FUEL HYDROCARBONS	**0.10**	**MG/L**	**0.91**	< 0.10	< 0.10
HYDROCARBON RANGE			**C6-C10**	C6-C10	C6-C10
HYDROCARBONS QUANTITATED USING			**GASOLINE**	GASOLINE	GASOLINE
BENZENE	**0.5**	**UG/L**	**2.1**	< 0.5	< 0.5
TOLUENE	0.5	UG/L	< 0.5	< 0.5	< 0.5
ETHYLBENZENE	0.5	UG/L	< 0.5	< 0.5	< 0.5
TOTAL XYLENES	**1.0**	**UG/L**	**2.3**	< 1.0	< 1.0
METHYL-t-BUTYL ETHER	**2.5**	**UG/L**	**590 - D5**	**24**	**14**
SURROGATE:					
BROMOFLUOROBENZENE (%)			110	102	101
SURROGATE LIMITS	(80 - 120)				

CHEMIST NOTES:
D5 = Reported from a 5X dilution run on 08-06-04.

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GAS CHROMATOGRAPHY RESULTS

TEST : EPA 8021B MODIFIED / 8015B GRO
CLIENT : BIOTECH REMEDIATION
PROJECT # : 810
PROJECT NAME : REFINERY

PINNACLE I.D. : 407234
ANALYST : BP

SAMPLE I.D. #	CLIENT I.D.	MATRIX	DATE SAMPLED	DATE EXTRACTED	DATE ANALYZED	DIL. FACTOR
10	REFINERY-MW-09	AQUEOUS	07/28/2004	NA	08/06/2004	1
11	REFINERY-MW-10	AQUEOUS	07/28/2004	NA	08/06/2004	1
12	REFINERY-MW-11	AQUEOUS	07/28/2004	NA	08/10/2004	1

PARAMETER	DET. LIMIT	UNITS	REFINERY-MW-09	REFINERY-MW-10	REFINERY-MW-11
FUEL HYDROCARBONS	0.10	MG/L	< 0.10	< 0.10	< 0.10
HYDROCARBON RANGE			C6-C10	C6-C10	C6-C10
HYDROCARBONS QUANTITATED USING			GASOLINE	GASOLINE	GASOLINE
BENZENE	0.5	UG/L	< 0.5	< 0.5	< 0.5
TOLUENE	**0.5**	**UG/L**	< 0.5	< 0.5	**1.9**
ETHYLBENZENE	**0.5**	**UG/L**	< 0.5	< 0.5	**0.9**
TOTAL XYLENES	**1.0**	**UG/L**	**1.0**	< 1.0	**3.3**
METHYL-t-BUTYL ETHER	2.5	UG/L	< 2.5	< 2.5	< 2.5
SURROGATE:					
BROMOFLUOROBENZENE (%)			102	103	102
SURROGATE LIMITS	(80 - 120)				

CHEMIST NOTES:
N/A

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GAS CHROMATOGRAPHY RESULTS

TEST : EPA 8021B MODIFIED / 8015B GRO
CLIENT : BIOTECH REMEDIATION
PROJECT # : 810
PROJECT NAME : REFINERY

PINNACLE I.D. : 407234
ANALYST : BP

SAMPLE I.D. #	CLIENT I.D.	MATRIX	DATE SAMPLED	DATE EXTRACTED	DATE ANALYZED	DIL. FACTOR
13	REFINERY-MW-15	AQUEOUS	07/28/2004	NA	08/10/2004	1
14	REFINERY-MW-13	AQUEOUS	07/28/2004	NA	08/10/2004	1
15	AIRSTRIPPER-INFLUENT	AQUEOUS	07/29/2004	NA	08/10/2004	10

PARAMETER	DET. LIMIT	UNITS	REFINERY-MW-15	REFINERY-MW-13	AIRSTRIPPER-INFLUENT
FUEL HYDROCARBONS	**0.10**	**MG/L**	< 0.10	< 0.10	**6.8**
HYDROCARBON RANGE			C6-C10	C6-C10	**C6-C10**
HYDROCARBONS QUANTITATED USING			GASOLINE	GASOLINE	**GASOLINE**
BENZENE	**0.5**	**UG/L**	< 0.5	< 0.5	**420**
TOLUENE	**0.5**	**UG/L**	< 0.5	< 0.5	**170**
ETHYLBENZENE	**0.5**	**UG/L**	< 0.5	< 0.5	**350**
TOTAL XYLENES	**1.0**	**UG/L**	< 1.0	< 1.0	**540**
METHYL-t-BUTYL ETHER	**2.5**	**UG/L**	< 2.5	< 2.5	**110**
SURROGATE:					
BROMOFLUOROBENZENE (%)			103	102	100
SURROGATE LIMITS	(80 - 120)				

CHEMIST NOTES:
N/A

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GAS CHROMATOGRAPHY RESULTS

TEST : EPA 8021B MODIFIED / 8015B GRO
CLIENT : BIOTECH REMEDIATION
PROJECT # : 810
PROJECT NAME : REFINERY

PINNACLE I.D. : 407234
ANALYST : BP

SAMPLE ID. #	CLIENT I.D.	MATRIX	DATE SAMPLED	DATE EXTRACTED	DATE ANALYZED	DIL. FACTOR
16	AIRSTRIPPER-EFFLUENT	AQUEOUS	07/29/2004	NA	08/10/2004	1
17	TRIP BLANK	AQUEOUS	07/23/2004	NA	08/06/2004	1

PARAMETER	DET. LIMIT	UNITS	AIRSTRIPPER-EFFLUENT	TRIP BLANK
FUEL HYDROCARBONS	0.10	MG/L	< 0.10	< 0.10
HYDROCARBON RANGE			C6-C10	C6-C10
HYDROCARBONS QUANTITATED USING			GASOLINE	GASOLINE
BENZENE	0.5	UG/L	< 0.5	< 0.5
TOLUENE	0.5	UG/L	< 0.5	< 0.5
ETHYLBENZENE	**0.5**	**UG/L**	**0.5**	< 0.5
TOTAL XYLENES	1.0	UG/L	< 1.0	< 1.0
METHYL-t-BUTYL ETHER	2.5	UG/L	< 2.5	< 2.5
SURROGATE:				
BROMOFLUOROBENZENE (%)			103	103
SURROGATE LIMITS	(80 - 120)			

CHEMIST NOTES:
N/A

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GAS CHROMATOGRAPHY RESULTS
REAGENT BLANK

TEST	: EPA 8021B MODIFIED / 8015B GRO	PINNACLE I.D.	: 407234
BLANK I.D.	: 080604	DATE EXTRACTED	: N/A
CLIENT	: BIOTECH REMEDIATION	DATE ANALYZED	: 08/06/2004
PROJECT #	: 810	SAMPLE MATRIX	: AQUEOUS
PROJECT NAME	: REFINERY	ANALYST	: BP

PARAMETER	UNITS	
FUEL HYDROCARBONS	MG/L	<0.10
HYDROCARBON RANGE		C6-C10
HYDROCARBONS QUANTITATED USING		GASOLINE
BENZENE	UG/L	<0.5
TOLUENE	UG/L	<0.5
ETHYLBENZENE	UG/L	<0.5
TOTAL XYLENES	UG/L	<1.0
METHYL-t-BUTYL ETHER	UG/L	<2.5
SURROGATE:		
BROMOFLUOROBENZENE (%)		105
SURROGATE LIMITS (80 - 120)		

CHEMIST NOTES:
N/A

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GAS CHROMATOGRAPHY RESULTS
REAGENT BLANK

TEST	: EPA 8021B MODIFIED / 8015B GRO	PINNACLE I.D.	: 407234
BLANK I.D.	: 081004	DATE EXTRACTED	: N/A
CLIENT	: BIOTECH REMEDIATION	DATE ANALYZED	: 08/10/2004
PROJECT #	: 810	SAMPLE MATRIX	: AQUEOUS
PROJECT NAME	: REFINERY	ANALYST	: BP

PARAMETER	UNITS	
FUEL HYDROCARBONS	MG/L	<0.10
HYDROCARBON RANGE		C6-C10
HYDROCARBONS QUANTITATED USING		GASOLINE
BENZENE	UG/L	<0.5
TOLUENE	UG/L	<0.5
ETHYLBENZENE	UG/L	<0.5
TOTAL XYLENES	UG/L	<1.0
METHYL-t-BUTYL ETHER	UG/L	<2.5
SURROGATE:		
BROMOFLUOROBENZENE (%)		99
SURROGATE LIMITS (80 - 120)		

CHEMIST NOTES:
N/A

PINNACLE LABORATORIES

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GAS CHROMATOGRAPHY QUALITY CONTROL
LCS/LCSD

EST	: EPA 8015B GRO	PINNACLE I.D.	: 407234
ATCH #	: 080604	DATE EXTRACTED	: N/A
CLIENT	: BIOTECH REMEDIATION	DATE ANALYZED	: 08/06/2004
ROJECT #	: 810	SAMPLE MATRIX	: AQUEOUS
ROJECT NAME	: REFINERY	UNITS	: MG/L

PARAMETER	SAMPLE RESULT	CONC SPIKE	SPIKED SAMPLE	% REC	DUP SPIKE	DUP % REC	RPD	REC LIMITS	RPD LIMITS
UEL HYDROCARBONS	<0.10	1.00	1.09	109	1.07	107	2	(70 - 130)	20
YDROCARBON RANGE		C6-C10							

HYDROCARBONS QUANTITATED USINGGASOLINE

CHEMIST NOTES:
N/A

$$\text{Recovery} = \frac{(\text{Spike Sample Result} - \text{Sample Result})}{\text{Spike Concentration}} \times 100$$

$$\text{RPD (Relative Percent Difference)} = \frac{(\text{Sample Result} - \text{Duplicate Result})}{\text{Average Result}} \times 100$$

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GAS CHROMATOGRAPHY QUALITY CONTROL
LCS/LCSD

EST	: EPA 8015B GRO	PINNACLE I.D.	: 407234
BATCH #	: 081004	DATE EXTRACTED	: N/A
CLIENT	: BIOTECH REMEDIATION	DATE ANALYZED	: 08/10/2004
PROJECT #	: 810	SAMPLE MATRIX	: AQUEOUS
PROJECT NAME	: REFINERY	UNITS	: MG/L

PARAMETER	SAMPLE RESULT	CONC SPIKE	SPIKED SAMPLE	% REC	DUP SPIKE	DUP % REC	RPD	REC LIMITS	RPD LIMITS
FUEL HYDROCARBONS	<0.10	1.00	1.08	108	1.06	106	2	(70 - 130)	20
HYDROCARBON RANGE		C6-C10							

HYDROCARBONS QUANTITATED USINGGASOLINE

CHEMIST NOTES:
NA

$$\% \text{ Recovery} = \frac{(\text{Spike Sample Result} - \text{Sample Result})}{\text{Spike Concentration}} \times 100$$

$$\text{RPD (Relative Percent Difference)} = \frac{(\text{Sample Result} - \text{Duplicate Result})}{\text{Average Result}} \times 100$$

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PINNACLE LABORATORIES

GAS CHROMATOGRAPHY QUALITY CONTROL
LCS/LCSD

TEST	: EPA 8021B MODIFIED	PINNACLE I.D.	: 407234
BATCH #	: 080604	DATE EXTRACTED	: N/A
CLIENT	: BIOTECH REMEDIATION	DATE ANALYZED	: 08/06/2004
PROJECT #	: 810	SAMPLE MATRIX	: AQUEOUS
PROJECT NAME	: REFINERY	UNITS	: UG/L

PARAMETER	SAMPLE RESULT	CONC SPIKE	SPIKED SAMPLE	% REC	DUP SPIKE	DUP % REC	RPD	REC LIMITS	RPD LIMITS
BENZENE	<0.5	20.0	20.8	104	20.7	104	0	(80 - 120)	20
TOLUENE	<0.5	20.0	21.1	106	20.7	104	2	(80 - 120)	20
ETHYLBENZENE	<0.5	20.0	21.4	107	21.0	105	2	(80 - 120)	20
TOTAL XYLENES	<1.0	60.0	64.6	108	63.4	106	2	(80 - 120)	20
METHYL-t-BUTYL ETHER	<2.5	20.0	18.8	94	18.7	94	1	(70 - 133)	20

CHEMIST NOTES:
N/A

$$\% \text{ Recovery} = \frac{(\text{Spike Sample Result} - \text{Sample Result})}{\text{Spike Concentration}} \times 100$$

$$\text{RPD (Relative Percent Difference)} = \frac{(\text{Sample Result} - \text{Duplicate Result})}{\text{Average Result}} \times 100$$

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GAS CHROMATOGRAPHY QUALITY CONTROL
LCS/LCSD

TEST	: EPA 8021B MODIFIED	PINNACLE I.D.	: 407234
BATCH #	: 081004	DATE EXTRACTED	: N/A
CLIENT	: BIOTECH REMEDIATION	DATE ANALYZED	: 08/10/2004
PROJECT #	: 810	SAMPLE MATRIX	: AQUEOUS
PROJECT NAME	: REFINERY	UNITS	: UG/L

PARAMETER	SAMPLE RESULT	CONC SPIKE	SPIKED SAMPLE	% REC	DUP SPIKE	DUP % REC	RPD	REC LIMITS	RPD LIMITS
BENZENE	<0.5	20.0	20.6	103	20.7	104	0	(80 - 120)	20
TOLUENE	<0.5	20.0	20.9	105	20.9	105	0	(80 - 120)	20
ETHYLBENZENE	<0.5	20.0	21.2	106	21.2	106	0	(80 - 120)	20
TOTAL XYLENES	<1.0	60.0	63.8	106	63.8	106	0	(80 - 120)	20
METHYL-t-BUTYL ETHER	<2.5	20.0	17.4	87	17.6	88	1	(70 - 133)	20

CHEMIST NOTES:
N/A

$$\% \text{ Recovery} = \frac{(\text{Spike Sample Result} - \text{Sample Result})}{\text{Spike Concentration}} \times 100$$

$$\text{RPD (Relative Percent Difference)} = \frac{(\text{Sample Result} - \text{Duplicate Result})}{\text{Average Result}} \times 100$$

PINNACLE LABORATORIES

2709-D Pan American Freeway NE
Albuquerque, New Mexico 87107
Phone (505) 344-3777
Fax (505) 344-4413

GAS CHROMATOGRAPHY QUALITY CONTROL
MS/MSD

TEST	: EPA 8021B MODIFIED	PINNACLE I.D.	: 407234
MS/MSD #	: 407234-10	DATE EXTRACTED	: N/A
CLIENT	: BIOTECH REMEDIATION	DATE ANALYZED	: 08/06/2004
PROJECT #	: 810	SAMPLE MATRIX	: AQUEOUS
PROJECT NAME	: REFINERY	UNITS	: UG/L

PARAMETER	SAMPLE RESULT	CONC SPIKE	SPIKED SAMPLE	% REC	DUP SPIKE	DUP % REC	RPD	REC LIMITS	RPD LIMITS
BENZENE	<0.5	20.0	20.6	103	20.5	103	0	(80 - 120)	20
TOLUENE	<0.5	20.0	20.6	103	20.5	103	0	(80 - 120)	20
ETHYLBENZENE	<0.5	20.0	20.8	104	20.8	104	0	(80 - 120)	20
TOTAL XYLENES	1.0	60.0	63.3	104	62.9	103	1	(80 - 120)	20
METHYL-t-BUTYL ETHER	<2.5	20.0	19.3	97	19.4	97	1	(70 - 133)	20

CHEMIST NOTES:
N/A

$$\text{Recovery} = \frac{(\text{Spike Sample Result} - \text{Sample Result})}{\text{Spike Concentration}} \times 100$$

$$\text{RPD (Relative Percent Difference)} = \frac{(\text{Sample Result} - \text{Duplicate Result})}{\text{Average Result}} \times 100$$

Pinnacle Laboratories Inc.

CHAIN OF CUSTODY

DATE: 7-30-04 PAGE: 1 OF 2

PLI Accession #: 407234

SHADED AREAS ARE FOR LAB USE ONLY.

PLEASE FILL THIS FORM IN COMPLETELY.

PROJECT MANAGER: Terry Griffin

COMPANY: BioTech Remediation Inc.

ADDRESS: 501 Airport Dr. Suite 104

PHONE: (505) - 327-4965

FAX:

BILL TO:

COMPANY:

ADDRESS:

ANALYSIS REQUEST

SAMPLE ID	DATE	TIME	MATRIX	LAB #	Petroleum Hydrocarbons (418.1) TRPH	(MOD.8015) Diesel/Direct Inject	(M8015) Gas/Purge & Trap	8021 (BTEX)/8015 (Gasoline) MTBE	8021 (BTEX) ☐MTBE ☐TMB ☐PCE	8021 (TCL)	8021 (EDX)	8021 (HALO)	8021 (CUST)	504.1 EDB ☐/DBCP ☐	8260 (TCL) Volatile Organics	8260 (Full) Volatile Organics ☐PBMS	8260 (CUST) Volatile Organics	8260 (Landfill) Volatile Organics	Pesticides/PCB (608/8081/8082)	Herbicides (615/8151)	Base/Neutral/Acid Compounds GC/MS (625/8270)	Polynuclear Aromatics (610/8310/8270-SIMS)	General Chemistry:	Priority Pollutant Metals (13)	Target Analyte List Metals (23)	RCRA Metals (8)	RCRA Metals by TCLP (Method1311)	Metals:	# CONTAINERS
Refinery - MW-18	7-27-4	1346		-01				/																					
- MW-05		1408		-02				/																					
- MW-19		1437		-03				/																					
- MW-04		1504		-04				/																					
- MW-06		1530		-05				/																					
- MW-07		1552		-06				/																					
- MW-20		1630		-07				/																					
Refinery - MW-21	7-28-4	0904		-08				/																					
- MW-22		0924		-09				/																					
- MW-09		1002		-10				/																					

WEEKEND ANALYSES MAY RESULT IN AN ADDITIONAL SURCHARGE - PLEASE INQUIRE.

PROJECT INFORMATION

PROJ. NO.: 810

PROJ. NAME: Refinery

P.O. NO.:

SHIPPED VIA:

SAMPLE RECEIPT

NO. CONTAINERS

CUSTODY SEALS Y / N / NA

RECEIVED INTACT

BLUE ICE/ICE 5.9°C

PRIOR AUTHORIZATION IS REQUIRED FOR RUSH PROJECTS

(RUSH) ☐24hr* ☐48hr* ☐72hr* ☐ 1 WEEK (NORMAL) ☐

*NOT AVAILABLE ON ALL ANALYSES

CERTIFICATION REQUIRED ☐ NM ☐ SDWA ☐ AZ ☐ OTHER

METHANOL PRESERVATION ☐ METALS ☐ TOTAL ☐ DISSOLVED

COMMENTS:

RELINQUISHED BY: 1.	RELINQUISHED BY: 2.
Signature: Time: 0700	Signature: Time:
Printed Name: Date: John Scarborough 7-30-04	Printed Name: Date:
Company: BioTech	Company:
See Reverse side (Force Majeure)	
RECEIVED BY:	**RECEIVED BY: (LAB) 2**
Signature: Time:	Signature: 1610
Printed Name: Date:	Printed Name: Date: 7/30/04
Company:	Company: Pinnacle Laboratories Inc.

Pinnacle Laboratories Inc.

CHAIN OF CUSTODY

DATE: 7-30-04 PAGE: 2 OF 2

PLI Accession #: 167234

PLEASE FILL THIS FORM IN COMPLETELY.

SHADED AREAS ARE FOR LAB USE ONLY

PROJECT MANAGER: Terry Griffin

COMPANY: BioTech Remediation Inc.

ADDRESS: 501 Airport Dr. Suite 104

PHONE: (505) - 327- 4965

FAX:

BILL TO:

COMPANY:

ADDRESS:

ANALYSIS REQUEST

SAMPLE ID	DATE	TIME	MATRIX	LAB I.D.	Petroleum Hydrocarbons (418.1) TRPH	(MOD.8015) Diesel/Direct Inject	(M8015) Gas/Purge & Trap	8021 (BTEX)/8015 (Gasoline) MTBE	8021 (BTEX) ☐MTBE ☐TMB ☐PCE	8021 (TCL)	8021 (EDX)	8021 (HALO)	8021 (CUST)	504.1 EDB ☐/DBCP ☐	8260 (TCL) Volatile Organics	8260 (Full) Volatile Organics ☐PBMS	8260 (CUST) Volatile Organics	8260 (Landfill) Volatile Organics	Pesticides/PCB (608/8081/8082)	Herbicides (615/8151)	Base/Neutral/Acid Compounds GC/MS (625/8270)	Polynuclear Aromatics (610/8310/8270-SIMS)	General Chemistry:	Priority Pollutant Metals (13)	Target Analyte List Metals (23)	RCRA Metals (8)	RCRA Metals by TCLP (Method1311)	Metals:	NUMBER OF CONTAINERS
Refinery - MW-10	7-28-4	1030		11				✓																					
- MW-11		1101		12																									
- MW-15		1620		13																									
- MW-13		1158		14																									
Air Stripper - Influent	7-29-04	1059		15																									
Air Stripper - Effluent	7-29-04	1102		16																									
TRIP BLANK	723	170		17				X																					

WEEKEND ANALYSES MAY RESULT IN AN ADDITIONAL SURCHARGE - PLEASE INQUIRE.

PROJECT INFORMATION

PROJ. NO.: 810

PROJ. NAME: Refinery / Air Stripper

P.O. NO.:

SHIPPED VIA:

SAMPLE RECEIPT

NO. CONTAINERS	
CUSTODY SEALS	Y / N / NA
RECEIVED INTACT	
BLUE ICE/ICE	Dry

PRIOR AUTHORIZATION IS REQUIRED FOR RUSH PROJECTS

(RUSH) ☐24hr* ☐48hr* ☐72hr* ☐ 1 WEEK (NORMAL) ☐
*NOT AVAILABLE ON ALL ANALYSES

CERTIFICATION REQUIRED ☐ NM ☐ SDWA ☐ AZ ☐ OTHER

METHANOL PRESERVATION ☐ METALS ☐ TOTAL ☐ DISSOLVED

COMMENTS:

RELINQUISHED BY: 1.

Signature: John Sanders Time: 0700

Printed Name: John Sanders Date: 7-30-04

Company: BioTech

See Reverse Side (Force Majeure)

RECEIVED BY: 1.

Signature: Time:

Printed Name: Date:

Company:

RELINQUISHED BY: 2.

Signature: Time:

Printed Name: Date:

Company:

RECEIVED BY: (LAB) 2.

Signature: Time: 1610

Printed Name: Date: 7-30-04 0730

Pinnacle Laboratories Inc.

entered 8/10

2709-D Pan American Freeway NE
Albuquerque, New Mexico 87107
Phone (505) 344-3777
Fax (505) 344-4413

Pinnacle Lab ID number **409023**
September 21, 2004

BIOTECH REMEDIATION
501 AIRPORT DRIVE SUITE 104
FARMINGTON, NM 87401

Project Name AIRSTRIPPER
Project Number 810

Attention: TERRY GRIFFIN

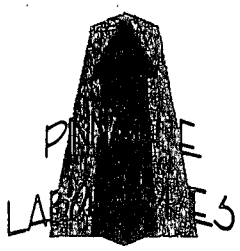
On 09/02/2004 Pinnacle Laboratories Inc., (ADHS License No. AZ0643), received a request to analyze **aqueous** samples. The samples were analyzed with EPA methodology or equivalent methods. The results of these analyses and the quality control data, which follow each set of analyses, are enclosed.

If you have any questions or comments, please do not hesitate to contact us at (505) 344-3777.

H. Mitchell Rubenstein, Ph.D.
General Manager, Pinnacle Laboratories, Inc.

MR: jt

Enclosure



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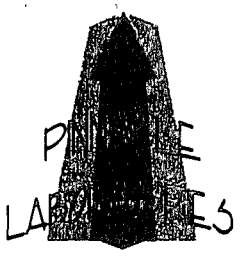
CLIENT	: BIOTECH REMEDIATION	PINNACLE ID	: 409023
PROJECT #	: 810	DATE RECEIVED	: 09/02/2004
PROJECT NAME	: AIRSTRIPPER	REPORT DATE	: 09/21/2004

PINNACLE ID #	CLIENT DESCRIPTION	MATRIX	DATE COLLECTED
409023 - 01	AIRSTRIPPER INFLUENT	AQUEOUS	08/31/2004
409023 - 02	AIRSTRIPPER EFFLUENT	AQUEOUS	08/31/2004



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GAS CHROMATOGRAPHY RESULTS

TEST : EPA 8015B GRO
CLIENT : BIOTECH REMEDIATION
PROJECT # : 810
PROJECT NAME : AIRSTRIPPER

PINNACLE I.D. : 409023
ANALYST : DSR

SAMPLE ID. #	CLIENT I.D.	MATRIX	DATE SAMPLED	DATE EXTRACTED	DATE ANALYZED	DIL. FACTOR
01	AIRSTRIPPER INFLUENT	AQUEOUS	08/31/2004	NA	09/08/2004	10
02	AIRSTRIPPER EFFLUENT	AQUEOUS	08/31/2004	NA	09/08/2004	1

PARAMETER	DET. LIMIT	UNITS	AIRSTRIPPER INFLUENT	AIRSTRIPPER EFFLUENT
FUEL HYDROCARBONS	**0.10**	**MG/L**	**4.9**	< 0.10
HYDROCARBON RANGE			**C6-C10**	C6-C10
HYDROCARBONS QUANTITATED USING			**GASOLINE**	GASOLINE

CHEMIST NOTES:
N/A

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Fax (505) 344-4413

GAS CHROMATOGRAPHY RESULTS

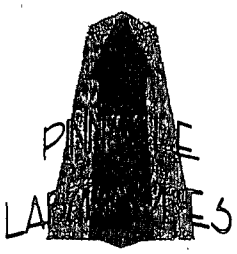
TEST : EPA 8021B MODIFIED
CLIENT : BIOTECH REMEDIATION
PROJECT # : 810
PROJECT NAME : AIRSTRIPPER

PINNACLE I.D. : 409023
ANALYST : BP

SAMPLE ID. #	CLIENT I.D.	MATRIX	DATE SAMPLED	DATE EXTRACTED	DATE ANALYZED	DIL. FACTOR
01	AIRSTRIPPER INFLUENT	AQUEOUS	08/31/2004	NA	09/10/2004	10
02	AIRSTRIPPER EFFLUENT	AQUEOUS	08/31/2004	NA	09/10/2004	1

PARAMETER	DET. LIMIT	UNITS	AIRSTRIPPER INFLUENT	AIRSTRIPPER EFFLUENT
BENZENE	**0.5**	**UG/L**	**550**	**0.9**
TOLUENE	**0.5**	**UG/L**	**390**	**1.1**
ETHYLBENZENE	**0.5**	**UG/L**	**250**	< 0.5
TOTAL XYLENES	**1.0**	**UG/L**	**310**	**1.0**
METHYL-t-BUTYL ETHER	**2.5**	**UG/L**	**95**	< 2.5
SURROGATE:				
BROMOFLUOROBENZENE (%)			97	101
SURROGATE LIMITS	(80 - 120)			

CHEMIST NOTES:
N/A



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GAS CHROMATOGRAPHY RESULTS
REAGENT BLANK

TEST	: EPA 8015B GRO	PINNACLE I.D.	: 409023
BLANK I.D.	: 090804	DATE EXTRACTED	: N/A
CLIENT	: BIOTECH REMEDIATION	DATE ANALYZED	: 09/08/2004
PROJECT #	: 810	SAMPLE MATRIX	: AQUEOUS
PROJECT NAME	: AIRSTRIPPER	ANALYST	: DSR

PARAMETER	UNITS	
FUEL HYDROCARBONS	MG/L	<0.10
HYDROCARBON RANGE		C6-C10
HYDROCARBONS QUANTITATED USING		GASOLINE

CHEMIST NOTES:
N/A

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GAS CHROMATOGRAPHY RESULTS
REAGENT BLANK

TEST	: EPA 8021B MODIFIED	PINNACLE I.D.	: 409023
BLANK I.D.	: 090904A	DATE EXTRACTED	: N/A
CLIENT	: BIOTECH REMEDIATION	DATE ANALYZED	: 09/09/2004
PROJECT #	: 810	SAMPLE MATRIX	: AQUEOUS
PROJECT NAME	: AIRSTRIPPER	ANALYST	: BP

PARAMETER	UNITS	
BENZENE	UG/L	<0.5
TOLUENE	UG/L	<0.5
ETHYLBENZENE	UG/L	<0.5
TOTAL XYLENES	UG/L	<1.0
METHYL-t-BUTYL ETHER	UG/L	<2.5
SURROGATE:		
BROMOFLUOROBENZENE (%)		100
SURROGATE LIMITS	(80 - 120)	

CHEMIST NOTES:
N/A

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GAS CHROMATOGRAPHY QUALITY CONTROL
LCS/LCSD

TEST	: EPA 8015B GRO	PINNACLE I.D.	: 409023
BATCH #	: 090804	DATE EXTRACTED	: N/A
CLIENT	: BIOTECH REMEDIATION	DATE ANALYZED	: 09/08/2004
PROJECT #	: 810	SAMPLE MATRIX	: AQUEOUS
PROJECT NAME	: AIRSTRIPPER	UNITS	: MG/L

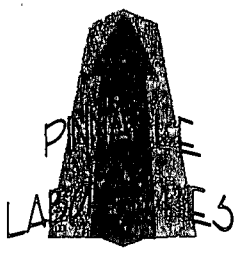
PARAMETER	SAMPLE RESULT	CONC SPIKE	SPIKED SAMPLE	% REC	DUP SPIKE	DUP % REC	RPD	REC LIMITS	RPD LIMITS
FUEL HYDROCARBONS	<0.10	1.00	0.828	83	0.772	77	7	(70 - 130)	20
HYDROCARBON RANGE		C6-C10							

HYDROCARBONS QUANTITATED USING GASOLINE

CHEMIST NOTES:
N/A

$$\% \text{ Recovery} = \frac{(\text{Spike Sample Result} - \text{Sample Result})}{\text{Spike Concentration}} \times 100$$

$$\text{RPD (Relative Percent Difference)} = \frac{(\text{Sample Result} - \text{Duplicate Result})}{\text{Average Result}} \times 100$$



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GAS CHROMATOGRAPHY QUALITY CONTROL
MS/MSD

TEST	: EPA 8015B GRO	PINNACLE I.D.	: 409023
MSMSD #	: 409023-02	DATE EXTRACTED	: N/A
CLIENT	: BIOTECH REMEDIATION	DATE ANALYZED	: 09/08/2004
PROJECT #	: 810	SAMPLE MATRIX	: AQUEOUS
PROJECT NAME	: AIRSTRIPPER	UNITS	: MG/L

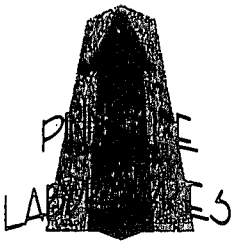
PARAMETER	SAMPLE RESULT	CONC SPIKE	SPIKED SAMPLE	% REC	DUP SPIKE	DUP % REC	RPD	REC LIMITS	RPD LIMITS
FUEL HYDROCARBONS	<0.10	1.00	0.803	80	0.760	76	6	(70 - 130)	20
HYDROCARBON RANGE		C6-C10							

HYDROCARBONS QUANTITATED USING GASOLINE

CHEMIST NOTES:
N/A

$$\%\text{Recovery} = \frac{(\text{Spike Sample Result} - \text{Sample Result})}{\text{Spike Concentration}} \times 100$$

$$\text{RPD (Relative Percent Difference)} = \frac{(\text{Sample Result} - \text{Duplicate Result})}{\text{Average Result}} \times 100$$



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GAS CHROMATOGRAPHY QUALITY CONTROL
LCS/LCSD

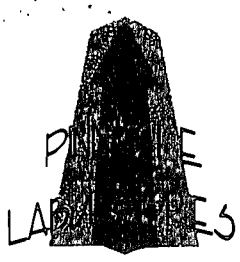
TEST	: EPA 8021B MODIFIED	PINNACLE I.D.	: 409023
BATCH #	: 090904A	DATE EXTRACTED	: N/A
CLIENT	: BIOTECH REMEDIATION	DATE ANALYZED	: 09/09/2004
PROJECT #	: 810	SAMPLE MATRIX	: AQUEOUS
PROJECT NAME	: AIRSTRIPPER	UNITS	: UG/L

PARAMETER	SAMPLE RESULT	CONC SPIKE	SPIKED SAMPLE	% REC	DUP SPIKE	DUP % REC	RPD	REC LIMITS	RPD LIMITS
BENZENE	<0.5	20.0	20.4	102	20.1	101	1	(80 - 120)	20
TOLUENE	<0.5	20.0	19.9	100	19.6	98	2	(80 - 120)	20
ETHYLBENZENE	<0.5	20.0	19.8	99	19.5	98	2	(80 - 120)	20
TOTAL XYLENES	<1.0	60.0	59.7	100	58.7	98	2	(80 - 120)	20
METHYL-t-BUTYL ETHER	<2.5	20.0	20.6	103	21.4	107	4	(70 - 133)	20

CHEMIST NOTES:
N/A

$$\% \text{ Recovery} = \frac{(\text{Spike Sample Result} - \text{Sample Result})}{\text{Spike Concentration}} \times 100$$

$$\text{RPD (Relative Percent Difference)} = \frac{(\text{Sample Result} - \text{Duplicate Result})}{\text{Average Result}} \times 100$$



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GAS CHROMATOGRAPHY QUALITY CONTROL
MS/MSD

TEST	: EPA 8021B MODIFIED	PINNACLE I.D.	: 409023
MSMSD #	: 409024-05	DATE EXTRACTED	: N/A
CLIENT	: BIOTECH REMEDIATION	DATE ANALYZED	: 09/09/2004
PROJECT #	: 810	SAMPLE MATRIX	: AQUEOUS
PROJECT NAME	: AIRSTRIPPER	UNITS	: UG/L

PARAMETER	SAMPLE RESULT	CONC SPIKE	SPIKED SAMPLE	% REC	DUP SPIKE	DUP % REC	RPD	REC LIMITS	RPD LIMITS
BENZENE	<0.5	20.0	20.2	101	20.5	103	1	(80 - 120)	20
TOLUENE	<0.5	20.0	19.7	99	19.9	100	1	(80 - 120)	20
ETHYLBENZENE	<0.5	20.0	19.5	98	19.8	99	2	(80 - 120)	20
TOTAL XYLENES	<1.0	60.0	58.9	98	59.7	100	1	(80 - 120)	20
METHYL-t-BUTYL ETHER	<2.5	20.0	21.9	110	22.1	111	1	(70 - 133)	20

CHEMIST NOTES:
N/A

$$\text{Recovery} = \frac{(\text{Spike Sample Result} - \text{Sample Result})}{\text{Spike Concentration}} \times 100$$

$$\text{RPD (Relative Percent Difference)} = \frac{(\text{Sample Result} - \text{Duplicate Result})}{\text{Average Result}} \times 100$$

PINNACLE LABORATORIES

2709-D Pan American Freeway NE
Albuquerque, New Mexico 87107
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Fax (505) 344-4413

Pinnacle Lab ID number **410012**
October 11, 2004

BIOTECH REMEDIATION
501 AIRPORT DRIVE SUITE 104
FARMINGTON, NM 87401

Project Name Air Stripper
Project Number 810

Attention: Terry Griffin

On 10/01/2004 Pinnacle Laboratories Inc., (ADHS License No. AZ0643), received a request to analyze **aqueous** samples. The samples were analyzed with EPA methodology or equivalent methods. The results of these analyses and the quality control data, which follow each set of analyses, are enclosed.

If you have any questions or comments, please do not hesitate to contact us at (505) 344-3777.

H. Mitchell Rubenstein, Ph.D.
General Manager, Pinnacle Laboratories, Inc.

MR: jt

Enclosure

PINNACLE LABORATORIES

2709-D Pan American Freeway NE
Albuquerque, New Mexico 87107
Phone (505) 344-3777
Fax (505) 344-4413

CLIENT	: BIOTECH REMEDIATION	PINNACLE ID	: 410012
PROJECT #	: 810	DATE RECEIVED	: 10/01/2004
PROJECT NAME	: Air Stripper	REPORT DATE	: 10/11/2004

PINNACLE ID #	CLIENT DESCRIPTION	MATRIX	DATE COLLECTED
410012 - 01	810 Influent	AQUEOUS	09/29/2004
410012 - 02	810 Efluent	AQUEOUS	09/29/2004
410012 - 03	Trip Blank	AQUEOUS	08/13/2004

PINNACLE LABORATORIES

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Albuquerque, New Mexico 87107
Phone (505) 344-3777
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GAS CHROMATOGRAPHY RESULTS

TEST : EPA 8021B / 8015B GRO
CLIENT : BIOTECH REMEDIATION
PROJECT # : 810
PROJECT NAME : Air Stripper

PINNACLE I.D. : 410012
ANALYST : BP

SAMPLE ID. #	CLIENT I.D.	MATRIX	DATE SAMPLED		DATE EXTRACTED	DATE ANALYZED	DIL. FACTOR
01	810 Influent	AQUEOUS	09/29/2004		NA	10/03/2004	10
02	810 Efluent	AQUEOUS	09/29/2004		NA	10/03/2004	1
03	Trip Blank	AQUEOUS	08/13/2004	T1	NA	10/03/2004	1

PARAMETER	DET. LIMIT	UNITS	810 Influent	810 Efluent	Trip Blank
FUEL HYDROCARBONS	**0.10**	**MG/L**	**3.2**	< 0.10	< 0.10
HYDROCARBON RANGE			**C6-C10**	C6-C10	C6-C10
HYDROCARBONS QUANTITATED USING			**GASOLINE**	GASOLINE	GASOLINE
BENZENE	**0.5**	**UG/L**	**240**	< 0.5	< 0.5
TOLUENE	**0.5**	**UG/L**	**120**	< 0.5	< 0.5
ETHYLBENZENE	**0.5**	**UG/L**	**190**	< 0.5	< 0.5
TOTAL XYLENES	**1.0**	**UG/L**	**150**	< 1.0	< 1.0
METHYL-t-BUTYL ETHER	**2.5**	**UG/L**	**49**	< 2.5	< 2.5
			H3	**H3**	**H3**
SURROGATE:					
BROMOFLUOROBENZENE (%)			96	95	95
SURROGATE LIMITS	(80 - 120)				

CHEMIST NOTES:
T1 = Trip Blank was received past the 14 day hold time.
H3 = Headspace present in sample containers.

PINNACLE LABORATORIES

2709-D Pan American Freeway NE
Albuquerque, New Mexico 87107
Phone (505) 344-3777
Fax (505) 344-4413

GAS CHROMATOGRAPHY RESULTS
REAGENT BLANK

TEST	: EPA 8021B / 8015B GRO	PINNACLE I.D.	: 410012
BLANK I.D.	: 100304	DATE EXTRACTED	: N/A
CLIENT	: BIOTECH REMEDIATION	DATE ANALYZED	: 10/03/2004
PROJECT #	: 810	SAMPLE MATRIX	: AQUEOUS
PROJECT NAME	: Air Stripper	ANALYST	: BP

PARAMETER	UNITS	
FUEL HYDROCARBONS	MG/L	<0.10
HYDROCARBON RANGE		C6-C10
HYDROCARBONS QUANTITATED USING		GASOLINE
BENZENE	UG/L	<0.5
TOLUENE	UG/L	<0.5
ETHYLBENZENE	UG/L	<0.5
TOTAL XYLENES	UG/L	<1.0
METHYL-t-BUTYL ETHER	UG/L	<2.5
SURROGATE:		
BROMOFLUOROBENZENE (%)		97
SURROGATE LIMITS	(80 - 120)	

CHEMIST NOTES:
N/A

PINNACLE LABORATORIES

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GAS CHROMATOGRAPHY QUALITY CONTROL
LCS/LCSD

TEST	: EPA 8015B GRO	PINNACLE I.D.	: 410012
BATCH #	: 100304	DATE EXTRACTED	: N/A
CLIENT	: BIOTECH REMEDIATION	DATE ANALYZED	: 10/03/2004
PROJECT #	: 810	SAMPLE MATRIX	: AQUEOUS
PROJECT NAME	: Air Stripper	UNITS	: MG/L

PARAMETER	SAMPLE RESULT	CONC SPIKE	SPIKED SAMPLE	% REC	DUP SPIKE	DUP % REC	RPD	REC LIMITS	RPD LIMITS
FUEL HYDROCARBONS	<0.10	1.00	0.994	99	0.975	98	2	(70 - 130)	20
HYDROCARBON RANGE		C6-C10							
HYDROCARBONS QUANTITATED USING	GASOLINE								

CHEMIST NOTES:
N/A

$$\% \text{ Recovery} = \frac{(\text{Spike Sample Result} - \text{Sample Result})}{\text{Spike Concentration}} \times 100$$

$$\text{RPD (Relative Percent Difference)} = \frac{(\text{Sample Result} - \text{Duplicate Result})}{\text{Average Result}} \times 100$$

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Fax (505) 344-4413

GAS CHROMATOGRAPHY QUALITY CONTROL
LCS/LCSD

TEST	: EPA 8021B	PINNACLE I.D.	: 410012
BATCH #	: 100304	DATE EXTRACTED	: N/A
CLIENT	: BIOTECH REMEDIATION	DATE ANALYZED	: 10/03/2004
PROJECT #	: 810	SAMPLE MATRIX	: AQUEOUS
PROJECT NAME	: Air Stripper	UNITS	: UG/L

PARAMETER	SAMPLE RESULT	CONC SPIKE	SPIKED SAMPLE	% REC	DUP SPIKE	DUP % REC	RPD	REC LIMITS	RPD LIMITS
BENZENE	<0.5	20.0	19.9	100	20.6	103	3	(80 - 120)	20
TOLUENE	<0.5	20.0	19.7	99	20.2	101	3	(80 - 120)	20
ETHYLBENZENE	<0.5	20.0	19.9	100	20.3	102	2	(80 - 120)	20
TOTAL XYLENES	<1.0	60.0	60.3	101	60.9	102	1	(80 - 120)	20
METHYL-t-BUTYL ETHER	<2.5	20.0	17.5	88	18.8	94	7	(70 - 133)	20

CHEMIST NOTES:
N/A

$$\% \text{ Recovery} = \frac{(\text{Spike Sample Result} - \text{Sample Result})}{\text{Spike Concentration}} \times 100$$

$$\text{RPD (Relative Percent Difference)} = \frac{(\text{Sample Result} - \text{Duplicate Result})}{\text{Average Result}} \times 100$$

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Fax (505) 344-4413

GAS CHROMATOGRAPHY QUALITY CONTROL
MS/MSD

TEST	: EPA 8015B GRO	PINNACLE I.D.	: 410012
MSMSD #	: 410012-02	DATE EXTRACTED	: N/A
CLIENT	: BIOTECH REMEDIATION	DATE ANALYZED	: 10/04/2004
PROJECT #	: 810	SAMPLE MATRIX	: AQUEOUS
PROJECT NAME	: Air Stripper	UNITS	: MG/L

PARAMETER	SAMPLE RESULT	CONC SPIKE	SPIKED SAMPLE	% REC	DUP SPIKE	DUP % REC	RPD	REC LIMITS	RPD LIMITS
FUEL HYDROCARBONS	<0.10	1.00	1.06	106	0.982	98	8	(70 - 130)	20
HYDROCARBON RANGE		C6-C10							
HYDROCARBONS QUANTITATED USING	GASOLINE								

CHEMIST NOTES:
N/A

$$\%\ \text{Recovery} = \frac{(\text{Spike Sample Result} - \text{Sample Result})}{\text{Spike Concentration}} \times 100$$

$$\text{RPD (Relative Percent Difference)} = \frac{(\text{Sample Result} - \text{Duplicate Result})}{\text{Average Result}} \times 100$$

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Albuquerque, New Mexico 87107
Phone (505) 344-3777
Fax (505) 344-4413

GAS CHROMATOGRAPHY QUALITY CONTROL
MS/MSD

TEST	: EPA 8021B	PINNACLE I.D.	: 410012
MSMSD #	: 410012-02	DATE EXTRACTED	: N/A
CLIENT	: BIOTECH REMEDIATION	DATE ANALYZED	: 10/03/2004
PROJECT #	: 810	SAMPLE MATRIX	: AQUEOUS
PROJECT NAME	: Air Stripper	UNITS	: UG/L

PARAMETER	SAMPLE RESULT	CONC SPIKE	SPIKED SAMPLE	% REC	DUP SPIKE	DUP % REC	RPD	REC LIMITS	RPD LIMITS
BENZENE	<0.5	20.0	20.1	101	20.8	104	3	(80 - 120)	20
TOLUENE	<0.5	20.0	20.1	101	21.0	105	4	(80 - 120)	20
ETHYLBENZENE	<0.5	20.0	19.7	99	20.5	103	4	(80 - 120)	20
TOTAL XYLENES	<1.0	60.0	59.7	100	62.0	103	4	(80 - 120)	20
METHYL-t-BUTYL ETHER	<2.5	20.0	17.3	87	18.6	93	7	(70 - 133)	20

CHEMIST NOTES:
N/A

$$\% \text{ Recovery} = \frac{(\text{Spike Sample Result} - \text{Sample Result})}{\text{Spike Concentration}} \times 100$$

$$\text{RPD (Relative Percent Difference)} = \frac{(\text{Sample Result} - \text{Duplicate Result})}{\text{Average Result}} \times 100$$

Pinnacle Laboratories Inc.

CHAIN OF CUSTODY

DATE: 9-29-4 PAGE: 1 OF 1

PLL Accession #: 410012

SHADED AREAS ARE FOR LAB USE ONLY

PLEASE FILL THIS FORM IN COMPLETELY.

PROJECT MANAGER: Terry Griffin

COMPANY: Biotech Remediation Inc.

ADDRESS: 501 Airport Dr. Suite 104
Farmington, NM. 87401

PHONE: 505-327-4963

FAX:

BILL TO:

COMPANY:

ADDRESS:

ANALYSIS REQUEST

SAMPLE ID	DATE	TIME	MATRIX	LAB I.D.	Petroleum Hydrocarbons (418.1) TRPH	(MOD.8015) Diesel/Direct Inject	(M8015) Gas/Purge & Trap	8021 (BTEX)/8015 (Gasoline) MTBE	8021 (BTEX) ☐MTBE ☐TMB ☐PCE	8021 (TCL)	8021 (EDX)	8021 (HALO)	8021 (CUST)	504.1 EDB ☐/DBCP ☐	8260 (TCL) Volatile Organics	8260 (Full) Volatile Organics ☐PBMS	8260 (CUST) Volatile Organics	8260 (Landfill) Volatile Organics	Pesticides/PCB (608/8081/8082)	Herbicides (615/8151)	Base/Neutral/Acid Compounds GC/MS (625/8270)	Polynuclear Aromatics (610/8310/8270-SIMS)	General Chemistry:	Priority Pollutant Metals (13)	Target Analyte List Metals (23)	RCRA Metals (8)	RCRA Metals by TCLP (Method1311)	Metals:	NUMBER OF CONTAINERS
810 Influent	9-29-4	1010	H2O	01				✓																					2
810 Effluent	"	1017	"	02				✓																					2
Trip Blank	8/13/04	1050	"	03				✓																					2

WEEKEND ANALYSES MAY RESULT IN AN ADDITIONAL SURCHARGE - PLEASE INQUIRE.

PROJECT INFORMATION

PROJ. NO.: 810

PROJ. NAME: Air Stripper

P.O. NO.:

SHIPPED VIA: Bus

SAMPLE RECEIPT

NO. CONTAINERS	6
CUSTODY SEALS	N/A
RECEIVED INTACT	Yes
BLUE ICE/ICE	9.3°

PRIOR AUTHORIZATION IS REQUIRED FOR RUSH PROJECTS

(RUSH) ☐24hr* ☐48hr* ☐72hr* ☐ 1 WEEK (NORMAL) ☐
*NOT AVAILABLE ON ALL ANALYSES

CERTIFICATION REQUIRED ☐ NM ☐ SDWA ☐ AZ ☐ OTHER

METHANOL PRESERVATION ☐ METALS ☐ TOTAL ☐ DISSOLVED

COMMENTS:

Ice Present

RELINQUISHED BY: 1.

Signature: Time: 0900

Printed Name: Mike Bearpaw Date: 90-1-4

Company:

See Reverse side (Force Majeure)

RECEIVED BY: 1.

Signature: Time:

Printed Name: Date:

Company:

RELINQUISHED BY: 2.

Signature: Time:

Printed Name: Date:

Company:

RECEIVED BY: (LAB) 2.

Signature: Time: 1735

Printed Name: Date: 9/1/04

Pinnacle Laboratories Inc.

PINNACLE LABORATORIES

2709-D Pan American Freeway NE
Albuquerque, New Mexico 87107
Phone (505) 344-3777
Fax (505) 344-4413

Pinnacle Lab ID number **411380**
December 14, 2004

BIOTECH REMEDIATION
501 AIRPORT DRIVE SUITE 104
FARMINGTON, NM 87401

Project Name AIRSTRIPPER
Project Number 810

Attention: TERRY GRIFFIN

On 11/30/2004 Pinnacle Laboratories Inc., (ADHS License No. AZ0643), received a request to analyze **aqueous** samples. The samples were analyzed with EPA methodology or equivalent methods. The results of these analyses and the quality control data, which follow each set of analyses, are enclosed.

If you have any questions or comments, please do not hesitate to contact us at (505) 344-3777.

H. Mitchell Rubenstein, Ph.D.
General Manager, Pinnacle Laboratories, Inc.

MR: jt

Enclosure

PINNACLE LABORATORIES

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Albuquerque, New Mexico 87107
Phone (505) 344-3777
Fax (505) 344-4413

CLIENT	: BIOTECH REMEDIATION	PINNACLE ID	: 411380
PROJECT #	: 810	DATE RECEIVED	: 11/30/2004
PROJECT NAME	: AIRSTRIPPER	REPORT DATE	: 12/14/2004

PINNACLE ID #	CLIENT DESCRIPTION	MATRIX	DATE COLLECTED
411380 - 01	AS/INFLUENT	AQUEOUS	11/30/2004
411380 - 02	AS/EFFLUENT	AQUEOUS	11/30/2004

PINNACLE LABORATORIES

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Albuquerque, New Mexico 87107
Phone (505) 344-3777
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GAS CHROMATOGRAPHY RESULTS

TEST : EPA 8021B / 8015B GRO
CLIENT : BIOTECH REMEDIATION
PROJECT # : 810
PROJECT NAME : AIRSTRIPPER

PINNACLE I.D. : 411380
ANALYST : BP

SAMPLE ID. #	CLIENT I.D.	MATRIX	DATE SAMPLED	DATE EXTRACTED	DATE ANALYZED	DIL. FACTOR
01	AS/INFLUENT	AQUEOUS	11/30/2004	NA	12/07/2004	10
02	AS/EFFLUENT	AQUEOUS	11/30/2004	NA	12/07/2004	1

PARAMETER	DET. LIMIT	UNITS	AS/INFLUENT	AS/EFFLUENT
FUEL HYDROCARBONS	**0.10**	**MG/L**	**2.7**	< 0.10
HYDROCARBON RANGE			**C6-C10**	C6-C10
HYDROCARBONS QUANTITATED USING			**GASOLINE**	GASOLINE
BENZENE	**0.5**	**UG/L**	**98**	**0.5**
TOLUENE	**0.5**	**UG/L**	**120**	**5.4**
ETHYLBENZENE	**0.5**	**UG/L**	**150**	**3.0**
TOTAL XYLENES	**1.0**	**UG/L**	**170**	**7.8**
METHYL-t-BUTYL ETHER	**2.5**	**UG/L**	**57**	< 2.5
SURROGATE: BROMOFLUOROBENZENE (%)			100	99
SURROGATE LIMITS	(80 - 120)			

CHEMIST NOTES:
N/A

PINNACLE LABORATORIES

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Fax (505) 344-4413

GAS CHROMATOGRAPHY RESULTS
REAGENT BLANK

TEST	: EPA 8021B / 8015B GRO	PINNACLE I.D.	: 411380
BLANK I.D.	: 120604	DATE EXTRACTED	: N/A
CLIENT	: BIOTECH REMEDIATION	DATE ANALYZED	: 12/06/2004
PROJECT #	: 810	SAMPLE MATRIX	: AQUEOUS
PROJECT NAME	: AIRSTRIPPER	ANALYST	: BP

PARAMETER	UNITS	
FUEL HYDROCARBONS	MG/L	<0.10
HYDROCARBON RANGE		C6-C10
HYDROCARBONS QUANTITATED USING		GASOLINE
BENZENE	UG/L	<0.5
TOLUENE	UG/L	<0.5
ETHYLBENZENE	UG/L	<0.5
TOTAL XYLENES	UG/L	<1.0
METHYL-t-BUTYL ETHER	UG/L	<2.5
SURROGATE:		
BROMOFLUOROBENZENE (%)		97
SURROGATE LIMITS (80 - 120)		

CHEMIST NOTES:
N/A

PINNACLE LABORATORIES

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Albuquerque, New Mexico 87107
Phone (505) 344-3777
Fax (505) 344-4413

GAS CHROMATOGRAPHY QUALITY CONTROL
LCS/LCSD

TEST	: EPA 8015B GRO	PINNACLE I.D.	: 411380
BATCH #	: 120604	DATE EXTRACTED	: N/A
CLIENT	: BIOTECH REMEDIATION	DATE ANALYZED	: 12/06/2004
PROJECT #	: 810	SAMPLE MATRIX	: AQUEOUS
PROJECT NAME	: AIRSTRIPPER	UNITS	: MG/L

PARAMETER	SAMPLE RESULT	CONC SPIKE	SPIKED SAMPLE	% REC	DUP SPIKE	DUP % REC	RPD	REC LIMITS	RPD LIMITS
FUEL HYDROCARBONS	<0.10	1.00	0.921	92	0.915	92	1	(70 - 130)	20
HYDROCARBON RANGE		C6-C10							
HYDROCARBONS QUANTITATED USING	GASOLINE								

CHEMIST NOTES:
N/A

$$\% \text{ Recovery} = \frac{(\text{Spike Sample Result} - \text{Sample Result})}{\text{Spike Concentration}} \times 100$$

$$\text{RPD (Relative Percent Difference)} = \frac{(\text{Sample Result} - \text{Duplicate Result})}{\text{Average Result}} \times 100$$

PINNACLE LABORATORIES

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Fax (505) 344-4413

GAS CHROMATOGRAPHY QUALITY CONTROL
MS/MSD

TEST	: EPA 8015B GRO	PINNACLE I.D.	: 411380
MSMSD #	: 411380-02	DATE EXTRACTED	: N/A
CLIENT	: BIOTECH REMEDIATION	DATE ANALYZED	: 12/07/2004
PROJECT #	: 810	SAMPLE MATRIX	: AQUEOUS
PROJECT NAME	: AIRSTRIPPER	UNITS	: MG/L

PARAMETER	SAMPLE RESULT	CONC SPIKE	SPIKED SAMPLE	% REC	DUP SPIKE	DUP % REC	RPD	REC LIMITS	RPD LIMITS
FUEL HYDROCARBONS	<0.10	1.00	1.02	102	0.989	99	3	(70 - 130)	20
HYDROCARBON RANGE		C6-C10							
HYDROCARBONS QUANTITATED USING		GASOLINE							

CHEMIST NOTES:
N/A

$$\%\ \text{Recovery} = \frac{(\text{Spike Sample Result} - \text{Sample Result})}{\text{Spike Concentration}} \times 100$$

$$\text{RPD (Relative Percent Difference)} = \frac{(\text{Sample Result} - \text{Duplicate Result})}{\text{Average Result}} \times 100$$

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Fax (505) 344-4413

GAS CHROMATOGRAPHY QUALITY CONTROL
LCS/LCSD

TEST	: EPA 8021B	PINNACLE I.D.	: 411380
BATCH #	: 120604	DATE EXTRACTED	: N/A
CLIENT	: BIOTECH REMEDIATION	DATE ANALYZED	: 12/06/2004
PROJECT #	: 810	SAMPLE MATRIX	: AQUEOUS
PROJECT NAME	: AIRSTRIPPER	UNITS	: UG/L

PARAMETER	SAMPLE RESULT	CONC SPIKE	SPIKED SAMPLE	% REC	DUP SPIKE	DUP % REC	RPD	REC LIMITS	RPD LIMITS
BENZENE	<0.5	20.0	20.2	101	20.0	100	1	(80 - 120)	20
TOLUENE	<0.5	20.0	20.1	101	20.1	101	0	(80 - 120)	20
ETHYLBENZENE	<0.5	20.0	19.9	100	20.0	100	1	(80 - 120)	20
TOTAL XYLENES	<1.0	60.0	59.8	100	59.9	100	0	(80 - 120)	20
METHYL-t-BUTYL ETHER	<2.5	20.0	17.9	90	18.7	94	4	(70 - 133)	20

CHEMIST NOTES:
N/A

$$\%\ \text{Recovery} = \frac{(\text{Spike Sample Result} - \text{Sample Result})}{\text{Spike Concentration}} \times 100$$

$$\text{RPD (Relative Percent Difference)} = \frac{(\text{Sample Result} - \text{Duplicate Result})}{\text{Average Result}} \times 100$$

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Fax (505) 344-4413

GAS CHROMATOGRAPHY QUALITY CONTROL
MS/MSD

TEST	: EPA 8021B	PINNACLE I.D.	: 411380
MSMSD #	: 411380-02	DATE EXTRACTED	: N/A
CLIENT	: BIOTECH REMEDIATION	DATE ANALYZED	: 12/07/2004
PROJECT #	: 810	SAMPLE MATRIX	: AQUEOUS
PROJECT NAME	: AIRSTRIPPER	UNITS	: UG/L

PARAMETER	SAMPLE RESULT	CONC SPIKE	SPIKED SAMPLE	% REC	DUP SPIKE	DUP % REC	RPD	REC LIMITS	RPD LIMITS
BENZENE	0.5	20.0	21.6	106	21.1	103	2	(80 - 120)	20
TOLUENE	5.4	20.0	26.6	106	25.8	102	3	(80 - 120)	20
ETHYLBENZENE	3.0	20.0	23.5	103	22.9	100	3	(80 - 120)	20
TOTAL XYLENES	7.8	60.0	69.9	104	67.9	100	3	(80 - 120)	20
METHYL-t-BUTYL ETHER	<2.5	20.0	18.9	95	18.6	93	2	(70 - 133)	20

CHEMIST NOTES:
N/A

$$\% \text{ Recovery} = \frac{(\text{Spike Sample Result} - \text{Sample Result})}{\text{Spike Concentration}} \times 100$$

$$\text{RPD (Relative Percent Difference)} = \frac{(\text{Sample Result} - \text{Duplicate Result})}{\text{Average Result}} \times 100$$

Pinnacle Laboratories Inc.

CHAIN OF CUSTODY

DATE: 11-30-4 PAGE: 1 OF 1

PLI Accession #: 41180

SHADED AREAS ARE FOR LAB USE ONLY

PLEASE FILL THIS FORM IN COMPLETELY.

PROJECT MANAGER: Jerry Griffin

COMPANY: Biotech Remediation
ADDRESS: 501 Airport Dr. Suite 104
Farmington, NM. 87401
PHONE: 505-327-4965
FAX:
BILL TO:
COMPANY:
ADDRESS:

ANALYSIS REQUEST

SAMPLE ID	DATE	TIME	MATRIX	LAB I.D.	8015/8021									
AS/Influent	11-30-4	0930	H2O		✓									2
AS/Effluent	11-30-4	0935	H2O		✓									2

PROJECT INFORMATION

PROJ. NO.: 810
PROJ. NAME: Air Stripper
P.O. NO.:
SHIPPED VIA: Bus

SAMPLE RECEIPT
NO. CONTAINERS: 2
CUSTODY SEALS: N/A
RECEIVED INTACT: Yes
BLUE ICE/ICE: Ice

PRIOR AUTHORIZATION IS REQUIRED FOR RUSH PROJECTS

(RUSH) ☐ 24HR ☐ 72HR ☐ 1 WEEK (NORMAL) ☐
CERTIFICATION REQUIRED ☐ NM ☐ SDWA ☐ OTHER
METHANOL PRESERVATION ☐
COMMENTS: FIXED FEE ☐

RELINQUISHED BY:

Signature: [signature] Time: 1000
Printed Name: Mike Beauprelant Date: 11-30-4
Company: Biotech
See reverse side (Force Majeure)

RECEIVED BY:

Signature: Time:
Printed Name: Date:
Company:

RELINQUISHED BY:

Signature: Time:
Printed Name: Date:
Company:

RECEIVED BY:

[signature] 1130

PINNACLE LABORATORIES

2709-D Pan American Freeway NE
Albuquerque, New Mexico 87107
Phone (505) 344-3777
Fax (505) 344-4413

AES Copy

Pinnacle ~~Lab ID number~~ **502013**
~~November 30, 2004~~
1/31/05

BIOTECH REMEDIATION
501 AIRPORT DRIVE SUITE 104
FARMINGTON, NM 87401

Project Name AIRSTRIPPER
Project Number 810

Attention: TERRY GRIFFIN

On ~~02/02/2005~~ Pinnacle Laboratories Inc., (ADHS License No. AZ0643), received a request to analyze **aqueous** samples. The samples were analyzed with EPA methodology or equivalent methods. The results of these analyses and the quality control data, which follow each set of analyses, are enclosed.

If you have any questions or comments, please do not hesitate to contact us at (505) 344-3777.

H. Mitchell Rubenstein, Ph.D.
General Manager, Pinnacle Laboratories, Inc.

MR: jt

Enclosure

PINNACLE LABORATORIES

2709-D Pan American Freeway NE
Albuquerque, New Mexico 87107
Phone (505) 344-3777
Fax (505) 344-4413

CLIENT	: BIOTECH REMEDIATION	PINNACLE ID	: 502013
PROJECT #	: 810	DATE RECEIVED	: 02/02/2005
PROJECT NAME	: AIRSTRIPPER	REPORT DATE	: 02/14/2005

PINNACLE ID #	CLIENT DESCRIPTION	MATRIX	DATE COLLECTED
502013 - 01	AS/INFLUENT	AQUEOUS	01/31/2005
502013 - 02	AS/EFLUENT	AQUEOUS	01/31/2005

PINNACLE LABORATORIES

2709-D Pan American Freeway NE
Albuquerque, New Mexico 87107
Phone (505) 344-3777
Fax (505) 344-4413

GAS CHROMATOGRAPHY RESULTS

TEST : EPA 8021B / 8015B GRO
CLIENT : BIOTECH REMEDIATION
PROJECT # : 810
PROJECT NAME : AIRSTRIPPER

PINNACLE I.D. : 502013
ANALYST : BP

SAMPLE ID. #	CLIENT I.D.	MATRIX	DATE SAMPLED	DATE EXTRACTED	DATE ANALYZED	DIL. FACTOR
01	AS/INFLUENT	AQUEOUS	01/31/2005	NA	02/02/2005	10
02	AS/EFLUENT	AQUEOUS	01/31/2005	NA	02/02/2005	1

PARAMETER	DET. LIMIT	UNITS	AS/INFLUENT	AS/EFLUENT
FUEL HYDROCARBONS	**0.10**	**MG/L**	**9.1**	< 0.10
HYDROCARBON RANGE			**C6-C10**	C6-C10
HYDROCARBONS QUANTITATED USING			**GASOLINE**	GASOLINE
BENZENE	**0.5**	**UG/L**	**1100**	**1.1**
TOLUENE	**0.5**	**UG/L**	**1700**	**1.9**
ETHYLBENZENE	**0.5**	**UG/L**	**260**	< 0.5
TOTAL XYLENES	**1.0**	**UG/L**	**600**	**1.7**
METHYL-t-BUTYL ETHER	**2.5**	**UG/L**	**120**	< 2.5
SURROGATE:				
BROMOFLUOROBENZENE (%)			95	101
SURROGATE LIMITS	(80 - 120)			

CHEMIST NOTES:
N/A

PINNACLE LABORATORIES

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Fax (505) 344-4413

GAS CHROMATOGRAPHY RESULTS
REAGENT BLANK

TEST	: EPA 8021B / 8015B GRO	PINNACLE I.D.	: 502013
BLANK I.D.	: 020205	DATE EXTRACTED	: N/A
CLIENT	: BIOTECH REMEDIATION	DATE ANALYZED	: 02/02/2005
PROJECT #	: 810	SAMPLE MATRIX	: AQUEOUS
PROJECT NAME	: AIRSTRIPPER	ANALYST	: BP

PARAMETER	UNITS	
FUEL HYDROCARBONS	MG/L	<0.10
HYDROCARBON RANGE		C6-C10
HYDROCARBONS QUANTITATED USING		GASOLINE
BENZENE	UG/L	<0.5
TOLUENE	UG/L	<0.5
ETHYLBENZENE	UG/L	<0.5
TOTAL XYLENES	UG/L	<1.0
METHYL-t-BUTYL ETHER	UG/L	<2.5
SURROGATE:		
BROMOFLUOROBENZENE (%)		103
SURROGATE LIMITS (80 - 120)		

CHEMIST NOTES:
N/A

PINNACLE LABORATORIES

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GAS CHROMATOGRAPHY QUALITY CONTROL
LCS/LCSD

TEST	: EPA 8015B GRO	PINNACLE I.D.	: 502013
BATCH #	: 020205	DATE EXTRACTED	: N/A
CLIENT	: BIOTECH REMEDIATION	DATE ANALYZED	: 02/02/2005
PROJECT #	: 810	SAMPLE MATRIX	: AQUEOUS
PROJECT NAME	: AIRSTRIPPER	UNITS	: MG/L

PARAMETER	SAMPLE RESULT	CONC SPIKE	SPIKED SAMPLE	% REC	DUP SPIKE	DUP % REC	RPD	REC LIMITS	RPD LIMITS
FUEL HYDROCARBONS	<0.10	1.00	0.948	95	0.913	91	4	(70 - 130)	20
HYDROCARBON RANGE		C6-C10							
HYDROCARBONS QUANTITATED USING	GASOLINE								

CHEMIST NOTES:
N/A

$$\% \text{ Recovery} = \frac{(\text{Spike Sample Result} - \text{Sample Result})}{\text{Spike Concentration}} \times 100$$

$$\text{RPD (Relative Percent Difference)} = \frac{(\text{Sample Result} - \text{Duplicate Result})}{\text{Average Result}} \times 100$$

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GAS CHROMATOGRAPHY QUALITY CONTROL
MS/MSD

TEST	: EPA 8015B GRO	PINNACLE I.D.	: 502013
MS/MSD #	: 502014-01	DATE EXTRACTED	: N/A
CLIENT	: BIOTECH REMEDIATION	DATE ANALYZED	: 02/03/2005
PROJECT #	: 810	SAMPLE MATRIX	: AQUEOUS
PROJECT NAME	: AIRSTRIPPER	UNITS	: MG/L

PARAMETER	SAMPLE RESULT	CONC SPIKE	SPIKED SAMPLE	% REC	DUP SPIKE	DUP % REC	RPD	REC LIMITS	RPD LIMITS
FUEL HYDROCARBONS	<0.10	1.00	0.939	94	0.958	96	2	(70 - 130)	20
HYDROCARBON RANGE		C6-C10							

HYDROCARBONS QUANTITATED USINGGASOLINE

CHEMIST NOTES:
N/A

$$\text{Recovery} = \frac{(\text{Spike Sample Result} - \text{Sample Result})}{\text{Spike Concentration}} \times 100$$

$$\text{RPD (Relative Percent Difference)} = \frac{(\text{Sample Result} - \text{Duplicate Result})}{\text{Average Result}} \times 100$$

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GAS CHROMATOGRAPHY QUALITY CONTROL
LCS/LCSD

TEST	: EPA 8021B	PINNACLE I.D.	: 502013
BATCH #	: 020205	DATE EXTRACTED	: N/A
CLIENT	: BIOTECH REMEDIATION	DATE ANALYZED	: 02/02/2005
PROJECT #	: 810	SAMPLE MATRIX	: AQUEOUS
PROJECT NAME	: AIRSTRIPPER	UNITS	: UG/L

PARAMETER	SAMPLE RESULT	CONC SPIKE	SPIKED SAMPLE	% REC	DUP SPIKE	DUP % REC	RPD	REC LIMITS	RPD LIMITS
BENZENE	<0.5	20.0	20.5	103	20.1	101	2	(80 - 120)	20
TOLUENE	<0.5	20.0	20.7	104	20.2	101	2	(80 - 120)	20
ETHYLBENZENE	<0.5	20.0	20.6	103	20.1	101	2	(80 - 120)	20
TOTAL XYLENES	<1.0	60.0	62.1	104	60.6	101	2	(80 - 120)	20
METHYL-t-BUTYL ETHER	<2.5	20.0	19.2	96	18.4	92	4	(70 - 133)	20

CHEMIST NOTES:
N/A

$$\%\ \text{Recovery} = \frac{(\text{Spike Sample Result} - \text{Sample Result})}{\text{Spike Concentration}} \times 100$$

$$\text{RPD (Relative Percent Difference)} = \frac{(\text{Sample Result} - \text{Duplicate Result})}{\text{Average Result}} \times 100$$

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GAS CHROMATOGRAPHY QUALITY CONTROL
MS/MSD

TEST	: EPA 8021B	PINNACLE I.D.	: 502013
MSMSD #	: 502014-01	DATE EXTRACTED	: N/A
CLIENT	: BIOTECH REMEDIATION	DATE ANALYZED	: 02/03/2005
PROJECT #	: 810	SAMPLE MATRIX	: AQUEOUS
PROJECT NAME	: AIRSTRIPPER	UNITS	: UG/L

PARAMETER	SAMPLE RESULT	CONC SPIKE	SPIKED SAMPLE	% REC	DUP SPIKE	DUP % REC	RPD	REC LIMITS	RPD LIMITS
BENZENE	<0.5	20.0	20.6	103	20.4	102	1	(80 - 120)	20
TOLUENE	<0.5	20.0	21.2	106	20.7	104	2	(80 - 120)	20
ETHYLBENZENE	<0.5	20.0	20.8	104	20.2	101	3	(80 - 120)	20
TOTAL XYLENES	<1.0	60.0	62.5	104	61.0	102	2	(80 - 120)	20
METHYL-t-BUTYL ETHER	<2.5	20.0	19.1	96	19.1	96	0	(70 - 133)	20

CHEMIST NOTES:
N/A

$$\% \text{ Recovery} = \frac{(\text{Spike Sample Result} - \text{Sample Result})}{\text{Spike Concentration}} \times 100$$

$$\text{RPD (Relative Percent Difference)} = \frac{(\text{Sample Result} - \text{Duplicate Result})}{\text{Average Result}} \times 100$$

Pinnacle Laboratories Inc.

CHAIN OF CUSTODY

DATE: 2-1-5 PAGE: 1 OF 1

Pin Accession #: S020113

SHADED AREAS ARE FOR LAB USE ONLY

PLEASE FILL THIS FORM IN COMPLETELY.

PROJECT MANAGER: Terry Griffin

COMPANY: Biotech Remediation Inc.
ADDRESS: 501 Airport Dr. Suite 104
Farmington, NM 87401
PHONE: 505-327-4965
FAX:

BILL TO:
COMPANY:
ADDRESS:

SAMPLE ID	DATE	TIME	MATRIX	LAB ID	Petroleum Hydrocarbons (418.1) TRPH	(MOD.8015) Diesel/Direct Inject	(M8015) Gas/Purge & Trap	8021 (BTEX)/8015 (Gasoline) MTBE	8021 (BTEX) ☐MTBE ☐TMB ☐PCE	8021 (TCL)	8021 (EDX)	8021 (HALO)	8021 (CUST)	504.1 EDB ☐/DBCP ☐	8260 (TCL) Volatile Organics	8260 (Full) Volatile Organics ☐PBMS	8260 (CUST) Volatile Organics	8260 (Landfill) Volatile Organics	Pesticides/PCB (608/8081/8082)	Herbicides (615/8151)	Base/Neutral/Acid Compounds GC/MS (625/8270)	Polynuclear Aromatics (610/8310/8270-SIMS)	General Chemistry:	Priority Pollutant Metals (13)	Target Analyte List Metals (23)	RCRA Metals (8)	RCRA Metals by TCLP (Method1311)	Metals:	NUMBER OF CONTAINERS
AS/Influent	1-31-5	1100	H2O	01				✓																					2
AS/Effluent	1-31-5	1130	H2O	02				✓																					2

ANALYSIS REQUEST

WEEKEND ANALYSES MAY RESULT IN AN ADDITIONAL SURCHARGE - PLEASE INQUIRE.

PROJECT INFORMATION

PROJ. NO.: 810
PROJ. NAME: AirStripper
P.O. NO.:
SHIPPED VIA:

SAMPLE RECEIPT

NO CONTAINERS: 4
CUSTODY SEALS: 0 NA
RECEIVED INTACT: YES
BLUE ICE/ICE: Ice

PRIOR AUTHORIZATION IS REQUIRED FOR RUSH PROJECTS

(RUSH) ☐24hr* ☐48hr* ☐72hr* ☐1 WEEK (NORMAL) ☐
*NOT AVAILABLE ON ALL ANALYSES

CERTIFICATION REQUIRED ☐NM ☐SDWA ☐AZ ☐OTHER

METHANOL PRESERVATION ☐ METALS ☐TOTAL ☐DISSOLVED

COMMENTS:

RELINQUISHED BY: 1

Signature: Time: 1200
Printed Name: Mike Bergstrom Date: 2-1-5
Company: Biotech
See Reverse side (Force Majeure)

RECEIVED BY: 1

Signature: Time:
Printed Name: Date:
Company:

RELINQUISHED BY: 2

Signature: Time:
Printed Name: Date:
Company:

RECEIVED BY (LAB): 2

Signature: Time: 1445
Printed Name: Date: 2/2/05

entered

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Pinnacle Lab ID number **412389**
February 01, 2005

BIOTECH REMEDIATION
501 AIRPORT DRIVE SUITE 104
FARMINGTON, NM 87401

Project Name (NONE)
Project Number 810

Attention: TERRY GRIFFIN

On 12/29/2004 Pinnacle Laboratories Inc., (ADHS License No. AZ0643), received a request to analyze **aqueous** samples. The samples were analyzed with EPA methodology or equivalent methods. The results of these analyses and the quality control data, which follow each set of analyses, are enclosed.

EPA method 8021/8015 and pH analyses were performed by Pinnacle Laboratories, Inc. Albuquerque, NM.

EPA method 8270 SIMS analyses were performed by Environmental Services Laboratory, Inc. Portland, OR.

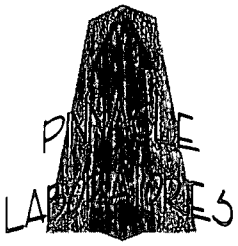
All remaining analyses were performed by Severn Trent Laboratories, Inc. Pensacola, FL.

If you have any questions or comments, please do not hesitate to contact us at (505) 344-3777.

H. Mitchell Rubenstein, Ph.D.
General Manager, Pinnacle Laboratories, Inc.

MR: jt

Enclosure



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CLIENT	: BIOTECH REMEDIATION	PINNACLE ID	: 412389
PROJECT #	: 810	DATE RECEIVED	: 12/29/2004
PROJECT NAME	: (NONE)	REPORT DATE	: 02/01/2005

PINNACLE ID #	CLIENT DESCRIPTION	MATRIX	DATE COLLECTED
412389 - 01	MW #18	AQUEOUS	12/28/2004
412389 - 02	MW #5	AQUEOUS	12/28/2004
412389 - 03	MW #19	AQUEOUS	12/28/2004
412389 - 04	MW #4	AQUEOUS	12/28/2004
412389 - 05	MW #6	AQUEOUS	12/28/2004
412389 - 06	TRIP BLANK	AQUEOUS	12/09/2004

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GENERAL CHEMISTRY RESULTS

CLIENT	: BIOTECH REMEDIATION	PINNACLE I.D.	: 412389
PROJECT #	: 810	DATE RECEIVED	: 12/29/2004
PROJECT NAME	: (NONE)	ANALYST	: BP

SAMPLE ID. #	CLIENT I.D.	MATRIX	DATE SAMPLED	DATE ANALYZED
01	MW #18	AQUEOUS	12/28/2004	12/30/2004
02	MW #5	AQUEOUS	12/28/2004	12/30/2004
03	MW #19	AQUEOUS	12/28/2004	12/30/2004

PARAMETER	UNITS	MW #18	MW #5	MW #19
PH (150.1)	UNITS	7.8	8.0	7.3

CHEMIST NOTES:
N/A

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GENERAL CHEMISTRY RESULTS

CLIENT	: BIOTECH REMEDIATION	PINNACLE I.D.	: 412389
PROJECT #	: 810	DATE RECEIVED	: 12/29/2004
PROJECT NAME	: (NONE)	ANALYST	: BP

SAMPLE I.D. #	CLIENT I.D.	MATRIX	DATE SAMPLED	DATE ANALYZED
04	MW #4	AQUEOUS	12/28/2004	12/30/2004
05	MW #6	AQUEOUS	12/28/2004	12/30/2004

PARAMETER	UNITS	MW #4	MW #6
PH (150.1)	UNITS	7.5	7.5

CHEMIST NOTES:
N/A

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GENERAL CHEMISTRY - QUALITY CONTROL

CLIENT	: BIOTECH REMEDIATION	PINNACLE I.D.	: 412389
PROJECT #	: 810	SAMPLE MATRIX	: AQUEOUS
PROJECT NAME	: (NONE)	DATE ANALYZED	: 12/30/2004

PARAMETER	UNITS	PINNACLE I.D.	SAMPLE RESULT	DUP. RESULT	% RPD
PH	UNITS	412389-02	8.04	7.98	1

CHEMIST NOTES:
N/A

$$\%\ \text{Recovery} = \frac{(\text{Spike Sample Result} - \text{Sample Result})}{\text{Spike Concentration}} \times 100$$

$$\text{RPD (Relative Percent Difference)} = \frac{(\text{Sample Result} - \text{Duplicate Result})}{\text{Average Result}} \times 100$$

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GAS CHROMATOGRAPHY RESULTS

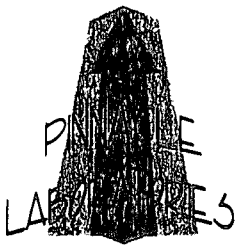
TEST : EPA 8021B / 8015B GRO
CLIENT : BIOTECH REMEDIATION
PROJECT # : 810
PROJECT NAME : (NONE)

PINNACLE I.D. : 412389
ANALYST : BP

SAMPLE ID. #	CLIENT I.D.	MATRIX	DATE SAMPLED	DATE EXTRACTED	DATE ANALYZED	DIL. FACTOR
01	MW #18	AQUEOUS	12/28/2004	NA	12/30/2004	1
02	MW #5	AQUEOUS	12/28/2004	NA	12/30/2004	1
03	MW #19	AQUEOUS	12/28/2004	NA	12/30/2004	1

PARAMETER	DET. LIMIT	UNITS	MW #18	MW #5	MW #19
FUEL HYDROCARBONS	**0.10**	**MG/L**	< 0.10	< 0.10	**0.40**
HYDROCARBON RANGE			C6-C10	C6-C10	**C6-C10**
HYDROCARBONS QUANTITATED USING			GASOLINE	GASOLINE	**GASOLINE**
BENZENE	0.5	UG/L	< 0.5	< 0.5	< 0.5
TOLUENE	**0.5**	**UG/L**	< 0.5	< 0.5	**0.6**
ETHYLBENZENE	0.5	UG/L	< 0.5	< 0.5	< 0.5
TOTAL XYLENES	**1.0**	**UG/L**	< 1.0	< 1.0	**3.0**
METHYL-t-BUTYL ETHER	**2.5**	**UG/L**	**18**	**27**	**250 - D5**
SURROGATE:					
BROMOFLUOROBENZENE (%)			99	97	109
SURROGATE LIMITS	(80 - 120)				

CHEMIST NOTES:
D5 = Reported from a 5X dilution run on 12-30-04.



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GAS CHROMATOGRAPHY RESULTS

TEST : EPA 8021B / 8015B GRO
CLIENT : BIOTECH REMEDIATION — PINNACLE I.D. : 412389
PROJECT # : 810 — ANALYST : BP
PROJECT NAME : (NONE)

SAMPLE ID. #	CLIENT I.D.	MATRIX	DATE SAMPLED		DATE EXTRACTED	DATE ANALYZED	DIL. FACTOR
04	MW #4	AQUEOUS	12/28/2004		NA	12/30/2004	1
05	MW #6	AQUEOUS	12/28/2004		NA	12/30/2004	1
06	TRIP BLANK	AQUEOUS	12/09/2004	T1	NA	12/30/2004	1

PARAMETER	DET. LIMIT	UNITS	MW #4	MW #6	TRIP BLANK
FUEL HYDROCARBONS	0.10	MG/L	< 0.10	< 0.10	< 0.10
HYDROCARBON RANGE			C6-C10	C6-C10	C6-C10
HYDROCARBONS QUANTITATED USING			GASOLINE	GASOLINE	GASOLINE
BENZENE	**0.5**	**UG/L**	**1.5**	< 0.5	< 0.5
TOLUENE	0.5	UG/L	< 0.5	< 0.5	< 0.5
ETHYLBENZENE	0.5	UG/L	< 0.5	< 0.5	< 0.5
TOTAL XYLENES	1.0	UG/L	< 1.0	< 1.0	< 1.0
METHYL-t-BUTYL ETHER	**2.5**	**UG/L**	**11**	**19**	< 2.5
SURROGATE:					
BROMOFLUOROBENZENE (%)			101	103	99
SURROGATE LIMITS	(80 - 120)				

CHEMIST NOTES:
T1 = Trip Blank was received past the 14 day hold time.

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GAS CHROMATOGRAPHY RESULTS
REAGENT BLANK

TEST	: EPA 8021B / 8015B GRO	PINNACLE I.D.	: 412389
BLANK I.D.	: 123004	DATE EXTRACTED	: N/A
CLIENT	: BIOTECH REMEDIATION	DATE ANALYZED	: 12/30/2004
PROJECT #	: 810	SAMPLE MATRIX	: AQUEOUS
PROJECT NAME	: (NONE)	ANALYST	: BP

PARAMETER	UNITS	
FUEL HYDROCARBONS	MG/L	<0.10
HYDROCARBON RANGE		C6-C10
HYDROCARBONS QUANTITATED USING		GASOLINE
BENZENE	UG/L	<0.5
TOLUENE	UG/L	<0.5
ETHYLBENZENE	UG/L	<0.5
TOTAL XYLENES	UG/L	<1.0
METHYL-t-BUTYL ETHER	UG/L	<2.5
SURROGATE:		
BROMOFLUOROBENZENE (%)		100
SURROGATE LIMITS	(80 - 120)	

CHEMIST NOTES:
N/A

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PINNACLE LABORATORIES

GAS CHROMATOGRAPHY QUALITY CONTROL
LCS/LCSD

TEST	: EPA 8015B GRO	PINNACLE I.D.	: 412389
BATCH #	: 123004	DATE EXTRACTED	: N/A
CLIENT	: BIOTECH REMEDIATION	DATE ANALYZED	: 12/30/2004
PROJECT #	: 810	SAMPLE MATRIX	: AQUEOUS
PROJECT NAME	: (NONE)	UNITS	: MG/L

PARAMETER	SAMPLE RESULT	CONC SPIKE	SPIKED SAMPLE	% REC	DUP SPIKE	DUP % REC	RPD	REC LIMITS	RPD LIMITS
FUEL HYDROCARBONS	<0.10	1.00	0.991	99	1.01	101	2	(70 - 130)	20
HYDROCARBON RANGE		C6-C10							

HYDROCARBONS QUANTITATED USINGGASOLINE

CHEMIST NOTES:
N/A

$$\%\ \text{Recovery} = \frac{(\text{Spike Sample Result} - \text{Sample Result})}{\text{Spike Concentration}} \times 100$$

$$\text{RPD (Relative Percent Difference)} = \frac{(\text{Sample Result} - \text{Duplicate Result})}{\text{Average Result}} \times 100$$

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GAS CHROMATOGRAPHY QUALITY CONTROL
LCS/LCSD

TEST	: EPA 8021B	PINNACLE I.D.	: 412389
BATCH #	: 123004	DATE EXTRACTED	: N/A
CLIENT	: BIOTECH REMEDIATION	DATE ANALYZED	: 12/30/2004
PROJECT #	: 810	SAMPLE MATRIX	: AQUEOUS
PROJECT NAME	: (NONE)	UNITS	: UG/L

PARAMETER	SAMPLE RESULT	CONC SPIKE	SPIKED SAMPLE	% REC	DUP SPIKE	DUP % REC	RPD	REC LIMITS	RPD LIMITS
BENZENE	<0.5	20.0	21.2	106	20.5	103	3	(80 - 120)	20
TOLUENE	<0.5	20.0	21.5	108	20.5	103	5	(80 - 120)	20
ETHYLBENZENE	<0.5	20.0	21.3	107	20.2	101	5	(80 - 120)	20
TOTAL XYLENES	<1.0	60.0	64.6	108	60.5	101	7	(80 - 120)	20
METHYL-t-BUTYL ETHER	<2.5	20.0	18.7	94	18.8	94	1	(70 - 133)	20

CHEMIST NOTES:
N/A

$$\%\ \text{Recovery} = \frac{(\text{Spike Sample Result} - \text{Sample Result})}{\text{Spike Concentration}} \times 100$$

$$\text{RPD (Relative Percent Difference)} = \frac{(\text{Sample Result} - \text{Duplicate Result})}{\text{Average Result}} \times 100$$

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GAS CHROMATOGRAPHY QUALITY CONTROL
MS/MSD

TEST	: EPA 8015B GRO	PINNACLE I.D.	: 412389
MSMSD #	: 412389-01	DATE EXTRACTED	: N/A
CLIENT	: BIOTECH REMEDIATION	DATE ANALYZED	: 12/30/2004
PROJECT #	: 810	SAMPLE MATRIX	: AQUEOUS
PROJECT NAME	: (NONE)	UNITS	: MG/L

PARAMETER	SAMPLE RESULT	CONC SPIKE	SPIKED SAMPLE	% REC	DUP SPIKE	DUP % REC	RPD	REC LIMITS	RPD LIMITS
FUEL HYDROCARBONS	<0.10	1.00	1.04	104	0.942	94	10	(70 - 130)	20
HYDROCARBON RANGE		C6-C10							

HYDROCARBONS QUANTITATED USINGGASOLINE

CHEMIST NOTES:
N/A

$$\%\ \text{Recovery} = \frac{(\text{Spike Sample Result} - \text{Sample Result})}{\text{Spike Concentration}} \times 100$$

$$\text{RPD (Relative Percent Difference)} = \frac{(\text{Sample Result} - \text{Duplicate Result})}{\text{Average Result}} \times 100$$

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GAS CHROMATOGRAPHY QUALITY CONTROL
MS/MSD

TEST	: EPA 8021B	PINNACLE I.D.	: 412389
MSMSD #	: 412389-01	DATE EXTRACTED	: N/A
CLIENT	: BIOTECH REMEDIATION	DATE ANALYZED	: 12/30/2004
PROJECT #	: 810	SAMPLE MATRIX	: AQUEOUS
PROJECT NAME	: (NONE)	UNITS	: UG/L

PARAMETER	SAMPLE RESULT	CONC SPIKE	SPIKED SAMPLE	% REC	DUP SPIKE	DUP % REC	RPD	REC LIMITS	RPD LIMITS
BENZENE	<0.5	20.0	20.9	105	20.6	103	1	(80 - 120)	20
TOLUENE	<0.5	20.0	21.0	105	20.7	104	1	(80 - 120)	20
ETHYLBENZENE	<0.5	20.0	20.4	102	20.1	101	1	(80 - 120)	20
TOTAL XYLENES	<1.0	60.0	61.3	102	60.5	101	1	(80 - 120)	20
METHYL-t-BUTYL ETHER	18	20.0	37.7	99	37.4	97	1	(70 - 133)	20

CHEMIST NOTES:
N/A

$$\% \text{ Recovery} = \frac{(\text{Spike Sample Result} - \text{Sample Result})}{\text{Spike Concentration}} \times 100$$

$$\text{RPD (Relative Percent Difference)} = \frac{(\text{Sample Result} - \text{Duplicate Result})}{\text{Average Result}} \times 100$$

SEVERN TRENT STL

STL Pensacola 3355 McLemore Drive - Pensacola FL 32514 Telephone:(850) 474-1001 Fax:(850) 478-2671

Analytical Report

For: Ms. Jacinta Tenorio
Pinnacle Laboratories
2709-D Pan American Freeway Northeast
Albuquerque, NM 87107
CC:

Order Number: C412851
SDG Number:
Client Project ID:
Project: 412389, BIO
Report Date: 01/17/2005
Sampled By: Client
Sample Received Date: 12/30/2004
Requisition Number:
Purchase Order:

Marty Edwards, Project Manager
medwards@stl-inc.com

SEVERN TRENT STL

STL Pensacola 3355 McLemore Drive - Pensacola FL 32514 Telephone:(850) 474-1001 Fax:(850) 478-2671

Sample Summary

Order: C412851
Date Received: 12/30/2004

Client: Pinnacle Laboratories
Project: 412389, BIO

Client Sample ID	Lab Sample ID	Matrix	Date Sampled
Mw#18/412389-01	C412851*1	Liquid	12/28/2004 11:04
Mw#5/412389-02	C412851*2	Liquid	12/28/2004 11:44
Mw#19/412389-03	C412851*3	Liquid	12/28/2004 13:51
Mw#4/412389-04	C412851*4	Liquid	12/28/2004 14:19
Mw#6/412389-05	C412851*5	Liquid	12/28/2004 14:47

SEVERN TRENT STL

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Analytical Data Report

Lab Sample ID	Description	Matrix	Date Received	Date Sampled	SDG#
12851-1	Mw#18/412389-01	Liquid	12/30/04	12/28/04 11:04	
12851-2	Mw#5/412389-02	Liquid	12/30/04	12/28/04 11:44	
12851-3	Mw#19/412389-03	Liquid	12/30/04	12/28/04 13:51	
12851-4	Mw#4/412389-04	Liquid	12/30/04	12/28/04 14:19	
12851-5	Mw#6/412389-05	Liquid	12/30/04	12/28/04 14:47	

Parameter	Units	Sample ID 12851-1 Mw#18/412389-01	12851-2 Mw#5/412389-02	12851-3 Mw#19/412389-03	12851-4 Mw#4/412389-04	12851-5 Mw#6/412389-05
CO2 and Forms of Alkalinity (4500D)						
Bicarbonate (2320/4500)	mg/l as CaCO3	990	720	790	530	770
Carbon Dioxide, Free	mg/l as CaCO3	34	22	120	56	40
Carbonate (2320/4500)	mg/l as CaCO3	6.0	4.0	1.0	1.0	3.0
Hydroxide	mg/l as CaCO3	<1.0	<1.0	<1.0	<1.0	<1.0
Carbon Dioxide, Total	mg/l as CaCO3	910	650	820	520	720
Analysis Date		01/03/05	01/03/05	01/03/05	01/03/05	01/03/05
Batch ID		AEW001	AEW001	AEW001	AEW001	AEW001
Analyst		ST	ST	ST	ST	ST
Alkalinity (to pH 4.5) as CaCO3 (2320B)						
Alkalinity (to pH 4.5) as CaCO3	mg/l	1000	720	790	530	770
Dilution Factor		1	1	1	1	1
Analysis Date		01/03/05	01/03/05	01/03/05	01/03/05	01/03/05
Batch ID		AEW001	AEW001	AEW001	AEW001	AEW001
Analyst		ST	ST	ST	ST	ST
Sulfate as SO4 (375.4)						
Sulfate as SO4	mg/l	1300	1700	2300	970	1600
Dilution Factor		50	50	75	40	50
Analysis Date		01/04/05	01/04/05	01/04/05	01/04/05	01/04/05
Batch ID		SEW001	SEW001	SEW001	SEW001	SEW001
Analyst		CR	CR	CR	CR	CR

SEVERN TRENT STL

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Analytical Data Report

Lab Sample ID	Description	Matrix	Date Received	Date Sampled	SDG#
12851-1	MW#18/412389-01	Liquid	12/30/04	12/28/04 11:04	
12851-2	MW#5/412389-02	Liquid	12/30/04	12/28/04 11:44	
12851-3	MW#19/412389-03	Liquid	12/30/04	12/28/04 13:51	
12851-4	MW#4/412389-04	Liquid	12/30/04	12/28/04 14:19	
12851-5	MW#6/412389-05	Liquid	12/30/04	12/28/04 14:47	

Parameter	Units	Sample ID 12851-1 MW#18/412389-01	12851-2 MW#5/412389-02	12851-3 MW#19/412389-03	12851-4 MW#4/412389-04	12851-5 MW#6/412389-05
Chloride (4500E)						
Chloride	mg/l	190	140	220	94	100
Dilution Factor		5	5	5	1	1
Analysis Date		01/04/05	01/04/05	01/04/05	01/04/05	01/04/05
Batch ID		CKW001	CKW001	CKW001	CKW001	CKW001
Analyst		CR	CR	CR	CR	CR
Total Dissolved Solids (160.1)						
Total Dissolved Solids	mg/l	3700	3800	4800	2300	3500
Dilution Factor		1	1	1	1	1
Analysis Date		12/31/04	12/31/04	12/31/04	12/31/04	12/31/04
Batch ID		TDW114	TDW114	TDW114	TDW114	TDW114
Analyst		ST	ST	ST	ST	ST
Specific Conductance (120.1)						
Specific Conductance	umhos/cm	5300	5800	6200	3200	4800
Dilution Factor		1	1	1	1	1
Analysis Date		01/03/05	01/03/05	01/03/05	01/03/05	01/03/05
Batch ID		CDW001	CDW001	CDW001	CDW001	CDW001
Analyst		ST	ST	ST	ST	ST

SEVERN TRENT STL

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Analytical Data Report

Lab Sample ID	Description	Matrix	Date Received	Date Sampled	SDG#
12851-1	MW#18/412389-01	Liquid	12/30/04	12/28/04 11:04	
12851-2	MW#5/412389-02	Liquid	12/30/04	12/28/04 11:44	
12851-3	MW#19/412389-03	Liquid	12/30/04	12/28/04 13:51	
12851-4	MW#4/412389-04	Liquid	12/30/04	12/28/04 14:19	
12851-5	MW#6/412389-05	Liquid	12/30/04	12/28/04 14:47	

Parameter	Units	Sample ID 12851-1 MW#18/412389-01	12851-2 MW#5/412389-02	12851-3 MW#19/412389-03	12851-4 MW#4/412389-04	12851-5 MW#6/412389-05
Fluoride (340.2)						
Fluoride	mg/l	0.45	0.57	0.51	0.49	0.54
Dilution Factor		1	1	1	1	1
Analysis Date		01/04/05	01/04/05	01/04/05	01/04/05	01/04/05
Batch ID		FLW001	FLW001	FLW001	FLW001	FLW001
Analyst		ST	ST	ST	ST	ST
Bromide (300.0)						
Bromide	mg/l	0.50J	0.35J	0.55J	0.20J	0.31J
Dilution Factor		20	20	20	20	20
Prep Date		01/04/05	01/04/05	01/04/05	01/04/05	01/04/05
Analysis Date		01/04/05	01/04/05	01/04/05	01/04/05	01/05/05
Batch ID		IC035	IC035	IC035	IC035	IC035
Prep Method		300.0	300.0	300.0	300.0	300.0
Analyst		SGB	SGB	SGB	SGB	SGB
Quantitation Factor		20	20	20	20	20
Metals, Dissolved (6010B)						
Calcium, Dissolved	mg/l	130	67	380	180	190
Magnesium, Dissolved	mg/l	47	19	76	22	32
Potassium, Dissolved	mg/l	10	8.8	8.6	6.2	9.6
Sodium, Dissolved	mg/l	1000	1100	920	490	860
Dilution Factor		1	1	1	1	1
Prep Date		01/04/05	01/04/05	01/04/05	01/04/05	01/04/05
Analysis Date		01/05/05	01/05/05	01/05/05	01/05/05	01/05/05
Batch ID		PD001	PD001	PD001	PD001	PD001
Prep Method		3005A	3005A	3005A	3005A	3005A
Analyst		GSP	GSP	GSP	GSP	GSP
Quantitation Factor		1.000	1.000	1.000	1.000	1.000

SEVERN TRENT STL

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Analytical Data Report

Lab Sample ID	Description	Matrix	Date Received	Date Sampled	SDG#
12851-1	Mw#18/412389-01	Liquid	12/30/04	12/28/04 11:04	
12851-2	Mw#5/412389-02	Liquid	12/30/04	12/28/04 11:44	
12851-3	Mw#19/412389-03	Liquid	12/30/04	12/28/04 13:51	
12851-4	Mw#4/412389-04	Liquid	12/30/04	12/28/04 14:19	
12851-5	Mw#6/412389-05	Liquid	12/30/04	12/28/04 14:47	

Parameter	Units	Sample ID 12851-1 Mw#18/412389-01	12851-2 Mw#5/412389-02	12851-3 Mw#19/412389-03	12851-4 Mw#4/412389-04	12851-5 Mw#6/412389-05
Hardness by calculation (6010B)						
Hardness as CaCO3	mg/l	560	260	1200	540	610
Dilution Factor		1	1	1	1	1
Prep Date		01/04/05	01/04/05	01/04/05	01/04/05	01/04/05
Analysis Date		01/05/05	01/05/05	01/05/05	01/05/05	01/05/05
Batch ID		PW005	PW005	PW005	PW005	PW005
Prep Method		3010A	3010A	3010A	3010A	3010A
Analyst		GSP	GSP	GSP	GSP	GSP
Quantitation Factor		1.000	1.000	1.000	1.000	1.000
RCRA Metals (6010B)						
Arsenic	mg/l	0.28	<0.0050	<0.0050	0.12	<0.0050
Barium	mg/l	0.12	0.077	0.058	0.070	0.015
Cadmium	mg/l	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050
Chromium	mg/l	0.0060	<0.0050	<0.0050	<0.0050	<0.0050
Lead	mg/l	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050
Selenium	mg/l	<0.010	<0.010	<0.010	<0.010	<0.010
Silver	mg/l	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050
Dilution Factor		1	1	1	1	1
Prep Date		01/04/05	01/04/05	01/04/05	01/04/05	01/04/05
Analysis Date		01/05/05	01/05/05	01/05/05	01/05/05	01/05/05
Batch ID		PW005	PW005	PW005	PW005	PW005
Prep Method		3010A	3010A	3010A	3010A	3010A
Analyst		GSP	GSP	GSP	GSP	GSP
Quantitation Factor		1.000	1.000	1.000	1.000	1.000

SEVERN TRENT STL

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Analytical Data Report

Lab Sample ID	Description	Matrix	Date Received	Date Sampled	SDG#
12851-1	MW#18/412389-01	Liquid	12/30/04	12/28/04 11:04	
12851-2	MW#5/412389-02	Liquid	12/30/04	12/28/04 11:44	
12851-3	MW#19/412389-03	Liquid	12/30/04	12/28/04 13:51	
12851-4	MW#4/412389-04	Liquid	12/30/04	12/28/04 14:19	
12851-5	MW#6/412389-05	Liquid	12/30/04	12/28/04 14:47	

Parameter	Units	Sample ID 12851-1 MW#18/412389-01	12851-2 MW#5/412389-02	12851-3 MW#19/412389-03	12851-4 MW#4/412389-04	12851-5 MW#6/412389-05
Mercury (7470A)						
Mercury	mg/l	<0.00020	<0.00020	<0.00020	<0.00020	<0.00020
Dilution Factor		1	1	1	1	1
Prep Date		01/05/05	01/05/05	01/05/05	01/05/05	01/05/05
Analysis Date		01/06/05	01/06/05	01/06/05	01/06/05	01/06/05
Batch ID		HGW001	HGW001	HGW001	HGW001	HGW001
Prep Method		7470A	7470A	7470A	7470A	7470A
Analyst		JB	JB	JB	JB	JB
Quantitation Factor		1	1	1	1	1

SEVERN TRENT STL

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Analytical Data Report

Lab Sample ID	Description	Matrix	Date Received	Date Sampled	SDG#
12851-6	Method Blank	Liquid	12/30/04		
12851-7	Lab Control Standard % Recovery	Liquid	12/30/04		
12851-8	LCS Accuracy Control Limit (%R)	Liquid	12/30/04		
12851-9	Precision (%RPD) MS/MSD	Liquid	12/30/04		
12851-10	MS Precision Advisory Limit (%RPD)	Liquid	12/30/04		

Parameter	Units	Sample ID 12851-6 Method Blank	12851-7 Lab Control Stan	12851-8 LCS Accuracy Con	12851-9 Precision (%RPD)	12851-10 MS Precision Ad
Alkalinity (to pH 4.5) as CaCO3 (2320B)						
Alkalinity (to pH 4.5) as CaCO3	mg/l	<1.0	97 %	90-110	1	20
Dilution Factor		1				
Analysis Date		01/03/05				
Batch ID		AEW001	AEW001		AEW001	
Analyst		ST				
Sulfate as SO4 (375.4)						
Sulfate as SO4	mg/l	<5.0	97 %	90-110	7	19
Dilution Factor		1				
Analysis Date		01/04/05				
Batch ID		SEW001	SEW001		SEW001	
Analyst		CR				
Chloride (4500E)						
Chloride	mg/l	<2.0	95 %	90-110	2	20
Dilution Factor		1				
Analysis Date		01/04/05				
Batch ID		CKW001	CKW001		CKW001	
Analyst		CR				

STL

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Analytical Data Report

Lab Sample ID	Description	Matrix	Date Received	Date Sampled	SDG#
12851-6	Method Blank	Liquid	12/30/04		
12851-7	Lab Control Standard % Recovery	Liquid	12/30/04		
12851-8	LCS Accuracy Control Limit (%R)	Liquid	12/30/04		
12851-9	Precision (%RPD) MS/MSD	Liquid	12/30/04		
12851-10	MS Precision Advisory Limit (%RPD)	Liquid	12/30/04		

Parameter	Units	Sample ID 12851-6 Method Blank	12851-7 Lab Control Stan	12851-8 LCS Accuracy Con	12851-9 Precision (%RPD)	12851-10 MS Precision Ad
Total Dissolved Solids (160.1)						
Total Dissolved Solids	mg/l	<5.0	103 %	68-120		
Dilution Factor		1				
Analysis Date		12/31/04				
Batch ID		TDW114	TDW114			
Analyst		ST				
Specific Conductance (120.1)						
Specific Conductance	umhos/cm	<1.0	101 %	98-102		
Dilution Factor		1				
Analysis Date		01/03/05				
Batch ID		CDW001	CDW001			
Analyst		ST				
Fluoride (340.2)						
Fluoride	mg/l	<0.20	98 %	90-110	3	10
Dilution Factor		1				
Analysis Date		01/04/05				
Batch ID		FLW001	FLW001		FLW001	
Analyst		ST				

SEVERN TRENT STL

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Analytical Data Report

Lab Sample ID	Description	Matrix	Date Received	Date Sampled	SDG#
12851-6	Method Blank	Liquid	12/30/04		
12851-7	Lab Control Standard % Recovery	Liquid	12/30/04		
12851-8	LCS Accuracy Control Limit (%R)	Liquid	12/30/04		
12851-9	Precision (%RPD) MS/MSD	Liquid	12/30/04		
12851-10	MS Precision Advisory Limit (%RPD)	Liquid	12/30/04		

Parameter	Units	Sample ID 12851-6 Method Blank	12851-7 Lab Control	12851-8 StanLCS Accuracy Con	12851-9 Precision (%RPD)	12851-10 MS Precision Ad
Bromide (300.0)						
Bromide	mg/l	<0.20	103 %	90-110	N/C	20
Dilution Factor		1.0				
Prep Date		01/04/05				
Analysis Date		01/04/05				
Batch ID		IC035	IC035		IC035	
Prep Method		300.0				
Analyst		SGB				
Quantitation Factor		1.0				
Metals, Dissolved (6010B)						
Calcium, Dissolved	mg/l	<0.50	104 %	80-120	2 %	20
Magnesium, Dissolved	mg/l	<0.50	106 %	80-120	1 %	20
Potassium, Dissolved	mg/l	<1.0	109 %	80-120	5 %	20
Sodium, Dissolved	mg/l	<1.0	108 %	80-120	3 %	20
Dilution Factor		1				
Prep Date		01/04/05				
Analysis Date		01/05/05				
Batch ID		PD001	PD001		PD001	
Prep Method		3005A				
Analyst		GSP				
Quantitation Factor		1.000				

SEVERN TRENT STL

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Analytical Data Report

Lab Sample ID	Description	Matrix	Date Received	Date Sampled	SDG#
12851-6	Method Blank	Liquid	12/30/04		
12851-7	Lab Control Standard % Recovery	Liquid	12/30/04		
12851-8	LCS Accuracy Control Limit (%R)	Liquid	12/30/04		
12851-9	Precision (%RPD) MS/MSD	Liquid	12/30/04		
12851-10	MS Precision Advisory Limit (%RPD)	Liquid	12/30/04		

Parameter	Units	Sample ID 12851-6 Method Blank	12851-7 Lab Control Stan	12851-8 LCS Accuracy Con	12851-9 Precision (%RPD)	12851-10 MS Precision Ad
Hardness by calculation (6010B)						
Hardness as CaCO3	mg/l	<3.3	N/A	N/A	N/A	N/A
Dilution Factor		1				
Prep Date		01/04/05				
Analysis Date		01/05/05				
Batch ID		PW005	PW005		PW005	
Prep Method		3010A				
Analyst		GSP				
Quantitation Factor		1.000				
RCRA Metals (6010B)						
Arsenic	mg/l	<0.0050	96 %	80-120	0 %	20
Barium	mg/l	<0.010	102 %	80-120	1 %	20
Cadmium	mg/l	<0.0050	97 %	80-120	1 %	20
Chromium	mg/l	<0.0050	98 %	80-120	1 %	20
Lead	mg/l	<0.0050	97 %	80-120	1 %	20
Selenium	mg/l	<0.010	87 %	80-120	0 %	20
Silver	mg/l	<0.0050	101 %	80-120	0 %	20
Dilution Factor		1				
Prep Date		01/04/05				
Analysis Date		01/05/05				
Batch ID		PW005	PW005		PW005	
Prep Method		3010A				
Analyst		GSP				
Quantitation Factor		1.000				

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Analytical Data Report

Lab Sample ID	Description	Matrix	Date Received	Date Sampled	SDG#
12851-6	Method Blank	Liquid	12/30/04		
12851-7	Lab Control Standard % Recovery	Liquid	12/30/04		
12851-8	LCS Accuracy Control Limit (%R)	Liquid	12/30/04		
12851-9	Precision (%RPD) MS/MSD	Liquid	12/30/04		
12851-10	MS Precision Advisory Limit (%RPD)	Liquid	12/30/04		

Parameter	Units	Sample ID 12851-6 Method Blank	12851-7 Lab Control Stan	12851-8 LCS Accuracy Con	12851-9 Precision (%RPD)	12851-10 MS Precision Ad
Mercury (7470A)						
Mercury	mg/l	<0.00020	100 %	80-120	0	20
Dilution Factor		1				
Prep Date		01/05/05				
Analysis Date		01/06/05				
Batch ID		HGW001	HGW001		HGW001	
Prep Method		7470A				
Analyst		JB				
Quantitation Factor		1				

SEVERN TRENT STL

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Analytical Data Report

Lab Sample ID	Description	Matrix	Date Received	Date Sampled	SDG#
12851-11	Reporting Limit (RL)	Liquid	12/30/04		

Parameter	Units	Sample ID 12851-11 Reporting Limit
CO2 and Forms of Alkalinity (4500D)		
Bicarbonate (2320/4500)	mg/l as CaCO3	1.0
Carbon Dioxide, Free	mg/l as CaCO3	1.0
Carbonate (2320/4500)	mg/l as CaCO3	1.0
Hydroxide	mg/l as CaCO3	1.0
Carbon Dioxide, Total	mg/l as CaCO3	1.0
Alkalinity (to pH 4.5) as CaCO3 (2320B)		
Alkalinity (to pH 4.5) as CaCO3	mg/l	1.0
Sulfate as SO4 (375.4)		
Sulfate as SO4	mg/l	5.0
Chloride (4500E)		
Chloride	mg/l	2.0
Total Dissolved Solids (160.1)		
Total Dissolved Solids	mg/l	5.0
Specific Conductance (120.1)		
Specific Conductance	umhos/cm	1.0

SEVERN TRENT STL

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Analytical Data Report

Lab Sample ID	Description	Matrix	Date Received	Date Sampled	SDG#
12851-11	Reporting Limit (RL)	Liquid	12/30/04		

Parameter	Units	Sample ID 12851-11 Reporting Limit
Fluoride (340.2)		
Fluoride	mg/l	0.20
Bromide (300.0)		
Bromide	mg/l	0.20
Metals, Dissolved (6010B)		
Calcium, Dissolved	mg/l	0.50
Magnesium, Dissolved	mg/l	0.50
Potassium, Dissolved	mg/l	1.0
Sodium, Dissolved	mg/l	1.0
Hardness by calculation (6010B)		
Hardness as CaCO3	mg/l	3.3
RCRA Metals (6010B)		
Arsenic	mg/l	0.0050
Barium	mg/l	0.010
Cadmium	mg/l	0.0050
Chromium	mg/l	0.0050
Lead	mg/l	0.0050
Selenium	mg/l	0.010
Silver	mg/l	0.0050

SEVERN TRENT STL

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Analytical Data Report

Lab Sample ID	Description	Matrix	Date Received	Date Sampled	SDG#
12851-11	Reporting Limit (RL)	Liquid	12/30/04		

Parameter	Units	Sample ID 12851-11 Reporting Limit
Mercury (7470A)		
Mercury	mg/l	0.00020

SEVERN TRENT STL

STL Pensacola 3355 McLemore Drive - Pensacola FL 32514 Telephone:(850) 474-1001 Fax:(850) 478-2671

Order Number: C412851

These test results meet all the requirements of NELAC. All questions regarding this test report should be directed to the STL Project Manager who signed this test report.

STL Pensacola
PROJECT SAMPLE INSPECTION FORM

SEVERN TRENT STL

Lab Order #: C41285 1 Date Received: 12/30/04

1.	Was there a Chain of Custody?	(Yes)	No*		
2.	Was Chain of Custody properly filled out and relinquished?	(Yes)	No*		
3.	Were all samples properly labeled and identified?	(Yes)	No*		
4.	Were samples received cold? (Criteria: 0.1° - 6°C: STL-SOP 1055)	(Yes)	No*	N/A	
5.	Did samples require splitting or compositing◊?	Yes*	(No)		
6.	Were samples received in proper containers for analysis requested?	(Yes)	No*		
7.	Were all sample containers received intact?	(Yes)	No*		
8.	Were samples checked for preservative? *(Check pH of all H_2O requiring preservative (STL-PN SOP 917) except VOA vials that require zero headspace)+*	(Yes)	No*	N/A	
9.	Is there sufficient volume for analysis requested?	(Yes)	No*	N/A	*(Can)*
10.	Were samples received within Holding Time? (REFER TO STL-SOP 1040)	Yes	(No*)		
11.	Is Headspace (bubble) visible > ¼" diameter in VOA vial(s)?*	Yes*	No	(N/A)	
12.	**Were Trip Blanks Received?**	Yes	(No)	N/A	
13.	**If yes, was analysis of Trip Blanks requested?**	Yes	No	(N/A)	
14.	Were MS/MSD-specific bottles provided?	Yes	No*	(N/A)	
15.	If any issues, how was PM notified?	PSIF ☒	Verbal ☒		

Airbill Number(s): 1Z8781680146738043 Delivery By: (UPS) FedEx HD BUS DHL PE

(HD – Hand Delivery)

Cooler Number(s) & Temp(s) °C: Client 2.3°C IR-1

(IE. #340L, 4°C, IR-1 – COOLER NUMBER, TEMPERATURE, THERMOMETER NUMBER)

Comments (reference item numbers above and list sample IDs/Tests where appropriate):

11 b) out of hold for conductivity

Also a 40z and a 16oz Nitric preserved bottles sent for each Sample - I is supposed to be dissolved and the other total, but are not labeled any differently.

⇒ Per Pinnacle use the little bottle for dissolved

Inspected By: CRW Date: 12/30/04 Logged By: LHL Date: 30-Dec-04

* Note all Out-of-Control and/or questionable events on Comment Section of this form. For holding times, the analytical department will flag immediate hold time samples (pH, Dissolved O2, Residual Cl) as out of hold time, therefore, these samples will not be documented on this PSIF.

◊ All volatile samples requested to be split or composited must be done in the Volatile Lab. Document: "Volatile sample values may be compromised due to sample splitting (compositing)"

\+ All pH results for North Carolina, and other requested projects are to be recorded on the pH log provided (STL-SOP 938).

• According to EPA, a bubble of ¼" or less is acceptable in 40 ml vials requiring volatile analysis. According to Florida DEP, excess headspace in liquid TCLP volatile containers shall be documented.

ANY PERSON MAKING OR ADDING COMMENTS TO ANY PART OF THIS PSIF MUST INITIAL AND DATE ALL CORRECTIONS, COMMENTS AND/OR INSTRUCTIONS.

SEVERN TRENT STL

Organic Data Qualifiers for Final Report

B	The analyte was detected in the method blank and in the client's sample.
D	The result was obtained from a dilution.
E	The result exceeds the calibration range.
J	Estimated value because the analyte concentration is less than the reporting limit.
M	A matrix effect was present.
N	Presumptive evidence of a compound. The compound was identified qualitatively or as a Tentatively Identified Compound.
N/C	Not Calculable. Either the sample spiked was > 4X spike concentration, or the compound was diluted out, or the results of sample duplicate analysis were <RL.
P	Second-column or detector confirmation exceeded method criteria. Appropriate value is reported and data is flagged/qualified as instructed by method/regulation.
U or < or ND	The analyte was not detected.
*	The result is not within control limit(s).

Inorganic Data Qualifiers for Final Report

B	The analyte was detected in the method blank and in the client's sample.
E	The reported value is estimated because of the presence of interference.
J	Estimated value because the analyte concentration is less than the reporting limit.
N	The spiked sample recovery is not within control limits.
N/C	Not Calculable. Either the sample spiked was > 4X spike concentration, or the compound was diluted out, or the results of sample duplicate analysis were <RL.
U or < or ND	The analyte was not detected.
*	Duplicate analysis not within control limits
M	The duplicate injection precision was not met.
S	The reported value was determined by the Method of Standard Addition (MSA).
W	Post-digestion spike for Furnace AA analysis is out of control limits (85-115%), while sample absorbance is less than 50% of spike absorbance and post spike recovery is greater than or equal to 40%, the sample is flagged with a "W" and no further action is required.
+	The Standard Additions Correlation Coefficient is <0.995.
L	The result is not within control limit(s).

It is permissible to submit an Out-of-Control Events/Corrective Action form and/or Case Narrative in lieu of using above qualifiers.

When the laboratory receives a sample that does not meet EPA requirements for sample collection, preservation or holding time, the laboratory is required to reject the samples. The client must be notified and asked whether the lab should proceed with analysis. Data from any samples that do not meet sample acceptance criteria (collection, preservation and holding time), must be flagged, or noted on a corrective action form or case narrative, or addressed on the Project Sample Inspection Form (PSIF) in an unambiguous manner clearly defining the nature and substance of the variation. NPDES samples from North Carolina that do not meet EPA requirements for sample collection, preservation or holding time are non-reportable for NPDES compliance monitoring.

Abbreviations

ND	Not Detected at or above the STL Pensacola reporting limit (RL)
NS	Not Submitted
NA	Not Applicable
MDL	STL Pensacola Method Detection Limit
RL	STL Pensacola Reporting Limit
NoMS	Not enough sample provided to prepare and/or analyze a method-required matrix spike (MS) and/or duplicate (MSD)
TIC	Tentatively Identified Compound

Florida Projects Inorganic/Organic

Refer to FL DEP 62-160; Table 4 Data Qualifier Codes. FL DEP Rule 62-160, Table 1 lists the Florida sites which require data qualifiers.

Arizona DEQ Projects

Any qualified data submitted to Arizona DEQ (ADEQ) after January 1, 2001 must be designated using the Arizona Data Qualifiers as developed by the Arizona ELAC technical subcommittee. Refer to the ADEQ qualifier list.

Severn Trent Laboratories Inc.
STL Pensacola ◦ 3355 McLemore Dr ◦ Pensacola, FL 32514
Tel 850 474 1001 Fax 850 484 5315 ◦ *www.stl-inc.com*

Revised/Effective: 08-09-04

SEVERN TRENT STL

STL PENSACOLA
Certifications, Memberships & Affiliations

Alabama Department of Environmental Management, Laboratory ID No. 40150 (Drinking Water by Reciprocity with FL)

Arizona Department of Health Services, Lab ID No. AZ0589 (Hazardous Waste & Wastewater)

Arkansas Department of Pollution Control and Ecology, (88-0689) (Environmental)

California Department of Health Services, **ELAP** Laboratory ID No. 2510 (Hazardous Waste and Wastewater)

Connecticut Department of Health Services, Connecticut Lab Approval No. PH-0697 (D W, H W and Wastewater)

Florida DOH, **NELAP** Laboratory ID No. E81010 (Drinking Water, Hazardous Waste and Wastewater)

Florida DEP/DOH CompQAP # 980156

Illinois Environmental Laboratory Accreditation Program (ELAP), **NELAP** Laboratory ID No. 200041 (Wastewater and Hazardous Waste)

Iowa Department of Natural Resources, Laboratory ID No. 367 (Wastewater, UST, Solid Waste, & Contaminated Sites)

Kansas Department of Health & Environment, **NELAP** Laboratory ID No. E10253 (Wastewater and Hazardous Waste)

Kentucky NR&EPC, Laboratory ID No. 90043 (Drinking Water)

Kentucky Petroleum Storage Tank Env Assurance Fund, Laboratory ID No. 0053 (UST)

Louisiana DEQ, LELAP, **NELAP** Laboratory ID No. 02075, Agency Interest ID 30748 (Environmental)

Maryland DH&MH Laboratory ID No. 233 (Drinking Water by Reciprocity with Florida)

Massachusetts DEP, Laboratory ID No. M-FL094 (Wastewater)

Michigan Bureau of E&OccH, Laboratory ID No.9912 (Drinking Water by Reciprocity with Florida)

New Hampshire DES ELAP, **NELAP** Laboratory ID No. 250502 (Drinking Water & Wastewater)

New Jersey DEP&E, **NELAP** Laboratory ID No. FL006 (Wastewater and Hazardous Waster)

North Carolina DENR, Laboratory ID No. 314 (Hazardous Waste and Wastewater)

North Dakota DH&Consol Labs, Laboratory ID No. R-108 Wastewater and Hazardous Waste by Reciprocity with Arizona)

Oklahoma Department of Environmental Quality, Laboratory ID No. 9810 (Hazardous Waste and Wastewater)

Pennsylvania Department of Environmental Resources, **NELAP** Laboratory ID No. 68-467 (Drinking Water & Wastewater)

South Carolina DH&EC, Laboratory ID No. 96026 (Wastewater & Solids/Hazardous Waste by Reciprocity with FL)

Tennessee Department of Health & Environment, Laboratory ID No. 02907 (Drinking Water)

Virginia Department of General Services, Laboratory ID No. 00008 (Drinking Water by Reciprocity with FL)

West Virginia DOE, Office of Water Resources, Laboratory ID No. 136 (Haz Waste and Wastewater)

EPA ICR (Information Collection Rule) Approved Laboratory, Laboratory ID No. ICRFL031

NFESC (Naval Facilities Engineering Services Center)

USACE (United States Army Corps. of Engineers), MRD

STL Pensacola also has a foreign soil permit to accept soils from locations other than the continental United States. Permit No. S-37599

Pinnacle Laboratories, Inc. — **Interlab Chain of Custody** — Date: 12/29/04 Page: 1 of 1

Network Project Manager: Jacinta Tenorio

Pinnacle Laboratories, Inc.
2709-D Pan American Freeway, NE
Albuquerque, NM 87107
(505) 344-3777 Fax (505) 344-4413

C412851

ANALYSIS REQUEST

SAMPLE ID	DATE	TIME	MATRIX	LAB ID	Metals (8) RCRA (Total)	TCLP RCRA (8) Metals	Metals-13 PP List	Metals-TAL (23 Metals)	Dissolved Fe, Mn, Pb (6010)	Dissolved Ca, Mg, K, Na	TOC	Gen Chemistry: Cl, F, SO4, Br, TDS	EC, Alk+Bicarb/Carb/OH	Hardness	Volatile Organics GC/MS (8260)	BOD	COD	Pesticides/PCB (608/8081/8082)	Herbicides (615/8151)	PNA (8310)/8270 SIMS	8260 (TCLP 1311) ZHE		Base/Neutral Acid Compounds GC/MS (625/8270)	Uranium (ICP-MS)	Radium 226+228	Gross Alpha/Beta	TO-14	NUMBER OF CONTAINERS
MW#18 / 412389-01	12/28/04	1104	AQ		X					X		X	X	X													
MW#5 / 412389-02	↓	1144	↓		X					X		X	X	X													
MW#19 / 412389-03		1351			X					X		X	X	X													
MW#4 / 412389-04		1419			X					X		X	X	X													
MW#6 / 412389-05	↓	1447	↓		X					X		X	X	X													

PROJECT INFORMATION		SAMPLE RECEIPT		SAMPLES SENT TO:	
PROJECT #:	412389	Total Number of Containers		PENSACOLA - STL-FL	X
PROJ. NAME:	BIO	Chain of Custody Seals		ESL - OR	
QC LEVEL:	STD IV	Received Intact?		ATEL - AZ	
QC REQUIRED:	MS MSD BLANK	Received Good Cond./Cold		ATEL - MARION	
TAT:	STANDARD RUSH!!	LAB NUMBER:		ATEL - MELMORE	
				EHL	
DUE DATE:	1/12	COMMENTS:		GEL	
RUSH SURCHARGE:	—			U OF MIAMI	
CLIENT DISCOUNT:	—			WCAS	
SPECIAL CERTIFICATION REQUIRED:	YES NO			WOHL	

RELINQUISED BY: 1.	RELINQUISED BY: 2.
Signature: Francine Tenorio Time: 1700	Signature: Time:
Printed Name: Francine Tenorio Date: 12/29/04	Printed Name: Date:
Pinnacle Laboratories, Inc.	Company
RECEIVED BY: 1.	**RECEIVED BY: 2.**
Signature: Time: 0945	Signature: Time:
Printed Name: Cheyenne Whitmire Date: 12/30/04	Printed Name: Date:
Company STL Pensacola	Company

Environmental Services Laboratory, Inc.

E S L

17400 SW Upper Boones Ferry Road, Suite 270 • Portland, OR 97224 • (503) 670-8520

January 17, 2005

Jacinta A. Tenorio
Pinnacle Laboratories
2709-D Pan American Fwy NE
Albuquerque, NM 87107

TEL: 505 344-3777
FAX (505) 344-4413

RE: 412389/BIO

Order No.: 0412152

Dear Jacinta A. Tenorio:

Environmental Services Laboratory received 5 samples on 12/30/04 for the analyses presented in the following report.

There were no analytical problems encountered and all analytical data met requirements established under NELAC protocol or laboratory specifications except where noted in a Case Narrative. Results apply only to the samples analyzed. Reproduction of this report is permitted only in its entirety, without the written approval of the laboratory. The following checked data sections are included in this report.

✓Base Sample Report ✓Method Blank Report ✓Sample Duplicate Report __Matrix Spike/Matrix Spike Duplicate Report ✓Laboratory Control Spike/Spike Duplicate Report ✓Continuing Calibration Verification Report __Initial Calibration Verification Report

If you have any questions regarding these tests results, please feel free to call.

Darwin Thomas
Project Manager

Keith Hunter
Technical Review

Environmental Services Laboratory

Date: *17-Jan-05*

CLIENT:	Pinnacle Laboratories	**Client Sample ID:**	MW#18/412389-01
Lab Order:	0412152	**Tag Number:**	
Project:	412389/BIO	**Collection Date:**	12/28/04
Lab ID:	0412152-01A	**Matrix:**	AQUEOUS

Analyses	Result	Limit	Qual	Units	DF	Date Analyzed
PAH BY SIM, AQUEOUS		**8270-SIM**		**(3510C)**		Analyst: **keh**
1-Methylnaphthalene	ND	0.40		µg/L	4	1/4/05
2-Methylnaphthalene	ND	0.40		µg/L	4	1/4/05
Acenaphthene	ND	0.40		µg/L	4	1/4/05
Acenaphthylene	ND	0.40		µg/L	4	1/4/05
Anthracene	ND	0.40		µg/L	4	1/4/05
Benz(a)anthracene	ND	0.40		µg/L	4	1/4/05
Benzo(a)pyrene	ND	0.40		µg/L	4	1/4/05
Benzo(b)fluoranthene	ND	0.40		µg/L	4	1/4/05
Benzo(g,h,i)perylene	ND	0.40		µg/L	4	1/4/05
Benzo(k)fluoranthene	ND	0.40		µg/L	4	1/4/05
Chrysene	ND	0.40		µg/L	4	1/4/05
Dibenz(a,h)anthracene	ND	0.40		µg/L	4	1/4/05
Fluoranthene	ND	0.40		µg/L	4	1/4/05
Fluorene	ND	0.40		µg/L	4	1/4/05
Indeno(1,2,3-cd)pyrene	ND	0.40		µg/L	4	1/4/05
Naphthalene	ND	0.40		µg/L	4	1/4/05
Phenanthrene	ND	0.40		µg/L	4	1/4/05
Pyrene	ND	0.40		µg/L	4	1/4/05
Surr: 2-Fluorobiphenyl	51.0	43-116		%REC	4	1/4/05
Surr: 4-Terphenyl-d14	66.0	33-141		%REC	4	1/4/05
Surr: Nitrobenzene-d5	16.0	35-114	S, MI	%REC	4	1/4/05

Qualifiers:

ND - Not Detected at the Reporting Limit

J - Analyte detected below quantitation limits

B - Analyte detected in the associated Method Blank

* - Value exceeds Maximum Contaminant Level

S - Spike Recovery outside accepted recovery limits

R - RPD outside accepted recovery limits

E - Value above quantitation range

Environmental Services Laboratory

Date: *17-Jan-05*

CLIENT:	Pinnacle Laboratories	**Client Sample ID:**	MW#5/412389-02
Lab Order:	0412152	**Tag Number:**	
Project:	412389/BIO	**Collection Date:**	12/28/04
Lab ID:	0412152-02A	**Matrix:**	AQUEOUS

Analyses	Result	Limit	Qual	Units	DF	Date Analyzed
PAH BY SIM, AQUEOUS		**8270-SIM**		**(3510C)**		Analyst: **keh**
1-Methylnaphthalene	ND	0.40		µg/L	4	1/4/05
2-Methylnaphthalene	ND	0.40		µg/L	4	1/4/05
Acenaphthene	ND	0.40		µg/L	4	1/4/05
Acenaphthylene	ND	0.40		µg/L	4	1/4/05
Anthracene	ND	0.40		µg/L	4	1/4/05
Benz(a)anthracene	ND	0.40		µg/L	4	1/4/05
Benzo(a)pyrene	ND	0.40		µg/L	4	1/4/05
Benzo(b)fluoranthene	ND	0.40		µg/L	4	1/4/05
Benzo(g,h,i)perylene	ND	0.40		µg/L	4	1/4/05
Benzo(k)fluoranthene	ND	0.40		µg/L	4	1/4/05
Chrysene	ND	0.40		µg/L	4	1/4/05
Dibenz(a,h)anthracene	ND	0.40		µg/L	4	1/4/05
Fluoranthene	ND	0.40		µg/L	4	1/4/05
Fluorene	ND	0.40		µg/L	4	1/4/05
Indeno(1,2,3-cd)pyrene	ND	0.40		µg/L	4	1/4/05
Naphthalene	ND	0.40		µg/L	4	1/4/05
Phenanthrene	ND	0.40		µg/L	4	1/4/05
Pyrene	ND	0.40		µg/L	4	1/4/05
Surr: 2-Fluorobiphenyl	48.0	43-116		%REC	4	1/4/05
Surr: 4-Terphenyl-d14	68.0	33-141		%REC	4	1/4/05
Surr: Nitrobenzene-d5	31.0	35-114	S	%REC	4	1/4/05

Qualifiers:

ND - Not Detected at the Reporting Limit

J - Analyte detected below quantitation limits

B - Analyte detected in the associated Method Blank

* - Value exceeds Maximum Contaminant Level

S - Spike Recovery outside accepted recovery limits

R - RPD outside accepted recovery limits

E - Value above quantitation range

Environmental Services Laboratory

Date: *17-Jan-05*

CLIENT:	Pinnacle Laboratories	**Client Sample ID:**	MW#19/412389-03
Lab Order:	0412152	**Tag Number:**	
Project:	412389/BIO	**Collection Date:**	12/28/04
Lab ID:	0412152-03A	**Matrix:**	AQUEOUS

Analyses	Result	Limit	Qual	Units	DF	Date Analyzed
PAH BY SIM, AQUEOUS		**8270-SIM**		**(3510C)**		Analyst: **keh**
1-Methylnaphthalene	ND	0.40		µg/L	4	1/4/05
2-Methylnaphthalene	ND	0.40		µg/L	4	1/4/05
Acenaphthene	ND	0.40		µg/L	4	1/4/05
Acenaphthylene	ND	0.40		µg/L	4	1/4/05
Anthracene	ND	0.40		µg/L	4	1/4/05
Benz(a)anthracene	ND	0.40		µg/L	4	1/4/05
Benzo(a)pyrene	ND	0.40		µg/L	4	1/4/05
Benzo(b)fluoranthene	ND	0.40		µg/L	4	1/4/05
Benzo(g,h,i)perylene	ND	0.40		µg/L	4	1/4/05
Benzo(k)fluoranthene	ND	0.40		µg/L	4	1/4/05
Chrysene	ND	0.40		µg/L	4	1/4/05
Dibenz(a,h)anthracene	ND	0.40		µg/L	4	1/4/05
Fluoranthene	ND	0.40		µg/L	4	1/4/05
Fluorene	ND	0.40		µg/L	4	1/4/05
Indeno(1,2,3-cd)pyrene	ND	0.40		µg/L	4	1/4/05
Naphthalene	ND	0.40		µg/L	4	1/4/05
Phenanthrene	ND	0.40		µg/L	4	1/4/05
Pyrene	ND	0.40		µg/L	4	1/4/05
Surr: 2-Fluorobiphenyl	49.0	43-116		%REC	4	1/4/05
Surr: 4-Terphenyl-d14	65.0	33-141		%REC	4	1/4/05
Surr: Nitrobenzene-d5	35.0	35-114		%REC	4	1/4/05

Qualifiers:

ND - Not Detected at the Reporting Limit

J - Analyte detected below quantitation limits

B - Analyte detected in the associated Method Blank

* - Value exceeds Maximum Contaminant Level

S - Spike Recovery outside accepted recovery limits

R - RPD outside accepted recovery limits

E - Value above quantitation range

Environmental Services Laboratory

Date: *17-Jan-05*

CLIENT:	Pinnacle Laboratories	**Client Sample ID:**	MW#4/412389-04
Lab Order:	0412152	**Tag Number:**	
Project:	412389/BIO	**Collection Date:**	12/28/04
Lab ID:	0412152-04A	**Matrix:**	AQUEOUS

Analyses	Result	Limit	Qual	Units	DF	Date Analyzed
PAH BY SIM, AQUEOUS		**8270-SIM**		**(3510C)**		Analyst: **keh**
1-Methylnaphthalene	ND	0.40		µg/L	4	1/4/05
2-Methylnaphthalene	ND	0.40		µg/L	4	1/4/05
Acenaphthene	ND	0.40		µg/L	4	1/4/05
Acenaphthylene	ND	0.40		µg/L	4	1/4/05
Anthracene	ND	0.40		µg/L	4	1/4/05
Benz(a)anthracene	ND	0.40		µg/L	4	1/4/05
Benzo(a)pyrene	ND	0.40		µg/L	4	1/4/05
Benzo(b)fluoranthene	ND	0.40		µg/L	4	1/4/05
Benzo(g,h,i)perylene	ND	0.40		µg/L	4	1/4/05
Benzo(k)fluoranthene	ND	0.40		µg/L	4	1/4/05
Chrysene	ND	0.40		µg/L	4	1/4/05
Dibenz(a,h)anthracene	ND	0.40		µg/L	4	1/4/05
Fluoranthene	ND	0.40		µg/L	4	1/4/05
Fluorene	ND	0.40		µg/L	4	1/4/05
Indeno(1,2,3-cd)pyrene	ND	0.40		µg/L	4	1/4/05
Naphthalene	ND	0.40		µg/L	4	1/4/05
Phenanthrene	ND	0.40		µg/L	4	1/4/05
Pyrene	ND	0.40		µg/L	4	1/4/05
Surr: 2-Fluorobiphenyl	44.0	43-116		%REC	4	1/4/05
Surr: 4-Terphenyl-d14	68.0	33-141		%REC	4	1/4/05
Surr: Nitrobenzene-d5	36.0	35-114		%REC	4	1/4/05

Qualifiers:

ND - Not Detected at the Reporting Limit

J - Analyte detected below quantitation limits

B - Analyte detected in the associated Method Blank

* - Value exceeds Maximum Contaminant Level

S - Spike Recovery outside accepted recovery limits

R - RPD outside accepted recovery limits

E - Value above quantitation range

Environmental Services Laboratory

Date: *17-Jan-05*

CLIENT:	Pinnacle Laboratories	**Client Sample ID:**	MW#6/412389-05
Lab Order:	0412152	**Tag Number:**	
Project:	412389/BIO	**Collection Date:**	12/28/04
Lab ID:	0412152-05A	**Matrix:**	AQUEOUS

Analyses	Result	Limit	Qual	Units	DF	Date Analyzed
PAH BY SIM, AQUEOUS		**8270-SIM**		**(3510C)**		Analyst: **keh**
1-Methylnaphthalene	ND	0.40		µg/L	4	1/4/05
2-Methylnaphthalene	ND	0.40		µg/L	4	1/4/05
Acenaphthene	ND	0.40		µg/L	4	1/4/05
Acenaphthylene	ND	0.40		µg/L	4	1/4/05
Anthracene	ND	0.40		µg/L	4	1/4/05
Benz(a)anthracene	ND	0.40		µg/L	4	1/4/05
Benzo(a)pyrene	ND	0.40		µg/L	4	1/4/05
Benzo(b)fluoranthene	ND	0.40		µg/L	4	1/4/05
Benzo(g,h,i)perylene	ND	0.40		µg/L	4	1/4/05
Benzo(k)fluoranthene	ND	0.40		µg/L	4	1/4/05
Chrysene	ND	0.40		µg/L	4	1/4/05
Dibenz(a,h)anthracene	ND	0.40		µg/L	4	1/4/05
Fluoranthene	ND	0.40		µg/L	4	1/4/05
Fluorene	ND	0.40		µg/L	4	1/4/05
Indeno(1,2,3-cd)pyrene	ND	0.40		µg/L	4	1/4/05
Naphthalene	ND	0.40		µg/L	4	1/4/05
Phenanthrene	ND	0.40		µg/L	4	1/4/05
Pyrene	ND	0.40		µg/L	4	1/4/05
Surr: 2-Fluorobiphenyl	58.0	43-116		%REC	4	1/4/05
Surr: 4-Terphenyl-d14	71.0	33-141		%REC	4	1/4/05
Surr: Nitrobenzene-d5	52.0	35-114		%REC	4	1/4/05

Qualifiers:

ND - Not Detected at the Reporting Limit

J - Analyte detected below quantitation limits

B - Analyte detected in the associated Method Blank

* - Value exceeds Maximum Contaminant Level

S - Spike Recovery outside accepted recovery limits

R - RPD outside accepted recovery limits

E - Value above quantitation range

CLIENT: Pinnacle Laboratories
Work Order: 0412152
Project: 412389/BIO

ANALYTICAL QC SUMMARY REPORT

TestCode: 06 PAH A

Sample ID: **MB-7889**	SampType: **MBLK**	TestCode: **06 PAH A**	Units: **µg/L**	Prep Date: **1/3/05**	Run ID: **HEISENBURG_050104A**
Client ID: **ZZZZZ**	Batch ID: **7889**	TestNo: **8270-SIM**	**(3510C)**	Analysis Date: **1/4/05**	SeqNo: **228018**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
1-Methylnaphthalene	ND	0.10									
2-Methylnaphthalene	ND	0.10									
Acenaphthene	ND	0.10									
Acenaphthylene	ND	0.10									
Anthracene	ND	0.10									
Benz(a)anthracene	ND	0.10									
Benzo(a)pyrene	ND	0.10									
Benzo(b)fluoranthene	ND	0.10									
Benzo(g,h,i)perylene	ND	0.10									
Benzo(k)fluoranthene	ND	0.10									
Chrysene	ND	0.10									
Dibenz(a,h)anthracene	ND	0.10									
Fluoranthene	ND	0.10									
Fluorene	ND	0.10									
Indeno(1,2,3-cd)pyrene	ND	0.10									
Naphthalene	ND	0.10									
Phenanthrene	ND	0.10									
Pyrene	ND	0.10									
Surr: 2-Fluorobiphenyl	0.46	0	1	0	46	43	116	0	0		
Surr: 4-Terphenyl-d14	0.6	0	1	0	60	33	141	0	0		
Surr: Nitrobenzene-d5	0.43	0	1	0	43	35	114	0	0		

Sample ID: **LCS-7889**	SampType: **LCS**	TestCode: **06 PAH A**	Units: **µg/L**	Prep Date: **1/3/05**	Run ID: **HEISENBURG_050104A**
Client ID: **ZZZZZ**	Batch ID: **7889**	TestNo: **8270-SIM**	**(3510C)**	Analysis Date: **1/4/05**	SeqNo: **228019**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
1-Methylnaphthalene	1.12	0.10	1	0	112	21	133	0	0		
2-Methylnaphthalene	0.73	0.10	1	0	73	21	133	0	0		
Acenaphthene	0.63	0.10	1	0	63	47	145	0	0		
Acenaphthylene	0.66	0.10	1	0	66	33	145	0	0		

Qualifiers: ND - Not Detected at the Reporting Limit; S - Spike Recovery outside accepted recovery limits; B - Analyte detected in the associated Method Blank
J - Analyte detected below quantitation limits; R - RPD outside accepted recovery limits

CLIENT: Pinnacle Laboratories
Work Order: 0412152
Project: 412389/BIO

ANALYTICAL QC SUMMARY REPORT

TestCode: 06 PAH A

Sample ID: **LCS-7889**	SampType: **LCS**	TestCode: **06 PAH A**	Units: **µg/L**	Prep Date: **1/3/05**	Run ID: **HEISENBURG_050104A**
Client ID: **ZZZZZ**	Batch ID: **7889**	TestNo: **8270-SIM**	**(3510C)**	Analysis Date: **1/4/05**	SeqNo: **228019**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Anthracene	0.64	0.10	1	0	64	27	133	0	0		
Benz(a)anthracene	0.56	0.10	1	0	56	33	143	0	0		
Benzo(a)pyrene	0.54	0.10	1	0	54	17	163	0	0		
Benzo(b)fluoranthene	0.46	0.10	1	0	46	24	159	0	0		
Benzo(k)fluoranthene	0.63	0.10	1	0	63	11	162	0	0		
Chrysene	0.67	0.10	1	0	67	17	168	0	0		
Fluoranthene	0.72	0.10	1	0	72	26	137	0	0		
Fluorene	0.68	0.10	1	0	68	59	121	0	0		
Naphthalene	0.76	0.10	1	0	76	21	133	0	0		
Phenanthrene	0.61	0.10	1	0	61	54	120	0	0		
Pyrene	0.68	0.10	1	0	68	52	115	0	0		
Surr: 2-Fluorobiphenyl	0.53	0	1	0	53	43	116	0	0		
Surr: 4-Terphenyl-d14	0.51	0	1	0	51	33	141	0	0		
Surr: Nitrobenzene-d5	0.5	0	1	0	50	35	114	0	0		

Sample ID: **LCSD-7889**	SampType: **LCSD**	TestCode: **06 PAH A**	Units: **µg/L**	Prep Date: **1/3/05**	Run ID: **HEISENBURG_050104A**
Client ID: **ZZZZZ**	Batch ID: **7889**	TestNo: **8270-SIM**	**(3510C)**	Analysis Date: **1/4/05**	SeqNo: **228020**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
1-Methylnaphthalene	0.92	0.10	1	0	92	21	133	1.12	19.6	30	
2-Methylnaphthalene	0.65	0.10	1	0	65	21	133	0.73	11.6	30	
Acenaphthene	0.6	0.10	1	0	60	47	145	0.63	4.88	30	
Acenaphthylene	0.64	0.10	1	0	64	33	145	0.66	3.08	30	
Anthracene	0.7	0.10	1	0	70	27	133	0.64	8.96	30	
Benz(a)anthracene	0.55	0.10	1	0	55	33	143	0.56	1.80	30	
Benzo(a)pyrene	0.52	0.10	1	0	52	17	163	0.54	3.77	30	
Benzo(b)fluoranthene	0.45	0.10	1	0	45	24	159	0.46	2.20	30	
Benzo(k)fluoranthene	0.56	0.10	1	0	56	11	162	0.63	11.8	30	
Chrysene	0.64	0.10	1	0	64	17	168	0.67	4.58	30	
Fluoranthene	0.67	0.10	1	0	67	26	137	0.72	7.19	30	
Fluorene	0.66	0.10	1	0	66	59	121	0.68	2.99	30	

Qualifiers: ND - Not Detected at the Reporting Limit
J - Analyte detected below quantitation limits
S - Spike Recovery outside accepted recovery limits
R - RPD outside accepted recovery limits
B - Analyte detected in the associated Method Blank

CLIENT: Pinnacle Laboratories
Work Order: 0412152
Project: 412389/BIO

ANALYTICAL QC SUMMARY REPORT

TestCode: 06 PAH A

Sample ID: **LCSD-7889**	SampType: **LCSD**	TestCode: **06 PAH A**	Units: **µg/L**	Prep Date: **1/3/05**	Run ID: **HEISENBURG_050104A**
Client ID: **ZZZZZ**	Batch ID: **7889**	TestNo: **8270-SIM**	**(3510C)**	Analysis Date: **1/4/05**	SeqNo: **228020**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Naphthalene	0.66	0.10	1	0	66	21	133	0.76	14.1	30	
Phenanthrene	0.59	0.10	1	0	59	54	120	0.61	3.33	30	
Pyrene	0.69	0.10	1	0	69	52	115	0.68	1.46	30	
Surr: 2-Fluorobiphenyl	0.53	0	1	0	53	43	116	0	0	30	
Surr: 4-Terphenyl-d14	0.49	0	1	0	49	33	141	0	0	30	
Surr: Nitrobenzene-d5	0.53	0	1	0	53	35	114	0	0	30	

Sample ID: **0412152-02A DUP**	SampType: **DUP**	TestCode: **06 PAH A**	Units: **µg/L**	Prep Date: **1/3/05**	Run ID: **HEISENBURG_050104A**
Client ID: **MW#5/412389-02**	Batch ID: **7889**	TestNo: **8270-SIM**	**(3510C)**	Analysis Date: **1/4/05**	SeqNo: **228023**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
1-Methylnaphthalene	ND	0.40	0	0	0	0	0	0	0	20	
2-Methylnaphthalene	ND	0.40	0	0	0	0	0	0	0	20	
Acenaphthene	ND	0.40	0	0	0	0	0	0	0	20	
Acenaphthylene	ND	0.40	0	0	0	0	0	0	0	20	
Anthracene	ND	0.40	0	0	0	0	0	0	0	20	
Benz(a)anthracene	ND	0.40	0	0	0	0	0	0	0	20	
Benzo(a)pyrene	ND	0.40	0	0	0	0	0	0	0	20	
Benzo(b)fluoranthene	ND	0.40	0	0	0	0	0	0	0	20	
Benzo(g,h,i)perylene	ND	0.40	0	0	0	0	0	0	0	20	
Benzo(k)fluoranthene	ND	0.40	0	0	0	0	0	0	0	20	
Chrysene	ND	0.40	0	0	0	0	0	0	0	20	
Dibenz(a,h)anthracene	ND	0.40	0	0	0	0	0	0	0	20	
Fluoranthene	ND	0.40	0	0	0	0	0	0	0	20	
Fluorene	ND	0.40	0	0	0	0	0	0	0	20	
Indeno(1,2,3-cd)pyrene	ND	0.40	0	0	0	0	0	0	0	20	
Naphthalene	ND	0.40	0	0	0	0	0	0	0	20	
Phenanthrene	ND	0.40	0	0	0	0	0	0	0	20	
Pyrene	ND	0.40	0	0	0	0	0	0	0	20	
Surr: 2-Fluorobiphenyl	1.96	0	4	0	49	43	116	0	0	0	
Surr: 4-Terphenyl-d14	2.68	0	4	0	67	33	141	0	0	0	

Qualifiers: ND - Not Detected at the Reporting Limit
J - Analyte detected below quantitation limits
S - Spike Recovery outside accepted recovery limits
R - RPD outside accepted recovery limits
B - Analyte detected in the associated Method Blank

CLIENT: Pinnacle Laboratories
Work Order: 0412152
Project: 412389/BIO

ANALYTICAL QC SUMMARY REPORT

TestCode: 06 PAH A

Sample ID: 0412152-02A DUP	SampType: DUP	TestCode: 06 PAH A	Units: µg/L	Prep Date: 1/3/05	Run ID: HEISENBURG_050104A
Client ID: MW#5/412389-02	Batch ID: 7889	TestNo: 8270-SIM	(3510C)	Analysis Date: 1/4/05	SeqNo: 228023

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Surr: Nitrobenzene-d5	1.64	0	4	0	41	35	114	0	0	0	

Sample ID: 0412152-05A DUP	SampType: DUP	TestCode: 06 PAH A	Units: µg/L	Prep Date: 1/3/05	Run ID: HEISENBURG_050104A
Client ID: MW#6/412389-05	Batch ID: 7889	TestNo: 8270-SIM	(3510C)	Analysis Date: 1/4/05	SeqNo: 228027

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
1-Methylnaphthalene	ND	0.40	0	0	0	0	0	0	0	20	
2-Methylnaphthalene	ND	0.40	0	0	0	0	0	0	0	20	
Acenaphthene	ND	0.40	0	0	0	0	0	0	0	20	
Acenaphthylene	ND	0.40	0	0	0	0	0	0	0	20	
Anthracene	ND	0.40	0	0	0	0	0	0	0	20	
Benz(a)anthracene	ND	0.40	0	0	0	0	0	0	0	20	
Benzo(a)pyrene	ND	0.40	0	0	0	0	0	0	0	20	
Benzo(b)fluoranthene	ND	0.40	0	0	0	0	0	0	0	20	
Benzo(g,h,i)perylene	ND	0.40	0	0	0	0	0	0	0	20	
Benzo(k)fluoranthene	ND	0.40	0	0	0	0	0	0	0	20	
Chrysene	ND	0.40	0	0	0	0	0	0	0	20	
Dibenz(a,h)anthracene	ND	0.40	0	0	0	0	0	0	0	20	
Fluoranthene	ND	0.40	0	0	0	0	0	0	0	20	
Fluorene	ND	0.40	0	0	0	0	0	0	0	20	
Indeno(1,2,3-cd)pyrene	ND	0.40	0	0	0	0	0	0	0	20	
Naphthalene	ND	0.40	0	0	0	0	0	0	0	20	
Phenanthrene	ND	0.40	0	0	0	0	0	0	0	20	
Pyrene	ND	0.40	0	0	0	0	0	0	0	20	
Surr: 2-Fluorobiphenyl	2.28	0	4	0	57	43	116	0	0	0	
Surr: 4-Terphenyl-d14	2.88	0	4	0	72	33	141	0	0	0	
Surr: Nitrobenzene-d5	1.56	0	4	0	39	35	114	0	0	0	

Qualifiers:
ND - Not Detected at the Reporting Limit
J - Analyte detected below quantitation limits
S - Spike Recovery outside accepted recovery limits
R - RPD outside accepted recovery limits
B - Analyte detected in the associated Method Blank

CLIENT: Pinnacle Laboratories
Work Order: 0412152
Project: 412389/BIO

ANALYTICAL QC SUMMARY REPORT

TestCode: 06 PAH A

Sample ID: CCV	SampType: CCV	TestCode: 06 PAH A	Units: µg/L	Prep Date:	Run ID: HEISENBURG_050104A
Client ID: ZZZZZ	Batch ID: R18642	TestNo: 8270-SIM		Analysis Date: 1/4/05	SeqNo: 228017

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Acenaphthene	1.01	0.10	1	0	101	80	120	0	0		
Acenaphthylene	0.98	0.10	1	0	98	80	120	0	0		
Anthracene	1.08	0.10	1	0	108	80	120	0	0		
Benz(a)anthracene	0.81	0.10	1	0	81	80	120	0	0		
Benzo(a)pyrene	0.94	0.10	1	0	94	80	120	0	0		
Benzo(b)fluoranthene	0.84	0.10	1	0	84	80	120	0	0		
Benzo(g,h,i)perylene	1.15	0.10	1	0	115	80	120	0	0		
Benzo(k)fluoranthene	1.08	0.10	1	0	108	80	120	0	0		
Chrysene	0.91	0.10	1	0	91	80	120	0	0		
Dibenz(a,h)anthracene	1.14	0.10	1	0	114	80	120	0	0		
Fluoranthene	1.14	0.10	1	0	114	80	120	0	0		
Fluorene	0.88	0.10	1	0	88	80	120	0	0		
Indeno(1,2,3-cd)pyrene	1.14	0.10	1	0	114	80	120	0	0		
Naphthalene	1	0.10	1	0	100	80	120	0	0		
Phenanthrene	0.84	0.10	1	0	84	80	120	0	0		
Pyrene	1.06	0.10	1	0	106	80	120	0	0		
Surr: 2-Fluorobiphenyl	0.9	0	1	0	90	43	116	0	0		
Surr: 4-Terphenyl-d14	1.02	0	1	0	102	33	141	0	0		
Surr: Nitrobenzene-d5	0.82	0	1	0	82	35	114	0	0		

Qualifiers:
ND - Not Detected at the Reporting Limit
J - Analyte detected below quantitation limits
S - Spike Recovery outside accepted recovery limits
R - RPD outside accepted recovery limits
B - Analyte detected in the associated Method Blank

ENVIRONMENTAL SERVICES LABORATORY – GLOSSARY OF FLAGS

QUALIFIER	DESCRIPTION
AA	This sample was analyzed after the holding time had expired.
AB	The hydrocarbon pattern in this sample is not typical of gasoline.
AC	The hydrocarbon pattern in this sample is not typical of diesel.
AD	The hydrocarbon pattern in this sample is not typical of oil.
AE	The hydrocarbon pattern in this sample extends into the gasoline range.
AF	The hydrocarbon pattern in this sample extends into the diesel range.
AG	The hydrocarbon pattern in this sample extends into the oil range.
A	This analysis was performed on a VOA sample containing headspace.
B	Analyte detected in the Method Blank above the reporting level.
C	The Relative Percent Difference (RPD) for the primary result and confirmation result was greater than 40%. The higher result was reported.
D	The sample was supplied in an inappropriate container according to method criteria.
E	This value is above the quantitation limit. It is considered an estimate.
H	The Matrix Spike/Matrix Spike Duplicate (MS/MSD) result was outside control limits. The Laboratory Control Standard/Duplicate (LCS/LCSD) result was in control validating the batch.
J	The result is above the Method Detection Limit (MDL) and below the Reporting level (RL). It is considered an estimate.
M	The MS/MSD recoveries are not calculable due to a high amount of analyte in sample.
MI	This indicates a high level of matrix interference affecting the spike or surrogate recovery.
N	See case narrative.
O	Detection Limits are elevated due to sample dilution. See case narrative.
Q	Further inspection of the sample confirms a non-homogenous sample matrix affecting RPD result.
R	The RPD result is outside method control limits. See other qualifiers or case narrative.
S	The spike recovery is outside method control limits. See other qualifiers or case narrative.
T	The RPD between the sample result and duplicate result was greater than 20%. The original result was less than three times the reporting level, therefore the RPD is not applicable.
X	Unable to quantitate surrogate recovery due to sample dilution.

Pinnacle Laboratories, Inc.

Interlab Chain of Custody

Date: 12/30/04 Page: 1 of 1

Network Project Manager: Jacinta Tenorio

Pinnacle Laboratories, Inc.
2709-D Pan American Freeway, NE
Albuquerque, NM 87107
(505) 344-3777 Fax (505) 344-4413

Please follow previous instructions submitted for 8270 SIMS.

0412152

ANALYSIS REQUEST

SAMPLE ID	DATE	TIME	MATRIX	LAB ID	Metals (8) RCRA	TCLP RCRA (8) Metals	Metals-13 PP List	Metals-TAL (23 Metals)	Dissolved Fe, Mn, Pb (6010)		TOC	Gen Chemistry:			Volatile Organics GC/MS (8260)	BOD	COD	Pesticides/PCB (608/8081/8082)	Herbicides (615/8151)	PNA (8310/8270 SIMS)	8260 (TCLP 1311) ZHE		Base/Neutral Acid Compounds GC/MS (625/8270)	Uranium (ICP-MS)	Radium 226+228	Gross Alpha/Beta	TO-14	NUMBER OF CONTAINERS
MW#18/412389-01	12/28/04	1104	AQ	01																X								
MW#5/412389-02		1144		02																X								
MW#19/412389-03		1351		03																X								
MW#4/412389-04		1419		04																X								
MW#6/412389-05	↓	1447	↓	05																X								
																				X								
																				X								
																				X								
																				X								
																				X								

PROJECT INFORMATION		SAMPLE RECEIPT	
PROJECT #:	412389	Total Number of Containers	
PROJ. NAME:	BIO	Chain of Custody Seals	
QC LEVEL:	STD. IV	Received Intact?	
QC REQUIRED:	MS MSD BLANK	Received Good Cond./Cold	
TAT:	STANDARD RUSH!!	LAB NUMBER:	
DUE DATE:	1/13		
RUSH SURCHARGE:	—		
CLIENT DISCOUNT:	—		
SPECIAL CERTIFICATION REQUIRED:	YES NO		

COMMENTS:

SAMPLES SENT TO:	
PENSACOLA - STL-FL	
ESL - OR	X
ATEL - AZ	
ATEL - MARION	
ATEL - MELMORE	
EHL	
GEL	
U OF MIAMI	
WCAS	
WOHL	

RELINQUISHED BY: 1.	RELINQUISHED BY: 2.
Signature: Jimena Jimino Time: 1125	Signature: Time:
Printed Name: Jimena Jimino Date: 12/30/04	Printed Name: Date:
Company: Pinnacle Laboratories, Inc.	Company
RECEIVED BY: 1.	RECEIVED BY: 2.
Signature: Brett V. Davis Time: 0900	Signature: Time:
Printed Name: BRETT V. DAVIS Date: 12/30/04	Printed Name: Date:
Company: ESL	Company

Pinnacle Laboratories Inc.

CHAIN OF CUSTODY

DATE: 12-29-04 PAGE: 1 OF 1

Pin Accession #: 412389

SHADED AREAS ARE FOR LAB USE ONLY

PLEASE FILL THIS FORM IN COMPLETELY.

PROJECT MANAGER: Terry Griffin

COMPANY: Biotech Remediation Inc.

ADDRESS: 501 Airport Dr. Suite 109
Farmington, NM 87401

PHONE:

FAX:

BILL TO:

COMPANY:

ADDRESS:

ANALYSIS REQUEST

SAMPLE ID	DATE	TIME	MATRIX	LAB ID	NUMBER OF CONTAINERS
MW#18	12-28-4	1104	H2O	01	6
mw#5		1144		02	6
MW#19		1351		03	6
MW#4		1419		04	6
mw#6		1447		05	6
Trip Blank	12/9/04	1646	AQ	06	2

Petroleum Hydrocarbons (418.1) TRPH
(MOD.8015) Diesel/Direct Inject
Sms 8270
(M8015) Gas/Purge & Trap
8021 (BTEX)/8015 (Gasoline) MTBE
8021 (BTEX) ☐MTBE ☐TMB ☐PCE
8021 (TCL)
8021 (EDX)
8021 (HALO)
8021 (CUST)
504.1 EDB ☐/DBCP ☐
PH
8260 (TCL) Volatile Organics
8260 (Full) Volatile Organics ☐PBMS
8260 (CUST) Volatile Organics
8260 (Landfill) Volatile Organics
Pesticides/PCB (608/8081/8082)
Herbicides (615/8151)
Base/Neutral/Acid Compounds GC/MS (625/8270)
Polynuclear Aromatics (610/8310/8270-SIMS)
General Chemistry: Cl, F, SO4, Br
Alkalinity/Carb, OH, TDS, EC
Priority Pollutant Metals (13)
Target Analyte List Metals (23)
RCRA Metals (8) Total Hardness
RCRA Metals by TCLP (Method1311)
Metals: Diss - Ca, Mg, K, Na

WEEKEND ANALYSES MAY RESULT IN AN ADDITIONAL SURCHARGE - PLEASE INQUIRE.

PROJECT INFORMATION

PROJ. NO.: 810

PROJ. NAME:

P.O. NO.:

SHIPPED VIA: Bus

SAMPLE RECEIPT

NO. CONTAINERS	31
CUSTODY SEALS	Y N (NA)
RECEIVED INTACT	Y N
BLUE ICE/ICE	5.4°

PRIOR AUTHORIZATION IS REQUIRED FOR RUSH PROJECTS

(RUSH) ☐24hr* ☐48hr* ☐72hr* ☐1 WEEK (NORMAL) ☑
*NOT AVAILABLE ON ALL ANALYSES

CERTIFICATION REQUIRED ☐ NM ☐ SDWA ☐ AZ ☐ OTHER

METHANOL PRESERVATION ☐ | METALS ☐ TOTAL ☐ DISSOLVED

COMMENTS:

RELINQUISHED BY 1

Signature: Time: 0900

Printed Name: Mike Benjamin Date: 12/29/4

Company: Biotech

See Reverse side (Force Majeure)

RECEIVED BY 1

Signature: Time:

Printed Name: Date:

Company:

RELINQUISHED BY 2

Signature: Time:

Printed Name: Date:

Company:

RECEIVED BY (LAB) 2

Signature: Name: Tamara Townsend

Printed Name: Date: 12/29/04

Company: Pinnacle Laboratories Inc.

ordered 3-1-05

2709-D Pan American Freeway NE
Albuquerque, New Mexico 87107
Phone (505) 344-3777
Fax (505) 344-4413

Pinnacle Lab ID number **412405**
February 01, 2005

BIOTECH REMEDIATION
501 AIRPORT DRIVE SUITE 104
FARMINGTON, NM 87401

Project Name THRIFTWAY REFINERY
Project Number 810

Attention: TERRY GRIFFIN

On 12/30/2004 Pinnacle Laboratories Inc., (ADHS License No. AZ0643), received a request to analyze **aqueous** samples. The samples were analyzed with EPA methodology or equivalent methods. The results of these analyses and the quality control data, which follow each set of analyses, are enclosed.

EPA method 8021/8015 and pH analyses were performed by Pinnacle Laboratories, Inc. Albuquerque, NM.

EPA method 8270 SIMS analyses were performed by Environmental Services Laboratories, Inc. Portland, OR.

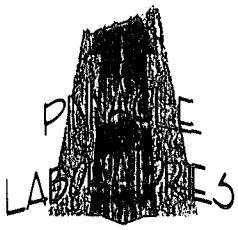
All remaining analyses were peformed by Severn Trent Laboratories, Inc. Penscola, FL.

If you have any questions or comments, please do not hesitate to contact us at (505) 344-3777.

H. Mitchell Rubenstein, Ph.D.
General Manager, Pinnacle Laboratories, Inc.

MR: jt

Enclosure



2709-D Pan American Freeway NE
Albuquerque, New Mexico 87107
Phone (505) 344-3777
Fax (505) 344-4413

CLIENT	: BIOTECH REMEDIATION	PINNACLE ID	: 412405
PROJECT #	: 810	DATE RECEIVED	: 12/30/2004
PROJECT NAME	: THRIFTWAY REFINERY	REPORT DATE	: 02/01/2005

PINNACLE ID #	CLIENT DESCRIPTION	MATRIX	DATE COLLECTED
412405 - 01	MW-7	AQUEOUS	12/29/2004
412405 - 02	MW-9	AQUEOUS	12/29/2004
412405 - 03	MW-10	AQUEOUS	12/29/2004
412405 - 04	MW-11	AQUEOUS	12/29/2004
412405 - 05	MW-15	AQUEOUS	12/29/2004
412405 - 06	MW-20	AQUEOUS	12/29/2004
412405 - 07	MW-21	AQUEOUS	12/29/2004
412405 - 08	MW-22	AQUEOUS	12/29/2004

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Albuquerque, New Mexico 87107
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PINNACLE LABORATORIES

GENERAL CHEMISTRY RESULTS

CLIENT	: BIOTECH REMEDIATION	PINNACLE I.D.	: 412405
PROJECT #	: 810	DATE RECEIVED	: 12/30/2004
PROJECT NAME	: THRIFTWAY REFINERY	ANALYST	: BP

SAMPLE I.D. #	CLIENT I.D.	MATRIX	DATE SAMPLED	DATE ANALYZED
01	MW-7	AQUEOUS	12/29/2004	12/31/2004
02	MW-9	AQUEOUS	12/29/2004	12/31/2004
03	MW-10	AQUEOUS	12/29/2004	12/31/2004

PARAMETER	UNITS	MW-7	MW-9	MW-10
PH (150.1)	UNITS	7.0	7.3	7.4

CHEMIST NOTES:
N/A

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PINNACLE LABORATORIES

GENERAL CHEMISTRY RESULTS

CLIENT	: BIOTECH REMEDIATION	PINNACLE I.D.	: 412405
PROJECT #	: 810	DATE RECEIVED	: 12/30/2004
PROJECT NAME	: THRIFTWAY REFINERY	ANALYST	: BP

SAMPLE I.D. #	CLIENT I.D.	MATRIX	DATE SAMPLED	DATE ANALYZED
04	MW-11	AQUEOUS	12/29/2004	12/31/2004
05	MW-15	AQUEOUS	12/29/2004	12/31/2004
06	MW-20	AQUEOUS	12/29/2004	12/31/2004

PARAMETER	UNITS	MW-11	MW-15	MW-20
PH (150.1)	UNITS	7.5	7.3	6.8

CHEMIST NOTES:
N/A

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PINNACLE LABORATORIES

GENERAL CHEMISTRY RESULTS

CLIENT	: BIOTECH REMEDIATION	PINNACLE I.D.	: 412405
PROJECT #	: 810	DATE RECEIVED	: 12/30/2004
PROJECT NAME	: THRIFTWAY REFINERY	ANALYST	: BP

SAMPLE ID. #	CLIENT I.D.	MATRIX	DATE SAMPLED	DATE ANALYZED
07	MW-21	AQUEOUS	12/29/2004	12/31/2004
08	MW-22	AQUEOUS	12/29/2004	12/31/2004

PARAMETER	UNITS	MW-21	MW-22
PH (150.1)	UNITS	7.1	7.0

CHEMIST NOTES:
N/A

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PINNACLE LABORATORIES

GENERAL CHEMISTRY - QUALITY CONTROL

CLIENT	: BIOTECH REMEDIATION	PINNACLE I.D.	: 412405
PROJECT #	: 810	SAMPLE MATRIX	: AQUEOUS
PROJECT NAME	: THRIFTWAY REFINERY	DATE ANALYZED	: 12/31/2004

PARAMETER	UNITS	PINNACLE I.D.	SAMPLE RESULT	DUP. RESULT	% RPD
PH	UNITS	412405-01	6.99	7.05	1

CHEMIST NOTES:
N/A

$$\% \text{ Recovery} = \frac{(\text{Spike Sample Result} - \text{Sample Result})}{\text{Spike Concentration}} \times 100$$

$$\text{RPD (Relative Percent Difference)} = \frac{(\text{Sample Result} - \text{Duplicate Result})}{\text{Average Result}} \times 100$$

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PINNACLE LABORATORIES

GAS CHROMATOGRAPHY RESULTS

TEST : EPA 8021B / 8015B GRO
CLIENT : BIOTECH REMEDIATION
PROJECT # : 810
PROJECT NAME : THRIFTWAY REFINERY

PINNACLE I.D. : 412405
ANALYST : BP

SAMPLE ID. #	CLIENT I.D.	MATRIX	DATE SAMPLED	DATE EXTRACTED	DATE ANALYZED	DIL. FACTOR
01	MW-7	AQUEOUS	12/29/2004	NA	12/31/2004	1
02	MW-9	AQUEOUS	12/29/2004	NA	12/31/2004	1
03	MW-10	AQUEOUS	12/29/2004	NA	12/31/2004	1

PARAMETER	DET. LIMIT	UNITS	MW-7	MW-9	MW-10
FUEL HYDROCARBONS	**0.10**	**MG/L**	**0.14**	< 0.10	< 0.10
HYDROCARBON RANGE			**C6-C10**	C6-C10	C6-C10
HYDROCARBONS QUANTITATED USING			**GASOLINE**	GASOLINE	GASOLINE
BENZENE	0.5	UG/L	< 0.5	< 0.5	< 0.5
TOLUENE	**0.5**	**UG/L**	< 0.5	< 0.5	**1.6**
ETHYLBENZENE	**0.5**	**UG/L**	< 0.5	< 0.5	**0.6**
TOTAL XYLENES	**1.0**	**UG/L**	< 1.0	< 1.0	**3.1**
METHYL-t-BUTYL ETHER	**2.5**	**UG/L**	**150**	< 2.5	< 2.5
SURROGATE: BROMOFLUOROBENZENE (%)			98	97	99
SURROGATE LIMITS	(80 - 120)				

CHEMIST NOTES:
N/A

PINNACLE LABORATORIES

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GAS CHROMATOGRAPHY RESULTS

TEST : EPA 8021B / 8015B GRO
CLIENT : BIOTECH REMEDIATION
PROJECT # : 810
PROJECT NAME : THRIFTWAY REFINERY

PINNACLE I.D. : 412405
ANALYST : BP

SAMPLE ID. #	CLIENT I.D.	MATRIX	DATE SAMPLED	DATE EXTRACTED	DATE ANALYZED	DIL. FACTOR
04	MW-11	AQUEOUS	12/29/2004	NA	12/31/2004	1
05	MW-15	AQUEOUS	12/29/2004	NA	12/31/2004	1
06	MW-20	AQUEOUS	12/29/2004	NA	01/03/2005	1

PARAMETER	DET. LIMIT	UNITS	MW-11	MW-15	MW-20
FUEL HYDROCARBONS	0.10	MG/L	< 0.10	< 0.10	**0.89**
HYDROCARBON RANGE			C6-C10	C6-C10	**C6-C10**
HYDROCARBONS QUANTITATED USING			GASOLINE	GASOLINE	**GASOLINE**
BENZENE	0.5	UG/L	< 0.5	< 0.5	**2.0**
TOLUENE	**0.5**	**UG/L**	< 0.5	**0.6**	< 0.5
ETHYLBENZENE	0.5	UG/L	< 0.5	< 0.5	< 0.5
TOTAL XYLENES	1.0	UG/L	< 1.0	< 1.0	**7.2**
METHYL-t-BUTYL ETHER	**2.5**	**UG/L**	< 2.5	< 2.5	**300 - D10**
SURROGATE:					
BROMOFLUOROBENZENE (%)			99	99	115
SURROGATE LIMITS	(80 - 120)				

CHEMIST NOTES:
D10 = Reported from a 10X dilution run on 12-31-04.

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GAS CHROMATOGRAPHY RESULTS

TEST : EPA 8021B / 8015B GRO
CLIENT : BIOTECH REMEDIATION
PROJECT # : 810
PROJECT NAME : THRIFTWAY REFINERY

PINNACLE I.D. : 412405
ANALYST : BP

SAMPLE ID. #	CLIENT I.D.	MATRIX	DATE SAMPLED	DATE EXTRACTED	DATE ANALYZED	DIL. FACTOR
07	MW-21	AQUEOUS	12/29/2004	NA	12/31/2004	1
08	MW-22	AQUEOUS	12/29/2004	NA	12/31/2004	1

PARAMETER	DET. LIMIT	UNITS	MW-21	MW-22
FUEL HYDROCARBONS	0.10	MG/L	< 0.10	< 0.10
HYDROCARBON RANGE			C6-C10	C6-C10
HYDROCARBONS QUANTITATED USING			GASOLINE	GASOLINE
BENZENE	0.5	UG/L	< 0.5	< 0.5
TOLUENE	0.5	UG/L	< 0.5	< 0.5
ETHYLBENZENE	0.5	UG/L	< 0.5	< 0.5
TOTAL XYLENES	1.0	UG/L	< 1.0	< 1.0
METHYL-t-BUTYL ETHER	**2.5**	**UG/L**	**25**	**11**
SURROGATE:				
BROMOFLUOROBENZENE (%)			99	99
SURROGATE LIMITS	(80 - 120)			

CHEMIST NOTES:
N/A

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GAS CHROMATOGRAPHY RESULTS
REAGENT BLANK

TEST	: EPA 8021B / 8015B GRO	PINNACLE I.D.	: 412405
BLANK I.D.	: 123104	DATE EXTRACTED	: N/A
CLIENT	: BIOTECH REMEDIATION	DATE ANALYZED	: 12/31/2004
PROJECT #	: 810	SAMPLE MATRIX	: AQUEOUS
PROJECT NAME	: THRIFTWAY REFINERY	ANALYST	: BP

PARAMETER	UNITS	
FUEL HYDROCARBONS	MG/L	<0.10
HYDROCARBON RANGE		C6-C10
HYDROCARBONS QUANTITATED USING		GASOLINE
BENZENE	UG/L	<0.5
TOLUENE	UG/L	<0.5
ETHYLBENZENE	UG/L	<0.5
TOTAL XYLENES	UG/L	<1.0
METHYL-t-BUTYL ETHER	UG/L	<2.5
SURROGATE:		
BROMOFLUOROBENZENE (%)		97
SURROGATE LIMITS (80 - 120)		

CHEMIST NOTES:
N/A

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GAS CHROMATOGRAPHY RESULTS
REAGENT BLANK

TEST	: EPA 8021B / 8015B GRO	PINNACLE I.D.	: 412405
BLANK I.D.	: 010305	DATE EXTRACTED	: N/A
CLIENT	: BIOTECH REMEDIATION	DATE ANALYZED	: 01/03/2005
PROJECT #	: 810	SAMPLE MATRIX	: AQUEOUS
PROJECT NAME	: THRIFTWAY REFINERY	ANALYST	: BP

PARAMETER	UNITS	
FUEL HYDROCARBONS	MG/L	<0.10
HYDROCARBON RANGE		C6-C10
HYDROCARBONS QUANTITATED USING		GASOLINE
BENZENE	UG/L	<0.5
TOLUENE	UG/L	<0.5
ETHYLBENZENE	UG/L	<0.5
TOTAL XYLENES	UG/L	<1.0
METHYL-t-BUTYL ETHER	UG/L	<2.5
SURROGATE:		
BROMOFLUOROBENZENE (%)		97
SURROGATE LIMITS (80 - 120)		

CHEMIST NOTES:
N/A

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GAS CHROMATOGRAPHY QUALITY CONTROL
LCS/LCSD

TEST	: EPA 8015B GRO	PINNACLE I.D.	: 412405
BATCH #	: 123104	DATE EXTRACTED	: N/A
CLIENT	: BIOTECH REMEDIATION	DATE ANALYZED	: 12/31/2004
PROJECT #	: 810	SAMPLE MATRIX	: AQUEOUS
PROJECT NAME	: THRIFTWAY REFINERY	UNITS	: MG/L

PARAMETER	SAMPLE RESULT	CONC SPIKE	SPIKED SAMPLE	% REC	DUP SPIKE	DUP % REC	RPD	REC LIMITS	RPD LIMITS
FUEL HYDROCARBONS	<0.10	1.00	0.927	93	0.941	94	1	(70 - 130)	20
HYDROCARBON RANGE		C6-C10							

HYDROCARBONS QUANTITATED USINGGASOLINE

CHEMIST NOTES:
N/A

$$\% \text{ Recovery} = \frac{(\text{Spike Sample Result} - \text{Sample Result})}{\text{Spike Concentration}} \times 100$$

$$\text{RPD (Relative Percent Difference)} = \frac{(\text{Sample Result} - \text{Duplicate Result})}{\text{Average Result}} \times 100$$

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GAS CHROMATOGRAPHY QUALITY CONTROL
LCS/LCSD

TEST	: EPA 8015B GRO	PINNACLE I.D.	: 412405
BATCH #	: 010305	DATE EXTRACTED	: N/A
CLIENT	: BIOTECH REMEDIATION	DATE ANALYZED	: 01/03/2005
PROJECT #	: 810	SAMPLE MATRIX	: AQUEOUS
PROJECT NAME	: THRIFTWAY REFINERY	UNITS	: MG/L

PARAMETER	SAMPLE RESULT	CONC SPIKE	SPIKED SAMPLE	% REC	DUP SPIKE	DUP % REC	RPD	REC LIMITS	RPD LIMITS
FUEL HYDROCARBONS	<0.10	1.00	0.946	95	0.953	95	1	(70 - 130)	20
HYDROCARBON RANGE		C6-C10							
HYDROCARBONS QUANTITATED USING		GASOLINE							

CHEMIST NOTES:
N/A

$$\% \text{ Recovery} = \frac{(\text{Spike Sample Result} - \text{Sample Result})}{\text{Spike Concentration}} \times 100$$

$$\text{RPD (Relative Percent Difference)} = \frac{(\text{Sample Result} - \text{Duplicate Result})}{\text{Average Result}} \times 100$$

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GAS CHROMATOGRAPHY QUALITY CONTROL
LCS/LCSD

TEST	: EPA 8021B	PINNACLE I.D.	: 412405
BATCH #	: 123104	DATE EXTRACTED	: N/A
CLIENT	: BIOTECH REMEDIATION	DATE ANALYZED	: 12/31/2004
PROJECT #	: 810	SAMPLE MATRIX	: AQUEOUS
PROJECT NAME	: THRIFTWAY REFINERY	UNITS	: UG/L

PARAMETER	SAMPLE RESULT	CONC SPIKE	SPIKED SAMPLE	% REC	DUP SPIKE	DUP % REC	RPD	REC LIMITS	RPD LIMITS
BENZENE	<0.5	20.0	20.9	105	20.9	105	0	(80 - 120)	20
TOLUENE	<0.5	20.0	20.9	105	20.8	104	0	(80 - 120)	20
ETHYLBENZENE	<0.5	20.0	20.7	104	20.5	103	1	(80 - 120)	20
TOTAL XYLENES	<1.0	60.0	62.0	103	61.4	102	1	(80 - 120)	20
METHYL-t-BUTYL ETHER	<2.5	20.0	19.0	95	19.0	95	0	(70 - 133)	20

CHEMIST NOTES:
N/A

$$\%\ \text{Recovery} = \frac{(\text{Spike Sample Result} - \text{Sample Result})}{\text{Spike Concentration}} \times 100$$

$$\text{RPD (Relative Percent Difference)} = \frac{(\text{Sample Result} - \text{Duplicate Result})}{\text{Average Result}} \times 100$$

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GAS CHROMATOGRAPHY QUALITY CONTROL
LCS/LCSD

TEST	: EPA 8021B	PINNACLE I.D.	: 412405
BATCH #	: 010305	DATE EXTRACTED	: N/A
CLIENT	: BIOTECH REMEDIATION	DATE ANALYZED	: 01/03/2005
PROJECT #	: 810	SAMPLE MATRIX	: AQUEOUS
PROJECT NAME	: THRIFTWAY REFINERY	UNITS	: UG/L

PARAMETER	SAMPLE RESULT	CONC SPIKE	SPIKED SAMPLE	% REC	DUP SPIKE	DUP % REC	RPD	REC LIMITS	RPD LIMITS
BENZENE	<0.5	20.0	20.7	104	20.4	102	1	(80 - 120)	20
TOLUENE	<0.5	20.0	20.6	103	20.4	102	1	(80 - 120)	20
ETHYLBENZENE	<0.5	20.0	20.3	102	20.2	101	0	(80 - 120)	20
TOTAL XYLENES	<1.0	60.0	61.0	102	60.6	101	1	(80 - 120)	20
METHYL-t-BUTYL ETHER	<2.5	20.0	18.5	93	18.4	92	1	(70 - 133)	20

CHEMIST NOTES:
N/A

$$\% \text{ Recovery} = \frac{(\text{Spike Sample Result} - \text{Sample Result})}{\text{Spike Concentration}} \times 100$$

$$\text{RPD (Relative Percent Difference)} = \frac{(\text{Sample Result} - \text{Duplicate Result})}{\text{Average Result}} \times 100$$

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GAS CHROMATOGRAPHY QUALITY CONTROL
MS/MSD

TEST	: EPA 8015B GRO	PINNACLE I.D.	: 412405
MSMSD #	: 412405-03	DATE EXTRACTED	: N/A
CLIENT	: BIOTECH REMEDIATION	DATE ANALYZED	: 12/31/2004
PROJECT #	: 810	SAMPLE MATRIX	: NON-AQ
PROJECT NAME	: THRIFTWAY REFINERY	UNITS	: MG/KG

PARAMETER	SAMPLE RESULT	CONC SPIKE	SPIKED SAMPLE	% REC	DUP SPIKE	DUP % REC	RPD	REC LIMITS	RPD LIMITS
FUEL HYDROCARBONS	<0.10	1.00	0.955	96	0.948	95	1	(70 - 130)	20
HYDROCARBON RANGE		C6-C10							

HYDROCARBONS QUANTITATED USINGGASOLINE

CHEMIST NOTES:
N/A

$$\% \text{ Recovery} = \frac{(\text{Spike Sample Result} - \text{Sample Result})}{\text{Spike Concentration}} \times 100$$

$$\text{RPD (Relative Percent Difference)} = \frac{(\text{Sample Result} - \text{Duplicate Result})}{\text{Average Result}} \times 100$$

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GAS CHROMATOGRAPHY QUALITY CONTROL
MS/MSD

TEST	: EPA 8021B	PINNACLE I.D.	: 412405
MSMSD #	: 412405-03	DATE EXTRACTED	: N/A
CLIENT	: BIOTECH REMEDIATION	DATE ANALYZED	: 12/31/2004
PROJECT #	: 810	SAMPLE MATRIX	: AQUEOUS
PROJECT NAME	: THRIFTWAY REFINERY	UNITS	: UG/L

PARAMETER	SAMPLE RESULT	CONC SPIKE	SPIKED SAMPLE	% REC	DUP SPIKE	DUP % REC	RPD	REC LIMITS	RPD LIMITS
BENZENE	<0.5	20.0	21.1	106	20.3	102	4	(80 - 120)	20
TOLUENE	1.6	20.0	21.0	97	20.3	94	3	(80 - 120)	20
ETHYLBENZENE	0.6	20.0	20.7	101	20.0	97	3	(80 - 120)	20
TOTAL XYLENES	3.1	60.0	61.9	98	60.0	95	3	(80 - 120)	20
METHYL-t-BUTYL ETHER	<2.5	20.0	18.9	95	18.0	90	5	(70 - 133)	20

CHEMIST NOTES:
N/A

$$\% \text{ Recovery} = \frac{(\text{Spike Sample Result} - \text{Sample Result})}{\text{Spike Concentration}} \times 100$$

$$\text{RPD (Relative Percent Difference)} = \frac{(\text{Sample Result} - \text{Duplicate Result})}{\text{Average Result}} \times 100$$

SEVERN TRENT STL

STL Pensacola 3355 McLemore Drive - Pensacola FL 32514 Telephone:(850) 474-1001 Fax:(850) 478-2671

Analytical Report

For: Ms. Jacinta Tenorio
Pinnacle Laboratories
2709-D Pan American Freeway Northeast
Albuquerque, NM 87107
CC:

Order Number: C501019
SDG Number:
Client Project ID:
Project: 412405,BIO/THRIFTWAY Refinery
Report Date: 01/17/2005
Sampled By: Client
Sample Received Date: 01/04/2005
Requisition Number:
Purchase Order:

Marty Edwards, Project Manager
medwards@stl-inc.com

STL Pensacola 3355 McLemore Drive - Pensacola FL 32514 Telephone:(850) 474-1001 Fax:(850) 478-2671

Sample Summary

Order: C501019
Date Received: 01/04/2005

Client: Pinnacle Laboratories
Project: 412405,BIO/THRIFTWAY Refinery

Client Sample ID	Lab Sample ID	Matrix	Date Sampled
MW-7/412405-01	C501019*1	Liquid	12/29/2004 10:36
MW-9/412405-02	C501019*2	Liquid	12/29/2004 11:11
MW-10/412405-03	C501019*3	Liquid	12/29/2004 11:40
MW-11/412405-04	C501019*4	Liquid	12/29/2004 12:09
MW-15/412405-05	C501019*5	Liquid	12/29/2004 12:43
MW-20/412405-06	C501019*6	Liquid	12/29/2004 14:21
MW-21/412405-07	C501019*7	Liquid	12/29/2004 14:57
MW-22/412405-08	C501019*8	Liquid	12/29/2004 15:27

SEVERN TRENT STL

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Analytical Data Report

Lab Sample ID	Description	Matrix	Date Received	Date Sampled	SDG#
01019-1	MW-7/412405-01	Liquid	01/04/05	12/29/04 10:36	
01019-2	MW-9/412405-02	Liquid	01/04/05	12/29/04 11:11	
01019-3	MW-10/412405-03	Liquid	01/04/05	12/29/04 11:40	
01019-4	MW-11/412405-04	Liquid	01/04/05	12/29/04 12:09	
01019-5	MW-15/412405-05	Liquid	01/04/05	12/29/04 12:43	

Parameter	Units	Sample ID 01019-1 MW-7/412405-01	01019-2 MW-9/412405-02	01019-3 MW-10/412405-03	01019-4 MW-11/412405-04	01019-5 MW-15/412405-05
Total Dissolved Solids (160.1)						
Total Dissolved Solids	mg/l	4500	6200	5000	4000	3400
Dilution Factor		1	1	1	1	1
Analysis Date		01/04/05	01/04/05	01/04/05	01/04/05	01/04/05
Batch ID		TDW002	TDW002	TDW002	TDW002	TDW002
Analyst		ST	ST	ST	ST	ST
Chloride (4500E)						
Chloride	mg/l	420	100	160	92	150
Dilution Factor		5	2	5	2	5
Analysis Date		01/07/05	01/07/05	01/07/05	01/07/05	01/07/05
Batch ID		CKW003	CKW003	CKW003	CKW003	CKW003
Analyst		CR	CR	CR	CR	CR
Sulfate as SO4 (375.4)						
Sulfate as SO4	mg/l	2000	3600	2800	2300	1900
Dilution Factor		200	200	200	200	75
Analysis Date		01/07/05	01/07/05	01/07/05	01/07/05	01/07/05
Batch ID		SEW002	SEW002	SEW002	SEW002	SEW002
Analyst		CR	CR	CR	CR	CR

STL Pensacola 3355 McLemore Drive - Pensacola FL 32514 Telephone:(850) 474-1001 Fax:(850) 478-2671

Analytical Data Report

Lab Sample ID	Description	Matrix	Date Received	Date Sampled	SDG#
01019-1	MW-7/412405-01	Liquid	01/04/05	12/29/04 10:36	
01019-2	MW-9/412405-02	Liquid	01/04/05	12/29/04 11:11	
01019-3	MW-10/412405-03	Liquid	01/04/05	12/29/04 11:40	
01019-4	MW-11/412405-04	Liquid	01/04/05	12/29/04 12:09	
01019-5	MW-15/412405-05	Liquid	01/04/05	12/29/04 12:43	

Parameter	Units	Sample ID 01019-1 MW-7/412405-01	01019-2 MW-9/412405-02	01019-3 MW-10/412405-03	01019-4 MW-11/412405-04	01019-5 MW-15/412405-05
Fluoride (340.2)						
Fluoride	mg/l	0.49	0.76	0.71	0.62	0.67
Dilution Factor		1	1	1	1	1
Analysis Date		01/07/05	01/07/05	01/07/05	01/07/05	01/07/05
Batch ID		FLW002	FLW002	FLW002	FLW002	FLW002
Analyst		ST	ST	ST	ST	ST
CO2 and Forms of Alkalinity (4500D)						
Bicarbonate (2320/4500)	mg/l as CaCO3	590	310	240	240	170
Carbon Dioxide, Free	mg/l as CaCO3	110	26	20	20	18
Carbonate (2320/4500)	mg/l as CaCO3	1.0	1.0	1.0	1.0	<1.0
Hydroxide	mg/l as CaCO3	<1.0	<1.0	<1.0	<1.0	<1.0
Carbon Dioxide, Total	mg/l as CaCO3	630	300	230	230	170
Dilution Factor		1	1	1	1	1
Analysis Date		01/06/05	01/06/05	01/06/05	01/06/05	01/06/05
Batch ID		AEW002	AEW002	AEW002	AEW002	AEW002
Analyst		ST	ST	ST	ST	ST
Alkalinity (to pH 4.5) as CaCO3 (2320B)						
Alkalinity (to pH 4.5) as CaCO3	mg/l	590	310	240	240	170
Dilution Factor		1	1	1	1	1
Analysis Date		01/06/05	01/06/05	01/06/05	01/06/05	01/06/05
Batch ID		AEW002	AEW002	AEW002	AEW002	AEW002
Analyst		ST	ST	ST	ST	ST

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Analytical Data Report

Lab Sample ID	Description	Matrix	Date Received	Date Sampled	SDG#
01019-1	MW-7/412405-01	Liquid	01/04/05	12/29/04 10:36	
01019-2	MW-9/412405-02	Liquid	01/04/05	12/29/04 11:11	
01019-3	MW-10/412405-03	Liquid	01/04/05	12/29/04 11:40	
01019-4	MW-11/412405-04	Liquid	01/04/05	12/29/04 12:09	
01019-5	MW-15/412405-05	Liquid	01/04/05	12/29/04 12:43	

Parameter	Units	Sample ID 01019-1 MW-7/412405-01	01019-2 MW-9/412405-02	01019-3 MW-10/412405-03	01019-4 MW-11/412405-04	01019-5 MW-15/412405-05
Specific Conductance (120.1)						
Specific Conductance	umhos/cm	5600	7000	5700	4900	3800
Dilution Factor		1	1	1	1	1
Analysis Date		01/04/05	01/04/05	01/04/05	01/04/05	01/04/05
Batch ID		CDW002	CDW002	CDW002	CDW002	CDW002
Analyst		ST	ST	ST	ST	ST
Bromide (300.0)						
Bromide	mg/l	0.36J	0.64J	0.99J	0.57J	0.97J
Dilution Factor		20	20	20	20	20
Prep Date		01/07/05	01/07/05	01/07/05	01/07/05	01/07/05
Analysis Date		01/07/05	01/07/05	01/07/05	01/07/05	01/07/05
Batch ID		IC036	IC036	IC036	IC036	IC036
Prep Method		300.0	300.0	300.0	300.0	300.0
Analyst		SGB	SGB	SGB	SGB	SGB
Quantitation Factor		20	20	20	20	20
Hardness by calculation (6010B)						
Hardness as CaCO3	mg/l	1100	1300	1100	720	1300
Dilution Factor		1	1	1	1	1
Prep Date		01/05/05	01/05/05	01/05/05	01/05/05	01/05/05
Analysis Date		01/05/05	01/05/05	01/05/05	01/05/05	01/05/05
Batch ID		PW006	PW006	PW006	PW006	PW006
Prep Method		3010A	3010A	3010A	3010A	3010A
Analyst		GSP	GSP	GSP	GSP	GSP
Quantitation Factor		1.000	1.000	1.000	1.000	1.000

SEVERN TRENT STL

STL Pensacola 3355 McLemore Drive - Pensacola FL 32514 Telephone:(850) 474-1001 Fax:(850) 478-2671

Analytical Data Report

Lab Sample ID	Description	Matrix	Date Received	Date Sampled	SDG#
01019-1	MW-7/412405-01	Liquid	01/04/05	12/29/04 10:36	
01019-2	MW-9/412405-02	Liquid	01/04/05	12/29/04 11:11	
01019-3	MW-10/412405-03	Liquid	01/04/05	12/29/04 11:40	
01019-4	MW-11/412405-04	Liquid	01/04/05	12/29/04 12:09	
01019-5	MW-15/412405-05	Liquid	01/04/05	12/29/04 12:43	

Parameter	Units	Sample ID 01019-1 MW-7/412405-01	01019-2 MW-9/412405-02	01019-3 MW-10/412405-03	01019-4 MW-11/412405-04	01019-5 MW-15/412405-05
RCRA Metals (6010B)						
Arsenic	mg/l	0.013	<0.0050	<0.0050	0.0090	<0.0050
Barium	mg/l	0.083	0.013	0.024	0.098	0.046
Cadmium	mg/l	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050
Chromium	mg/l	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050
Lead	mg/l	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050
Selenium	mg/l	<0.010	<0.010	<0.010	<0.010	<0.010
Silver	mg/l	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050
Dilution Factor		1	1	1	1	1
Prep Date		01/05/05	01/05/05	01/05/05	01/05/05	01/05/05
Analysis Date		01/06/05	01/06/05	01/06/05	01/06/05	01/06/05
Batch ID		PW006	PW006	PW006	PW006	PW006
Prep Method		3010A	3010A	3010A	3010A	3010A
Analyst		GSP	GSP	GSP	GSP	GSP
Quantitation Factor		1.000	1.000	1.000	1.000	1.000
Mercury (7470A)						
Mercury	mg/l	<0.00020	<0.00020	<0.00020	<0.00020	<0.00020
Dilution Factor		1	1	1	1	1
Prep Date		01/05/05	01/05/05	01/05/05	01/05/05	01/05/05
Analysis Date		01/06/05	01/06/05	01/06/05	01/06/05	01/06/05
Batch ID		HGW001	HGW001	HGW001	HGW001	HGW001
Prep Method		7470A	7470A	7470A	7470A	7470A
Analyst		JB	JB	JB	JB	JB
Quantitation Factor		1	1	1	1	1

SEVERN TRENT STL

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Analytical Data Report

Lab Sample ID	Description	Matrix	Date Received	Date Sampled	SDG#
01019-1	MW-7/412405-01	Liquid	01/04/05	12/29/04 10:36	
01019-2	MW-9/412405-02	Liquid	01/04/05	12/29/04 11:11	
01019-3	MW-10/412405-03	Liquid	01/04/05	12/29/04 11:40	
01019-4	MW-11/412405-04	Liquid	01/04/05	12/29/04 12:09	
01019-5	MW-15/412405-05	Liquid	01/04/05	12/29/04 12:43	

Parameter	Units	Sample ID 01019-1 MW-7/412405-01	01019-2 MW-9/412405-02	01019-3 MW-10/412405-03	01019-4 MW-11/412405-04	01019-5 MW-15/412405-05
Metals, Dissolved (6010B)						
Calcium, Dissolved	mg/l	330	420	340	250	510
Magnesium, Dissolved	mg/l	44	64	53	21	36
Potassium, Dissolved	mg/l	10	6.6	5.6	8.3	5.6
Sodium, Dissolved	mg/l	900	1400	1100	950	490
Dilution Factor		1	1	1	1	1
Prep Date		01/07/05	01/07/05	01/07/05	01/07/05	01/07/05
Analysis Date		01/07/05	01/07/05	01/07/05	01/07/05	01/07/05
Batch ID		PD002	PD002	PD002	PD002	PD002
Prep Method		3005A	3005A	3005A	3005A	3005A
Analyst		GSP	GSP	GSP	GSP	GSP
Quantitation Factor		1.000	1.000	1.000	1.000	1.000

SEVERN TRENT STL

STL Pensacola 3355 McLemore Drive - Pensacola FL 32514 Telephone:(850) 474-1001 Fax:(850) 478-2671

Analytical Data Report

Lab Sample ID	Description	Matrix	Date Received	Date Sampled	SDG#
01019-6	MW-20/412405-06	Liquid	01/04/05	12/29/04 14:21	
01019-7	MW-21/412405-07	Liquid	01/04/05	12/29/04 14:57	
01019-8	MW-22/412405-08	Liquid	01/04/05	12/29/04 15:27	

Parameter	Units	Sample ID 01019-6 MW-20/412405-06	01019-7 MW-21/412405-07	01019-8 MW-22/412405-08
Total Dissolved Solids (160.1)				
Total Dissolved Solids	mg/l	4000	8500	8700
Dilution Factor		1	1	1
Analysis Date		01/04/05	01/04/05	01/04/05
Batch ID		TDW002	TDW002	TDW002
Analyst		ST	ST	ST
Chloride (4500E)				
Chloride	mg/l	200	280	340
Dilution Factor		5	5	5
Analysis Date		01/07/05	01/07/05	01/07/05
Batch ID		CKW003	CKW003	CKW003
Analyst		CR	CR	CR
Sulfate as SO4 (375.4)				
Sulfate as SO4	mg/l	1900	4600	4900
Dilution Factor		75	200	200
Analysis Date		01/07/05	01/07/05	01/07/05
Batch ID		SEW002	SEW002	SEW002
Analyst		CR	CR	CR

STL Pensacola 3355 McLemore Drive - Pensacola FL 32514 Telephone:(850) 474-1001 Fax:(850) 478-2671

Analytical Data Report

Lab Sample ID	Description	Matrix	Date Received	Date Sampled	SDG#
01019-6	MW-20/412405-06	Liquid	01/04/05	12/29/04 14:21	
01019-7	MW-21/412405-07	Liquid	01/04/05	12/29/04 14:57	
01019-8	MW-22/412405-08	Liquid	01/04/05	12/29/04 15:27	

Parameter	Units	Sample ID 01019-6 MW-20/412405-06	01019-7 MW-21/412405-07	01019-8 MW-22/412405-08
Fluoride (340.2)				
Fluoride	mg/l	0.56	0.46	0.36
Dilution Factor		1	1	1
Analysis Date		01/07/05	01/07/05	01/07/05
Batch ID		FLW002	FLW002	FLW002
Analyst		ST	ST	ST
CO2 and Forms of Alkalinity (4500D)				
Bicarbonate (2320/4500)	mg/l as CaCO3	870	610	410
Carbon Dioxide, Free	mg/l as CaCO3	130	84	78
Carbonate (2320/4500)	mg/l as CaCO3	1.0	1.0	<1.0
Hydroxide	mg/l as CaCO3	<1.0	<1.0	<1.0
Carbon Dioxide, Total	mg/l as CaCO3	900	620	440
Dilution Factor		1	1	1
Analysis Date		01/06/05	01/06/05	01/06/05
Batch ID		AEW002	AEW002	AEW002
Analyst		ST	ST	ST
Alkalinity (to pH 4.5) as CaCO3 (2320B)				
Alkalinity (to pH 4.5) as CaCO3	mg/l	870	610	410
Dilution Factor		1	1	1
Analysis Date		01/06/05	01/06/05	01/06/05
Batch ID		AEW002	AEW002	AEW002
Analyst		ST	ST	ST

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STL Pensacola 3355 McLemore Drive - Pensacola FL 32514 Telephone:(850) 474-1001 Fax:(850) 478-2671

Analytical Data Report

Lab Sample ID	Description	Matrix	Date Received	Date Sampled	SDG#
01019-6	MW-20/412405-06	Liquid	01/04/05	12/29/04 14:21	
01019-7	MW-21/412405-07	Liquid	01/04/05	12/29/04 14:57	
01019-8	MW-22/412405-08	Liquid	01/04/05	12/29/04 15:27	

Parameter	Units	Sample ID 01019-6 MW-20/412405-06	01019-7 MW-21/412405-07	01019-8 MW-22/412405-08
Specific Conductance (120.1)				
Specific Conductance	umhos/cm	4800	9900	10000
Dilution Factor		1	1	1
Analysis Date		01/04/05	01/04/05	01/04/05
Batch ID		CDW002	CDW002	CDW002
Analyst		ST	ST	ST
Bromide (300.0)				
Bromide	mg/l	0.44J	0.68J	1.8
Dilution Factor		20	20	20
Prep Date		01/07/05	01/07/05	01/07/05
Analysis Date		01/07/05	01/07/05	01/07/05
Batch ID		IC036	IC036	IC036
Prep Method		300.0	300.0	300.0
Analyst		SGB	SGB	SGB
Quantitation Factor		20	20	20
Hardness by calculation (6010B)				
Hardness as CaCO3	mg/l	1300	1400	1200
Dilution Factor		1	1	1
Prep Date		01/05/05	01/05/05	01/05/05
Analysis Date		01/05/05	01/05/05	01/05/05
Batch ID		PW006	PW006	PW006
Prep Method		3010A	3010A	3010A
Analyst		GSP	GSP	GSP
Quantitation Factor		1.000	1.000	1.000

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Analytical Data Report

Lab Sample ID	Description	Matrix	Date Received	Date Sampled	SDG#
01019-6	MW-20/412405-06	Liquid	01/04/05	12/29/04 14:21	
01019-7	MW-21/412405-07	Liquid	01/04/05	12/29/04 14:57	
01019-8	MW-22/412405-08	Liquid	01/04/05	12/29/04 15:27	

Parameter	Units	Sample ID 01019-6 MW-20/412405-06	01019-7 MW-21/412405-07	01019-8 MW-22/412405-08
RCRA Metals (6010B)				
Arsenic	mg/l	0.0080	0.13	0.0060
Barium	mg/l	0.055	0.065	0.017
Cadmium	mg/l	<0.0050	<0.0050	<0.0050
Chromium	mg/l	<0.0050	0.0060	<0.0050
Lead	mg/l	<0.0050	0.0060	0.20
Selenium	mg/l	<0.010	<0.010	<0.010
Silver	mg/l	<0.0050	<0.0050	<0.0050
Dilution Factor		1	1	1
Prep Date		01/05/05	01/05/05	01/05/05
Analysis Date		01/06/05	01/06/05	01/06/05
Batch ID		PW006	PW006	PW006
Prep Method		3010A	3010A	3010A
Analyst		GSP	GSP	GSP
Quantitation Factor		1.000	1.000	1.000
Mercury (7470A)				
Mercury	mg/l	<0.00020	<0.00020	<0.00020
Dilution Factor		1	1	1
Prep Date		01/05/05	01/05/05	01/05/05
Analysis Date		01/06/05	01/06/05	01/06/05
Batch ID		HGW001	HGW001	HGW001
Prep Method		7470A	7470A	7470A
Analyst		JB	JB	JB
Quantitation Factor		1	1	1

SEVERN TRENT STL

STL Pensacola 3355 McLemore Drive - Pensacola FL 32514 Telephone:(850) 474-1001 Fax:(850) 478-2671

Analytical Data Report

Lab Sample ID	Description	Matrix	Date Received	Date Sampled	SDG#
01019-6	MW-20/412405-06	Liquid	01/04/05	12/29/04 14:21	
01019-7	MW-21/412405-07	Liquid	01/04/05	12/29/04 14:57	
01019-8	MW-22/412405-08	Liquid	01/04/05	12/29/04 15:27	

Parameter	Units	Sample ID 01019-6 MW-20/412405-06	01019-7 MW-21/412405-07	01019-8 MW-22/412405-08
Metals, Dissolved (6010B)				
Calcium, Dissolved	mg/l	410	410	350
Magnesium, Dissolved	mg/l	65	87	68
Potassium, Dissolved	mg/l	5.9	13	14
Sodium, Dissolved	mg/l	790	2100	2200
Dilution Factor		1	1	1
Prep Date		01/07/05	01/07/05	01/07/05
Analysis Date		01/07/05	01/07/05	01/07/05
Batch ID		PD002	PD002	PD002
Prep Method		3005A	3005A	3005A
Analyst		GSP	GSP	GSP
Quantitation Factor		1.000	1.000	1.000

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STL Pensacola 3355 McLemore Drive - Pensacola FL 32514 Telephone:(850) 474-1001 Fax:(850) 478-2671

Analytical Data Report

Lab Sample ID	Description	Matrix	Date Received	Date Sampled	SDG#
01019-9	Method Blank	Liquid	01/04/05		
01019-10	Lab Control Standard % Recovery	Liquid	01/04/05		
01019-11	LCS Accuracy Control Limit (%R)	Liquid	01/04/05		
01019-12	Precision (%RPD) MS/MSD	Liquid	01/04/05		
01019-13	MS Precision Advisory Limit (%RPD)	Liquid	01/04/05		

Parameter	Units	Sample ID 01019-9 Method Blank	01019-10 Lab Control Stan	01019-11 LCS Accuracy Con	01019-12 Precision (%RPD)	01019-13 MS Precision Ad
Total Dissolved Solids (160.1)						
Total Dissolved Solids	mg/l	<5.0	96 %	68-120		
Dilution Factor		1				
Analysis Date		01/04/05				
Batch ID		TDW002	TDW002			
Analyst		ST				
Chloride (4500E)						
Chloride	mg/l	<2.0	96 %	90-110	0	20
Dilution Factor		1				
Analysis Date		01/07/05				
Batch ID		CKW003	CKW003		CKW003	
Analyst		CR				
Sulfate as SO4 (375.4)						
Sulfate as SO4	mg/l	<5.0	100 %	90-110	1	19
Dilution Factor		1				
Analysis Date		01/07/05				
Batch ID		SEW002	SEW002		SEW002	
Analyst		CR				

STL

STL Pensacola 3355 McLemore Drive - Pensacola FL 32514 Telephone:(850) 474-1001 Fax:(850) 478-2671

Analytical Data Report

Lab Sample ID	Description	Matrix	Date Received	Date Sampled	SDG#
01019-9	Method Blank	Liquid	01/04/05		
01019-10	Lab Control Standard % Recovery	Liquid	01/04/05		
01019-11	LCS Accuracy Control Limit (%R)	Liquid	01/04/05		
01019-12	Precision (%RPD) MS/MSD	Liquid	01/04/05		
01019-13	MS Precision Advisory Limit (%RPD)	Liquid	01/04/05		

Parameter	Units	Sample ID 01019-9 Method Blank	01019-10 Lab Control Stan	01019-11 LCS Accuracy Con	01019-12 Precision (%RPD)	01019-13 MS Precision Ad
Fluoride (340.2)						
Fluoride	mg/l	<0.20	93 %	90-110	1	10
Dilution Factor		1				
Analysis Date		01/07/05				
Batch ID		FLW002	FLW002		FLW002	
Analyst		ST				
Alkalinity (to pH 4.5) as CaCO3 (2320B)						
Alkalinity (to pH 4.5) as CaCO3	mg/l	<1.0	98 %	90-110	1	20
Dilution Factor		1				
Analysis Date		01/06/05				
Batch ID		AEW002	AEW002		AEW002	
Analyst		ST				
Specific Conductance (120.1)						
Specific Conductance	umhos/cm	<1.0	100 %	98-102		
Dilution Factor		1				
Analysis Date		01/04/05				
Batch ID		CDW002	CDW002			
Analyst		ST				

SEVERN TRENT STL

STL Pensacola 3355 McLemore Drive - Pensacola FL 32514 Telephone:(850) 474-1001 Fax:(850) 478-2671

Analytical Data Report

Lab Sample ID	Description	Matrix	Date Received	Date Sampled	SDG#
01019-9	Method Blank	Liquid	01/04/05		
01019-10	Lab Control Standard % Recovery	Liquid	01/04/05		
01019-11	LCS Accuracy Control Limit (%R)	Liquid	01/04/05		
01019-12	Precision (%RPD) MS/MSD	Liquid	01/04/05		
01019-13	MS Precision Advisory Limit (%RPD)	Liquid	01/04/05		

Parameter	Units	Sample ID 01019-9 Method Blank	01019-10 Lab Control	01019-11 StanLCS Accuracy Con	01019-12 Precision (%RPD)	01019-13 MS Precision Ad
Hardness by calculation (6010B)						
Hardness as CaCO3	mg/l	<3.3	N/A	N/A	N/A	N/A
Dilution Factor		1				
Prep Date		01/05/05				
Analysis Date		01/05/05				
Batch ID		PW006	PW006		PW006	
Prep Method		3010A				
Analyst		GSP				
Quantitation Factor		1.000				
RCRA Metals (6010B)						
Arsenic	mg/l	<0.0050	97 %	80-120	1 %	20
Barium	mg/l	<0.010	101 %	80-120	3 %	20
Cadmium	mg/l	<0.0050	100 %	80-120	0 %	20
Chromium	mg/l	<0.0050	100 %	80-120	0 %	20
Lead	mg/l	<0.0050	99 %	80-120	0 %	20
Selenium	mg/l	<0.010	88 %	80-120	2 %	20
Silver	mg/l	<0.0050	103 %	80-120	1 %	20
Dilution Factor		1				
Prep Date		01/05/05				
Analysis Date		01/06/05				
Batch ID		PW006	PW006		PW006	
Prep Method		3010A				
Analyst		GSP				
Quantitation Factor		1.000				

SEVERN TRENT STL

STL Pensacola 3355 McLemore Drive - Pensacola FL 32514 Telephone:(850) 474-1001 Fax:(850) 478-2671

Analytical Data Report

Lab Sample ID	Description	Matrix	Date Received	Date Sampled	SDG#
01019-9	Method Blank	Liquid	01/04/05		
01019-10	Lab Control Standard % Recovery	Liquid	01/04/05		
01019-11	LCS Accuracy Control Limit (%R)	Liquid	01/04/05		
01019-12	Precision (%RPD) MS/MSD	Liquid	01/04/05		
01019-13	MS Precision Advisory Limit (%RPD)	Liquid	01/04/05		

Parameter	Units	Sample ID 01019-9 Method Blank	01019-10 Lab Control Stan	01019-11 LCS Accuracy Con	01019-12 Precision (%RPD)	01019-13 MS Precision Ad
Mercury (7470A)						
Mercury	mg/l	<0.00020	100 %	80-120	0	20
Dilution Factor		1				
Prep Date		01/05/05				
Analysis Date		01/06/05				
Batch ID		HGW001	HGW001		HGW001	
Prep Method		7470A				
Analyst		JB				
Quantitation Factor		1				
Metals, Dissolved (6010B)						
Calcium, Dissolved	mg/l	<0.50	98 %	80-120	6 %	20
Magnesium, Dissolved	mg/l	<0.50	100 %	80-120	6 %	20
Potassium, Dissolved	mg/l	<1.0	98 %	80-120	7 %	20
Sodium, Dissolved	mg/l	<1.0	98 %	80-120	6 %	20
Dilution Factor		1				
Prep Date		01/07/05				
Analysis Date		01/07/05				
Batch ID		PD002	PD002		PD002	
Prep Method		3005A				
Analyst		GSP				
Quantitation Factor		1.000				

Analytical Data Report

Lab Sample ID	Description	Matrix	Date Received	Date Sampled	SDG#
01019-14	Reporting Limit (RL)	Liquid	01/04/05		

Parameter	Units	Sample ID 01019-14 Reporting Limit
Total Dissolved Solids (160.1)		
Total Dissolved Solids	mg/l	5.0
Chloride (4500E)		
Chloride	mg/l	2.0
Sulfate as SO4 (375.4)		
Sulfate as SO4	mg/l	5.0
Fluoride (340.2)		
Fluoride	mg/l	0.20
CO2 and Forms of Alkalinity (4500D)		
Bicarbonate (2320/4500)	mg/l as CaCO3	1.0
Carbon Dioxide, Free	mg/l as CaCO3	1.0
Carbonate (2320/4500)	mg/l as CaCO3	1.0
Hydroxide	mg/l as CaCO3	1.0
Carbon Dioxide, Total	mg/l as CaCO3	1.0
Alkalinity (to pH 4.5) as CaCO3 (2320B)		
Alkalinity (to pH 4.5) as CaCO3	mg/l	1.0

SEVERN TRENT STL

STL Pensacola 3355 McLemore Drive - Pensacola FL 32514 Telephone:(850) 474-1001 Fax:(850) 478-2671

Analytical Data Report

Lab Sample ID	Description	Matrix	Date Received	Date Sampled	SDG#
01019-14	Reporting Limit (RL)	Liquid	01/04/05		

Parameter	Units	Sample ID 01019-14 Reporting Limit
Specific Conductance (120.1)		
Specific Conductance	umhos/cm	1.0
Hardness by calculation (6010B)		
Hardness as CaCO3	mg/l	3.3
RCRA Metals (6010B)		
Arsenic	mg/l	0.0050
Barium	mg/l	0.010
Cadmium	mg/l	0.0050
Chromium	mg/l	0.0050
Lead	mg/l	0.0050
Selenium	mg/l	0.010
Silver	mg/l	0.0050
Mercury (7470A)		
Mercury	mg/l	0.00020
Metals, Dissolved (6010B)		
Calcium, Dissolved	mg/l	0.50
Magnesium, Dissolved	mg/l	0.50
Potassium, Dissolved	mg/l	1.0
Sodium, Dissolved	mg/l	1.0

SEVERN TRENT STL

STL Pensacola 3355 McLemore Drive - Pensacola FL 32514 Telephone:(850) 474-1001 Fax:(850) 478-2671

Order Number: C501019

These test results meet all the requirements of NELAC. All questions regarding this test report should be directed to the STL Project Manager who signed this test report.

STL Pensacola
PROJECT SAMPLE INSPECTION FORM

SEVERN TRENT STL

Lab Order #: C501019 Date Received: 01-04-05

1.	Was there a Chain of Custody?	(Yes)	No*			
2.	Was Chain of Custody properly filled out and relinquished?	(Yes)	No*			
3.	Were all samples properly labeled and identified?	(Yes)	No*			
4.	Were samples received cold? (Criteria: 0.1° - 6°C: STL-SOP 1055)	(Yes)	No*	N/A		
5.	Did samples require splitting or compositing°?	Yes*	(No)			
6.	Were samples received in proper containers for analysis requested?	(Yes)	No*			
7.	Were all sample containers received intact?	(Yes)	No*			
8.	Were samples checked for preservative? *(Check pH of all H_2O requiring preservative (STL-PN SOP 917) except VOA vials that require zero headspace)*+*	(Yes)	No*	N/A		
9.	Is there sufficient volume for analysis requested?	(Yes)	No*	N/A *(Can)*		
10.	Were samples received within Holding Time? (REFER TO STL-SOP 1040)	(Yes)	No*			
11.	Is Headspace (bubble) visible > ¼" diameter in VOA vial(s)?*	Yes*	No	(N/A)		
12.	**Were Trip Blanks Received?**	Yes	No	(N/A)		
13.	**If yes, was analysis of Trip Blanks requested?**	Yes	No	(N/A)		
14.	Were MS/MSD-specific bottles provided?	Yes	No*	(N/A)		
15.	If any issues, how was PM notified?	PSIF ☐	Verbal ☐			

Airbill Number(s): 1Z 878 168 01 4515 4167 Delivery By: (UPS) FedEx HD BUS DHL PE

(HD – Hand Delivery)

Cooler Number(s) & Temp(s) °C: Client 4.6c IR-1

(IE. #340L, 4°C, IR-1 – COOLER NUMBER, TEMPERATURE, THERMOMETER NUMBER)

Comments (reference item numbers above and list sample IDs/Tests where appropriate):

water hold times

Inspected By: RH Date: 01-04-05 Logged By: RH Date: 01-04-05

* *Note all Out-of-Control and/or questionable events on Comment Section of this form. For holding times, the analytical department will flag immediate hold time samples (pH, Dissolved O2, Residual Cl) as out of hold time, therefore, these samples will not be documented on this PSIF.*

° *All volatile samples requested to be split or composited must be done in the Volatile Lab. Document: "Volatile sample values may be compromised due to sample splitting (compositing)"*

+ *All pH results for North Carolina, and other requested projects are to be recorded on the pH log provided (STL-SOP 938).*

* *According to EPA, a bubble of ¼" or less is acceptable in 40 ml vials requiring volatile analysis. According to Florida DEP, excess headspace in liquid TCLP volatile containers shall be documented.*

ANY PERSON MAKING OR ADDING COMMENTS TO ANY PART OF THIS PSIF MUST INITIAL AND DATE ALL CORRECTIONS, COMMENTS AND/OR INSTRUCTIONS.

SEVERN TRENT STL

Organic Data Qualifiers for Final Report

B	The analyte was detected in the method blank and in the client's sample.
D	The result was obtained from a dilution.
E	The result exceeds the calibration range.
J	Estimated value because the analyte concentration is less than the reporting limit.
M	A matrix effect was present.
N	Presumptive evidence of a compound. The compound was identified qualitatively or as a Tentatively Identified Compound.
N/C	Not Calculable. Either the sample spiked was > 4X spike concentration, or the compound was diluted out, or the results of sample duplicate analysis were <RL.
P	Second-column or detector confirmation exceeded method criteria. Appropriate value is reported and data is flagged/qualified as instructed by method/regulation.
U or < or ND	The analyte was not detected.
*	The result is not within control limit(s).

Inorganic Data Qualifiers for Final Report

B	The analyte was detected in the method blank and in the client's sample.
E	The reported value is estimated because of the presence of interference.
J	Estimated value because the analyte concentration is less than the reporting limit.
N	The spiked sample recovery is not within control limits.
N/C	Not Calculable. Either the sample spiked was > 4X spike concentration, or the compound was diluted out, or the results of sample duplicate analysis were <RL.
U or < or ND	The analyte was not detected.
*	Duplicate analysis not within control limits
M	The duplicate injection precision was not met.
S	The reported value was determined by the Method of Standard Addition (MSA).
W	Post-digestion spike for Furnace AA analysis is out of control limits (85-115%), while sample absorbance is less than 50% of spike absorbance and post spike recovery is greater than or equal to 40%, the sample is flagged with a "W" and no further action is required.
+	The Standard Additions Correlation Coefficient is <0.995.
L	The result is not within control limit(s).

It is permissible to submit an Out-of-Control Events/Corrective Action form and/or Case Narrative in lieu of using above qualifiers.

When the laboratory receives a sample that does not meet EPA requirements for sample collection, preservation or holding time, the laboratory is required to reject the samples. The client must be notified and asked whether the lab should proceed with analysis. Data from any samples that do not meet sample acceptance criteria (collection, preservation and holding time), must be flagged, or noted on a corrective action form or case narrative, or addressed on the Project Sample Inspection Form (PSIF) in an unambiguous manner clearly defining the nature and substance of the variation. NPDES samples from North Carolina that do not meet EPA requirements for sample collection, preservation or holding time are non-reportable for NPDES compliance monitoring.

Abbreviations

ND	Not Detected at or above the STL Pensacola reporting limit (RL)
NS	Not Submitted
NA	Not Applicable
MDL	STL Pensacola Method Detection Limit
RL	STL Pensacola Reporting Limit
NoMS	Not enough sample provided to prepare and/or analyze a method-required matrix spike (MS) and/or duplicate (MSD)
TIC	Tentatively Identified Compound

Florida Projects Inorganic/Organic

Refer to FL DEP 62-160; Table 4 Data Qualifier Codes. FL DEP Rule 62-160, Table 1 lists the Florida sites which require data qualifiers.

Arizona DEQ Projects

Any qualified data submitted to Arizona DEQ (ADEQ) after January 1, 2001 must be designated using the Arizona Data Qualifiers as developed by the Arizona ELAC technical subcommittee. Refer to the ADEQ qualifier list.

Severn Trent Laboratories Inc.
STL Pensacola ◦ 3355 McLemore Dr ◦ Pensacola, FL 32514
Tel 850 474 1001 Fax 850 484 5315 ◦ *www.stl-inc.com*

SEVERN TRENT STL

STL PENSACOLA
Certifications, Memberships & Affiliations

Alabama Department of Environmental Management, Laboratory ID No. 40150 (Drinking Water by Reciprocity with FL)

Arizona Department of Health Services, Lab ID No. AZ0589 (Hazardous Waste & Wastewater)

Arkansas Department of Pollution Control and Ecology, (88-0689) (Environmental)

California Department of Health Services, **ELAP** Laboratory ID No. 2510 (Hazardous Waste and Wastewater)

Connecticut Department of Health Services, Connecticut Lab Approval No. PH-0697 (D W, H W and Wastewater)

Florida DOH, **NELAP** Laboratory ID No. E81010 (Drinking Water, Hazardous Waste and Wastewater)

Florida DEP/DOH CompQAP # 980156

Illinois Environmental Laboratory Accreditation Program (ELAP), **NELAP** Laboratory ID No. 200041 (Wastewater and Hazardous Waste)

Iowa Department of Natural Resources, Laboratory ID No. 367 (Wastewater, UST, Solid Waste, & Contaminated Sites)

Kansas Department of Health & Environment, **NELAP** Laboratory ID No. E10253 (Wastewater and Hazardous Waste)

Kentucky NR&EPC, Laboratory ID No. 90043 (Drinking Water)

Kentucky Petroleum Storage Tank Env Assurance Fund, Laboratory ID No. 0053 (UST)

Louisiana DEQ, LELAP, **NELAP** Laboratory ID No. 02075, Agency Interest ID 30748 (Environmental)

Maryland DH&MH Laboratory ID No. 233 (Drinking Water by Reciprocity with Florida)

Massachusetts DEP, Laboratory ID No. M-FL094 (Wastewater)

Michigan Bureau of E&OccH, Laboratory ID No.9912 (Drinking Water by Reciprocity with Florida)

New Hampshire DES ELAP, **NELAP** Laboratory ID No. 250502 (Drinking Water & Wastewater)

New Jersey DEP&E, **NELAP** Laboratory ID No. FL006 (Wastewater and Hazardous Waster)

North Carolina DENR, Laboratory ID No. 314 (Hazardous Waste and Wastewater)

North Dakota DH&Consol Labs, Laboratory ID No. R-108 Wastewater and Hazardous Waste by Reciprocity with Arizona)

Oklahoma Department of Environmental Quality, Laboratory ID No. 9810 (Hazardous Waste and Wastewater)

Pennsylvania Department of Environmental Resources, **NELAP** Laboratory ID No. 68-467 (Drinking Water & Wastewater)

South Carolina DH&EC, Laboratory ID No. 96026 (Wastewater & Solids/Hazardous Waste by Reciprocity with FL)

Tennessee Department of Health & Environment, Laboratory ID No. 02907 (Drinking Water)

Virginia Department of General Services, Laboratory ID No. 00008 (Drinking Water by Reciprocity with FL)

West Virginia DOE, Office of Water Resources, Laboratory ID No. 136 (Haz Waste and Wastewater)

EPA ICR (Information Collection Rule) Approved Laboratory, Laboratory ID No. ICRFL031

NFESC (Naval Facilities Engineering Services Center)

USACE (United States Army Corps. of Engineers), MRD

STL Pensacola also has a foreign soil permit to accept soils from locations other than the continental United States. Permit No. S-37599

Total Pages of Report 23

Pinnacle Laboratories, Inc. — Interlab Chain of Custody

Date: 1/3/05 Page: 1 of 1

Network Project Manager: Jacinta Tenorio

Pinnacle Laboratories, Inc.
2709-D Pan American Freeway, NE
Albuquerque, NM 87107
(505) 344-3777 Fax (505) 344-4413

WATCH HOLD TIME! Small bottles are dissolved metals.

ANALYSIS REQUEST

SAMPLE ID	DATE	TIME	MATRIX	LAB ID	Metals (8) RCRA (Total)	TCLP RCRA (8) Metals	Metals-13 PP List	Metals-TAL (23 Metals)	Dissolved Fe, Mn, Pb (6010)	Dissolved Ca, Mg, K, Na	TOC	Gen Chemistry: Cl, F, SO4, Br	TDS, EC, Total Hardness	Alk + Bicarb/Carb/OH	Volatile Organics GC/MS (8260)	BOD	COD	Pesticides/PCB (608/8081/8082)	Herbicides (615/8151)	PNA (8310)/8270 SIMS	8260 (TCLP 1311) ZHE		Base/Neutral Acid Compounds GC/MS (625/8270)	Uranium (ICP-MS)	Radium 226+228	Gross Alpha/Beta	TO-14	NUMBER OF CONTAINERS
MW-7/412405-01	12/29/04	1036	AQ		X					X		X	X	X													
MW-9/412405-02		1111			X					X		X	X	X													
MW-10/412405-03		1140			X					X		X	X	X													
MW-11/412405-04		1209			X					X		X	X	X													
MW-15/412405-05		1243			X					X		X	X	X													
MW-20/412405-06		1421			X					X		X	X	X													
MW-21/412405-07		1457			X					X		X	X	X													
MW-22/412405-08	↓	1527	↓		X					X		X	X	X													

PROJECT INFORMATION		SAMPLE RECEIPT		SAMPLES SENT TO:	
PROJECT #:	412405	Total Number of Containers		PENSACOLA - STL-FL	X
PROJ. NAME:	BIO	Chain of Custody Seals		ESL - OR	
QC LEVEL:	(STD) IV	Received Intact?		ATEL - AZ	
QC REQUIRED:	(MS) MSD BLANK	Received Good Cond./Cold		ATEL - MARION	
TAT:	(STANDARD) RUSH!!	LAB NUMBER:		ATEL - MELMORE	
				EHL	
DUE DATE:	1/3	COMMENTS:		GEL	
RUSH SURCHARGE:	—			U OF MIAMI	
CLIENT DISCOUNT:	—			WCAS	
SPECIAL CERTIFICATION REQUIRED:	YES (NO)			WOHL	

RELINQUISED BY: 1.	RELINQUISED BY: 2.
Signature: Francine Tenorio Time: 1700	Signature: Time:
Printed Name: Francine Tenorio Date: 1/3/05	Printed Name: Date:
Pinnacle Laboratories, Inc.	Company
RECEIVED BY: 1.	**RECEIVED BY: 2.**
Signature: Raven Hedana Time: 1355	Signature: Time:
Printed Name: Date: 01-04-05	Printed Name: Date:
Company STL	Company

Environmental Services Laboratory, Inc.

E S L

17400 SW Upper Boones Ferry Road, Suite 270 • Portland, OR 97224 • (503) 670-8520

January 17, 2005

Jacinta A. Tenorio
Pinnacle Laboratories
2709-D Pan American Fwy NE
Albuquerque, NM 87107

TEL: 505 344-3777
FAX (505) 344-4413

RE: 412405/BIO

Order No.: 0412159

Dear Jacinta A. Tenorio:

Environmental Services Laboratory received 8 samples on 12/31/04 for the analyses presented in the following report.

There were no analytical problems encountered and all analytical data met requirements established under NELAC protocol or laboratory specifications except where noted in a Case Narrative. Results apply only to the samples analyzed. Reproduction of this report is permitted only in its entirety, without the written approval of the laboratory. The following checked data sections are included in this report.

✓ Base Sample Report ✓ Method Blank Report ✓ Sample Duplicate Report __ Matrix Spike/Matrix Spike Duplicate Report ✓ Laboratory Control Spike/Spike Duplicate Report ✓ Continuing Calibration Verification Report __ Initial Calibration Verification Report

If you have any questions regarding these tests results, please feel free to call.

Darwin Thomas
Project Manager

Technical Review

Environmental Services Laboratory

Date: *17-Jan-05*

CLIENT:	Pinnacle Laboratories	**Client Sample ID:**	MW-7/412405-01
Lab Order:	0412159	**Tag Number:**	
Project:	412405/BIO	**Collection Date:**	12/29/04
Lab ID:	0412159-01A	**Matrix:**	AQUEOUS

Analyses	Result	Limit	Qual	Units	DF	Date Analyzed
PAH BY SIM, AQUEOUS		**8270-SIM**		**(3510C)**		Analyst: **keh**
1-Methylnaphthalene	ND	0.40		µg/L	4	1/4/05
2-Methylnaphthalene	ND	0.40		µg/L	4	1/4/05
Acenaphthene	ND	0.40		µg/L	4	1/4/05
Acenaphthylene	ND	0.40		µg/L	4	1/4/05
Anthracene	ND	0.40		µg/L	4	1/4/05
Benz(a)anthracene	ND	0.40		µg/L	4	1/4/05
Benzo(a)pyrene	ND	0.40		µg/L	4	1/4/05
Benzo(b)fluoranthene	ND	0.40		µg/L	4	1/4/05
Benzo(g,h,i)perylene	ND	0.40		µg/L	4	1/4/05
Benzo(k)fluoranthene	ND	0.40		µg/L	4	1/4/05
Chrysene	ND	0.40		µg/L	4	1/4/05
Dibenz(a,h)anthracene	ND	0.40		µg/L	4	1/4/05
Fluoranthene	ND	0.40		µg/L	4	1/4/05
Fluorene	ND	0.40		µg/L	4	1/4/05
Indeno(1,2,3-cd)pyrene	ND	0.40		µg/L	4	1/4/05
Naphthalene	ND	0.40		µg/L	4	1/4/05
Phenanthrene	ND	0.40		µg/L	4	1/4/05
Pyrene	ND	0.40		µg/L	4	1/4/05
Surr: 2-Fluorobiphenyl	54.0	43-116		%REC	4	1/4/05
Surr: 4-Terphenyl-d14	74.0	33-141		%REC	4	1/4/05
Surr: Nitrobenzene-d5	42.0	35-114		%REC	4	1/4/05

Qualifiers:

ND - Not Detected at the Reporting Limit

J - Analyte detected below quantitation limits

B - Analyte detected in the associated Method Blank

* - Value exceeds Maximum Contaminant Level

S - Spike Recovery outside accepted recovery limits

R - RPD outside accepted recovery limits

E - Value above quantitation range

Environmental Services Laboratory

Date: *17-Jan-05*

CLIENT:	Pinnacle Laboratories	**Client Sample ID:**	MW-9/412405-02
Lab Order:	0412159	**Tag Number:**	
Project:	412405/BIO	**Collection Date:**	12/29/04
Lab ID:	0412159-02A	**Matrix:**	AQUEOUS

Analyses	Result	Limit	Qual	Units	DF	Date Analyzed
PAH BY SIM, AQUEOUS		**8270-SIM**		**(3510C)**		Analyst: **keh**
1-Methylnaphthalene	ND	0.40		µg/L	4	1/4/05
2-Methylnaphthalene	ND	0.40		µg/L	4	1/4/05
Acenaphthene	ND	0.40		µg/L	4	1/4/05
Acenaphthylene	ND	0.40		µg/L	4	1/4/05
Anthracene	ND	0.40		µg/L	4	1/4/05
Benz(a)anthracene	ND	0.40		µg/L	4	1/4/05
Benzo(a)pyrene	ND	0.40		µg/L	4	1/4/05
Benzo(b)fluoranthene	ND	0.40		µg/L	4	1/4/05
Benzo(g,h,i)perylene	ND	0.40		µg/L	4	1/4/05
Benzo(k)fluoranthene	ND	0.40		µg/L	4	1/4/05
Chrysene	ND	0.40		µg/L	4	1/4/05
Dibenz(a,h)anthracene	ND	0.40		µg/L	4	1/4/05
Fluoranthene	ND	0.40		µg/L	4	1/4/05
Fluorene	ND	0.40		µg/L	4	1/4/05
Indeno(1,2,3-cd)pyrene	ND	0.40		µg/L	4	1/4/05
Naphthalene	ND	0.40		µg/L	4	1/4/05
Phenanthrene	ND	0.40		µg/L	4	1/4/05
Pyrene	ND	0.40		µg/L	4	1/4/05
Surr: 2-Fluorobiphenyl	55.0	43-116		%REC	4	1/4/05
Surr: 4-Terphenyl-d14	67.0	33-141		%REC	4	1/4/05
Surr: Nitrobenzene-d5	40.0	35-114		%REC	4	1/4/05

Qualifiers:

ND - Not Detected at the Reporting Limit

J - Analyte detected below quantitation limits

B - Analyte detected in the associated Method Blank

* - Value exceeds Maximum Contaminant Level

S - Spike Recovery outside accepted recovery limits

R - RPD outside accepted recovery limits

E - Value above quantitation range

Environmental Services Laboratory

Date: *17-Jan-05*

CLIENT:	Pinnacle Laboratories	**Client Sample ID:**	MW-10/412405-03
Lab Order:	0412159	**Tag Number:**	
Project:	412405/BIO	**Collection Date:**	12/29/04
Lab ID:	0412159-03A	**Matrix:**	AQUEOUS

Analyses	Result	Limit	Qual	Units	DF	Date Analyzed
PAH BY SIM, AQUEOUS		**8270-SIM**		**(3510C)**		Analyst: keh
1-Methylnaphthalene	ND	0.40		µg/L	4	1/4/05
2-Methylnaphthalene	ND	0.40		µg/L	4	1/4/05
Acenaphthene	ND	0.40		µg/L	4	1/4/05
Acenaphthylene	ND	0.40		µg/L	4	1/4/05
Anthracene	ND	0.40		µg/L	4	1/4/05
Benz(a)anthracene	ND	0.40		µg/L	4	1/4/05
Benzo(a)pyrene	ND	0.40		µg/L	4	1/4/05
Benzo(b)fluoranthene	ND	0.40		µg/L	4	1/4/05
Benzo(g,h,i)perylene	ND	0.40		µg/L	4	1/4/05
Benzo(k)fluoranthene	ND	0.40		µg/L	4	1/4/05
Chrysene	ND	0.40		µg/L	4	1/4/05
Dibenz(a,h)anthracene	ND	0.40		µg/L	4	1/4/05
Fluoranthene	ND	0.40		µg/L	4	1/4/05
Fluorene	ND	0.40		µg/L	4	1/4/05
Indeno(1,2,3-cd)pyrene	ND	0.40		µg/L	4	1/4/05
Naphthalene	ND	0.40		µg/L	4	1/4/05
Phenanthrene	ND	0.40		µg/L	4	1/4/05
Pyrene	ND	0.40		µg/L	4	1/4/05
Surr: 2-Fluorobiphenyl	54.0	43-116		%REC	4	1/4/05
Surr: 4-Terphenyl-d14	74.0	33-141		%REC	4	1/4/05
Surr: Nitrobenzene-d5	39.0	35-114		%REC	4	1/4/05

Qualifiers:

ND - Not Detected at the Reporting Limit

J - Analyte detected below quantitation limits

B - Analyte detected in the associated Method Blank

* - Value exceeds Maximum Contaminant Level

S - Spike Recovery outside accepted recovery limits

R - RPD outside accepted recovery limits

E - Value above quantitation range

Environmental Services Laboratory

Date: *17-Jan-05*

CLIENT:	Pinnacle Laboratories	**Client Sample ID:**	MW-11/412405-04
Lab Order:	0412159	**Tag Number:**	
Project:	412405/BIO	**Collection Date:**	12/29/04
Lab ID:	0412159-04A	**Matrix:**	AQUEOUS

Analyses	Result	Limit	Qual	Units	DF	Date Analyzed
PAH BY SIM, AQUEOUS		**8270-SIM**		**(3510C)**		Analyst: keh
1-Methylnaphthalene	ND	0.40		µg/L	4	1/4/05
2-Methylnaphthalene	ND	0.40		µg/L	4	1/4/05
Acenaphthene	ND	0.40		µg/L	4	1/4/05
Acenaphthylene	ND	0.40		µg/L	4	1/4/05
Anthracene	ND	0.40		µg/L	4	1/4/05
Benz(a)anthracene	ND	0.40		µg/L	4	1/4/05
Benzo(a)pyrene	ND	0.40		µg/L	4	1/4/05
Benzo(b)fluoranthene	ND	0.40		µg/L	4	1/4/05
Benzo(g,h,i)perylene	ND	0.40		µg/L	4	1/4/05
Benzo(k)fluoranthene	ND	0.40		µg/L	4	1/4/05
Chrysene	ND	0.40		µg/L	4	1/4/05
Dibenz(a,h)anthracene	ND	0.40		µg/L	4	1/4/05
Fluoranthene	ND	0.40		µg/L	4	1/4/05
Fluorene	ND	0.40		µg/L	4	1/4/05
Indeno(1,2,3-cd)pyrene	ND	0.40		µg/L	4	1/4/05
Naphthalene	ND	0.40		µg/L	4	1/4/05
Phenanthrene	ND	0.40		µg/L	4	1/4/05
Pyrene	ND	0.40		µg/L	4	1/4/05
Surr: 2-Fluorobiphenyl	53.0	43-116		%REC	4	1/4/05
Surr: 4-Terphenyl-d14	70.0	33-141		%REC	4	1/4/05
Surr: Nitrobenzene-d5	34.0	35-114	S	%REC	4	1/4/05

Qualifiers:

ND - Not Detected at the Reporting Limit

J - Analyte detected below quantitation limits

B - Analyte detected in the associated Method Blank

* - Value exceeds Maximum Contaminant Level

S - Spike Recovery outside accepted recovery limits

R - RPD outside accepted recovery limits

E - Value above quantitation range

Environmental Services Laboratory

Date: *17-Jan-05*

CLIENT:	Pinnacle Laboratories	**Client Sample ID:**	MW-15/412405-05
Lab Order:	0412159	**Tag Number:**	
Project:	412405/BIO	**Collection Date:**	12/29/04
Lab ID:	0412159-05A	**Matrix:**	AQUEOUS

Analyses	Result	Limit	Qual	Units	DF	Date Analyzed
PAH BY SIM, AQUEOUS		**8270-SIM**		**(3510C)**		Analyst: **keh**
1-Methylnaphthalene	ND	0.40		µg/L	4	1/4/05
2-Methylnaphthalene	ND	0.40		µg/L	4	1/4/05
Acenaphthene	ND	0.40		µg/L	4	1/4/05
Acenaphthylene	ND	0.40		µg/L	4	1/4/05
Anthracene	ND	0.40		µg/L	4	1/4/05
Benz(a)anthracene	ND	0.40		µg/L	4	1/4/05
Benzo(a)pyrene	ND	0.40		µg/L	4	1/4/05
Benzo(b)fluoranthene	ND	0.40		µg/L	4	1/4/05
Benzo(g,h,i)perylene	ND	0.40		µg/L	4	1/4/05
Benzo(k)fluoranthene	ND	0.40		µg/L	4	1/4/05
Chrysene	ND	0.40		µg/L	4	1/4/05
Dibenz(a,h)anthracene	ND	0.40		µg/L	4	1/4/05
Fluoranthene	ND	0.40		µg/L	4	1/4/05
Fluorene	ND	0.40		µg/L	4	1/4/05
Indeno(1,2,3-cd)pyrene	ND	0.40		µg/L	4	1/4/05
Naphthalene	ND	0.40		µg/L	4	1/4/05
Phenanthrene	ND	0.40		µg/L	4	1/4/05
Pyrene	ND	0.40		µg/L	4	1/4/05
Surr: 2-Fluorobiphenyl	54.0	43-116		%REC	4	1/4/05
Surr: 4-Terphenyl-d14	70.0	33-141		%REC	4	1/4/05
Surr: Nitrobenzene-d5	36.0	35-114		%REC	4	1/4/05

Qualifiers:

ND - Not Detected at the Reporting Limit

J - Analyte detected below quantitation limits

B - Analyte detected in the associated Method Blank

* - Value exceeds Maximum Contaminant Level

S - Spike Recovery outside accepted recovery limits

R - RPD outside accepted recovery limits

E - Value above quantitation range

Environmental Services Laboratory

Date: *17-Jan-05*

CLIENT:	Pinnacle Laboratories	**Client Sample ID:**	MW-20/412405-06
Lab Order:	0412159	**Tag Number:**	
Project:	412405/BIO	**Collection Date:**	12/29/04
Lab ID:	0412159-06A	**Matrix:**	AQUEOUS

Analyses	Result	Limit	Qual	Units	DF	Date Analyzed
PAH BY SIM, AQUEOUS		**8270-SIM**		**(3510C)**		Analyst: **keh**
1-Methylnaphthalene	ND	0.40		µg/L	4	1/4/05
2-Methylnaphthalene	ND	0.40		µg/L	4	1/4/05
Acenaphthene	ND	0.40		µg/L	4	1/4/05
Acenaphthylene	ND	0.40		µg/L	4	1/4/05
Anthracene	ND	0.40		µg/L	4	1/4/05
Benz(a)anthracene	ND	0.40		µg/L	4	1/4/05
Benzo(a)pyrene	ND	0.40		µg/L	4	1/4/05
Benzo(b)fluoranthene	ND	0.40		µg/L	4	1/4/05
Benzo(g,h,i)perylene	ND	0.40		µg/L	4	1/4/05
Benzo(k)fluoranthene	ND	0.40		µg/L	4	1/4/05
Chrysene	ND	0.40		µg/L	4	1/4/05
Dibenz(a,h)anthracene	ND	0.40		µg/L	4	1/4/05
Fluoranthene	ND	0.40		µg/L	4	1/4/05
Fluorene	ND	0.40		µg/L	4	1/4/05
Indeno(1,2,3-cd)pyrene	ND	0.40		µg/L	4	1/4/05
Naphthalene	ND	0.40		µg/L	4	1/4/05
Phenanthrene	ND	0.40		µg/L	4	1/4/05
Pyrene	ND	0.40		µg/L	4	1/4/05
Surr: 2-Fluorobiphenyl	55.0	43-116		%REC	4	1/4/05
Surr: 4-Terphenyl-d14	85.0	33-141		%REC	4	1/4/05
Surr: Nitrobenzene-d5	19.0	35-114	S, MI	%REC	4	1/4/05

Qualifiers:

ND - Not Detected at the Reporting Limit

J - Analyte detected below quantitation limits

B - Analyte detected in the associated Method Blank

* - Value exceeds Maximum Contaminant Level

S - Spike Recovery outside accepted recovery limits

R - RPD outside accepted recovery limits

E - Value above quantitation range

Environmental Services Laboratory

Date: *17-Jan-05*

CLIENT:	Pinnacle Laboratories	**Client Sample ID:**	MW-21/412405-07
Lab Order:	0412159	**Tag Number:**	
Project:	412405/BIO	**Collection Date:**	12/29/04
Lab ID:	0412159-07A	**Matrix:**	AQUEOUS

Analyses	Result	Limit	Qual	Units	DF	Date Analyzed
PAH BY SIM, AQUEOUS		**8270-SIM**		**(3510C)**		Analyst: **keh**
1-Methylnaphthalene	ND	0.40		µg/L	4	1/4/05
2-Methylnaphthalene	ND	0.40		µg/L	4	1/4/05
Acenaphthene	ND	0.40		µg/L	4	1/4/05
Acenaphthylene	ND	0.40		µg/L	4	1/4/05
Anthracene	ND	0.40		µg/L	4	1/4/05
Benz(a)anthracene	ND	0.40		µg/L	4	1/4/05
Benzo(a)pyrene	ND	0.40		µg/L	4	1/4/05
Benzo(b)fluoranthene	ND	0.40		µg/L	4	1/4/05
Benzo(g,h,i)perylene	ND	0.40		µg/L	4	1/4/05
Benzo(k)fluoranthene	ND	0.40		µg/L	4	1/4/05
Chrysene	ND	0.40		µg/L	4	1/4/05
Dibenz(a,h)anthracene	ND	0.40		µg/L	4	1/4/05
Fluoranthene	ND	0.40		µg/L	4	1/4/05
Fluorene	ND	0.40		µg/L	4	1/4/05
Indeno(1,2,3-cd)pyrene	ND	0.40		µg/L	4	1/4/05
Naphthalene	ND	0.40		µg/L	4	1/4/05
Phenanthrene	ND	0.40		µg/L	4	1/4/05
Pyrene	ND	0.40		µg/L	4	1/4/05
Surr: 2-Fluorobiphenyl	57.0	43-116		%REC	4	1/4/05
Surr: 4-Terphenyl-d14	66.0	33-141		%REC	4	1/4/05
Surr: Nitrobenzene-d5	32.0	35-114	S	%REC	4	1/4/05

Qualifiers:

ND - Not Detected at the Reporting Limit

J - Analyte detected below quantitation limits

B - Analyte detected in the associated Method Blank

* - Value exceeds Maximum Contaminant Level

S - Spike Recovery outside accepted recovery limits

R - RPD outside accepted recovery limits

E - Value above quantitation range

Environmental Services Laboratory

Date: *17-Jan-05*

CLIENT:	Pinnacle Laboratories	**Client Sample ID:**	MW-22/412405-08
Lab Order:	0412159	**Tag Number:**	
Project:	412405/BIO	**Collection Date:**	12/29/04
Lab ID:	0412159-08A	**Matrix:**	AQUEOUS

Analyses	Result	Limit	Qual	Units	DF	Date Analyzed
PAH BY SIM, AQUEOUS		**8270-SIM**		**(3510C)**		Analyst: **keh**
1-Methylnaphthalene	ND	0.40		µg/L	4	1/4/05
2-Methylnaphthalene	ND	0.40		µg/L	4	1/4/05
Acenaphthene	ND	0.40		µg/L	4	1/4/05
Acenaphthylene	ND	0.40		µg/L	4	1/4/05
Anthracene	ND	0.40		µg/L	4	1/4/05
Benz(a)anthracene	ND	0.40		µg/L	4	1/4/05
Benzo(a)pyrene	ND	0.40		µg/L	4	1/4/05
Benzo(b)fluoranthene	ND	0.40		µg/L	4	1/4/05
Benzo(g,h,i)perylene	ND	0.40		µg/L	4	1/4/05
Benzo(k)fluoranthene	ND	0.40		µg/L	4	1/4/05
Chrysene	ND	0.40		µg/L	4	1/4/05
Dibenz(a,h)anthracene	ND	0.40		µg/L	4	1/4/05
Fluoranthene	ND	0.40		µg/L	4	1/4/05
Fluorene	ND	0.40		µg/L	4	1/4/05
Indeno(1,2,3-cd)pyrene	ND	0.40		µg/L	4	1/4/05
Naphthalene	ND	0.40		µg/L	4	1/4/05
Phenanthrene	ND	0.40		µg/L	4	1/4/05
Pyrene	ND	0.40		µg/L	4	1/4/05
Surr: 2-Fluorobiphenyl	61.0	43-116		%REC	4	1/4/05
Surr: 4-Terphenyl-d14	73.0	33-141		%REC	4	1/4/05
Surr: Nitrobenzene-d5	46.0	35-114		%REC	4	1/4/05

Qualifiers:

ND - Not Detected at the Reporting Limit

J - Analyte detected below quantitation limits

B - Analyte detected in the associated Method Blank

* - Value exceeds Maximum Contaminant Level

S - Spike Recovery outside accepted recovery limits

R - RPD outside accepted recovery limits

E - Value above quantitation range

CLIENT: Pinnacle Laboratories
Work Order: 0412159
Project: 412405/BIO

ANALYTICAL QC SUMMARY REPORT

TestCode: 06 PAH A

Sample ID: **MB-7889**	SampType: **MBLK**	TestCode: **06 PAH A**	Units: **µg/L**	Prep Date: **1/3/05**	Run ID: **HEISENBURG_050104A**
Client ID: **ZZZZZ**	Batch ID: **7889**	TestNo: **8270-SIM**	**(3510C)**	Analysis Date: **1/4/05**	SeqNo: **228018**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
1-Methylnaphthalene	ND	0.10									
2-Methylnaphthalene	ND	0.10									
Acenaphthene	ND	0.10									
Acenaphthylene	ND	0.10									
Anthracene	ND	0.10									
Benz(a)anthracene	ND	0.10									
Benzo(a)pyrene	ND	0.10									
Benzo(b)fluoranthene	ND	0.10									
Benzo(g,h,i)perylene	ND	0.10									
Benzo(k)fluoranthene	ND	0.10									
Chrysene	ND	0.10									
Dibenz(a,h)anthracene	ND	0.10									
Fluoranthene	ND	0.10									
Fluorene	ND	0.10									
Indeno(1,2,3-cd)pyrene	ND	0.10									
Naphthalene	ND	0.10									
Phenanthrene	ND	0.10									
Pyrene	ND	0.10									
Surr: 2-Fluorobiphenyl	0.46	0	1	0	46	43	116	0	0		
Surr: 4-Terphenyl-d14	0.6	0	1	0	60	33	141	0	0		
Surr: Nitrobenzene-d5	0.43	0	1	0	43	35	114	0	0		

Sample ID: **LCS-7889**	SampType: **LCS**	TestCode: **06 PAH A**	Units: **µg/L**	Prep Date: **1/3/05**	Run ID: **HEISENBURG_050104A**
Client ID: **ZZZZZ**	Batch ID: **7889**	TestNo: **8270-SIM**	**(3510C)**	Analysis Date: **1/4/05**	SeqNo: **228019**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
1-Methylnaphthalene	1.12	0.10	1	0	112	21	133	0	0		
2-Methylnaphthalene	0.73	0.10	1	0	73	21	133	0	0		
Acenaphthene	0.63	0.10	1	0	63	47	145	0	0		
Acenaphthylene	0.66	0.10	1	0	66	33	145	0	0		

Qualifiers: ND - Not Detected at the Reporting Limit; S - Spike Recovery outside accepted recovery limits; B - Analyte detected in the associated Method Blank
J - Analyte detected below quantitation limits; R - RPD outside accepted recovery limits

CLIENT: Pinnacle Laboratories
Work Order: 0412159
Project: 412405/BIO

ANALYTICAL QC SUMMARY REPORT

TestCode: 06 PAH A

Sample ID: LCS-7889	SampType: LCS	TestCode: 06 PAH A	Units: µg/L	Prep Date: 1/3/05	Run ID: HEISENBURG_050104A
Client ID: ZZZZZ	Batch ID: 7889	TestNo: 8270-SIM	(3510C)	Analysis Date: 1/4/05	SeqNo: 228019

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Anthracene	0.64	0.10	1	0	64	27	133	0	0		
Benz(a)anthracene	0.56	0.10	1	0	56	33	143	0	0		
Benzo(a)pyrene	0.54	0.10	1	0	54	17	163	0	0		
Benzo(b)fluoranthene	0.46	0.10	1	0	46	24	159	0	0		
Benzo(k)fluoranthene	0.63	0.10	1	0	63	11	162	0	0		
Chrysene	0.67	0.10	1	0	67	17	168	0	0		
Fluoranthene	0.72	0.10	1	0	72	26	137	0	0		
Fluorene	0.68	0.10	1	0	68	59	121	0	0		
Naphthalene	0.76	0.10	1	0	76	21	133	0	0		
Phenanthrene	0.61	0.10	1	0	61	54	120	0	0		
Pyrene	0.68	0.10	1	0	68	52	115	0	0		
Surr: 2-Fluorobiphenyl	0.53	0	1	0	53	43	116	0	0		
Surr: 4-Terphenyl-d14	0.51	0	1	0	51	33	141	0	0		
Surr: Nitrobenzene-d5	0.5	0	1	0	50	35	114	0	0		

Sample ID: LCSD-7889	SampType: LCSD	TestCode: 06 PAH A	Units: µg/L	Prep Date: 1/3/05	Run ID: HEISENBURG_050104A
Client ID: ZZZZZ	Batch ID: 7889	TestNo: 8270-SIM	(3510C)	Analysis Date: 1/4/05	SeqNo: 228020

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
1-Methylnaphthalene	0.92	0.10	1	0	92	21	133	1.12	19.6	30	
2-Methylnaphthalene	0.65	0.10	1	0	65	21	133	0.73	11.6	30	
Acenaphthene	0.6	0.10	1	0	60	47	145	0.63	4.88	30	
Acenaphthylene	0.64	0.10	1	0	64	33	145	0.66	3.08	30	
Anthracene	0.7	0.10	1	0	70	27	133	0.64	8.96	30	
Benz(a)anthracene	0.55	0.10	1	0	55	33	143	0.56	1.80	30	
Benzo(a)pyrene	0.52	0.10	1	0	52	17	163	0.54	3.77	30	
Benzo(b)fluoranthene	0.45	0.10	1	0	45	24	159	0.46	2.20	30	
Benzo(k)fluoranthene	0.56	0.10	1	0	56	11	162	0.63	11.8	30	
Chrysene	0.64	0.10	1	0	64	17	168	0.67	4.58	30	
Fluoranthene	0.67	0.10	1	0	67	26	137	0.72	7.19	30	
Fluorene	0.66	0.10	1	0	66	59	121	0.68	2.99	30	

Qualifiers:
ND - Not Detected at the Reporting Limit
J - Analyte detected below quantitation limits
S - Spike Recovery outside accepted recovery limits
R - RPD outside accepted recovery limits
B - Analyte detected in the associated Method Blank

CLIENT: Pinnacle Laboratories
Work Order: 0412159
Project: 412405/BIO

ANALYTICAL QC SUMMARY REPORT

TestCode: 06 PAH A

Sample ID: **LCSD-7889**	SampType: **LCSD**	TestCode: **06 PAH A**	Units: **µg/L**	Prep Date: **1/3/05**	Run ID: **HEISENBURG_050104A**
Client ID: **ZZZZZ**	Batch ID: **7889**	TestNo: **8270-SIM**	**(3510C)**	Analysis Date: **1/4/05**	SeqNo: **228020**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Naphthalene	0.66	0.10	1	0	66	21	133	0.76	14.1	30	
Phenanthrene	0.59	0.10	1	0	59	54	120	0.61	3.33	30	
Pyrene	0.69	0.10	1	0	69	52	115	0.68	1.46	30	
Surr: 2-Fluorobiphenyl	0.53	0	1	0	53	43	116	0	0	30	
Surr: 4-Terphenyl-d14	0.49	0	1	0	49	33	141	0	0	30	
Surr: Nitrobenzene-d5	0.53	0	1	0	53	35	114	0	0	30	

Sample ID: **0412152-02A DUP**	SampType: **DUP**	TestCode: **06 PAH A**	Units: **µg/L**	Prep Date: **1/3/05**	Run ID: **HEISENBURG_050104A**
Client ID: **ZZZZZ**	Batch ID: **7889**	TestNo: **8270-SIM**	**(3510C)**	Analysis Date: **1/4/05**	SeqNo: **228023**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
1-Methylnaphthalene	ND	0.40	0	0	0	0	0	0	0	20	
2-Methylnaphthalene	ND	0.40	0	0	0	0	0	0	0	20	
Acenaphthene	ND	0.40	0	0	0	0	0	0	0	20	
Acenaphthylene	ND	0.40	0	0	0	0	0	0	0	20	
Anthracene	ND	0.40	0	0	0	0	0	0	0	20	
Benz(a)anthracene	ND	0.40	0	0	0	0	0	0	0	20	
Benzo(a)pyrene	ND	0.40	0	0	0	0	0	0	0	20	
Benzo(b)fluoranthene	ND	0.40	0	0	0	0	0	0	0	20	
Benzo(g,h,i)perylene	ND	0.40	0	0	0	0	0	0	0	20	
Benzo(k)fluoranthene	ND	0.40	0	0	0	0	0	0	0	20	
Chrysene	ND	0.40	0	0	0	0	0	0	0	20	
Dibenz(a,h)anthracene	ND	0.40	0	0	0	0	0	0	0	20	
Fluoranthene	ND	0.40	0	0	0	0	0	0	0	20	
Fluorene	ND	0.40	0	0	0	0	0	0	0	20	
Indeno(1,2,3-cd)pyrene	ND	0.40	0	0	0	0	0	0	0	20	
Naphthalene	ND	0.40	0	0	0	0	0	0	0	20	
Phenanthrene	ND	0.40	0	0	0	0	0	0	0	20	
Pyrene	ND	0.40	0	0	0	0	0	0	0	20	
Surr: 2-Fluorobiphenyl	1.96	0	4	0	49	43	116	0	0	0	
Surr: 4-Terphenyl-d14	2.68	0	4	0	67	33	141	0	0	0	

Qualifiers: ND - Not Detected at the Reporting Limit
J - Analyte detected below quantitation limits
S - Spike Recovery outside accepted recovery limits
R - RPD outside accepted recovery limits
B - Analyte detected in the associated Method Blank

CLIENT: Pinnacle Laboratories
Work Order: 0412159
Project: 412405/BIO

ANALYTICAL QC SUMMARY REPORT

TestCode: 06 PAH A

Sample ID: 0412152-02A DUP	SampType: DUP	TestCode: 06 PAH A	Units: µg/L	Prep Date: 1/3/05	Run ID: HEISENBURG_050104A
Client ID: ZZZZZ	Batch ID: 7889	TestNo: 8270-SIM	(3510C)	Analysis Date: 1/4/05	SeqNo: 228023

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Surr: Nitrobenzene-d5	1.64	0	4	0	41	35	114	0	0	0	

Sample ID: 0412152-05A DUP	SampType: DUP	TestCode: 06 PAH A	Units: µg/L	Prep Date: 1/3/05	Run ID: HEISENBURG_050104A
Client ID: ZZZZZ	Batch ID: 7889	TestNo: 8270-SIM	(3510C)	Analysis Date: 1/4/05	SeqNo: 228027

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
1-Methylnaphthalene	ND	0.40	0	0	0	0	0	0	0	20	
2-Methylnaphthalene	ND	0.40	0	0	0	0	0	0	0	20	
Acenaphthene	ND	0.40	0	0	0	0	0	0	0	20	
Acenaphthylene	ND	0.40	0	0	0	0	0	0	0	20	
Anthracene	ND	0.40	0	0	0	0	0	0	0	20	
Benz(a)anthracene	ND	0.40	0	0	0	0	0	0	0	20	
Benzo(a)pyrene	ND	0.40	0	0	0	0	0	0	0	20	
Benzo(b)fluoranthene	ND	0.40	0	0	0	0	0	0	0	20	
Benzo(g,h,i)perylene	ND	0.40	0	0	0	0	0	0	0	20	
Benzo(k)fluoranthene	ND	0.40	0	0	0	0	0	0	0	20	
Chrysene	ND	0.40	0	0	0	0	0	0	0	20	
Dibenz(a,h)anthracene	ND	0.40	0	0	0	0	0	0	0	20	
Fluoranthene	ND	0.40	0	0	0	0	0	0	0	20	
Fluorene	ND	0.40	0	0	0	0	0	0	0	20	
Indeno(1,2,3-cd)pyrene	ND	0.40	0	0	0	0	0	0	0	20	
Naphthalene	ND	0.40	0	0	0	0	0	0	0	20	
Phenanthrene	ND	0.40	0	0	0	0	0	0	0	20	
Pyrene	ND	0.40	0	0	0	0	0	0	0	20	
Surr: 2-Fluorobiphenyl	2.28	0	4	0	57	43	116	0	0	0	
Surr: 4-Terphenyl-d14	2.88	0	4	0	72	33	141	0	0	0	
Surr: Nitrobenzene-d5	1.56	0	4	0	39	35	114	0	0	0	

Qualifiers:
ND - Not Detected at the Reporting Limit
J - Analyte detected below quantitation limits
S - Spike Recovery outside accepted recovery limits
R - RPD outside accepted recovery limits
B - Analyte detected in the associated Method Blank

CLIENT: Pinnacle Laboratories
Work Order: 0412159
Project: 412405/BIO

ANALYTICAL QC SUMMARY REPORT

TestCode: 06 PAH A

Sample ID: CCV	SampType: CCV	TestCode: 06 PAH A	Units: µg/L	Prep Date:	Run ID: HEISENBURG_050104A
Client ID: ZZZZZ	Batch ID: R18642	TestNo: 8270-SIM		Analysis Date: 1/4/05	SeqNo: 228017

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Acenaphthene	1.01	0.10	1	0	101	80	120	0	0		
Acenaphthylene	0.98	0.10	1	0	98	80	120	0	0		
Anthracene	1.08	0.10	1	0	108	80	120	0	0		
Benz(a)anthracene	0.81	0.10	1	0	81	80	120	0	0		
Benzo(a)pyrene	0.94	0.10	1	0	94	80	120	0	0		
Benzo(b)fluoranthene	0.84	0.10	1	0	84	80	120	0	0		
Benzo(g,h,i)perylene	1.15	0.10	1	0	115	80	120	0	0		
Benzo(k)fluoranthene	1.08	0.10	1	0	108	80	120	0	0		
Chrysene	0.91	0.10	1	0	91	80	120	0	0		
Dibenz(a,h)anthracene	1.14	0.10	1	0	114	80	120	0	0		
Fluoranthene	1.14	0.10	1	0	114	80	120	0	0		
Fluorene	0.88	0.10	1	0	88	80	120	0	0		
Indeno(1,2,3-cd)pyrene	1.14	0.10	1	0	114	80	120	0	0		
Naphthalene	1	0.10	1	0	100	80	120	0	0		
Phenanthrene	0.84	0.10	1	0	84	80	120	0	0		
Pyrene	1.06	0.10	1	0	106	80	120	0	0		
Surr: 2-Fluorobiphenyl	0.9	0	1	0	90	43	116	0	0		
Surr: 4-Terphenyl-d14	1.02	0	1	0	102	33	141	0	0		
Surr: Nitrobenzene-d5	0.82	0	1	0	82	35	114	0	0		

Qualifiers:
ND - Not Detected at the Reporting Limit
J - Analyte detected below quantitation limits
S - Spike Recovery outside accepted recovery limits
R - RPD outside accepted recovery limits
B - Analyte detected in the associated Method Blank

ENVIRONMENTAL SERVICES LABORATORY – GLOSSARY OF FLAGS

QUALIFIER	DESCRIPTION
AA	This sample was analyzed after the holding time had expired.
AB	The hydrocarbon pattern in this sample is not typical of gasoline.
AC	The hydrocarbon pattern in this sample is not typical of diesel.
AD	The hydrocarbon pattern in this sample is not typical of oil.
AE	The hydrocarbon pattern in this sample extends into the gasoline range.
AF	The hydrocarbon pattern in this sample extends into the diesel range.
AG	The hydrocarbon pattern in this sample extends into the oil range.
A	This analysis was performed on a VOA sample containing headspace.
B	Analyte detected in the Method Blank above the reporting level.
C	The Relative Percent Difference (RPD) for the primary result and confirmation result was greater than 40%. The higher result was reported.
D	The sample was supplied in an inappropriate container according to method criteria.
E	This value is above the quantitation limit. It is considered an estimate.
H	The Matrix Spike/Matrix Spike Duplicate (MS/MSD) result was outside control limits. The Laboratory Control Standard/Duplicate (LCS/LCSD) result was in control validating the batch.
J	The result is above the Method Detection Limit (MDL) and below the Reporting level (RL). It is considered an estimate.
M	The MS/MSD recoveries are not calculable due to a high amount of analyte in sample.
MI	This indicates a high level of matrix interference affecting the spike or surrogate recovery.
N	See case narrative.
O	Detection Limits are elevated due to sample dilution. See case narrative.
Q	Further inspection of the sample confirms a non-homogenous sample matrix affecting RPD result.
R	The RPD result is outside method control limits. See other qualifiers or case narrative.
S	The spike recovery is outside method control limits. See other qualifiers or case narrative.
T	The RPD between the sample result and duplicate result was greater than 20%. The original result was less than three times the reporting level, therefore the RPD is not applicable.
X	Unable to quantitate surrogate recovery due to sample dilution.

Pinnacle Laboratories, Inc. 0412159 **Interlab Chain of Custody** Date: 12/30/04 Page: 1 of 1

Network Project Manager: Jacinta Tenorio

Pinnacle Laboratories, Inc.
2709-D Pan American Freeway, NE
Albuquerque, NM 87107
(505) 344-3777 Fax (505) 344-4413

See 8270 SIMS instructions.

0412159

ANALYSIS REQUEST

SAMPLE ID	DATE	TIME	MATRIX	LAB ID	Metals (8) RCRA	TCLP RCRA (8) Metals	Metals-13 PP List	Metals-TAL (23 Metals)	Dissolved Fe, Mn, Pb (6010)		TOC	Gen Chemistry:			Volatile Organics GC/MS (8260)	BOD	COD	Pesticides/PCB (608/8081/8082)	Herbicides (615/8151)	PNA (8310/8270 SIMS)	8260 (TCLP 1311) ZHE		Base/Neutral Acid Compounds GC/MS (625/8270)	Uranium (ICP-MS)	Radium 226+228	Gross Alpha/Beta	TO-14	NUMBER OF CONTAINERS
MW-7/412405-01	12/29/04	1036	AQ	01																X								
MW-9/412405-02		1111		02																X								
MW-10/412405-03		1140		03																X								
MW-11/412405-04		1209		04																X								
MW-15/412405-05		1243		05																X								
MW-20/412405-06		1421		06																X								
MW-21/412405-07		1457		07																X								
MW-22/412405-08	↓	1527	↓	08																X								

PROJECT INFORMATION		SAMPLE RECEIPT		SAMPLES SENT TO:		RELINQUISED BY: 1.	RELINQUISED BY: 2.
PROJECT #:	412405	Total Number of Containers		PENSACOLA - STL-FL		Signature: Francine Tonno Time: 1700	Signature: Time:
PROJ. NAME:	BIO	Chain of Custody Seals		ESL - OR	X	Printed Name: Francine Tonno Date: 12/30/04	Printed Name: Date:
QC LEVEL:	STD. IV	Received Intact?		ATEL - AZ		Pinnacle Laboratories, Inc.	Company
QC REQUIRED:	MS MSD BLANK	Received Good Cond./Cold		ATEL - MARION		RECEIVED BY: 1.	RECEIVED BY: 2.
TAT:	STANDARD RUSH!!	LAB NUMBER:		ATEL - MELMORE		Signature: D. Thomas Time: 1300	Signature: Time:
DUE DATE:	1/13	COMMENTS:		EHL		Printed Name: Date: 12/31/04	Printed Name: Date:
RUSH SURCHARGE:	—			GEL		Company ESL	Company
CLIENT DISCOUNT:	—			U OF MIAMI			
SPECIAL CERTIFICATION REQUIRED:	YES NO			WCAS			
				WOHL			

Pinnacle Laboratories Inc.

CHAIN OF CUSTODY

DATE: 12-30-4 PAGE: 1 OF 1

PLEASE FILL THIS FORM IN COMPLETELY.

PROJECT MANAGER: Terry Griffin

COMPANY: Biotech Remediation Inc.

ADDRESS: 501 Airport Dr. Suite 104
Farmington NM. 87401

PHONE:

FAX:

BILL TO:

COMPANY:

ADDRESS:

ANALYSIS REQUEST

SAMPLE ID	DATE	TIME	MATRIX	# CONTAINERS
MW-7	12-29-4	1036	H_2O	
MW-9		1111		
MW-10		1140		
MW-11		1209		
MW-15		1243		
MW-20		1421		
MW-21		1457		
MW-22		1527		

Petroleum Hydrocarbons (418.1) TRPH
(MOD.8015) Diesel/Direct Inject
Sims 8270
(M8015) Gas/Purge & Trap
8021 (BTEX)/8015 (Gasoline) MTBE
8021 (BTEX) ☐MTBE ☐TMB ☐PCE
8021 (TCL)
8021 (EDX)
8021 (HALO)
8021 (CUST)
504.1 EDB ☐/DBCP ☐
pH
8260 (TCL) Volatile Organics
8260 (Full) Volatile Organics ☐PBMS
8260 (CUST) Volatile Organics
8260 (Landfill) Volatile Organics
Pesticides/PCB (608/8081/8082)
Herbicides (615/8151)
Base/Neutral/Acid Compounds GC/MS (625/8270)
Polynuclear Aromatics (610/8310/8270-SIMS)
General Chemistry: Cl, F, SO4, Br
Hardness, TDS, EC, Alkalinity, Carbonate
Priority Pollutant Metals (13)
Target Analyte List Metals (23)
RCRA Metals (8) Total
RCRA Metals by TCLP (Method1311)
Metals: Diss. Ca, Mg, K, Na
NUMBER OF CONTAINERS

WEEKEND ANALYSES MAY RESULT IN AN ADDITIONAL SURCHARGE - PLEASE INQUIRE.

SAMPLE RECEIPT

PROJ. NO.: 810

PROJ. NAME: Thriftway Refinery

P.O. NO.:

SHIPPED VIA:

PRIOR AUTHORIZATIONS REQUIRED FOR RUSH PROJECTS

(RUSH) ☐24hr* ☐48hr* ☐72hr* ☐1 WEEK (NORMAL) ☐
*NOT AVAILABLE ON ALL ANALYSES

CERTIFICATION REQUIRED ☐NM ☐SDWA ☐AZ ☐OTHER

METHANOL PRESERVATION ☐ METALS ☐TOTAL ☐DISSOLVED

COMMENTS:

RELINQUISHED BY: #1

Signature: Time: 0900

Printed Name: Mike Beauparlant Date: 12-30-4

Company: Biotech

See Reverse side (Force Majeure)

RECEIVED BY:

Signature: Time:

Printed Name Date

Company:

RELINQUISHED BY: #2

Signature: Time:

Printed Name: Date:

Company:

RECEIVED BY: (LAB) #2

Signature: Time: 1645

Printed Name: Date: 12-30-04

Company: Pinnacle Laboratories Inc.

PINNACLE LABORATORIES

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Pinnacle Lab ID number **412407**
February 01, 2005

BIOTECH REMEDIATION
501 AIRPORT DRIVE SUITE 104
FARMINGTON, NM 87401

Project Name THRIFTWAY REFINERY
Project Number 810

Attention: TERRY GRIFFIN

On 12/31/2004 Pinnacle Laboratories Inc., (ADHS License No. AZ0643), received a request to analyze **aqueous** samples. The samples were analyzed with EPA methodology or equivalent methods. The results of these analyses and the quality control data, which follow each set of analyses, are enclosed.

EPA method 8021/8015 and pH analyses were performed by Pinnacle Laborartories, Inc. Albuquerque, NM.

EPA method 8270 SIMS analyses were performed by Environmental Services Laboratory, Inc. Portland, OR.

All remaining analyses were performed by Severn Trent Laboratories, Inc. Pensacola, FL.

If you have any questions or comments, please do not hesitate to contact us at (505) 344-3777.

H. Mitchell Rubenstein, Ph.D.
General Manager, Pinnacle Laboratories, Inc.

MR: jt

Enclosure

PINNACLE LABORATORIES

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CLIENT	: BIOTECH REMEDIATION	PINNACLE ID	: 412407
PROJECT #	: 810	DATE RECEIVED	: 12/31/2004
PROJECT NAME	: THRIFTWAY REFINERY	REPORT DATE	: 02/01/2005

PINNACLE ID #	CLIENT DESCRIPTION	MATRIX	DATE COLLECTED
412407 - 01	AIRSTRIPPER INFLUENT	AQUEOUS	12/30/2004
412407 - 02	AIRSTRIPPER EFFLUENT	AQUEOUS	12/30/2004
412407 - 03	MW #13	AQUEOUS	12/30/2004
412407 - 04	MW #12	AQUEOUS	12/30/2004

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GENERAL CHEMISTRY RESULTS

CLIENT	: BIOTECH REMEDIATION	PINNACLE I.D.	: 412407
PROJECT #	: 810	DATE RECEIVED	: 12/31/2004
PROJECT NAME	: THRIFTWAY REFINERY	ANALYST	: BP

SAMPLE ID. #	CLIENT I.D.	MATRIX	DATE SAMPLED	DATE ANALYZED
01	AIRSTRIPPER INFLUENT	AQUEOUS	12/30/2004	12/31/2004
02	AIRSTRIPPER EFFLUENT	AQUEOUS	12/30/2004	12/31/2004
03	MW #13	AQUEOUS	12/30/2004	12/31/2004

PARAMETER	UNITS	AIRSTRIPPER INFLUENT	AIRSTRIPPER EFFLUENT	MW #13
PH (150.1)	UNITS	7.0	2.4	6.0

CHEMIST NOTES:
N/A

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GENERAL CHEMISTRY RESULTS

CLIENT	: BIOTECH REMEDIATION	PINNACLE I.D.	: 412407
PROJECT #	: 810	DATE RECEIVED	: 12/31/2004
PROJECT NAME	: THRIFTWAY REFINERY	ANALYST	: BP

SAMPLE ID. #	CLIENT I.D.	MATRIX	DATE SAMPLED	DATE ANALYZED
04	MW #12	AQUEOUS	12/30/2004	12/31/2004

PARAMETER	UNITS	MW #12
PH (150.1)	UNITS	7.0

CHEMIST NOTES:
N/A

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GENERAL CHEMISTRY - QUALITY CONTROL

CLIENT	: BIOTECH REMEDIATION	PINNACLE I.D.	: 412407
PROJECT #	: 810	SAMPLE MATRIX	: AQUEOUS
PROJECT NAME	: THRIFTWAY REFINERY	DATE ANALYZED	: 12/31/2004

PARAMETER	UNITS	PINNACLE I.D.	SAMPLE RESULT	DUP. RESULT	% RPD
PH	UNITS	412407-01	6.98	7.04	1

CHEMIST NOTES:
N/A

$$\% \text{ Recovery} = \frac{(\text{Spike Sample Result} - \text{Sample Result})}{\text{Spike Concentration}} \times 100$$

$$\text{RPD (Relative Percent Difference)} = \frac{(\text{Sample Result} - \text{Duplicate Result})}{\text{Average Result}} \times 100$$

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GAS CHROMATOGRAPHY RESULTS

TEST : EPA 8021B / 8015B GRO
CLIENT : BIOTECH REMEDIATION
PROJECT # : 810
PROJECT NAME : THRIFTWAY REFINERY

PINNACLE I.D. : 412407
ANALYST : BP

SAMPLE I.D. #	CLIENT I.D.	MATRIX	DATE SAMPLED	DATE EXTRACTED	DATE ANALYZED	DIL. FACTOR
01	AIRSTRIPPER INFLUENT	AQUEOUS	12/30/2004	NA	12/31/2004	10
02	AIRSTRIPPER EFFLUENT	AQUEOUS	12/30/2004	NA	12/31/2004	1
03	MW #13	AQUEOUS	12/30/2004	NA	12/31/2004	1

PARAMETER	DET. LIMIT	UNITS	AIRSTRIPPER INFLUENT	AIRSTRIPPER EFFLUENT	MW #13
FUEL HYDROCARBONS	**0.10**	**MG/L**	**2.5**	< 0.10	< 0.10
HYDROCARBON RANGE			**C6-C10**	C6-C10	C6-C10
HYDROCARBONS QUANTITATED USING			**GASOLINE**	GASOLINE	GASOLINE
BENZENE	**0.5**	**UG/L**	**81**	< 0.5	< 0.5
TOLUENE	**0.5**	**UG/L**	**44**	**1.0**	< 0.5
ETHYLBENZENE	**0.5**	**UG/L**	**120**	**0.6**	< 0.5
TOTAL XYLENES	**1.0**	**UG/L**	**170**	**2.4**	< 1.0
METHYL-t-BUTYL ETHER	**2.5**	**UG/L**	**78**	**2.6**	< 2.5
SURROGATE:					
BROMOFLUOROBENZENE (%)			97	96	100
SURROGATE LIMITS	(80 - 120)				

CHEMIST NOTES:
N/A

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GAS CHROMATOGRAPHY RESULTS

TEST : EPA 8021B / 8015B GRO
CLIENT : BIOTECH REMEDIATION
PROJECT # : 810
PROJECT NAME : THRIFTWAY REFINERY

PINNACLE I.D. : 412407
ANALYST : BP

SAMPLE ID. #	CLIENT I.D.	MATRIX	DATE SAMPLED	DATE EXTRACTED	DATE ANALYZED	DIL. FACTOR
04	MW #12	AQUEOUS	12/30/2004	NA	01/03/2005	1

PARAMETER	DET. LIMIT	UNITS	MW #12
FUEL HYDROCARBONS	**0.10**	**MG/L**	**0.69**
HYDROCARBON RANGE			**C6-C10**
HYDROCARBONS QUANTITATED USING			**GASOLINE**
BENZENE	**0.5**	**UG/L**	**7.0**
TOLUENE	**0.5**	**UG/L**	**0.7**
ETHYLBENZENE	**0.5**	**UG/L**	**35**
TOTAL XYLENES	**1.0**	**UG/L**	**74**
METHYL-t-BUTYL ETHER	**2.5**	**UG/L**	**87**
SURROGATE:			
BROMOFLUOROBENZENE (%)			106
SURROGATE LIMITS	(80 - 120)		

CHEMIST NOTES:
N/A

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GAS CHROMATOGRAPHY RESULTS
REAGENT BLANK

TEST	: EPA 8021B / 8015B GRO	PINNACLE I.D.	: 412407
BLANK I.D.	: 123104	DATE EXTRACTED	: N/A
CLIENT	: BIOTECH REMEDIATION	DATE ANALYZED	: 12/31/2004
PROJECT #	: 810	SAMPLE MATRIX	: AQUEOUS
PROJECT NAME	: THRIFTWAY REFINERY	ANALYST	: BP

PARAMETER	UNITS	
FUEL HYDROCARBONS	MG/L	<0.10
HYDROCARBON RANGE		C6-C10
HYDROCARBONS QUANTITATED USING		GASOLINE
BENZENE	UG/L	<0.5
TOLUENE	UG/L	<0.5
ETHYLBENZENE	UG/L	<0.5
TOTAL XYLENES	UG/L	<1.0
METHYL-t-BUTYL ETHER	UG/L	<2.5
SURROGATE:		
BROMOFLUOROBENZENE (%)		97
SURROGATE LIMITS (80 - 120)		

CHEMIST NOTES:
N/A

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GAS CHROMATOGRAPHY RESULTS
REAGENT BLANK

TEST	: EPA 8021B / 8015B GRO	PINNACLE I.D.	: 412407
BLANK I.D.	: 010305	DATE EXTRACTED	: N/A
CLIENT	: BIOTECH REMEDIATION	DATE ANALYZED	: 01/03/2005
PROJECT #	: 810	SAMPLE MATRIX	: AQUEOUS
PROJECT NAME	: THRIFTWAY REFINERY	ANALYST	: BP

PARAMETER	UNITS	
FUEL HYDROCARBONS	MG/L	<0.10
HYDROCARBON RANGE		C6-C10
HYDROCARBONS QUANTITATED USING		GASOLINE
BENZENE	UG/L	<0.5
TOLUENE	UG/L	<0.5
ETHYLBENZENE	UG/L	<0.5
TOTAL XYLENES	UG/L	<1.0
METHYL-t-BUTYL ETHER	UG/L	<2.5
SURROGATE:		
BROMOFLUOROBENZENE (%)		97
SURROGATE LIMITS (80 - 120)		

CHEMIST NOTES:
N/A

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GAS CHROMATOGRAPHY QUALITY CONTROL
MS/MSD

TEST	: EPA 8015B GRO	PINNACLE I.D.	: 412407
MSMSD #	: 412405-03	DATE EXTRACTED	: N/A
CLIENT	: BIOTECH REMEDIATION	DATE ANALYZED	: 12/31/2004
PROJECT #	: 810	SAMPLE MATRIX	: AQUEOUS
PROJECT NAME	: THRIFTWAY REFINERY	UNITS	: MG/L

PARAMETER	SAMPLE RESULT	CONC SPIKE	SPIKED SAMPLE	% REC	DUP SPIKE	DUP % REC	RPD	REC LIMITS	RPD LIMITS
FUEL HYDROCARBONS	<0.10	1.00	0.955	96	0.948	95	1	(70 - 130)	20
HYDROCARBON RANGE		C6-C10							

HYDROCARBONS QUANTITATED USINGGASOLINE

CHEMIST NOTES:
N/A

$$\% \text{ Recovery} = \frac{(\text{Spike Sample Result} - \text{Sample Result})}{\text{Spike Concentration}} \times 100$$

$$\text{RPD (Relative Percent Difference)} = \frac{(\text{Sample Result} - \text{Duplicate Result})}{\text{Average Result}} \times 100$$

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GAS CHROMATOGRAPHY QUALITY CONTROL
LCS/LCSD

TEST	: EPA 8015B GRO	PINNACLE I.D.	: 412407
BATCH #	: 010305	DATE EXTRACTED	: N/A
CLIENT	: BIOTECH REMEDIATION	DATE ANALYZED	: 01/03/2005
PROJECT #	: 810	SAMPLE MATRIX	: AQUEOUS
PROJECT NAME	: THRIFTWAY REFINERY	UNITS	: MG/L

PARAMETER	SAMPLE RESULT	CONC SPIKE	SPIKED SAMPLE	% REC	DUP SPIKE	DUP % REC	RPD	REC LIMITS	RPD LIMITS
FUEL HYDROCARBONS	<0.10	1.00	0.946	95	0.953	95	1	(70 - 130)	20
HYDROCARBON RANGE		C6-C10							

HYDROCARBONS QUANTITATED USINGGASOLINE

CHEMIST NOTES:
N/A

$$\% \text{ Recovery} = \frac{(\text{Spike Sample Result} - \text{Sample Result})}{\text{Spike Concentration}} \times 100$$

$$\text{RPD (Relative Percent Difference)} = \frac{(\text{Sample Result} - \text{Duplicate Result})}{\text{Average Result}} \times 100$$

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GAS CHROMATOGRAPHY QUALITY CONTROL
LCS/LCSD

TEST	: EPA 8021B	PINNACLE I.D.	: 412407
BATCH #	: 123104	DATE EXTRACTED	: N/A
CLIENT	: BIOTECH REMEDIATION	DATE ANALYZED	: 12/31/2004
PROJECT #	: 810	SAMPLE MATRIX	: AQUEOUS
PROJECT NAME	: THRIFTWAY REFINERY	UNITS	: UG/L

PARAMETER	SAMPLE RESULT	CONC SPIKE	SPIKED SAMPLE	% REC	DUP SPIKE	DUP % REC	RPD	REC LIMITS	RPD LIMITS
BENZENE	<0.5	20.0	20.9	105	20.9	105	0	(80 - 120)	20
TOLUENE	<0.5	20.0	20.9	105	20.8	104	0	(80 - 120)	20
ETHYLBENZENE	<0.5	20.0	20.7	104	20.5	103	1	(80 - 120)	20
TOTAL XYLENES	<1.0	60.0	62.0	103	61.4	102	1	(80 - 120)	20
METHYL-t-BUTYL ETHER	<2.5	20.0	19.0	95	19.0	95	0	(70 - 133)	20

CHEMIST NOTES:
N/A

$$\%\ \text{Recovery} = \frac{(\text{Spike Sample Result} - \text{Sample Result})}{\text{Spike Concentration}} \times 100$$

$$\text{RPD (Relative Percent Difference)} = \frac{(\text{Sample Result} - \text{Duplicate Result})}{\text{Average Result}} \times 100$$

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GAS CHROMATOGRAPHY QUALITY CONTROL
LCS/LCSD

TEST	: EPA 8021B	PINNACLE I.D.	: 412407
BATCH #	: 010305	DATE EXTRACTED	: N/A
CLIENT	: BIOTECH REMEDIATION	DATE ANALYZED	: 01/03/2005
PROJECT #	: 810	SAMPLE MATRIX	: AQUEOUS
PROJECT NAME	: THRIFTWAY REFINERY	UNITS	: UG/L

PARAMETER	SAMPLE RESULT	CONC SPIKE	SPIKED SAMPLE	% REC	DUP SPIKE	DUP % REC	RPD	REC LIMITS	RPD LIMITS
BENZENE	<0.5	20.0	20.7	104	20.4	102	1	(80 - 120)	20
TOLUENE	<0.5	20.0	20.6	103	20.4	102	1	(80 - 120)	20
ETHYLBENZENE	<0.5	20.0	20.3	102	20.2	101	0	(80 - 120)	20
TOTAL XYLENES	<1.0	60.0	61.0	102	60.6	101	1	(80 - 120)	20
METHYL-t-BUTYL ETHER	<2.5	20.0	18.5	93	18.4	92	1	(70 - 133)	20

CHEMIST NOTES:
N/A

$$\%\ \text{Recovery} = \frac{(\text{Spike Sample Result} - \text{Sample Result})}{\text{Spike Concentration}} \times 100$$

$$\text{RPD (Relative Percent Difference)} = \frac{(\text{Sample Result} - \text{Duplicate Result})}{\text{Average Result}} \times 100$$

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GAS CHROMATOGRAPHY QUALITY CONTROL
MS/MSD

TEST	: EPA 8015B GRO	PINNACLE I.D.	: 412407
MSMSD #	: 412405-03	DATE EXTRACTED	: N/A
CLIENT	: BIOTECH REMEDIATION	DATE ANALYZED	: 12/31/2004
PROJECT #	: 810	SAMPLE MATRIX	: AQUEOUS
PROJECT NAME	: THRIFTWAY REFINERY	UNITS	: MG/L

PARAMETER	SAMPLE RESULT	CONC SPIKE	SPIKED SAMPLE	% REC	DUP SPIKE	DUP % REC	RPD	REC LIMITS	RPD LIMITS
FUEL HYDROCARBONS	<0.10	1.00	0.955	96	0.948	95	1	(70 - 130)	20
HYDROCARBON RANGE		C6-C10							

HYDROCARBONS QUANTITATED USINGGASOLINE

CHEMIST NOTES:
N/A

$$\% \text{ Recovery} = \frac{(\text{Spike Sample Result} - \text{Sample Result})}{\text{Spike Concentration}} \times 100$$

$$\text{RPD (Relative Percent Difference)} = \frac{(\text{Sample Result} - \text{Duplicate Result})}{\text{Average Result}} \times 100$$

PINNACLE LABORATORIES

2709-D Pan American Freeway NE
Albuquerque, New Mexico 87107
Phone (505) 344-3777
Fax (505) 344-4413

GAS CHROMATOGRAPHY QUALITY CONTROL
MS/MSD

TEST	: EPA 8021B	PINNACLE I.D.	: 412407
MSMSD #	: 412405-03	DATE EXTRACTED	: N/A
CLIENT	: BIOTECH REMEDIATION	DATE ANALYZED	: 12/31/2004
PROJECT #	: 810	SAMPLE MATRIX	: AQUEOUS
PROJECT NAME	: THRIFTWAY REFINERY	UNITS	: UG/L

PARAMETER	SAMPLE RESULT	CONC SPIKE	SPIKED SAMPLE	% REC	DUP SPIKE	DUP % REC	RPD	REC LIMITS	RPD LIMITS
BENZENE	<0.5	20.0	21.1	106	20.3	102	4	(80 - 120)	20
TOLUENE	1.6	20.0	21.0	97	20.3	94	3	(80 - 120)	20
ETHYLBENZENE	0.6	20.0	20.7	101	20.0	97	3	(80 - 120)	20
TOTAL XYLENES	3.1	60.0	61.9	98	60.0	95	3	(80 - 120)	20
METHYL-t-BUTYL ETHER	<2.5	20.0	18.9	95	18.0	90	5	(70 - 133)	20

CHEMIST NOTES:
N/A

$$\%\ \text{Recovery} = \frac{(\text{Spike Sample Result} - \text{Sample Result})}{\text{Spike Concentration}} \times 100$$

$$\text{RPD (Relative Percent Difference)} = \frac{(\text{Sample Result} - \text{Duplicate Result})}{\text{Average Result}} \times 100$$

SEVERN TRENT STL

STL Pensacola 3355 McLemore Drive - Pensacola FL 32514 Telephone:(850) 474-1001 Fax:(850) 478-2671

Analytical Report

For: Ms. Jacinta Tenorio
Pinnacle Laboratories
2709-D Pan American Freeway Northeast
Albuquerque, NM 87107
CC:

Order Number: C501017
SDG Number:
Client Project ID:
Project: 412407,BIO/THRIFTWAY Refinery
Report Date: 01/17/2005
Sampled By: Client
Sample Received Date: 01/04/2005
Requisition Number:
Purchase Order:

Marty Edwards, Project Manager
medwards@stl-inc.com

STL Pensacola 3355 McLemore Drive - Pensacola FL 32514 Telephone:(850) 474-1001 Fax:(850) 478-2671

Sample Summary

Order: C501017
Date Received: 01/04/2005

Client: Pinnacle Laboratories
Project: 412407,BIO/THRIFTWAY Refinery

Client Sample ID	Lab Sample ID	Matrix	Date Sampled
AIRSTRIPPER INF/412407-01	C501017*1	Liquid	12/30/2005 10:40
AIRSTRIPPER EFF/412407-02	C501017*2	Liquid	12/30/2005 11:00
Mw#13-412407-03	C501017*3	Liquid	12/30/2005 11:50
Mw#12-412407-04	C501017*4	Liquid	12/30/2005 12:35

SEVERN TRENT STL

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Analytical Data Report

Lab Sample ID	Description	Matrix	Date Received	Date Sampled	SDG#
01017-1	AIRSTRIPPER INF/412407-01	Liquid	01/04/05	12/30/05 10:40	
01017-2	AIRSTRIPPER EFF/412407-02	Liquid	01/04/05	12/30/05 11:00	
01017-3	MW#13-412407-03	Liquid	01/04/05	12/30/05 11:50	
01017-4	MW#12-412407-04	Liquid	01/04/05	12/30/05 12:35	

Parameter	Units	Sample ID 01017-1 AIRSTRIPPER INF/412407-01	01017-2 AIRSTRIPPER EFF/412407-02	01017-3 MW#13-412407-03	01017-4 MW#12-412407-04
Total Dissolved Solids (160.1)					
Total Dissolved Solids	mg/l	4100	4400	5400	6100
Dilution Factor		1	1	1	1
Analysis Date		01/04/05	01/04/05	01/04/05	01/04/05
Batch ID		TDW002	TDW002	TDW002	TDW002
Analyst		ST	ST	ST	ST
Chloride (4500E)					
Chloride	mg/l	550	1500	70	88
Dilution Factor		10	20	1	1
Analysis Date		01/07/05	01/07/05	01/07/05	01/07/05
Batch ID		CKW003	CKW003	CKW003	CKW003
Analyst		CR	CR	CR	CR
Sulfate as SO4 (375.4)					
Sulfate as SO4	mg/l	1500	1500	3100	3500
Dilution Factor		50	50	200	200
Analysis Date		01/07/05	01/07/05	01/07/05	01/07/05
Batch ID		SEW002	SEW002	SEW002	SEW002
Analyst		CR	CR	CR	CR

SEVERN TRENT STL

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Analytical Data Report

Lab Sample ID	Description	Matrix	Date Received	Date Sampled	SDG#
01017-1	AIRSTRIPPER INF/412407-01	Liquid	01/04/05	12/30/05 10:40	
01017-2	AIRSTRIPPER EFF/412407-02	Liquid	01/04/05	12/30/05 11:00	
01017-3	Mw#13-412407-03	Liquid	01/04/05	12/30/05 11:50	
01017-4	Mw#12-412407-04	Liquid	01/04/05	12/30/05 12:35	

Parameter	Units	Sample ID 01017-1 AIRSTRIPPER INF	01017-2 AIRSTRIPPER EFF	01017-3 Mw#13-412407-03	01017-4 Mw#12-412407-04
Fluoride (340.2)					
Fluoride	mg/l	1.2	0.87	1.3	1.9
Dilution Factor		1	1	1	1
Analysis Date		01/04/05	01/04/05	01/04/05	01/04/05
Batch ID		FLW001	FLW001	FLW001	FLW001
Analyst		ST	ST	ST	ST
CO2 and Forms of Alkalinity (4500D)					
Bicarbonate (2320/4500)	mg/l as CaCO3	840	<1.0	300	570
Carbon Dioxide, Free	mg/l as CaCO3	120	<1.0	25	57
Carbonate (2320/4500)	mg/l as CaCO3	1.0	<1.0	1.0	1.0
Hydroxide	mg/l as CaCO3	<1.0	<1.0	<1.0	<1.0
Carbon Dioxide, Total	mg/l as CaCO3	860	<1.0	290	560
Dilution Factor		1	1	1	1
Analysis Date		01/06/05	01/06/05	01/06/05	01/06/05
Batch ID		AEW002	AEW002	AEW002	AEW002
Analyst		ST	ST	ST	ST
Alkalinity (to pH 4.5) as CaCO3 (2320B)					
Alkalinity (to pH 4.5) as CaCO3	mg/l	840	<1.0	300	570
Dilution Factor		1	1	1	1
Analysis Date		01/06/05	01/06/05	01/06/05	01/06/05
Batch ID		AEW002	AEW002	AEW002	AEW002
Analyst		ST	ST	ST	ST

SEVERN TRENT STL

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Analytical Data Report

Lab Sample ID	Description	Matrix	Date Received	Date Sampled	SDG#
01017-1	AIRSTRIPPER INF/412407-01	Liquid	01/04/05	12/30/05 10:40	
01017-2	AIRSTRIPPER EFF/412407-02	Liquid	01/04/05	12/30/05 11:00	
01017-3	Mw#13-412407-03	Liquid	01/04/05	12/30/05 11:50	
01017-4	Mw#12-412407-04	Liquid	01/04/05	12/30/05 12:35	

Parameter	Units	Sample ID 01017-1 AIRSTRIPPER INF/412407-01	01017-2 AIRSTRIPPER EFF/412407-02	01017-3 Mw#13-412407-03	01017-4 Mw#12-412407-04
Specific Conductance (120.1)					
Specific Conductance	umhos/cm	1500	7900	6100	7100
Dilution Factor		1	1	1	1
Analysis Date		01/04/05	01/04/05	01/04/05	01/04/05
Batch ID		CDW002	CDW002	CDW002	CDW002
Analyst		ST	ST	ST	ST
Bromide (300.0)					
Bromide	mg/l	0.74J	0.79J	0.21J	0.24J
Dilution Factor		20	20	20	20
Prep Date		01/07/05	01/07/05	01/07/05	01/07/05
Analysis Date		01/07/05	01/07/05	01/07/05	01/07/05
Batch ID		IC036	IC036	IC036	IC036
Prep Method		300.0	300.0	300.0	300.0
Analyst		SGB	SGB	SGB	SGB
Quantitation Factor		20	20	20	20
Hardness by calculation (6010B)					
Hardness as CaCO3	mg/l	1100	1100	1400	1200
Dilution Factor		1	1	1	1
Prep Date		01/05/05	01/05/05	01/05/05	01/05/05
Analysis Date		01/05/05	01/05/05	01/05/05	01/05/05
Batch ID		PW006	PW006	PW006	PW006
Prep Method		3010A	3010A	3010A	3010A
Analyst		GSP	GSP	GSP	GSP
Quantitation Factor		1.000	1.000	1.000	1.000

SEVERN TRENT STL

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Analytical Data Report

Lab Sample ID	Description	Matrix	Date Received	Date Sampled	SDG#
01017-1	AIRSTRIPPER INF/412407-01	Liquid	01/04/05	12/30/05 10:40	
01017-2	AIRSTRIPPER EFF/412407-02	Liquid	01/04/05	12/30/05 11:00	
01017-3	MW#13-412407-03	Liquid	01/04/05	12/30/05 11:50	
01017-4	MW#12-412407-04	Liquid	01/04/05	12/30/05 12:35	

Parameter	Units	Sample ID 01017-1 AIRSTRIPPER INF/412407-01	01017-2 AIRSTRIPPER EFF/412407-02	01017-3 MW#13-412407-03	01017-4 MW#12-412407-04
RCRA Metals (6010B)					
Arsenic	mg/l	<0.0050	<0.0050	<0.0050	0.012
Barium	mg/l	0.043	0.043	0.021	0.18
Cadmium	mg/l	<0.0050	<0.0050	<0.0050	<0.0050
Chromium	mg/l	<0.0050	<0.0050	<0.0050	0.029
Lead	mg/l	<0.0050	0.18	<0.0050	0.010
Selenium	mg/l	<0.010	<0.010	<0.010	<0.010
Silver	mg/l	<0.0050	<0.0050	<0.0050	<0.0050
Dilution Factor		1	1	1	1
Prep Date		01/05/05	01/05/05	01/05/05	01/05/05
Analysis Date		01/06/05	01/06/05	01/06/05	01/06/05
Batch ID		PW006	PW006	PW006	PW006
Prep Method		3010A	3010A	3010A	3010A
Analyst		GSP	GSP	GSP	GSP
Quantitation Factor		1.000	1.000	1.000	1.000
Mercury (7470A)					
Mercury	mg/l	<0.00020	<0.00020	<0.00020	<0.00020
Dilution Factor		1	1	1	1
Prep Date		01/05/05	01/05/05	01/05/05	01/05/05
Analysis Date		01/06/05	01/06/05	01/06/05	01/06/05
Batch ID		HGW001	HGW001	HGW001	HGW001
Prep Method		7470A	7470A	7470A	7470A
Analyst		JB	JB	JB	JB

SEVERN TRENT STL

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Analytical Data Report

Lab Sample ID	Description	Matrix	Date Received	Date Sampled	SDG#
01017-1	AIRSTRIPPER INF/412407-01	Liquid	01/04/05	12/30/05 10:40	
01017-2	AIRSTRIPPER EFF/412407-02	Liquid	01/04/05	12/30/05 11:00	
01017-3	Mw#13-412407-03	Liquid	01/04/05	12/30/05 11:50	
01017-4	Mw#12-412407-04	Liquid	01/04/05	12/30/05 12:35	

Parameter	Units	Sample ID 01017-1 AIRSTRIPPER INF	01017-2 AIRSTRIPPER EFF	01017-3 Mw#13-412407-03	01017-4 Mw#12-412407-04
Metals, Dissolved (6010B)					
Calcium, Dissolved	mg/l	350	340	480	410
Magnesium, Dissolved	mg/l	55	54	63	81
Potassium, Dissolved	mg/l	8.6	8.8	9.5	8.0
Sodium, Dissolved	mg/l	910	870	1100	1300
Dilution Factor		1	1	1	1
Prep Date		01/07/05	01/07/05	01/07/05	01/07/05
Analysis Date		01/07/05	01/07/05	01/07/05	01/07/05
Batch ID		PD002	PD002	PD002	PD002
Prep Method		3005A	3005A	3005A	3005A
Analyst		GSP	GSP	GSP	GSP
Quantitation Factor		1.000	1.000	1.000	1.000

SEVERN TRENT STL

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Analytical Data Report

Lab Sample ID	Description	Matrix	Date Received	Date Sampled	SDG#
01017-5	Method Blank	Liquid	01/04/05		
01017-6	Lab Control Standard % Recovery	Liquid	01/04/05		
01017-7	LCS Accuracy Control Limit (%R)	Liquid	01/04/05		
01017-8	Precision (%RPD) MS/MSD	Liquid	01/04/05		
01017-9	MS Precision Advisory Limit (%RPD)	Liquid	01/04/05		

Parameter	Units	Sample ID 01017-5 Method Blank	01017-6 Lab Control	01017-7 StanLCS Accuracy Con	01017-8 Precision (%RPD)	01017-9 MS Precision Ad
Total Dissolved Solids (160.1)						
Total Dissolved Solids	mg/l	<5.0	96 %	68-120	N/A	N/A
Dilution Factor		1				
Analysis Date		01/04/05				
Batch ID		TDW002	TDW002			
Analyst		ST				
Chloride (4500E)						
Chloride	mg/l	<2.0	96 %	90-110	0	20
Dilution Factor		1				
Analysis Date		01/07/05				
Batch ID		CKW003	CKW003		CKW003	
Analyst		CR				
Sulfate as SO4 (375.4)						
Sulfate as SO4	mg/l	<5.0	100 %	90-110	1	19
Dilution Factor		1				
Analysis Date		01/07/05				
Batch ID		SEW002	SEW002		SEW002	
Analyst		CR				

SEVERN TRENT STL

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Analytical Data Report

Lab Sample ID	Description	Matrix	Date Received	Date Sampled	SDG#
01017-5	Method Blank	Liquid	01/04/05		
01017-6	Lab Control Standard % Recovery	Liquid	01/04/05		
01017-7	LCS Accuracy Control Limit (%R)	Liquid	01/04/05		
01017-8	Precision (%RPD) MS/MSD	Liquid	01/04/05		
01017-9	MS Precision Advisory Limit (%RPD)	Liquid	01/04/05		

Parameter	Units	Sample ID 01017-5 Method Blank	01017-6 Lab Control	01017-7 StanLCS Accuracy Con	01017-8 Precision (%RPD)	01017-9 MS Precision Ad
Fluoride (340.2)						
Fluoride	mg/l	<0.20	98 %	90-110	3	10
Dilution Factor		1				
Analysis Date		01/04/05				
Batch ID		FLW001	FLW001		FLW001	
Analyst		ST				
CO2 and Forms of Alkalinity (4500D)						
Bicarbonate (2320/4500)	mg/l as CaCO3	N/A	N/A	N/A	N/A	N/A
Alkalinity (to pH 4.5) as CaCO3 (2320B)						
Alkalinity (to pH 4.5) as CaCO3	mg/l	<1.0	98 %	90-110	1	20
Dilution Factor		1				
Analysis Date		01/06/05				
Batch ID		AEW002	AEW002		AEW002	
Analyst		ST				
Specific Conductance (120.1)						
Specific Conductance	umhos/cm	<1.0	100 %	98-102	N/A	N/A
Dilution Factor		1				
Analysis Date		01/04/05				
Batch ID		CDW002	CDW002			
Analyst		ST				

SEVERN TRENT STL

STL Pensacola 3355 McLemore Drive - Pensacola FL 32514 Telephone:(850) 474-1001 Fax:(850) 478-2671

Analytical Data Report

Lab Sample ID	Description	Matrix	Date Received	Date Sampled	SDG#
01017-5	Method Blank	Liquid	01/04/05		
01017-6	Lab Control Standard % Recovery	Liquid	01/04/05		
01017-7	LCS Accuracy Control Limit (%R)	Liquid	01/04/05		
01017-8	Precision (%RPD) MS/MSD	Liquid	01/04/05		
01017-9	MS Precision Advisory Limit (%RPD)	Liquid	01/04/05		

Parameter	Units	Sample ID 01017-5 Method Blank	01017-6 Lab Control Stan	01017-7 LCS Accuracy Con	01017-8 Precision (%RPD)	01017-9 MS Precision Ad
Hardness by calculation (6010B)						
Hardness as CaCO3	mg/l	<3.3	N/A	N/A	N/A	N/A
Dilution Factor		1				
Prep Date		01/05/05				
Analysis Date		01/05/05				
Batch ID		PW006	PW006		PW006	
Prep Method		3010A				
Analyst		GSP				
Quantitation Factor		1.000				
RCRA Metals (6010B)						
Arsenic	mg/l	<0.0050	97 %	80-120	1 %	20
Barium	mg/l	<0.010	101 %	80-120	3 %	20
Cadmium	mg/l	<0.0050	100 %	80-120	0 %	20
Chromium	mg/l	<0.0050	100 %	80-120	0 %	20
Lead	mg/l	<0.0050	99 %	80-120	0 %	20
Selenium	mg/l	<0.010	88 %	80-120	2 %	20
Silver	mg/l	<0.0050	103 %	80-120	1 %	20
Dilution Factor		1				
Prep Date		01/05/05				
Analysis Date		01/06/05				
Batch ID		PW006	PW006		PW006	
Prep Method		3010A				
Analyst		GSP				
Quantitation Factor		1.000				

SEVERN TRENT STL

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Analytical Data Report

Lab Sample ID	Description	Matrix	Date Received	Date Sampled	SDG#
01017-5	Method Blank	Liquid	01/04/05		
01017-6	Lab Control Standard % Recovery	Liquid	01/04/05		
01017-7	LCS Accuracy Control Limit (%R)	Liquid	01/04/05		
01017-8	Precision (%RPD) MS/MSD	Liquid	01/04/05		
01017-9	MS Precision Advisory Limit (%RPD)	Liquid	01/04/05		

Parameter	Units	Sample ID 01017-5 Method Blank	01017-6 Lab Control	01017-7 StanLCS Accuracy Con	01017-8 Precision (%RPD)	01017-9 MS Precision Ad
Mercury (7470A)						
Mercury	mg/l	<0.00020	100 %	80-120	0	20
Dilution Factor		1				
Prep Date		01/05/05				
Analysis Date		01/06/05				
Batch ID		HGW001	HGW001		HGW001	
Prep Method		7470A				
Analyst		JB				
Metals, Dissolved (6010B)						
Calcium, Dissolved	mg/l	<0.50	98 %	80-120	6 %	20
Magnesium, Dissolved	mg/l	<0.50	100 %	80-120	6 %	20
Potassium, Dissolved	mg/l	<1.0	98 %	80-120	7 %	20
Sodium, Dissolved	mg/l	<1.0	98 %	80-120	6 %	20
Dilution Factor		1				
Prep Date		01/07/05				
Analysis Date		01/07/05				
Batch ID		PD002	PD002		PD002	
Prep Method		3005A				
Analyst		GSP				
Quantitation Factor		1.000				

SEVERN TRENT STL

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Analytical Data Report

Lab Sample ID	Description	Matrix	Date Received	Date Sampled	SDG#
01017-10	Reporting Limit (RL)	Liquid	01/04/05		

Parameter	Units	Sample ID 01017-10 Reporting Limit
Total Dissolved Solids (160.1)		
Total Dissolved Solids	mg/l	5.0
Chloride (4500E)		
Chloride	mg/l	2.0
Sulfate as SO4 (375.4)		
Sulfate as SO4	mg/l	5.0
Fluoride (340.2)		
Fluoride	mg/l	0.20
CO2 and Forms of Alkalinity (4500D)		
Bicarbonate (2320/4500)	mg/l as CaCO3	1.0
Carbon Dioxide, Free	mg/l as CaCO3	1.0
Carbonate (2320/4500)	mg/l as CaCO3	1.0
Hydroxide	mg/l as CaCO3	1.0
Carbon Dioxide, Total	mg/l as CaCO3	1.0
Alkalinity (to pH 4.5) as CaCO3 (2320B)		
Alkalinity (to pH 4.5) as CaCO3	mg/l	1.0

SEVERN TRENT STL

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Analytical Data Report

Lab Sample ID	Description	Matrix	Date Received	Date Sampled	SDG#
01017-10	Reporting Limit (RL)	Liquid	01/04/05		

Parameter	Units	Sample ID 01017-10 Reporting Limit
Specific Conductance (120.1)		
Specific Conductance	umhos/cm	1.0
Hardness by calculation (6010B)		
Hardness as CaCO3	mg/l	3.3
RCRA Metals (6010B)		
Arsenic	mg/l	0.0050
Barium	mg/l	0.010
Cadmium	mg/l	0.0050
Chromium	mg/l	0.0050
Lead	mg/l	0.0050
Selenium	mg/l	0.010
Silver	mg/l	0.0050
Mercury (7470A)		
Mercury	mg/l	0.00020
Metals, Dissolved (6010B)		
Calcium, Dissolved	mg/l	0.50
Magnesium, Dissolved	mg/l	0.50
Potassium, Dissolved	mg/l	1.0
Sodium, Dissolved	mg/l	1.0

SEVERN TRENT STL

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Order Number: C501017

These test results meet all the requirements of NELAC. All questions regarding this test report should be directed to the STL Project Manager who signed this test report.

STL Pensacola
PROJECT SAMPLE INSPECTION FORM

SEVERN TRENT STL

Lab Order #: C501017 Date Received: 04-JAN-05

1.	Was there a Chain of Custody?	(Yes)	No*		8.	Were samples checked for preservative? *(Check pH of all H_2O requiring preservative (STL-PN SOP 917) except VOA vials that require zero headspace)**	(Yes)	No*	N/A
2.	Was Chain of Custody properly filled out and relinquished?	(Yes)	No*		9.	Is there sufficient volume for analysis requested?	(Yes)	No*	N/A *(Can)*
3.	Were all samples properly labeled and identified?	(Yes)	No*		10.	Were samples received within Holding Time? (REFER TO STL-SOP 1040)	(Yes)	No*	
4.	Were samples received cold? (Criteria: 0.1° - 6°C: STL-SOP 1055)	(Yes)	No*	N/A	11.	Is Headspace (bubble) visible > ¼" diameter in VOA vial(s)?*	Yes*	No	(N/A)
5.	Did samples require splitting or compositing*?	Yes*	(No)		12.	Were Trip Blanks Received?	Yes	No	(N/A)
6.	Were samples received in proper containers for analysis requested?	(Yes)	No*		13.	If yes, was analysis of Trip Blanks requested?	Yes	No	(N/A)
7.	Were all sample containers received intact?	(Yes)	No*		14.	Were MS/MSD-specific bottles provided?	Yes	No*	(N/A)
					15.	If any issues, how was PM notified?	PSIF ☐	Verbal ☐	

Airbill Number(s): 12878168014515 4167 Delivery By: (UPS) FedEx HD BUS DHL PE

(HD – Hand Delivery)

Cooler Number(s) & Temp(s) °C: Client 4.6°C, 3.6°C IR-1

(IE. #340L, 4°C, IR-1 – COOLER NUMBER, TEMPERATURE, THERMOMETER NUMBER)

Comments (reference item numbers above and list sample IDs/Tests where appropriate):

Inspected By: [illegible] Date: 01-04-05 Logged By: LLL Date: 04-JAN-05

* *Note all Out-of-Control and/or questionable events on Comment Section of this form. For holding times, the analytical department will flag immediate hold time samples (pH, Dissolved O2, Residual Cl) as out of hold time, therefore, these samples will not be documented on this PSIF.*

♦ *All volatile samples requested to be split or composited must be done in the Volatile Lab. Document: "Volatile sample values may be compromised due to sample splitting (compositing)"*

+ *All pH results for North Carolina, and other requested projects are to be recorded on the pH log provided (STL-SOP 938).*

• *According to EPA, a bubble of ¼" or less is acceptable in 40 ml vials requiring volatile analysis. According to Florida DEP, excess headspace in liquid TCLP volatile containers shall be documented.*

ANY PERSON MAKING OR ADDING COMMENTS TO ANY PART OF THIS PSIF MUST INITIAL AND DATE ALL CORRECTIONS, COMMENTS AND/OR INSTRUCTIONS.

SEVERN TRENT STL

Organic Data Qualifiers for Final Report

B	The analyte was detected in the method blank and in the client's sample.
D	The result was obtained from a dilution.
E	The result exceeds the calibration range.
J	Estimated value because the analyte concentration is less than the reporting limit.
M	A matrix effect was present.
N	Presumptive evidence of a compound. The compound was identified qualitatively or as a Tentatively Identified Compound.
N/C	Not Calculable. Either the sample spiked was > 4X spike concentration, or the compound was diluted out, or the results of sample duplicate analysis were <RL.
P	Second-column or detector confirmation exceeded method criteria. Appropriate value is reported and data is flagged/qualified as instructed by method/regulation.
U or < or ND	The analyte was not detected.
*	The result is not within control limit(s).

Inorganic Data Qualifiers for Final Report

B	The analyte was detected in the method blank and in the client's sample.
E	The reported value is estimated because of the presence of interference.
J	Estimated value because the analyte concentration is less than the reporting limit.
N	The spiked sample recovery is not within control limits.
N/C	Not Calculable. Either the sample spiked was > 4X spike concentration, or the compound was diluted out, or the results of sample duplicate analysis were <RL.
U or < or ND	The analyte was not detected.
*	Duplicate analysis not within control limits
M	The duplicate injection precision was not met.
S	The reported value was determined by the Method of Standard Addition (MSA).
W	Post-digestion spike for Furnace AA analysis is out of control limits (85-115%), while sample absorbance is less than 50% of spike absorbance and post spike recovery is greater than or equal to 40%, the sample is flagged with a "W" and no further action is required.
+	The Standard Additions Correlation Coefficient is <0.995.
L	The result is not within control limit(s).

It is permissible to submit an Out-of-Control Events/Corrective Action form and/or Case Narrative in lieu of using above qualifiers.

When the laboratory receives a sample that does not meet EPA requirements for sample collection, preservation or holding time, the laboratory is required to reject the samples. The client must be notified and asked whether the lab should proceed with analysis. Data from any samples that do not meet sample acceptance criteria (collection, preservation and holding time), must be flagged, or noted on a corrective action form or case narrative, or addressed on the Project Sample Inspection Form (PSIF) in an unambiguous manner clearly defining the nature and substance of the variation. NPDES samples from North Carolina that do not meet EPA requirements for sample collection, preservation or holding time are non-reportable for NPDES compliance monitoring.

Abbreviations

ND	Not Detected at or above the STL Pensacola reporting limit (RL)
NS	Not Submitted
NA	Not Applicable
MDL	STL Pensacola Method Detection Limit
RL	STL Pensacola Reporting Limit
NoMS	Not enough sample provided to prepare and/or analyze a method-required matrix spike (MS) and/or duplicate (MSD)
TIC	Tentatively Identified Compound

Florida Projects Inorganic/Organic

Refer to FL DEP 62-160; Table 4 Data Qualifier Codes. FL DEP Rule 62-160, Table 1 lists the Florida sites which require data qualifiers.

Arizona DEQ Projects

Any qualified data submitted to Arizona DEQ (ADEQ) after January 1, 2001 must be designated using the Arizona Data Qualifiers as developed by the Arizona ELAC technical subcommittee. Refer to the ADEQ qualifier list.

Severn Trent Laboratories Inc.
STL Pensacola • 3355 McLemore Dr • Pensacola, FL 32514
Tel 850 474 1001 Fax 850 484 5315 • *www.stl-inc.com*

Revised/Effective: 08-09-04

SEVERN TRENT STL

STL PENSACOLA
Certifications, Memberships & Affiliations

Alabama *Department of Environmental Management, Laboratory ID No. 40150 (Drinking Water by Reciprocity with FL)*

Arizona *Department of Health Services, Lab ID No. AZ0589 (Hazardous Waste & Wastewater)*

Arkansas *Department of Pollution Control and Ecology, (88-0689) (Environmental)*

California *Department of Health Services,* ***ELAP*** *Laboratory ID No. 2510 (Hazardous Waste and Wastewater)*

Connecticut *Department of Health Services, Connecticut Lab Approval No. PH-0697 (D W, H W and Wastewater)*

Florida *DOH,* ***NELAP*** *Laboratory ID No. E81010 (Drinking Water, Hazardous Waste and Wastewater)*

Florida *DEP/DOH CompQAP # 980156*

Illinois *Environmental Laboratory Accreditation Program (ELAP),* ***NELAP*** *Laboratory ID No. 200041 (Wastewater and Hazardous Waste)*

Iowa *Department of Natural Resources, Laboratory ID No. 367 (Wastewater, UST, Solid Waste, & Contaminated Sites)*

Kansas *Department of Health & Environment,* ***NELAP*** *Laboratory ID No. E10253 (Wastewater and Hazardous Waste)*

Kentucky *NR&EPC, Laboratory ID No. 90043 (Drinking Water)*

Kentucky *Petroleum Storage Tank Env Assurance Fund, Laboratory ID No. 0053 (UST)*

Louisiana *DEQ, LELAP,* ***NELAP*** *Laboratory ID No. 02075, Agency Interest ID 30748 (Environmental)*

Maryland *DH&MH Laboratory ID No. 233 (Drinking Water by Reciprocity with Florida)*

Massachusetts *DEP, Laboratory ID No. M-FL094 (Wastewater)*

Michigan *Bureau of E&OccH, Laboratory ID No.9912 (Drinking Water by Reciprocity with Florida)*

New Hampshire *DES ELAP,* ***NELAP*** *Laboratory ID No. 250502 (Drinking Water & Wastewater)*

New Jersey *DEP&E,* ***NELAP*** *Laboratory ID No. FL006 (Wastewater and Hazardous Waster)*

North Carolina *DENR, Laboratory ID No. 314 (Hazardous Waste and Wastewater)*

North Dakota *DH&Consol Labs, Laboratory ID No. R-108 Wastewater and Hazardous Waste by Reciprocity with Arizona)*

Oklahoma *Department of Environmental Quality, Laboratory ID No. 9810 (Hazardous Waste and Wastewater)*

Pennsylvania *Department of Environmental Resources,* ***NELAP*** *Laboratory ID No. 68-467 (Drinking Water & Wastewater)*

South Carolina *DH&EC, Laboratory ID No. 96026 (Wastewater & Solids/Hazardous Waste by Reciprocity with FL)*

Tennessee *Department of Health & Environment, Laboratory ID No. 02907 (Drinking Water)*

Virginia *Department of General Services, Laboratory ID No. 00008 (Drinking Water by Reciprocity with FL)*

West Virginia *DOE, Office of Water Resources, Laboratory ID No. 136 (Haz Waste and Wastewater)*

EPA ICR *(Information Collection Rule) Approved Laboratory, Laboratory ID No. ICRFL031*

NFESC *(Naval Facilities Engineering Services Center)*

USACE *(United States Army Corps. of Engineers), MRD*

STL Pensacola also has a foreign soil permit to accept soils from locations other than the continental United States. Permit No. S-37599

Pinnacle Laboratories, Inc. — **Interlab Chain of Custody** — Date: 1/3/05 Page: 1 of 1

Network Project Manager: Jacinta Tenorio

Pinnacle Laboratories, Inc.
2709-D Pan American Freeway, NE
Albuquerque, NM 87107
(505) 344-3777 Fax (505) 344-4413

C501017

WATCH HOLD TIMES!!
Smaller bottle is for dissolved Metals.

ANALYSIS REQUEST

SAMPLE ID	DATE	TIME	MATRIX	LAB ID	Metals (8) RCRA (Total)	TCLP RCRA (8) Metals	Metals-13 PP List	Metals-TAL (23 Metals)	Dissolved Fe, Mn, Pb (6010)	Dissolved Ca, Mg, K, Na	TOC	Gen Chemistry: Cl, F, SO4, Br, FC	Alk+Bicarb/Carb/OH, TDS	Total Hardness	Volatile Organics GC/MS (8260)	BOD	COD	Pesticides/PCB (608/8081/8082)	Herbicides (615/8151)	PNA (8310)/8270 SIMS	8260 (TCLP 1311) ZHE		Base/Neutral Acid Compounds GC/MS (625/8270)	Uranium (ICP-MS)	Radium 226+228	Gross Alpha/Beta	TO-14	NUMBER OF CONTAINERS
Airstripper Influent/412407-01	12/30/04	1040	AQ		X					X		X	X	X													
Airstripper Effluent/412407-02	↓	1100	↑		X					X		X	X	X													
MW #13/412407-03		1150			X					X		X	X	X													
MW #12/412407-04	↓	1235	↓		X					X		X	X	X													

PROJECT INFORMATION		SAMPLE RECEIPT	
PROJECT #:	412407	Total Number of Containers	
PROJ. NAME:	BIO	Chain of Custody Seals	
QC LEVEL:	STD. IV	Received Intact?	
QC REQUIRED:	MS MSD BLANK	Received Good Cond./Cold	
TAT:	STANDARD RUSH!!	LAB NUMBER:	

DUE DATE:	1/7
RUSH SURCHARGE:	—
CLIENT DISCOUNT:	—
SPECIAL CERTIFICATION REQUIRED: YES / NO	NO

COMMENTS:

SAMPLES SENT TO:	
PENSACOLA - STL-FL	X
ESL - OR	
ATEL - AZ	
ATEL - MARION	
ATEL - MELMORE	
EHL	
GEL	
U OF MIAMI	
WCAS	
WOHL	

RELINQUISED BY: 1.	RELINQUISED BY: 2.
Signature: Francine Tanio Time: 1700	Signature: Time:
Printed Name: Francine Tanio Date: 1/3/05	Printed Name: Date:
Company: Pinnacle Laboratories, Inc.	Company
RECEIVED BY: 1.	**RECEIVED BY: 2.**
Signature: Linda L. Kitt Time: 1355 1416 1/4/05	Signature: Time:
Printed Name: Linda L. Kitt Date: 1/4/05	Printed Name: Date:
Company STL-FL	Company

Environmental Services Laboratory, Inc.

E S L

17400 SW Upper Boones Ferry Road, Suite 270 • Portland, OR 97224 • (503) 670-8520

January 17, 2005

Jacinta A. Tenorio
Pinnacle Laboratories
2709-D Pan American Fwy NE
Albuquerque, NM 87107

TEL: 505 344-3777
FAX (505) 344-4413

RE: 412407/BIO

Order No.: 0501005

Dear Jacinta A. Tenorio:

Environmental Services Laboratory received 4 samples on 1/4/05 for the analyses presented in the following report.

There were no analytical problems encountered and all analytical data met requirements established under NELAC protocol or laboratory specifications except where noted in a Case Narrative. Results apply only to the samples analyzed. Reproduction of this report is permitted only in its entirety, without the written approval of the laboratory. The following checked data sections are included in this report.

✓Base Sample Report ✓Method Blank Report ✓Sample Duplicate Report __Matrix Spike/Matrix Spike Duplicate Report ✓Laboratory Control Spike/Spike Duplicate Report ✓Continuing Calibration Verification Report __Initial Calibration Verification Report

If you have any questions regarding these tests results, please feel free to call.

Darwin Thomas
Project Manager

Keith Hunter
Technical Review

Environmental Services Laboratory

Date: *17-Jan-05*

CLIENT:	Pinnacle Laboratories	**Client Sample ID:**	Airstripper Influent/412407-01
Lab Order:	0501005	**Tag Number:**	
Project:	412407/BIO	**Collection Date:**	12/30/04
Lab ID:	0501005-01A	**Matrix:**	AQUEOUS

Analyses	Result	Limit	Qual	Units	DF	Date Analyzed
PAH BY SIM, AQUEOUS		**8270-SIM**		**(3510C)**		Analyst: **keh**
1-Methylnaphthalene	40	0.40		µg/L	4	1/6/05
2-Methylnaphthalene	32	0.40		µg/L	4	1/6/05
Acenaphthene	0.56	0.40		µg/L	4	1/6/05
Acenaphthylene	ND	0.40		µg/L	4	1/6/05
Anthracene	ND	0.40		µg/L	4	1/6/05
Benz(a)anthracene	ND	0.40		µg/L	4	1/6/05
Benzo(a)pyrene	ND	0.40		µg/L	4	1/6/05
Benzo(b)fluoranthene	ND	0.40		µg/L	4	1/6/05
Benzo(g,h,i)perylene	ND	0.40		µg/L	4	1/6/05
Benzo(k)fluoranthene	ND	0.40		µg/L	4	1/6/05
Chrysene	ND	0.40		µg/L	4	1/6/05
Dibenz(a,h)anthracene	ND	0.40		µg/L	4	1/6/05
Fluoranthene	ND	0.40		µg/L	4	1/6/05
Fluorene	3.2	0.40		µg/L	4	1/6/05
Indeno(1,2,3-cd)pyrene	ND	0.40		µg/L	4	1/6/05
Naphthalene	30	0.40		µg/L	4	1/6/05
Phenanthrene	2.3	0.40		µg/L	4	1/6/05
Pyrene	ND	0.40		µg/L	4	1/6/05
Surr: 2-Fluorobiphenyl	84.0	43-116		%REC	4	1/6/05
Surr: 4-Terphenyl-d14	140	33-141		%REC	4	1/6/05
Surr: Nitrobenzene-d5	80.0	35-114		%REC	4	1/6/05

Qualifiers:

ND - Not Detected at the Reporting Limit

J - Analyte detected below quantitation limits

B - Analyte detected in the associated Method Blank

* - Value exceeds Maximum Contaminant Level

S - Spike Recovery outside accepted recovery limits

R - RPD outside accepted recovery limits

E - Value above quantitation range

Environmental Services Laboratory

Date: *17-Jan-05*

CLIENT:	Pinnacle Laboratories	**Client Sample ID:**	Airstripper Effluent/412407-02
Lab Order:	0501005	**Tag Number:**	
Project:	412407/BIO	**Collection Date:**	12/30/04
Lab ID:	0501005-02A	**Matrix:**	AQUEOUS

Analyses	Result	Limit	Qual	Units	DF	Date Analyzed
PAH BY SIM, AQUEOUS		**8270-SIM**		**(3510C)**		Analyst: **keh**
1-Methylnaphthalene	3.6	0.40		µg/L	4	1/6/05
2-Methylnaphthalene	2.2	0.40		µg/L	4	1/6/05
Acenaphthene	ND	0.40		µg/L	4	1/6/05
Acenaphthylene	ND	0.40		µg/L	4	1/6/05
Anthracene	ND	0.40		µg/L	4	1/6/05
Benz(a)anthracene	ND	0.40		µg/L	4	1/6/05
Benzo(a)pyrene	ND	0.40		µg/L	4	1/6/05
Benzo(b)fluoranthene	ND	0.40		µg/L	4	1/6/05
Benzo(g,h,i)perylene	ND	0.40		µg/L	4	1/6/05
Benzo(k)fluoranthene	ND	0.40		µg/L	4	1/6/05
Chrysene	ND	0.40		µg/L	4	1/6/05
Dibenz(a,h)anthracene	ND	0.40		µg/L	4	1/6/05
Fluoranthene	ND	0.40		µg/L	4	1/6/05
Fluorene	1.8	0.40		µg/L	4	1/6/05
Indeno(1,2,3-cd)pyrene	ND	0.40		µg/L	4	1/6/05
Naphthalene	2.2	0.40		µg/L	4	1/6/05
Phenanthrene	1.9	0.40		µg/L	4	1/6/05
Pyrene	ND	0.40		µg/L	4	1/6/05
Surr: 2-Fluorobiphenyl	96.0	43-116		%REC	4	1/6/05
Surr: 4-Terphenyl-d14	115	33-141		%REC	4	1/6/05
Surr: Nitrobenzene-d5	94.0	35-114		%REC	4	1/6/05

Qualifiers:

ND - Not Detected at the Reporting Limit

J - Analyte detected below quantitation limits

B - Analyte detected in the associated Method Blank

* - Value exceeds Maximum Contaminant Level

S - Spike Recovery outside accepted recovery limits

R - RPD outside accepted recovery limits

E - Value above quantitation range

Environmental Services Laboratory

Date: *17-Jan-05*

CLIENT:	Pinnacle Laboratories	**Client Sample ID:**	MW #13/412407-03
Lab Order:	0501005	**Tag Number:**	
Project:	412407/BIO	**Collection Date:**	12/30/04
Lab ID:	0501005-03A	**Matrix:**	AQUEOUS

Analyses	Result	Limit	Qual	Units	DF	Date Analyzed
PAH BY SIM, AQUEOUS		**8270-SIM**		**(3510C)**		Analyst: **keh**
1-Methylnaphthalene	ND	0.40		µg/L	4	1/6/05
2-Methylnaphthalene	ND	0.40		µg/L	4	1/6/05
Acenaphthene	ND	0.40		µg/L	4	1/6/05
Acenaphthylene	ND	0.40		µg/L	4	1/6/05
Anthracene	ND	0.40		µg/L	4	1/6/05
Benz(a)anthracene	ND	0.40		µg/L	4	1/6/05
Benzo(a)pyrene	ND	0.40		µg/L	4	1/6/05
Benzo(b)fluoranthene	ND	0.40		µg/L	4	1/6/05
Benzo(g,h,i)perylene	ND	0.40		µg/L	4	1/6/05
Benzo(k)fluoranthene	ND	0.40		µg/L	4	1/6/05
Chrysene	ND	0.40		µg/L	4	1/6/05
Dibenz(a,h)anthracene	ND	0.40		µg/L	4	1/6/05
Fluoranthene	ND	0.40		µg/L	4	1/6/05
Fluorene	ND	0.40		µg/L	4	1/6/05
Indeno(1,2,3-cd)pyrene	ND	0.40		µg/L	4	1/6/05
Naphthalene	ND	0.40		µg/L	4	1/6/05
Phenanthrene	ND	0.40		µg/L	4	1/6/05
Pyrene	ND	0.40		µg/L	4	1/6/05
Surr: 2-Fluorobiphenyl	100	43-116		%REC	4	1/6/05
Surr: 4-Terphenyl-d14	107	33-141		%REC	4	1/6/05
Surr: Nitrobenzene-d5	102	35-114		%REC	4	1/6/05

Qualifiers:

ND - Not Detected at the Reporting Limit

J - Analyte detected below quantitation limits

B - Analyte detected in the associated Method Blank

* - Value exceeds Maximum Contaminant Level

S - Spike Recovery outside accepted recovery limits

R - RPD outside accepted recovery limits

E - Value above quantitation range

Environmental Services Laboratory

Date: *18-Jan-05*

CLIENT:	Pinnacle Laboratories	**Client Sample ID:**	MW#12/412407-04
Lab Order:	0501005	**Tag Number:**	
Project:	412407/BIO	**Collection Date:**	12/30/2004
Lab ID:	0501005-04A	**Matrix:**	AQUEOUS

Analyses	Result	Limit	Qual	Units	DF	Date Analyzed
PAH BY SIM, AQUEOUS		**8270-SIM**		**(3510C)**		Analyst: keh
1-Methylnaphthalene	3500	8.0		µg/L	80	1/6/2005
2-Methylnaphthalene	3700	8.0		µg/L	80	1/6/2005
Acenaphthene	41	8.0		µg/L	80	1/6/2005
Acenaphthylene	ND	8.0		µg/L	80	1/6/2005
Anthracene	ND	8.0		µg/L	80	1/6/2005
Benz(a)anthracene	ND	8.0		µg/L	80	1/6/2005
Benzo(a)pyrene	ND	8.0		µg/L	80	1/6/2005
Benzo(b)fluoranthene	ND	8.0		µg/L	80	1/6/2005
Benzo(g,h,i)perylene	ND	8.0		µg/L	80	1/6/2005
Benzo(k)fluoranthene	ND	8.0		µg/L	80	1/6/2005
Chrysene	15	8.0		µg/L	80	1/6/2005
Dibenz(a,h)anthracene	ND	8.0		µg/L	80	1/6/2005
Fluoranthene	8.0	8.0		µg/L	80	1/6/2005
Fluorene	360	8.0		µg/L	80	1/6/2005
Indeno(1,2,3-cd)pyrene	ND	8.0		µg/L	80	1/6/2005
Naphthalene	730	8.0		µg/L	80	1/6/2005
Phenanthrene	650	8.0		µg/L	80	1/6/2005
Pyrene	ND	8.0		µg/L	80	1/6/2005
Surr: 2-Fluorobiphenyl	0	43-116	S, X	%REC	80	1/6/2005
Surr: 4-Terphenyl-d14	0	33-141	S, X	%REC	80	1/6/2005
Surr: Nitrobenzene-d5	0	35-114	S, X	%REC	80	1/6/2005

Qualifiers:

ND - Not Detected at the Reporting Limit

J - Analyte detected below quantitation limits

B - Analyte detected in the associated Method Blank

* - Value exceeds Maximum Contaminant Level

S - Spike Recovery outside accepted recovery limits

R - RPD outside accepted recovery limits

E - Value above quantitation range

CLIENT: Pinnacle Laboratories
Work Order: 0501005
Project: 412407/BIO

ANALYTICAL QC SUMMARY REPORT

TestCode: 06 PAH A

Sample ID: **MB-7894**	SampType: **MBLK**	TestCode: **06 PAH A**	Units: **µg/L**	Prep Date: **1/5/05**	Run ID: **HEISENBURG_050106A**
Client ID: **ZZZZZ**	Batch ID: **7894**	TestNo: **8270-SIM**	**(3510C)**	Analysis Date: **1/6/05**	SeqNo: **228176**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Acenaphthene	ND	0.10									
Acenaphthylene	ND	0.10									
Anthracene	ND	0.10									
Benz(a)anthracene	ND	0.10									
Benzo(a)pyrene	ND	0.10									
Benzo(b)fluoranthene	ND	0.10									
Benzo(g,h,i)perylene	ND	0.10									
Benzo(k)fluoranthene	ND	0.10									
Chrysene	ND	0.10									
Dibenz(a,h)anthracene	ND	0.10									
Fluoranthene	ND	0.10									
Fluorene	ND	0.10									
Indeno(1,2,3-cd)pyrene	ND	0.10									
Naphthalene	ND	0.10									
Phenanthrene	ND	0.10									
Pyrene	ND	0.10									
Surr: 2-Fluorobiphenyl	1.06	0	1	0	106	43	116	0	0		
Surr: 4-Terphenyl-d14	1.14	0	1	0	114	33	141	0	0		
Surr: Nitrobenzene-d5	0.94	0	1	0	94	35	114	0	0		

Sample ID: **LCS-7894**	SampType: **LCS**	TestCode: **06 PAH A**	Units: **µg/L**	Prep Date: **1/5/05**	Run ID: **HEISENBURG_050106A**
Client ID: **ZZZZZ**	Batch ID: **7894**	TestNo: **8270-SIM**	**(3510C)**	Analysis Date: **1/6/05**	SeqNo: **228177**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
1-Methylnaphthalene	0.97	0.10	1	0	97	21	133	0	0		
2-Methylnaphthalene	0.85	0.10	1	0	85	21	133	0	0		
Acenaphthene	0.77	0.10	1	0	77	47	145	0	0		
Acenaphthylene	0.8	0.10	1	0	80	33	145	0	0		
Anthracene	1.02	0.10	1	0	102	27	133	0	0		
Benz(a)anthracene	0.59	0.10	1	0	59	33	143	0	0		

Qualifiers: ND - Not Detected at the Reporting Limit
J - Analyte detected below quantitation limits
S - Spike Recovery outside accepted recovery limits
R - RPD outside accepted recovery limits
B - Analyte detected in the associated Method Blank

CLIENT: Pinnacle Laboratories
Work Order: 0501005
Project: 412407/BIO

ANALYTICAL QC SUMMARY REPORT

TestCode: 06 PAH A

Sample ID: LCS-7894	SampType: LCS	TestCode: 06 PAH A	Units: µg/L	Prep Date: 1/5/05	Run ID: HEISENBURG_050106A
Client ID: ZZZZZ	Batch ID: 7894	TestNo: 8270-SIM	(3510C)	Analysis Date: 1/6/05	SeqNo: 228177

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Benzo(a)pyrene	0.63	0.10	1	0	63	17	163	0	0		
Benzo(b)fluoranthene	0.55	0.10	1	0	55	24	159	0	0		
Benzo(g,h,i)perylene	0.48	0.10	1	0	48	1	219	0	0		
Benzo(k)fluoranthene	0.74	0.10	1	0	74	11	162	0	0		
Chrysene	0.89	0.10	1	0	89	17	168	0	0		
Dibenz(a,h)anthracene	0.53	0.10	1	0	53	1	227	0	0		
Fluoranthene	0.92	0.10	1	0	92	26	137	0	0		
Fluorene	0.72	0.10	1	0	72	59	121	0	0		
Indeno(1,2,3-cd)pyrene	0.51	0.10	1	0	51	1	171	0	0		
Naphthalene	0.77	0.10	1	0	77	21	133	0	0		
Phenanthrene	0.67	0.10	1	0	67	54	120	0	0		
Pyrene	0.88	0.10	1	0	88	52	115	0	0		
Surr: 2-Fluorobiphenyl	0.98	0	1	0	98	43	116	0	0		
Surr: 4-Terphenyl-d14	1.05	0	1	0	105	33	141	0	0		
Surr: Nitrobenzene-d5	0.93	0	1	0	93	35	114	0	0		

Sample ID: LCSD-7894	SampType: LCSD	TestCode: 06 PAH A	Units: µg/L	Prep Date: 1/5/05	Run ID: HEISENBURG_050106A
Client ID: ZZZZZ	Batch ID: 7894	TestNo: 8270-SIM	(3510C)	Analysis Date: 1/6/05	SeqNo: 228178

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
1-Methylnaphthalene	1.11	0.10	1	0	111	21	133	0.97	13.5	30	
2-Methylnaphthalene	0.91	0.10	1	0	91	21	133	0.85	6.82	30	
Acenaphthene	0.82	0.10	1	0	82	47	145	0.77	6.29	30	
Acenaphthylene	0.86	0.10	1	0	86	33	145	0.8	7.23	30	
Anthracene	0.98	0.10	1	0	98	27	133	1.02	4.00	30	
Benz(a)anthracene	0.53	0.10	1	0	53	33	143	0.59	10.7	30	
Benzo(a)pyrene	0.63	0.10	1	0	63	17	163	0.63	0	30	
Benzo(b)fluoranthene	0.47	0.10	1	0	47	24	159	0.55	15.7	30	
Benzo(g,h,i)perylene	0.57	0.10	1	0	57	1	219	0.48	17.1	30	
Benzo(k)fluoranthene	0.8	0.10	1	0	80	11	162	0.74	7.79	30	
Chrysene	0.98	0.10	1	0	98	17	168	0.89	9.63	30	

Qualifiers: ND - Not Detected at the Reporting Limit; S - Spike Recovery outside accepted recovery limits; B - Analyte detected in the associated Method Blank; J - Analyte detected below quantitation limits; R - RPD outside accepted recovery limits

CLIENT: Pinnacle Laboratories
Work Order: 0501005
Project: 412407/BIO

ANALYTICAL QC SUMMARY REPORT

TestCode: 06 PAH A

Sample ID: LCSD-7894	SampType: LCSD	TestCode: 06 PAH A	Units: µg/L	Prep Date: 1/5/05	Run ID: HEISENBURG_050106A
Client ID: ZZZZZ	Batch ID: 7894	TestNo: 8270-SIM	(3510C)	Analysis Date: 1/6/05	SeqNo: 228178

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Dibenz(a,h)anthracene	0.62	0.10	1	0	62	1	227	0.53	15.7	30	
Fluoranthene	1.02	0.10	1	0	102	26	137	0.92	10.3	30	
Fluorene	0.78	0.10	1	0	78	59	121	0.72	8.00	30	
Indeno(1,2,3-cd)pyrene	0.48	0.10	1	0	48	1	171	0.51	6.06	30	
Naphthalene	0.76	0.10	1	0	76	21	133	0.77	1.31	30	
Phenanthrene	0.78	0.10	1	0	78	54	120	0.67	15.2	30	
Pyrene	1.09	0.10	1	0	109	52	115	0.88	21.3	30	
Surr: 2-Fluorobiphenyl	0.95	0	1	0	95	43	116	0	0	30	
Surr: 4-Terphenyl-d14	1.18	0	1	0	118	33	141	0	0	30	
Surr: Nitrobenzene-d5	0.96	0	1	0	96	35	114	0	0	30	

Sample ID: 0501005-03A DUP	SampType: DUP	TestCode: 06 PAH A	Units: µg/L	Prep Date: 1/5/05	Run ID: HEISENBURG_050106A
Client ID: MW #13/412407-03	Batch ID: 7894	TestNo: 8270-SIM	(3510C)	Analysis Date: 1/6/05	SeqNo: 228182

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
1-Methylnaphthalene	ND	0.40	0	0	0	0	0	0	0	20	
2-Methylnaphthalene	ND	0.40	0	0	0	0	0	0	0	20	
Acenaphthene	ND	0.40	0	0	0	0	0	0	0	20	
Acenaphthylene	ND	0.40	0	0	0	0	0	0	0	20	
Anthracene	ND	0.40	0	0	0	0	0	0	0	20	
Benz(a)anthracene	ND	0.40	0	0	0	0	0	0	0	20	
Benzo(a)pyrene	ND	0.40	0	0	0	0	0	0	0	20	
Benzo(b)fluoranthene	ND	0.40	0	0	0	0	0	0	0	20	
Benzo(g,h,i)perylene	ND	0.40	0	0	0	0	0	0	0	20	
Benzo(k)fluoranthene	ND	0.40	0	0	0	0	0	0	0	20	
Chrysene	ND	0.40	0	0	0	0	0	0	0	20	
Dibenz(a,h)anthracene	ND	0.40	0	0	0	0	0	0	0	20	
Fluoranthene	ND	0.40	0	0	0	0	0	0	0	20	
Fluorene	ND	0.40	0	0	0	0	0	0	0	20	
Indeno(1,2,3-cd)pyrene	ND	0.40	0	0	0	0	0	0	0	20	
Naphthalene	ND	0.40	0	0	0	0	0	0	0	20	

Qualifiers: ND - Not Detected at the Reporting Limit
J - Analyte detected below quantitation limits
S - Spike Recovery outside accepted recovery limits
R - RPD outside accepted recovery limits
B - Analyte detected in the associated Method Blank

CLIENT: Pinnacle Laboratories
Work Order: 0501005
Project: 412407/BIO

ANALYTICAL QC SUMMARY REPORT

TestCode: 06 PAH A

Sample ID: 0501005-03A DUP	SampType: DUP	TestCode: 06 PAH A	Units: µg/L	Prep Date: 1/5/05	Run ID: HEISENBURG_050106A
Client ID: MW #13/412407-03	Batch ID: 7894	TestNo: 8270-SIM	(3510C)	Analysis Date: 1/6/05	SeqNo: 228182

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Phenanthrene	ND	0.40	0	0	0	0	0	0	0	20	
Pyrene	ND	0.40	0	0	0	0	0	0	0	20	
Surr: 2-Fluorobiphenyl	4.12	0	4	0	103	43	116	0	0	0	
Surr: 4-Terphenyl-d14	4.6	0	4	0	115	33	141	0	0	0	
Surr: Nitrobenzene-d5	4.16	0	4	0	104	35	114	0	0	0	

Sample ID: CCV	SampType: CCV	TestCode: 06 PAH A	Units: µg/L	Prep Date:	Run ID: HEISENBURG_050106A
Client ID: ZZZZZ	Batch ID: R18660	TestNo: 8270-SIM		Analysis Date: 1/6/05	SeqNo: 228175

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Acenaphthene	5.43	0.10	5	0	109	80	120	0	0		
Acenaphthylene	5.68	0.10	5	0	114	80	120	0	0		
Anthracene	5.66	0.10	5	0	113	80	120	0	0		
Benz(a)anthracene	4.92	0.10	5	0	98.4	80	120	0	0		
Benzo(a)pyrene	5.22	0.10	5	0	104	80	120	0	0		
Benzo(b)fluoranthene	4.71	0.10	5	0	94.2	80	120	0	0		
Benzo(g,h,i)perylene	4.31	0.10	5	0	86.2	80	120	0	0		
Benzo(k)fluoranthene	4.98	0.10	5	0	99.6	80	120	0	0		
Chrysene	5.07	0.10	5	0	101	80	120	0	0		
Dibenz(a,h)anthracene	5.16	0.10	5	0	103	80	120	0	0		
Fluoranthene	5.5	0.10	5	0	110	80	120	0	0		
Fluorene	5.79	0.10	5	0	116	80	120	0	0		
Indeno(1,2,3-cd)pyrene	4.82	0.10	5	0	96.4	80	120	0	0		
Naphthalene	5.24	0.10	5	0	105	80	120	0	0		
Phenanthrene	5.62	0.10	5	0	112	80	120	0	0		
Pyrene	5.04	0.10	5	0	101	80	120	0	0		
Surr: 2-Fluorobiphenyl	4.98	0	5	0	99.6	43	116	0	0		
Surr: 4-Terphenyl-d14	4.39	0	5	0	87.8	33	141	0	0		
Surr: Nitrobenzene-d5	5.01	0	5	0	100	35	114	0	0		

Qualifiers:
ND - Not Detected at the Reporting Limit
J - Analyte detected below quantitation limits
S - Spike Recovery outside accepted recovery limits
R - RPD outside accepted recovery limits
B - Analyte detected in the associated Method Blank

ENVIRONMENTAL SERVICES LABORATORY – GLOSSARY OF FLAGS

QUALIFIER	DESCRIPTION
AA	This sample was analyzed after the holding time had expired.
AB	The hydrocarbon pattern in this sample is not typical of gasoline.
AC	The hydrocarbon pattern in this sample is not typical of diesel.
AD	The hydrocarbon pattern in this sample is not typical of oil.
AE	The hydrocarbon pattern in this sample extends into the gasoline range.
AF	The hydrocarbon pattern in this sample extends into the diesel range.
AG	The hydrocarbon pattern in this sample extends into the oil range.
A	This analysis was performed on a VOA sample containing headspace.
B	Analyte detected in the Method Blank above the reporting level.
C	The Relative Percent Difference (RPD) for the primary result and confirmation result was greater than 40%. The higher result was reported.
D	The sample was supplied in an inappropriate container according to method criteria.
E	This value is above the quantitation limit. It is considered an estimate.
H	The Matrix Spike/Matrix Spike Duplicate (MS/MSD) result was outside control limits. The Laboratory Control Standard/Duplicate (LCS/LCSD) result was in control validating the batch.
J	The result is above the Method Detection Limit (MDL) and below the Reporting level (RL). It is considered an estimate.
M	The MS/MSD recoveries are not calculable due to a high amount of analyte in sample.
MI	This indicates a high level of matrix interference affecting the spike or surrogate recovery.
N	See case narrative.
O	Detection Limits are elevated due to sample dilution. See case narrative.
Q	Further inspection of the sample confirms a non-homogenous sample matrix affecting RPD result.
R	The RPD result is outside method control limits. See other qualifiers or case narrative.
S	The spike recovery is outside method control limits. See other qualifiers or case narrative.
T	The RPD between the sample result and duplicate result was greater than 20%. The original result was less than three times the reporting level, therefore the RPD is not applicable.
X	Unable to quantitate surrogate recovery due to sample dilution.

Pinnacle Laboratories, Inc.

Interlab Chain of Custody

Date: 1/3/05 Page: 1 of 1

Network Project Manager: Jacinta Tenorio

Pinnacle Laboratories, Inc.
2709-D Pan American Freeway, NE
Albuquerque, NM 87107
(505) 344-3777 Fax (505) 344-4413

0501005

SAMPLE ID	DATE	TIME	MATRIX	LAB ID
Airstripper Influent/412407-01	12/30/04	1040	AQ	01
Airstripper Effluent/412407-02	"	1100	"	02
MW#13/412407-03	"	1150	"	03
MW#12/412407-04	↓	1235	↓	04

ANALYSIS REQUEST

Metals (8) RCRA	TCLP RCRA (8) Metals	Metals-13 PP List	Metals-TAL (23 Metals)	Dissolved Fe, Mn, Pb (6010)		TOC	Gen Chemistry:			Volatile Organics GC/MS (8260)	BOD	COD	Pesticides/PCB (608/8081/8082)	Herbicides (615/8151)	PNA (8310/8270 SIMS	8260 (TCLP 1311) ZHE		Base/Neutral Acid Compounds GC/MS (625/8270)	Uranium (ICP-MS)	Radium 226+228	Gross Alpha/Beta	TO-14	NUMBER OF CONTAINERS
															X								
															X								
															X								
															X								

PROJECT INFORMATION		SAMPLE RECEIPT		SAMPLES SENT TO:	
PROJECT #:	412407	Total Number of Containers		PENSACOLA - STL-FL	
PROJ. NAME:	BIO	Chain of Custody Seals		ESL - OR	X
QC LEVEL:	STD IV	Received Intact?		ATEL - AZ	
QC REQUIRED:	MS MSD BLANK	Received Good Cond./Cold		ATEL - MARION	
TAT:	STANDARD RUSH!!	LAB NUMBER:		ATEL - MELMORE	
				EHL	
DUE DATE:	1/17	COMMENTS:		GEL	
RUSH SURCHARGE:	—			U OF MIAMI	
CLIENT DISCOUNT:	—			WCAS	
SPECIAL CERTIFICATION REQUIRED:	YES NO			WOHL	

RELINQUISED BY: 1.	RELINQUISED BY: 2.
Signature: Francine Tonio Time: 1700	Signature: Time:
Printed Name: Francine Tonio Date: 1/3/05	Printed Name: Date:
Pinnacle Laboratories, Inc.	Company
RECEIVED BY: 1.	**RECEIVED BY: 2.**
Signature: Brett V. Danko Time: 1015	Signature: Time:
Printed Name: BRETT V. DANKO Date: 1/4/05	Printed Name: Date:
Company ESL	Company

Pinnacle Laboratories Inc.

CHAIN OF CUSTODY

DATE: _____ PAGE: ____ OF ____

PLI Accession #: 412407

SHADED AREAS ARE FOR LAB USE ONLY

PLEASE FILL THIS FORM IN COMPLETELY.

PROJECT MANAGER: Terry Griffin

COMPANY: Biotech Remediation Inc.

ADDRESS: 501 Airport Dr. Suite 109
Farmington, NM 87401

PHONE:

FAX:

BILL TO:

COMPANY:

ADDRESS:

SAMPLE ID	DATE	TIME	MATRIX	LAB ID
Air Stripper Influent	12-30-1	1040	H_2O	01
Air Stripper Effluent	1	1100		02
MW #3		1150		03
MW #12		1235		04

ANALYSIS REQUEST

	NUMBER OF CONTAINERS
Petroleum Hydrocarbons (418.1) TRPH	
(MOD.8015) Diesel/Direct Inject	
8270 Sims	8
(M8015) Gas/Purge & Trap	8
8021 (BTEX)/8015 (Gasoline) MTBE	
8021 (BTEX) ☐MTBE ☐TMB ☐PCE	
8021 (TCL)	
8021 (EDX)	
8021 (HALO)	
8021 (CUST)	
504.1 EDB ☐/DBCP ☐	
pH	8
8260 (TCL) Volatile Organics	
8260 (Full) Volatile Organics ☐PBMS	
8260 (CUST) Volatile Organics	
8260 (Landfill) Volatile Organics	
Pesticides/PCB (608/8081/8082)	
Herbicides (615/8151)	
Base/Neutral/Acid Compounds GC/MS (625/8270)	
Polynuclear Aromatics (610/8310/8270-SIMS)	
General Chemistry: Cl, F, SO4, Br	4
Alk + Brmb (Carb) Of, TDS, EC	4
Priority Pollutant Metals (13)	
Target Analyte List Metals (23)	
RCRA Metals (8) Total	4
RCRA Metals by TCLP (Method1311)	
Metals: Dissolved Ca, Mg, K, Na	4
Total Hardness	4

WEEKEND ANALYSES MAY RESULT IN AN ADDITIONAL SURCHARGE - PLEASE INQUIRE.

PROJECT INFORMATION

PROJ. NO.: 810

PROJ. NAME: Thriftway Refinery

P.O. NO.:

SHIPPED VIA:

SAMPLE RECEIPT

NO. CONTAINERS	32
CUSTODY SEALS	N/A
RECEIVED INTACT	yes
TEMP. OF COOLER	6.4°C

PRIOR AUTHORIZATION IS REQUIRED FOR RUSH PROJECTS

(RUSH) ☐24hr* ☐48hr* ☐72hr* ☐ 1 WEEK (NORMAL) ☑
*NOT AVAILABLE ON ALL ANALYSES

CERTIFICATION REQUIRED ☐ NM ☐ SDWA ☐ AZ ☐ OTHER

METHANOL PRESERVATION ☐ | METALS ☐ TOTAL ☐ DISSOLVED

COMMENTS:

RELINQUISHED BY: 1	RELINQUISHED BY: 2
Signature: Time:	Signature: Time:
Printed Name: Date:	Printed Name: Date:
Company:	Company:
See Reverse side (Force Majeure)	
RECEIVED BY: 1	**RECEIVED BY: (LAB) 2**
Signature: Time:	Signature: Time: 8:45
Printed Name: Date:	Printed Name: Date: 12/31/04
Company:	Pinnacle Laboratories Inc.

July 2002 PLI