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REPORTS

DATE:

2003

ENERCON SERVICES, INC.
An Employee Owned Company

2775 Villa Creek, Suite 120
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February 19, 2003

Mr. Scott E. Burkey
Shell Oil Products US
7750 N. MacArthur, Suite 120 PMB 319
Irving, Texas 75063

RE: 2002 ANNUAL GROUNDWATER MONITORING REPORT
JANUARY THROUGH DECEMBER 2002
BARBER RANCH
MONUMENT, LEA COUNTY, NEW MEXICO

Mr. Burkey:

This report details the groundwater monitoring activities at Barber Ranch from January 1, 2002 through December 31, 2002. The site is located approximately 3 miles southeast of Monument, on New Mexico State Highway 18, in Lea County, New Mexico. The purpose of the groundwater monitoring activities was to gauge monitor wells, recover product and collect groundwater samples in an effort to follow the extent and impact of a groundwater plume apparently originating from a subsurface crude oil pipeline release.

SITE SAFETY

Before work was initiated each day, all personnel working at the site attended a tailgate safety meeting. During the meetings, the Site Health and Safety Officer discussed the safety and health concerns and procedures for the site as outlined in the Site Health and Safety Plan (HASP). All personnel signed the HASP at the close of each meeting to document their attendance. A copy of the HASP was maintained at the site during all working hours in an easily accessible area.

GROUNDWATER ASSESSMENT

Enercon has completed monitoring at the referenced facility for the period from January 1, 2002 through December 31, 2002. All monitor wells were gauged quarterly, wells exhibiting PSH were bailed, and groundwater samples were collected twice during the annual monitoring period. The twenty-three onsite monitor wells were installed from April to August 2002.

Quarterly hand bailing and absorbent sock change-out have been utilized as the PSH recovery techniques for all monitor wells. To date, 1.00 gallon of PSH have been recovered manually (booms and bailing) since the installation of the twenty-three onsite monitor wells.

Phase-separated hydrocarbons were detected during each monitoring event in monitor wells MW-2, MW-10, MW-13, and MW-19 and were detected periodically in monitor well MW-7. Monitor well MW-10 consistently exhibited the greatest thickness of PSH with an average of 0.10 feet. PSH thicknesses and recoveries are listed in Table 1 of Attachment B. PSH thicknesses are illustrated in Figure 5 of Attachment A.

Depth to groundwater ranged across the site from 22.86 feet below the top of the casing (TOC) in monitor well MW-8 to 39.31 feet in monitor well MW-16. Groundwater table elevation fluctuated from a minimum of 0.01 feet in MW-1 and MW-2 to a maximum of 15.80 feet in MW-16, with an average fluctuation of 0.84 feet across the site since the installation of the wells. Groundwater at the site was determined to flow to the south/southeast. Figures 2 and 3 of Attachment A illustrate the groundwater gradient based on the two quarterly gauging events for the year. Relative water table elevations are summarized in Table 1 of Attachment B.

GROUNDWATER SAMPLING

From April 30, 2002 to August 21, 2002, Enercon installed and sampled twenty-three monitor wells on site. During that time period, groundwater samples were collected from monitor wells MW-1, MW-3, MW-4, MW-5, MW-6, MW-7, MW-8, MW-9, MW-11, MW-12, MW-14, MW-15, MW-16, MW-17, MW-18, MW-20, MW-21, MW-22, and MW-23 and analyzed for BTEX (EPA Method 8021B) and PAH (EPA Method 8270C). Those wells exhibiting PSH were not sampled. Laboratory analytical results indicated concentrations of 0.0128 mg/l benzene from monitor well MW-1, 0.0262 mg/l benzene from monitor well MW-6, 0.0032 mg/l benzene from monitor well MW-14, 0.0014 mg/l benzene from monitor well MW-18, and 0.577 mg/l benzene from monitor well MW-23.

Laboratory analytical results indicated concentrations of 0.0351 mg/l benzene, 0.0317 mg/l ethylbenzene and 0.122 mg/l xylenes from monitor well MW-5. Laboratory analytical results indicated concentrations of 0.0116 mg/l benzene, 0.0021 mg/l ethylbenzene and 0.0012 mg/l xylenes from monitor well MW-7. Laboratory analytical results indicated concentrations of 0.002 mg/l benzene and 0.0026 mg/l xylenes from monitor well MW-12. Analytical results indicated concentrations of 0.0092 mg/l xylenes from monitor well MW-20. Analytical results indicated concentrations of 0.152 mg/l benzene, 0.427 mg/l toluene, 0.47 mg/l ethylbenzene and 1.35 mg/l xylenes from monitor well MW-21. Analytical results indicated concentrations of 0.0663 mg/l benzene and 0.519 mg/l xylenes from monitor well MW-22. BTEX concentrations from all remaining groundwater samples analyzed resulted in concentrations below laboratory detectable limits.

Laboratory analytical results indicated PAH concentrations of 0.0068 mg/l naphthalene, 0.0003 mg/l fluorene and 0.0002 mg/l phenanthrene from monitor well MW-5. Laboratory analytical results indicated PAH concentrations of 0.0004 mg/l naphthalene from monitor well MW-6, 0.0008 mg/l naphthalene from monitor well MW-7, 0.00089 mg/l naphthalene from monitor well MW-9, 0.0008 mg/l napthalene from monitor well

MW-11, 0.0011 mg/l naphthalene from monitor well MW-20, and 0.0097 mg/l naphthalene from monitor well MW-22. Laboratory analytical results indicated PAH concentrations of 0.0008 mg/l naphthalene, 0.0002 mg/l fluorene, 0.0006 mg/l anthracene, 0.0007 mg/l benzo(a)anthracene, 0.0008 mg/l chrysene, 0.0013 mg/l benzo (b) fluoranthene, 0.0015 mg/l benzo (k) fluoranthene and 0.0014 mg/l benzo (a) pyrene from monitor well MW-12. Laboratory analytical results indicated PAH concentrations of 0.020 mg/l naphthalene and 0.0003 mg/l anthracene from monitor well MW-21. All remaining groundwater samples analyzed resulted in PAH concentrations below laboratory detectable limits.

On October 10, 2002, the fourth quarter groundwater sampling event was performed. Groundwater samples were collected from monitor wells MW-1, MW-3, MW-4, MW-5, MW-6, MW-8, MW-9, MW-11, MW-12, MW-14, MW-15, MW-16, MW-17, MW-18, MW-20, MW-21, MW-22, and MW-23 and analyzed for BTEX (EPA Method 8021B) and PAH (EPA Method 8270C). Laboratory analytical results indicated concentrations of 0.0054 mg/l benzene from monitor well MW-1, 0.0501 mg/l benzene from monitor well MW-6, 0.0231 mg/l benzene from monitor well MW-15, 0.0362 mg/l benzene from monitor well MW-22, and 0.0029 mg/l benzene from monitor well MW-23. Laboratory analytical results indicated concentrations of 0.0203 mg/l benzene, 0.0077 mg/l ethylbenzene and 0.0204 mg/l xylenes from monitor well MW-5. Laboratory analytical results indicated concentrations of 0.0086 mg/l xylenes from monitor well MW-21. Laboratory analytical results indicated PAH concentrations of 0.0138 mg/l naphthalene and 0.0006 mg/l phenanthrene from monitor well MW-5. Laboratory analytical results indicated PAH concentrations of 0.0034 mg/l naphthalene from monitor well MW-22. BTEX and PAH concentrations from all other groundwater samples were below laboratory detectable limits.

From the two groundwater sampling events conducted this year, laboratory analytical results indicated PAH concentrations of naphthalene ranging from 0.0004 mg/l in monitor well MW-6 to 0.020 mg/l in monitor well MW-21, concentrations of fluorene ranging from 0.0002 mg/l in monitor well MW-12 to 0.0003 mg/l in monitor well MW-5, and concentrations of phenanthrene ranging from 0.0002 mg/l in monitor well MW-5 to 0.0006 mg/l in monitor well MW-5. Laboratory analytical results indicated PAH concentrations of anthracene ranging from 0.0003 mg/l in monitor well MW-21 to 0.0006 mg/l in monitor well MW-12, concentrations of 0.0007 mg/l benzo(a)anthracene, 0.0008 mg/l chrysene, 0.0013 benzo(b)fluoranthene, 0.0015 mg/l benzo(k)fluoranthene, and 0.0014 mg/l benzo(a)pyrene in monitor well MW-12. The remaining PAH concentrations were below laboratory detectable limits for all samples collected and analyzed during the year.

BTEX analytical results during the year indicated concentrations of benzene ranging from 0.0014 mg/l in monitor well MW-18 to 0.152 mg/l in monitor well MW-21. Laboratory analytical results indicated toluene was detected only in monitor well MW-21 with a concentration of 0.427 mg/l. Laboratory analytical results indicated concentrations of ethylbenzene ranging from 0.0021 mg/l in monitor well MW-7 to 0.47

in monitor well MW-21. Laboratory analytical results indicated concentrations of xylenes ranging from 0.0012 mg/l in monitor well MW-7 to 1.35 mg/l in monitor well MW-21. All other BTEX concentrations were below laboratory detectable limits. Figure 4 of Attachment A illustrate the dissolved hydrocarbon concentrations across the site based on the quarterly gauging events for the year. Laboratory analytical results are summarized in Tables 2 and 3, Attachment B of this report and laboratory data sheets are located in Attachment C.

Enercon Services, Inc. appreciates the opportunity to provide you with our professional consulting services on this important project. If you have any questions or if we can be of further assistance, please do not hesitate to call.

Respectfully,
Enercon Services, Inc.

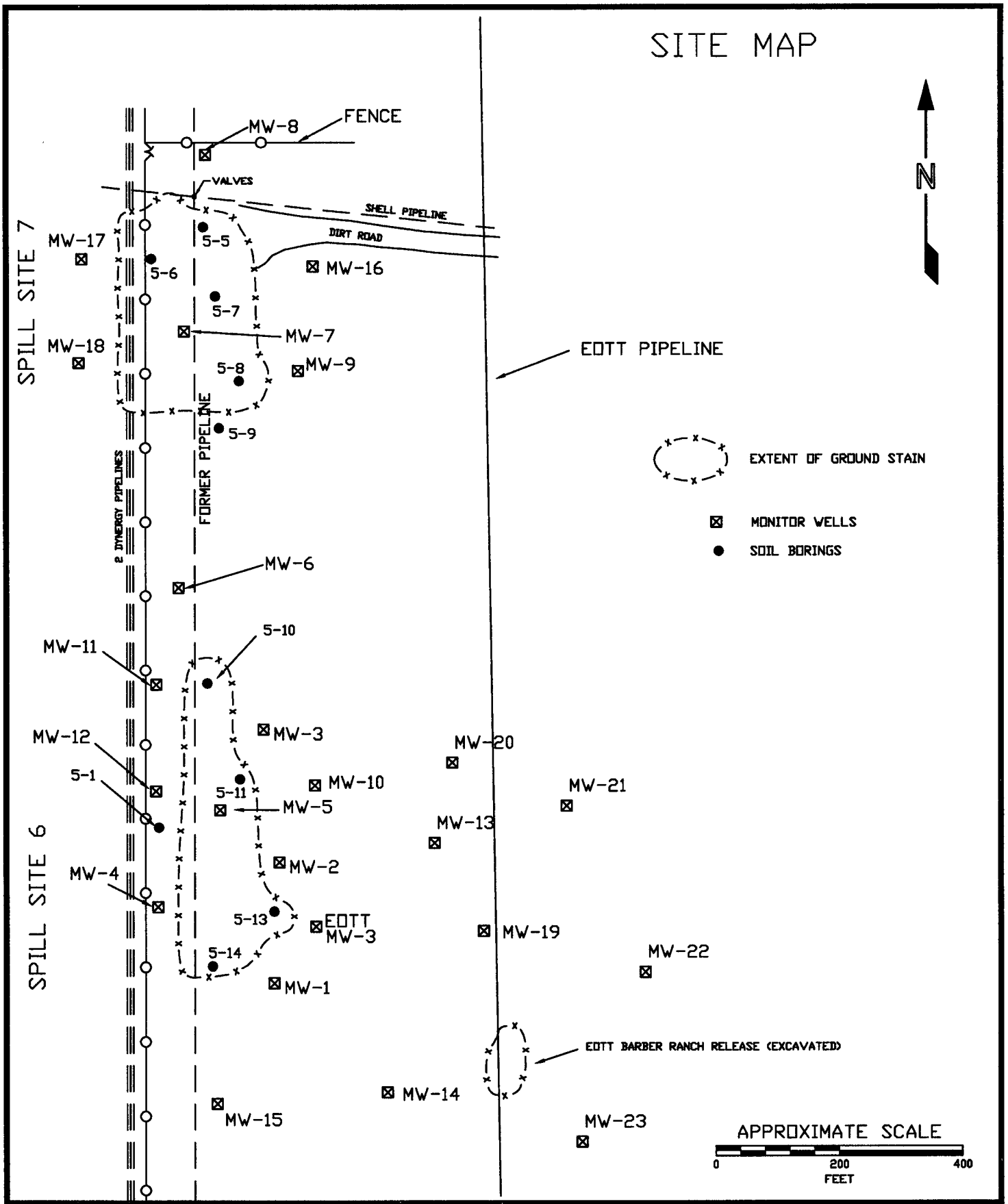
Jeffrey W. Kindley, P.G.
Senior Project Manager

ATTACHMENT A

FIGURES

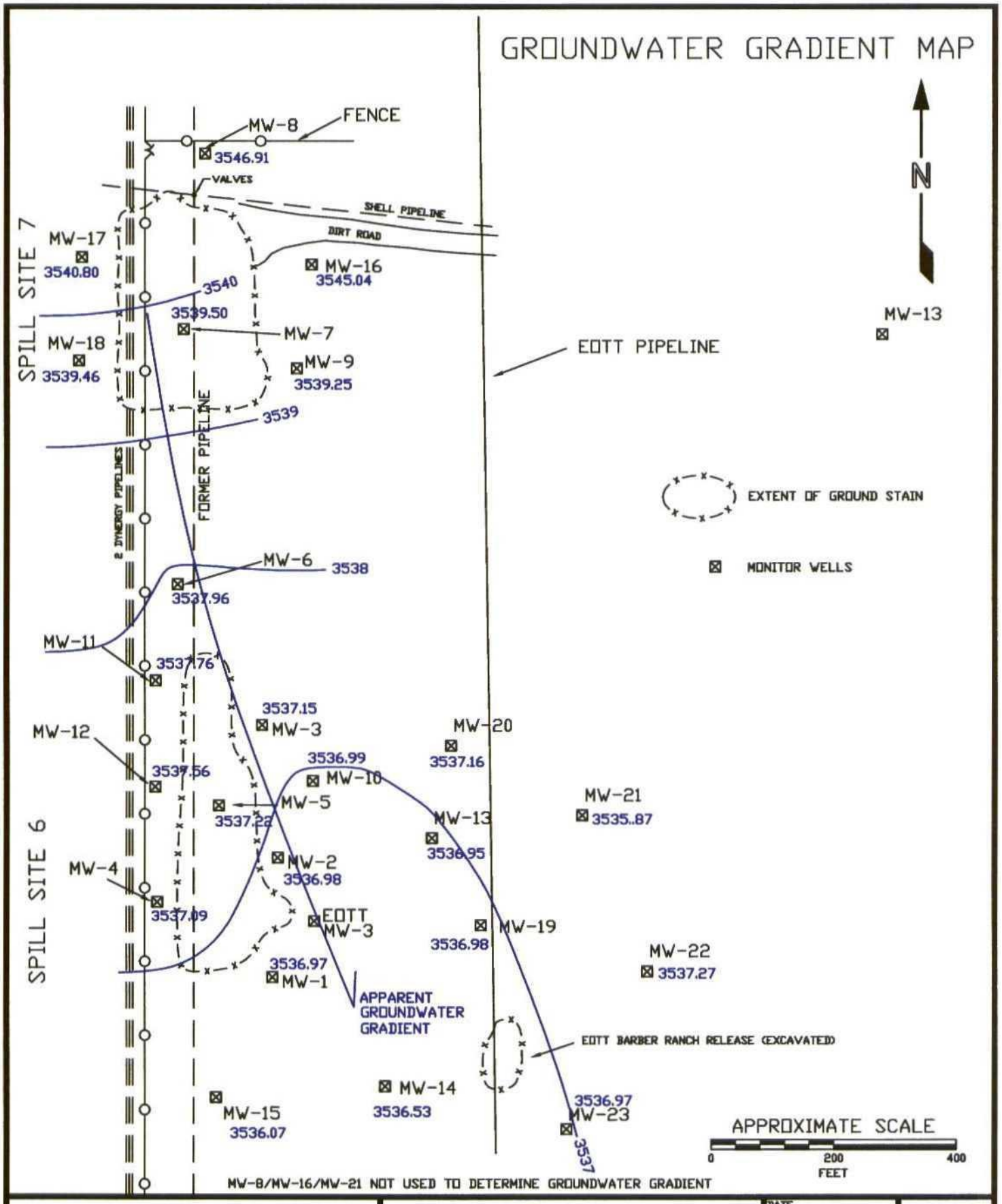
Site Map (Figure 1)
Groundwater Gradient Maps (Figures 2 and 3)
Dissolved Hydrocarbon Concentration Map (Figures 4 and 5)
PSH Thickness Map (Figures 6 and 7)

SITE MAP



SHELL PIPELINE CORPORATION BARBER RANCH SPILL SITES 6 AND 7 LEA COUNTY, NEW MEXICO	ENERCON SERVICES, INC. 2775 VILLA CREEK, SUITE 120 DALLAS, TEXAS 75234 972/484-3854	DATE AUGUST, 2002 PROJECT NO. EQ-112	FIGURE 1

GROUNDWATER GRADIENT MAP



SHELL PIPELINE CORPORATION
BARBER RANCH
SPILL SITES 6 AND 7
LEA COUNTY, NEW MEXICO

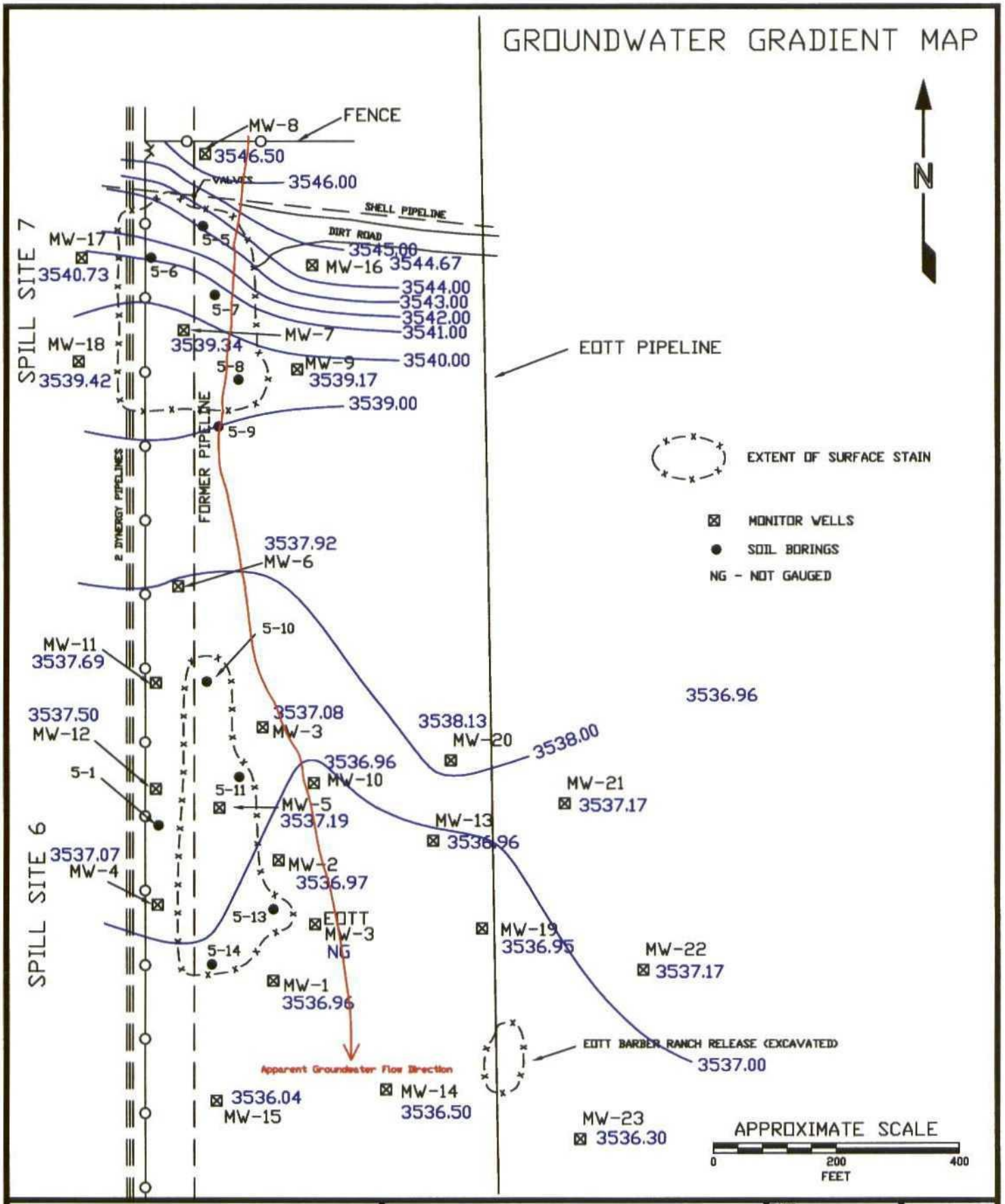
ENERCON SERVICES, INC.
2775 VILLA CREEK, SUITE 120
DALLAS, TEXAS 75234
972/484-3854

DATE: AUGUST, 2002

PROJECT NO.: EQ-112

FIGURE 2

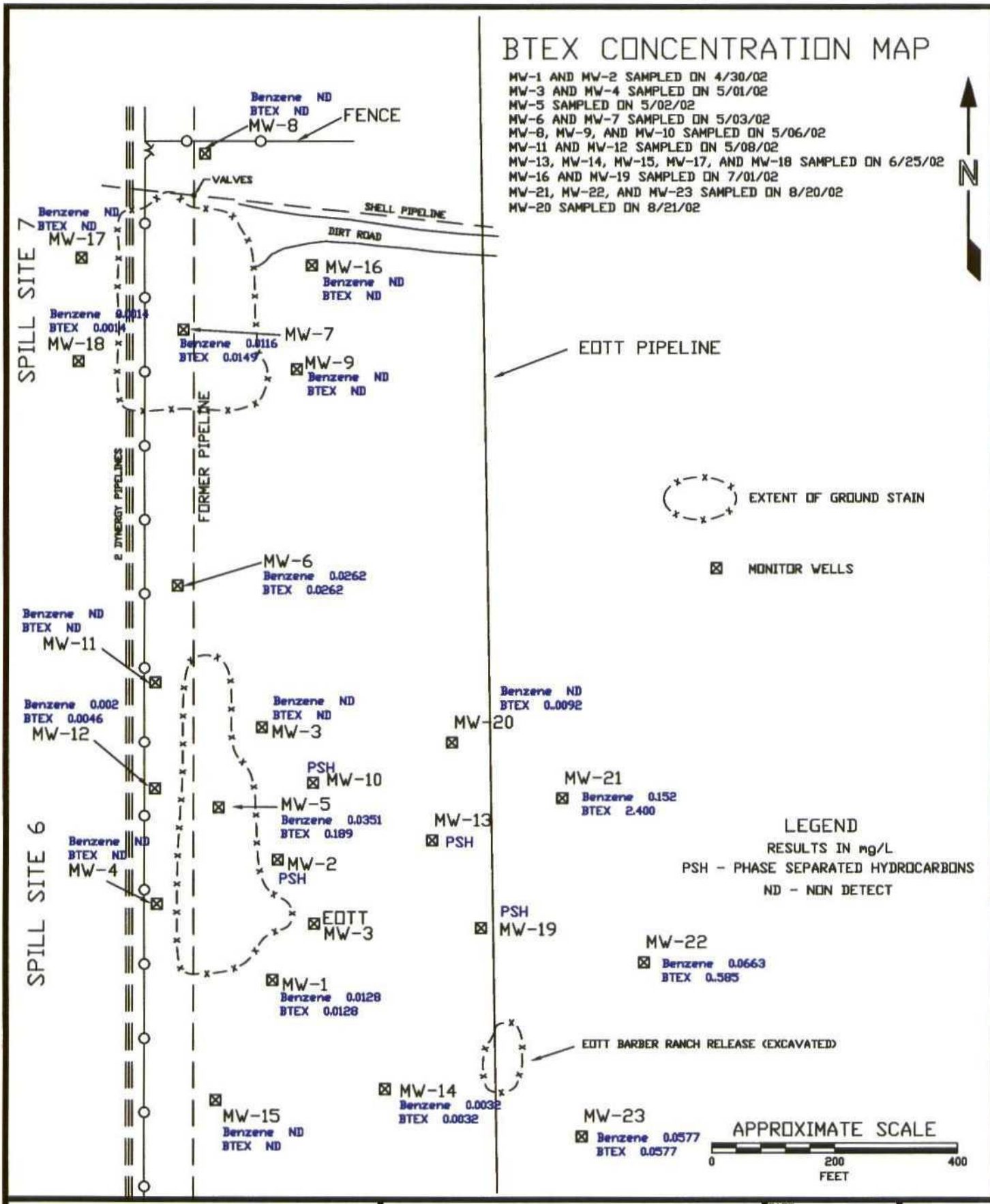
GROUNDWATER GRADIENT MAP



SHELL OIL PRODUCTS US BARBER RANCH SPILL SITES 6 AND 7 LEA COUNTY, NEW MEXICO	ENERCON SERVICES, INC. 2775 VILLA CREEK, SUITE 120 DALLAS, TEXAS 75234 972/484-3854	DATE 10/10/02 PROJECT NO. EQ-112	FIGURE 3

BTEX CONCENTRATION MAP

MW-1 AND MW-2 SAMPLED ON 4/30/02
MW-3 AND MW-4 SAMPLED ON 5/01/02
MW-5 SAMPLED ON 5/02/02
MW-6 AND MW-7 SAMPLED ON 5/03/02
MW-8, MW-9, AND MW-10 SAMPLED ON 5/06/02
MW-11 AND MW-12 SAMPLED ON 5/08/02
MW-13, MW-14, MW-15, MW-17, AND MW-18 SAMPLED ON 6/25/02
MW-16 AND MW-19 SAMPLED ON 7/01/02
MW-21, MW-22, AND MW-23 SAMPLED ON 8/20/02
MW-20 SAMPLED ON 8/21/02



SHELL PIPELINE CORPORATION
BARBER RANCH
SPILL SITES 6 AND 7
LEA COUNTY, NEW MEXICO

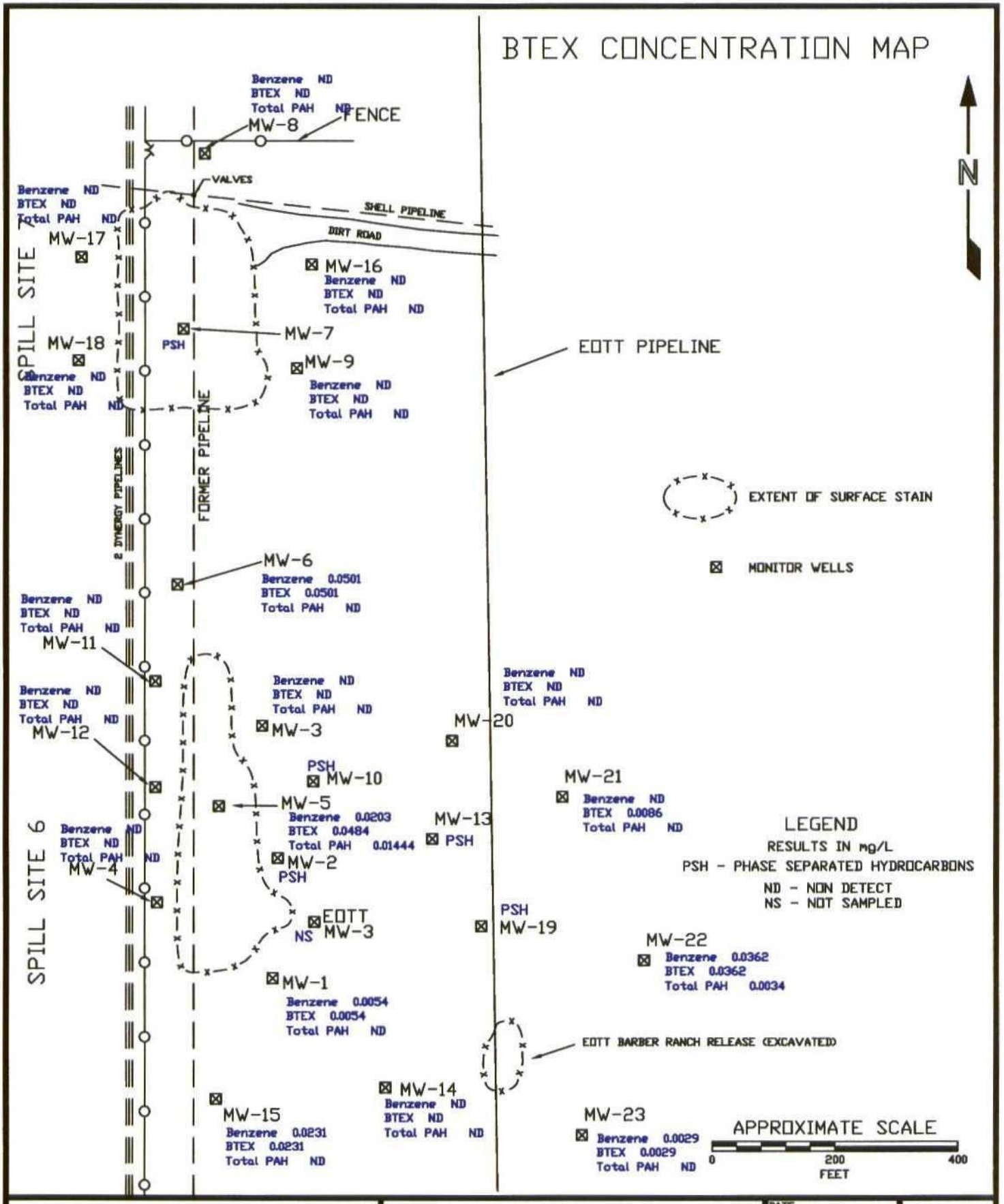
ENERCON SERVICES, INC.
2775 VILLA CREEK, SUITE 120
DALLAS, TEXAS 75234
972/484-3854

DATE
AUGUST, 2002

PROJECT NO.
EQ-112

FIGURE
4

BTEX CONCENTRATION MAP



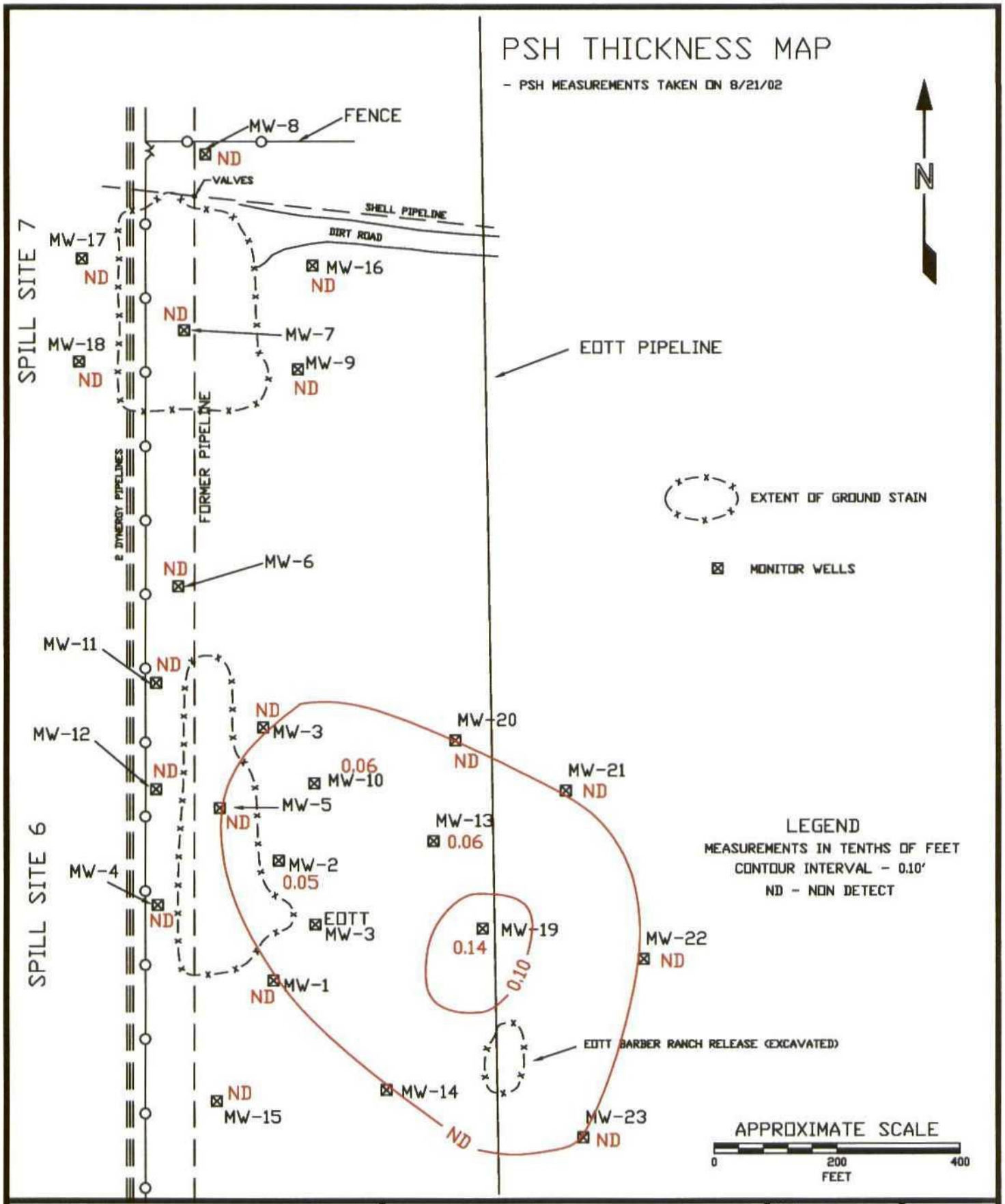
SHELL OIL PRODUCTS US
BARBER RANCH
SPILL SITES 6 AND 7
LEA COUNTY, NEW MEXICO

ENERCON SERVICES, INC.
2775 VILLA CREEK, SUITE 120
DALLAS, TEXAS 75234
972/484-3854

DATE: 10/10/02

PROJECT NO.: EQ-112

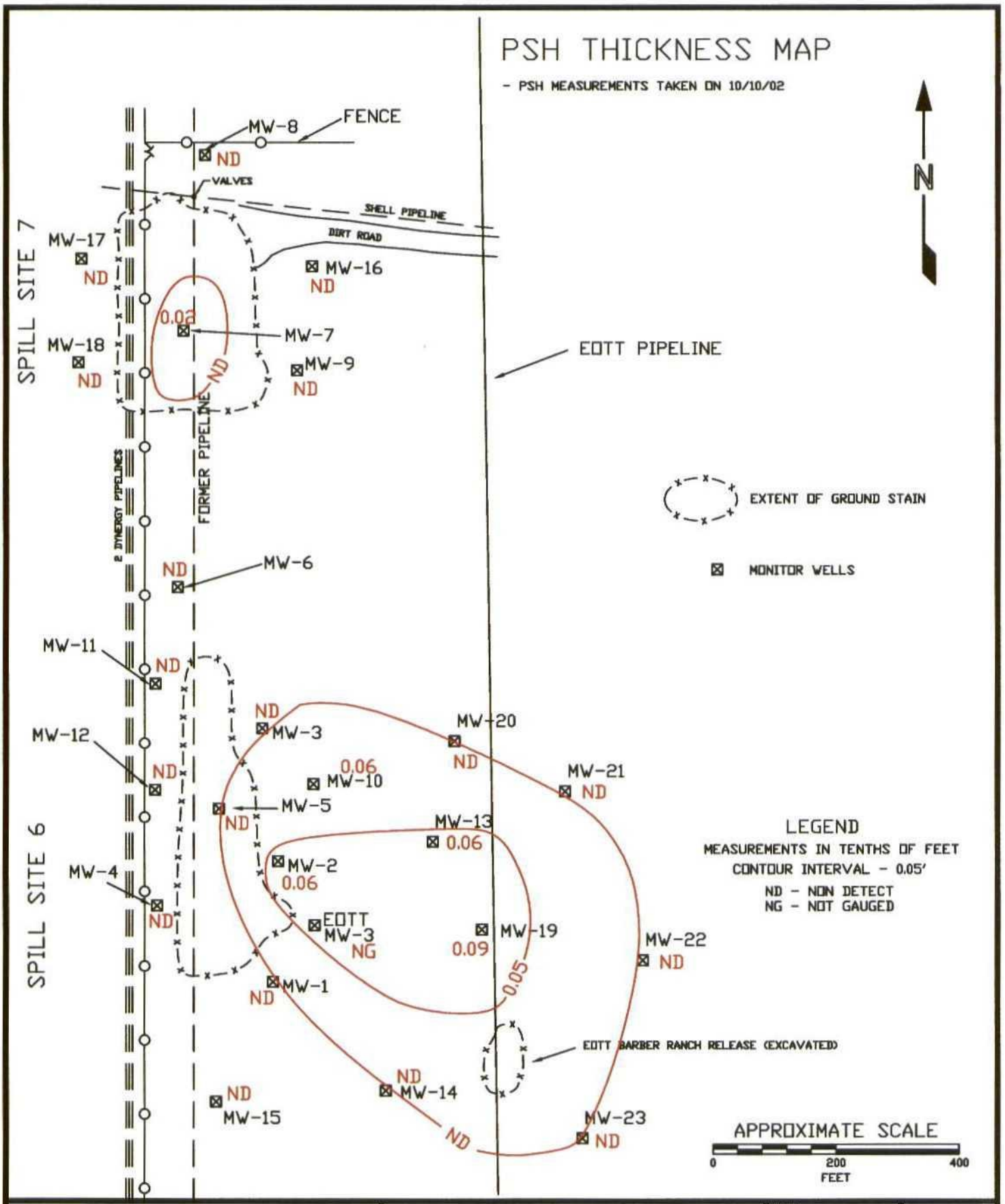
FIGURE 5



SHELL PIPELINE CORPORATION BARBER RANCH SPILL SITES 6 AND 7 LEA COUNTY, NEW MEXICO	ENERCON SERVICES, INC. 2775 VILLA CREEK, SUITE 120 DALLAS, TEXAS 75234 972/484-3854	DATE AUGUST, 2002 PROJECT NO. EQ-112	FIGURE 6

PSH THICKNESS MAP

- PSH MEASUREMENTS TAKEN ON 10/10/02



SHELL OIL PRODUCTS US BARBER RANCH SPILL SITES 6 AND 7 LEA COUNTY, NEW MEXICO	ENERCON SERVICES, INC. 2775 VILLA CREEK, SUITE 120 DALLAS, TEXAS 75234 972/484-3854	DATE 10/10/02 PROJECT NO. EQ-112	FIGURE 7

ATTACHMENT B

TABLES

Relative Groundwater Elevations, PSH Thickness, and Manual PSH Recovery-(Table1)
Dissolved Hydrocarbon Concentrations (Tables 2 and 3)

Monitor Well	Date	Relative Top of Casing (in feet)	Depth to PSH (feet)	Depth to Water (in feet)	Corrected Groundwater (in feet)	PSH Thickness (in feet)	PSH Recovery (in gallons)	PSH Cumulative Recovery (in gallons)	Type of Recovery
MW-10	07/01/02	3,565.97	28.95	29.13	3537.00	0.18	0.00	0.00	None
	08/21/02		28.97	29.03	3536.99	0.06	0.25	0.25	Absorption Boom
	10/10/02		29.00	29.06	3536.96	0.06	0.00	0.25	
MW-11	07/01/02	3,566.99		29.27	3537.72	0.00			
	08/21/02			29.23	3537.76	0.00			
	10/10/02			29.30	3537.69	0.00			
MW-12	07/01/02	3,567.18		29.64	3537.54	0.00			
	08/21/02			29.62	3537.56	0.00			
	10/10/02			29.68	3537.50	0.00			
MW-13	07/01/02	3,566.65	29.67	29.69	3536.98	0.02	0.00	0.00	None
	08/21/02		29.69	29.75	3536.95	0.06	0.25	0.25	Absorption Boom
	10/10/02		29.68	29.74	3536.96	0.06	0.00	0.25	
MW-14	07/01/02	3,566.03		29.53	3536.50	0.00			
	08/21/02			29.50	3536.53	0.00			
	10/10/02			29.53	3536.50	0.00			
MW-15	07/01/02	3,566.79		30.77	3536.02	0.00			
	08/21/02			30.72	3536.07	0.00			
	10/10/02			30.75	3536.04	0.00			
MW-16	07/01/02	3,568.55		39.31	3529.24	0.00			
	08/21/02			23.51	3545.04	0.00			
	10/10/02			23.88	3544.67	0.00			
MW-17	07/01/02	3,569.45		28.63	3540.82	0.00			
	08/21/02			28.65	3540.80	0.00			
	10/10/02			28.72	3540.73	0.00			
MW-18	07/01/02	3,568.38		28.92	3539.46	0.00			
	08/21/02			28.92	3539.46	0.00			
	10/10/02			28.96	3539.42	0.00			
MW-19	07/01/02	3,566.22	29.25	29.26	3536.97	0.01	0.00	0.00	None
	08/21/02		29.23	29.37	3536.98	0.14	0.25	0.25	Absorption Boom
	10/10/02		29.26	29.35	3536.95	0.09	0.00	0.25	
MW-20	08/21/02	3,566.59		29.43	3537.16	0.00			
	10/10/02			28.46	3538.13	0.00			

Monitor Well	Date	Relative Top of Casing (in feet)	Depth to PSH (feet)	Depth to Water (in feet)	Corrected Groundwater (in feet)	PSH Thickness (in feet)	PSH Recovery (in gallons)	PSH Cumulative Recovery (in gallons)	Type of Recovery
MW-21	08/21/02	3,565.58		29.71	3535.87	0.00			
	10/10/02			28.43	3537.15	0.00			
MW-22	08/21/02	3,565.69		28.42	3537.27	0.00			
	10/10/02			28.52	3537.17	0.00			
MW-23	08/21/02	3,565.47		28.50	3536.97	0.00			
	10/10/02			29.17	3536.30	0.00			

* Correction Equation for Phase-Separated Hydrocarbons: Corrected Groundwater Elevation = Top of Casing Elevation - [Depth to Water Below Top of Casing - (SG)(PSH Thickness)].
Specific Gravity (SG) = 0.9 for crude oil.

TABLE 3
GROUNDWATER ANALYSIS-POLYNUCLEAR AROMATIC HYDROCARBONS
BARBER RANCH
MONUMENT, LEA COUNTY, NEW MEXICO

Monitor Well	Date	Total (mg/l)	Naphthalene (mg/l)	Acenaphthylene (mg/l)	Acenaphthene (mg/l)	Fluorene (mg/l)	Phenanthrene (mg/l)	Anthracene (mg/l)	Fluoranthene (mg/l)	Pyrene (mg/l)	Benzo(a)anthracene (mg/l)	Chrysene (mg/l)	Benzo(b)fluoranthene (mg/l)	Benzo(k)fluoranthene (mg/l)	Benzo(a)pyrene (mg/l)	Indeno(1,2,3-cd)pyrene (mg/l)	Dibenzo(a,h)anthracene (mg/l)	Benzo(g,h,i) perylene (mg/l)
MW-1	05/20/02	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002
	10/10/02	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002
MW-2	04/30/02	PSH	PSH	PSH	PSH	PSH	PSH	PSH	PSH	PSH	PSH	PSH	PSH	PSH	PSH	PSH	PSH	PSH
	10/10/02	PSH	PSH	PSH	PSH	PSH	PSH	PSH	PSH	PSH	PSH	PSH	PSH	PSH	PSH	PSH	PSH	PSH
MW-3	05/01/02	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002
	10/10/02	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002
MW-4	05/01/02	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002
	10/10/02	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002
MW-5	05/02/02	0.0073	0.0068	<0.0002	<0.0002	0.0003	0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002
	10/10/02	0.014444	0.0138	<0.0002	<0.0002	<0.0002	0.0006	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002
MW-6	05/03/02	0.0004	0.0004	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002
	10/10/02	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002
MW-7	05/03/02	0.0008	0.0008	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002
	10/10/02	PSH	PSH	PSH	PSH	PSH	PSH	PSH	PSH	PSH	PSH	PSH	PSH	PSH	PSH	PSH	PSH	PSH
MW-8	05/06/02	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002
	10/10/02	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002
MW-9	05/06/02	0.00089	0.00089	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002
	10/10/02	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002
MW-10	05/06/02	PSH	PSH	PSH	PSH	PSH	PSH	PSH	PSH	PSH	PSH	PSH	PSH	PSH	PSH	PSH	PSH	PSH
	10/10/02	PSH	PSH	PSH	PSH	PSH	PSH	PSH	PSH	PSH	PSH	PSH	PSH	PSH	PSH	PSH	PSH	PSH
MW-11	05/08/02	0.0008	0.0008	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002
	10/10/02	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002
MW-12	05/08/02	0.0071	0.0008	<0.0002	<0.0002	0.0002	<0.0002	0.0006	<0.0002	<0.0002	0.0007	0.0008	0.0013	0.0015	0.0014	<0.0002	<0.0002	<0.0002
	10/10/02	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002
MW-13	06/25/02	PSH	PSH	PSH	PSH	PSH	PSH	PSH	PSH	PSH	PSH	PSH	PSH	PSH	PSH	PSH	PSH	PSH
	10/10/02	PSH	PSH	PSH	PSH	PSH	PSH	PSH	PSH	PSH	PSH	PSH	PSH	PSH	PSH	PSH	PSH	PSH
MW-14	06/25/02	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002
	10/10/02	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002
MW-15	06/25/02	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002
	10/10/02	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002
MW-16	07/01/02	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002
	10/10/02	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002
MW-17	06/25/02	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002
	10/10/02	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002
MW-18	06/25/02	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002
	10/10/02	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002
MW-19	07/01/02	PSH	PSH	PSH	PSH	PSH	PSH	PSH	PSH	PSH	PSH	PSH	PSH	PSH	PSH	PSH	PSH	PSH
	10/10/02	PSH	PSH	PSH	PSH	PSH	PSH	PSH	PSH	PSH	PSH	PSH	PSH	PSH	PSH	PSH	PSH	PSH
MW-20	08/21/02	0.0011	0.0011	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002
	10/10/02	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002
MW-21	08/20/02	0.02030	0.02000	<0.0002	<0.0002	<0.0002	<0.0002	0.0003	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002
	10/10/02	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002
MW-22	08/20/02	0.0097	0.0097	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002
	10/10/02	0.0034	0.0034	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002
MW-23	08/20/02	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002
	10/10/02	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002
NMWQCC Standards		NA	0.03	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA

PSH - Phase Separated Hydrocarbons NA - Not Applicable

h/reports/shell/barber/tables.xls/gwgah

TABLE 2
GROUNDWATER ANALYSIS
BARBER RANCH
MONUMENT, LEA COUNTY, NEW MEXICO

Monitor Well	Date	Benzene (mg/l)	Toluene (mg/l)	Ethylbenzene (mg/l)	Xylenes (mg/l)	Total BTEX (mg/l)	TPH -TX1005 C6-C12 (mg/l)	TPH- TX1005 C12-C35 (mg/l)	TPH - TX1005 C6-C35 (mg/l)	Hydrox Alkalinity (mg/l)	Carbon Alkalinity (mg/l)	Bicarb Alkalinity (mg/l)	Total Alkalinity (mg/l)	Ferrous Iron (mg/l)	Bromide (mg/l)	Phosphate (mg/l)	Nitrate (mg/l)
MW-1	04/30/02	0.0128	<0.001	<0.001	<0.001	0.0128	<5.00	<5.00	<5.00	<1.0	<1.0	452	452	0.28	1.18	0.0475	<1.00
	10/10/02	0.0054	<0.001	<0.001	<0.001	0.0054											
MW-2	04/30/02	PSH	PSH	PSH	PSH	PSH											
	10/10/02	PSH	PSH	PSH	PSH	PSH											
MW-3	05/01/02	<0.001	<0.001	<0.001	<0.001	<0.001											
	10/10/02	<0.001	<0.001	<0.001	<0.001	<0.001											
MW-4	05/01/02	<0.001	<0.001	<0.001	<0.001	<0.001	<5.00	<5.00	<5.00	<1.0	<1.0	402	402	0.28	1.25	<0.04	1.87
	10/10/02	<0.001	<0.001	<0.001	<0.001	<0.001											
MW-5	05/02/02	0.0351	<0.010	0.0317	0.122	0.189											
	10/10/02	0.0203	<0.005	0.0077	0.0204	0.0484											
MW-6	05/03/02	0.0262	<0.005	<0.005	<0.005	0.0262											
	10/10/02	0.0501	<0.005	<0.005	<0.005	0.0501											
MW-7	05/03/02	0.0116	<0.001	0.0021	0.0012	0.0149											
	10/10/02	PSH	PSH	PSH	PSH	PSH											
MW-8	05/06/02	<0.005	<0.005	<0.005	<0.005	<0.005											
	10/10/02	<0.001	<0.001	<0.001	<0.001	<0.001											
MW-9	05/06/02	<0.005	<0.005	<0.005	<0.005	<0.005											
	10/10/02	<0.005	<0.005	<0.005	<0.005	<0.005											
MW-10	05/06/02	PSH	PSH	PSH	PSH	PSH											
	10/10/02	PSH	PSH	PSH	PSH	PSH											
MW-11	05/08/02	<0.005	<0.005	<0.005	<0.005	<0.005											
	10/10/02	<0.001	<0.001	<0.001	<0.001	<0.001											
MW-12	05/08/02	0.002	<0.001	<0.001	0.0026	0.0046											
	10/10/02	<0.001	<0.001	<0.001	<0.001	<0.001											
MW-13	06/25/02	PSH	PSH	PSH	PSH	PSH											
	10/10/02	PSH	PSH	PSH	PSH	PSH											
MW-14	06/25/02	0.0032	<0.001	<0.001	<0.001	0.0032											
	10/10/02	<0.005	<0.005	<0.005	<0.005	<0.005											
MW-15	06/25/02	<0.001	<0.001	<0.001	<0.001	<0.001											
	10/10/02	0.0231	<0.001	<0.001	<0.001	0.0231											
MW-16	07/01/02	<0.005	<0.005	<0.005	<0.005	<0.005											
	10/10/02	<0.001	<0.001	<0.001	<0.001	<0.001											
MW-17	06/25/02	<0.005	<0.005	<0.005	<0.005	<0.005											
	10/10/02	<0.005	<0.005	<0.005	<0.005	<0.005											
MW-18	06/25/02	0.0014	<0.001	<0.001	<0.001	0.0014											
	10/10/02	<0.005	<0.005	<0.005	<0.005	<0.005											
MW-19	07/01/02	PSH	PSH	PSH	PSH	PSH											
	10/10/02	PSH	PSH	PSH	PSH	PSH											
MW-20	08/21/02	<0.005	<0.005	<0.005	0.0092	0.0092											
	10/10/02	<0.001	<0.001	<0.001	<0.001	<0.001											
MW-21	08/20/02	0.152	0.427	0.47	1.35	2.40											
	10/10/02	<0.005	<0.005	<0.005	0.0086	0.0086											
MW-22	08/20/02	0.0663	<0.020	<0.020	0.519	0.585											
	10/10/02	0.0362	<0.005	<0.005	<0.005	0.0362											
MW-23	08/20/02	0.0577	<0.005	<0.005	<0.005	0.0577											
	10/10/02	0.0029	<0.001	<0.001	<0.001	0.0029											
NMOCD Standards		0.01	0.75	0.75	0.62	2.13											

PSH-Phase Separated Hydrocarbons
Any well exhibiting PSH was not sampled.

ATTACHMENT C

Analytical Data

Analytical and Quality Control Report

Jeff Kindley
Enercon Services Inc.
306 W. Wall Suite 1312
Midland, Tx. 79701

Report Date: May 17, 2002

Order ID Number: A02050216

Project Number: EQ-112
Project Name: Barber Ranch 3000109
Project Location: Barber Lea County, New Mexico

Enclosed are the Analytical Results and Quality Control Data Reports for the following samples submitted to Trace-Analysis, Inc.

Sample	Description	Matrix	Date Taken	Time Taken	Date Received
196167	MW-1	Water	4/30/02	16:30	5/2/02

These results represent only the samples received in the laboratory. The Quality Control Report is generated on a batch basis. All information contained in this report is for the analytical batch(es) in which your sample(s) were analyzed.
Note: the RDL is equal to MQL for all organic analytes including TPH.
The test results contained within this report meet all requirements of LAC 33:I unless otherwise noted.

This report consists of a total of 9 pages and shall not be reproduced except in its entirety including the chain of custody (COC), without written approval of TraceAnalysis, Inc.

for
Dr. Blair Leftwich, Director

Analytical Report

Sample: 196167 - MW-1

Analysis:	Alkalinity	Analytical Method:	E 310.1	QC Batch:	QC20078	Date Analyzed:	5/3/02
Analyst:	RS	Preparation Method:	N/A	Prep Batch:	PB19249	Date Prepared:	5/3/02

Param	Flag	Result	Units	Dilution	RDL
Hydroxide Alkalinity		<1.0	mg/L as CaCo3	1	1
Carbonate Alkalinity		<1.0	mg/L as CaCo3	1	1
Bicarbonate Alkalinity		452	mg/L as CaCo3	1	1
Total Alkalinity		452	mg/L as CaCo3	1	1

Sample: 196167 - MW-1

Analysis:	BTEX	Analytical Method:	S 8021B	QC Batch:	QC20035	Date Analyzed:	5/2/02
Analyst:	CG	Preparation Method:	S 5030B	Prep Batch:	PB19213	Date Prepared:	5/2/02

Param	Flag	Result	Units	Dilution	RDL
Benzene		0.0128	mg/L	1	0.001
Toluene		<0.001	mg/L	1	0.001
Ethylbenzene		<0.001	mg/L	1	0.001
M,P,O-Xylene		<0.001	mg/L	1	0.001
Total BTEX		0.0128	mg/L	1	0.001

Surrogate	Flag	Result	Units	Dilution	Spike Amount	Percent Recovery	Recovery Limits
TFT		0.0926	mg/L	1	0.10	93	70 - 130
4-BFB		0.099	mg/L	1	0.10	99	70 - 130

Sample: 196167 - MW-1

Analysis:	Extended TX1005	Analytical Method:	TX1005	QC Batch:	QC20117	Date Analyzed:	5/3/02
Analyst:	MM	Preparation Method:	N/A	Prep Batch:	PB19281	Date Prepared:	5/2/02

Param	Flag	Result	Units	Dilution	RDL
C6-C12		<5.00	mg/L	0.10	50
>C12-C35		<5.00	mg/L	0.10	50
C6-C35		<5.00	mg/L	0.10	50

Surrogate	Flag	Result	Units	Dilution	Spike Amount	Percent Recovery	Recovery Limits
n-Triacontane		13.9	mg/L	1	15	92	70 - 130

Sample: 196167 - MW-1

Analysis:	Ferrous Iron	Analytical Method:	Hach IR-1	QC Batch:	QC20042	Date Analyzed:	5/2/02
Analyst:	JSW	Preparation Method:	N/A	Prep Batch:	PB19206	Date Prepared:	5/2/02

Param	Flag	Result	Units	Dilution	RDL
ferrous iron	[1]	0.28	mg/L	1	0.01

Sample: 196167 - MW-1

Analysis: Ion Chromatography (IC) Analytical Method: E 300.0 QC Batch: QC20103 Date Analyzed: 5/2/02
Analyst: JS Preparation Method: N/A Prep Batch: PB19265 Date Prepared: 5/2/02

Param	Flag	Result	Units	Dilution	RDL
Bromide	[2]	1.18	mg/L	5	0.20
Nitrate-N	[3]	<1.00	mg/L	5	0.20

Sample: 196167 - MW-1

Analysis: PO4 Analytical Method: E 300.0 QC Batch: QC20045 Date Analyzed: 5/2/02
Analyst: JSW Preparation Method: N/A Prep Batch: PB19204 Date Prepared: 5/2/02

Param	Flag	Result	Units	Dilution	RDL
PO4-P		0.0475	mg/L	1	0.01

[1]Sample was received out of holding time.
[2]Br matrix spikes RPD = 3; %EA = 94.
[3]NO3 matrix spikes RPD = 0; %EA = 91.

Quality Control Report
Method Blank

Method Blank

QCBatch: QC20035

Param	Flag	Results	Units	Reporting Limit
Benzene		<0.001	mg/L	0.001
Toluene		<0.001	mg/L	0.001
Ethylbenzene		<0.001	mg/L	0.001
M,P,O-Xylene		<0.001	mg/L	0.001
Total BTEX		<0.001	mg/L	0.001

Surrogate	Flag	Result	Units	Dilution	Spike Amount	Percent Recovery	Recovery Limits
TFT		0.0912	mg/L	1	0.10	91	70 - 130
4-BFB		0.0899	mg/L	1	0.10	90	70 - 130

Method Blank

QCBatch: QC20042

Param	Flag	Results	Units	Reporting Limit
ferrous iron		0.28	mg/L	0.01

Method Blank

QCBatch: QC20045

Param	Flag	Results	Units	Reporting Limit
PO4-P		0.0131	mg/L	0.01

Method Blank

QCBatch: QC20078

Param	Flag	Results	Units	Reporting Limit
Hydroxide Alkalinity		<1.0	mg/L as CaCo3	1
Carbonate Alkalinity		<1.0	mg/L as CaCo3	1
Bicarbonate Alkalinity		<4.0	mg/L as CaCo3	1
Total Alkalinity		<4.0	mg/L as CaCo3	1

Method Blank

QCBatch: QC20103

Param	Flag	Results	Units	Reporting Limit
Bromide		<0.2	mg/L	0.20

Continued ...

... Continued

Param	Flag	Results	Units	Reporting Limit
Nitrate-N		<0.2	mg/L	0.20

Method Blank

QCBatch: QC20117

Param	Flag	Results	Units	Reporting Limit
C6-C12		<5.00	mg/L	50
>C12-C35		<5.00	mg/L	50
C6-C35		<5.00	mg/L	50

Surrogate	Flag	Result	Units	Dilution	Spike Amount	Percent Recovery	Recovery Limits
n-Triacontane		15.3	mg/L	0.10	15	102	70 - 130

Quality Control Report
Duplicate Samples

Duplicate

QCBatch: QC20078

Param	Flag	Duplicate Result	Sample Result	Units	Dilution	RPD	RPD Limit
Hydroxide Alkalinity		<1.0	<1.0	mg/L as CaCo3	1	0	9.2
Carbonate Alkalinity		<1.0	<1.0	mg/L as CaCo3	1	0	9.2
Bicarbonate Alkalinity		46	48	mg/L as CaCo3	1	4	9.2
Total Alkalinity		46	48	mg/L as CaCo3	1	4	9.2

Quality Control Report
Lab Control Spikes and Duplicate Spikes

Laboratory Control Spikes

QCBatch: QC20035

Param	LCS Result	LCSD Result	Units	Dil.	Spike Amount Added	Matrix Result	% Rec	RPD	% Rec Limit	RPD Limit
MTBE	0.103	0.103	mg/L	1	0.10	<0.001	103	0	70 - 130	20
Benzene	0.101	0.0998	mg/L	1	0.10	<0.001	101	1	70 - 130	20
Toluene	0.0975	0.0972	mg/L	1	0.10	<0.001	98	0	70 - 130	20
Ethylbenzene	0.0984	0.100	mg/L	1	0.10	<0.001	98	2	70 - 130	20
M,P,O-Xylene	0.295	0.297	mg/L	1	0.30	<0.001	98	1	70 - 130	20

Percent recovery is based on the spike result. RPD is based on the spike and spike duplicate result.

Surrogate	LCS Result	LCSD Result	Units	Dilution	Spike Amount	LCS % Rec	LCSD % Rec	Recovery Limits
TFT	0.0918	0.0916	mg/L	1	0.10	92	92	70 - 130

Continued ...

Surrogate	LCS Result	LCSD Result	Units	Dilution	Spike Amount	LCS % Rec	LCSD % Rec	Recovery Limits
4-BFB	0.0887	0.0908	mg/L	1	0.10	89	91	70 - 130

Laboratory Control Spikes

QCBatch: QC20045

Param	LCS Result	LCSD Result	Units	Dil.	Spike Amount Added	Matrix Result	% Rec	RPD	% Rec Limit	RPD Limit
PO4-P	0.0661	0.0661	mg/L	1	0.06	0.0131	101	0	90 - 120	20

Percent recovery is based on the spike result. RPD is based on the spike and spike duplicate result.

Laboratory Control Spikes

QCBatch: QC20103

Param	LCS Result	LCSD Result	Units	Dil.	Spike Amount Added	Matrix Result	% Rec	RPD	% Rec Limit	RPD Limit
Chloride	11.98	2.37	mg/L	1	12.50	<1.0	95	0	90 - 110	20

Percent recovery is based on the spike result. RPD is based on the spike and spike duplicate result.

Laboratory Control Spikes

QCBatch: QC20117

Param	LCS Result	LCSD Result	Units	Dil.	Spike Amount Added	Matrix Result	% Rec	RPD	% Rec Limit	RPD Limit
C6-C12	24.6	23.8	mg/L	0.10	250	<5.00	98	3	70 - 130	20
>C12-C35	24.9	24.4	mg/L	0.10	250	<5.00	99	2	70 - 130	20
C6-C35	49.5	< 50	mg/L	0.10	500	<5.00	99	2	70 - 130	20

Percent recovery is based on the spike result. RPD is based on the spike and spike duplicate result.

Surrogate	LCS Result	LCSD Result	Units	Dilution	Spike Amount	LCS % Rec	LCSD % Rec	Recovery Limits
n-Triacontane	16.2	15.5	mg/L	0.10	15	108	103	70 - 130

Quality Control Report
Matrix Spikes and Duplicate Spikes

Matrix Spikes

QCBatch: QC20045

Param	MS Result	MSD Result	Units	Dil.	Spike Amount Added	Matrix Result	% Rec	RPD	% Rec Limit	RPD Limit
PO4-P	0.111	0.110	mg/L	1	0.06	0.0475	97	1	80 - 135	20

Percent recovery is based on the spike result. RPD is based on the spike and spike duplicate result.

Quality Control Report

Continuing Calibration Verification Standards

CCV (1)

QCBatch: QC20035

Param	Flag	Units	CCVs True Conc.	CCVs Found Conc.	CCVs Percent Recovery	Percent Recovery Limits	Date Analyzed
MTBE		mg/L	0.10	0.094	94	85 - 115	5/2/02
Benzene		mg/L	0.10	0.0998	100	85 - 115	5/2/02
Toluene		mg/L	0.10	0.0964	96	85 - 115	5/2/02
Ethylbenzene		mg/L	0.10	0.0976	98	85 - 115	5/2/02
M,P,O-Xylene		mg/L	0.30	0.291	97	85 - 115	5/2/02

CCV (2)

QCBatch: QC20035

Param	Flag	Units	CCVs True Conc.	CCVs Found Conc.	CCVs Percent Recovery	Percent Recovery Limits	Date Analyzed
MTBE		mg/L	0.10	0.0968	96	85 - 115	5/2/02
Benzene		mg/L	0.10	0.0979	97	85 - 115	5/2/02
Toluene		mg/L	0.10	0.0975	97	85 - 115	5/2/02
Ethylbenzene		mg/L	0.10	0.0986	98	85 - 115	5/2/02
M,P,O-Xylene		mg/L	0.30	0.294	98	85 - 115	5/2/02

ICV (1)

QCBatch: QC20035

Param	Flag	Units	CCVs True Conc.	CCVs Found Conc.	CCVs Percent Recovery	Percent Recovery Limits	Date Analyzed
MTBE		mg/L	0.10	0.098	98	85 - 115	5/2/02
Benzene		mg/L	0.10	0.097	97	85 - 115	5/2/02
Toluene		mg/L	0.10	0.0968	97	85 - 115	5/2/02
Ethylbenzene		mg/L	0.10	0.102	102	85 - 115	5/2/02
M,P,O-Xylene		mg/L	0.30	0.304	101	85 - 115	5/2/02

CCV (1)

QCBatch: QC20045

Param	Flag	Units	CCVs True Conc.	CCVs Found Conc.	CCVs Percent Recovery	Percent Recovery Limits	Date Analyzed
PO4-P		mg/L	0.06	0.0661	101	85 - 115	5/2/02

ICV (1)

QCBatch: QC20045

Param	Flag	Units	CCVs True Conc.	CCVs Found Conc.	CCVs Percent Recovery	Percent Recovery Limits	Date Analyzed
PO4-P		mg/L	0.06	0.0707	108	85 - 115	5/2/02

CCV (1) QCBatch: QC20078

Param	Flag	Units	CCVs True Conc.	CCVs Found Conc.	CCVs Percent Recovery	Percent Recovery Limits	Date Analyzed
Hydroxide Alkalinity		mg/L as CaCo3	0	<1.0	0	90 - 110	5/3/02
Carbonate Alkalinity		mg/L as CaCo3	0	232	0	90 - 110	5/3/02
Bicarbonate Alkalinity		mg/L as CaCo3	0	10	0	90 - 110	5/3/02
Total Alkalinity		mg/L as CaCo3	250	242	96	90 - 110	5/3/02

ICV (1) QCBatch: QC20078

Param	Flag	Units	CCVs True Conc.	CCVs Found Conc.	CCVs Percent Recovery	Percent Recovery Limits	Date Analyzed
Hydroxide Alkalinity		mg/L as CaCo3	0	<1.0	0	90 - 110	5/3/02
Carbonate Alkalinity		mg/L as CaCo3	0	228	0	90 - 110	5/3/02
Bicarbonate Alkalinity		mg/L as CaCo3	0	16	0	90 - 110	5/3/02
Total Alkalinity		mg/L as CaCo3	250	244	97	90 - 110	5/3/02

CCV (1) QCBatch: QC20103

Param	Flag	Units	CCVs True Conc.	CCVs Found Conc.	CCVs Percent Recovery	Percent Recovery Limits	Date Analyzed
Chloride		mg/L	12.50	12.11	96	90 - 110	5/2/02

ICV (1) QCBatch: QC20103

Param	Flag	Units	CCVs True Conc.	CCVs Found Conc.	CCVs Percent Recovery	Percent Recovery Limits	Date Analyzed
Chloride		mg/L	12.50	11.62	92	90 - 110	5/2/02

CCV (1) QCBatch: QC20117

Continued ...

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Param	Flag	Units	CCVs True Conc.	CCVs Found Conc.	CCVs Percent Recovery	Percent Recovery Limits	Date Analyzed
C6-C12		mg/L	250	231	92	75 - 125	5/3/02
>C12-C35		mg/L	250	238	95	75 - 125	5/3/02
C6-C35		mg/L	500	469	93	75 - 125	5/3/02

ICV (1)

QCBatch: QC20117

Param	Flag	Units	CCVs True Conc.	CCVs Found Conc.	CCVs Percent Recovery	Percent Recovery Limits	Date Analyzed
C6-C12		mg/L	250	219	87	75 - 125	5/3/02
>C12-C35		mg/L	250	228	91	75 - 125	5/3/02
C6-C35		mg/L	500	447	89	75 - 125	5/3/02

TraceAnalysis, Inc. 6701 Aberdeen Ave., Suite 9 Lubbock, TX 79424-1515 (806) 794-1296

Summary Report

Kyle Landreneau
Equilon Kyle Landreneau
PMB 284 40 FM 1960 West
Houston, TX 77090

Report Date: May 17, 2002

Order ID Number: A02050216

Project: EQ-112
TA Job Code: Barber Ranch 3000109
Casualty Code: EQ-112
Project Location: Barber Lea County, New Mexico
Project Address:
Enercon Services Inc. / Midland / Jeff Kindley

Sample	Description	Matrix	Date Taken	Time Taken	Date Received
196167	MW-1	Water	4/30/02	16:30	5/2/02

0 This report consists of a total of 1 page(s) and is intended only as a summary of results for the sample(s) listed above.

	BTEX					Extended TX1005		
Sample - Field Code	Benzene (ppm)	Toluene (ppm)	Ethylbenzene (ppm)	M,P,O-Xylene (ppm)	Total BTEX (ppm)	C6-C12 (ppm)	>C12-C35 (ppm)	C6-C35 (ppm)
196167 - MW-1	0.0128	<0.001	<0.001	<0.001	0.0128	<5.00	<5.00	<5.00

Sample: 196167 - MW-1

Param	Flag	Result	Units
Hydroxide Alkalinity		<1.0	mg/L as CaCo3
Carbonate Alkalinity		<1.0	mg/L as CaCo3
Bicarbonate Alkalinity		452	mg/L as CaCo3
Total Alkalinity		452	mg/L as CaCo3
ferrous iron	[1]	0.28	mg/L
Bromide	[2]	1.18	mg/L
Nitrate-N	[3]	<1.00	mg/L
PO4-P		0.0475	mg/L

[1]Sample was received out of holding time.
[2]Br matrix spikes RPD = 3; %EA = 94.
[3]NO3 matrix spikes RPD = 0; %EA = 91.

This is only a summary. Please, refer to the complete report package for quality control data.

TRACEANALYSIS, INC.

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E-Mail: lab@traceanalysis.com

Analytical and Quality Control Report

Kyle Landreneau
Equilon Kyle Landreneau
PMB 284 40 FM 1960 West
Houston, TX 77090

Report Date: May 17, 2002

Order ID Number: A02050216

Project: EQ-112
TA Job Code: Barber Ranch 3000109
Casualty Code: EQ-112
Project Location: Barber Lea County, New Mexico
Enercon Services Inc. / Midland / Jeff Kindley

Enclosed are the Analytical Results and Quality Control Data Reports for the following samples submitted to Trace-Analysis, Inc.

Sample	Description	Matrix	Date Taken	Time Taken	Date Received
196167	MW-1	Water	4/30/02	16:30	5/2/02

These results represent only the samples received in the laboratory. The Quality Control Report is generated on a batch basis. All information contained in this report is for the analytical batch(es) in which your sample(s) were analyzed. Note: the RDL is equal to MQL for all organic analytes including TPH.
The test results contained within this report meet all requirements of LAC 33:I unless otherwise noted.

This report consists of a total of 9 pages and shall not be reproduced except in its entirety including the chain of custody (COC), without written approval of TraceAnalysis, Inc.

Dr. Blair Leftwich, Director

Analytical Report

Sample: 196167 - MW-1

Analysis: Alkalinity | Analytical Method: E 310.1 | QC Batch: QC20078 | Date Analyzed: 5/3/02
Analyst: RS | Preparation Method: N/A | Prep Batch: PB19249 | Date Prepared: 5/3/02

Param	Flag	Result	Units	Dilution	RDL
Hydroxide Alkalinity		<1.0	mg/L as CaCo3	1	1
Carbonate Alkalinity		<1.0	mg/L as CaCo3	1	1
Bicarbonate Alkalinity		452	mg/L as CaCo3	1	1
Total Alkalinity		452	mg/L as CaCo3	1	1

Sample: 196167 - MW-1

Analysis: BTEX | Analytical Method: S 8021B | QC Batch: QC20035 | Date Analyzed: 5/2/02
Analyst: CG | Preparation Method: S 5030B | Prep Batch: PB19213 | Date Prepared: 5/2/02

Param	Flag	Result	Units	Dilution	RDL
Benzene		0.0128	mg/L	1	0.001
Toluene		<0.001	mg/L	1	0.001
Ethylbenzene		<0.001	mg/L	1	0.001
M,P,O-Xylene		<0.001	mg/L	1	0.001
Total BTEX		0.0128	mg/L	1	0.001

Surrogate	Flag	Result	Units	Dilution	Spike Amount	Percent Recovery	Recovery Limits
TFT		0.0926	mg/L	1	0.10	93	70 - 130
4-BFB		0.099	mg/L	1	0.10	99	70 - 130

Sample: 196167 - MW-1

Analysis: Extended TX1005 | Analytical Method: TX1005 | QC Batch: QC20117 | Date Analyzed: 5/3/02
Analyst: MM | Preparation Method: N/A | Prep Batch: PB19281 | Date Prepared: 5/2/02

Param	Flag	Result	Units	Dilution	RDL
C6-C12		<5.00	mg/L	0.10	50
>C12-C35		<5.00	mg/L	0.10	50
C6-C35		<5.00	mg/L	0.10	50

Surrogate	Flag	Result	Units	Dilution	Spike Amount	Percent Recovery	Recovery Limits
n-Triacontane		13.9	mg/L	1	15	92	70 - 130

Sample: 196167 - MW-1

Analysis: Ferrous Iron | Analytical Method: Hach IR-1 | QC Batch: QC20042 | Date Analyzed: 5/2/02
Analyst: JSW | Preparation Method: N/A | Prep Batch: PB19206 | Date Prepared: 5/2/02

Param	Flag	Result	Units	Dilution	RDL
ferrous iron	[1]	0.28	mg/L	1	0.01

Sample: 196167 - MW-1

Analysis: Ion Chromatography (IC) Analytical Method: E 300.0 QC Batch: QC20103 Date Analyzed: 5/2/02
Analyst: JS Preparation Method: N/A Prep Batch: PB19265 Date Prepared: 5/2/02

Param	Flag	Result	Units	Dilution	RDL
Bromide	[2]	1.18	mg/L	5	0.20
Nitrate-N	[3]	<1.00	mg/L	5	0.20

Sample: 196167 - MW-1

Analysis: PO4 Analytical Method: E 300.0 QC Batch: QC20045 Date Analyzed: 5/2/02
Analyst: JSW Preparation Method: N/A Prep Batch: PB19204 Date Prepared: 5/2/02

Param	Flag	Result	Units	Dilution	RDL
PO4-P		0.0475	mg/L	1	0.01

[1]Sample was received out of holding time.
[2]Br matrix spikes RPD = 3; %EA = 94.
[3]NO3 matrix spikes RPD = 0; %EA = 91.

Quality Control Report
Method Blank

Method Blank

QCBatch: QC20035

Param	Flag	Results	Units	Reporting Limit
Benzene		<0.001	mg/L	0.001
Toluene		<0.001	mg/L	0.001
Ethylbenzene		<0.001	mg/L	0.001
M,P,O-Xylene		<0.001	mg/L	0.001
Total BTEX		<0.001	mg/L	0.001

Surrogate	Flag	Result	Units	Dilution	Spike Amount	Percent Recovery	Recovery Limits
TFT		0.0912	mg/L	1	0.10	91	70 - 130
4-BFB		0.0899	mg/L	1	0.10	90	70 - 130

Method Blank

QCBatch: QC20042

Param	Flag	Results	Units	Reporting Limit
ferrous iron		0.28	mg/L	0.01

Method Blank

QCBatch: QC20045

Param	Flag	Results	Units	Reporting Limit
PO4-P		0.0131	mg/L	0.01

Method Blank

QCBatch: QC20078

Param	Flag	Results	Units	Reporting Limit
Hydroxide Alkalinity		<1.0	mg/L as CaCo3	1
Carbonate Alkalinity		<1.0	mg/L as CaCo3	1
Bicarbonate Alkalinity		<4.0	mg/L as CaCo3	1
Total Alkalinity		<4.0	mg/L as CaCo3	1

Method Blank

QCBatch: QC20103

Param	Flag	Results	Units	Reporting Limit
Bromide		<0.2	mg/L	0.20

Continued ...

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Param	Flag	Results	Units	Reporting Limit
Nitrate-N		<0.2	mg/L	0.20

Method Blank

QCBatch: QC20117

Param	Flag	Results	Units	Reporting Limit
C6-C12		<5.00	mg/L	50
>C12-C35		<5.00	mg/L	50
C6-C35		<5.00	mg/L	50

Surrogate	Flag	Result	Units	Dilution	Spike Amount	Percent Recovery	Recovery Limits
n-Triacontane		15.3	mg/L	0.10	15	102	70 - 130

Quality Control Report
Duplicate Samples

Duplicate

QCBatch: QC20078

Param	Flag	Duplicate Result	Sample Result	Units	Dilution	RPD	RPD Limit
Hydroxide Alkalinity		<1.0	<1.0	mg/L as CaCo3	1	0	9.2
Carbonate Alkalinity		<1.0	<1.0	mg/L as CaCo3	1	0	9.2
Bicarbonate Alkalinity		46	48	mg/L as CaCo3	1	4	9.2
Total Alkalinity		46	48	mg/L as CaCo3	1	4	9.2

Quality Control Report
Lab Control Spikes and Duplicate Spikes

Laboratory Control Spikes

QCBatch: QC20035

Param	LCS Result	LCSD Result	Units	Dil.	Spike Amount Added	Matrix Result	% Rec	RPD	% Rec Limit	RPD Limit
MTBE	0.103	0.103	mg/L	1	0.10	<0.001	103	0	70 - 130	20
Benzene	0.101	0.0998	mg/L	1	0.10	<0.001	101	1	70 - 130	20
Toluene	0.0975	0.0972	mg/L	1	0.10	<0.001	98	0	70 - 130	20
Ethylbenzene	0.0984	0.100	mg/L	1	0.10	<0.001	98	2	70 - 130	20
M,P,O-Xylene	0.295	0.297	mg/L	1	0.30	<0.001	98	1	70 - 130	20

Percent recovery is based on the spike result. RPD is based on the spike and spike duplicate result.

Surrogate	LCS Result	LCSD Result	Units	Dilution	Spike Amount	LCS % Rec	LCSD % Rec	Recovery Limits
TFT	0.0918	0.0916	mg/L	1	0.10	92	92	70 - 130

Continued ...

Surrogate	LCS Result	LCSD Result	Units	Dilution	Spike Amount	LCS % Rec	LCSD % Rec	Recovery Limits
4-BFB	0.0887	0.0908	mg/L	1	0.10	89	91	70 - 130

Laboratory Control Spikes

QCBatch: QC20045

Param	LCS Result	LCSD Result	Units	Dil.	Spike Amount Added	Matrix Result	% Rec	RPD	% Rec Limit	RPD Limit
PO4-P	0.0661	0.0661	mg/L	1	0.06	0.0131	101	0	90 - 120	20

Percent recovery is based on the spike result. RPD is based on the spike and spike duplicate result.

Laboratory Control Spikes

QCBatch: QC20103

Param	LCS Result	LCSD Result	Units	Dil.	Spike Amount Added	Matrix Result	% Rec	RPD	% Rec Limit	RPD Limit
Chloride	11.98	2.37	mg/L	1	12.50	<1.0	95	0	90 - 110	20

Percent recovery is based on the spike result. RPD is based on the spike and spike duplicate result.

Laboratory Control Spikes

QCBatch: QC20117

Param	LCS Result	LCSD Result	Units	Dil.	Spike Amount Added	Matrix Result	% Rec	RPD	% Rec Limit	RPD Limit
C6-C12	24.6	23.8	mg/L	0.10	250	<5.00	98	3	70 - 130	20
>C12-C35	24.9	24.4	mg/L	0.10	250	<5.00	99	2	70 - 130	20
C6-C35	49.5	< 50	mg/L	0.10	500	<5.00	99	2	70 - 130	20

Percent recovery is based on the spike result. RPD is based on the spike and spike duplicate result.

Surrogate	LCS Result	LCSD Result	Units	Dilution	Spike Amount	LCS % Rec	LCSD % Rec	Recovery Limits
n-Triacontane	16.2	15.5	mg/L	0.10	15	108	103	70 - 130

Quality Control Report
Matrix Spikes and Duplicate Spikes

Matrix Spikes

QCBatch: QC20045

Param	MS Result	MSD Result	Units	Dil.	Spike Amount Added	Matrix Result	% Rec	RPD	% Rec Limit	RPD Limit
PO4-P	0.111	0.110	mg/L	1	0.06	0.0475	97	1	80 - 135	20

Percent recovery is based on the spike result. RPD is based on the spike and spike duplicate result.

Quality Control Report

Continuing Calibration Verification Standards

CCV (1) QCBatch: QC20035

Param	Flag	Units	CCVs True Conc.	CCVs Found Conc.	CCVs Percent Recovery	Percent Recovery Limits	Date Analyzed
MTBE		mg/L	0.10	0.094	94	85 - 115	5/2/02
Benzene		mg/L	0.10	0.0998	100	85 - 115	5/2/02
Toluene		mg/L	0.10	0.0964	96	85 - 115	5/2/02
Ethylbenzene		mg/L	0.10	0.0976	98	85 - 115	5/2/02
M,P,O-Xylene		mg/L	0.30	0.291	97	85 - 115	5/2/02

CCV (2) QCBatch: QC20035

Param	Flag	Units	CCVs True Conc.	CCVs Found Conc.	CCVs Percent Recovery	Percent Recovery Limits	Date Analyzed
MTBE		mg/L	0.10	0.0968	96	85 - 115	5/2/02
Benzene		mg/L	0.10	0.0979	97	85 - 115	5/2/02
Toluene		mg/L	0.10	0.0975	97	85 - 115	5/2/02
Ethylbenzene		mg/L	0.10	0.0986	98	85 - 115	5/2/02
M,P,O-Xylene		mg/L	0.30	0.294	98	85 - 115	5/2/02

ICV (1) QCBatch: QC20035

Param	Flag	Units	CCVs True Conc.	CCVs Found Conc.	CCVs Percent Recovery	Percent Recovery Limits	Date Analyzed
MTBE		mg/L	0.10	0.098	98	85 - 115	5/2/02
Benzene		mg/L	0.10	0.097	97	85 - 115	5/2/02
Toluene		mg/L	0.10	0.0968	97	85 - 115	5/2/02
Ethylbenzene		mg/L	0.10	0.102	102	85 - 115	5/2/02
M,P,O-Xylene		mg/L	0.30	0.304	101	85 - 115	5/2/02

CCV (1) QCBatch: QC20045

Param	Flag	Units	CCVs True Conc.	CCVs Found Conc.	CCVs Percent Recovery	Percent Recovery Limits	Date Analyzed
PO4-P		mg/L	0.06	0.0661	101	85 - 115	5/2/02

ICV (1) QCBatch: QC20045

Param	Flag	Units	CCVs True Conc.	CCVs Found Conc.	CCVs Percent Recovery	Percent Recovery Limits	Date Analyzed
PO4-P		mg/L	0.06	0.0707	108	85 - 115	5/2/02

CCV (1) QCBatch: QC20078

Param	Flag	Units	CCVs True Conc.	CCVs Found Conc.	CCVs Percent Recovery	Percent Recovery Limits	Date Analyzed
Hydroxide Alkalinity		mg/L as CaCo3	0	<1.0	0	90 - 110	5/3/02
Carbonate Alkalinity		mg/L as CaCo3	0	232	0	90 - 110	5/3/02
Bicarbonate Alkalinity		mg/L as CaCo3	0	10	0	90 - 110	5/3/02
Total Alkalinity		mg/L as CaCo3	250	242	96	90 - 110	5/3/02

ICV (1) QCBatch: QC20078

Param	Flag	Units	CCVs True Conc.	CCVs Found Conc.	CCVs Percent Recovery	Percent Recovery Limits	Date Analyzed
Hydroxide Alkalinity		mg/L as CaCo3	0	<1.0	0	90 - 110	5/3/02
Carbonate Alkalinity		mg/L as CaCo3	0	228	0	90 - 110	5/3/02
Bicarbonate Alkalinity		mg/L as CaCo3	0	16	0	90 - 110	5/3/02
Total Alkalinity		mg/L as CaCo3	250	244	97	90 - 110	5/3/02

CCV (1) QCBatch: QC20103

Param	Flag	Units	CCVs True Conc.	CCVs Found Conc.	CCVs Percent Recovery	Percent Recovery Limits	Date Analyzed
Chloride		mg/L	12.50	12.11	96	90 - 110	5/2/02

ICV (1) QCBatch: QC20103

Param	Flag	Units	CCVs True Conc.	CCVs Found Conc.	CCVs Percent Recovery	Percent Recovery Limits	Date Analyzed
Chloride		mg/L	12.50	11.62	92	90 - 110	5/2/02

CCV (1) QCBatch: QC20117

Continued ...

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Param	Flag	Units	CCVs True Conc.	CCVs Found Conc.	CCVs Percent Recovery	Percent Recovery Limits	Date Analyzed
C6-C12		mg/L	250	231	92	75 - 125	5/3/02
>C12-C35		mg/L	250	238	95	75 - 125	5/3/02
C6-C35		mg/L	500	469	93	75 - 125	5/3/02

ICV (1) QCBatch: QC20117

Param	Flag	Units	CCVs True Conc.	CCVs Found Conc.	CCVs Percent Recovery	Percent Recovery Limits	Date Analyzed
C6-C12		mg/L	250	219	87	75 - 125	5/3/02
>C12-C35		mg/L	250	228	91	75 - 125	5/3/02
C6-C35		mg/L	500	447	89	75 - 125	5/3/02

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Fax (915) 585-4944
1 (888) 588-3443

CHAIN-OF-CUSTODY AND ANALYSIS REQUEST

LAB Order ID # 402050216

Company Name: Environ Services
Phone #: 915-570-8726
Address: (Street, City, Zip) 306 West Wall, Suite 1312, Midland, Tx 79701
Fax #: 915-684-7587
Contact Person: Jeffrey Kindley
Invoice to: (if different from above) Equiva Services Kyle Lambermon
Equiva #
Project #: EQ-112
Project Name: Barber Ranch
Project Location: Barber Lea County, New Mexico
Sampler Signature: Jeffrey Kindley

LAB # (LAB USE ONLY)	FIELD CODE	# CONTAINERS	Volume/Amount	MATRIX: WATER	SOIL	AIR	SLUDGE	PRESERVATIVE METHOD: HCl	HNO_3	H_2SO_4	NaOH	ICE	NONE	SAMPLING: DATE	TIME
19616	MW-1	1	1 Liter	✓									✓	04/30/02	1630
	MW-1	1	1 Liter	✓									✓	04/30/02	1630
	MW-1	6	40ml	✓				✓						04/30/02	1630

ANALYSIS REQUEST
(Circle or Specify Method No.)

	MTBE 8021B/602	BTEX 8021B/602	TPH ~~418.1~~/TX1005	PAH 8270C	Total Metals Ag As Ba Cd Cr Pb Se Hg 6010B/200.7	TCLP Metals Ag As Ba Cd Cr Pb Se Hg	TCLP Volatiles	TCLP Semi Volatiles	TCLP Pesticides	RCI	GC/MS Vol. 8260B/624	GC/MS Semi. Vol. 8270C/625	PCB's 8082/608	Pesticides 8081A/608	BOD, TSS, pH	Carbonates (Tot. Alk/310.1 mod.)	Bromides/Phosphates/Nitrates (EC-300 Series)	Ferrous Iron (Fe II - 3500 FED)			Turn Around Time if different from standard	Hold
		8021B	TX 1005 extended to C38 with report																		
		✓	✓													✓	✓	✓			

Relinquished by: Jeffrey Kindley Date: Apr 30, 2002 Time: 1800
Received by: Date: Time:
Relinquished by: Date: Time:
Received by: Date: Time:
Relinquished by: Date: Time:
Received at Laboratory by: Date: Time:

LAB USE ONLY
Intact (Y) N
Headspace Y / N
Temp 2 °
Log-in Review

REMARKS:
PAH not run, lab error notified Jeff 5/17; will re-sample next week. MB.
P+F 5/17/02

☐ Check If Special Reporting Limits Are Needed

Carrier # Fed Ex 902 8779287

Submittal of samples constitutes agreement to Terms and Conditions listed on reverse side of C.O.C.

ORIGINAL COPY

Summary Report

Jeff Kindley
Enercon Services Inc.
306 W. Wall Suite 1312
Midland, Tx. 79701

Report Date: May 28, 2002

Order ID Number: A02050218

Project Number: EQ-112
Project Name: Barber Ranch 3000109
Project Location: Barber Lea County, New Mexico

Sample	Description	Matrix	Date Taken	Time Taken	Date Received
196173	MW-2 (13-15')	Soil	4/30/02	16:12	5/2/02
196174	MW-2 (23-25')	Soil	4/30/02	16:50	5/2/02

0 This report consists of a total of 4 page(s) and is intended only as a summary of results for the sample(s) listed above.

Sample: 196173 - MW-2 (13-15')

Param	Flag	Result	Units
Bromochloromethane		<1.00	µg/L
Dichlorodifluoromethane		<1.00	µg/L
Chloromethane (methyl chloride)		<1.00	µg/L
Vinyl Chloride		<1.00	µg/L
Bromomethane (methyl bromide)		<5.00	µg/L
Chloroethane		<1.00	µg/L
Trichlorofluoromethane		<1.00	µg/L
Acetone		<10.0	µg/L
Iodomethane (methyl iodide)		<5.00	µg/L
Carbon Disulfide		<1.00	µg/L
Acrylonitrile		<1.00	µg/L
2-Butanone (MEK)		<5.00	µg/L
4-methyl-2-pentanone (MIBK)		<5.00	µg/L
2-hexanone		<5.00	µg/L
trans 1,4-Dichloro-2-butene		<10.0	µg/L
1,1-Dichloroethene		<1.00	µg/L
Methylene chloride		<5.00	µg/L
MTBE		<1.00	µg/L
trans-1,2-Dichloroethene		<1.00	µg/L
1,1-Dichloroethane		<1.00	µg/L
cis-1,2-Dichloroethene		<1.00	µg/L
2,2-Dichloropropane		<1.00	µg/L
1,2-Dichloroethane (EDC)		<1.00	µg/L
Chloroform		<1.00	µg/L
1,1,1-Trichloroethane		<1.00	µg/L
1,1-Dichloropropene		<1.00	µg/L
Benzene		<1.00	µg/L

Continued on next page ...

Sample 196173 continued ...

Param	Flag	Result	Units
Carbon Tetrachloride		<1.00	µg/L
1,2-Dichloropropane		<1.00	µg/L
Trichloroethene (TCE)		<1.00	µg/L
Dibromomethane (methylene bromide)		<1.00	µg/L
Bromodichloromethane		<1.00	µg/L
2-Chloroethyl vinyl ether		<5.00	µg/L
cis-1,3-Dichloropropene		<1.00	µg/L
trans-1,3-Dichloropropene		<1.00	µg/L
Toluene		3.17	µg/L
1,1,2-Trichloroethane		<1.00	µg/L
1,3-Dichloropropane		<1.00	µg/L
Dibromochloromethane		<1.00	µg/L
1,2-Dibromoethane (EDB)		<1.00	µg/L
Tetrachloroethene (PCE)		<1.00	µg/L
Chlorobenzene		<1.00	µg/L
1,1,1,2-Tetrachloroethane		<1.00	µg/L
Ethylbenzene		18.8	µg/L
m,p-Xylene		30.9	µg/L
Bromoform		<1.00	µg/L
Styrene		<1.00	µg/L
o-Xylene		<1.00	µg/L
1,1,2,2-Tetrachloroethane		<1.00	µg/L
2-Chlorotoluene		<1.00	µg/L
1,2,3-Trichloropropane		<1.00	µg/L
Isopropylbenzene		40.6	µg/L
Bromobenzene		<1.00	µg/L
n-Propylbenzene		13.6	µg/L
1,3,5-Trimethylbenzene		47.5	µg/L
tert-Butylbenzene		<1.00	µg/L
1,2,4-Trimethylbenzene		167	µg/L
1,4-Dichlorobenzene (para)		<1.00	µg/L
sec-Butylbenzene		12.7	µg/L
1,3-Dichlorobenzene (meta)		<1.00	µg/L
p-Isopropyltoluene		10.2	µg/L
4-Chlorotoluene		<1.00	µg/L
1,2-Dichlorobenzene (ortho)		<1.00	µg/L
n-Butylbenzene		1.73	µg/L
1,2-Dibromo-3-chloropropane		<5.00	µg/L
1,2,3-Trichlorobenzene		<5.00	µg/L
1,2,4-Trichlorobenzene		<5.00	µg/L
Naphthalene		26.4	µg/L
Hexachlorobutadiene		<5.00	µg/L

Sample: 196174 - MW-2 (23-25')

Param	Flag	Result	Units
Bromochloromethane		<1.00	µg/L
Dichlorodifluoromethane		<1.00	µg/L
Chloromethane (methyl chloride)		<1.00	µg/L

Continued on next page ...

Sample 196174 continued ...

Param	Flag	Result	Units
Vinyl Chloride		<1.00	µg/L
Bromomethane (methyl bromide)		<5.00	µg/L
Chloroethane		<1.00	µg/L
Trichlorofluoromethane		<1.00	µg/L
Acetone		<10.0	µg/L
Iodomethane (methyl iodide)		<5.00	µg/L
Carbon Disulfide		<1.00	µg/L
Acrylonitrile		<1.00	µg/L
2-Butanone (MEK)		<5.00	µg/L
4-methyl-2-pentanone (MIBK)		<5.00	µg/L
2-hexanone		<5.00	µg/L
trans 1,4-Dichloro-2-butene		<10.0	µg/L
1,1-Dichloroethene		<1.00	µg/L
Methylene chloride		<5.00	µg/L
MTBE		<1.00	µg/L
trans-1,2-Dichloroethene		<1.00	µg/L
1,1-Dichloroethane		<1.00	µg/L
cis-1,2-Dichloroethene		<1.00	µg/L
2,2-Dichloropropane		<1.00	µg/L
1,2-Dichloroethane (EDC)		<1.00	µg/L
Chloroform		<1.00	µg/L
1,1,1-Trichloroethane		<1.00	µg/L
1,1-Dichloropropene		<1.00	µg/L
Benzene		1.22	µg/L
Carbon Tetrachloride		<1.00	µg/L
1,2-Dichloropropane		<1.00	µg/L
Trichloroethene (TCE)		<1.00	µg/L
Dibromomethane (methylene bromide)		<1.00	µg/L
Bromodichloromethane		<1.00	µg/L
2-Chloroethyl vinyl ether		<5.00	µg/L
cis-1,3-Dichloropropene		<1.00	µg/L
trans-1,3-Dichloropropene		<1.00	µg/L
Toluene		1.25	µg/L
1,1,2-Trichloroethane		<1.00	µg/L
1,3-Dichloropropane		<1.00	µg/L
Dibromochloromethane		<1.00	µg/L
1,2-Dibromoethane (EDB)		<1.00	µg/L
Tetrachloroethene (PCE)		<1.00	µg/L
Chlorobenzene		<1.00	µg/L
1,1,1,2-Tetrachloroethane		<1.00	µg/L
Ethylbenzene		23.5	µg/L
m,p-Xylene		74.2	µg/L
Bromoform		<1.00	µg/L
Styrene		<1.00	µg/L
o-Xylene		19.3	µg/L
1,1,2,2-Tetrachloroethane		<1.00	µg/L
2-Chlorotoluene		<1.00	µg/L
1,2,3-Trichloropropane		<1.00	µg/L
Isopropylbenzene		10.1	µg/L
Bromobenzene		<1.00	µg/L

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Sample 196174 continued ...

Param	Flag	Result	Units
n-Propylbenzene		11.9	µg/L
1,3,5-Trimethylbenzene		30.8	µg/L
tert-Butylbenzene		<1.00	µg/L
1,2,4-Trimethylbenzene		80.2	µg/L
1,4-Dichlorobenzene (para)		<1.00	µg/L
sec-Butylbenzene		4.73	µg/L
1,3-Dichlorobenzene (meta)		<1.00	µg/L
p-Isopropyltoluene		3.90	µg/L
4-Chlorotoluene		<1.00	µg/L
1,2-Dichlorobenzene (ortho)		<1.00	µg/L
n-Butylbenzene		3.65	µg/L
1,2-Dibromo-3-chloropropane		<5.00	µg/L
1,2,3-Trichlorobenzene		<5.00	µg/L
1,2,4-Trichlorobenzene		<5.00	µg/L
Naphthalene		29.4	µg/L
Hexachlorobutadiene		<5.00	µg/L

Summary Report

Jeff Kindley
Enercon Services Inc.
306 W. Wall Suite 1312
Midland, Tx. 79701

Report Date: May 28, 2002

Order ID Number: A02050218

Project Number: EQ-112
Project Name: Barber Ranch 3000109
Project Location: Barber Lea County, New Mexico

Sample	Description	Matrix	Date Taken	Time Taken	Date Received
196173	MW-2 (13-15')	Soil	4/30/02	16:12	5/2/02
196174	MW-2 (23-25')	Soil	4/30/02	16:50	5/2/02

0 This report consists of a total of 5 page(s) and is intended only as a summary of results for the sample(s) listed above.

Sample: 196173 - MW-2 (13-15')

Param	Flag	Result	Units
Pyridine		<0.005	mg/Kg
n-Nitrosodimethylamine		<0.005	mg/Kg
2-Picoline		<0.005	mg/Kg
Methyl methanesulfonate		<0.005	mg/Kg
Ethyl methanesulfonate		<0.005	mg/Kg
Phenol		<0.005	mg/Kg
Aniline		<0.005	mg/Kg
bis (2-chloroethyl) ether		<0.005	mg/Kg
2-Chlorophenol		<0.005	mg/Kg
1,3-Dichlorobenzene (meta)		<0.005	mg/Kg
1,4-Dichlorobenzene		<0.005	mg/Kg
Benzyl alcohol		<0.005	mg/Kg
1,2-Dichlorobenzene		<0.005	mg/Kg
2-Methylphenol		<0.005	mg/Kg
bis (2-chloroisopropyl) ether		<0.005	mg/Kg
4-Methylphenol/3-Methylphenol		<0.005	mg/Kg
Acetophenone		<0.005	mg/Kg
n-Nitrosodi-n-propylamine		<0.005	mg/Kg
Hexachloroethane		<0.005	mg/Kg
Nitrobenzene		<0.005	mg/Kg
n-Nitrosopiperidine		<0.005	mg/Kg
Isophorone		<0.005	mg/Kg
2-Nitrophenol		<0.005	mg/Kg
2,4-Dimethylphenol		<0.005	mg/Kg
bis (2-chloroethoxy) methane		<0.005	mg/Kg
Benzoic acid		<0.005	mg/Kg
2,4-Dichlorophenol		<0.005	mg/Kg

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Sample 196173 continued ...

Param	Flag	Result	Units
1,2,4-Trichlorobenzene		<0.005	mg/Kg
a,a-Dimethylphenethylamine		<0.005	mg/Kg
Naphthalene		0.009	mg/Kg
4-Chloroaniline		<0.005	mg/Kg
2,6-Dichlorophenol		<0.005	mg/Kg
Hexachlorobutadiene		<0.005	mg/Kg
n-Nitroso-di-n-butylamine		<0.005	mg/Kg
4-Chloro-3-methylphenol		<0.005	mg/Kg
1-Methylnaphthalene		0.023	mg/Kg
2-Methylnaphthalene		0.020	mg/Kg
1,2,4,5-Tetrachlorobenzene		<0.005	mg/Kg
Hexachlorocyclopentadiene		<0.005	mg/Kg
2,4,6-Trichlorophenol		<0.005	mg/Kg
2,4,5-Trichlorophenol		<0.005	mg/Kg
2-Chloronaphthalene		<0.005	mg/Kg
1-Chloronaphthalene		<0.005	mg/Kg
2-Nitroaniline		<0.005	mg/Kg
Dimethylphthalate		<0.005	mg/Kg
Acenaphthylene		<0.005	mg/Kg
2,6-Dinitrotoluene		<0.005	mg/Kg
3-Nitroaniline		<0.005	mg/Kg
Acenaphthene		<0.005	mg/Kg
2,4-Dinitrophenol		<0.005	mg/Kg
Dibenzofuran		<0.005	mg/Kg
Pentachlorobenzene		<0.005	mg/Kg
4-Nitrophenol		<0.005	mg/Kg
1-Naphthylamine		<0.005	mg/Kg
2,4-Dinitrotoluene		<0.005	mg/Kg
2-Naphthylamine		<0.005	mg/Kg
2,3,4,6-Tetrachlorophenol		<0.005	mg/Kg
Fluorene		<0.005	mg/Kg
Diethylphthalate		<0.005	mg/Kg
4-Chlorophenyl-phenylether		<0.005	mg/Kg
4-Nitroaniline		<0.005	mg/Kg
4,6-Dinitro-2-methylphenol		<0.005	mg/Kg
Diphenylamine		<0.005	mg/Kg
Diphenylhydrazine		<0.005	mg/Kg
4-Bromophenyl-phenylether		<0.005	mg/Kg
Phenacetin		<0.005	mg/Kg
Hexachlorobenzene		<0.005	mg/Kg
4-Aminobiphenyl		<0.005	mg/Kg
Pentachlorophenol		<0.005	mg/Kg
Pentachloronitrobenzene		<0.005	mg/Kg
Pronamide		<0.005	mg/Kg
Phenanthrene		<0.005	mg/Kg
Anthracene		<0.005	mg/Kg
Di-n-butylphthalate		<0.005	mg/Kg
Fluoranthene		<0.005	mg/Kg
Benzidine		<0.005	mg/Kg
Pyrene		<0.005	mg/Kg

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Sample 196173 continued ...

Param	Flag	Result	Units
p-Dimethylaminoazobenzene		<0.005	mg/Kg
Butylbenzylphthalate		<0.005	mg/Kg
Benzo(a)anthracene		<0.005	mg/Kg
3,3-Dichlorobenzidine		<0.005	mg/Kg
Chrysene		<0.005	mg/Kg
Bis (2-ethylhexyl) phthalate		<0.005	mg/Kg
Di-n-octylphthalate		<0.005	mg/Kg
Benzo(b)fluoranthene		<0.005	mg/Kg
7,12-Dimethylbenz(a)anthracene		<0.005	mg/Kg
Benzo(k)fluoranthene		<0.005	mg/Kg
Benzo(a)pyrene		<0.005	mg/Kg
3-Methylcholanthrene		<0.005	mg/Kg
Dibenzo(a,j)acridine		<0.005	mg/Kg
Indeno(1,2,3-cd)pyrene		<0.005	mg/Kg
Dibenzo(a,h)anthracene		<0.005	mg/Kg
Benzo(g,h,i)perylene		<0.005	mg/Kg

Sample: 196174 - MW-2 (23-25')

Param	Flag	Result	Units
Pyridine		<0.005	mg/Kg
n-Nitrosodimethylamine		<0.005	mg/Kg
2-Picoline		<0.005	mg/Kg
Methyl methanesulfonate		<0.005	mg/Kg
Ethyl methanesulfonate		<0.005	mg/Kg
Phenol		<0.005	mg/Kg
Aniline		<0.005	mg/Kg
bis (2-chloroethyl) ether		<0.005	mg/Kg
2-Chlorophenol		<0.005	mg/Kg
1,3-Dichlorobenzene (meta)		<0.005	mg/Kg
1,4-Dichlorobenzene		<0.005	mg/Kg
Benzyl alcohol		<0.005	mg/Kg
1,2-Dichlorobenzene		<0.005	mg/Kg
2-Methylphenol		<0.005	mg/Kg
bis (2-chloroisopropyl) ether		<0.005	mg/Kg
4-Methylphenol/3-Methylphenol		<0.005	mg/Kg
Acetophenone		<0.005	mg/Kg
n-Nitrosodi-n-propylamine		<0.005	mg/Kg
Hexachloroethane		<0.005	mg/Kg
Nitrobenzene		<0.005	mg/Kg
n-Nitrosopiperidine		<0.005	mg/Kg
Isophorone		<0.005	mg/Kg
2-Nitrophenol		<0.005	mg/Kg
2,4-Dimethylphenol		<0.005	mg/Kg
bis (2-chloroethoxy) methane		<0.005	mg/Kg
Benzoic acid		<0.005	mg/Kg
2,4-Dichlorophenol		<0.005	mg/Kg
1,2,4-Trichlorobenzene		<0.005	mg/Kg
a,a-Dimethylphenethylamine		<0.005	mg/Kg

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Sample 196174 continued ...

Param	Flag	Result	Units
Naphthalene		0.010	mg/Kg
4-Chloroaniline		<0.005	mg/Kg
2,6-Dichlorophenol		<0.005	mg/Kg
Hexachlorobutadiene		<0.005	mg/Kg
n-Nitroso-di-n-butylamine		<0.005	mg/Kg
4-Chloro-3-methylphenol		<0.005	mg/Kg
1-Methylnaphthalene		0.018	mg/Kg
2-Methylnaphthalene		0.018	mg/Kg
1,2,4,5-Tetrachlorobenzene		<0.005	mg/Kg
Hexachlorocyclopentadiene		<0.005	mg/Kg
2,4,6-Trichlorophenol		<0.005	mg/Kg
2,4,5-Trichlorophenol		<0.005	mg/Kg
2-Chloronaphthalene		<0.005	mg/Kg
1-Chloronaphthalene		<0.005	mg/Kg
2-Nitroaniline		<0.005	mg/Kg
Dimethylphthalate		<0.005	mg/Kg
Acenaphthylene		<0.005	mg/Kg
2,6-Dinitrotoluene		<0.005	mg/Kg
3-Nitroaniline		<0.005	mg/Kg
Acenaphthene		<0.005	mg/Kg
2,4-Dinitrophenol		<0.005	mg/Kg
Dibenzofuran		<0.005	mg/Kg
Pentachlorobenzene		<0.005	mg/Kg
4-Nitrophenol		<0.005	mg/Kg
1-Naphthylamine		<0.005	mg/Kg
2,4-Dinitrotoluene		<0.005	mg/Kg
2-Naphthylamine		<0.005	mg/Kg
2,3,4,6-Tetrachlorophenol		<0.005	mg/Kg
Fluorene		<0.005	mg/Kg
Diethylphthalate		<0.005	mg/Kg
4-Chlorophenyl-phenylether		<0.005	mg/Kg
4-Nitroaniline		<0.005	mg/Kg
4,6-Dinitro-2-methylphenol		<0.005	mg/Kg
Diphenylamine		<0.005	mg/Kg
Diphenylhydrazine		<0.005	mg/Kg
4-Bromophenyl-phenylether		<0.005	mg/Kg
Phenacetin		<0.005	mg/Kg
Hexachlorobenzene		<0.005	mg/Kg
4-Aminobiphenyl		<0.005	mg/Kg
Pentachlorophenol		<0.005	mg/Kg
Pentachloronitrobenzene		<0.005	mg/Kg
Pronamide		<0.005	mg/Kg
Phenanthrene		<0.005	mg/Kg
Anthracene		<0.005	mg/Kg
Di-n-butylphthalate		<0.005	mg/Kg
Fluoranthene		<0.005	mg/Kg
Benzidine		<0.005	mg/Kg
Pyrene		<0.005	mg/Kg
p-Dimethylaminoazobenzene		<0.005	mg/Kg
Butylbenzylphthalate		<0.005	mg/Kg

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Sample 196174 continued ...

Param	Flag	Result	Units
Benzo(a)anthracene		<0.005	mg/Kg
3,3-Dichlorobenzidine		<0.005	mg/Kg
Chrysene		<0.005	mg/Kg
Bis (2-ethylhexyl) phthalate		<0.005	mg/Kg
Di-n-octylphthalate		<0.005	mg/Kg
Benzo(b)fluoranthene		<0.005	mg/Kg
7,12-Dimethylbenz(a)anthracene		<0.005	mg/Kg
Benzo(k)fluoranthene		<0.005	mg/Kg
Benzo(a)pyrene		<0.005	mg/Kg
3-Methylcholanthrene		<0.005	mg/Kg
Dibenzo(a,j)acridine		<0.005	mg/Kg
Indeno(1,2,3-cd)pyrene		<0.005	mg/Kg
Dibenzo(a,h)anthracene		<0.005	mg/Kg
Benzo(g,h,i)perylene		<0.005	mg/Kg

TRACEANALYSIS, INC.

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Analytical and Quality Control Report

Jeff Kindley
Enercon Services Inc.
306 W. Wall Suite 1312
Midland, Tx. 79701

Report Date: May 28, 2002

Order ID Number: A02050218

Project Number: EQ-112
Project Name: Barber Ranch 3000109
Project Location: Barber Lea County, New Mexico

Enclosed are the Analytical Results and Quality Control Data Reports for the following samples submitted to Trace-Analysis, Inc.

Sample	Description	Matrix	Date Taken	Time Taken	Date Received
196173	MW-2 (13-15')	Soil	4/30/02	16:12	5/2/02
196174	MW-2 (23-25')	Soil	4/30/02	16:50	5/2/02

These results represent only the samples received in the laboratory. The Quality Control Report is generated on a batch basis. All information contained in this report is for the analytical batch(es) in which your sample(s) were analyzed. Note: the RDL is equal to MQL for all organic analytes including TPH.
The test results contained within this report meet all requirements of LAC 33:I unless otherwise noted.

This report consists of a total of 8 pages and shall not be reproduced except in its entirety including the chain of custody (COC), without written approval of TraceAnalysis, Inc.

Dr. Blair Leftwich, Director

Analytical Report

Sample: 196173 - MW-2 (13-15')

Analysis: SPLP Volatiles | Analytical Method: S 8260B | QC Batch: QC20510 | Date Analyzed: 5/20/02
Analyst: JG | Preparation Method: 1312 | Prep Batch: PB19572 | Date Prepared: 5/14/02

Param	Flag	Result	Units	Dilution	RDL
Bromochloromethane		<1.00	µg/L	1	1
Dichlorodifluoromethane		<1.00	µg/L	1	1
Chloromethane (methyl chloride)		<1.00	µg/L	1	1
Vinyl Chloride		<1.00	µg/L	1	1
Bromomethane (methyl bromide)		<5.00	µg/L	1	5
Chloroethane		<1.00	µg/L	1	1
Trichlorofluoromethane		<1.00	µg/L	1	1
Acetone		<10.0	µg/L	1	10
Iodomethane (methyl iodide)		<5.00	µg/L	1	5
Carbon Disulfide		<1.00	µg/L	1	1
Acrylonitrile		<1.00	µg/L	1	1
2-Butanone (MEK)		<5.00	µg/L	1	5
4-methyl-2-pentanone (MIBK)		<5.00	µg/L	1	5
2-hexanone		<5.00	µg/L	1	5
trans 1,4-Dichloro-2-butene		<10.0	µg/L	1	10
1,1-Dichloroethene		<1.00	µg/L	1	1
Methylene chloride		<5.00	µg/L	1	5
MTBE		<1.00	µg/L	1	1
trans-1,2-Dichloroethene		<1.00	µg/L	1	1
1,1-Dichloroethane		<1.00	µg/L	1	1
cis-1,2-Dichloroethene		<1.00	µg/L	1	1
2,2-Dichloropropane		<1.00	µg/L	1	1
1,2-Dichloroethane (EDC)		<1.00	µg/L	1	1
Chloroform		<1.00	µg/L	1	1
1,1,1-Trichloroethane		<1.00	µg/L	1	1
1,1-Dichloropropene		<1.00	µg/L	1	1
Benzene		<1.00	µg/L	1	1
Carbon Tetrachloride		<1.00	µg/L	1	1
1,2-Dichloropropane		<1.00	µg/L	1	1
Trichloroethene (TCE)		<1.00	µg/L	1	1
Dibromomethane (methylene bromide)		<1.00	µg/L	1	1
Bromodichloromethane		<1.00	µg/L	1	1
2-Chloroethyl vinyl ether		<5.00	µg/L	1	5
cis-1,3-Dichloropropene		<1.00	µg/L	1	1
trans-1,3-Dichloropropene		<1.00	µg/L	1	1
Toluene		3.17	µg/L	1	1
1,1,2-Trichloroethane		<1.00	µg/L	1	1
1,3-Dichloropropane		<1.00	µg/L	1	1
Dibromochloromethane		<1.00	µg/L	1	1
1,2-Dibromoethane (EDB)		<1.00	µg/L	1	1
Tetrachloroethene (PCE)		<1.00	µg/L	1	1
Chlorobenzene		<1.00	µg/L	1	1
1,1,1,2-Tetrachloroethane		<1.00	µg/L	1	1
Ethylbenzene		18.8	µg/L	1	1
m,p-Xylene		30.9	µg/L	1	1
Bromoform		<1.00	µg/L	1	1

Continued ...

... *Continued* Sample: 196173 Analysis: SPLP Volatiles

Param	Flag	Result	Units	Dilution	RDL
Styrene		<1.00	µg/L	1	1
o-Xylene		<1.00	µg/L	1	1
1,1,2,2-Tetrachloroethane		<1.00	µg/L	1	1
2-Chlorotoluene		<1.00	µg/L	1	1
1,2,3-Trichloropropane		<1.00	µg/L	1	1
Isopropylbenzene		40.6	µg/L	1	1
Bromobenzene		<1.00	µg/L	1	1
n-Propylbenzene		13.6	µg/L	1	1
1,3,5-Trimethylbenzene		47.5	µg/L	1	1
tert-Butylbenzene		<1.00	µg/L	1	1
1,2,4-Trimethylbenzene		167	µg/L	1	1
1,4-Dichlorobenzene (para)		<1.00	µg/L	1	1
sec-Butylbenzene		12.7	µg/L	1	1
1,3-Dichlorobenzene (meta)		<1.00	µg/L	1	1
p-Isopropyltoluene		10.2	µg/L	1	1
4-Chlorotoluene		<1.00	µg/L	1	1
1,2-Dichlorobenzene (ortho)		<1.00	µg/L	1	1
n-Butylbenzene		1.73	µg/L	1	1
1,2-Dibromo-3-chloropropane		<5.00	µg/L	1	5
1,2,3-Trichlorobenzene		<5.00	µg/L	1	5
1,2,4-Trichlorobenzene		<5.00	µg/L	1	5
Naphthalene		26.4	µg/L	1	5
Hexachlorobutadiene		<5.00	µg/L	1	5

Surrogate	Flag	Result	Units	Dilution	Spike Amount	Percent Recovery	Recovery Limits
Dibromofluoromethane		47.4	µg/L	1	50	94	84 - 122
Toluene-d8		50.1	µg/L	1	50	100	95 - 105
4-Bromofluorobenzene		50.	µg/L	1	50	100	91 - 108

Sample: 196174 - MW-2 (23-25')

Analysis: SPLP Volatiles | Analytical Method: S 8260B | QC Batch: QC20510 | Date Analyzed: 5/20/02
Analyst: JG | Preparation Method: 1312 | Prep Batch: PB19572 | Date Prepared: 5/14/02

Param	Flag	Result	Units	Dilution	RDL
Bromochloromethane		<1.00	µg/L	1	1
Dichlorodifluoromethane		<1.00	µg/L	1	1
Chloromethane (methyl chloride)		<1.00	µg/L	1	1
Vinyl Chloride		<1.00	µg/L	1	1
Bromomethane (methyl bromide)		<5.00	µg/L	1	5
Chloroethane		<1.00	µg/L	1	1
Trichlorofluoromethane		<1.00	µg/L	1	1
Acetone		<10.0	µg/L	1	10
Iodomethane (methyl iodide)		<5.00	µg/L	1	5
Carbon Disulfide		<1.00	µg/L	1	1
Acrylonitrile		<1.00	µg/L	1	1
2-Butanone (MEK)		<5.00	µg/L	1	5
4-methyl-2-pentanone (MIBK)		<5.00	µg/L	1	5
2-hexanone		<5.00	µg/L	1	5
trans 1,4-Dichloro-2-butene		<10.0	µg/L	1	10

Continued ...

... *Continued* Sample: 196174 Analysis: SPLP Volatiles

Param	Flag	Result	Units	Dilution	RDL
1,1-Dichloroethene		<1.00	µg/L	1	1
Methylene chloride		<5.00	µg/L	1	5
MTBE		<1.00	µg/L	1	1
trans-1,2-Dichloroethene		<1.00	µg/L	1	1
1,1-Dichloroethane		<1.00	µg/L	1	1
cis-1,2-Dichloroethene		<1.00	µg/L	1	1
2,2-Dichloropropane		<1.00	µg/L	1	1
1,2-Dichloroethane (EDC)		<1.00	µg/L	1	1
Chloroform		<1.00	µg/L	1	1
1,1,1-Trichloroethane		<1.00	µg/L	1	1
1,1-Dichloropropene		<1.00	µg/L	1	1
Benzene		1.22	µg/L	1	1
Carbon Tetrachloride		<1.00	µg/L	1	1
1,2-Dichloropropane		<1.00	µg/L	1	1
Trichloroethene (TCE)		<1.00	µg/L	1	1
Dibromomethane (methylene bromide)		<1.00	µg/L	1	1
Bromodichloromethane		<1.00	µg/L	1	1
2-Chloroethyl vinyl ether		<5.00	µg/L	1	5
cis-1,3-Dichloropropene		<1.00	µg/L	1	1
trans-1,3-Dichloropropene		<1.00	µg/L	1	1
Toluene		1.25	µg/L	1	1
1,1,2-Trichloroethane		<1.00	µg/L	1	1
1,3-Dichloropropane		<1.00	µg/L	1	1
Dibromochloromethane		<1.00	µg/L	1	1
1,2-Dibromoethane (EDB)		<1.00	µg/L	1	1
Tetrachloroethene (PCE)		<1.00	µg/L	1	1
Chlorobenzene		<1.00	µg/L	1	1
1,1,1,2-Tetrachloroethane		<1.00	µg/L	1	1
Ethylbenzene		23.5	µg/L	1	1
m,p-Xylene		74.2	µg/L	1	1
Bromoform		<1.00	µg/L	1	1
Styrene		<1.00	µg/L	1	1
o-Xylene		19.3	µg/L	1	1
1,1,2,2-Tetrachloroethane		<1.00	µg/L	1	1
2-Chlorotoluene		<1.00	µg/L	1	1
1,2,3-Trichloropropane		<1.00	µg/L	1	1
Isopropylbenzene		10.1	µg/L	1	1
Bromobenzene		<1.00	µg/L	1	1
n-Propylbenzene		11.9	µg/L	1	1
1,3,5-Trimethylbenzene		30.8	µg/L	1	1
tert-Butylbenzene		<1.00	µg/L	1	1
1,2,4-Trimethylbenzene		80.2	µg/L	1	1
1,4-Dichlorobenzene (para)		<1.00	µg/L	1	1
sec-Butylbenzene		4.73	µg/L	1	1
1,3-Dichlorobenzene (meta)		<1.00	µg/L	1	1
p-Isopropyltoluene		3.90	µg/L	1	1
4-Chlorotoluene		<1.00	µg/L	1	1
1,2-Dichlorobenzene (ortho)		<1.00	µg/L	1	1
n-Butylbenzene		3.65	µg/L	1	1
1,2-Dibromo-3-chloropropane		<5.00	µg/L	1	5
1,2,3-Trichlorobenzene		<5.00	µg/L	1	5
1,2,4-Trichlorobenzene		<5.00	µg/L	1	5
Naphthalene		29.4	µg/L	1	5

Continued ...

... *Continued* Sample: 196174 Analysis: SPLP Volatiles

Param	Flag	Result	Units	Dilution	RDL
Hexachlorobutadiene		<5.00	µg/L	1	5

Surrogate	Flag	Result	Units	Dilution	Spike Amount	Percent Recovery	Recovery Limits
Dibromofluoromethane		46.7	µg/L	1	50	93	84 - 122
Toluene-d8		49.6	µg/L	1	50	99	95 - 105
4-Bromofluorobenzene		50	µg/L	1	50	100	91 - 108

Quality Control Report
Method Blank

Method Blank

QCBatch: QC20510

Param	Flag	Results	Units	Reporting Limit
Bromochloromethane		<1.00	µg/L	1
Dichlorodifluoromethane		<1.00	µg/L	1
Chloromethane (methyl chloride)		<1.00	µg/L	1
Vinyl Chloride		<1.00	µg/L	1
Bromomethane (methyl bromide)		<5.00	µg/L	5
Chloroethane		<1.00	µg/L	1
Trichlorofluoromethane		<1.00	µg/L	1
Acetone		<10.0	µg/L	10
Iodomethane (methyl iodide)		<5.00	µg/L	5
Carbon Disulfide		<1.00	µg/L	1
Acrylonitrile		<1.00	µg/L	1
2-Butanone (MEK)		<5.00	µg/L	5
4-methyl-2-pentanone (MIBK)		<5.00	µg/L	5
2-hexanone		<5.00	µg/L	5
trans 1,4-Dichloro-2-butene		<10.0	µg/L	10
1,1-Dichloroethene		<1.00	µg/L	1
Methylene chloride		<5.00	µg/L	5
MTBE		<1.00	µg/L	1
trans-1,2-Dichloroethene		<1.00	µg/L	1
1,1-Dichloroethane		<1.00	µg/L	1
cis-1,2-Dichloroethene		<1.00	µg/L	1
2,2-Dichloropropane		<1.00	µg/L	1
1,2-Dichloroethane (EDC)		<1.00	µg/L	1
Chloroform		<1.00	µg/L	1
1,1,1-Trichloroethane		<1.00	µg/L	1
1,1-Dichloropropene		<1.00	µg/L	1
Benzene		<1.00	µg/L	1
Carbon Tetrachloride		<1.00	µg/L	1
1,2-Dichloropropane		<1.00	µg/L	1
Trichloroethene (TCE)		<1.00	µg/L	1
Dibromomethane (methylene bromide)		<1.00	µg/L	1
Bromodichloromethane		<1.00	µg/L	1
2-Chloroethyl vinyl ether		<5.00	µg/L	5
cis-1,3-Dichloropropene		<1.00	µg/L	1
trans-1,3-Dichloropropene		<1.00	µg/L	1
Toluene		<1.00	µg/L	1
1,1,2-Trichloroethane		<1.00	µg/L	1
1,3-Dichloropropane		<1.00	µg/L	1
Dibromochloromethane		<1.00	µg/L	1
1,2-Dibromoethane (EDB)		<1.00	µg/L	1
Tetrachloroethene (PCE)		<1.00	µg/L	1
Chlorobenzene		<1.00	µg/L	1
1,1,1,2-Tetrachloroethane		<1.00	µg/L	1
Ethylbenzene		<1.00	µg/L	1
m,p-Xylene		<1.00	µg/L	1
Bromoform		<1.00	µg/L	1

Continued ...

... Continued

Param	Flag	Results	Units	Reporting Limit
Styrene		<1.00	µg/L	1
o-Xylene		<1.00	µg/L	1
1,1,2,2-Tetrachloroethane		<1.00	µg/L	1
2-Chlorotoluene		<1.00	µg/L	1
1,2,3-Trichloropropane		<1.00	µg/L	1
Isopropylbenzene		<1.00	µg/L	1
Bromobenzene		<1.00	µg/L	1
n-Propylbenzene		<1.00	µg/L	1
1,3,5-Trimethylbenzene		<1.00	µg/L	1
tert-Butylbenzene		<1.00	µg/L	1
1,2,4-Trimethylbenzene		<1.00	µg/L	1
1,4-Dichlorobenzene (para)		<1.00	µg/L	1
sec-Butylbenzene		<1.00	µg/L	1
1,3-Dichlorobenzene (meta)		<1.00	µg/L	1
p-Isopropyltoluene		<1.00	µg/L	1
4-Chlorotoluene		<1.00	µg/L	1
1,2-Dichlorobenzene (ortho)		<1.00	µg/L	1
n-Butylbenzene		<1.00	µg/L	1
1,2-Dibromo-3-chloropropane		<5.00	µg/L	5
1,2,3-Trichlorobenzene		<5.00	µg/L	5
1,2,4-Trichlorobenzene		<5.00	µg/L	5
Naphthalene		<5.00	µg/L	5
Hexachlorobutadiene		<5.00	µg/L	5

Surrogate	Flag	Result	Units	Dilution	Spike Amount	Percent Recovery	Recovery Limits
Dibromofluoromethane		50.9	µg/L	1	50	101	84 - 122
Toluene-d8		50.3	µg/L	1	50	100	95 - 105
4-Bromofluorobenzene		50	µg/L	1	50	100	91 - 108

Quality Control Report
Lab Control Spikes and Duplicate Spikes

Laboratory Control Spikes

QCBatch: QC20510

Param	LCS Result	LCSD Result	Units	Dil.	Spike Amount Added	Matrix Result	% Rec	RPD	% Rec Limit	RPD Limit
1,1-Dichloroethene	116	118	µg/L	1	100	<1.00	116	1	80 - 120	20
Benzene	106	106	µg/L	1	100	<1.00	106	0	80 - 120	20
Trichloroethene (TCE)	105	105	µg/L	1	100	<1.00	105	0	90 - 120	20
Toluene	104	103	µg/L	1	100	<1.00	104	0	80 - 120	20
Chlorobenzene	102	101	µg/L	1	100	<1.00	102	0	80 - 120	20

Percent recovery is based on the spike result. RPD is based on the spike and spike duplicate result.

Surrogate	LCS Result	LCSD Result	Units	Dilution	Spike Amount	LCS % Rec	LCSD % Rec	Recovery Limits
Dibromofluoromethane	47.4	48.4	µg/L	1	50	94	96	84 - 122

Continued ...

Surrogate	LCS Result	LCSD Result	Units	Dilution	Spike Amount	LCS % Rec	LCSD % Rec	Recovery Limits
Toluene-d8	50.1	49.7	µg/L	1	50	100	99	95 - 105
4-Bromofluorobenzene	51.5	50.4	µg/L	1	50	103	100	91 - 108

Quality Control Report
Continuing Calibration Verification Standards

CCV (1)

QCBatch: QC20510

Param	Flag	Units	CCVs True Conc.	CCVs Found Conc.	CCVs Percent Recovery	Percent Recovery Limits	Date Analyzed
Vinyl Chloride		µg/L	100	88	88	80 - 120	5/20/02
1,1-Dichloroethene		µg/L	100	99	99	80 - 120	5/20/02
Chloroform		µg/L	100	91	91	80 - 120	5/20/02
1,2-Dichloropropane		µg/L	100	94	94	80 - 120	5/20/02
Toluene		µg/L	100	97	97	80 - 120	5/20/02
Chlorobenzene		µg/L	100	97	97	80 - 120	5/20/02
Ethylbenzene		µg/L	100	96	96	80 - 120	5/20/02
Dibromofluoromethane		µg/L	50	47.6	95	80 - 120	5/20/02
Toluene-d8		µg/L	50	49.3	98	80 - 120	5/20/02
4-Bromofluorobenzene		µg/L	50	50.2	100	80 - 120	5/20/02

TRACEANALYSIS, INC.

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Analytical and Quality Control Report

Jeff Kindley
Enercon Services Inc.
306 W. Wall Suite 1312
Midland, Tx. 79701

Report Date: May 28, 2002

Order ID Number: A02050218

Project Number: EQ-112
Project Name: Barber Ranch 3000109
Project Location: Barber Lea County, New Mexico

Enclosed are the Analytical Results and Quality Control Data Reports for the following samples submitted to Trace-Analysis, Inc.

Sample	Description	Matrix	Date Taken	Time Taken	Date Received
196173	MW-2 (13-15')	Soil	4/30/02	16:12	5/2/02
196174	MW-2 (23-25')	Soil	4/30/02	16:50	5/2/02

These results represent only the samples received in the laboratory. The Quality Control Report is generated on a batch basis. All information contained in this report is for the analytical batch(es) in which your sample(s) were analyzed. Note: the RDL is equal to MQL for all organic analytes including TPH.
The test results contained within this report meet all requirements of LAC 33:I unless otherwise noted.

This report consists of a total of 10 pages and shall not be reproduced except in its entirety including the chain of custody (COC), without written approval of TraceAnalysis, Inc.

Dr. Blair Leftwich, Director

Analytical Report

Sample: 196173 - MW-2 (13-15')

Analysis: SPLP Semivolatiles | Analytical Method: S 8270C | QC Batch: QC20609 | Date Analyzed: 5/22/02
Analyst: RC | Preparation Method: 1312 | Prep Batch: PB19578 | Date Prepared: 5/19/02

Param	Flag	Result	Units	Dilution	RDL
Pyridine		<0.005	mg/Kg	1	0.005
n-Nitrosodimethylamine		<0.005	mg/Kg	1	0.005
2-Picoline		<0.005	mg/Kg	1	0.005
Methyl methanesulfonate		<0.005	mg/Kg	1	0.005
Ethyl methanesulfonate		<0.005	mg/Kg	1	0.005
Phenol		<0.005	mg/Kg	1	0.005
Aniline		<0.005	mg/Kg	1	0.005
bis (2-chloroethyl) ether		<0.005	mg/Kg	1	0.005
2-Chlorophenol		<0.005	mg/Kg	1	0.005
1,3-Dichlorobenzene (meta)		<0.005	mg/Kg	1	0.005
1,4-Dichlorobenzene		<0.005	mg/Kg	1	0.005
Benzyl alcohol		<0.005	mg/Kg	1	0.005
1,2-Dichlorobenzene		<0.005	mg/Kg	1	0.005
2-Methylphenol		<0.005	mg/Kg	1	0.005
bis (2-chloroisopropyl) ether		<0.005	mg/Kg	1	0.005
4-Methylphenol/3-Methylphenol		<0.005	mg/Kg	1	0.005
Acetophenone		<0.005	mg/Kg	1	0.005
n-Nitrosodi-n-propylamine		<0.005	mg/Kg	1	0.005
Hexachloroethane		<0.005	mg/Kg	1	0.005
Nitrobenzene		<0.005	mg/Kg	1	0.005
n-Nitrosopiperidine		<0.005	mg/Kg	1	0.005
Isophorone		<0.005	mg/Kg	1	0.005
2-Nitrophenol		<0.005	mg/Kg	1	0.005
2,4-Dimethylphenol		<0.005	mg/Kg	1	0.005
bis (2-chloroethoxy) methane		<0.005	mg/Kg	1	0.005
Benzoic acid		<0.005	mg/Kg	1	0.005
2,4-Dichlorophenol		<0.005	mg/Kg	1	0.005
1,2,4-Trichlorobenzene		<0.005	mg/Kg	1	0.005
a,a-Dimethylphenethylamine		<0.005	mg/Kg	1	0.005
Naphthalene		0.009	mg/Kg	1	0.005
4-Chloroaniline		<0.005	mg/Kg	1	0.005
2,6-Dichlorophenol		<0.005	mg/Kg	1	0.005
Hexachlorobutadiene		<0.005	mg/Kg	1	0.005
n-Nitroso-di-n-butylamine		<0.005	mg/Kg	1	0.005
4-Chloro-3-methylphenol		<0.005	mg/Kg	1	0.005
1-Methylnaphthalene		0.023	mg/Kg	1	0.005
2-Methylnaphthalene		0.020	mg/Kg	1	0.005
1,2,4,5-Tetrachlorobenzene		<0.005	mg/Kg	1	0.005
Hexachlorocyclopentadiene		<0.005	mg/Kg	1	0.005
2,4,6-Trichlorophenol		<0.005	mg/Kg	1	0.005
2,4,5-Trichlorophenol		<0.005	mg/Kg	1	0.005
2-Chloronaphthalene		<0.005	mg/Kg	1	0.005
1-Chloronaphthalene		<0.005	mg/Kg	1	0.005
2-Nitroaniline		<0.005	mg/Kg	1	0.005
Dimethylphthalate		<0.005	mg/Kg	1	0.005
Acenaphthylene		<0.005	mg/Kg	1	0.005

Continued ...

... *Continued* Sample: 196173 Analysis: SPLP Semivolatiles

Param	Flag	Result	Units	Dilution	RDL
2,6-Dinitrotoluene		<0.005	mg/Kg	1	0.005
3-Nitroaniline		<0.005	mg/Kg	1	0.005
Acenaphthene		<0.005	mg/Kg	1	0.005
2,4-Dinitrophenol		<0.005	mg/Kg	1	0.005
Dibenzofuran		<0.005	mg/Kg	1	0.005
Pentachlorobenzene		<0.005	mg/Kg	1	0.005
4-Nitrophenol		<0.005	mg/Kg	1	0.005
1-Naphthylamine		<0.005	mg/Kg	1	0.005
2,4-Dinitrotoluene		<0.005	mg/Kg	1	0.005
2-Naphthylamine		<0.005	mg/Kg	1	0.005
2,3,4,6-Tetrachlorophenol		<0.005	mg/Kg	1	0.005
Fluorene		<0.005	mg/Kg	1	0.005
Diethylphthalate		<0.005	mg/Kg	1	0.005
4-Chlorophenyl-phenylether		<0.005	mg/Kg	1	0.005
4-Nitroaniline		<0.005	mg/Kg	1	0.005
4,6-Dinitro-2-methylphenol		<0.005	mg/Kg	1	0.005
Diphenylamine		<0.005	mg/Kg	1	0.005
Diphenylhydrazine		<0.005	mg/Kg	1	0.005
4-Bromophenyl-phenylether		<0.005	mg/Kg	1	0.005
Phenacetin		<0.005	mg/Kg	1	0.005
Hexachlorobenzene		<0.005	mg/Kg	1	0.005
4-Aminobiphenyl		<0.005	mg/Kg	1	0.005
Pentachlorophenol		<0.005	mg/Kg	1	0.005
Pentachloronitrobenzene		<0.005	mg/Kg	1	0.005
Pronamide		<0.005	mg/Kg	1	0.005
Phenanthrene		<0.005	mg/Kg	1	0.005
Anthracene		<0.005	mg/Kg	1	0.005
Di-n-butylphthalate		<0.005	mg/Kg	1	0.005
Fluoranthene		<0.005	mg/Kg	1	0.005
Benzidine		<0.005	mg/Kg	1	0.005
Pyrene		<0.005	mg/Kg	1	0.005
p-Dimethylaminoazobenzene		<0.005	mg/Kg	1	0.005
Butylbenzylphthalate		<0.005	mg/Kg	1	0.005
Benzo(a)anthracene		<0.005	mg/Kg	1	0.005
3,3-Dichlorobenzidine		<0.005	mg/Kg	1	0.005
Chrysene		<0.005	mg/Kg	1	0.005
Bis (2-ethylhexyl) phthalate		<0.005	mg/Kg	1	0.005
Di-n-octylphthalate		<0.005	mg/Kg	1	0.005
Benzo(b)fluoranthene		<0.005	mg/Kg	1	0.005
7,12-Dimethylbenz(a)anthracene		<0.005	mg/Kg	1	0.005
Benzo(k)fluoranthene		<0.005	mg/Kg	1	0.005
Benzo(a)pyrene		<0.005	mg/Kg	1	0.005
3-Methylcholanthrene		<0.005	mg/Kg	1	0.005
Dibenzo(a,j)acridine		<0.005	mg/Kg	1	0.005
Indeno(1,2,3-cd)pyrene		<0.005	mg/Kg	1	0.005
Dibenzo(a,h)anthracene		<0.005	mg/Kg	1	0.005
Benzo(g,h,i)perylene		<0.005	mg/Kg	1	0.005

Surrogate	Flag	Result	Units	Dilution	Spike Amount	Percent Recovery	Recovery Limits
2-Fluorophenol		30.96	mg/L	1	80	38	25 - 121
Phenol-d5		16.89	mg/L	1	80	21	24 - 113

Continued ...

Surrogate	Flag	Result	Units	Dilution	Spike Amount	Percent Recovery	Recovery Limits
Nitrobenzene-d5		60.7	mg/L	1	80	75	23 - 120
2-Fluorobiphenyl		61.01	mg/L	1	80	76	30 - 115
2,4,6-Tribromophenol		70.67	mg/L	1	80	88	19 - 122
Terphenyl-d14		44.47	mg/L	1	80	55	28 - 137

Sample: 196174 - MW-2 (23-25')

Analysis: SPLP Semivolatiles Analytical Method: S 8270C QC Batch: QC20609 Date Analyzed: 5/22/02
Analyst: RC Preparation Method: 1312 Prep Batch: PB19578 Date Prepared: 5/19/02

Param	Flag	Result	Units	Dilution	RDL
Pyridine		<0.005	mg/Kg	1	0.005
n-Nitrosodimethylamine		<0.005	mg/Kg	1	0.005
2-Picoline		<0.005	mg/Kg	1	0.005
Methyl methanesulfonate		<0.005	mg/Kg	1	0.005
Ethyl methanesulfonate		<0.005	mg/Kg	1	0.005
Phenol		<0.005	mg/Kg	1	0.005
Aniline		<0.005	mg/Kg	1	0.005
bis (2-chloroethyl) ether		<0.005	mg/Kg	1	0.005
2-Chlorophenol		<0.005	mg/Kg	1	0.005
1,3-Dichlorobenzene (meta)		<0.005	mg/Kg	1	0.005
1,4-Dichlorobenzene		<0.005	mg/Kg	1	0.005
Benzyl alcohol		<0.005	mg/Kg	1	0.005
1,2-Dichlorobenzene		<0.005	mg/Kg	1	0.005
2-Methylphenol		<0.005	mg/Kg	1	0.005
bis (2-chloroisopropyl) ether		<0.005	mg/Kg	1	0.005
4-Methylphenol/3-Methylphenol		<0.005	mg/Kg	1	0.005
Acetophenone		<0.005	mg/Kg	1	0.005
n-Nitrosodi-n-propylamine		<0.005	mg/Kg	1	0.005
Hexachloroethane		<0.005	mg/Kg	1	0.005
Nitrobenzene		<0.005	mg/Kg	1	0.005
n-Nitrosopiperidine		<0.005	mg/Kg	1	0.005
Isophorone		<0.005	mg/Kg	1	0.005
2-Nitrophenol		<0.005	mg/Kg	1	0.005
2,4-Dimethylphenol		<0.005	mg/Kg	1	0.005
bis (2-chloroethoxy) methane		<0.005	mg/Kg	1	0.005
Benzoic acid		<0.005	mg/Kg	1	0.005
2,4-Dichlorophenol		<0.005	mg/Kg	1	0.005
1,2,4-Trichlorobenzene		<0.005	mg/Kg	1	0.005
a,a-Dimethylphenethylamine		<0.005	mg/Kg	1	0.005
Naphthalene		0.010	mg/Kg	1	0.005
4-Chloroaniline		<0.005	mg/Kg	1	0.005
2,6-Dichlorophenol		<0.005	mg/Kg	1	0.005
Hexachlorobutadiene		<0.005	mg/Kg	1	0.005
n-Nitroso-di-n-butylamine		<0.005	mg/Kg	1	0.005
4-Chloro-3-methylphenol		<0.005	mg/Kg	1	0.005
1-Methylnaphthalene		0.018	mg/Kg	1	0.005
2-Methylnaphthalene		0.018	mg/Kg	1	0.005
1,2,4,5-Tetrachlorobenzene		<0.005	mg/Kg	1	0.005
Hexachlorocyclopentadiene		<0.005	mg/Kg	1	0.005
2,4,6-Trichlorophenol		<0.005	mg/Kg	1	0.005
2,4,5-Trichlorophenol		<0.005	mg/Kg	1	0.005

Continued ...

... *Continued* Sample: 196174 Analysis: SPLP Semivolatiles

Param	Flag	Result	Units	Dilution	RDL
2-Chloronaphthalene		<0.005	mg/Kg	1	0.005
1-Chloronaphthalene		<0.005	mg/Kg	1	0.005
2-Nitroaniline		<0.005	mg/Kg	1	0.005
Dimethylphthalate		<0.005	mg/Kg	1	0.005
Acenaphthylene		<0.005	mg/Kg	1	0.005
2,6-Dinitrotoluene		<0.005	mg/Kg	1	0.005
3-Nitroaniline		<0.005	mg/Kg	1	0.005
Acenaphthene		<0.005	mg/Kg	1	0.005
2,4-Dinitrophenol		<0.005	mg/Kg	1	0.005
Dibenzofuran		<0.005	mg/Kg	1	0.005
Pentachlorobenzene		<0.005	mg/Kg	1	0.005
4-Nitrophenol		<0.005	mg/Kg	1	0.005
1-Naphthylamine		<0.005	mg/Kg	1	0.005
2,4-Dinitrotoluene		<0.005	mg/Kg	1	0.005
2-Naphthylamine		<0.005	mg/Kg	1	0.005
2,3,4,6-Tetrachlorophenol		<0.005	mg/Kg	1	0.005
Fluorene		<0.005	mg/Kg	1	0.005
Diethylphthalate		<0.005	mg/Kg	1	0.005
4-Chlorophenyl-phenylether		<0.005	mg/Kg	1	0.005
4-Nitroaniline		<0.005	mg/Kg	1	0.005
4,6-Dinitro-2-methylphenol		<0.005	mg/Kg	1	0.005
Diphenylamine		<0.005	mg/Kg	1	0.005
Diphenylhydrazine		<0.005	mg/Kg	1	0.005
4-Bromophenyl-phenylether		<0.005	mg/Kg	1	0.005
Phenacetin		<0.005	mg/Kg	1	0.005
Hexachlorobenzene		<0.005	mg/Kg	1	0.005
4-Aminobiphenyl		<0.005	mg/Kg	1	0.005
Pentachlorophenol		<0.005	mg/Kg	1	0.005
Pentachloronitrobenzene		<0.005	mg/Kg	1	0.005
Pronamide		<0.005	mg/Kg	1	0.005
Phenanthrene		<0.005	mg/Kg	1	0.005
Anthracene		<0.005	mg/Kg	1	0.005
Di-n-butylphthalate		<0.005	mg/Kg	1	0.005
Fluoranthene		<0.005	mg/Kg	1	0.005
Benzidine		<0.005	mg/Kg	1	0.005
Pyrene		<0.005	mg/Kg	1	0.005
p-Dimethylaminoazobenzene		<0.005	mg/Kg	1	0.005
Butylbenzylphthalate		<0.005	mg/Kg	1	0.005
Benzo(a)anthracene		<0.005	mg/Kg	1	0.005
3,3-Dichlorobenzidine		<0.005	mg/Kg	1	0.005
Chrysene		<0.005	mg/Kg	1	0.005
Bis (2-ethylhexyl) phthalate		<0.005	mg/Kg	1	0.005
Di-n-octylphthalate		<0.005	mg/Kg	1	0.005
Benzo(b)fluoranthene		<0.005	mg/Kg	1	0.005
7,12-Dimethylbenz(a)anthracene		<0.005	mg/Kg	1	0.005
Benzo(k)fluoranthene		<0.005	mg/Kg	1	0.005
Benzo(a)pyrene		<0.005	mg/Kg	1	0.005
3-Methylcholanthrene		<0.005	mg/Kg	1	0.005
Dibenzo(a,j)acridine		<0.005	mg/Kg	1	0.005
Indeno(1,2,3-cd)pyrene		<0.005	mg/Kg	1	0.005
Dibenzo(a,h)anthracene		<0.005	mg/Kg	1	0.005
Benzo(g,h,i)perylene		<0.005	mg/Kg	1	0.005

Surrogate	Flag	Result	Units	Dilution	Spike Amount	Percent Recovery	Recovery Limits
2-Fluorophenol		23.73	mg/L	1	80	29	25 - 121
Phenol-d5		13.28	mg/L	1	80	16	24 - 113
Nitrobenzene-d5		60.06	mg/L	1	80	75	23 - 120
2-Fluorobiphenyl		59.59	mg/L	1	80	74	30 - 115
2,4,6-Tribromophenol		54.43	mg/L	1	80	68	19 - 122
Terphenyl-d14		39.55	mg/L	1	80	49	28 - 137

Quality Control Report
Method Blank

Method Blank

QCBatch: QC20609

Param	Flag	Results	Units	Reporting Limit
Pyridine		<0.005	mg/Kg	0.005
n-Nitrosodimethylamine		<0.005	mg/Kg	0.005
2-Picoline		<0.005	mg/Kg	0.005
Methyl methanesulfonate		<0.005	mg/Kg	0.005
Ethyl methanesulfonate		<0.005	mg/Kg	0.005
Phenol		<0.005	mg/Kg	0.005
Aniline		<0.005	mg/Kg	0.005
bis (2-chloroethyl) ether		<0.005	mg/Kg	0.005
2-Chlorophenol		<0.005	mg/Kg	0.005
1,3-Dichlorobenzene (meta)		<0.005	mg/Kg	0.005
1,4-Dichlorobenzene		<0.005	mg/Kg	0.005
Benzyl alcohol		<0.005	mg/Kg	0.005
1,2-Dichlorobenzene		<0.005	mg/Kg	0.005
2-Methylphenol		<0.005	mg/Kg	0.005
bis (2-chloroisopropyl) ether		<0.005	mg/Kg	0.005
4-Methylphenol/3-Methylphenol		<0.005	mg/Kg	0.005
Acetophenone		<0.005	mg/Kg	0.005
n-Nitrosodi-n-propylamine		<0.005	mg/Kg	0.005
Hexachloroethane		<0.005	mg/Kg	0.005
Nitrobenzene		<0.005	mg/Kg	0.005
n-Nitrosopiperidine		<0.005	mg/Kg	0.005
Isophorone		<0.005	mg/Kg	0.005
2-Nitrophenol		<0.005	mg/Kg	0.005
2,4-Dimethylphenol		<0.005	mg/Kg	0.005
bis (2-chloroethoxy) methane		<0.005	mg/Kg	0.005
Benzoic acid		<0.005	mg/Kg	0.005
2,4-Dichlorophenol		<0.005	mg/Kg	0.005
1,2,4-Trichlorobenzene		<0.005	mg/Kg	0.005
a,a-Dimethylphenethylamine		<0.005	mg/Kg	0.005
Naphthalene		<0.005	mg/Kg	0.005
4-Chloroaniline		<0.005	mg/Kg	0.005
2,6-Dichlorophenol		<0.005	mg/Kg	0.005
Hexachlorobutadiene		<0.005	mg/Kg	0.005
n-Nitroso-di-n-butylamine		<0.005	mg/Kg	0.005
4-Chloro-3-methylphenol		<0.005	mg/Kg	0.005
1-Methylnaphthalene		<0.005	mg/Kg	0.005
2-Methylnaphthalene		<0.005	mg/Kg	0.005
1,2,4,5-Tetrachlorobenzene		<0.005	mg/Kg	0.005
Hexachlorocyclopentadiene		<0.005	mg/Kg	0.005
2,4,6-Trichlorophenol		<0.005	mg/Kg	0.005
2,4,5-Trichlorophenol		<0.005	mg/Kg	0.005
2-Chloronaphthalene		<0.005	mg/Kg	0.005
1-Chloronaphthalene		<0.005	mg/Kg	0.005
2-Nitroaniline		<0.005	mg/Kg	0.005
Dimethylphthalate		<0.005	mg/Kg	0.005
Acenaphthylene		<0.005	mg/Kg	0.005

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Param	Flag	Results	Units	Reporting Limit
2,6-Dinitrotoluene		<0.005	mg/Kg	0.005
3-Nitroaniline		<0.005	mg/Kg	0.005
Acenaphthene		<0.005	mg/Kg	0.005
2,4-Dinitrophenol		<0.005	mg/Kg	0.005
Dibenzofuran		<0.005	mg/Kg	0.005
Pentachlorobenzene		<0.005	mg/Kg	0.005
4-Nitrophenol		<0.005	mg/Kg	0.005
1-Naphthylamine		<0.005	mg/Kg	0.005
2,4-Dinitrotoluene		<0.005	mg/Kg	0.005
2-Naphthylamine		<0.005	mg/Kg	0.005
2,3,4,6-Tetrachlorophenol		<0.005	mg/Kg	0.005
Fluorene		<0.005	mg/Kg	0.005
Diethylphthalate		<0.005	mg/Kg	0.005
4-Chlorophenyl-phenylether		<0.005	mg/Kg	0.005
4-Nitroaniline		<0.005	mg/Kg	0.005
4,6-Dinitro-2-methylphenol		<0.005	mg/Kg	0.005
Diphenylamine		<0.005	mg/Kg	0.005
Diphenylhydrazine		<0.005	mg/Kg	0.005
4-Bromophenyl-phenylether		<0.005	mg/Kg	0.005
Phenacetin		<0.005	mg/Kg	0.005
Hexachlorobenzene		<0.005	mg/Kg	0.005
4-Aminobiphenyl		<0.005	mg/Kg	0.005
Pentachlorophenol		<0.005	mg/Kg	0.005
Pentachloronitrobenzene		<0.005	mg/Kg	0.005
Pronamide		<0.005	mg/Kg	0.005
Phenanthrene		<0.005	mg/Kg	0.005
Anthracene		<0.005	mg/Kg	0.005
Di-n-butylphthalate		<0.005	mg/Kg	0.005
Fluoranthene		<0.005	mg/Kg	0.005
Benzidine		<0.005	mg/Kg	0.005
Pyrene		<0.005	mg/Kg	0.005
p-Dimethylaminoazobenzene		<0.005	mg/Kg	0.005
Butylbenzylphthalate		<0.005	mg/Kg	0.005
Benzo(a)anthracene		<0.005	mg/Kg	0.005
3,3-Dichlorobenzidine		<0.005	mg/Kg	0.005
Chrysene		<0.005	mg/Kg	0.005
Bis (2-ethylhexyl) phthalate		<0.005	mg/Kg	0.005
Di-n-octylphthalate		<0.005	mg/Kg	0.005
Benzo(b)fluoranthene		<0.005	mg/Kg	0.005
7,12-Dimethylbenz(a)anthracene		<0.005	mg/Kg	0.005
Benzo(k)fluoranthene		<0.005	mg/Kg	0.005
Benzo(a)pyrene		<0.005	mg/Kg	0.005
3-Methylcholanthrene		<0.005	mg/Kg	0.005
Dibenzo(a,j)acridine		<0.005	mg/Kg	0.005
Indeno(1,2,3-cd)pyrene		<0.005	mg/Kg	0.005
Dibenzo(a,h)anthracene		<0.005	mg/Kg	0.005
Benzo(g,h,i)perylene		<0.005	mg/Kg	0.005

Quality Control Report
Lab Control Spikes and Duplicate Spikes

Laboratory Control Spikes

QCBatch: QC20609

Param	LCS Result	LCSD Result	Units	Dil.	Spike Amount Added	Matrix Result	% Rec	RPD	% Rec Limit	RPD Limit
Phenol	12.25	17.11	mg/Kg	1	80	<0.005	15	33	29 - 170	20
2-Chlorophenol	34.16	53.26	mg/Kg	1	80	<0.005	42	43	30 - 68	20
1,4-Dichlorobenzene	37.45	59.14	mg/Kg	1	80	<0.005	46	44	32 - 62	20
n-Nitrosodi-n-propylamine	41.61	61.84	mg/Kg	1	80	<0.005	52	39	28 - 77	20
1,2,4-Trichlorobenzene	36.21	57.12	mg/Kg	1	80	<0.005	45	44	32 - 65	20
4-Chloro-3-methylphenol	32.66	51.25	mg/Kg	1	80	<0.005	40	44	27 - 81	20
Acenaphthene	41.46	62.47	mg/Kg	1	80	<0.005	51	40	40 - 73	20
4-Nitrophenol	13.46	20.33	mg/Kg	1	80	<0.005	16	40	0 - 127	20
2,4-Dinitrotoluene	45.02	67.12	mg/Kg	1	80	<0.005	56	39	27 - 96	20
Pentachlorophenol	36.99	59.53	mg/Kg	1	80	<0.005	46	46	0 - 100	20
Pyrene	40.09	58.13	mg/Kg	1	80	<0.005	50	36	16 - 101	20

Percent recovery is based on the spike result. RPD is based on the spike and spike duplicate result.

Surrogate	LCS Result	LCSD Result	Units	Dilution	Spike Amount	LCS % Rec	LCSD % Rec	Recovery Limits
2-Fluorophenol	20.44	31.1	mg/Kg	1	80	25	38	25 - 121
Phenol-d5	12.87	18.03	mg/Kg	1	80	16	22	24 - 113
Nitrobenzene-d5	44.1	67.25	mg/Kg	1	80	55	84	23 - 120
2-Fluorobiphenyl	46.82	68.84	mg/Kg	1	80	58	86	30 - 115
2,4,6-Tribromophenol	53.75	76.69	mg/Kg	1	80	67	95	19 - 122
Terphenyl-d14	46.27	64.29	mg/Kg	1	80	57	80	28 - 137

Quality Control Report
Continuing Calibration Verification Standards

CCV (1)

QCBatch: QC20609

Param	Flag	Units	CCVs True Conc.	CCVs Found Conc.	CCVs Percent Recovery	Percent Recovery Limits	Date Analyzed
Phenol		mg/Kg	60	59.49	99	80 - 120	5/22/02
1,4-Dichlorobenzene		mg/Kg	60	60.36	100	80 - 120	5/22/02
2-Nitrophenol		mg/Kg	60	60.43	100	80 - 120	5/22/02
2,4-Dichlorophenol		mg/Kg	60	57.7	96	80 - 120	5/22/02
Hexachlorobutadiene		mg/Kg	60	60.85	101	80 - 120	5/22/02
4-Chloro-3-methylphenol		mg/Kg	60	57.48	95	80 - 120	5/22/02
2,4,6-Trichlorophenol		mg/Kg	60	58.58	97	80 - 120	5/22/02
Acenaphthene		mg/Kg	60	59.09	98	80 - 120	5/22/02
Diphenylamine		mg/Kg	60	52.76	87	80 - 120	5/22/02
Pentachlorophenol		mg/Kg	60	60.85	101	80 - 120	5/22/02
Fluoranthene		mg/Kg	60	62.17	103	80 - 120	5/22/02
Di-n-octylphthalate		mg/Kg	60	53.7	89	80 - 120	5/22/02
Benzo(a)pyrene		mg/Kg	60	57.53	95	80 - 120	5/22/02
2-Fluorophenol		mg/Kg	60	62.39	103	80 - 120	5/22/02
Phenol-d5		mg/Kg	60	56.45	94	80 - 120	5/22/02
Nitrobenzene-d5		mg/Kg	60	62.31	103	80 - 120	5/22/02
2-Fluorobiphenyl		mg/Kg	60	59.34	98	80 - 120	5/22/02
2,4,6-Tribromophenol		mg/Kg	60	66.49	110	80 - 120	5/22/02

Continued ...

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Param	Flag	Units	CCVs True Conc.	CCVs Found Conc.	CCVs Percent Recovery	Percent Recovery Limits	Date Analyzed
Terphenyl-d14		mg/Kg	60	58.46	97	80 - 120	5/22/02

Analytical and Quality Control Report

Jeff Kindley
Enercon Services Inc.
306 W. Wall Suite 1312
Midland, Tx. 79701

Report Date: May 7, 2002

Order ID Number: A02050218

Project Number: EQ-112
Project Name: Barber Ranch 3000109
Project Location: Barber Lea County, New Mexico

Enclosed are the Analytical Results and Quality Control Data Reports for the following samples submitted to Trace-Analysis, Inc.

Sample	Description	Matrix	Date Taken	Time Taken	Date Received
196171	MW-1 (13-15')	Soil	4/30/02	13:05	5/2/02
196172	MW-1 (23-25')	Soil	4/30/02	13:25	5/2/02
196173	MW-2 (13-15')	Soil	4/30/02	16:12	5/2/02
196174	MW-2 (23-25')	Soil	4/30/02	16:50	5/2/02
196175	MW-3 (13-15')	Soil	4/30/02	11:25	5/2/02
196176	MW-3 (18-20')	Soil	4/30/02	11:30	5/2/02
196177	MW-4 (13-15')	Soil	4/30/02	17:00	5/2/02
196178	MW-4 (28-30')	Soil	4/30/02	17:30	5/2/02

These results represent only the samples received in the laboratory. The Quality Control Report is generated on a batch basis. All information contained in this report is for the analytical batch(es) in which your sample(s) were analyzed. Note: the RDL is equal to MQL for all organic analytes including TPH.
The test results contained within this report meet all requirements of LAC 33:I unless otherwise noted.

This report consists of a total of 18 pages and shall not be reproduced except in its entirety including the chain of custody (COC), without written approval of TraceAnalysis, Inc.

for
Dr. Blair Leftwich, Director

Analytical Report

Sample: 196171 - MW-1 (13-15')

Analysis:	BTEX	Analytical Method:	S 8021B	QC Batch:	QC20047	Date Analyzed:	5/2/02
Analyst:	CG	Preparation Method:	S 5035	Prep Batch:	PB19215	Date Prepared:	5/2/02

Param	Flag	Result	Units	Dilution	RDL
Benzene		<0.010	mg/Kg	10	0.001
Toluene		<0.010	mg/Kg	10	0.001
Ethylbenzene		<0.010	mg/Kg	10	0.001
M,P,O-Xylene		<0.010	mg/Kg	10	0.001
Total BTEX		<0.010	mg/Kg	10	0.001

Surrogate	Flag	Result	Units	Dilution	Spike Amount	Percent Recovery	Recovery Limits
TFT		0.756	mg/Kg	10	1	76	70 - 130
4-BFB	[1]	0.690	mg/Kg	10	1	69	70 - 130

Sample: 196171 - MW-1 (13-15')

Analysis:	Extended TX1005	Analytical Method:	TX1005	QC Batch:	QC20095	Date Analyzed:	5/5/02
Analyst:	MM	Preparation Method:	N/A	Prep Batch:	PB19255	Date Prepared:	5/2/02

Param	Flag	Result	Units	Dilution	RDL
C6-C12		<50.0	mg/Kg	1	50
>C12-C35		<50.0	mg/Kg	1	50
C6-C35		<50.0	mg/Kg	1	50

Surrogate	Flag	Result	Units	Dilution	Spike Amount	Percent Recovery	Recovery Limits
n-Triacontane		141	mg/Kg	1	150	94	70 - 130

Sample: 196171 - MW-1 (13-15')

Analysis:	TPH DRO	Analytical Method:	Mod. 8015B	QC Batch:	QC20096	Date Analyzed:	5/5/02
Analyst:	MM	Preparation Method:	3550 B	Prep Batch:	PB19256	Date Prepared:	5/2/02

Param	Flag	Result	Units	Dilution	RDL
DRO		<50.0	mg/Kg	1	50

Surrogate	Flag	Result	Units	Dilution	Spike Amount	Percent Recovery	Recovery Limits
n-Triacontane		122	mg/Kg	1	150	81	70 - 130

[1]Low surrogate recovery due to matrix interference. ICV, CCV, CCV shows the method to be in control.

Sample: 196171 - MW-1 (13-15')

Analysis:	TPH GRO	Analytical Method:	8015B	QC Batch:	QC20048	Date Analyzed:	5/2/02
Analyst:	CG	Preparation Method:	5035	Prep Batch:	PB19215	Date Prepared:	5/2/02

Param	Flag	Result	Units	Dilution	RDL
GRO		<1.00	mg/Kg	10	0.10

Surrogate	Flag	Result	Units	Dilution	Spike Amount	Percent Recovery	Recovery Limits
TFT		0.961	mg/Kg	10	0.10	96	70 - 130
4-BFB		0.850	mg/Kg	10	0.10	85	70 - 130

Sample: 196172 - MW-1 (23-25')

Analysis:	BTEX	Analytical Method:	S 8021B	QC Batch:	QC20047	Date Analyzed:	5/2/02
Analyst:	CG	Preparation Method:	S 5035	Prep Batch:	PB19215	Date Prepared:	5/2/02

Param	Flag	Result	Units	Dilution	RDL
Benzene		<0.010	mg/Kg	10	0.001
Toluene		<0.010	mg/Kg	10	0.001
Ethylbenzene		<0.010	mg/Kg	10	0.001
M,P,O-Xylene		<0.010	mg/Kg	10	0.001
Total BTEX		<0.010	mg/Kg	10	0.001

Surrogate	Flag	Result	Units	Dilution	Spike Amount	Percent Recovery	Recovery Limits
TFT		0.712	mg/Kg	10	1	71	70 - 130
4-BFB	[2]	0.655	mg/Kg	10	1	65	70 - 130

Sample: 196172 - MW-1 (23-25')

Analysis:	Extended TX1005	Analytical Method:	TX1005	QC Batch:	QC20095	Date Analyzed:	5/5/02
Analyst:	MM	Preparation Method:	N/A	Prep Batch:	PB19255	Date Prepared:	5/2/02

Param	Flag	Result	Units	Dilution	RDL
C6-C12		<50.0	mg/Kg	1	50
>C12-C35		<50.0	mg/Kg	1	50
C6-C35		<50.0	mg/Kg	1	50

Surrogate	Flag	Result	Units	Dilution	Spike Amount	Percent Recovery	Recovery Limits
n-Triacontane		144	mg/Kg	1	150	96	70 - 130

Sample: 196172 - MW-1 (23-25')

Analysis:	TPH DRO	Analytical Method:	Mod. 8015B	QC Batch:	QC20096	Date Analyzed:	5/5/02
Analyst:	MM	Preparation Method:	3550 B	Prep Batch:	PB19256	Date Prepared:	5/2/02

[2]Low surrogate recovery due to matrix interference. ICV, CCV, CCV shows the method to be in control.

Param	Flag	Result	Units	Dilution	RDL
DRO		<50.0	mg/Kg	1	50

Surrogate	Flag	Result	Units	Dilution	Spike Amount	Percent Recovery	Recovery Limits
n-Triacontane		124	mg/Kg	1	150	83	70 - 130

Sample: 196172 - MW-1 (23-25')

Analysis:	TPH GRO	Analytical Method:	8015B	QC Batch:	QC20048	Date Analyzed:	5/2/02
Analyst:	CG	Preparation Method:	5035	Prep Batch:	PB19215	Date Prepared:	5/2/02

Param	Flag	Result	Units	Dilution	RDL
GRO		<1.00	mg/Kg	10	0.10

Surrogate	Flag	Result	Units	Dilution	Spike Amount	Percent Recovery	Recovery Limits
TFT		1.01	mg/Kg	10	0.10	101	70 - 130
4-BFB		0.818	mg/Kg	10	0.10	82	70 - 130

Sample: 196173 - MW-2 (13-15')

Analysis:	BTEX	Analytical Method:	S 8021B	QC Batch:	QC20047	Date Analyzed:	5/2/02
Analyst:	CG	Preparation Method:	S 5035	Prep Batch:	PB19215	Date Prepared:	5/2/02

Param	Flag	Result	Units	Dilution	RDL
Benzene		<0.500	mg/Kg	500	0.001
Toluene		<0.500	mg/Kg	500	0.001
Ethylbenzene		1.27	mg/Kg	500	0.001
M,P,O-Xylene		1.95	mg/Kg	500	0.001
Total BTEX		3.22	mg/Kg	500	0.001
Test Comments	[3]	*	mg/Kg	1	

Surrogate	Flag	Result	Units	Dilution	Spike Amount	Percent Recovery	Recovery Limits
TFT	[4]	0.672	mg/Kg	10	1	67	70 - 130
4-BFB	[5]	7.40	mg/Kg	10	1	740	70 - 130

Sample: 196173 - MW-2 (13-15')

Analysis:	Extended TX1005	Analytical Method:	TX1005	QC Batch:	QC20095	Date Analyzed:	5/5/02
Analyst:	MM	Preparation Method:	N/A	Prep Batch:	PB19255	Date Prepared:	5/2/02

Param	Flag	Result	Units	Dilution	RDL
C6-C12		1020	mg/Kg	5	50

Continued ...

[3]Sample diluted due to hydrocarbons beyond xylene. Sample has a Benzene concentration of less than 0.1183 which is the MDL.
[4]Low surrogate recovery due to matrix interference. ICV, CCV, CCV shows the method to be in control.
[5]High surrogate recovery due to matrix interference.

... *Continued* Sample: 196173 Analysis: Extended TX1005

Param	Flag	Result	Units	Dilution	RDL
>C12-C35		2090	mg/Kg	5	50
C6-C35		3110	mg/Kg	5	50

Surrogate	Flag	Result	Units	Dilution	Spike Amount	Percent Recovery	Recovery Limits
n-Triacontane		194	mg/Kg	1	150	129	70 - 130

Sample: 196173 - MW-2 (13-15')

Analysis: TPH DRO Analytical Method: Mod. 8015B QC Batch: QC20096 Date Analyzed: 5/5/02
Analyst: MM Preparation Method: 3550 B Prep Batch: PB19256 Date Prepared: 5/2/02

Param	Flag	Result	Units	Dilution	RDL
DRO		2150	mg/Kg	5	50

Surrogate	Flag	Result	Units	Dilution	Spike Amount	Percent Recovery	Recovery Limits
n-Triacontane	[6]	215	mg/Kg	5	150	143	70 - 130

Sample: 196173 - MW-2 (13-15')

Analysis: TPH GRO Analytical Method: 8015B QC Batch: QC20048 Date Analyzed: 5/2/02
Analyst: CG Preparation Method: 5035 Prep Batch: PB19215 Date Prepared: 5/2/02

Param	Flag	Result	Units	Dilution	RDL
GRO		532	mg/Kg	500	0.10

Surrogate	Flag	Result	Units	Dilution	Spike Amount	Percent Recovery	Recovery Limits
TFT		1.28	mg/Kg	500	0.10	128	70 - 130
4-BFB	[7]	24.0	mg/Kg	500	0.10	2400	70 - 130

Sample: 196174 - MW-2 (23-25')

Analysis: BTEX Analytical Method: S 8021B QC Batch: QC20047 Date Analyzed: 5/2/02
Analyst: CG Preparation Method: S 5035 Prep Batch: PB19215 Date Prepared: 5/2/02

Param	Flag	Result	Units	Dilution	RDL
Benzene		<0.100	mg/Kg	100	0.001
Toluene		<0.100	mg/Kg	100	0.001
Ethylbenzene		2.15	mg/Kg	100	0.001
M,P,O-Xylene		7.14	mg/Kg	100	0.001
Total BTEX		9.29	mg/Kg	100	0.001
Test Comments	[8]	*	mg/Kg	1	

[6]Surrogate out of recovery limits due to high hydrocarbons. LCS, ICV, and CCV show the process is in control.
[7]High surrogate recovery due to peak interference.
[8]Sample diluted due to hydrocarbons beyond xylene. Sample has a Benzene concentration of less than 0.02366 which is the MDL.

Surrogate	Flag	Result	Units	Dilution	Spike Amount	Percent Recovery	Recovery Limits
TFT	[9]	0.489	mg/Kg	50	1	48	70 - 130
4-BFB	[10]	3.86	mg/Kg	500	1	386	70 - 130

Sample: 196174 - MW-2 (23-25')

Analysis:	Extended TX1005	Analytical Method:	TX1005	QC Batch:	QC20095	Date Analyzed:	5/5/02
Analyst:	MM	Preparation Method:	N/A	Prep Batch:	PB19255	Date Prepared:	5/2/02

Param	Flag	Result	Units	Dilution	RDL
C6-C12		690	mg/Kg	5	50
>C12-C35		1880	mg/Kg	5	50
C6-C35		2570	mg/Kg	5	50

Surrogate	Flag	Result	Units	Dilution	Spike Amount	Percent Recovery	Recovery Limits
n-Triacontane		194	mg/Kg	1	150	129	70 - 130

Sample: 196174 - MW-2 (23-25')

Analysis:	TPH DRO	Analytical Method:	Mod. 8015B	QC Batch:	QC20096	Date Analyzed:	5/5/02
Analyst:	MM	Preparation Method:	3550 B	Prep Batch:	PB19256	Date Prepared:	5/2/02

Param	Flag	Result	Units	Dilution	RDL
DRO		1840	mg/Kg	5	50

Surrogate	Flag	Result	Units	Dilution	Spike Amount	Percent Recovery	Recovery Limits
n-Triacontane	[11]	215	mg/Kg	5	150	143	70 - 130

Sample: 196174 - MW-2 (23-25')

Analysis:	TPH GRO	Analytical Method:	8015B	QC Batch:	QC20048	Date Analyzed:	5/2/02
Analyst:	CG	Preparation Method:	5035	Prep Batch:	PB19215	Date Prepared:	5/2/02

Param	Flag	Result	Units	Dilution	RDL
GRO		313	mg/Kg	100	0.10

Surrogate	Flag	Result	Units	Dilution	Spike Amount	Percent Recovery	Recovery Limits
TFT	[12]	0.0211	mg/Kg	100	0.10	2	70 - 130
4-BFB	[13]	11	mg/Kg	100	0.10	1100	70 - 130

[9] Low surrogate recovery due to matrix interference. ICV, CCV, CCV shows the method to be in control.
[10] High surrogate recovery due to peak interference.
[11] Surrogate out of recovery limits due to high hydrocarbons. LCS, ICV, and CCV show the process is in control.
[12] Low surrogate recovery due to matrix interference. ICV, CCV, CCV shows the method to be in control.
[13] High surrogate recovery due to peak interference.

Sample: 196175 - MW-3 (13-15')

Analysis:	BTEX	Analytical Method:	S 8021B	QC Batch:	QC20047	Date Analyzed:	5/2/02
Analyst:	CG	Preparation Method:	S 5035	Prep Batch:	PB19215	Date Prepared:	5/2/02

Param	Flag	Result	Units	Dilution	RDL
Benzene		<0.010	mg/Kg	10	0.001
Toluene		<0.010	mg/Kg	10	0.001
Ethylbenzene		<0.010	mg/Kg	10	0.001
M,P,O-Xylene		<0.010	mg/Kg	10	0.001
Total BTEX		<0.010	mg/Kg	10	0.001

Surrogate	Flag	Result	Units	Dilution	Spike Amount	Percent Recovery	Recovery Limits
TFT		0.721	mg/Kg	10	1	72	70 - 130
4-BFB	[14]	0.697	mg/Kg	10	1	69	70 - 130

Sample: 196175 - MW-3 (13-15')

Analysis:	Extended TX1005	Analytical Method:	TX1005	QC Batch:	QC20095	Date Analyzed:	5/5/02
Analyst:	MM	Preparation Method:	N/A	Prep Batch:	PB19255	Date Prepared:	5/2/02

Param	Flag	Result	Units	Dilution	RDL
C6-C12		<50.0	mg/Kg	1	50
>C12-C35		<50.0	mg/Kg	1	50
C6-C35		<50.0	mg/Kg	1	50

Surrogate	Flag	Result	Units	Dilution	Spike Amount	Percent Recovery	Recovery Limits
n-Triacontane		140	mg/Kg	1	150	93	70 - 130

Sample: 196175 - MW-3 (13-15')

Analysis:	TPH DRO	Analytical Method:	Mod. 8015B	QC Batch:	QC20096	Date Analyzed:	5/5/02
Analyst:	MM	Preparation Method:	3550 B	Prep Batch:	PB19256	Date Prepared:	5/2/02

Param	Flag	Result	Units	Dilution	RDL
DRO		<50.0	mg/Kg	1	50

Surrogate	Flag	Result	Units	Dilution	Spike Amount	Percent Recovery	Recovery Limits
n-Triacontane		122	mg/Kg	1	150	81	70 - 130

Sample: 196175 - MW-3 (13-15')

Analysis:	TPH GRO	Analytical Method:	8015B	QC Batch:	QC20048	Date Analyzed:	5/2/02
Analyst:	CG	Preparation Method:	5035	Prep Batch:	PB19215	Date Prepared:	5/2/02

[14] Low surrogate recovery due to matrix interference. ICV, CCV, CCV shows the method to be in control.

Param	Flag	Result	Units	Dilution	RDL
GRO		<1.00	mg/Kg	10	0.10

Surrogate	Flag	Result	Units	Dilution	Spike Amount	Percent Recovery	Recovery Limits
TFT		1.09	mg/Kg	10	0.10	109	70 - 130
4-BFB		0.858	mg/Kg	10	0.10	86	70 - 130

Sample: 196176 - MW-3 (18-20')

Analysis:	BTEX	Analytical Method:	S 8021B	QC Batch:	QC20047	Date Analyzed:	5/2/02
Analyst:	CG	Preparation Method:	S 5035	Prep Batch:	PB19215	Date Prepared:	5/2/02

Param	Flag	Result	Units	Dilution	RDL
Benzene		<0.010	mg/Kg	10	0.001
Toluene		<0.010	mg/Kg	10	0.001
Ethylbenzene		<0.010	mg/Kg	10	0.001
M,P,O-Xylene		<0.010	mg/Kg	10	0.001
Total BTEX		<0.010	mg/Kg	10	0.001

Surrogate	Flag	Result	Units	Dilution	Spike Amount	Percent Recovery	Recovery Limits
TFT		0.790	mg/Kg	10	1	79	70 - 130
4-BFB		0.751	mg/Kg	10	1	75	70 - 130

Sample: 196176 - MW-3 (18-20')

Analysis:	Extended TX1005	Analytical Method:	TX1005	QC Batch:	QC20095	Date Analyzed:	5/5/02
Analyst:	MM	Preparation Method:	N/A	Prep Batch:	PB19255	Date Prepared:	5/2/02

Param	Flag	Result	Units	Dilution	RDL
C6-C12		<50.0	mg/Kg	1	50
>C12-C35		<50.0	mg/Kg	1	50
C6-C35		<50.0	mg/Kg	1	50

Surrogate	Flag	Result	Units	Dilution	Spike Amount	Percent Recovery	Recovery Limits
n-Triacontane		145	mg/Kg	1	150	97	70 - 130

Sample: 196176 - MW-3 (18-20')

Analysis:	TPH DRO	Analytical Method:	Mod. 8015B	QC Batch:	QC20096	Date Analyzed:	5/5/02
Analyst:	MM	Preparation Method:	3550 B	Prep Batch:	PB19256	Date Prepared:	5/2/02

Param	Flag	Result	Units	Dilution	RDL
DRO		<50.0	mg/Kg	1	50

Surrogate	Flag	Result	Units	Dilution	Spike Amount	Percent Recovery	Recovery Limits
n-Triacontane		125	mg/Kg	1	150	83	70 - 130

Sample: 196176 - MW-3 (18-20')

Analysis: TPH GRO | Analytical Method: 8015B | QC Batch: QC20048 | Date Analyzed: 5/2/02
Analyst: CG | Preparation Method: 5035 | Prep Batch: PB19215 | Date Prepared: 5/2/02

Param	Flag	Result	Units	Dilution	RDL
GRO		<1.00	mg/Kg	10	0.10

Surrogate	Flag	Result	Units	Dilution	Spike Amount	Percent Recovery	Recovery Limits
TFT		1.20	mg/Kg	10	0.10	120	70 - 130
4-BFB		0.916	mg/Kg	10	0.10	92	70 - 130

Sample: 196177 - MW-4 (13-15')

Analysis: BTEX | Analytical Method: S 8021B | QC Batch: QC20047 | Date Analyzed: 5/2/02
Analyst: CG | Preparation Method: S 5035 | Prep Batch: PB19215 | Date Prepared: 5/2/02

Param	Flag	Result	Units	Dilution	RDL
Benzene		<0.010	mg/Kg	10	0.001
Toluene		<0.010	mg/Kg	10	0.001
Ethylbenzene		<0.010	mg/Kg	10	0.001
M,P,O-Xylene		<0.010	mg/Kg	10	0.001
Total BTEX		<0.010	mg/Kg	10	0.001

Surrogate	Flag	Result	Units	Dilution	Spike Amount	Percent Recovery	Recovery Limits
TFT		0.7	mg/Kg	10	1	70	70 - 130
4-BFB	[15]	0.645	mg/Kg	10	1	64	70 - 130

Sample: 196177 - MW-4 (13-15')

Analysis: Extended TX1005 | Analytical Method: TX1005 | QC Batch: QC20095 | Date Analyzed: 5/5/02
Analyst: MM | Preparation Method: N/A | Prep Batch: PB19255 | Date Prepared: 5/2/02

Param	Flag	Result	Units	Dilution	RDL
C6-C12		<50.0	mg/Kg	1	50
>C12-C35		<50.0	mg/Kg	1	50
C6-C35		<50.0	mg/Kg	1	50

Surrogate	Flag	Result	Units	Dilution	Spike Amount	Percent Recovery	Recovery Limits
n-Triacontane		143	mg/Kg	1	150	95	70 - 130

[15] Low surrogate recovery due to matrix interference. ICV, CCV, CCV shows the method to be in control.

Sample: 196177 - MW-4 (13-15')

Analysis:	TPH DRO	Analytical Method:	Mod. 8015B	QC Batch:	QC20096	Date Analyzed:	5/5/02
Analyst:	MM	Preparation Method:	3550 B	Prep Batch:	PB19256	Date Prepared:	5/2/02

Param	Flag	Result	Units	Dilution	RDL
DRO		<50.0	mg/Kg	1	50

Surrogate	Flag	Result	Units	Dilution	Spike Amount	Percent Recovery	Recovery Limits
n-Triacontane		124	mg/Kg	1	150	83	70 - 130

Sample: 196177 - MW-4 (13-15')

Analysis:	TPH GRO	Analytical Method:	8015B	QC Batch:	QC20048	Date Analyzed:	5/2/02
Analyst:	CG	Preparation Method:	5035	Prep Batch:	PB19215	Date Prepared:	5/2/02

Param	Flag	Result	Units	Dilution	RDL
GRO		<1.00	mg/Kg	10	0.10

Surrogate	Flag	Result	Units	Dilution	Spike Amount	Percent Recovery	Recovery Limits
TFT		1.13	mg/Kg	10	0.10	113	70 - 130
4-BFB		0.812	mg/Kg	10	0.10	81	70 - 130

Sample: 196178 - MW-4 (28-30')

Analysis:	BTEX	Analytical Method:	S 8021B	QC Batch:	QC20047	Date Analyzed:	5/2/02
Analyst:	CG	Preparation Method:	S 5035	Prep Batch:	PB19215	Date Prepared:	5/2/02

Param	Flag	Result	Units	Dilution	RDL
Benzene		<0.010	mg/Kg	10	0.001
Toluene		<0.010	mg/Kg	10	0.001
Ethylbenzene		<0.010	mg/Kg	10	0.001
M,P,O-Xylene		<0.010	mg/Kg	10	0.001
Total BTEX		<0.010	mg/Kg	10	0.001

Surrogate	Flag	Result	Units	Dilution	Spike Amount	Percent Recovery	Recovery Limits
TFT		0.788	mg/Kg	10	1	79	70 - 130
4-BFB		0.755	mg/Kg	10	1	75	70 - 130

Sample: 196178 - MW-4 (28-30')

Analysis:	Extended TX1005	Analytical Method:	TX1005	QC Batch:	QC20095	Date Analyzed:	5/5/02
Analyst:	MM	Preparation Method:	N/A	Prep Batch:	PB19255	Date Prepared:	5/2/02

Param	Flag	Result	Units	Dilution	RDL
C6-C12		<50.0	mg/Kg	1	50

Continued ...

... Continued Sample: 196178 Analysis: Extended TX1005

Param	Flag	Result	Units	Dilution	RDL
>C12-C35		<50.0	mg/Kg	1	50
C6-C35		<50.0	mg/Kg	1	50

Surrogate	Flag	Result	Units	Dilution	Spike Amount	Percent Recovery	Recovery Limits
n-Triacontane		158	mg/Kg	1	150	105	70 - 130

Sample: 196178 - MW-4 (28-30')

Analysis: TPH DRO Analytical Method: Mod. 8015B QC Batch: QC20096 Date Analyzed: 5/5/02
Analyst: MM Preparation Method: 3550 B Prep Batch: PB19256 Date Prepared: 5/2/02

Param	Flag	Result	Units	Dilution	RDL
DRO		<50.0	mg/Kg	1	50

Surrogate	Flag	Result	Units	Dilution	Spike Amount	Percent Recovery	Recovery Limits
n-Triacontane		135	mg/Kg	1	150	90	70 - 130

Sample: 196178 - MW-4 (28-30')

Analysis: TPH GRO Analytical Method: 8015B QC Batch: QC20048 Date Analyzed: 5/2/02
Analyst: CG Preparation Method: 5035 Prep Batch: PB19215 Date Prepared: 5/2/02

Param	Flag	Result	Units	Dilution	RDL
GRO		<1.00	mg/Kg	10	0.10

Surrogate	Flag	Result	Units	Dilution	Spike Amount	Percent Recovery	Recovery Limits
TFT		1.16	mg/Kg	10	0.10	116	70 - 130
4-BFB		0.905	mg/Kg	10	0.10	90	70 - 130

Quality Control Report
Method Blank

Method Blank

QCBatch: QC20047

Param	Flag	Results	Units	Reporting Limit
Benzene		<0.010	mg/Kg	0.001
Toluene		<0.010	mg/Kg	0.001
Ethylbenzene		<0.010	mg/Kg	0.001
M,P,O-Xylene		<0.010	mg/Kg	0.001
Total BTEX		<0.010	mg/Kg	0.001

Surrogate	Flag	Result	Units	Dilution	Spike Amount	Percent Recovery	Recovery Limits
TFT		0.886	mg/Kg	10	1	89	70 - 130
4-BFB	[16]	0.585	mg/Kg	10	1	58	70 - 130

Method Blank

QCBatch: QC20048

Param	Flag	Results	Units	Reporting Limit
GRO		<1	mg/Kg	0.10

Surrogate	Flag	Result	Units	Dilution	Spike Amount	Percent Recovery	Recovery Limits
TFT		1.01	mg/Kg	10	0.10	101	70 - 130
4-BFB		0.736	mg/Kg	10	0.10	74	70 - 130

Method Blank

QCBatch: QC20095

Param	Flag	Results	Units	Reporting Limit
C6-C12		<50.0	mg/Kg	50
>C12-C35		<50.0	mg/Kg	50
C6-C35		<50.0	mg/Kg	50

Surrogate	Flag	Result	Units	Dilution	Spike Amount	Percent Recovery	Recovery Limits
n-Triacontane		141	mg/Kg	1	150	94	70 - 130

Method Blank

QCBatch: QC20096

[16] Low surrogate recovery due to prep. ICV, CCV, CCV shows the method to be in control.

Param	Flag	Results	Units	Reporting Limit
DRO		<50.0	mg/Kg	50

Surrogate	Flag	Result	Units	Dilution	Spike Amount	Percent Recovery	Recovery Limits
n-Triacontane		122	mg/Kg	1	150	81	70 - 130

Quality Control Report
Lab Control Spikes and Duplicate Spikes

Laboratory Control Spikes

QCBatch: QC20047

Param	LCS Result	LCSD Result	Units	Dil.	Spike Amount Added	Matrix Result	% Rec	RPD	% Rec Limit	RPD Limit
MTBE	0.906	0.926	mg/Kg	10	1	<0.010	91	2	70 - 130	20
Benzene	0.929	0.935	mg/Kg	10	1	<0.010	93	1	70 - 130	20
Toluene	0.926	0.935	mg/Kg	10	1	<0.010	93	1	70 - 130	20
Ethylbenzene	0.932	0.936	mg/Kg	10	1	<0.010	93	0	70 - 130	20
M,P,O-Xylene	2.70	2.85	mg/Kg	10	3	<0.010	90	5	70 - 130	20

Percent recovery is based on the spike result. RPD is based on the spike and spike duplicate result.

Surrogate	LCS Result	LCSD Result	Units	Dilution	Spike Amount	LCS % Rec	LCSD % Rec	Recovery Limits
TFT	0.900	0.900	mg/Kg	10	1	90	90	70 - 130
4-BFB	0.770	0.841	mg/Kg	10	1	77	84	70 - 130

Laboratory Control Spikes

QCBatch: QC20048

Param	LCS Result	LCSD Result	Units	Dil.	Spike Amount Added	Matrix Result	% Rec	RPD	% Rec Limit	RPD Limit
GRO	11.1	11.6	mg/Kg	10	1	<1	111	4	80 - 120	20

Percent recovery is based on the spike result. RPD is based on the spike and spike duplicate result.

Surrogate	LCS Result	LCSD Result	Units	Dilution	Spike Amount	LCS % Rec	LCSD % Rec	Recovery Limits
TFT	1.06	1.08	mg/Kg	10	0.10	106	108	70 - 130
4-BFB	0.947	0.958	mg/Kg	10	0.10	95	76	70 - 130

Laboratory Control Spikes

QCBatch: QC20095

Param	LCS Result	LCSD Result	Units	Dil.	Spike Amount Added	Matrix Result	% Rec	RPD	% Rec Limit	RPD Limit
C6-C12	224	224	mg/Kg	1	250	<50.0	89	0	70 - 130	20
C6-C35	449	225	mg/Kg	1	500	<50.0	89	0	70 - 130	20

Percent recovery is based on the spike result. RPD is based on the spike and spike duplicate result.

Surrogate	LCS Result	LCSD Result	Units	Dilution	Spike Amount	LCS % Rec	LCSD % Rec	Recovery Limits
n-Triacontane	142	141	mg/Kg	1	150	95	94	70 - 130

Laboratory Control Spikes

QCBatch: QC20096

Param	LCS Result	LCSD Result	Units	Dil.	Spike Amount Added	Matrix Result	% Rec	RPD	% Rec Limit	RPD Limit
DRO	251	251	mg/Kg	1	250	<50.0	100	0	70 - 130	20

Percent recovery is based on the spike result. RPD is based on the spike and spike duplicate result.

Surrogate	LCS Result	LCSD Result	Units	Dilution	Spike Amount	LCS % Rec	LCSD % Rec	Recovery Limits
n-Triacontane	121	120	mg/Kg	1	150	81	80	70 - 130

Quality Control Report
Matrix Spikes and Duplicate Spikes

Matrix Spikes

QCBatch: QC20047

Param	MS Result	MSD Result	Units	Dil.	Spike Amount Added	Matrix Result	% Rec	RPD	% Rec Limit	RPD Limit
Benzene	[17] 0.498	0.922	mg/Kg	10	1	<0.010	49	59	70 - 130	20
Toluene	[18] 0.474	0.881	mg/Kg	10	1	<0.010	47	60	70 - 130	20
Ethylbenzene	[19] 0.49	0.94	mg/Kg	10	1	<0.010	49	62	70 - 130	20
M,P,O-Xylene	[20] 1.5	2.86	mg/Kg	10	3	<0.010	50	62	70 - 130	20

Percent recovery is based on the spike result. RPD is based on the spike and spike duplicate result.

Surrogate	MS Result	MSD Result	Units	Dilution	Spike Amount	MS % Rec	MSD % Rec	Recovery Limits
TFT	[21] 0.469	0.851	mg/Kg	10	1	46	85	70 - 130
4-BFB	[22] 0.454	0.818	mg/Kg	10	1	45	81	70 - 130

Matrix Spikes

QCBatch: QC20048

[17] Low MS recovery due to prep. LCS, LCSD, MSD show the method to be in control.
[18] Low MS recovery due to prep. LCS, LCSD, MSD show the method to be in control.
[19] Low MS recovery due to prep. LCS, LCSD, MSD show the method to be in control.
[20] Low MS recovery due to prep. LCS, LCSD, MSD show the method to be in control.
[21] Low MS recovery due to prep. LCS, LCSD, MSD show the method to be in control.
[22] Low MS recovery due to prep. LCS, LCSD, MSD show the method to be in control.

Param	MS Result	MSD Result	Units	Dil.	Spike Amount Added	Matrix Result	% Rec	RPD	% Rec Limit	RPD Limit
GRO	9.69	8.26	mg/Kg	10	1	<1.00	87	15	80 - 120	20

Percent recovery is based on the spike result. RPD is based on the spike and spike duplicate result.

Surrogate	MS Result	MSD Result	Units	Dilution	Spike Amount	MS % Rec	MSD % Rec	Recovery Limits
TFT	0.733	0.786	mg/Kg	10	0.10	73	79	70 - 130
4-BFB	0.744	0.938	mg/Kg	10	0.10	74	94	70 - 130

Matrix Spikes

QCBatch: QC20095

Param	MS Result	MSD Result	Units	Dil.	Spike Amount Added	Matrix Result	% Rec	RPD	% Rec Limit	RPD Limit
C6-C12	199	195	mg/Kg	1	250	<50.0	79	2	70 - 130	20
>C12-C35	204	214	mg/Kg	1	250	<50.0	81	4	70 - 130	20
C6-C35	403	409	mg/Kg	1	500	<50.0	80	1	70 - 130	20

Percent recovery is based on the spike result. RPD is based on the spike and spike duplicate result.

Surrogate	MS Result	MSD Result	Units	Dilution	Spike Amount	MS % Rec	MSD % Rec	Recovery Limits
n-Triacontane	135	143	mg/Kg	1	150	90	95	70 - 130

Matrix Spikes

QCBatch: QC20096

Param	MS Result	MSD Result	Units	Dil.	Spike Amount Added	Matrix Result	% Rec	RPD	% Rec Limit	RPD Limit
DRO	227	224	mg/Kg	1	250	<50.0	91	1	70 - 130	20

Percent recovery is based on the spike result. RPD is based on the spike and spike duplicate result.

Surrogate	MS Result	MSD Result	Units	Dilution	Spike Amount	MS % Rec	MSD % Rec	Recovery Limits
n-Triacontane	115	122	mg/Kg	1	150	77	81	70 - 130

Quality Control Report
Continuing Calibration Verification Standards

CCV (1)

QCBatch: QC20047

Param	Flag	Units	CCVs True Conc.	CCVs Found Conc.	CCVs Percent Recovery	Percent Recovery Limits	Date Analyzed
MTBE		mg/L	0.10	0.100	100	85 - 115	5/2/02
Benzene		mg/L	0.10	0.0911	91	85 - 115	5/2/02
Toluene		mg/L	0.10	0.0927	93	85 - 115	5/2/02
Ethylbenzene		mg/L	0.10	0.093	93	85 - 115	5/2/02
M,P,O-Xylene		mg/L	0.30	0.282	94	85 - 115	5/2/02

CCV (2)

QCBatch: QC20047

Param	Flag	Units	CCVs True Conc.	CCVs Found Conc.	CCVs Percent Recovery	Percent Recovery Limits	Date Analyzed
MTBE		mg/L	0.10	0.1028	102	85 - 115	5/2/02
Benzene		mg/L	0.10	0.0921	92	85 - 115	5/2/02
Toluene		mg/L	0.10	0.0936	93	85 - 115	5/2/02
Ethylbenzene		mg/L	0.10	0.0939	93	85 - 115	5/2/02
M,P,O-Xylene		mg/L	0.30	0.2841	94	85 - 115	5/2/02

ICV (1)

QCBatch: QC20047

Param	Flag	Units	CCVs True Conc.	CCVs Found Conc.	CCVs Percent Recovery	Percent Recovery Limits	Date Analyzed
MTBE		mg/L	0.10	0.0875	88	85 - 115	5/2/02
Benzene		mg/L	0.10	0.092	92	85 - 115	5/2/02
Toluene		mg/L	0.10	0.0936	94	85 - 115	5/2/02
Ethylbenzene		mg/L	0.10	0.087	87	85 - 115	5/2/02
M,P,O-Xylene		mg/L	0.30	0.282	94	85 - 115	5/2/02

CCV (1)

QCBatch: QC20048

Param	Flag	Units	CCVs True Conc.	CCVs Found Conc.	CCVs Percent Recovery	Percent Recovery Limits	Date Analyzed
GRO		mg/Kg	1	0.877	87	85 - 115	5/2/02

ICV (1)

QCBatch: QC20048

Param	Flag	Units	CCVs True Conc.	CCVs Found Conc.	CCVs Percent Recovery	Percent Recovery Limits	Date Analyzed
GRO		mg/Kg	1	0.895	89	85 - 115	5/2/02

CCV (1) QCBatch: QC20095

Param	Flag	Units	CCVs True Conc.	CCVs Found Conc.	CCVs Percent Recovery	Percent Recovery Limits	Date Analyzed
C6-C12		mg/Kg	250	243	97	70 - 130	5/5/02
>C12-C35		mg/Kg	250	244	97	70 - 130	5/5/02
C6-C35		mg/Kg	500	487	97	70 - 130	5/5/02

CCV (2) QCBatch: QC20095

Param	Flag	Units	CCVs True Conc.	CCVs Found Conc.	CCVs Percent Recovery	Percent Recovery Limits	Date Analyzed
C6-C12		mg/Kg	250	224	89	70 - 130	5/5/02
>C12-C35		mg/Kg	250	228	91	70 - 130	5/5/02
C6-C35		mg/Kg	500	452	90	70 - 130	5/5/02

ICV (1) QCBatch: QC20095

Param	Flag	Units	CCVs True Conc.	CCVs Found Conc.	CCVs Percent Recovery	Percent Recovery Limits	Date Analyzed
C6-C12		mg/Kg	250	224	89	75 - 125	5/5/02
>C12-C35		mg/Kg	250	225	90	75 - 125	5/5/02
C6-C35		mg/Kg	500	449	89	75 - 125	5/5/02

CCV (1) QCBatch: QC20096

Param	Flag	Units	CCVs True Conc.	CCVs Found Conc.	CCVs Percent Recovery	Percent Recovery Limits	Date Analyzed
DRO		mg/Kg	250	271	108	75 - 125	5/5/02

CCV (2) QCBatch: QC20096

Param	Flag	Units	CCVs True Conc.	CCVs Found Conc.	CCVs Percent Recovery	Percent Recovery Limits	Date Analyzed
DRO		mg/Kg	250	254	101	75 - 125	5/5/02

ICV (1) QCBatch: QC20096

Param	Flag	Units	CCVs True Conc.	CCVs Found Conc.	CCVs Percent Recovery	Percent Recovery Limits	Date Analyzed
DRO		mg/Kg	250	251	100	75 - 125	5/5/02

Summary Report

Kyle Landreneau
Equilon Kyle Landreneau
PMB 284 40 FM 1960 West
Houston, TX 77090

Report Date: May 22, 2002

Order ID Number: A02050217

Project: EQ-112
TA Job Code: Barber Ranch 3000109
Casualty Code: EQ-112
Project Location: Barber Lea County, New Mexico
Project Address:
Enercon Services Inc. / Midland / Jeff Kindley

Sample	Description	Matrix	Date Taken	Time Taken	Date Received
196168	MW-4 (13-15)	Soil	4/30/02	:	5/2/02
196169	MW-4 (18-20')	Soil	4/30/02	:	5/2/02
196170	MW-1 (13-15')	Soil	4/30/02	:	5/2/02

0 This report consists of a total of 2 page(s) and is intended only as a summary of results for the sample(s) listed above.

Sample: 196168 - MW-4 (13-15)

Param	Flag	Result	Units
Hydroxide Alkalinity		<1.0	mg/kg as CaCo3
Carbonate Alkalinity		<1.0	mg/kg as CaCo3
Bicarbonate Alkalinity		60	mg/kg as CaCo3
Total Alkalinity		60	mg/kg as CaCo3
Specific Conductance		156	μMHOS/cm
FOC		0.62	%
ferrous iron		0.28	mg/Kg
Bromide		<0.2	mg/Kg
Nitrate-N		0.41	mg/Kg
Phosphate		<0.5	mg/Kg
pH		8.3	s.u.

Sample: 196169 - MW-4 (18-20')

Param	Flag	Result	Units
Hydroxide Alkalinity		<1.0	mg/kg as CaCo3
Carbonate Alkalinity		<1.0	mg/kg as CaCo3
Bicarbonate Alkalinity		116	mg/kg as CaCo3
Total Alkalinity		116	mg/kg as CaCo3
Specific Conductance		144	μMHOS/cm
FOC		0.72	%
ferrous iron		0.28	mg/Kg

Continued on next page ...

Sample 196169 continued ...

Param	Flag	Result	Units
Bromide		<0.2	mg/Kg
Nitrate-N		0.57	mg/Kg
Phosphate		<0.5	mg/Kg
pH		8.5	s.u.

Sample: 196170 - MW-1 (13-15')

Param	Flag	Result	Units
Hydroxide Alkalinity		<1.0	mg/kg as CaCo3
Carbonate Alkalinity		<1.0	mg/kg as CaCo3
Bicarbonate Alkalinity		145	mg/kg as CaCo3
Total Alkalinity		145	mg/kg as CaCo3
Specific Conductance		143	μMHOS/cm
FOC		1.06	%
ferrous iron		0.28	mg/Kg
Bromide		<0.2	mg/Kg
Nitrate-N		0.48	mg/Kg
Phosphate		<0.5	mg/Kg
pH		8.4	s.u.

TRACEANALYSIS, INC.

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Analytical and Quality Control Report

Kyle Landreneau
Equilon Kyle Landreneau
PMB 284 40 FM 1960 West
Houston, TX 77090

Report Date: May 22, 2002

Order ID Number: A02050217

Project: EQ-112
TA Job Code: Barber Ranch 3000109
Casualty Code: EQ-112
Project Location: Barber Lea County, New Mexico
Enercon Services Inc. / Midland / Jeff Kindley

Enclosed are the Analytical Results and Quality Control Data Reports for the following samples submitted to TraceAnalysis, Inc.

Sample	Description	Matrix	Date Taken	Time Taken	Date Received
196168	MW-4 (13-15)	Soil	4/30/02	:	5/2/02
196169	MW-4 (18-20')	Soil	4/30/02	:	5/2/02
196170	MW-1 (13-15')	Soil	4/30/02	:	5/2/02

These results represent only the samples received in the laboratory. The Quality Control Report is generated on a batch basis. All information contained in this report is for the analytical batch(es) in which your sample(s) were analyzed. Note: the RDL is equal to MQL for all organic analytes including TPH.
The test results contained within this report meet all requirements of LAC 33:I unless otherwise noted.

This report consists of a total of 9 pages and shall not be reproduced except in its entirety including the chain of custody (COC), without written approval of TraceAnalysis, Inc.

Dr. Blair Leftwich, Director

Analytical Report

Sample: 196168 - MW-4 (13-15)

Analysis:	Alkalinity	Analytical Method:	E 310.1	QC Batch:	QC20521	Date Analyzed:	5/21/02
Analyst:	RS	Preparation Method:	N/A	Prep Batch:	PB19588	Date Prepared:	5/21/02

Param	Flag	Result	Units	Dilution	RDL
Hydroxide Alkalinity		<1.0	mg/kg as CaCo3	1	1
Carbonate Alkalinity		<1.0	mg/kg as CaCo3	1	1
Bicarbonate Alkalinity		60	mg/kg as CaCo3	1	1
Total Alkalinity		60	mg/kg as CaCo3	1	1

Sample: 196168 - MW-4 (13-15)

Analysis:	Conductivity	Analytical Method:	SM 2510B	QC Batch:	QC20336	Date Analyzed:	5/14/02
Analyst:	RS	Preparation Method:	N/A	Prep Batch:	PB19447	Date Prepared:	5/14/02

Param	Flag	Result	Units	Dilution	RDL
Specific Conductance		156	μMHOS/cm	1	

Sample: 196168 - MW-4 (13-15)

Analysis:	FOC	Analytical Method:	D2974-87	QC Batch:	QC20343	Date Analyzed:	5/10/02
Analyst:	RS	Preparation Method:	N/A	Prep Batch:	PB19443	Date Prepared:	5/8/02

Param	Flag	Result	Units	Dilution	RDL
FOC		0.62	%	1	0.10

Sample: 196168 - MW-4 (13-15)

Analysis:	Ferrous Iron	Analytical Method:	Hach IR-1	QC Batch:	QC20396	Date Analyzed:	5/14/02
Analyst:	RS	Preparation Method:	N/A	Prep Batch:	PB19486	Date Prepared:	5/14/02

Param	Flag	Result	Units	Dilution	RDL
ferrous iron		0.28	mg/Kg	1	

Sample: 196168 - MW-4 (13-15)

Analysis:	Ion Chromatography (IC)	Analytical Method:	E 300.0	QC Batch:	QC20502	Date Analyzed:	5/14/02
Analyst:	JSW	Preparation Method:	N/A	Prep Batch:	PB19566	Date Prepared:	5/14/02

Param	Flag	Result	Units	Dilution	RDL
Bromide		<0.2	mg/Kg	1	0.50
Nitrate-N		0.41	mg/Kg	1	0.20
Phosphate		<0.5	mg/Kg	1	1

Sample: 196168 - MW-4 (13-15)

Analysis:	pH	Analytical Method:	E 150.1	QC Batch:	QC20389	Date Analyzed:	5/14/02
Analyst:	RS	Preparation Method:	N/A	Prep Batch:	PB19493	Date Prepared:	5/14/02

Param	Flag	Result	Units	Dilution	RDL
pH		8.3	s.u.	1	1

Sample: 196169 - MW-4 (18-20')

Analysis:	Alkalinity	Analytical Method:	E 310.1	QC Batch:	QC20521	Date Analyzed:	5/21/02
Analyst:	RS	Preparation Method:	N/A	Prep Batch:	PB19588	Date Prepared:	5/21/02

Param	Flag	Result	Units	Dilution	RDL
Hydroxide Alkalinity		<1.0	mg/kg as CaCo3	1	1
Carbonate Alkalinity		<1.0	mg/kg as CaCo3	1	1
Bicarbonate Alkalinity		116	mg/kg as CaCo3	1	1
Total Alkalinity		116	mg/kg as CaCo3	1	1

Sample: 196169 - MW-4 (18-20')

Analysis:	Conductivity	Analytical Method:	SM 2510B	QC Batch:	QC20336	Date Analyzed:	5/14/02
Analyst:	RS	Preparation Method:	N/A	Prep Batch:	PB19447	Date Prepared:	5/14/02

Param	Flag	Result	Units	Dilution	RDL
Specific Conductance		144	μMHOS/cm	1	

Sample: 196169 - MW-4 (18-20')

Analysis:	FOC	Analytical Method:	D2974-87	QC Batch:	QC20343	Date Analyzed:	5/10/02
Analyst:	RS	Preparation Method:	N/A	Prep Batch:	PB19443	Date Prepared:	5/8/02

Param	Flag	Result	Units	Dilution	RDL
FOC		0.72	%	1	0.10

Sample: 196169 - MW-4 (18-20')

Analysis:	Ferrous Iron	Analytical Method:	Hach IR-1	QC Batch:	QC20396	Date Analyzed:	5/14/02
Analyst:	RS	Preparation Method:	N/A	Prep Batch:	PB19486	Date Prepared:	5/14/02

Param	Flag	Result	Units	Dilution	RDL
ferrous iron		0.28	mg/Kg	1	

Sample: 196169 - MW-4 (18-20')

Analysis:	Ion Chromatography (IC)	Analytical Method:	E 300.0	QC Batch:	QC20502	Date Analyzed:	5/14/02
Analyst:	JSW	Preparation Method:	N/A	Prep Batch:	PB19566	Date Prepared:	5/14/02

Param	Flag	Result	Units	Dilution	RDL
Bromide		<0.2	mg/Kg	1	0.50

Continued ...

... Continued Sample: 196169 Analysis: Ion Chromatography (IC)

Param	Flag	Result	Units	Dilution	RDL
Nitrate-N		0.57	mg/Kg	1	0.20
Phosphate		<0.5	mg/Kg	1	1

Sample: 196169 - MW-4 (18-20')

Analysis:	pH	Analytical Method:	E 150.1	QC Batch:	QC20389	Date Analyzed:	5/14/02
Analyst:	RS	Preparation Method:	N/A	Prep Batch:	PB19493	Date Prepared:	5/14/02

Param	Flag	Result	Units	Dilution	RDL
pH		8.5	s.u.	1	1

Sample: 196170 - MW-1 (13-15')

Analysis:	Alkalinity	Analytical Method:	E 310.1	QC Batch:	QC20521	Date Analyzed:	5/21/02
Analyst:	RS	Preparation Method:	N/A	Prep Batch:	PB19588	Date Prepared:	5/21/02

Param	Flag	Result	Units	Dilution	RDL
Hydroxide Alkalinity		<1.0	mg/kg as CaCo3	1	1
Carbonate Alkalinity		<1.0	mg/kg as CaCo3	1	1
Bicarbonate Alkalinity		145	mg/kg as CaCo3	1	1
Total Alkalinity		145	mg/kg as CaCo3	1	1

Sample: 196170 - MW-1 (13-15')

Analysis:	Conductivity	Analytical Method:	SM 2510B	QC Batch:	QC20336	Date Analyzed:	5/14/02
Analyst:	RS	Preparation Method:	N/A	Prep Batch:	PB19447	Date Prepared:	5/14/02

Param	Flag	Result	Units	Dilution	RDL
Specific Conductance		143	μMHOS/cm	1	

Sample: 196170 - MW-1 (13-15')

Analysis:	FOC	Analytical Method:	D2974-87	QC Batch:	QC20343	Date Analyzed:	5/10/02
Analyst:	RS	Preparation Method:	N/A	Prep Batch:	PB19443	Date Prepared:	5/8/02

Param	Flag	Result	Units	Dilution	RDL
FOC		1.06	%	1	0.10

Sample: 196170 - MW-1 (13-15')

Analysis:	Ferrous Iron	Analytical Method:	Hach IR-1	QC Batch:	QC20396	Date Analyzed:	5/14/02
Analyst:	RS	Preparation Method:	N/A	Prep Batch:	PB19486	Date Prepared:	5/14/02

Param	Flag	Result	Units	Dilution	RDL
ferrous iron		0.28	mg/Kg	1	

Sample: 196170 - MW-1 (13-15')

Analysis: Ion Chromatography (IC) Analytical Method: E 300.0 QC Batch: QC20502 Date Analyzed: 5/14/02
Analyst: JSW Preparation Method: N/A Prep Batch: PB19566 Date Prepared: 5/14/02

Param	Flag	Result	Units	Dilution	RDL
Bromide		<0.2	mg/Kg	1	0.50
Nitrate-N		0.48	mg/Kg	1	0.20
Phosphate		<0.5	mg/Kg	1	1

Sample: 196170 - MW-1 (13-15')

Analysis: pH Analytical Method: E 150.1 QC Batch: QC20389 Date Analyzed: 5/14/02
Analyst: RS Preparation Method: N/A Prep Batch: PB19493 Date Prepared: 5/14/02

Param	Flag	Result	Units	Dilution	RDL
pH		8.4	s.u.	1	1

Quality Control Report
Method Blank

Method Blank QCBatch: QC20336

Param	Flag	Results	Units	Reporting Limit
Specific Conductance		3.66	µMHOS/cm	

Method Blank QCBatch: QC20396

Param	Flag	Results	Units	Reporting Limit
ferrous iron		0.28	mg/Kg	

Method Blank QCBatch: QC20502

Param	Flag	Results	Units	Reporting Limit
Bromide		<0.2	mg/Kg	0.50
Nitrate-N		<0.2	mg/Kg	0.20
Phosphate		<0.5	mg/Kg	1

Method Blank QCBatch: QC20521

Param	Flag	Results	Units	Reporting Limit
Hydroxide Alkalinity		<1.0	mg/Kg as CaCo3	1
Carbonate Alkalinity		<1.0	mg/Kg as CaCo3	1
Bicarbonate Alkalinity		<4.0	mg/Kg as CaCo3	1
Total Alkalinity		<4.0	mg/Kg as CaCo3	1

Quality Control Report
Duplicate Samples

Duplicate QCBatch: QC20336

Param	Flag	Duplicate Result	Sample Result	Units	Dilution	RPD	RPD Limit
Specific Conductance		34165	34700	µMHOS/cm	1	1	4.3

Duplicate QCBatch: QC20343

Param	Flag	Duplicate Result	Sample Result	Units	Dilution	RPD	RPD Limit
FOC		0.78	0.72	%	1	8	72

Duplicate

QCBatch: QC20389

Param	Flag	Duplicate Result	Sample Result	Units	Dilution	RPD	RPD Limit
pH		8.4	8.4	s.u.	1	0	1

Duplicate

QCBatch: QC20521

Param	Flag	Duplicate Result	Sample Result	Units	Dilution	RPD	RPD Limit
Hydroxide Alkalinity		<1.0	<1.0	mg/Kg as CaCo3	1	0	20
Carbonate Alkalinity		<1.0	<1.0	mg/Kg as CaCo3	1	0	20
Bicarbonate Alkalinity		58	60	mg/Kg as CaCo3	1	3	20
Total Alkalinity		58	60	mg/Kg as CaCo3	1	3	20

Quality Control Report
Lab Control Spikes and Duplicate Spikes

Laboratory Control Spikes

QCBatch: QC20502

Param	LCS Result	LCSD Result	Units	Dil.	Spike Amount Added	Matrix Result	% Rec	RPD	% Rec Limit	RPD Limit
Bromide	2.51	2.43	mg/Kg	1	2.50	<0.2	100	3	90 - 110	20
Nitrate-N	2.53	2.53	mg/Kg	1	2.50	<0.2	101	0	90 - 110	20
Phosphate	12.50	12.74	mg/Kg	1	12.50	<0.5	100	1	90 - 110	20

Percent recovery is based on the spike result. RPD is based on the spike and spike duplicate result.

Quality Control Report
Matrix Spikes and Duplicate Spikes

Matrix Spikes

QCBatch: QC20502

Param	MS Result	MSD Result	Units	Dil.	Spike Amount Added	Matrix Result	% Rec	RPD	% Rec Limit	RPD Limit
Bromide	5.00	5.07	mg/Kg	1	5	<0.2	100	1	88 - 116	20
Nitrate-N	5.49	5.37	mg/Kg	1	5	0.73	95	2	53 - 130	20
Phosphate	24.99	24.77	mg/Kg	1	25	<0.5	99	0	83 - 118	20

Percent recovery is based on the spike result. RPD is based on the spike and spike duplicate result.

Quality Control Report
Continuing Calibration Verification Standards

CCV (1) QCBatch: QC20336

Param	Flag	Units	CCVs True Conc.	CCVs Found Conc.	CCVs Percent Recovery	Percent Recovery Limits	Date Analyzed
Specific Conductance		µMHOS/cm	1412	1393	98	90 - 110	5/14/02

ICV (1) QCBatch: QC20336

Param	Flag	Units	CCVs True Conc.	CCVs Found Conc.	CCVs Percent Recovery	Percent Recovery Limits	Date Analyzed
Specific Conductance		µMHOS/cm	1409	1403	99	90 - 110	5/14/02

CCV (1) QCBatch: QC20389

Param	Flag	Units	CCVs True Conc.	CCVs Found Conc.	CCVs Percent Recovery	Percent Recovery Limits	Date Analyzed
pH		s.u.	7	7.0	100	-0.1 s.u. - +0.1 s.u.	5/14/02

ICV (1) QCBatch: QC20389

Param	Flag	Units	CCVs True Conc.	CCVs Found Conc.	CCVs Percent Recovery	Percent Recovery Limits	Date Analyzed
pH		s.u.	7	7.0	100	-0.1 s.u. - +0.1 s.u.	5/14/02

CCV (1) QCBatch: QC20502

Param	Flag	Units	CCVs True Conc.	CCVs Found Conc.	CCVs Percent Recovery	Percent Recovery Limits	Date Analyzed
Bromide		mg/Kg	2.50	2.52	100	90 - 110	5/14/02
Nitrate-N		mg/Kg	2.50	2.36	94	90 - 110	5/14/02
Phosphate		mg/Kg	12.50	12.25	98	90 - 110	5/14/02

ICV (1) QCBatch: QC20502

Param	Flag	Units	CCVs True Conc.	CCVs Found Conc.	CCVs Percent Recovery	Percent Recovery Limits	Date Analyzed
Bromide		mg/Kg	2.50	2.41	96	90 - 110	5/14/02
Nitrate-N		mg/Kg	2.50	2.36	94	90 - 110	5/14/02
Phosphate		mg/Kg	12.50	12.14	97	90 - 110	5/14/02

CCV (1)

QCBatch: QC20521

Param	Flag	Units	CCVs True Conc.	CCVs Found Conc.	CCVs Percent Recovery	Percent Recovery Limits	Date Analyzed
Hydroxide Alkalinity		mg/kg as CaCo3	0	<1.0	0	90 - 110	5/21/02
Carbonate Alkalinity		mg/Kg as CaCo3	0	224	0	90 - 110	5/21/02
Bicarbonate Alkalinity		mg/Kg as CaCo3	0	22	0	90 - 110	5/21/02
Total Alkalinity		mg/Kg as CaCo3	250	246	98	90 - 110	5/21/02

ICV (1)

QCBatch: QC20521

Param	Flag	Units	CCVs True Conc.	CCVs Found Conc.	CCVs Percent Recovery	Percent Recovery Limits	Date Analyzed
Hydroxide Alkalinity		mg/Kg as CaCo3	0	<1.0	0	90 - 110	5/21/02
Carbonate Alkalinity		mg/Kg as CaCo3	0	224	0	90 - 110	5/21/02
Bicarbonate Alkalinity		mg/Kg as CaCo3	0	22	0	90 - 110	5/21/02
Total Alkalinity		mg/Kg as CaCo3	250	246	98	90 - 110	5/21/02

6701 Aberdeen Avenue, Ste. 9
Lubbock, Texas 79424
Tel (806) 794-1296
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1 (800) 378-1296

TraceAnalysis, Inc.

155 McCutcheon, Suite H
El Paso, Texas 79932
Tel (915) 585-3443
Fax (915) 585-4944
1 (888) 588-3443

CHAIN-OF-CUSTODY AND ANALYSIS REQUEST

LAB Order ID # A02050218

Company Name: Enercon Services Inc
Phone #: 915-570-8726

Address: (Street, City, Zip) 306 West Wall, Suite 1312, Midland, Tx 79701
Fax #: 915-684-7587

Contact Person: Jeffrey Kindley

Invoice to: (If different from above) Kyle Landeneau Equiva Services
EQUIVA #

Project #: EQ-112
Project Name: Barber Lease / Ranch

Project Location: Barber Lease, Lea County, New Mexico
Sampler Signature: Jeffrey Kindley

ANALYSIS REQUEST (Circle or Specify Method No.)

LAB # (LAB USE ONLY)	FIELD CODE	# CONTAINERS	Volume/Amount	MATRIX: WATER	SOIL	AIR	SLUDGE		PRESERVATIVE METHOD: HCl	HNO_3	H_2SO_4	NaOH	ICE	NONE		SAMPLING: DATE	TIME	MTBE 8021B/602	BTEX 8021B/602	TPH 418.1/TX1005	PAH 8270C	Total Metals Ag As Ba Cd Cr Pb Se Hg 6010B/200.7	TCLP Metals Ag As Ba Cd Cr Pb Se Hg	TCLP Volatiles	TCLP Semi Volatiles	TCLP Pesticides	RCI	GC/MS Vol. 8260B/624	GC/MS Semi. Vol. 8270C/625	PCB's 8082/608	Pesticides 8081A/608	BOD, TSS, pH	TPH (DRO/GRO) 8015 modified *	TPH (TX 1005) extend to C38 ** on report			Turn Around Time if different from standard	Hold
19/6/71	MW-1 (13-15')	1	4oz		✓									✓		04/29/02	1305		✓														✓					
72	MW-1 (23-25')	1	4oz		✓									✓		04/29/02	1325		✓														✓					
73	MW-2 (13-15')	1	4oz		✓									✓		04/29/02	1612		✓														✓					
74	MW-2 (23-25')	1	4oz		✓									✓		04/29/02	1650		✓														✓					
75	MW-3 (13-15')	1	4oz		✓									✓		04/30/02	1125		✓														✓					
76	MW-3 (18-20')	1	4oz		✓									✓		04/30/02	1130		✓														✓					
77	MW-4 (13-15')	1	4oz		✓									✓		04/30/02	1700		✓														✓					
78	MW-4 (28-30')	1	4oz		✓									✓		04/30/02	1730		✓														✓					

Relinquished by:	Date:	Time:	Received by:	Date:	Time:
Jeffrey Kindley	April 30, 2002	1800			
Relinquished by:	Date:	Time:	Received by:	Date:	Time:
Relinquished by:	Date:	Time:	Received at Laboratory by:	Date:	Time:
			[signature]	5-2-02	10:00

LAB USE ONLY
Intact Y / N
Headspace Y / N
Temp 2 °
Log-in Review [initials]

REMARKS:
* Need 3 day turnaround on TPH (DRO/GRO) Phone results to: 915-631-6591 → Jeff Kindley and 972-484-3854 → Bennett Howell
5/1/02

☐ Check If Special Reporting Limits Are Needed

Submittal of samples constitutes agreement to Terms and Conditions listed on reverse side of C.O.C. 9028779287

Carrier # ** Please call after TPH (DRO/GRO) results [illegible] for [illegible]

[redacted] ORIGI[redacted]COR[redacted]

TRACEANALYSIS, INC.

6701 Aberdeen Avenue, Suite 9 Lubbock, Texas 79424 800•378•1296 806•794•1296 FAX 806•794•1298
155 McCutcheon, Suite H El Paso, Texas 79932 888•588•3443 915•585•3443 FAX 915•585•4944
E-Mail: lab@traceanalysis.com

Analytical and Quality Control Report

Kyle Landreneau
Equilon Kyle Landreneau
PMB 284 40 FM 1960 West
Houston, TX 77090

Report Date: May 13, 2002

Order ID Number: A02050309

Project: EQ-112
TA Job Code: Barber Ranch 3000109
Casualty Code: EQ-112
Project Location: Barber Lea County, New Mexico
Enercon Services Inc. / Midland / Jeff Kindley

Enclosed are the Analytical Results and Quality Control Data Reports for the following samples submitted to Trace-Analysis, Inc.

Sample	Description	Matrix	Date Taken	Time Taken	Date Received
196260	MW-3	Water	5/1/02	13:00	5/3/02
196261	MW-4	Water	5/1/02	15:00	5/3/02

These results represent only the samples received in the laboratory. The Quality Control Report is generated on a batch basis. All information contained in this report is for the analytical batch(es) in which your sample(s) were analyzed. Note: the RDL is equal to MQL for all organic analytes including TPH.
The test results contained within this report meet all requirements of LAC 33:I unless otherwise noted.

This report consists of a total of 11 pages and shall not be reproduced except in its entirety including the chain of custody (COC), without written approval of TraceAnalysis, Inc.

Dr. Blair Leftwich, Director

Analytical Report

Sample: 196260 - MW-3

Analysis:	BTEX	Analytical Method:	S 8021B	QC Batch:	QC20068	Date Analyzed:	5/3/02
Analyst:	CG	Preparation Method:	N/A	Prep Batch:	PB19235	Date Prepared:	5/3/02

Param	Flag	Result	Units	Dilution	RDL
Benzene		<0.001	mg/L	1	0.001
Toluene		<0.001	mg/L	1	0.001
Ethylbenzene		<0.001	mg/L	1	0.001
M,P,O-Xylene		<0.001	mg/L	1	0.001
Total BTEX		<0.001	mg/L	1	0.001

Surrogate	Flag	Result	Units	Dilution	Spike Amount	Percent Recovery	Recovery Limits
TFT		0.0881	mg/L	1	0.10	88	70 - 130
4-BFB		0.090	mg/L	1	0.10	90	70 - 130

Sample: 196260 - MW-3

Analysis:	PAH	Analytical Method:	S 8270C	QC Batch:	QC20211	Date Analyzed:	5/7/02
Analyst:	RC	Preparation Method:	E 3510C	Prep Batch:	PB19287	Date Prepared:	5/7/02

Param	Flag	Result	Units	Dilution	RDL
Naphthalene		<0.0002	mg/L	1	0.0002
Acenaphthylene		<0.0002	mg/L	1	0.0002
Acenaphthene		<0.0002	mg/L	1	0.0002
Fluorene		<0.0002	mg/L	1	0.0002
Phenanthrene		<0.0002	mg/L	1	0.0002
Anthracene		<0.0002	mg/L	1	0.0002
Fluoranthene		<0.0002	mg/L	1	0.0002
Pyrene		<0.0002	mg/L	1	0.0002
Benzo(a)anthracene		<0.0002	mg/L	1	0.0002
Chrysene		<0.0002	mg/L	1	0.0002
Benzo(b)fluoranthene		<0.0002	mg/L	1	0.0002
Benzo(k)fluoranthene		<0.0002	mg/L	1	0.0002
Benzo(a)pyrene		<0.0002	mg/L	1	0.0002
Indeno(1,2,3-cd)pyrene		<0.0002	mg/L	1	0.0002
Dibenzo(a,h)anthracene		<0.0002	mg/L	1	0.0002
Benzo(g,h,i)perylene		<0.0002	mg/L	1	0.0002
Test Comments		<0.0002	mg/L	1	

Surrogate	Flag	Result	Units	Dilution	Spike Amount	Percent Recovery	Recovery Limits
Nitrobenzene-d5		31.21	mg/L	1	80	39	35 - 114
2-Fluorobiphenyl		32.51	mg/L	1	80	40	43 - 116
Terphenyl-d14		34.44	mg/L	1	80	43	33 - 141

Sample: 196261 - MW-4

Analysis:	Alkalinity	Analytical Method:	E 310.1	QC Batch:	QC20078	Date Analyzed:	5/3/02
Analyst:	RS	Preparation Method:	N/A	Prep Batch:	PB19249	Date Prepared:	5/3/02

Param	Flag	Result	Units	Dilution	RDL
Hydroxide Alkalinity		<1.0	mg/L as CaCo3	1	1
Carbonate Alkalinity		<1.0	mg/L as CaCo3	1	1
Bicarbonate Alkalinity		402	mg/L as CaCo3	1	1
Total Alkalinity		402	mg/L as CaCo3	1	1

Sample: 196261 - MW-4

Analysis:	BTEX	Analytical Method:	S 8021B	QC Batch:	QC20068	Date Analyzed:	5/3/02
Analyst:	CG	Preparation Method:	S 5030B	Prep Batch:	PB19235	Date Prepared:	5/3/02

Param	Flag	Result	Units	Dilution	RDL
Benzene		<0.001	mg/L	1	0.001
Toluene		<0.001	mg/L	1	0.001
Ethylbenzene		<0.001	mg/L	1	0.001
M,P,O-Xylene		<0.001	mg/L	1	0.001
Total BTEX		<0.001	mg/L	1	0.001

Surrogate	Flag	Result	Units	Dilution	Spike Amount	Percent Recovery	Recovery Limits
TFT		0.0801	mg/L	1	0.10	80	70 - 130
4-BFB		0.0838	mg/L	1	0.10	84	70 - 130

Sample: 196261 - MW-4

Analysis:	Extended TX1005	Analytical Method:	TX1005	QC Batch:	QC20117	Date Analyzed:	5/3/02
Analyst:	MM	Preparation Method:	N/A	Prep Batch:	PB19281	Date Prepared:	5/2/02

Param	Flag	Result	Units	Dilution	RDL
C6-C12		<5.00	mg/L	0.10	50
>C12-C35		<5.00	mg/L	0.10	50
C6-C35		<5.00	mg/L	0.10	50

Surrogate	Flag	Result	Units	Dilution	Spike Amount	Percent Recovery	Recovery Limits
n-Triacontane		14.9	mg/L	1	15	99	70 - 130

Sample: 196261 - MW-4

Analysis:	Ferrous Iron	Analytical Method:	Hach IR-1	QC Batch:	QC20065	Date Analyzed:	5/3/02
Analyst:	JSW	Preparation Method:	N/A	Prep Batch:	PB19231	Date Prepared:	5/3/02

Param	Flag	Result	Units	Dilution	RDL
ferrous iron	[1]	0.28	mg/L	1	0.01

[1] Sample was received out of holding time.

Sample: 196261 - MW-4

Analysis: Ion Chromatography (IC) Analytical Method: E 300.0 QC Batch: QC20140 Date Analyzed: 5/3/02
Analyst: JSW Preparation Method: N/A Prep Batch: PB19295 Date Prepared: 5/3/02

Param	Flag	Result	Units	Dilution	RDL
Bromide		1.25	mg/L	5	0.20
Nitrate-N	[2]	1.87	mg/L	5	0.20

Sample: 196261 - MW-4

Analysis: PAH Analytical Method: S 8270C QC Batch: QC20211 Date Analyzed: 5/7/02
Analyst: RC Preparation Method: E 3510C Prep Batch: PB19287 Date Prepared: 5/7/02

Param	Flag	Result	Units	Dilution	RDL
Naphthalene		<0.0002	mg/L	1	0.0002
Acenaphthylene		<0.0002	mg/L	1	0.0002
Acenaphthene		<0.0002	mg/L	1	0.0002
Fluorene		<0.0002	mg/L	1	0.0002
Phenanthrene		<0.0002	mg/L	1	0.0002
Anthracene		<0.0002	mg/L	1	0.0002
Fluoranthene		<0.0002	mg/L	1	0.0002
Pyrene		<0.0002	mg/L	1	0.0002
Benzo(a)anthracene		<0.0002	mg/L	1	0.0002
Chrysene		<0.0002	mg/L	1	0.0002
Benzo(b)fluoranthene		<0.0002	mg/L	1	0.0002
Benzo(k)fluoranthene		<0.0002	mg/L	1	0.0002
Benzo(a)pyrene		<0.0002	mg/L	1	0.0002
Indeno(1,2,3-cd)pyrene		<0.0002	mg/L	1	0.0002
Dibenzo(a,h)anthracene		<0.0002	mg/L	1	0.0002
Benzo(g,h,i)perylene		<0.0002	mg/L	1	0.0002
Test Comments		<0.0002	mg/L	1	

Surrogate	Flag	Result	Units	Dilution	Spike Amount	Percent Recovery	Recovery Limits
Nitrobenzene-d5		32.01	mg/L	1	80	40	35 - 114
2-Fluorobiphenyl		33.92	mg/L	1	80	42	43 - 116
Terphenyl-d14		29.48	mg/L	1	80	36	33 - 141

Sample: 196261 - MW-4

Analysis: PO4 Analytical Method: E 300.0 QC Batch: QC20139 Date Analyzed: 5/3/02
Analyst: JSW Preparation Method: N/A Prep Batch: PB19294 Date Prepared: 5/3/02

Param	Flag	Result	Units	Dilution	RDL
PO4-P		< 0.04	mg/L	1	0.04

[2]Matrix spikes RPD = 0. %EA = 95.

Quality Control Report
Method Blank

Method Blank

QCBatch: QC20065

Param	Flag	Results	Units	Reporting Limit
ferrous iron		0.28	mg/L	0.01

Method Blank

QCBatch: QC20068

Param	Flag	Results	Units	Reporting Limit
Benzene		<0.001	mg/L	0.001
Toluene		<0.001	mg/L	0.001
Ethylbenzene		<0.001	mg/L	0.001
M,P,O-Xylene		<0.001	mg/L	0.001
Total BTEX		<0.001	mg/L	0.001

Surrogate	Flag	Result	Units	Dilution	Spike Amount	Percent Recovery	Recovery Limits
TFT		0.104	mg/L	1	0.10	104	70 - 130
4-BFB		0.102	mg/L	1	0.10	102	70 - 130

Method Blank

QCBatch: QC20078

Param	Flag	Results	Units	Reporting Limit
Hydroxide Alkalinity		<1.0	mg/L as CaCo3	1
Carbonate Alkalinity		<1.0	mg/L as CaCo3	1
Bicarbonate Alkalinity		<4.0	mg/L as CaCo3	1
Total Alkalinity		<4.0	mg/L as CaCo3	1

Method Blank

QCBatch: QC20117

Param	Flag	Results	Units	Reporting Limit
C6-C12		<5.00	mg/L	50
>C12-C35		<5.00	mg/L	50
C6-C35		<5.00	mg/L	50

Surrogate	Flag	Result	Units	Dilution	Spike Amount	Percent Recovery	Recovery Limits
n-Triacontane		15.3	mg/L	0.10	15	102	70 - 130

Method Blank

QCBatch: QC20139

Param	Flag	Results	Units	Reporting Limit
PO4-P		<0.0131	mg/L	0.04

Method Blank

QCBatch: QC20140

Param	Flag	Results	Units	Reporting Limit
Bromide		<0.2	mg/L	0.20
Nitrate-N		<0.2	mg/L	0.20

Method Blank

QCBatch: QC20211

Param	Flag	Results	Units	Reporting Limit
Naphthalene		<0.0002	mg/L	0.0002
Acenaphthylene		<0.0002	mg/L	0.0002
Acenaphthene		<0.0002	mg/L	0.0002
Fluorene		<0.0002	mg/L	0.0002
Phenanthrene		<0.0002	mg/L	0.0002
Anthracene		<0.0002	mg/L	0.0002
Fluoranthene		<0.0002	mg/L	0.0002
Pyrene		<0.0002	mg/L	0.0002
Benzo(a)anthracene		<0.0002	mg/L	0.0002
Chrysene		<0.0002	mg/L	0.0002
Benzo(b)fluoranthene		<0.0002	mg/L	0.0002
Benzo(k)fluoranthene		<0.0002	mg/L	0.0002
Benzo(a)pyrene		<0.0002	mg/L	0.0002
Indeno(1,2,3-cd)pyrene		<0.0002	mg/L	0.0002
Dibenzo(a,h)anthracene		<0.0002	mg/L	0.0002
Benzo(g,h,i)perylene		<0.0002	mg/L	0.0002
Test Comments		<0.0002	mg/L	

Surrogate	Flag	Result	Units	Dilution	Spike Amount	Percent Recovery	Recovery Limits
Nitrobenzene-d5		89.97	mg/L	1	80	112	35 - 114
2-Fluorobiphenyl		96.41	mg/L	1	80	120	43 - 116
Terphenyl-d14		86	mg/L	1	80	107	33 - 141

Quality Control Report
Duplicate Samples

Duplicate

QCBatch: QC20078

Param	Flag	Duplicate Result	Sample Result	Units	Dilution	RPD	RPD Limit
Hydroxide Alkalinity		<1.0	<1.0	mg/L as CaCo3	1	0	6.6
Carbonate Alkalinity		<1.0	<1.0	mg/L as CaCo3	1	0	6.6
Bicarbonate Alkalinity		46	48	mg/L as CaCo3	1	4	6.6
Total Alkalinity		46	48	mg/L as CaCo3	1	4	6.6

Quality Control Report
Lab Control Spikes and Duplicate Spikes

Laboratory Control Spikes

QCBatch: QC20068

Param	LCS Result	LCSD Result	Units	Dil.	Spike Amount Added	Matrix Result	% Rec	RPD	% Rec Limit	RPD Limit
MTBE	0.0984	0.102	mg/L	1	0.10	<0.001	98	4	70 - 130	20
Benzene	0.101	0.100	mg/L	1	0.10	<0.001	101	1	70 - 130	20
Toluene	0.099	0.0993	mg/L	1	0.10	<0.001	99	0	70 - 130	20
Ethylbenzene	0.0995	0.103	mg/L	1	0.10	<0.001	100	3	70 - 130	20
M,P,O-Xylene	0.298	0.307	mg/L	1	0.30	<0.001	99	3	70 - 130	20

Percent recovery is based on the spike result. RPD is based on the spike and spike duplicate result.

Surrogate	LCS Result	LCSD Result	Units	Dilution	Spike Amount	LCS % Rec	LCSD % Rec	Recovery Limits
TFT	0.104	0.0982	mg/L	1	0.10	104	98	70 - 130
4-BFB	0.101	0.0977	mg/L	1	0.10	101	98	70 - 130

Laboratory Control Spikes

QCBatch: QC20117

Param	LCS Result	LCSD Result	Units	Dil.	Spike Amount Added	Matrix Result	% Rec	RPD	% Rec Limit	RPD Limit
C6-C12	24.6	23.8	mg/L	0.10	250	<5.00	98	3	70 - 130	20
>C12-C35	24.9	24.4	mg/L	0.10	250	<5.00	99	2	70 - 130	20
C6-C35	49.5	< 50	mg/L	0.10	500	<5.00	99	2	70 - 130	20

Percent recovery is based on the spike result. RPD is based on the spike and spike duplicate result.

Surrogate	LCS Result	LCSD Result	Units	Dilution	Spike Amount	LCS % Rec	LCSD % Rec	Recovery Limits
n-Triacontane	16.2	15.5	mg/L	0.10	15	108	103	70 - 130

Laboratory Control Spikes

QCBatch: QC20139

Param	LCS Result	LCSD Result	Units	Dil.	Spike Amount Added	Matrix Result	% Rec	RPD	% Rec Limit	RPD Limit
PO4-P	0.0591	0.0580	mg/L	1	0.06	<0.0131	90	1	90 - 120	20

Percent recovery is based on the spike result. RPD is based on the spike and spike duplicate result.

Laboratory Control Spikes

QCBatch: QC20140

Param	LCS Result	LCSD Result	Units	Dil.	Spike Amount Added	Matrix Result	% Rec	RPD	% Rec Limit	RPD Limit
Chloride	11.93	11.95	mg/L	1	12.50	<2.0	95	0	90 - 110	20
Sulfate	12.27	12.32	mg/L	1	12.50	<2.0	98	0	90 - 110	20

Percent recovery is based on the spike result. RPD is based on the spike and spike duplicate result.

Laboratory Control Spikes

QCBatch: QC20211

Param	LCS Result	LCSD Result	Units	Dil.	Spike Amount Added	Matrix Result	% Rec	RPD	% Rec Limit	RPD Limit
Naphthalene	16.53	39.82	mg/L	1	80	<0.0002	20	82	16 - 96	20
Acenaphthylene	18.7	47.23	mg/L	1	80	<0.0002	23	86	20 - 110	20
Acenaphthene	17.36	45.28	mg/L	1	80	<0.0002	21	89	18 - 108	20
Fluorene	17.6	47.76	mg/L	1	80	<0.0002	22	92	22 - 102	20
Phenanthrene	16.33	48.56	mg/L	1	80	<0.0002	20	99	25 - 103	20
Anthracene	16.68	50.28	mg/L	1	80	<0.0002	20	100	22 - 110	20
Fluoranthene	21.35	65.13	mg/L	1	80	<0.0002	26	101	21 - 110	20
Pyrene	31.23	55.82	mg/L	1	80	<0.0002	39	56	22 - 100	20
Benzo(a)anthracene	29.98	54.52	mg/L	1	80	<0.0002	37	58	30 - 99	20
Chrysene	26.95	49.62	mg/L	1	80	<0.0002	33	59	27 - 108	20
Benzo(b)fluoranthene	44.89	60.98	mg/L	1	80	<0.0002	56	30	19 - 102	20
Benzo(k)fluoranthene	51.42	62.36	mg/L	1	80	<0.0002	64	19	35 - 103	20
Benzo(a)pyrene	48.44	61.65	mg/L	1	80	<0.0002	60	23	24 - 105	20
Indeno(1,2,3-cd)pyrene	35.08	50.52	mg/L	1	80	<0.0002	43	36	22 - 108	20
Dibenzo(a,h)anthracene	31.71	40.79	mg/L	1	80	<0.0002	39	25	23 - 77	20
Benzo(g,h,i)perylene	41.14	53.31	mg/L	1	80	<0.0002	51	25	19 - 119	20

Percent recovery is based on the spike result. RPD is based on the spike and spike duplicate result.

Surrogate	LCS Result	LCSD Result	Units	Dilution	Spike Amount	LCS % Rec	LCSD % Rec	Recovery Limits
Nitrobenzene-d5	29.1	69.05	mg/L	1	80	36	86	35 - 114
2-Fluorobiphenyl	29.93	74.73	mg/L	1	80	37	93	43 - 116
Terphenyl-d14	51.05	90.12	mg/L	1	80	63	112	33 - 141

Quality Control Report
Matrix Spikes and Duplicate Spikes

Matrix Spikes

QCBatch: QC20139

Param	MS Result	MSD Result	Units	Dil.	Spike Amount Added	Matrix Result	% Rec	RPD	% Rec Limit	RPD Limit
PO4-P	0.0974	0.0916	mg/L	1	0.06	0.0359	94	9	80 - 135	20

Percent recovery is based on the spike result. RPD is based on the spike and spike duplicate result.

Matrix Spikes

QCBatch: QC20140

Param	MS Result	MSD Result	Units	Dil.	Spike Amount Added	Matrix Result	% Rec	RPD	% Rec Limit	RPD Limit
Bromide	3.29	3.30	mg/L	1	1.25	1.92	104	0	84 - 110	20

Percent recovery is based on the spike result. RPD is based on the spike and spike duplicate result.

Quality Control Report
Continuing Calibration Verification Standards

CCV (1) QCBatch: QC20068

Param	Flag	Units	CCVs True Conc.	CCVs Found Conc.	CCVs Percent Recovery	Percent Recovery Limits	Date Analyzed
MTBE		mg/L	0.10	0.0932	93	85 - 115	5/3/02
Benzene		mg/L	0.10	0.0977	98	85 - 115	5/3/02
Toluene		mg/L	0.10	0.0961	96	85 - 115	5/3/02
Ethylbenzene		mg/L	0.10	0.0967	97	85 - 115	5/3/02
M,P,O-Xylene		mg/L	0.30	0.290	97	85 - 115	5/3/02

CCV (2) QCBatch: QC20068

Param	Flag	Units	CCVs True Conc.	CCVs Found Conc.	CCVs Percent Recovery	Percent Recovery Limits	Date Analyzed
MTBE		mg/L	0.10	0.096	96	85 - 115	5/3/02
Benzene		mg/L	0.10	0.102	102	85 - 115	5/3/02
Toluene		mg/L	0.10	0.1	100	85 - 115	5/3/02
Ethylbenzene		mg/L	0.10	0.103	103	85 - 115	5/3/02
M,P,O-Xylene		mg/L	0.30	0.302	100	85 - 115	5/3/02

ICV (1) QCBatch: QC20068

Param	Flag	Units	CCVs True Conc.	CCVs Found Conc.	CCVs Percent Recovery	Percent Recovery Limits	Date Analyzed
MTBE		mg/L	0.10	0.1134	113	85 - 115	5/3/02
Benzene		mg/L	0.10	0.113	113	85 - 115	5/3/02
Toluene		mg/L	0.10	0.108	108	85 - 115	5/3/02
Ethylbenzene		mg/L	0.10	0.108	108	85 - 115	5/3/02
M,P,O-Xylene		mg/L	0.30	0.322	107	85 - 115	5/3/02

CCV (1) QCBatch: QC20078

Param	Flag	Units	CCVs True Conc.	CCVs Found Conc.	CCVs Percent Recovery	Percent Recovery Limits	Date Analyzed
Hydroxide Alkalinity		mg/L as CaCo3	0	<1.0	0	90 - 110	5/3/02
Carbonate Alkalinity		mg/L as CaCo3	0	232	0	90 - 110	5/3/02
Bicarbonate Alkalinity		mg/L as CaCo3	0	10	0	90 - 110	5/3/02
Total Alkalinity		mg/L as CaCo3	250	242	96	90 - 110	5/3/02

ICV (1) QCBatch: QC20078

Param	Flag	Units	CCVs True Conc.	CCVs Found Conc.	CCVs Percent Recovery	Percent Recovery Limits	Date Analyzed
Hydroxide Alkalinity		mg/L as CaCo3	0	<1.0	0	90 - 110	5/3/02
Carbonate Alkalinity		mg/L as CaCo3	0	228	0	90 - 110	5/3/02
Bicarbonate Alkalinity		mg/L as CaCo3	0	16	0	90 - 110	5/3/02
Total Alkalinity		mg/L as CaCo3	250	244	97	90 - 110	5/3/02

CCV (1) QCBatch: QC20117

Param	Flag	Units	CCVs True Conc.	CCVs Found Conc.	CCVs Percent Recovery	Percent Recovery Limits	Date Analyzed
C6-C12		mg/L	250	231	92	75 - 125	5/3/02
>C12-C35		mg/L	250	238	95	75 - 125	5/3/02
C6-C35		mg/L	500	469	93	75 - 125	5/3/02

ICV (1) QCBatch: QC20117

Param	Flag	Units	CCVs True Conc.	CCVs Found Conc.	CCVs Percent Recovery	Percent Recovery Limits	Date Analyzed
C6-C12		mg/L	250	219	87	75 - 125	5/3/02
>C12-C35		mg/L	250	228	91	75 - 125	5/3/02
C6-C35		mg/L	500	447	89	75 - 125	5/3/02

CCV (1) QCBatch: QC20139

Param	Flag	Units	CCVs True Conc.	CCVs Found Conc.	CCVs Percent Recovery	Percent Recovery Limits	Date Analyzed
PO4-P		mg/L	0.06	0.0638	97	85 - 115	5/3/02

ICV (1) QCBatch: QC20139

Param	Flag	Units	CCVs True Conc.	CCVs Found Conc.	CCVs Percent Recovery	Percent Recovery Limits	Date Analyzed
PO4-P		mg/L	0.06	0.0626	95	85 - 115	5/3/02

CCV (1)

QCBatch: QC20140

Param	Flag	Units	CCVs True Conc.	CCVs Found Conc.	CCVs Percent Recovery	Percent Recovery Limits	Date Analyzed
Chloride		mg/L	12.50	11.98	95	90 - 110	5/3/02
Sulfate		mg/L	12.50	12.48	99	90 - 110	5/3/02

ICV (1)

QCBatch: QC20140

Param	Flag	Units	CCVs True Conc.	CCVs Found Conc.	CCVs Percent Recovery	Percent Recovery Limits	Date Analyzed
Chloride		mg/L	12.50	12.04	96	90 - 110	5/3/02
Sulfate		mg/L	12.50	12.50	100	90 - 110	5/3/02

CCV (1)

QCBatch: QC20211

Param	Flag	Units	CCVs True Conc.	CCVs Found Conc.	CCVs Percent Recovery	Percent Recovery Limits	Date Analyzed
Naphthalene		mg/L	60	60.51	100	80 - 120	5/7/02
Acenaphthylene		mg/L	60	63.27	105	80 - 120	5/7/02
Acenaphthene		mg/L	60	61.09	101	80 - 120	5/7/02
Fluorene		mg/L	60	60.09	100	80 - 120	5/7/02
Phenanthrene		mg/L	60	53.08	88	80 - 120	5/7/02
Anthracene		mg/L	60	54.12	90	80 - 120	5/7/02
Fluoranthene		mg/L	60	65.02	108	80 - 120	5/7/02
Pyrene		mg/L	60	60.27	100	80 - 120	5/7/02
Benzo(a)anthracene		mg/L	60	60.83	101	80 - 120	5/7/02
Chrysene		mg/L	60	58.92	98	80 - 120	5/7/02
Benzo(b)fluoranthene		mg/L	60	64.67	107	80 - 120	5/7/02
Benzo(k)fluoranthene		mg/L	60	60.34	100	80 - 120	5/7/02
Benzo(a)pyrene		mg/L	60	62.7	104	80 - 120	5/7/02
Indeno(1,2,3-cd)pyrene		mg/L	60	53.8	89	80 - 120	5/7/02
Dibenzo(a,h)anthracene		mg/L	60	53.89	89	80 - 120	5/7/02
Benzo(g,h,i)perylene		mg/L	60	53.55	89	80 - 120	5/7/02
Nitrobenzene-d5		mg/L	60	62.25	103	80 - 120	5/7/02
2-Fluorobiphenyl		mg/L	60	63.85	106	80 - 120	5/7/02
Terphenyl-d14		mg/L	60	59.23	98	80 - 120	5/7/02

Summary Report

Kyle Landreneau
Equilon Kyle Landreneau
PMB 284 40 FM 1960 West
Houston, TX 77090

Report Date: May 13, 2002

Order ID Number: A02050309

Project: EQ-112
TA Job Code: Barber Ranch 3000109
Casualty Code: EQ-112
Project Location: Barber Lea County, New Mexico
Project Address:
Enercon Services Inc. / Midland / Jeff Kindley

Sample	Description	Matrix	Date Taken	Time Taken	Date Received
196260	MW-3	Water	5/1/02	13:00	5/3/02
196261	MW-4	Water	5/1/02	15:00	5/3/02

0 This report consists of a total of 2 page(s) and is intended only as a summary of results for the sample(s) listed above.

	BTEX					Extended TX1005		
Sample - Field Code	Benzene (ppm)	Toluene (ppm)	Ethylbenzene (ppm)	M,P,O-Xylene (ppm)	Total BTEX (ppm)	C6-C12 (ppm)	>C12-C35 (ppm)	C6-C35 (ppm)
196260 - MW-3	<0.001	<0.001	<0.001	<0.001	<0.001	-	-	-
196261 - MW-4	<0.001	<0.001	<0.001	<0.001	<0.001	<5.00	<5.00	<5.00

Sample: 196260 - MW-3

Param	Flag	Result	Units
Naphthalene		<0.0002	mg/L
Acenaphthylene		<0.0002	mg/L
Acenaphthene		<0.0002	mg/L
Fluorene		<0.0002	mg/L
Phenanthrene		<0.0002	mg/L
Anthracene		<0.0002	mg/L
Fluoranthene		<0.0002	mg/L
Pyrene		<0.0002	mg/L
Benzo(a)anthracene		<0.0002	mg/L
Chrysene		<0.0002	mg/L
Benzo(b)fluoranthene		<0.0002	mg/L
Benzo(k)fluoranthene		<0.0002	mg/L
Benzo(a)pyrene		<0.0002	mg/L
Indeno(1,2,3-cd)pyrene		<0.0002	mg/L
Dibenzo(a,h)anthracene		<0.0002	mg/L
Benzo(g,h,i)perylene		<0.0002	mg/L

Continued on next page ...

Sample 196260 continued ...

Param	Flag	Result	Units
Test Comments		<0.0002	mg/L

Sample: 196261 - MW-4

Param	Flag	Result	Units
Hydroxide Alkalinity		<1.0	mg/L as CaCo3
Carbonate Alkalinity		<1.0	mg/L as CaCo3
Bicarbonate Alkalinity		402	mg/L as CaCo3
Total Alkalinity		402	mg/L as CaCo3
ferrous iron	[1]	0.28	mg/L
Bromide		1.25	mg/L
Nitrate-N	[2]	1.87	mg/L
Naphthalene		<0.0002	mg/L
Acenaphthylene		<0.0002	mg/L
Acenaphthene		<0.0002	mg/L
Fluorene		<0.0002	mg/L
Phenanthrene		<0.0002	mg/L
Anthracene		<0.0002	mg/L
Fluoranthene		<0.0002	mg/L
Pyrene		<0.0002	mg/L
Benzo(a)anthracene		<0.0002	mg/L
Chrysene		<0.0002	mg/L
Benzo(b)fluoranthene		<0.0002	mg/L
Benzo(k)fluoranthene		<0.0002	mg/L
Benzo(a)pyrene		<0.0002	mg/L
Indeno(1,2,3-cd)pyrene		<0.0002	mg/L
Dibenzo(a,h)anthracene		<0.0002	mg/L
Benzo(g,h,i)perylene		<0.0002	mg/L
Test Comments		<0.0002	mg/L
PO4-P		< 0.04	mg/L

[1]Sample was received out of holding time.
[2]Matrix spikes RPD = 0. %EA = 95.

Analytical and Quality Control Report

Jeff Kindley
Enercon Services Inc.
306 W. Wall Suite 1312
Midland, Tx. 79701

Report Date: May 14, 2002

Order ID Number: A02050309

Project Number: EQ-112
Project Name: Barber Ranch 3000109
Project Location: Barber Lea County, New Mexico

Enclosed are the Analytical Results and Quality Control Data Reports for the following samples submitted to Trace-Analysis, Inc.

Sample	Description	Matrix	Date Taken	Time Taken	Date Received
196260	MW-3	Water	5/1/02	13:00	5/3/02
196261	MW-4	Water	5/1/02	15:00	5/3/02

These results represent only the samples received in the laboratory. The Quality Control Report is generated on a batch basis. All information contained in this report is for the analytical batch(es) in which your sample(s) were analyzed. Note: the RDL is equal to MQL for all organic analytes including TPH.
The test results contained within this report meet all requirements of LAC 33:I unless otherwise noted.

This report consists of a total of 11 pages and shall not be reproduced except in its entirety including the chain of custody (COC), without written approval of TraceAnalysis, Inc.

Dr. Blair Leftwich, Director

Analytical Report

Sample: 196260 - MW-3

Analysis:	BTEX	Analytical Method:	S 8021B	QC Batch:	QC20068	Date Analyzed:	5/3/02
Analyst:	CG	Preparation Method:	N/A	Prep Batch:	PB19235	Date Prepared:	5/3/02

Param	Flag	Result	Units	Dilution	RDL
Benzene		<0.001	mg/L	1	0.001
Toluene		<0.001	mg/L	1	0.001
Ethylbenzene		<0.001	mg/L	1	0.001
M,P,O-Xylene		<0.001	mg/L	1	0.001
Total BTEX		<0.001	mg/L	1	0.001

Surrogate	Flag	Result	Units	Dilution	Spike Amount	Percent Recovery	Recovery Limits
TFT		0.0881	mg/L	1	0.10	88	70 - 130
4-BFB		0.090	mg/L	1	0.10	90	70 - 130

Sample: 196260 - MW-3

Analysis:	PAH	Analytical Method:	S 8270C	QC Batch:	QC20211	Date Analyzed:	5/7/02
Analyst:	RC	Preparation Method:	E 3510C	Prep Batch:	PB19287	Date Prepared:	5/7/02

Param	Flag	Result	Units	Dilution	RDL
Naphthalene		<0.0002	mg/L	1	0.0002
Acenaphthylene		<0.0002	mg/L	1	0.0002
Acenaphthene		<0.0002	mg/L	1	0.0002
Fluorene		<0.0002	mg/L	1	0.0002
Phenanthrene		<0.0002	mg/L	1	0.0002
Anthracene		<0.0002	mg/L	1	0.0002
Fluoranthene		<0.0002	mg/L	1	0.0002
Pyrene		<0.0002	mg/L	1	0.0002
Benzo(a)anthracene		<0.0002	mg/L	1	0.0002
Chrysene		<0.0002	mg/L	1	0.0002
Benzo(b)fluoranthene		<0.0002	mg/L	1	0.0002
Benzo(k)fluoranthene		<0.0002	mg/L	1	0.0002
Benzo(a)pyrene		<0.0002	mg/L	1	0.0002
Indeno(1,2,3-cd)pyrene		<0.0002	mg/L	1	0.0002
Dibenzo(a,h)anthracene		<0.0002	mg/L	1	0.0002
Benzo(g,h,i)perylene		<0.0002	mg/L	1	0.0002
Test Comments		<0.0002	mg/L	1	

Surrogate	Flag	Result	Units	Dilution	Spike Amount	Percent Recovery	Recovery Limits
Nitrobenzene-d5		31.21	mg/L	1	80	39	35 - 114
2-Fluorobiphenyl		32.51	mg/L	1	80	40	43 - 116
Terphenyl-d14		34.44	mg/L	1	80	43	33 - 141

Sample: 196261 - MW-4

Analysis:	Alkalinity	Analytical Method:	E 310.1	QC Batch:	QC20078	Date Analyzed:	5/3/02
Analyst:	RS	Preparation Method:	N/A	Prep Batch:	PB19249	Date Prepared:	5/3/02

Param	Flag	Result	Units	Dilution	RDL
Hydroxide Alkalinity		<1.0	mg/L as CaCo3	1	1
Carbonate Alkalinity		<1.0	mg/L as CaCo3	1	1
Bicarbonate Alkalinity		402	mg/L as CaCo3	1	1
Total Alkalinity		402	mg/L as CaCo3	1	1

Sample: 196261 - MW-4

Analysis:	BTEX	Analytical Method:	S 8021B	QC Batch:	QC20068	Date Analyzed:	5/3/02
Analyst:	CG	Preparation Method:	S 5030B	Prep Batch:	PB19235	Date Prepared:	5/3/02

Param	Flag	Result	Units	Dilution	RDL
Benzene		<0.001	mg/L	1	0.001
Toluene		<0.001	mg/L	1	0.001
Ethylbenzene		<0.001	mg/L	1	0.001
M,P,O-Xylene		<0.001	mg/L	1	0.001
Total BTEX		<0.001	mg/L	1	0.001

Surrogate	Flag	Result	Units	Dilution	Spike Amount	Percent Recovery	Recovery Limits
TFT		0.0801	mg/L	1	0.10	80	70 - 130
4-BFB		0.0838	mg/L	1	0.10	84	70 - 130

Sample: 196261 - MW-4

Analysis:	Extended TX1005	Analytical Method:	TX1005	QC Batch:	QC20117	Date Analyzed:	5/3/02
Analyst:	MM	Preparation Method:	N/A	Prep Batch:	PB19281	Date Prepared:	5/2/02

Param	Flag	Result	Units	Dilution	RDL
C6-C12		<5.00	mg/L	0.10	50
>C12-C35		<5.00	mg/L	0.10	50
C6-C35		<5.00	mg/L	0.10	50

Surrogate	Flag	Result	Units	Dilution	Spike Amount	Percent Recovery	Recovery Limits
n-Triacontane		14.9	mg/L	1	15	99	70 - 130

Sample: 196261 - MW-4

Analysis:	Ferrous Iron	Analytical Method:	Hach IR-1	QC Batch:	QC20065	Date Analyzed:	5/3/02
Analyst:	JSW	Preparation Method:	N/A	Prep Batch:	PB19231	Date Prepared:	5/3/02

Param	Flag	Result	Units	Dilution	RDL
ferrous iron	[1]	0.28	mg/L	1	0.01

[1] Sample was received out of holding time.

Sample: 196261 - MW-4

Analysis: Ion Chromatography (IC) Analytical Method: E 300.0 QC Batch: QC20140 Date Analyzed: 5/3/02
Analyst: JSW Preparation Method: N/A Prep Batch: PB19295 Date Prepared: 5/3/02

Param	Flag	Result	Units	Dilution	RDL
Bromide		1.25	mg/L	5	0.20
Nitrate-N	[2]	1.87	mg/L	5	0.20

Sample: 196261 - MW-4

Analysis: PAH Analytical Method: S 8270C QC Batch: QC20211 Date Analyzed: 5/7/02
Analyst: RC Preparation Method: E 3510C Prep Batch: PB19287 Date Prepared: 5/7/02

Param	Flag	Result	Units	Dilution	RDL
Naphthalene		<0.0002	mg/L	1	0.0002
Acenaphthylene		<0.0002	mg/L	1	0.0002
Acenaphthene		<0.0002	mg/L	1	0.0002
Fluorene		<0.0002	mg/L	1	0.0002
Phenanthrene		<0.0002	mg/L	1	0.0002
Anthracene		<0.0002	mg/L	1	0.0002
Fluoranthene		<0.0002	mg/L	1	0.0002
Pyrene		<0.0002	mg/L	1	0.0002
Benzo(a)anthracene		<0.0002	mg/L	1	0.0002
Chrysene		<0.0002	mg/L	1	0.0002
Benzo(b)fluoranthene		<0.0002	mg/L	1	0.0002
Benzo(k)fluoranthene		<0.0002	mg/L	1	0.0002
Benzo(a)pyrene		<0.0002	mg/L	1	0.0002
Indeno(1,2,3-cd)pyrene		<0.0002	mg/L	1	0.0002
Dibenzo(a,h)anthracene		<0.0002	mg/L	1	0.0002
Benzo(g,h,i)perylene		<0.0002	mg/L	1	0.0002
Test Comments		<0.0002	mg/L	1	

Surrogate	Flag	Result	Units	Dilution	Spike Amount	Percent Recovery	Recovery Limits
Nitrobenzene-d5		32.01	mg/L	1	80	40	35 - 114
2-Fluorobiphenyl		33.92	mg/L	1	80	42	43 - 116
Terphenyl-d14		29.48	mg/L	1	80	36	33 - 141

Sample: 196261 - MW-4

Analysis: PO4 Analytical Method: E 300.0 QC Batch: QC20139 Date Analyzed: 5/3/02
Analyst: JSW Preparation Method: N/A Prep Batch: PB19294 Date Prepared: 5/3/02

Param	Flag	Result	Units	Dilution	RDL
PO4-P		< 0.04	mg/L	1	0.04

[2]Matrix spikes RPD = 0. %EA = 95.

Quality Control Report
Method Blank

Method Blank

QCBatch: QC20065

Param	Flag	Results	Units	Reporting Limit
ferrous iron		0.28	mg/L	0.01

Method Blank

QCBatch: QC20068

Param	Flag	Results	Units	Reporting Limit
Benzene		<0.001	mg/L	0.001
Toluene		<0.001	mg/L	0.001
Ethylbenzene		<0.001	mg/L	0.001
M,P,O-Xylene		<0.001	mg/L	0.001
Total BTEX		<0.001	mg/L	0.001

Surrogate	Flag	Result	Units	Dilution	Spike Amount	Percent Recovery	Recovery Limits
TFT		0.104	mg/L	1	0.10	104	70 - 130
4-BFB		0.102	mg/L	1	0.10	102	70 - 130

Method Blank

QCBatch: QC20078

Param	Flag	Results	Units	Reporting Limit
Hydroxide Alkalinity		<1.0	mg/L as CaCo3	1
Carbonate Alkalinity		<1.0	mg/L as CaCo3	1
Bicarbonate Alkalinity		<4.0	mg/L as CaCo3	1
Total Alkalinity		<4.0	mg/L as CaCo3	1

Method Blank

QCBatch: QC20117

Param	Flag	Results	Units	Reporting Limit
C6-C12		<5.00	mg/L	50
>C12-C35		<5.00	mg/L	50
C6-C35		<5.00	mg/L	50

Surrogate	Flag	Result	Units	Dilution	Spike Amount	Percent Recovery	Recovery Limits
n-Triacontane		15.3	mg/L	0.10	15	102	70 - 130

Method Blank

QCBatch: QC20139

Param	Flag	Results	Units	Reporting Limit
PO4-P		<0.0131	mg/L	0.04

Method Blank

QCBatch: QC20140

Param	Flag	Results	Units	Reporting Limit
Bromide		<0.2	mg/L	0.20
Nitrate-N		<0.2	mg/L	0.20

Method Blank

QCBatch: QC20211

Param	Flag	Results	Units	Reporting Limit
Naphthalene		<0.0002	mg/L	0.0002
Acenaphthylene		<0.0002	mg/L	0.0002
Acenaphthene		<0.0002	mg/L	0.0002
Fluorene		<0.0002	mg/L	0.0002
Phenanthrene		<0.0002	mg/L	0.0002
Anthracene		<0.0002	mg/L	0.0002
Fluoranthene		<0.0002	mg/L	0.0002
Pyrene		<0.0002	mg/L	0.0002
Benzo(a)anthracene		<0.0002	mg/L	0.0002
Chrysene		<0.0002	mg/L	0.0002
Benzo(b)fluoranthene		<0.0002	mg/L	0.0002
Benzo(k)fluoranthene		<0.0002	mg/L	0.0002
Benzo(a)pyrene		<0.0002	mg/L	0.0002
Indeno(1,2,3-cd)pyrene		<0.0002	mg/L	0.0002
Dibenzo(a,h)anthracene		<0.0002	mg/L	0.0002
Benzo(g,h,i)perylene		<0.0002	mg/L	0.0002
Test Comments		<0.0002	mg/L	

Surrogate	Flag	Result	Units	Dilution	Spike Amount	Percent Recovery	Recovery Limits
Nitrobenzene-d5		89.97	mg/L	1	80	112	35 - 114
2-Fluorobiphenyl		96.41	mg/L	1	80	120	43 - 116
Terphenyl-d14		86	mg/L	1	80	107	33 - 141

Quality Control Report
Duplicate Samples

Duplicate

QCBatch: QC20078

Param	Flag	Duplicate Result	Sample Result	Units	Dilution	RPD	RPD Limit
Hydroxide Alkalinity		<1.0	<1.0	mg/L as CaCo3	1	0	6.6
Carbonate Alkalinity		<1.0	<1.0	mg/L as CaCo3	1	0	6.6
Bicarbonate Alkalinity		46	48	mg/L as CaCo3	1	4	6.6
Total Alkalinity		46	48	mg/L as CaCo3	1	4	6.6

Quality Control Report
Lab Control Spikes and Duplicate Spikes

Laboratory Control Spikes

QCBatch: QC20068

Param	LCS Result	LCSD Result	Units	Dil.	Spike Amount Added	Matrix Result	% Rec	RPD	% Rec Limit	RPD Limit
MTBE	0.0984	0.102	mg/L	1	0.10	<0.001	98	4	70 - 130	20
Benzene	0.101	0.100	mg/L	1	0.10	<0.001	101	1	70 - 130	20
Toluene	0.099	0.0993	mg/L	1	0.10	<0.001	99	0	70 - 130	20
Ethylbenzene	0.0995	0.103	mg/L	1	0.10	<0.001	100	3	70 - 130	20
M,P,O-Xylene	0.298	0.307	mg/L	1	0.30	<0.001	99	3	70 - 130	20

Percent recovery is based on the spike result. RPD is based on the spike and spike duplicate result.

Surrogate	LCS Result	LCSD Result	Units	Dilution	Spike Amount	LCS % Rec	LCSD % Rec	Recovery Limits
TFT	0.104	0.0982	mg/L	1	0.10	104	98	70 - 130
4-BFB	0.101	0.0977	mg/L	1	0.10	101	98	70 - 130

Laboratory Control Spikes

QCBatch: QC20117

Param	LCS Result	LCSD Result	Units	Dil.	Spike Amount Added	Matrix Result	% Rec	RPD	% Rec Limit	RPD Limit
C6-C12	24.6	23.8	mg/L	0.10	250	<5.00	98	3	70 - 130	20
>C12-C35	24.9	24.4	mg/L	0.10	250	<5.00	99	2	70 - 130	20
C6-C35	49.5	< 50	mg/L	0.10	500	<5.00	99	2	70 - 130	20

Percent recovery is based on the spike result. RPD is based on the spike and spike duplicate result.

Surrogate	LCS Result	LCSD Result	Units	Dilution	Spike Amount	LCS % Rec	LCSD % Rec	Recovery Limits
n-Triacontane	16.2	15.5	mg/L	0.10	15	108	103	70 - 130

Laboratory Control Spikes

QCBatch: QC20139

Param	LCS Result	LCSD Result	Units	Dil.	Spike Amount Added	Matrix Result	% Rec	RPD	% Rec Limit	RPD Limit
PO4-P	0.0591	0.0580	mg/L	1	0.06	<0.0131	90	1	90 - 120	20

Percent recovery is based on the spike result. RPD is based on the spike and spike duplicate result.

Laboratory Control Spikes

QCBatch: QC20140

Param	LCS Result	LCSD Result	Units	Dil.	Spike Amount Added	Matrix Result	% Rec	RPD	% Rec Limit	RPD Limit
Chloride	11.93	11.95	mg/L	1	12.50	<2.0	95	0	90 - 110	20
Sulfate	12.27	12.32	mg/L	1	12.50	<2.0	98	0	90 - 110	20

Percent recovery is based on the spike result. RPD is based on the spike and spike duplicate result.

Laboratory Control Spikes

QCBatch: QC20211

Param	LCS Result	LCSD Result	Units	Dil.	Spike Amount Added	Matrix Result	% Rec	RPD	% Rec Limit	RPD Limit
Naphthalene	16.53	39.82	mg/L	1	80	<0.0002	20	82	16 - 96	20
Acenaphthylene	18.7	47.23	mg/L	1	80	<0.0002	23	86	20 - 110	20
Acenaphthene	17.36	45.28	mg/L	1	80	<0.0002	21	89	18 - 108	20
Fluorene	17.6	47.76	mg/L	1	80	<0.0002	22	92	22 - 102	20
Phenanthrene	16.33	48.56	mg/L	1	80	<0.0002	20	99	25 - 103	20
Anthracene	16.68	50.28	mg/L	1	80	<0.0002	20	100	22 - 110	20
Fluoranthene	21.35	65.13	mg/L	1	80	<0.0002	26	101	21 - 110	20
Pyrene	31.23	55.82	mg/L	1	80	<0.0002	39	56	22 - 100	20
Benzo(a)anthracene	29.98	54.52	mg/L	1	80	<0.0002	37	58	30 - 99	20
Chrysene	26.95	49.62	mg/L	1	80	<0.0002	33	59	27 - 108	20
Benzo(b)fluoranthene	44.89	60.98	mg/L	1	80	<0.0002	56	30	19 - 102	20
Benzo(k)fluoranthene	51.42	62.36	mg/L	1	80	<0.0002	64	19	35 - 103	20
Benzo(a)pyrene	48.44	61.65	mg/L	1	80	<0.0002	60	23	24 - 105	20
Indeno(1,2,3-cd)pyrene	35.08	50.52	mg/L	1	80	<0.0002	43	36	22 - 108	20
Dibenzo(a,h)anthracene	31.71	40.79	mg/L	1	80	<0.0002	39	25	23 - 77	20
Benzo(g,h,i)perylene	41.14	53.31	mg/L	1	80	<0.0002	51	25	19 - 119	20

Percent recovery is based on the spike result. RPD is based on the spike and spike duplicate result.

Surrogate	LCS Result	LCSD Result	Units	Dilution	Spike Amount	LCS % Rec	LCSD % Rec	Recovery Limits
Nitrobenzene-d5	29.1	69.05	mg/L	1	80	36	86	35 - 114
2-Fluorobiphenyl	29.93	74.73	mg/L	1	80	37	93	43 - 116
Terphenyl-d14	51.05	90.12	mg/L	1	80	63	112	33 - 141

Quality Control Report
Matrix Spikes and Duplicate Spikes

Matrix Spikes

QCBatch: QC20139

Param	MS Result	MSD Result	Units	Dil.	Spike Amount Added	Matrix Result	% Rec	RPD	% Rec Limit	RPD Limit
PO4-P	0.0974	0.0916	mg/L	1	0.06	0.0359	94	9	80 - 135	20

Percent recovery is based on the spike result. RPD is based on the spike and spike duplicate result.

Matrix Spikes

QCBatch: QC20140

Param	MS Result	MSD Result	Units	Dil.	Spike Amount Added	Matrix Result	% Rec	RPD	% Rec Limit	RPD Limit
Bromide	3.29	3.30	mg/L	1	1.25	1.92	104	0	84 - 110	20

Percent recovery is based on the spike result. RPD is based on the spike and spike duplicate result.

Quality Control Report
Continuing Calibration Verification Standards

CCV (1) QCBatch: QC20068

Param	Flag	Units	CCVs True Conc.	CCVs Found Conc.	CCVs Percent Recovery	Percent Recovery Limits	Date Analyzed
MTBE		mg/L	0.10	0.0932	93	85 - 115	5/3/02
Benzene		mg/L	0.10	0.0977	98	85 - 115	5/3/02
Toluene		mg/L	0.10	0.0961	96	85 - 115	5/3/02
Ethylbenzene		mg/L	0.10	0.0967	97	85 - 115	5/3/02
M,P,O-Xylene		mg/L	0.30	0.290	97	85 - 115	5/3/02

CCV (2) QCBatch: QC20068

Param	Flag	Units	CCVs True Conc.	CCVs Found Conc.	CCVs Percent Recovery	Percent Recovery Limits	Date Analyzed
MTBE		mg/L	0.10	0.096	96	85 - 115	5/3/02
Benzene		mg/L	0.10	0.102	102	85 - 115	5/3/02
Toluene		mg/L	0.10	0.1	100	85 - 115	5/3/02
Ethylbenzene		mg/L	0.10	0.103	103	85 - 115	5/3/02
M,P,O-Xylene		mg/L	0.30	0.302	100	85 - 115	5/3/02

ICV (1) QCBatch: QC20068

Param	Flag	Units	CCVs True Conc.	CCVs Found Conc.	CCVs Percent Recovery	Percent Recovery Limits	Date Analyzed
MTBE		mg/L	0.10	0.1134	113	85 - 115	5/3/02
Benzene		mg/L	0.10	0.113	113	85 - 115	5/3/02
Toluene		mg/L	0.10	0.108	108	85 - 115	5/3/02
Ethylbenzene		mg/L	0.10	0.108	108	85 - 115	5/3/02
M,P,O-Xylene		mg/L	0.30	0.322	107	85 - 115	5/3/02

CCV (1) QCBatch: QC20078

Param	Flag	Units	CCVs True Conc.	CCVs Found Conc.	CCVs Percent Recovery	Percent Recovery Limits	Date Analyzed
Hydroxide Alkalinity		mg/L as CaCo3	0	<1.0	0	90 - 110	5/3/02
Carbonate Alkalinity		mg/L as CaCo3	0	232	0	90 - 110	5/3/02
Bicarbonate Alkalinity		mg/L as CaCo3	0	10	0	90 - 110	5/3/02
Total Alkalinity		mg/L as CaCo3	250	242	96	90 - 110	5/3/02

ICV (1) QCBatch: QC20078

Param	Flag	Units	CCVs True Conc.	CCVs Found Conc.	CCVs Percent Recovery	Percent Recovery Limits	Date Analyzed
Hydroxide Alkalinity		mg/L as CaCo3	0	<1.0	0	90 - 110	5/3/02
Carbonate Alkalinity		mg/L as CaCo3	0	228	0	90 - 110	5/3/02
Bicarbonate Alkalinity		mg/L as CaCo3	0	16	0	90 - 110	5/3/02
Total Alkalinity		mg/L as CaCo3	250	244	97	90 - 110	5/3/02

CCV (1) QCBatch: QC20117

Param	Flag	Units	CCVs True Conc.	CCVs Found Conc.	CCVs Percent Recovery	Percent Recovery Limits	Date Analyzed
C6-C12		mg/L	250	231	92	75 - 125	5/3/02
>C12-C35		mg/L	250	238	95	75 - 125	5/3/02
C6-C35		mg/L	500	469	93	75 - 125	5/3/02

ICV (1) QCBatch: QC20117

Param	Flag	Units	CCVs True Conc.	CCVs Found Conc.	CCVs Percent Recovery	Percent Recovery Limits	Date Analyzed
C6-C12		mg/L	250	219	87	75 - 125	5/3/02
>C12-C35		mg/L	250	228	91	75 - 125	5/3/02
C6-C35		mg/L	500	447	89	75 - 125	5/3/02

CCV (1) QCBatch: QC20139

Param	Flag	Units	CCVs True Conc.	CCVs Found Conc.	CCVs Percent Recovery	Percent Recovery Limits	Date Analyzed
PO4-P		mg/L	0.06	0.0638	97	85 - 115	5/3/02

ICV (1) QCBatch: QC20139

Param	Flag	Units	CCVs True Conc.	CCVs Found Conc.	CCVs Percent Recovery	Percent Recovery Limits	Date Analyzed
PO4-P		mg/L	0.06	0.0626	95	85 - 115	5/3/02

CCV (1)

QCBatch: QC20140

Param	Flag	Units	CCVs True Conc.	CCVs Found Conc.	CCVs Percent Recovery	Percent Recovery Limits	Date Analyzed
Chloride		mg/L	12.50	11.98	95	90 - 110	5/3/02
Sulfate		mg/L	12.50	12.48	99	90 - 110	5/3/02

ICV (1)

QCBatch: QC20140

Param	Flag	Units	CCVs True Conc.	CCVs Found Conc.	CCVs Percent Recovery	Percent Recovery Limits	Date Analyzed
Chloride		mg/L	12.50	12.04	96	90 - 110	5/3/02
Sulfate		mg/L	12.50	12.50	100	90 - 110	5/3/02

CCV (1)

QCBatch: QC20211

Param	Flag	Units	CCVs True Conc.	CCVs Found Conc.	CCVs Percent Recovery	Percent Recovery Limits	Date Analyzed
Naphthalene		mg/L	60	60.51	100	80 - 120	5/7/02
Acenaphthylene		mg/L	60	63.27	105	80 - 120	5/7/02
Acenaphthene		mg/L	60	61.09	101	80 - 120	5/7/02
Fluorene		mg/L	60	60.09	100	80 - 120	5/7/02
Phenanthrene		mg/L	60	53.08	88	80 - 120	5/7/02
Anthracene		mg/L	60	54.12	90	80 - 120	5/7/02
Fluoranthene		mg/L	60	65.02	108	80 - 120	5/7/02
Pyrene		mg/L	60	60.27	100	80 - 120	5/7/02
Benzo(a)anthracene		mg/L	60	60.83	101	80 - 120	5/7/02
Chrysene		mg/L	60	58.92	98	80 - 120	5/7/02
Benzo(b)fluoranthene		mg/L	60	64.67	107	80 - 120	5/7/02
Benzo(k)fluoranthene		mg/L	60	60.34	100	80 - 120	5/7/02
Benzo(a)pyrene		mg/L	60	62.7	104	80 - 120	5/7/02
Indeno(1,2,3-cd)pyrene		mg/L	60	53.8	89	80 - 120	5/7/02
Dibenzo(a,h)anthracene		mg/L	60	53.89	89	80 - 120	5/7/02
Benzo(g,h,i)perylene		mg/L	60	53.55	89	80 - 120	5/7/02
Nitrobenzene-d5		mg/L	60	62.25	103	80 - 120	5/7/02
2-Fluorobiphenyl		mg/L	60	63.85	106	80 - 120	5/7/02
Terphenyl-d14		mg/L	60	59.23	98	80 - 120	5/7/02

96260-61

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CHAIN-OF-CUSTODY AND ANALYSIS REQUEST

LAB Order ID # A02050309

ompany Name: Enercon Services Inc.
Phone #: 915-570-8726
ddress: (Street, City, Zip) 306 West Wall, Suite 1312, Midland, Tx 79701
Fax #: 915-684-7587
ontact Person: Jeffrey Kindley
voice to: (different from above) EQuiva Services Kyle Landreneau
Incident # 300109
roject #: EQ-112
Project Name: Barber Ranch
roject Location: Lea County, New Mexico
Sampler Signature: Jeffrey Kindley

ANALYSIS REQUEST (Circle or Specify Method No.)

LAB # (LAB USE ONLY)	FIELD CODE	# CONTAINERS	Volume/Amount	MATRIX: WATER	SOIL	AIR	SLUDGE	PRESERVATIVE METHOD: HCl	HNO_3	H_2SO_4	NaOH	ICE	NONE	SAMPLING: DATE	TIME	MTBE 8021B/602	BTEX 8021B/602 (8021B)	TRH 418.1/TX1005 (Extend to C38 on report)	PAH 8270C	Total Metals Ag As Ba Cd Cr Pb Se Hg 6010B/200.7	TCLP Metals Ag As Ba Cd Cr Pb Se Hg	TCLP Volatiles	TCLP Semi Volatiles	TCLP Pesticides	RCI	GC/MS Vol. 8260B/624	GC/MS Semi. Vol. 8270C/625	PCB's 8082/608	Pesticides 8081A/608	BOD, TSS, pH	Carbonates (Tot Alk 310.1 mod)	Bromides/Phosphates/Nitrates (IC-300 Series)	Ferrous Iron (Fell-3500 FED)			Turn Around Time if different from standard	Hold
96260	MW-3	3	40ml	✓				✓						05/01/02	1300		✓																				
	MW-3	1	Liter	✓									✓	05/01/02	1300				✓																		
261	MW-4	6	40ml	✓				✓						05/01/02	1500		✓	✓																			
	MW-4	1	Liter	✓									✓	05/01/02	1500				✓																		
	MW-4	1	Liter	✓									✓	05/01/02	1500																✓	✓	✓				

Relinquished by:	Date:	Time:	Received by:	Date:	Time:
Jeffrey	May 1, 2002	1800			
Relinquished by:	Date:	Time:	Received by:	Date:	Time:
Relinquished by:	Date:	Time:	Received at Laboratory by: [signature]	5-3-02	10:00

LAB USE ONLY
Intact Y / N
Headspace Y / N
Temp -2°
Log-in Review [initials]

REMARKS: 5/14/02 P&F

☐ Check If Special Reporting Limits Are Needed

Carrier # TNM&O 902-877-938-6

Submittal of samples constitutes agreement to Terms and Conditions listed on reverse side of C.O.C.

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1 (888) 588-3443

CHAIN-OF-CUSTODY AND ANALYSIS REQUEST

LAB Order ID # A020S031 **

Company Name: Enercon Services Inc
Phone #: 915-570-8726
Address: (Street, City, Zip) 306 West Wall, Suite 1312, Midland, Tx 79701
Fax #: 915-684-7587
Contact Person: Jeffrey Kindley
Invoice to: (If different from above) Kyle Landerneau Equiva Services
Incident # 300109
Project #: EQ-112
Project Name: Barber Ranch
Project Location: Monument, Lea County, New Mexico
Sampler Signature: Jeffrey Kindley

ANALYSIS REQUEST (Circle or Specify Method No.)

LAB # (LAB USE ONLY)	FIELD CODE	# CONTAINERS	Volume/Amount	MATRIX: WATER	MATRIX: SOIL	MATRIX: AIR	MATRIX: SLUDGE	PRESERVATIVE METHOD: HCl	PRESERVATIVE METHOD: HNO_3	PRESERVATIVE METHOD: H_2SO_4	PRESERVATIVE METHOD: NaOH	PRESERVATIVE METHOD: ICE	PRESERVATIVE METHOD: NONE	SAMPLING: DATE	SAMPLING: TIME	MTBE 8021B/602	BTEX 8021B/602	TPH 418.1/TX1005	PAH 8270C	Total Metals Ag As Ba Cd Cr Pb Se Hg 6010B/200.7	TCLP Metals Ag As Ba Cd Cr Pb Se Hg	TCLP Volatiles	TCLP Semi Volatiles	TCLP Pesticides	RCI	GC/MS Vol. 8260B/624	GC/MS Semi. Vol. 8270C/625	PCB's 8082/608	Pesticides 8081A/608	BOD, TSS, pH	TPH (DRO/GRO) 8015 Modified *	TPH (TX 1005) carried out to C-38				Turn Around Time if different from standard	Hold
196242	MW-5 (8-10')	1	4oz		✓									05/01/02	1418		✓														✓						
263	MW-5 (28-30')	1	4oz		✓									05/01/02	1518		✓														✓						

Relinquished by:	Date:	Time:	Received by:	Date:	Time:
Jeffrey Kindley	May 1, 2002	1800			
Relinquished by:	Date:	Time:	Received by:	Date:	Time:
Relinquished by:	Date:	Time:	Received at Laboratory by: [signature]	Date: 5-3-02	Time: 10:00

LAB USE ONLY
Intact Y / N
Headspace Y / N
Temp -2°
Log-in Review [initials]

REMARKS:
* Need 3 day Turnaround on TPH (DRO/GRO)
Phone results to: 915-631-6591 Jeff Kindley
and 972-484-3854 → Bennett Howell
☐ Check If Special Reporting Limits Are Needed
PHF 5/7/02

Carrier # ** Please call to determine if sample will be completed for analysis & after completing

Submittal of samples constitutes agreement to Terms and Conditions listed on reverse side of C.O.C.

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Analytical and Quality Control Report

Jeff Kindley
Enercon Services Inc.
306 W. Wall Suite 1312
Midland, Tx. 79701

Report Date: May 7, 2002

Order ID Number: A02050310

Project Number: EQ-112
Project Name: Barber Ranch 3000109
Project Location: Monument, Lea County,New Mexico

Enclosed are the Analytical Results and Quality Control Data Reports for the following samples submitted to Trace-Analysis, Inc.

Sample	Description	Matrix	Date Taken	Time Taken	Date Received
196262	MW-5 (8-10')	Soil	5/2/02	14:18	5/3/02
196263	MW-5 (28-30')	Soil	5/2/02	15:18	5/3/02

These results represent only the samples received in the laboratory. The Quality Control Report is generated on a batch basis. All information contained in this report is for the analytical batch(es) in which your sample(s) were analyzed. Note: the RDL is equal to MQL for all organic analytes including TPH.
The test results contained within this report meet all requirements of LAC 33:I unless otherwise noted.

This report consists of a total of 8 pages and shall not be reproduced except in its entirety including the chain of custody (COC), without written approval of TraceAnalysis, Inc.

for
Dr. Blair Leftwich, Director

Analytical Report

Sample: 196262 - MW-5 (8-10')

Analysis:	BTEX	Analytical Method:	S 8021B	QC Batch:	QC20071	Date Analyzed:	5/3/02
Analyst:	CG	Preparation Method:	S 5035	Prep Batch:	PB19238	Date Prepared:	5/3/02

Param	Flag	Result	Units	Dilution	RDL
Benzene		<0.500	mg/Kg	500	0.001
Toluene		<0.500	mg/Kg	500	0.001
Ethylbenzene		0.946	mg/Kg	500	0.001
M,P,O-Xylene		1.6	mg/Kg	500	0.001
Total BTEX		2.55	mg/Kg	500	0.001
Test Comments	[1]	*	mg/Kg	1	

Surrogate	Flag	Result	Units	Dilution	Spike Amount	Percent Recovery	Recovery Limits
TFT	[2]	0.684	mg/Kg	500	1	68	70 - 130
4-BFB	[3]	7.39	mg/Kg	500	1	739	70 - 130

Sample: 196262 - MW-5 (8-10')

Analysis:	TPH DRO	Analytical Method:	Mod. 8015B	QC Batch:	QC20096	Date Analyzed:	5/5/02
Analyst:	MM	Preparation Method:	3550 B	Prep Batch:	PB19256	Date Prepared:	5/2/02

Param	Flag	Result	Units	Dilution	RDL
DRO		374	mg/Kg	1	50

Surrogate	Flag	Result	Units	Dilution	Spike Amount	Percent Recovery	Recovery Limits
n-Triacontane		122	mg/Kg	1	150	81	70 - 130

Sample: 196262 - MW-5 (8-10')

Analysis:	TPH GRO	Analytical Method:	8015B	QC Batch:	QC20072	Date Analyzed:	5/3/02
Analyst:	CG	Preparation Method:	5035	Prep Batch:	PB19238	Date Prepared:	5/3/02

Param	Flag	Result	Units	Dilution	RDL
GRO		497	mg/Kg	500	0.10

Surrogate	Flag	Result	Units	Dilution	Spike Amount	Percent Recovery	Recovery Limits
TFT	[4]	0.419	mg/Kg	500	0.10	42	70 - 130
4-BFB	[5]	27.5	mg/Kg	500	0.10	2750	70 - 130

[1]Sample diluted due to hydrocarbons beyond xylene. Sample has a Benzene concentration of less than 0.1183 which is the MDL.
[2]Low surrogate recovery due to matrix interference. ICV, CCV shows the method to be in control.
[3]High surrogate recovery due to peak interference.
[4]Low surrogate recovery due to matrix interference. ICV, CCV shows the method to be in control.
[5]High surrogate recovery due to peak interference.

Sample: 196263 - MW-5 (28-30')

Analysis:	BTEX	Analytical Method:	S 8021B	QC Batch:	QC20071	Date Analyzed:	5/3/02
Analyst:	CG	Preparation Method:	S 5035	Prep Batch:	PB19238	Date Prepared:	5/3/02

Param	Flag	Result	Units	Dilution	RDL
Benzene		<0.020	mg/Kg	20	0.001
Toluene		<0.020	mg/Kg	20	0.001
Ethylbenzene		<0.020	mg/Kg	20	0.001
M,P,O-Xylene		0.04	mg/Kg	20	0.001
Total BTEX		0.040	mg/Kg	20	0.001
Test Comments	[6]	*	mg/Kg	1	

Surrogate	Flag	Result	Units	Dilution	Spike Amount	Percent Recovery	Recovery Limits
TFT	[7]	0.602	mg/Kg	20	1	60	70 - 130
4-BFB	[8]	0.554	mg/Kg	20	1	55	70 - 130

Sample: 196263 - MW-5 (28-30')

Analysis:	TPH DRO	Analytical Method:	Mod. 8015B	QC Batch:	QC20096	Date Analyzed:	5/5/02
Analyst:	MM	Preparation Method:	3550 B	Prep Batch:	PB19256	Date Prepared:	5/2/02

Param	Flag	Result	Units	Dilution	RDL
DRO		<50.0	mg/Kg	1	50

Surrogate	Flag	Result	Units	Dilution	Spike Amount	Percent Recovery	Recovery Limits
n-Triacontane		120	mg/Kg	1	150	80	70 - 130

Sample: 196263 - MW-5 (28-30')

Analysis:	TPH GRO	Analytical Method:	8015B	QC Batch:	QC20072	Date Analyzed:	5/3/02
Analyst:	CG	Preparation Method:	5035	Prep Batch:	PB19238	Date Prepared:	5/3/02

Param	Flag	Result	Units	Dilution	RDL
GRO	[9]	<2	mg/Kg	20	0.10

Surrogate	Flag	Result	Units	Dilution	Spike Amount	Percent Recovery	Recovery Limits
TFT		1.04	mg/Kg	20	0.10	104	70 - 130
4-BFB		0.857	mg/Kg	20	0.10	86	70 - 130

[6]Sample diluted due to lack of sample extract. Sample has a Benzene concentration of less than 0.0473 which is the MDL.
[7]Low surrogate recovery due to matrix interference. ICV, CCV shows the method to be in control.
[8]Low surrogate recovery due to matrix interference. ICV, CCV shows the method to be in control.
[9]Sample diluted due to lack of sample extract.

Quality Control Report
Method Blank

Method Blank

QCBatch: QC20071

Param	Flag	Results	Units	Reporting Limit
Benzene		<0.010	mg/Kg	0.001
Toluene		<0.010	mg/Kg	0.001
Ethylbenzene		<0.010	mg/Kg	0.001
M,P,O-Xylene		<0.010	mg/Kg	0.001
Total BTEX		<0.010	mg/Kg	0.001

Surrogate	Flag	Result	Units	Dilution	Spike Amount	Percent Recovery	Recovery Limits
TFT		0.846	mg/Kg	10	1	84	70 - 130
4-BFB	[10]	0.55	mg/Kg	10	1	55	70 - 130

Method Blank

QCBatch: QC20072

Param	Flag	Results	Units	Reporting Limit
GRO		<1	mg/Kg	0.10

Surrogate	Flag	Result	Units	Dilution	Spike Amount	Percent Recovery	Recovery Limits
TFT		0.952	mg/Kg	10	0.10	95	70 - 130
4-BFB		0.703	mg/Kg	10	0.10	70	70 - 130

Method Blank

QCBatch: QC20096

Param	Flag	Results	Units	Reporting Limit
DRO		<50.0	mg/Kg	50

Surrogate	Flag	Result	Units	Dilution	Spike Amount	Percent Recovery	Recovery Limits
n-Triacontane		122	mg/Kg	1	150	81	70 - 130

Quality Control Report
Lab Control Spikes and Duplicate Spikes

[10]Low surrogate recovery due to prep. ICV, CCV shows the method to be in control.

Laboratory Control Spikes

QCBatch: QC20071

Param	LCS Result	LCSD Result	Units	Dil.	Spike Amount Added	Matrix Result	% Rec	RPD	% Rec Limit	RPD Limit
MTBE	0.917	0.914	mg/Kg	10	1	<0.010	91	0	70 - 130	20
Benzene	0.09	0.897	mg/Kg	10	1	<0.010	90	163	70 - 130	20
Toluene	0.925	0.908	mg/Kg	10	1	<0.010	92	1	70 - 130	20
Ethylbenzene	0.897	0.9	mg/Kg	10	1	<0.010	90	0	70 - 130	20
M,P,O-Xylene	2.77	2.68	mg/Kg	10	3	<0.010	92	3	70 - 130	20

Percent recovery is based on the spike result. RPD is based on the spike and spike duplicate result.

Surrogate	LCS Result	LCSD Result	Units	Dilution	Spike Amount	LCS % Rec	LCSD % Rec	Recovery Limits
TFT	0.874	0.862	mg/Kg	10	1	87	86	70 - 130
4-BFB	0.826	0.806	mg/Kg	10	1	82	80	70 - 130

Laboratory Control Spikes

QCBatch: QC20072

Param	LCS Result	LCSD Result	Units	Dil.	Spike Amount Added	Matrix Result	% Rec	RPD	% Rec Limit	RPD Limit
GRO	9.37	10.1	mg/Kg	10	1	<1	94	7	80 - 120	20

Percent recovery is based on the spike result. RPD is based on the spike and spike duplicate result.

Surrogate	LCS Result	LCSD Result	Units	Dilution	Spike Amount	LCS % Rec	LCSD % Rec	Recovery Limits
TFT	0.998	1.06	mg/Kg	10	0.10	100	106	70 - 130
4-BFB	0.958	0.984	mg/Kg	10	0.10	96	98	70 - 130

Laboratory Control Spikes

QCBatch: QC20096

Param	LCS Result	LCSD Result	Units	Dil.	Spike Amount Added	Matrix Result	% Rec	RPD	% Rec Limit	RPD Limit
DRO	251	251	mg/Kg	1	250	<50.0	100	0	70 - 130	20

Percent recovery is based on the spike result. RPD is based on the spike and spike duplicate result.

Surrogate	LCS Result	LCSD Result	Units	Dilution	Spike Amount	LCS % Rec	LCSD % Rec	Recovery Limits
n-Triacontane	121	120	mg/Kg	1	150	81	80	70 - 130

Quality Control Report
Matrix Spikes and Duplicate Spikes

Matrix Spikes

QCBatch: QC20071

Param	MS Result	MSD Result	Units	Dil.	Spike Amount Added	Matrix Result	% Rec	RPD	% Rec Limit	RPD Limit
Benzene	0.85	0.857	mg/Kg	10	1	<0.010	85	0	70 - 130	20
Toluene	0.872	0.875	mg/Kg	10	1	<0.010	87	0	70 - 130	20
Ethylbenzene	0.871	0.878	mg/Kg	10	1	<0.010	87	0	70 - 130	20
M,P,O-Xylene	2.65	2.58	mg/Kg	10	3	<0.010	88	2	70 - 130	20

Percent recovery is based on the spike result. RPD is based on the spike and spike duplicate result.

Surrogate	MS Result	MSD Result	Units	Dilution	Spike Amount	MS % Rec	MSD % Rec	Recovery Limits
TFT	0.807	0.858	mg/Kg	10	1	80	85	70 - 130
4-BFB	0.81	0.829	mg/Kg	10	1	81	82	70 - 130

Matrix Spikes

QCBatch: QC20072

Param	MS Result	MSD Result	Units	Dil.	Spike Amount Added	Matrix Result	% Rec	RPD	% Rec Limit	RPD Limit
GRO	7.99	8.67	mg/Kg	10	1	<1	80	8	80 - 120	20

Percent recovery is based on the spike result. RPD is based on the spike and spike duplicate result.

Surrogate	MS Result	MSD Result	Units	Dilution	Spike Amount	MS % Rec	MSD % Rec	Recovery Limits
TFT	0.788	0.86	mg/Kg	10	0.10	79	86	70 - 130
4-BFB	0.945	1.01	mg/Kg	10	0.10	94	101	70 - 130

Matrix Spikes

QCBatch: QC20096

Param	MS Result	MSD Result	Units	Dil.	Spike Amount Added	Matrix Result	% Rec	RPD	% Rec Limit	RPD Limit
DRO	227	224	mg/Kg	1	250	<50.0	91	1	70 - 130	20

Percent recovery is based on the spike result. RPD is based on the spike and spike duplicate result.

Surrogate	MS Result	MSD Result	Units	Dilution	Spike Amount	MS % Rec	MSD % Rec	Recovery Limits
n-Triacontane	115	122	mg/Kg	1	150	77	81	70 - 130

Quality Control Report
Continuing Calibration Verification Standards

CCV (1)

QCBatch: QC20071

Param	Flag	Units	CCVs True Conc.	CCVs Found Conc.	CCVs Percent Recovery	Percent Recovery Limits	Date Analyzed
MTBE		mg/L	0.10	0.0926	92	85 - 115	5/3/02
Benzene		mg/L	0.10	0.0891	89	85 - 115	5/3/02
Toluene		mg/L	0.10	0.0906	90	85 - 115	5/3/02
Ethylbenzene		mg/L	0.10	0.0893	89	85 - 115	5/3/02
M,P,O-Xylene		mg/L	0.30	0.274	91	85 - 115	5/3/02

ICV (1)

QCBatch: QC20071

Param	Flag	Units	CCVs True Conc.	CCVs Found Conc.	CCVs Percent Recovery	Percent Recovery Limits	Date Analyzed
MTBE		mg/L	0.10	0.0901	90	85 - 115	5/3/02
Benzene		mg/L	0.10	0.0902	90	85 - 115	5/3/02
Toluene		mg/L	0.10	0.0909	90	85 - 115	5/3/02
Ethylbenzene		mg/L	0.10	0.0894	89	85 - 115	5/3/02
M,P,O-Xylene		mg/L	0.30	0.2618	87	85 - 115	5/3/02

CCV (1)

QCBatch: QC20072

Param	Flag	Units	CCVs True Conc.	CCVs Found Conc.	CCVs Percent Recovery	Percent Recovery Limits	Date Analyzed
GRO		mg/Kg	1	0.912	91	85 - 115	5/3/02

ICV (1)

QCBatch: QC20072

Param	Flag	Units	CCVs True Conc.	CCVs Found Conc.	CCVs Percent Recovery	Percent Recovery Limits	Date Analyzed
GRO		mg/Kg	1	1.03	103	85 - 115	5/3/02

CCV (1)

QCBatch: QC20096

Param	Flag	Units	CCVs True Conc.	CCVs Found Conc.	CCVs Percent Recovery	Percent Recovery Limits	Date Analyzed
DRO		mg/Kg	250	271	108	75 - 125	5/5/02

CCV (2)

QCBatch: QC20096

Param	Flag	Units	CCVs True Conc.	CCVs Found Conc.	CCVs Percent Recovery	Percent Recovery Limits	Date Analyzed
DRO		mg/Kg	250	254	101	75 - 125	5/5/02

ICV (1) QCBatch: QC20096

Param	Flag	Units	CCVs True Conc.	CCVs Found Conc.	CCVs Percent Recovery	Percent Recovery Limits	Date Analyzed
DRO		mg/Kg	250	251	100	75 - 125	5/5/02

Analytical and Quality Control Report

Jeff Kindley
Enercon Services Inc.
306 W. Wall Suite 1312
Midland, Tx. 79701

Report Date: May 7, 2002

Order ID Number: A02050310

Project Number: EQ-112
Project Name: Barber Ranch 3000109
Project Location: Monument, Lea County,New Mexico

Enclosed are the Analytical Results and Quality Control Data Reports for the following samples submitted to Trace-Analysis, Inc.

Sample	Description	Matrix	Date Taken	Time Taken	Date Received
196262	MW-5 (8-10')	Soil	5/2/02	14:18	5/3/02
196263	MW-5 (28-30')	Soil	5/2/02	15:18	5/3/02

These results represent only the samples received in the laboratory. The Quality Control Report is generated on a batch basis. All information contained in this report is for the analytical batch(es) in which your sample(s) were analyzed. Note: the RDL is equal to MQL for all organic analytes including TPH.
The test results contained within this report meet all requirements of LAC 33:I unless otherwise noted.

This report consists of a total of 6 pages and shall not be reproduced except in its entirety including the chain of custody (COC), without written approval of TraceAnalysis, Inc.

for
Dr. Blair Leftwich, Director

Analytical Report

Sample: 196262 - MW-5 (8-10')

Analysis:	Extended TX1005	Analytical Method:	TX1005	QC Batch:	QC20095	Date Analyzed:	5/5/02
Analyst:	MM	Preparation Method:	N/A	Prep Batch:	PB19255	Date Prepared:	5/2/02

Param	Flag	Result	Units	Dilution	RDL
C6-C12		251	mg/Kg	1	50
>C12-C35		320	mg/Kg	1	50
C6-C35		571	mg/Kg	1	50

Surrogate	Flag	Result	Units	Dilution	Spike Amount	Percent Recovery	Recovery Limits
n-Triacontane		144	mg/Kg	1	150	96	70 - 130

Sample: 196263 - MW-5 (28-30')

Analysis:	TPH DRO	Analytical Method:	Mod. 8015B	QC Batch:	QC20096	Date Analyzed:	5/5/02
Analyst:	MM	Preparation Method:	3550 B	Prep Batch:	PB19256	Date Prepared:	5/2/02

Param	Flag	Result	Units	Dilution	RDL
DRO		<50.0	mg/Kg	1	50

Surrogate	Flag	Result	Units	Dilution	Spike Amount	Percent Recovery	Recovery Limits
n-Triacontane		120	mg/Kg	1	150	80	70 - 130

Quality Control Report
Method Blank

Method Blank

QCBatch: QC20095

Param	Flag	Results	Units	Reporting Limit
C6-C12		<50.0	mg/Kg	50
>C12-C35		<50.0	mg/Kg	50
C6-C35		<50.0	mg/Kg	50

Surrogate	Flag	Result	Units	Dilution	Spike Amount	Percent Recovery	Recovery Limits
n-Triacontane		141	mg/Kg	1	150	94	70 - 130

Method Blank

QCBatch: QC20096

Param	Flag	Results	Units	Reporting Limit
DRO		<50.0	mg/Kg	50

Surrogate	Flag	Result	Units	Dilution	Spike Amount	Percent Recovery	Recovery Limits
n-Triacontane		122	mg/Kg	1	150	81	70 - 130

Quality Control Report
Lab Control Spikes and Duplicate Spikes

Laboratory Control Spikes

QCBatch: QC20095

Param	LCS Result	LCSD Result	Units	Dil.	Spike Amount Added	Matrix Result	% Rec	RPD	% Rec Limit	RPD Limit
C6-C12	224	224	mg/Kg	1	250	<50.0	89	0	70 - 130	20
>C12-C35	225	225	mg/Kg	1	250	<50.0	90	0	70 - 130	20
C6-C35	449	449	mg/Kg	1	500	<50.0	89	0	70 - 130	20

Percent recovery is based on the spike result. RPD is based on the spike and spike duplicate result.

Surrogate	LCS Result	LCSD Result	Units	Dilution	Spike Amount	LCS % Rec	LCSD % Rec	Recovery Limits
n-Triacontane	142	141	mg/Kg	1	150	95	94	70 - 130

Laboratory Control Spikes

QCBatch: QC20096

Param	LCS Result	LCSD Result	Units	Dil.	Spike Amount Added	Matrix Result	% Rec	RPD	% Rec Limit	RPD Limit
DRO	251	251	mg/Kg	1	250	<50.0	100	0	70 - 130	20

Percent recovery is based on the spike result. RPD is based on the spike and spike duplicate result.

Surrogate	LCS Result	LCSD Result	Units	Dilution	Spike Amount	LCS % Rec	LCSD % Rec	Recovery Limits
n-Triacontane	121	120	mg/Kg	1	150	81	80	70 - 130

Quality Control Report
Matrix Spikes and Duplicate Spikes

Matrix Spikes

QCBatch: QC20095

Param	MS Result	MSD Result	Units	Dil.	Spike Amount Added	Matrix Result	% Rec	RPD	% Rec Limit	RPD Limit
C6-C12	199	195	mg/Kg	1	250	<50.0	79	2	70 - 130	20
>C12-C35	204	214	mg/Kg	1	250	<50.0	81	4	70 - 130	20
C6-C35	403	409	mg/Kg	1	500	<50.0	80	1	70 - 130	20

Percent recovery is based on the spike result. RPD is based on the spike and spike duplicate result.

Surrogate	MS Result	MSD Result	Units	Dilution	Spike Amount	MS % Rec	MSD % Rec	Recovery Limits
n-Triacontane	135	143	mg/Kg	1	150	90	95	70 - 130

Matrix Spikes

QCBatch: QC20096

Param	MS Result	MSD Result	Units	Dil.	Spike Amount Added	Matrix Result	% Rec	RPD	% Rec Limit	RPD Limit
DRO	227	224	mg/Kg	1	250	<50.0	91	1	70 - 130	20

Percent recovery is based on the spike result. RPD is based on the spike and spike duplicate result.

Surrogate	MS Result	MSD Result	Units	Dilution	Spike Amount	MS % Rec	MSD % Rec	Recovery Limits
n-Triacontane	115	122	mg/Kg	1	150	77	81	70 - 130

Quality Control Report
Continuing Calibration Verification Standards

CCV (1)

QCBatch: QC20095

Param	Flag	Units	CCVs True Conc.	CCVs Found Conc.	CCVs Percent Recovery	Percent Recovery Limits	Date Analyzed
C6-C12		mg/Kg	250	243	97	70 - 130	5/5/02
>C12-C35		mg/Kg	250	244	97	70 - 130	5/5/02
C6-C35		mg/Kg	500	487	97	70 - 130	5/5/02

CCV (2) QCBatch: QC20095

Param	Flag	Units	CCVs True Conc.	CCVs Found Conc.	CCVs Percent Recovery	Percent Recovery Limits	Date Analyzed
C6-C12		mg/Kg	250	224	89	70 - 130	5/5/02
>C12-C35		mg/Kg	250	228	91	70 - 130	5/5/02
C6-C35		mg/Kg	500	452	90	70 - 130	5/5/02

ICV (1) QCBatch: QC20095

Param	Flag	Units	CCVs True Conc.	CCVs Found Conc.	CCVs Percent Recovery	Percent Recovery Limits	Date Analyzed
C6-C12		mg/Kg	250	224	89	75 - 125	5/5/02
>C12-C35		mg/Kg	250	225	90	75 - 125	5/5/02
C6-C35		mg/Kg	500	449	89	75 - 125	5/5/02

CCV (1) QCBatch: QC20096

Param	Flag	Units	CCVs True Conc.	CCVs Found Conc.	CCVs Percent Recovery	Percent Recovery Limits	Date Analyzed
DRO		mg/Kg	250	271	108	75 - 125	5/5/02

CCV (2) QCBatch: QC20096

Param	Flag	Units	CCVs True Conc.	CCVs Found Conc.	CCVs Percent Recovery	Percent Recovery Limits	Date Analyzed
DRO		mg/Kg	250	254	101	75 - 125	5/5/02

ICV (1) QCBatch: QC20096

Continued ...

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Param	Flag	Units	CCVs True Conc.	CCVs Found Conc.	CCVs Percent Recovery	Percent Recovery Limits	Date Analyzed
Param	Flag	Units	CCVs True Conc.	CCVs Found Conc.	CCVs Percent Recovery	Percent Recovery Limits	Date Analyzed
DRO		mg/Kg	250	251	100	75 - 125	5/5/02

Summary Report

Kyle Landreneau
Equiva Kyle Landreneau
PMB 284 40 FM 1960 West
Houston, TX 77090

Report Date: May 6, 2002

Order ID Number: A02050310

Project: EQ-112 Monument
TA Job Code: Barber Ranch 3000109
Casualty Code: EQ-112
Project Location: Monument, Lea County,New Mexico
Project Address:
Enercon Services Inc. / Midland / Jeff Kindley

Sample	Description	Matrix	Date Taken	Time Taken	Date Received
196262	MW-5 (8-10')	Soil	5/2/02	14:18	5/3/02
196263	MW-5 (28-30')	Soil	5/2/02	15:18	5/3/02

0 This report consists of a total of 1 page(s) and is intended only as a summary of results for the sample(s) listed above.

Sample - Field Code	C6-C12 (ppm)	Extended TX1005 >C12-C35 (ppm)	C6-C35 (ppm)
196262 - MW-5 (8-10')	251	320	571
196263 - MW-5 (28-30')	<50.0	<50.0	<50.0

This is only a summary. Please, refer to the complete report package for quality control data.

Analytical and Quality Control Report

Jeff Kindley
Enercon Services Inc.
306 W. Wall Suite 1312
Midland, Tx. 79701

Report Date: May 21, 2002

Order ID Number: A02050404

Project Number: EQ-112
Project Name: Barber Ranch 3000109
Project Location: Barber Lea County, New Mexico

Enclosed are the Analytical Results and Quality Control Data Reports for the following samples submitted to Trace-Analysis, Inc.

Sample	Description	Matrix	Date Taken	Time Taken	Date Received
196318	MW-6 (13-15')	Soil	5/2/02	9:10	5/3/02
196319	MW-6 (25-27')	Soil	5/2/02	10:15	5/3/02
196320	MW-7 (8-10')	Soil	5/2/02	16:00	5/3/02
196321	MW-7 (25-27')	Soil	5/2/02	17:10	5/3/02
196322	MW-8 (8-10')	Soil	5/3/02	10:12	5/3/02
196323	MW-8 (23-25')	Soil	5/3/02	11:15	5/3/02

These results represent only the samples received in the laboratory. The Quality Control Report is generated on a batch basis. All information contained in this report is for the analytical batch(es) in which your sample(s) were analyzed. Note: the RDL is equal to MQL for all organic analytes including TPH.
The test results contained within this report meet all requirements of LAC 33:I unless otherwise noted.

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Dr. Blair Leftwich, Director

Analytical Report

Sample: 196318 - MW-6 (13-15')

Analysis:	BTEX	Analytical Method:	S 8021B	QC Batch:	QC20107	Date Analyzed:	5/6/02
Analyst:	CG	Preparation Method:	S 5035	Prep Batch:	PB19273	Date Prepared:	5/6/02

Param	Flag	Result	Units	Dilution	RDL
Benzene		<0.010	mg/Kg	10	0.001
Toluene		<0.010	mg/Kg	10	0.001
Ethylbenzene		<0.010	mg/Kg	10	0.001
M,P,O-Xylene		<0.010	mg/Kg	10	0.001
Total BTEX		<0.010	mg/Kg	10	0.001

Surrogate	Flag	Result	Units	Dilution	Spike Amount	Percent Recovery	Recovery Limits
TFT		0.858	mg/Kg	10	1	86	70 - 130
4-BFB		0.727	mg/Kg	10	1	73	70 - 130

Sample: 196318 - MW-6 (13-15')

Analysis:	TPH DRO	Analytical Method:	Mod. 8015B	QC Batch:	QC20145	Date Analyzed:	5/7/02
Analyst:	MM	Preparation Method:	3550 B	Prep Batch:	PB19299	Date Prepared:	5/7/02

Param	Flag	Result	Units	Dilution	RDL
DRO		<50.0	mg/Kg	1	50

Surrogate	Flag	Result	Units	Dilution	Spike Amount	Percent Recovery	Recovery Limits
n-Triacontane		127	mg/Kg	1	150	85	70 - 130

Sample: 196318 - MW-6 (13-15')

Analysis:	TPH GRO	Analytical Method:	8015B	QC Batch:	QC20108	Date Analyzed:	5/6/02
Analyst:	CG	Preparation Method:	5035	Prep Batch:	PB19273	Date Prepared:	5/6/02

Param	Flag	Result	Units	Dilution	RDL
GRO		<1.00	mg/Kg	10	0.10

Surrogate	Flag	Result	Units	Dilution	Spike Amount	Percent Recovery	Recovery Limits
TFT		0.844	mg/Kg	10	0.10	84	70 - 130
4-BFB		0.887	mg/Kg	10	0.10	89	70 - 130

Sample: 196319 - MW-6 (25-27')

Analysis:	BTEX	Analytical Method:	S 8021B	QC Batch:	QC20107	Date Analyzed:	5/6/02
Analyst:	CG	Preparation Method:	S 5035	Prep Batch:	PB19273	Date Prepared:	5/6/02

Param	Flag	Result	Units	Dilution	RDL
Benzene		<0.010	mg/Kg	10	0.001
Toluene		<0.010	mg/Kg	10	0.001
Ethylbenzene		<0.010	mg/Kg	10	0.001
M,P,O-Xylene		0.0115	mg/Kg	10	0.001
Total BTEX		0.0115	mg/Kg	10	0.001

Surrogate	Flag	Result	Units	Dilution	Spike Amount	Percent Recovery	Recovery Limits
TFT		0.870	mg/Kg	10	1	87	70 - 130
4-BFB		0.747	mg/Kg	10	1	75	70 - 130

Sample: 196319 - MW-6 (25-27')

Analysis:	TPH DRO	Analytical Method:	Mod. 8015B	QC Batch:	QC20145	Date Analyzed:	5/7/02
Analyst:	MM	Preparation Method:	3550 B	Prep Batch:	PB19299	Date Prepared:	5/7/02

Param	Flag	Result	Units	Dilution	RDL
DRO		<50.0	mg/Kg	1	50

Surrogate	Flag	Result	Units	Dilution	Spike Amount	Percent Recovery	Recovery Limits
n-Triacontane		129	mg/Kg	1	150	86	70 - 130

Sample: 196319 - MW-6 (25-27')

Analysis:	TPH GRO	Analytical Method:	8015B	QC Batch:	QC20108	Date Analyzed:	5/6/02
Analyst:	CG	Preparation Method:	5035	Prep Batch:	PB19273	Date Prepared:	5/6/02

Param	Flag	Result	Units	Dilution	RDL
GRO		<1.00	mg/Kg	10	0.10

Surrogate	Flag	Result	Units	Dilution	Spike Amount	Percent Recovery	Recovery Limits
TFT		1.26	mg/Kg	10	0.10	126	70 - 130
4-BFB		0.899	mg/Kg	10	0.10	90	70 - 130

Sample: 196320 - MW-7 (8-10')

Analysis:	BTEX	Analytical Method:	S 8021B	QC Batch:	QC20422	Date Analyzed:	5/16/02
Analyst:	CG	Preparation Method:	S 5035	Prep Batch:	PB19512	Date Prepared:	5/16/02

Param	Flag	Result	Units	Dilution	RDL
Benzene		1.05	mg/Kg	500	0.001
Toluene		<0.500	mg/Kg	500	0.001
Ethylbenzene		6.42	mg/Kg	500	0.001
M,P,O-Xylene		2.17	mg/Kg	500	0.001
Total BTEX		9.64	mg/Kg	500	0.001

Surrogate	Flag	Result	Units	Dilution	Spike Amount	Percent Recovery	Recovery Limits
TFT		0.0904	mg/Kg	5	1	90	70 - 130
4-BFB	[1]	0.0884	mg/Kg	5	1	88	70 - 130

Sample: 196320 - MW-7 (8-10')

Analysis: Extended TX1005 | Analytical Method: TX1005 | QC Batch: QC20286 | Date Analyzed: 5/13/02
Analyst: MM | Preparation Method: N/A | Prep Batch: PB19403 | Date Prepared: 5/10/02

Param	Flag	Result	Units	Dilution	RDL
C6-C12		840	mg/Kg	10	50
>C12-C35		1610	mg/Kg	10	50
C6-C35		2450	mg/Kg	10	50

Surrogate	Flag	Result	Units	Dilution	Spike Amount	Percent Recovery	Recovery Limits
n-Triacontane	[2]	235	mg/Kg	1	150	156	70 - 130

Sample: 196320 - MW-7 (8-10')

Analysis: SPLP DRO | Analytical Method: Mod. 8015B | QC Batch: QC20373 | Date Analyzed: 5/16/02
Analyst: MM | Preparation Method: 1312 | Prep Batch: PB19468 | Date Prepared: 5/16/02

Param	Flag	Result	Units	Dilution	RDL
SPLP DRO		<5.00	mg/L	1	50

Sample: 196320 - MW-7 (8-10')

Analysis: SPLP GRO | Analytical Method: 8015 | QC Batch: QC20465 | Date Analyzed: 5/16/02
Analyst: CG | Preparation Method: 1312 | Prep Batch: PB19543 | Date Prepared: 5/16/02

Param	Flag	Result	Units	Dilution	RDL
SPLP GRO		1.31	mg/L	5	0.10

Sample: 196320 - MW-7 (8-10')

Analysis: TPH DRO | Analytical Method: Mod. 8015B | QC Batch: QC20162 | Date Analyzed: 5/8/02
Analyst: MM | Preparation Method: 3550 B | Prep Batch: PB19315 | Date Prepared: 5/7/02

Param	Flag	Result	Units	Dilution	RDL
DRO		2700	mg/Kg	5	50

Surrogate	Flag	Result	Units	Dilution	Spike Amount	Percent Recovery	Recovery Limits
n-Triacontane	[3]	263	mg/Kg	5	150	175	70 - 130

[1] High surrogate recovery due to peak interference.
[2] Surrogate out of recovery limits due to high hydrocarbons. LCS, ICV, and CCV show the process is in control.
[3] Surrogate out of recovery limits due to high hydrocarbons. LCS, ICV, and CCV show the process is in control.

Sample: 196320 - MW-7 (8-10')

Analysis:	TPH GRO	Analytical Method:	8015B	QC Batch:	QC20423	Date Analyzed:	5/16/02
Analyst:	CG	Preparation Method:	5035	Prep Batch:	PB19512	Date Prepared:	5/16/02

Param	Flag	Result	Units	Dilution	RDL
GRO		1.31	mg/Kg	5	0.10

Surrogate	Flag	Result	Units	Dilution	Spike Amount	Percent Recovery	Recovery Limits
TFT	[4]	0.0875	mg/Kg	5	0.10	87	70 - 130
4-BFB	[5]	0.108	mg/Kg	5	0.10	108	70 - 130

Sample: 196321 - MW-7 (25-27')

Analysis:	BTEX	Analytical Method:	S 8021B	QC Batch:	QC20107	Date Analyzed:	5/6/02
Analyst:	CG	Preparation Method:	S 5035	Prep Batch:	PB19273	Date Prepared:	5/6/02

Param	Flag	Result	Units	Dilution	RDL
Benzene		<0.010	mg/Kg	10	0.001
Toluene		<0.010	mg/Kg	10	0.001
Ethylbenzene		0.0203	mg/Kg	10	0.001
M,P,O-Xylene		<0.010	mg/Kg	10	0.001
Total BTEX		0.0203	mg/Kg	10	0.001

Surrogate	Flag	Result	Units	Dilution	Spike Amount	Percent Recovery	Recovery Limits
TFT		0.903	mg/Kg	10	1	90	70 - 130
4-BFB		0.776	mg/Kg	10	1	78	70 - 130

Sample: 196321 - MW-7 (25-27')

Analysis:	TPH DRO	Analytical Method:	Mod. 8015B	QC Batch:	QC20145	Date Analyzed:	5/7/02
Analyst:	MM	Preparation Method:	3550 B	Prep Batch:	PB19299	Date Prepared:	5/7/02

Param	Flag	Result	Units	Dilution	RDL
DRO		<50.0	mg/Kg	1	50

Surrogate	Flag	Result	Units	Dilution	Spike Amount	Percent Recovery	Recovery Limits
n-Triacontane		132	mg/Kg	1	150	88	70 - 130

Sample: 196321 - MW-7 (25-27')

Analysis:	TPH GRO	Analytical Method:	8015B	QC Batch:	QC20108	Date Analyzed:	5/6/02
Analyst:	CG	Preparation Method:	5035	Prep Batch:	PB19273	Date Prepared:	5/6/02

[4]High surrogate recovery due to peak interference.
[5]High surrogate recovery due to peak interference.

Param	Flag	Result	Units	Dilution	RDL
GRO		<1.00	mg/Kg	10	0.10

Surrogate	Flag	Result	Units	Dilution	Spike Amount	Percent Recovery	Recovery Limits
TFT		0.825	mg/Kg	10	0.10	82	70 - 130
4-BFB		0.897	mg/Kg	10	0.10	90	70 - 130

Sample: 196322 - MW-8 (8-10')

Analysis:	BTEX	Analytical Method:	S 8021B	QC Batch:	QC20107	Date Analyzed:	5/6/02
Analyst:	CG	Preparation Method:	S 5035	Prep Batch:	PB19273	Date Prepared:	5/6/02

Param	Flag	Result	Units	Dilution	RDL
Benzene		<0.010	mg/Kg	10	0.001
Toluene		<0.010	mg/Kg	10	0.001
Ethylbenzene		<0.010	mg/Kg	10	0.001
M,P,O-Xylene		<0.010	mg/Kg	10	0.001
Total BTEX		<0.010	mg/Kg	10	0.001

Surrogate	Flag	Result	Units	Dilution	Spike Amount	Percent Recovery	Recovery Limits
TFT		0.850	mg/Kg	10	1	85	70 - 130
4-BFB		0.726	mg/Kg	10	1	73	70 - 130

Sample: 196322 - MW-8 (8-10')

Analysis:	TPH DRO	Analytical Method:	Mod. 8015B	QC Batch:	QC20145	Date Analyzed:	5/7/02
Analyst:	MM	Preparation Method:	3550 B	Prep Batch:	PB19299	Date Prepared:	5/7/02

Param	Flag	Result	Units	Dilution	RDL
DRO		<50.0	mg/Kg	1	50

Surrogate	Flag	Result	Units	Dilution	Spike Amount	Percent Recovery	Recovery Limits
n-Triacontane		127	mg/Kg	1	150	85	70 - 130

Sample: 196322 - MW-8 (8-10')

Analysis:	TPH GRO	Analytical Method:	8015B	QC Batch:	QC20108	Date Analyzed:	5/6/02
Analyst:	CG	Preparation Method:	5035	Prep Batch:	PB19273	Date Prepared:	5/6/02

Param	Flag	Result	Units	Dilution	RDL
GRO		<1.00	mg/Kg	10	0.10

Surrogate	Flag	Result	Units	Dilution	Spike Amount	Percent Recovery	Recovery Limits
TFT		0.847	mg/Kg	10	0.10	85	70 - 130

Continued ...

Surrogate	Flag	Result	Units	Dilution	Spike Amount	Percent Recovery	Recovery Limits
4-BFB		0.878	mg/Kg	10	0.10	88	70 - 130

Sample: 196323 - MW-8 (23-25')

Analysis:	BTEX	Analytical Method:	S 8021B	QC Batch:	QC20107	Date Analyzed:	5/6/02
Analyst:	CG	Preparation Method:	S 5035	Prep Batch:	PB19273	Date Prepared:	5/6/02

Param	Flag	Result	Units	Dilution	RDL
Benzene		<0.020	mg/Kg	20	0.001
Toluene		<0.020	mg/Kg	20	0.001
Ethylbenzene		<0.020	mg/Kg	20	0.001
M,P,O-Xylene		<0.020	mg/Kg	20	0.001
Total BTEX		<0.020	mg/Kg	20	0.001
Test Comments	[6]	*	mg/Kg	1	

Surrogate	Flag	Result	Units	Dilution	Spike Amount	Percent Recovery	Recovery Limits
TFT		0.853	mg/Kg	20	1	85	70 - 130
4-BFB	[7]	0.664	mg/Kg	20	1	66	70 - 130

Sample: 196323 - MW-8 (23-25')

Analysis:	TPH DRO	Analytical Method:	Mod. 8015B	QC Batch:	QC20145	Date Analyzed:	5/7/02
Analyst:	MM	Preparation Method:	3550 B	Prep Batch:	PB19299	Date Prepared:	5/7/02

Param	Flag	Result	Units	Dilution	RDL
DRO		<50.0	mg/Kg	1	50

Surrogate	Flag	Result	Units	Dilution	Spike Amount	Percent Recovery	Recovery Limits
n-Triacontane		126	mg/Kg	1	150	84	70 - 130

Sample: 196323 - MW-8 (23-25')

Analysis:	TPH GRO	Analytical Method:	8015B	QC Batch:	QC20108	Date Analyzed:	5/6/02
Analyst:	CG	Preparation Method:	5035	Prep Batch:	PB19273	Date Prepared:	5/6/02

Param	Flag	Result	Units	Dilution	RDL
GRO		<2.00	mg/Kg	20	0.10

Surrogate	Flag	Result	Units	Dilution	Spike Amount	Percent Recovery	Recovery Limits
TFT		0.847	mg/Kg	20	0.10	85	70 - 130
4-BFB		0.929	mg/Kg	20	0.10	93	70 - 130

[6]Sample diluted due to lack of sample extract. Sample has a Benzene concentration of less than 0.0047.
[7]Low surrogate recovery due to matrix interference. ICV, CCV, CCV shows the method to be in control.

Quality Control Report
Method Blank

Method Blank

QCBatch: QC20107

Param	Flag	Results	Units	Reporting Limit
Benzene		<0.010	mg/Kg	0.001
Toluene		<0.010	mg/Kg	0.001
Ethylbenzene		<0.010	mg/Kg	0.001
M,P,O-Xylene		<0.010	mg/Kg	0.001
Total BTEX		<0.010	mg/Kg	0.001

Surrogate	Flag	Result	Units	Dilution	Spike Amount	Percent Recovery	Recovery Limits
TFT		0.920	mg/Kg	10	1	92	70 - 130
4-BFB	[8]	0.523	mg/Kg	10	1	52	70 - 130

Method Blank

QCBatch: QC20108

Param	Flag	Results	Units	Reporting Limit
GRO		<1	mg/Kg	0.10

Surrogate	Flag	Result	Units	Dilution	Spike Amount	Percent Recovery	Recovery Limits
TFT		0.952	mg/Kg	10	0.10	95	70 - 130
4-BFB	[9]	0.625	mg/Kg	10	0.10	62	70 - 130

Method Blank

QCBatch: QC20145

Param	Flag	Results	Units	Reporting Limit
DRO		<50.0	mg/Kg	50

Surrogate	Flag	Result	Units	Dilution	Spike Amount	Percent Recovery	Recovery Limits
n-Triacontane		119	mg/Kg	1	150	79	70 - 130

Method Blank

QCBatch: QC20162

[8]Low surrogate recovery due to prep. ICV, CCV, CCV show the method to be in control.
[9]Low surrogate recovery due to prep. ICV, CCV, CCV show the method to be in control.

Param	Flag	Results	Units	Reporting Limit
DRO		<50.0	mg/Kg	50

Surrogate	Flag	Result	Units	Dilution	Spike Amount	Percent Recovery	Recovery Limits
n-Triacontane		125	mg/Kg	1	150	83	70 - 130

Method Blank

QCBatch: QC20286

Param	Flag	Results	Units	Reporting Limit
C6-C12		<50.0	mg/Kg	50
>C12-C35		<50.0	mg/Kg	50
C6-C35		<50.0	mg/Kg	50

Surrogate	Flag	Result	Units	Dilution	Spike Amount	Percent Recovery	Recovery Limits
n-Triacontane		184	mg/Kg	1	150	122	70 - 130

Method Blank

QCBatch: QC20373

Param	Flag	Results	Units	Reporting Limit
SPLP DRO		<5.00	mg/L	50

Method Blank

QCBatch: QC20423

Param	Flag	Results	Units	Reporting Limit
GRO		<0.1	mg/Kg	0.10

Surrogate	Flag	Result	Units	Dilution	Spike Amount	Percent Recovery	Recovery Limits
TFT		0.0964	mg/Kg	1	0.10	96	70 - 130
4-BFB		0.0968	mg/Kg	1	0.10	96	70 - 130

Method Blank

QCBatch: QC20465

Param	Flag	Results	Units	Reporting Limit
SPLP GRO		<0.1	mg/L	0.10

Quality Control Report
Lab Control Spikes and Duplicate Spikes

Laboratory Control Spikes

QCBatch: QC20107

Param	LCS Result	LCSD Result	Units	Dil.	Spike Amount Added	Matrix Result	% Rec	RPD	% Rec Limit	RPD Limit
MTBE	1.01	0.999	mg/Kg	10	1	<0.010	101	1	70 - 130	20
Benzene	0.985	0.968	mg/Kg	10	1	<0.010	98	2	70 - 130	20
Toluene	0.980	0.976	mg/Kg	10	1	<0.010	98	0	70 - 130	20
Ethylbenzene	0.982	0.963	mg/Kg	10	1	<0.010	98	2	70 - 130	20
M,P,O-Xylene	3.01	2.94	mg/Kg	10	3	<0.010	100	2	70 - 130	20

Percent recovery is based on the spike result. RPD is based on the spike and spike duplicate result.

Surrogate	LCS Result	LCSD Result	Units	Dilution	Spike Amount	LCS % Rec	LCSD % Rec	Recovery Limits
TFT	0.997	0.997	mg/Kg	10	1	100	100	70 - 130
4-BFB	0.913	0.911	mg/Kg	10	1	91	91	70 - 130

Laboratory Control Spikes

QCBatch: QC20108

Param	LCS Result	LCSD Result	Units	Dil.	Spike Amount Added	Matrix Result	% Rec	RPD	% Rec Limit	RPD Limit
GRO	8.32	8.48	mg/Kg	10	1	<1	83	1	80 - 120	20

Percent recovery is based on the spike result. RPD is based on the spike and spike duplicate result.

Surrogate	LCS Result	LCSD Result	Units	Dilution	Spike Amount	LCS % Rec	LCSD % Rec	Recovery Limits
TFT	0.882	0.896	mg/Kg	10	0.10	88	90	70 - 130
4-BFB	0.898	0.91	mg/Kg	10	0.10	90	91	70 - 130

Laboratory Control Spikes

QCBatch: QC20145

Param	LCS Result	LCSD Result	Units	Dil.	Spike Amount Added	Matrix Result	% Rec	RPD	% Rec Limit	RPD Limit
DRO	228	233	mg/Kg	1	250	<50.0	91	2	70 - 130	20

Percent recovery is based on the spike result. RPD is based on the spike and spike duplicate result.

Surrogate	LCS Result	LCSD Result	Units	Dilution	Spike Amount	LCS % Rec	LCSD % Rec	Recovery Limits
n-Triacontane	123	120	mg/Kg	1	150	82	80	70 - 130

Laboratory Control Spikes

QCBatch: QC20162

Param	LCS Result	LCSD Result	Units	Dil.	Spike Amount Added	Matrix Result	% Rec	RPD	% Rec Limit	RPD Limit
DRO	261	262	mg/Kg	1	250	<50.0	104	0	70 - 130	20

Percent recovery is based on the spike result. RPD is based on the spike and spike duplicate result.

Surrogate	LCS Result	LCSD Result	Units	Dilution	Spike Amount	LCS % Rec	LCSD % Rec	Recovery Limits
n-Triacontane	133	132	mg/Kg	1	150	89	88	70 - 130

Laboratory Control Spikes

QCBatch: QC20286

Param	LCS Result	LCSD Result	Units	Dil.	Spike Amount Added	Matrix Result	% Rec	RPD	% Rec Limit	RPD Limit
C6-C12	262	249	mg/Kg	1	250	<50.0	104	5	70 - 130	20
>C12-C35	273	262	mg/Kg	1	250	<50.0	109	4	70 - 130	20
C6-C35	535	511	mg/Kg	1	500	<50.0	107	4	70 - 130	20

Percent recovery is based on the spike result. RPD is based on the spike and spike duplicate result.

Surrogate	LCS Result	LCSD Result	Units	Dilution	Spike Amount	LCS % Rec	LCSD % Rec	Recovery Limits
n-Triacontane	167	178	mg/Kg	1	150	111	119	70 - 130

Laboratory Control Spikes

QCBatch: QC20373

Param	LCS Result	LCSD Result	Units	Dil.	Spike Amount Added	Matrix Result	% Rec	RPD	% Rec Limit	RPD Limit
SPLP DRO	< 50	< 50	mg/L	1	25	<5.00	95	4	70 - 130	20

Percent recovery is based on the spike result. RPD is based on the spike and spike duplicate result.

Laboratory Control Spikes

QCBatch: QC20423

Param	LCS Result	LCSD Result	Units	Dil.	Spike Amount Added	Matrix Result	% Rec	RPD	% Rec Limit	RPD Limit
GRO	0.854	0.855	mg/Kg	1	1	<0.1	85	0	80 - 120	20

Percent recovery is based on the spike result. RPD is based on the spike and spike duplicate result.

Surrogate	LCS Result	LCSD Result	Units	Dilution	Spike Amount	LCS % Rec	LCSD % Rec	Recovery Limits
TFT	0.0866	0.089	mg/Kg	1	0.10	86	89	70 - 130
4-BFB	0.102	0.105	mg/Kg	1	0.10	102	105	70 - 130

Laboratory Control Spikes

QCBatch: QC20465

Param	LCS Result	LCSD Result	Units	Dil.	Spike Amount Added	Matrix Result	% Rec	RPD	% Rec Limit	RPD Limit
SPLP GRO	0.854	0.855	mg/L	1	1	<0.1	85	0	70 - 130	20

Percent recovery is based on the spike result. RPD is based on the spike and spike duplicate result.

Quality Control Report
Matrix Spikes and Duplicate Spikes

Matrix Spikes

QCBatch: QC20107

Param	MS Result	MSD Result	Units	Dil.	Spike Amount Added	Matrix Result	% Rec	RPD	% Rec Limit	RPD Limit
Benzene	0.845	0.854	mg/Kg	10	1	<0.010	84	1	70 - 130	20
Toluene	0.876	0.878	mg/Kg	10	1	<0.010	87	0	70 - 130	20
Ethylbenzene	0.877	0.891	mg/Kg	10	1	<0.010	87	1	70 - 130	20
M,P,O-Xylene	2.63	2.73	mg/Kg	10	3	<0.010	87	3	70 - 130	20

Percent recovery is based on the spike result. RPD is based on the spike and spike duplicate result.

Surrogate	MS Result	MSD Result	Units	Dilution	Spike Amount	MS % Rec	MSD % Rec	Recovery Limits
TFT	0.842	0.814	mg/Kg	10	1	84	81	70 - 130
4-BFB	0.811	0.783	mg/Kg	10	1	81	78	70 - 130

Matrix Spikes

QCBatch: QC20108

Param	MS Result	MSD Result	Units	Dil.	Spike Amount Added	Matrix Result	% Rec	RPD	% Rec Limit	RPD Limit
GRO	9.45	11.4	mg/Kg	10	1	<1.00	94	18	80 - 120	20

Percent recovery is based on the spike result. RPD is based on the spike and spike duplicate result.

Surrogate	MS Result	MSD Result	Units	Dilution	Spike Amount	MS % Rec	MSD % Rec	Recovery Limits
TFT	0.907	1.07	mg/Kg	10	0.10	91	107	70 - 130
4-BFB	0.885	0.914	mg/Kg	10	0.10	88	91	70 - 130

Matrix Spikes

QCBatch: QC20145

Param	MS Result	MSD Result	Units	Dil.	Spike Amount Added	Matrix Result	% Rec	RPD	% Rec Limit	RPD Limit
DRO	224	263	mg/Kg	1	250	<50.0	89	16	70 - 130	20

Percent recovery is based on the spike result. RPD is based on the spike and spike duplicate result.

Surrogate	MS Result	MSD Result	Units	Dilution	Spike Amount	MS % Rec	MSD % Rec	Recovery Limits
n-Triacontane	112	128	mg/Kg	1	150	75	85	70 - 130

Matrix Spikes

QCBatch: QC20162

Param	MS Result	MSD Result	Units	Dil.	Spike Amount Added	Matrix Result	% Rec	RPD	% Rec Limit	RPD Limit
DRO	455	456	mg/Kg	1	250	195	104	0	70 - 130	20

Percent recovery is based on the spike result. RPD is based on the spike and spike duplicate result.

Surrogate	MS Result	MSD Result	Units	Dilution	Spike Amount	MS % Rec	MSD % Rec	Recovery Limits
n-Triacontane	134	134	mg/Kg	1	150	89	89	70 - 130

Matrix Spikes

QCBatch: QC20286

Param	MS Result	MSD Result	Units	Dil.	Spike Amount Added	Matrix Result	% Rec	RPD	% Rec Limit	RPD Limit
C6-C12	[10] 200	207	mg/Kg	1	250	<50.0	80	3	70 - 130	20
>C12-C35	256	266	mg/Kg	1	250	121	54	7	70 - 130	20
C6-C35	456	473	mg/Kg	1	500	121	67	4	70 - 130	20

Percent recovery is based on the spike result. RPD is based on the spike and spike duplicate result.

Surrogate	MS Result	MSD Result	Units	Dilution	Spike Amount	MS % Rec	MSD % Rec	Recovery Limits
n-Triacontane	155	155	mg/Kg	1	150	103	103	70 - 130

Quality Control Report
Continuing Calibration Verification Standards

CCV (1)

QCBatch: QC20107

Param	Flag	Units	CCVs True Conc.	CCVs Found Conc.	CCVs Percent Recovery	Percent Recovery Limits	Date Analyzed
MTBE		mg/L	0.10	0.101	101	85 - 115	5/6/02
Benzene		mg/L	0.10	0.0969	97	85 - 115	5/6/02
Toluene		mg/L	0.10	0.0965	96	85 - 115	5/6/02

Continued ...

[10] MS and MSD out of recovery limits due to matrix interference. LCS and LCSD show the process is in control.

... Continued

Param	Flag	Units	CCVs True Conc.	CCVs Found Conc.	CCVs Percent Recovery	Percent Recovery Limits	Date Analyzed
Ethylbenzene		mg/L	0.10	0.0959	96	85 - 115	5/6/02
M,P,O-Xylene		mg/L	0.30	0.293	98	85 - 115	5/6/02

CCV (2) QCBatch: QC20107

Param	Flag	Units	CCVs True Conc.	CCVs Found Conc.	CCVs Percent Recovery	Percent Recovery Limits	Date Analyzed
MTBE		mg/L	0.10	0.109	109	85 - 115	5/6/02
Benzene		mg/L	0.10	0.0954	95	85 - 115	5/6/02
Toluene		mg/L	0.10	0.0971	97	85 - 115	5/6/02
Ethylbenzene		mg/L	0.10	0.101	101	85 - 115	5/6/02
M,P,O-Xylene		mg/L	0.30	0.292	97	85 - 115	5/6/02

ICV (1) QCBatch: QC20107

Param	Flag	Units	CCVs True Conc.	CCVs Found Conc.	CCVs Percent Recovery	Percent Recovery Limits	Date Analyzed
MTBE		mg/L	0.10	0.101	101	85 - 115	5/6/02
Benzene		mg/L	0.10	0.0974	97	85 - 115	5/6/02
Toluene		mg/L	0.10	0.0989	99	85 - 115	5/6/02
Ethylbenzene		mg/L	0.10	0.0971	97	85 - 115	5/6/02
M,P,O-Xylene		mg/L	0.30	0.299	100	85 - 115	5/6/02

CCV (1) QCBatch: QC20108

Param	Flag	Units	CCVs True Conc.	CCVs Found Conc.	CCVs Percent Recovery	Percent Recovery Limits	Date Analyzed
GRO		mg/Kg	1	0.904	90	85 - 115	5/6/02

CCV (2) QCBatch: QC20108

Param	Flag	Units	CCVs True Conc.	CCVs Found Conc.	CCVs Percent Recovery	Percent Recovery Limits	Date Analyzed
GRO		mg/Kg	1	1.09	109	85 - 115	5/6/02

ICV (1) QCBatch: QC20108

Param	Flag	Units	CCVs True Conc.	CCVs Found Conc.	CCVs Percent Recovery	Percent Recovery Limits	Date Analyzed
GRO		mg/Kg	1	0.872	87	85 - 115	5/6/02

CCV (1) QCBatch: QC20145

Param	Flag	Units	CCVs True Conc.	CCVs Found Conc.	CCVs Percent Recovery	Percent Recovery Limits	Date Analyzed
DRO		mg/Kg	250	246	98	75 - 125	5/7/02

CCV (2) QCBatch: QC20145

Param	Flag	Units	CCVs True Conc.	CCVs Found Conc.	CCVs Percent Recovery	Percent Recovery Limits	Date Analyzed
DRO		mg/Kg	250	269	107	75 - 125	5/7/02

ICV (1) QCBatch: QC20145

Param	Flag	Units	CCVs True Conc.	CCVs Found Conc.	CCVs Percent Recovery	Percent Recovery Limits	Date Analyzed
DRO		mg/Kg	250	233	93	75 - 125	5/7/02

CCV (1) QCBatch: QC20162

Param	Flag	Units	CCVs True Conc.	CCVs Found Conc.	CCVs Percent Recovery	Percent Recovery Limits	Date Analyzed
DRO		mg/Kg	250	246	98	75 - 125	5/8/02

CCV (2) QCBatch: QC20162

Param	Flag	Units	CCVs True Conc.	CCVs Found Conc.	CCVs Percent Recovery	Percent Recovery Limits	Date Analyzed
DRO		mg/Kg	250	262	104	75 - 125	5/8/02

ICV (1) QCBatch: QC20162

Param	Flag	Units	CCVs True Conc.	CCVs Found Conc.	CCVs Percent Recovery	Percent Recovery Limits	Date Analyzed
DRO		mg/Kg	250	263	105	75 - 125	5/8/02

CCV (1)

QCBatch: QC20286

Param	Flag	Units	CCVs True Conc.	CCVs Found Conc.	CCVs Percent Recovery	Percent Recovery Limits	Date Analyzed
C6-C12		mg/Kg	250	226	90	70 - 130	5/13/02
>C12-C35		mg/Kg	250	241	96	70 - 130	5/13/02
C6-C35		mg/Kg	500	467	93	70 - 130	5/13/02

CCV (2)

QCBatch: QC20286

Param	Flag	Units	CCVs True Conc.	CCVs Found Conc.	CCVs Percent Recovery	Percent Recovery Limits	Date Analyzed
C6-C12		mg/Kg	250	218	87	70 - 130	5/13/02
>C12-C35		mg/Kg	250	235	94	70 - 130	5/13/02
C6-C35		mg/Kg	500	453	90	70 - 130	5/13/02

ICV (1)

QCBatch: QC20286

Param	Flag	Units	CCVs True Conc.	CCVs Found Conc.	CCVs Percent Recovery	Percent Recovery Limits	Date Analyzed
C6-C12		mg/Kg	250	233	93	75 - 125	5/13/02
>C12-C35		mg/Kg	250	247	98	75 - 125	5/13/02
C6-C35		mg/Kg	500	480	96	75 - 125	5/13/02

CCV (1)

QCBatch: QC20373

Param	Flag	Units	CCVs True Conc.	CCVs Found Conc.	CCVs Percent Recovery	Percent Recovery Limits	Date Analyzed
SPLP DRO		mg/L	250	253	101	75 - 125	5/16/02

ICV (1)

QCBatch: QC20373

Continued ...

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Param	Flag	Units	CCVs True Conc.	CCVs Found Conc.	CCVs Percent Recovery	Percent Recovery Limits	Date Analyzed
SPLP DRO		mg/L	250	252	100	75 - 125	5/16/02

CCV (1)

QCBatch: QC20422

Param	Flag	Units	CCVs True Conc.	CCVs Found Conc.	CCVs Percent Recovery	Percent Recovery Limits	Date Analyzed
MTBE		mg/L	0.10	0.0959	95	85 - 115	5/16/02
Benzene		mg/L	0.10	0.0974	97	85 - 115	5/16/02
Toluene		mg/L	0.10	0.0981	98	85 - 115	5/16/02
Ethylbenzene		mg/L	0.10	0.0911	91	85 - 115	5/16/02
M,P,O-Xylene		mg/L	0.30	0.295	98	85 - 115	5/16/02

ICV (1)

QCBatch: QC20422

Param	Flag	Units	CCVs True Conc.	CCVs Found Conc.	CCVs Percent Recovery	Percent Recovery Limits	Date Analyzed
MTBE		mg/L	0.10	0.0973	97	85 - 115	5/16/02
Benzene		mg/L	0.10	0.0937	93	85 - 115	5/16/02
Toluene		mg/L	0.10	0.0958	95	85 - 115	5/16/02
Ethylbenzene		mg/L	0.10	0.0907	90	85 - 115	5/16/02
M,P,O-Xylene		mg/L	0.30	0.302	100	85 - 115	5/16/02

CCV (1)

QCBatch: QC20423

Param	Flag	Units	CCVs True Conc.	CCVs Found Conc.	CCVs Percent Recovery	Percent Recovery Limits	Date Analyzed
GRO		mg/Kg	1	0.915	91	85 - 115	5/16/02

ICV (1)

QCBatch: QC20423

Param	Flag	Units	CCVs True Conc.	CCVs Found Conc.	CCVs Percent Recovery	Percent Recovery Limits	Date Analyzed
GRO		mg/Kg	1	1.04	104	85 - 115	5/16/02

CCV (1)

QCBatch: QC20465

Param	Flag	Units	CCVs True Conc.	CCVs Found Conc.	CCVs Percent Recovery	Percent Recovery Limits	Date Analyzed
SPLP GRO		mg/L	1	0.915	91	85 - 115	5/16/02

ICV (1)

QCBatch: QC20465

Param	Flag	Units	CCVs True Conc.	CCVs Found Conc.	CCVs Percent Recovery	Percent Recovery Limits	Date Analyzed
SPLP GRO		mg/L	1	1.04	104	85 - 115	5/16/02

Summary Report

Kyle Landreneau
Equiva Kyle Landreneau
PMB 284 40 FM 1960 West
Houston, TX 77090

Report Date: May 6, 2002

Order ID Number: A02050310

Project: EQ-112 Monument
TA Job Code: Barber Ranch 3000109
Casualty Code: EQ-112
Project Location: Monument, Lea County,New Mexico
Project Address:
Enercon Services Inc. / Midland / Jeff Kindley

Sample	Description	Matrix	Date Taken	Time Taken	Date Received
196262	MW-5 (8-10')	Soil	5/2/02	14:18	5/3/02
196263	MW-5 (28-30')	Soil	5/2/02	15:18	5/3/02

0 This report consists of a total of 1 page(s) and is intended only as a summary of results for the sample(s) listed above.

	BTEX						TPH DRO	TPH GRO
	Benzene	Toluene	Ethylbenzene	M,P,O-Xylene	Total BTEX	Test Comments	DRO	GRO
Sample - Field Code	(ppm)	(ppm)	(ppm)	(ppm)	(ppm)	(ppm)	(ppm)	(ppm)
196262 - MW-5 (8-10')	<0.500	<0.500	0.946	1.6	2.55	* [1]	374	497
196263 - MW-5 (28-30')	<0.020	<0.020	<0.020	0.04	0.040	* [2]	<50.0	<2 [3]

[1]Sample diluted due to hydrocarbons beyond xylene. Sample has a Benzene concentration of less than 0.1183 which is the MDL.
[2]Sample diluted due to lack of sample extract. Sample has a Benzene concentration of less than 0.0473 which is the MDL.
[3]Sample diluted due to lack of sample extract.

This is only a summary. Please, refer to the complete report package for quality control data.

TRACEANALYSIS, INC.

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4725 Ripley Avenue, Suite A El Paso, Texas 79922 888•588•3443 915•585•3443 FAX 915•585•4944
E-Mail: lab@traceanalysis.com

Analytical and Quality Control Report

Kyle Landreneau
Equiva Kyle Landreneau
PMB 284 40 FM 1960 West
Houston, TX 77090

Report Date: May 6, 2002

Order ID Number: A02050310

Project: EQ-112 Monument
TA Job Code: Barber Ranch 3000109
Casualty Code: EQ-112
Project Location: Monument, Lea County,New Mexico
Enercon Services Inc. / Midland / Jeff Kindley

Enclosed are the Analytical Results and Quality Control Data Reports for the following samples submitted to Trace-Analysis, Inc.

Sample	Description	Matrix	Date Taken	Time Taken	Date Received
196262	MW-5 (8-10')	Soil	5/2/02	14:18	5/3/02
196263	MW-5 (28-30')	Soil	5/2/02	15:18	5/3/02

These results represent only the samples received in the laboratory. The Quality Control Report is generated on a batch basis. All information contained in this report is for the analytical batch(es) in which your sample(s) were analyzed. Note: the RDL is equal to MQL for all organic analytes including TPH.
The test results contained within this report meet all requirements of LAC 33:I unless otherwise noted.

This report consists of a total of 4 pages and shall not be reproduced except in its entirety including the chain of custody (COC), without written approval of TraceAnalysis, Inc.

Dr. Blair Leftwich, Director

Analytical Report

Sample: 196262 - MW-5 (8-10')

Analysis:	Extended TX1005	Analytical Method:	TX1005	QC Batch:	QC20095	Date Analyzed:	5/5/02
Analyst:	MM	Preparation Method:	N/A	Prep Batch:	PB19255	Date Prepared:	5/2/02

Param	Flag	Result	Units	Dilution	RDL
C6-C12		251	mg/Kg	1	50
>C12-C35		320	mg/Kg	1	50
C6-C35		571	mg/Kg	1	50

Surrogate	Flag	Result	Units	Dilution	Spike Amount	Percent Recovery	Recovery Limits
n-Triacontane		144	mg/Kg	1	150	96	70 - 130

Sample: 196263 - MW-5 (28-30')

Analysis:	Extended TX1005	Analytical Method:	TX1005	QC Batch:	QC20095	Date Analyzed:	5/5/02
Analyst:	MM	Preparation Method:	N/A	Prep Batch:	PB19255	Date Prepared:	5/2/02

Param	Flag	Result	Units	Dilution	RDL
C6-C12		<50.0	mg/Kg	1	50
>C12-C35		<50.0	mg/Kg	1	50
C6-C35		<50.0	mg/Kg	1	50

Surrogate	Flag	Result	Units	Dilution	Spike Amount	Percent Recovery	Recovery Limits
n-Triacontane		139	mg/Kg	1	150	93	70 - 130

Quality Control Report
Method Blank

Method Blank

QCBatch: QC20095

Param	Flag	Results	Units	Reporting Limit
C6-C12		<50.0	mg/Kg	50
>C12-C35		<50.0	mg/Kg	50
C6-C35		<50.0	mg/Kg	50

Surrogate	Flag	Result	Units	Dilution	Spike Amount	Percent Recovery	Recovery Limits
n-Triacontane		141	mg/Kg	1	150	94	70 - 130

Quality Control Report
Lab Control Spikes and Duplicate Spikes

Laboratory Control Spikes

QCBatch: QC20095

Param	LCS Result	LCSD Result	Units	Dil.	Spike Amount Added	Matrix Result	% Rec	RPD	% Rec Limit	RPD Limit
C6-C12	224	224	mg/Kg	1	250	<50.0	89	0	70 - 130	20
>C12-C35	225	225	mg/Kg	1	250	<50.0	90	0	70 - 130	20
C6-C35	449	449	mg/Kg	1	500	<50.0	89	0	70 - 130	20

Percent recovery is based on the spike result. RPD is based on the spike and spike duplicate result.

Surrogate	LCS Result	LCSD Result	Units	Dilution	Spike Amount	LCS % Rec	LCSD % Rec	Recovery Limits
n-Triacontane	142	141	mg/Kg	1	150	95	94	70 - 130

Quality Control Report
Matrix Spikes and Duplicate Spikes

Matrix Spikes

QCBatch: QC20095

Param	MS Result	MSD Result	Units	Dil.	Spike Amount Added	Matrix Result	% Rec	RPD	% Rec Limit	RPD Limit
C6-C12	199	195	mg/Kg	1	250	<50.0	79	2	70 - 130	20
>C12-C35	204	214	mg/Kg	1	250	<50.0	81	4	70 - 130	20
C6-C35	403	409	mg/Kg	1	500	<50.0	80	1	70 - 130	20

Percent recovery is based on the spike result. RPD is based on the spike and spike duplicate result.

Surrogate	MS Result	MSD Result	Units	Dilution	Spike Amount	MS % Rec	MSD % Rec	Recovery Limits
n-Triacontane	135	143	mg/Kg	1	150	90	95	70 - 130

Quality Control Report
Continuing Calibration Verification Standards

CCV (1)

QCBatch: QC20095

Param	Flag	Units	CCVs True Conc.	CCVs Found Conc.	CCVs Percent Recovery	Percent Recovery Limits	Date Analyzed
C6-C12		mg/Kg	250	243	97	70 - 130	5/5/02
>C12-C35		mg/Kg	250	244	97	70 - 130	5/5/02
C6-C35		mg/Kg	500	487	97	70 - 130	5/5/02

CCV (2)

QCBatch: QC20095

Param	Flag	Units	CCVs True Conc.	CCVs Found Conc.	CCVs Percent Recovery	Percent Recovery Limits	Date Analyzed
C6-C12		mg/Kg	250	224	89	70 - 130	5/5/02
>C12-C35		mg/Kg	250	228	91	70 - 130	5/5/02
C6-C35		mg/Kg	500	452	90	70 - 130	5/5/02

ICV (1)

QCBatch: QC20095

Param	Flag	Units	CCVs True Conc.	CCVs Found Conc.	CCVs Percent Recovery	Percent Recovery Limits	Date Analyzed
C6-C12		mg/Kg	250	224	89	75 - 125	5/5/02
>C12-C35		mg/Kg	250	225	90	75 - 125	5/5/02
C6-C35		mg/Kg	500	449	89	75 - 125	5/5/02

TRACEANALYSIS, INC.

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E-Mail: lab@traceanalysis.com

Analytical and Quality Control Report

Kyle Landreneau
Equiva Kyle Landreneau
PMB 284 40 FM 1960 West
Houston, TX 77090

Report Date: May 6, 2002

Order ID Number: A02050310

Project: EQ-112 Monument
TA Job Code: Barber Ranch 3000109
Casualty Code: EQ-112
Project Location: Monument, Lea County,New Mexico
Enercon Services Inc. / Midland / Jeff Kindley

Enclosed are the Analytical Results and Quality Control Data Reports for the following samples submitted to Trace-Analysis, Inc.

Sample	Description	Matrix	Date Taken	Time Taken	Date Received
196262	MW-5 (8-10')	Soil	5/2/02	14:18	5/3/02
196263	MW-5 (28-30')	Soil	5/2/02	15:18	5/3/02

These results represent only the samples received in the laboratory. The Quality Control Report is generated on a batch basis. All information contained in this report is for the analytical batch(es) in which your sample(s) were analyzed. Note: the RDL is equal to MQL for all organic analytes including TPH.
The test results contained within this report meet all requirements of LAC 33:I unless otherwise noted.

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Dr. Blair Leftwich, Director

Analytical Report

Sample: 196262 - MW-5 (8-10')

Analysis:	BTEX	Analytical Method:	S 8021B	QC Batch:	QC20071	Date Analyzed:	5/3/02
Analyst:	CG	Preparation Method:	S 5035	Prep Batch:	PB19238	Date Prepared:	5/3/02

Param	Flag	Result	Units	Dilution	RDL
Benzene		<0.500	mg/Kg	500	0.001
Toluene		<0.500	mg/Kg	500	0.001
Ethylbenzene		0.946	mg/Kg	500	0.001
M,P,O-Xylene		1.6	mg/Kg	500	0.001
Total BTEX		2.55	mg/Kg	500	0.001
Test Comments	[1]	*	mg/Kg	1	

Surrogate	Flag	Result	Units	Dilution	Spike Amount	Percent Recovery	Recovery Limits
TFT	[2]	0.684	mg/Kg	500	1	68	70 - 130
4-BFB	[3]	7.39	mg/Kg	500	1	739	70 - 130

Sample: 196262 - MW-5 (8-10')

Analysis:	TPH DRO	Analytical Method:	Mod. 8015B	QC Batch:	QC20096	Date Analyzed:	5/5/02
Analyst:	MM	Preparation Method:	3550 B	Prep Batch:	PB19256	Date Prepared:	5/2/02

Param	Flag	Result	Units	Dilution	RDL
DRO		374	mg/Kg	1	50

Surrogate	Flag	Result	Units	Dilution	Spike Amount	Percent Recovery	Recovery Limits
n-Triacontane		122	mg/Kg	1	150	81	70 - 130

Sample: 196262 - MW-5 (8-10')

Analysis:	TPH GRO	Analytical Method:	8015B	QC Batch:	QC20072	Date Analyzed:	5/3/02
Analyst:	CG	Preparation Method:	5035	Prep Batch:	PB19238	Date Prepared:	5/3/02

Param	Flag	Result	Units	Dilution	RDL
GRO		497	mg/Kg	500	0.10

Surrogate	Flag	Result	Units	Dilution	Spike Amount	Percent Recovery	Recovery Limits
TFT	[4]	0.419	mg/Kg	500	0.10	42	70 - 130
4-BFB	[5]	27.5	mg/Kg	500	0.10	2750	70 - 130

[1]Sample diluted due to hydrocarbons beyond xylene. Sample has a Benzene concentration of less than 0.1183 which is the MDL.
[2]Low surrogate recovery due to matrix interference. ICV, CCV shows the method to be in control.
[3]High surrogate recovery due to peak interference.
[4]Low surrogate recovery due to matrix interference. ICV, CCV shows the method to be in control.
[5]High surrogate recovery due to peak interference.

Sample: 196263 - MW-5 (28-30')

Analysis:	BTEX	Analytical Method:	S 8021B	QC Batch:	QC20071	Date Analyzed:	5/3/02
Analyst:	CG	Preparation Method:	S 5035	Prep Batch:	PB19238	Date Prepared:	5/3/02

Param	Flag	Result	Units	Dilution	RDL
Benzene		<0.020	mg/Kg	20	0.001
Toluene		<0.020	mg/Kg	20	0.001
Ethylbenzene		<0.020	mg/Kg	20	0.001
M,P,O-Xylene		0.04	mg/Kg	20	0.001
Total BTEX		0.040	mg/Kg	20	0.001
Test Comments	[6]	*	mg/Kg	1	

Surrogate	Flag	Result	Units	Dilution	Spike Amount	Percent Recovery	Recovery Limits
TFT	[7]	0.602	mg/Kg	20	1	60	70 - 130
4-BFB	[8]	0.554	mg/Kg	20	1	55	70 - 130

Sample: 196263 - MW-5 (28-30')

Analysis:	TPH DRO	Analytical Method:	Mod. 8015B	QC Batch:	QC20096	Date Analyzed:	5/5/02
Analyst:	MM	Preparation Method:	3550 B	Prep Batch:	PB19256	Date Prepared:	5/2/02

Param	Flag	Result	Units	Dilution	RDL
DRO		<50.0	mg/Kg	1	50

Surrogate	Flag	Result	Units	Dilution	Spike Amount	Percent Recovery	Recovery Limits
n-Triacontane		120	mg/Kg	1	150	80	70 - 130

Sample: 196263 - MW-5 (28-30')

Analysis:	TPH GRO	Analytical Method:	8015B	QC Batch:	QC20072	Date Analyzed:	5/3/02
Analyst:	CG	Preparation Method:	5035	Prep Batch:	PB19238	Date Prepared:	5/3/02

Param	Flag	Result	Units	Dilution	RDL
GRO	[9]	<2	mg/Kg	20	0.10

Surrogate	Flag	Result	Units	Dilution	Spike Amount	Percent Recovery	Recovery Limits
TFT		1.04	mg/Kg	20	0.10	104	70 - 130
4-BFB		0.857	mg/Kg	20	0.10	86	70 - 130

[6]Sample diluted due to lack of sample extract. Sample has a Benzene concentration of less than 0.0473 which is the MDL.
[7]Low surrogate recovery due to matrix interference. ICV, CCV shows the method to be in control.
[8]Low surrogate recovery due to matrix interference. ICV, CCV shows the method to be in control.
[9]Sample diluted due to lack of sample extract.

Quality Control Report
Method Blank

Method Blank

QCBatch: QC20071

Param	Flag	Results	Units	Reporting Limit
Benzene		<0.010	mg/Kg	0.001
Toluene		<0.010	mg/Kg	0.001
Ethylbenzene		<0.010	mg/Kg	0.001
M,P,O-Xylene		<0.010	mg/Kg	0.001
Total BTEX		<0.010	mg/Kg	0.001

Surrogate	Flag	Result	Units	Dilution	Spike Amount	Percent Recovery	Recovery Limits
TFT		0.846	mg/Kg	10	1	84	70 - 130
4-BFB	[10]	0.55	mg/Kg	10	1	55	70 - 130

Method Blank

QCBatch: QC20072

Param	Flag	Results	Units	Reporting Limit
GRO		<1	mg/Kg	0.10

Surrogate	Flag	Result	Units	Dilution	Spike Amount	Percent Recovery	Recovery Limits
TFT		0.952	mg/Kg	10	0.10	95	70 - 130
4-BFB		0.703	mg/Kg	10	0.10	70	70 - 130

Method Blank

QCBatch: QC20096

Param	Flag	Results	Units	Reporting Limit
DRO		<50.0	mg/Kg	50

Surrogate	Flag	Result	Units	Dilution	Spike Amount	Percent Recovery	Recovery Limits
n-Triacontane		122	mg/Kg	1	150	81	70 - 130

Quality Control Report
Lab Control Spikes and Duplicate Spikes

[10]Low surrogate recovery due to prep. ICV, CCV shows the method to be in control.

Laboratory Control Spikes

QCBatch: QC20071

Param	LCS Result	LCSD Result	Units	Dil.	Spike Amount Added	Matrix Result	% Rec	RPD	% Rec Limit	RPD Limit
MTBE	0.917	0.914	mg/Kg	10	1	<0.010	91	0	70 - 130	20
Benzene	0.09	0.897	mg/Kg	10	1	<0.010	90	163	70 - 130	20
Toluene	0.925	0.908	mg/Kg	10	1	<0.010	92	1	70 - 130	20
Ethylbenzene	0.897	0.9	mg/Kg	10	1	<0.010	90	0	70 - 130	20
M,P,O-Xylene	2.77	2.68	mg/Kg	10	3	<0.010	92	3	70 - 130	20

Percent recovery is based on the spike result. RPD is based on the spike and spike duplicate result.

Surrogate	LCS Result	LCSD Result	Units	Dilution	Spike Amount	LCS % Rec	LCSD % Rec	Recovery Limits
TFT	0.874	0.862	mg/Kg	10	1	87	86	70 - 130
4-BFB	0.826	0.806	mg/Kg	10	1	82	80	70 - 130

Laboratory Control Spikes

QCBatch: QC20072

Param	LCS Result	LCSD Result	Units	Dil.	Spike Amount Added	Matrix Result	% Rec	RPD	% Rec Limit	RPD Limit
GRO	9.37	10.1	mg/Kg	10	1	<1	94	7	80 - 120	20

Percent recovery is based on the spike result. RPD is based on the spike and spike duplicate result.

Surrogate	LCS Result	LCSD Result	Units	Dilution	Spike Amount	LCS % Rec	LCSD % Rec	Recovery Limits
TFT	0.998	1.06	mg/Kg	10	0.10	100	106	70 - 130
4-BFB	0.958	0.984	mg/Kg	10	0.10	96	98	70 - 130

Laboratory Control Spikes

QCBatch: QC20096

Param	LCS Result	LCSD Result	Units	Dil.	Spike Amount Added	Matrix Result	% Rec	RPD	% Rec Limit	RPD Limit
DRO	251	251	mg/Kg	1	250	<50.0	100	0	70 - 130	20

Percent recovery is based on the spike result. RPD is based on the spike and spike duplicate result.

Surrogate	LCS Result	LCSD Result	Units	Dilution	Spike Amount	LCS % Rec	LCSD % Rec	Recovery Limits
n-Triacontane	121	120	mg/Kg	1	150	81	80	70 - 130

Quality Control Report
Matrix Spikes and Duplicate Spikes

Matrix Spikes

QCBatch: QC20071

Param	MS Result	MSD Result	Units	Dil.	Spike Amount Added	Matrix Result	% Rec	RPD	% Rec Limit	RPD Limit
Benzene	0.85	0.857	mg/Kg	10	1	<0.010	85	0	70 - 130	20
Toluene	0.872	0.875	mg/Kg	10	1	<0.010	87	0	70 - 130	20
Ethylbenzene	0.871	0.878	mg/Kg	10	1	<0.010	87	0	70 - 130	20
M,P,O-Xylene	2.65	2.58	mg/Kg	10	3	<0.010	88	2	70 - 130	20

Percent recovery is based on the spike result. RPD is based on the spike and spike duplicate result.

Surrogate	MS Result	MSD Result	Units	Dilution	Spike Amount	MS % Rec	MSD % Rec	Recovery Limits
TFT	0.807	0.858	mg/Kg	10	1	80	85	70 - 130
4-BFB	0.81	0.829	mg/Kg	10	1	81	82	70 - 130

Matrix Spikes

QCBatch: QC20072

Param	MS Result	MSD Result	Units	Dil.	Spike Amount Added	Matrix Result	% Rec	RPD	% Rec Limit	RPD Limit
GRO	7.99	8.67	mg/Kg	10	1	<1	80	8	80 - 120	20

Percent recovery is based on the spike result. RPD is based on the spike and spike duplicate result.

Surrogate	MS Result	MSD Result	Units	Dilution	Spike Amount	MS % Rec	MSD % Rec	Recovery Limits
TFT	0.788	0.86	mg/Kg	10	0.10	79	86	70 - 130
4-BFB	0.945	1.01	mg/Kg	10	0.10	94	101	70 - 130

Matrix Spikes

QCBatch: QC20096

Param	MS Result	MSD Result	Units	Dil.	Spike Amount Added	Matrix Result	% Rec	RPD	% Rec Limit	RPD Limit
DRO	227	224	mg/Kg	1	250	<50.0	91	1	70 - 130	20

Percent recovery is based on the spike result. RPD is based on the spike and spike duplicate result.

Surrogate	MS Result	MSD Result	Units	Dilution	Spike Amount	MS % Rec	MSD % Rec	Recovery Limits
n-Triacontane	115	122	mg/Kg	1	150	77	81	70 - 130

Quality Control Report
Continuing Calibration Verification Standards

CCV (1)

QCBatch: QC20071

Param	Flag	Units	CCVs True Conc.	CCVs Found Conc.	CCVs Percent Recovery	Percent Recovery Limits	Date Analyzed
MTBE		mg/L	0.10	0.0926	92	85 - 115	5/3/02
Benzene		mg/L	0.10	0.0891	89	85 - 115	5/3/02
Toluene		mg/L	0.10	0.0906	90	85 - 115	5/3/02
Ethylbenzene		mg/L	0.10	0.0893	89	85 - 115	5/3/02
M,P,O-Xylene		mg/L	0.30	0.274	91	85 - 115	5/3/02

ICV (1) QCBatch: QC20071

Param	Flag	Units	CCVs True Conc.	CCVs Found Conc.	CCVs Percent Recovery	Percent Recovery Limits	Date Analyzed
MTBE		mg/L	0.10	0.0901	90	85 - 115	5/3/02
Benzene		mg/L	0.10	0.0902	90	85 - 115	5/3/02
Toluene		mg/L	0.10	0.0909	90	85 - 115	5/3/02
Ethylbenzene		mg/L	0.10	0.0894	89	85 - 115	5/3/02
M,P,O-Xylene		mg/L	0.30	0.2618	87	85 - 115	5/3/02

CCV (1) QCBatch: QC20072

Param	Flag	Units	CCVs True Conc.	CCVs Found Conc.	CCVs Percent Recovery	Percent Recovery Limits	Date Analyzed
GRO		mg/Kg	1	0.912	91	85 - 115	5/3/02

ICV (1) QCBatch: QC20072

Param	Flag	Units	CCVs True Conc.	CCVs Found Conc.	CCVs Percent Recovery	Percent Recovery Limits	Date Analyzed
GRO		mg/Kg	1	1.03	103	85 - 115	5/3/02

CCV (1) QCBatch: QC20096

Param	Flag	Units	CCVs True Conc.	CCVs Found Conc.	CCVs Percent Recovery	Percent Recovery Limits	Date Analyzed
DRO		mg/Kg	250	271	108	75 - 125	5/5/02

CCV (2) QCBatch: QC20096

Param	Flag	Units	CCVs True Conc.	CCVs Found Conc.	CCVs Percent Recovery	Percent Recovery Limits	Date Analyzed
DRO		mg/Kg	250	254	101	75 - 125	5/5/02

ICV (1) QCBatch: QC20096

Param	Flag	Units	CCVs True Conc.	CCVs Found Conc.	CCVs Percent Recovery	Percent Recovery Limits	Date Analyzed
DRO		mg/Kg	250	251	100	75 - 125	5/5/02

96317

Page 1 of 1

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El Paso, Texas 79932
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CHAIN-OF-CUSTODY AND ANALYSIS REQUEST

LAB Order ID #:

Company Name: Environ Services Inc. Phone #: 915-570-8726

Address: (Street, City, Zip) 306 West Wall, Suite 1312, Midland, Tx 79701 Fax #: 915-684-7587

Contact Person: Jeffrey Kindley

Invoice to: EQUIVA SERVICES Incident # 300109
(If different from above) Kyle Londoneau

Project #: EQ-112 Project Name: Barber Ranch

Project Location: Lea County, New Mexico Sampler Signature: Jeffrey Kindley

ANALYSIS REQUEST

(Circle or Specify Method No.)

LAB # (LAB USE ONLY)	FIELD CODE	# CONTAINERS	Volume/Amount	MATRIX: WATER	SOIL	AIR	SLUDGE	PRESERVATIVE METHOD: HCl	HNO_3	H_2SO_4	NaOH	ICE	NONE	SAMPLING: DATE	TIME
96317	MW-6 (13-15')	1	4oz		✓								✓	05/02/02	910

MTBE 8021B/602	BTEX 8021B/602	TPH 418.1/TX1005	PAH 8270C	Total Metals Ag As Ba Cd Cr Pb Se Hg 6010B/200.7	TCLP Metals Ag As Ba Cd Cr Pb Se Hg	TCLP Volatiles	TCLP Semi Volatiles	TCLP Pesticides	~~HCl~~ Bromide/Fluoride/Nitrate (IC-300)	GC/MS Vol. 8260B/624	GC/MS Semi. Vol. 8270C/625	~~PCB's 8082/608~~ Ferrous Iron (Fell - 3500 Fe)	Pesticides 8081A/608	BOD, TSS, pH	Frac. Organic Carbon (TOC 9060 Soils)	pH (SW 9045)	Conductivity (120.1 mod)	Redox Potential	Carbonates (Total Alkalinity)	Turn Around Time if different from standard	Hold
									✓			✓			✓	✓	✓	✓	✓		

Relinquished by:	Date:	Time:	Received by:	Date:	Time:
Jeffrey Kindley	May 3, 2002	1300		5/3/02	1302
	5/3/02	1420	Received by:	Date:	Time:
Relinquished by:	Date:	Time:	Received at Laboratory by: Nell Green	Date: 5-3-02	Time: 4:20pm

LAB USE ONLY
Intact Y / N
Headspace Y / N
Temp 2 °
Log-in Review MT

REMARKS: 5123F

☐ Check If Special Reporting Limits Are Needed

Carrier # Carry in

Submittal of samples constitutes agreement to Terms and Conditions listed on reverse side of C.O.C.

ORIGINAL COPY

Summary Report

Kyle Landreneau
Equilon Kyle Landreneau
PMB 284 40 FM 1960 West
Houston, TX 77090

Report Date: May 22, 2002

Order ID Number: A02050403

Project: EQ-112
TA Job Code: Barber Ranch 3000109
Casualty Code: EQ-112
Project Location: Barber Lea County, New Mexico
Project Address:
Enercon Services Inc. / Midland / Jeff Kindley

Sample	Description	Matrix	Date Taken	Time Taken	Date Received
196317	MW-6 (13-15')	Soil	5/2/02	9:10	5/3/02

0 This report consists of a total of 1 page(s) and is intended only as a summary of results for the sample(s) listed above.

Sample: 196317 - MW-6 (13-15')

Param	Flag	Result	Units
Hydroxide Alkalinity		<1.0	mg/kg as CaCo3
Carbonate Alkalinity		<1.0	mg/Kg as CaCo3
Bicarbonate Alkalinity		180	mg/Kg as CaCo3
Total Alkalinity		180	mg/Kg as CaCo3
Specific Conductance		189	μMHOS/cm
FOC		1.04	%
ferrous iron		0.28	mg/Kg
Bromide		<0.2	mg/Kg
Nitrate-N		0.73	mg/Kg
Phosphate		<0.5	mg/Kg
pH		8.4	s.u.

This is only a summary. Please, refer to the complete report package for quality control data.

TRACEANALYSIS, INC.

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Analytical and Quality Control Report

Kyle Landreneau
Equilon Kyle Landreneau
PMB 284 40 FM 1960 West
Houston, TX 77090

Report Date: May 22, 2002

Order ID Number: A02050403

Project: EQ-112
TA Job Code: Barber Ranch 3000109
Casualty Code: EQ-112
Project Location: Barber Lea County, New Mexico
Enercon Services Inc. / Midland / Jeff Kindley

Enclosed are the Analytical Results and Quality Control Data Reports for the following samples submitted to Trace-Analysis, Inc.

Sample	Description	Matrix	Date Taken	Time Taken	Date Received
196317	MW-6 (13-15')	Soil	5/2/02	9:10	5/3/02

These results represent only the samples received in the laboratory. The Quality Control Report is generated on a batch basis. All information contained in this report is for the analytical batch(es) in which your sample(s) were analyzed. Note: the RDL is equal to MQL for all organic analytes including TPH.
The test results contained within this report meet all requirements of LAC 33:I unless otherwise noted.

This report consists of a total of 7 pages and shall not be reproduced except in its entirety including the chain of custody (COC), without written approval of TraceAnalysis, Inc.

Dr. Blair Leftwich, Director

Analytical Report

Sample: 196317 - MW-6 (13-15')

Analysis: Alkalinity | Analytical Method: E 310.1 | QC Batch: QC20521 | Date Analyzed: 5/21/02
Analyst: RS | Preparation Method: N/A | Prep Batch: PB19588 | Date Prepared: 5/21/02

Param	Flag	Result	Units	Dilution	RDL
Hydroxide Alkalinity		<1.0	mg/kg as CaCo3	1	1
Carbonate Alkalinity		<1.0	mg/Kg as CaCo3	1	1
Bicarbonate Alkalinity		180	mg/Kg as CaCo3	1	1
Total Alkalinity		180	mg/Kg as CaCo3	1	1

Sample: 196317 - MW-6 (13-15')

Analysis: Conductivity | Analytical Method: SM 2510B | QC Batch: QC20336 | Date Analyzed: 5/14/02
Analyst: RS | Preparation Method: N/A | Prep Batch: PB19447 | Date Prepared: 5/14/02

Param	Flag	Result	Units	Dilution	RDL
Specific Conductance		189	μMHOS/cm	1	

Sample: 196317 - MW-6 (13-15')

Analysis: FOC | Analytical Method: D2974-87 | QC Batch: QC20343 | Date Analyzed: 5/10/02
Analyst: RS | Preparation Method: N/A | Prep Batch: PB19443 | Date Prepared: 5/8/02

Param	Flag	Result	Units	Dilution	RDL
FOC		1.04	%	1	0.10

Sample: 196317 - MW-6 (13-15')

Analysis: Ferrous Iron | Analytical Method: Hach IR-1 | QC Batch: QC20396 | Date Analyzed: 5/14/02
Analyst: RS | Preparation Method: N/A | Prep Batch: PB19486 | Date Prepared: 5/14/02

Param	Flag	Result	Units	Dilution	RDL
ferrous iron		0.28	mg/Kg	1	

Sample: 196317 - MW-6 (13-15')

Analysis: Ion Chromatography (IC) | Analytical Method: E 300.0 | QC Batch: QC20502 | Date Analyzed: 5/14/02
Analyst: JSW | Preparation Method: N/A | Prep Batch: PB19566 | Date Prepared: 5/14/02

Param	Flag	Result	Units	Dilution	RDL
Bromide		<0.2	mg/Kg	1	0.50
Nitrate-N		0.73	mg/Kg	1	0.20
Phosphate		<0.5	mg/Kg	1	1

Sample: 196317 - MW-6 (13-15')

Analysis:	pH	Analytical Method:	E 150.1	QC Batch:	QC20389	Date Analyzed:	5/14/02
Analyst:	RS	Preparation Method:	N/A	Prep Batch:	PB19493	Date Prepared:	5/14/02

Param	Flag	Result	Units	Dilution	RDL
pH		8.4	s.u.	1	1

Quality Control Report
Method Blank

Method Blank QCBatch: QC20336

Param	Flag	Results	Units	Reporting Limit
Specific Conductance		3.66	µMHOS/cm	

Method Blank QCBatch: QC20396

Param	Flag	Results	Units	Reporting Limit
ferrous iron		0.28	mg/Kg	

Method Blank QCBatch: QC20502

Param	Flag	Results	Units	Reporting Limit
Bromide		<0.2	mg/Kg	0.50
Nitrate-N		<0.2	mg/Kg	0.20
Phosphate		<0.5	mg/Kg	1

Method Blank QCBatch: QC20521

Param	Flag	Results	Units	Reporting Limit
Hydroxide Alkalinity		<1.0	mg/Kg as CaCo3	1
Carbonate Alkalinity		<1.0	mg/Kg as CaCo3	1
Bicarbonate Alkalinity		<4.0	mg/Kg as CaCo3	1
Total Alkalinity		<4.0	mg/Kg as CaCo3	1

Quality Control Report
Duplicate Samples

Duplicate QCBatch: QC20336

Param	Flag	Duplicate Result	Sample Result	Units	Dilution	RPD	RPD Limit
Specific Conductance		34165	34700	µMHOS/cm	1	1	4.3

Duplicate QCBatch: QC20343

Param	Flag	Duplicate Result	Sample Result	Units	Dilution	RPD	RPD Limit
FOC		0.78	0.72	%	1	8	72

Duplicate QCBatch: QC20389

Param	Flag	Duplicate Result	Sample Result	Units	Dilution	RPD	RPD Limit
pH		8.4	8.4	s.u.	1	0	1

Duplicate QCBatch: QC20521

Param	Flag	Duplicate Result	Sample Result	Units	Dilution	RPD	RPD Limit
Hydroxide Alkalinity		<1.0	<1.0	mg/Kg as CaCo3	1	0	20
Carbonate Alkalinity		<1.0	<1.0	mg/Kg as CaCo3	1	0	20
Bicarbonate Alkalinity		58	60	mg/Kg as CaCo3	1	3	20
Total Alkalinity		58	60	mg/Kg as CaCo3	1	3	20

Quality Control Report
Lab Control Spikes and Duplicate Spikes

Laboratory Control Spikes QCBatch: QC20502

Param	LCS Result	LCSD Result	Units	Dil.	Spike Amount Added	Matrix Result	% Rec	RPD	% Rec Limit	RPD Limit
Bromide	2.51	2.43	mg/Kg	1	2.50	<0.2	100	3	90 - 110	20
Nitrate-N	2.53	2.53	mg/Kg	1	2.50	<0.2	101	0	90 - 110	20
Phosphate	12.50	12.74	mg/Kg	1	12.50	<0.5	100	1	90 - 110	20

Percent recovery is based on the spike result. RPD is based on the spike and spike duplicate result.

Quality Control Report
Matrix Spikes and Duplicate Spikes

Matrix Spikes QCBatch: QC20502

Param	MS Result	MSD Result	Units	Dil.	Spike Amount Added	Matrix Result	% Rec	RPD	% Rec Limit	RPD Limit
Bromide	5.00	5.07	mg/Kg	1	5	<0.2	100	1	88 - 116	20
Nitrate-N	5.49	5.37	mg/Kg	1	5	0.73	95	2	53 - 130	20
Phosphate	24.99	24.77	mg/Kg	1	25	<0.5	99	0	83 - 118	20

Percent recovery is based on the spike result. RPD is based on the spike and spike duplicate result.

Quality Control Report
Continuing Calibration Verification Standards

CCV (1) QCBatch: QC20336

Param	Flag	Units	CCVs True Conc.	CCVs Found Conc.	CCVs Percent Recovery	Percent Recovery Limits	Date Analyzed
Specific Conductance		µMHOS/cm	1412	1393	98	90 - 110	5/14/02

ICV (1) QCBatch: QC20336

Param	Flag	Units	CCVs True Conc.	CCVs Found Conc.	CCVs Percent Recovery	Percent Recovery Limits	Date Analyzed
Specific Conductance		µMHOS/cm	1409	1403	99	90 - 110	5/14/02

CCV (1) QCBatch: QC20389

Param	Flag	Units	CCVs True Conc.	CCVs Found Conc.	CCVs Percent Recovery	Percent Recovery Limits	Date Analyzed
pH		s.u.	7	7.0	100	-0.1 s.u. - +0.1 s.u.	5/14/02

ICV (1) QCBatch: QC20389

Param	Flag	Units	CCVs True Conc.	CCVs Found Conc.	CCVs Percent Recovery	Percent Recovery Limits	Date Analyzed
pH		s.u.	7	7.0	100	-0.1 s.u. - +0.1 s.u.	5/14/02

CCV (1) QCBatch: QC20502

Param	Flag	Units	CCVs True Conc.	CCVs Found Conc.	CCVs Percent Recovery	Percent Recovery Limits	Date Analyzed
Bromide		mg/L	2.50	2.52	100	90 - 110	5/14/02
Nitrate-N		mg/L	2.50	2.36	94	90 - 110	5/14/02
Phosphate		mg/L	12.50	12.25	98	90 - 110	5/14/02

ICV (1) QCBatch: QC20502

Param	Flag	Units	CCVs True Conc.	CCVs Found Conc.	CCVs Percent Recovery	Percent Recovery Limits	Date Analyzed
Bromide		mg/L	2.50	2.41	96	90 - 110	5/14/02
Nitrate-N		mg/L	2.50	2.36	94	90 - 110	5/14/02
Phosphate		mg/L	12.50	12.14	97	90 - 110	5/14/02

CCV (1)

QCBatch: QC20521

Param	Flag	Units	CCVs True Conc.	CCVs Found Conc.	CCVs Percent Recovery	Percent Recovery Limits	Date Analyzed
Hydroxide Alkalinity		mg/kg as CaCo3	0	<1.0	0	90 - 110	5/21/02
Carbonate Alkalinity		mg/Kg as CaCo3	0	224	0	90 - 110	5/21/02
Bicarbonate Alkalinity		mg/Kg as CaCo3	0	22	0	90 - 110	5/21/02
Total Alkalinity		mg/Kg as CaCo3	250	246	98	90 - 110	5/21/02

ICV (1)

QCBatch: QC20521

Param	Flag	Units	CCVs True Conc.	CCVs Found Conc.	CCVs Percent Recovery	Percent Recovery Limits	Date Analyzed
Hydroxide Alkalinity		mg/Kg as CaCo3	0	<1.0	0	90 - 110	5/21/02
Carbonate Alkalinity		mg/Kg as CaCo3	0	224	0	90 - 110	5/21/02
Bicarbonate Alkalinity		mg/Kg as CaCo3	0	22	0	90 - 110	5/21/02
Total Alkalinity		mg/Kg as CaCo3	250	246	98	90 - 110	5/21/02

Summary Report

Kyle Landreneau
Equilon Kyle Landreneau
PMB 284 40 FM 1960 West
Houston, TX 77090

Report Date: May 20, 2002

Order ID Number: A02050404

Project: EQ-112
TA Job Code: Barber Ranch 3000109
Casualty Code: EQ-112
Project Location: Barber Lea County, New Mexico
Project Address:
Enercon Services Inc. / Midland / Jeff Kindley

Sample	Description	Matrix	Date Taken	Time Taken	Date Received
196320	MW-7 (8-10')	Soil	5/2/02	16:00	5/3/02

0 This report consists of a total of 1 page(s) and is intended only as a summary of results for the sample(s) listed above.

Sample: 196320 - MW-7 (8-10')

Param	Flag	Result	Units
SPLP DRO		<5.00	mg/L
SPLP GRO		1.31	mg/L

This is only a summary. Please, refer to the complete report package for quality control data.

Summary Report

Kyle Landreneau
Equilon Kyle Landreneau
PMB 284 40 FM 1960 West
Houston, TX 77090

Report Date: May 14, 2002

Order ID Number: A02050404

Project: EQ-112
TA Job Code: Barber Ranch 3000109
Casualty Code: EQ-112
Project Location: Barber Lea County, New Mexico
Project Address:
Enercon Services Inc. / Midland / Jeff Kindley

Sample	Description	Matrix	Date Taken	Time Taken	Date Received
196320	MW-7 (8-10')	Soil	5/2/02	16:00	5/3/02

0 This report consists of a total of 1 page(s) and is intended only as a summary of results for the sample(s) listed above.

Sample - Field Code	C6-C12 (ppm)	Extended TX1005 >C12-C35 (ppm)	C6-C35 (ppm)
196320 - MW-7 (8-10')	840	1610	2450

This is only a summary. Please, refer to the complete report package for quality control data.

Summary Report

Kyle Landreneau
Equilon Kyle Landreneau
PMB 284 40 FM 1960 West
Houston, TX 77090

Report Date: May 8, 2002

Order ID Number: A02050404

Project: EQ-112
TA Job Code: Barber Ranch 3000109
Casualty Code: EQ-112
Project Location: Barber Lea County, New Mexico
Project Address:
Enercon Services Inc. / Midland / Jeff Kindley

Sample	Description	Matrix	Date Taken	Time Taken	Date Received
196318	MW-6 (13-15')	Soil	5/2/02	9:10	5/3/02
196319	MW-6 (25-27')	Soil	5/2/02	10:15	5/3/02
196320	MW-7 (8-10')	Soil	5/2/02	16:00	5/3/02
196321	MW-7 (25-27')	Soil	5/2/02	17:10	5/3/02
196322	MW-8 (8-10')	Soil	5/2/02	10:12	5/3/02
196323	MW-8 (23-25')	Soil	5/2/02	11:15	5/3/02

0 This report consists of a total of 1 page(s) and is intended only as a summary of results for the sample(s) listed above.

	BTEX					TPH DRO	TPH GRO
Sample - Field Code	Benzene (ppm)	Toluene (ppm)	Ethylbenzene (ppm)	M,P,O-Xylene (ppm)	Total BTEX (ppm)	DRO (ppm)	GRO (ppm)
196318 - MW-6 (13-15')	<0.010	<0.010	<0.010	<0.010	<0.010	<50.0	<1.00
196319 - MW-6 (25-27')	<0.010	<0.010	<0.010	0.0115	0.0115	<50.0	<1.00
196320 - MW-7 (8-10')	1.05	<0.500	6.42	2.17	9.64	2700	877
196321 - MW-7 (25-27')	<0.010	<0.010	0.0203	<0.010	0.0203	<50.0	<1.00
196322 - MW-8 (8-10')	<0.010	<0.010	<0.010	<0.010	<0.010	<50.0	<1.00
196323 - MW-8 (23-25')	<0.020	<0.020	<0.020	<0.020	<0.020	<50.0	<2.00

This is only a summary. Please, refer to the complete report package for quality control data.

TRACEANALYSIS, INC.

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E-Mail: lab@traceanalysis.com

Analytical and Quality Control Report

Kyle Landreneau
Equilon Kyle Landreneau
PMB 284 40 FM 1960 West
Houston, TX 77090

Report Date: May 20, 2002

Order ID Number: A02050404

Project: EQ-112
TA Job Code: Barber Ranch 3000109
Casualty Code: EQ-112
Project Location: Barber Lea County, New Mexico
Enercon Services Inc. / Midland / Jeff Kindley

Enclosed are the Analytical Results and Quality Control Data Reports for the following samples submitted to Trace-Analysis, Inc.

Sample	Description	Matrix	Date Taken	Time Taken	Date Received
196320	MW-7 (8-10')	Soil	5/2/02	16:00	5/3/02

These results represent only the samples received in the laboratory. The Quality Control Report is generated on a batch basis. All information contained in this report is for the analytical batch(es) in which your sample(s) were analyzed. Note: the RDL is equal to MQL for all organic analytes including TPH.
The test results contained within this report meet all requirements of LAC 33:I unless otherwise noted.

This report consists of a total of 4 pages and shall not be reproduced except in its entirety including the chain of custody (COC), without written approval of TraceAnalysis, Inc.

Dr. Blair Leftwich, Director

Analytical Report

Sample: 196320 - MW-7 (8-10')

Analysis:	SPLP DRO	Analytical Method:	Mod. 8015B	QC Batch:	QC20373	Date Analyzed:	5/16/02
Analyst:	MM	Preparation Method:	1312	Prep Batch:	PB19468	Date Prepared:	5/16/02

Param	Flag	Result	Units	Dilution	RDL
SPLP DRO		<5.00	mg/L	1	50

Sample: 196320 - MW-7 (8-10')

Analysis:	SPLP GRO	Analytical Method:	8015	QC Batch:	QC20465	Date Analyzed:	5/16/02
Analyst:	CG	Preparation Method:	1312	Prep Batch:	PB19543	Date Prepared:	5/16/02

Param	Flag	Result	Units	Dilution	RDL
SPLP GRO		1.31	mg/L	5	0.10

Quality Control Report
Method Blank

Method Blank

QCBatch: QC20373

Param	Flag	Results	Units	Reporting Limit
SPLP DRO		<5.00	mg/L	50

Method Blank

QCBatch: QC20465

Param	Flag	Results	Units	Reporting Limit
SPLP GRO		<0.1	mg/L	0.10

Quality Control Report
Lab Control Spikes and Duplicate Spikes

Laboratory Control Spikes

QCBatch: QC20373

Param	LCS Result	LCSD Result	Units	Dil.	Spike Amount Added	Matrix Result	% Rec	RPD	% Rec Limit	RPD Limit
SPLP DRO	< 50	< 50	mg/L	1	25	<5.00	95	4	70 - 130	20

Percent recovery is based on the spike result. RPD is based on the spike and spike duplicate result.

Laboratory Control Spikes

QCBatch: QC20465

Param	LCS Result	LCSD Result	Units	Dil.	Spike Amount Added	Matrix Result	% Rec	RPD	% Rec Limit	RPD Limit
SPLP GRO	0.854	0.855	mg/L	1	1	<0.1	85	0	70 - 130	20

Percent recovery is based on the spike result. RPD is based on the spike and spike duplicate result.

Quality Control Report
Continuing Calibration Verification Standards

CCV (1)

QCBatch: QC20373

Param	Flag	Units	CCVs True Conc.	CCVs Found Conc.	CCVs Percent Recovery	Percent Recovery Limits	Date Analyzed
SPLP DRO		mg/L	250	253	101	75 - 125	5/16/02

ICV (1) QCBatch: QC20373

Param	Flag	Units	CCVs True Conc.	CCVs Found Conc.	CCVs Percent Recovery	Percent Recovery Limits	Date Analyzed
SPLP DRO		mg/L	250	252	100	75 - 125	5/16/02

CCV (1) QCBatch: QC20465

Param	Flag	Units	CCVs True Conc.	CCVs Found Conc.	CCVs Percent Recovery	Percent Recovery Limits	Date Analyzed
SPLP GRO		mg/L	1	0.915	91	85 - 115	5/16/02

ICV (1) QCBatch: QC20465

Param	Flag	Units	CCVs True Conc.	CCVs Found Conc.	CCVs Percent Recovery	Percent Recovery Limits	Date Analyzed
SPLP GRO		mg/L	1	1.04	104	85 - 115	5/16/02

TRACEANALYSIS, INC.

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Analytical and Quality Control Report

Kyle Landreneau
Equilon Kyle Landreneau
PMB 284 40 FM 1960 West
Houston, TX 77090

Report Date: May 14, 2002

Order ID Number: A02050404

Project: EQ-112
TA Job Code: Barber Ranch 3000109
Casualty Code: EQ-112
Project Location: Barber Lea County, New Mexico
Enercon Services Inc. / Midland / Jeff Kindley

Enclosed are the Analytical Results and Quality Control Data Reports for the following samples submitted to Trace-Analysis, Inc.

Sample	Description	Matrix	Date Taken	Time Taken	Date Received
196320	MW-7 (8-10')	Soil	5/2/02	16:00	5/3/02

These results represent only the samples received in the laboratory. The Quality Control Report is generated on a batch basis. All information contained in this report is for the analytical batch(es) in which your sample(s) were analyzed. Note: the RDL is equal to MQL for all organic analytes including TPH.
The test results contained within this report meet all requirements of LAC 33:I unless otherwise noted.

This report consists of a total of 4 pages and shall not be reproduced except in its entirety including the chain of custody (COC), without written approval of TraceAnalysis, Inc.

Dr. Blair Leftwich, Director

Analytical Report

Sample: 196320 - MW-7 (8-10')

Analysis:	Extended TX1005	Analytical Method:	TX1005	QC Batch:	QC20286	Date Analyzed:	5/13/02
Analyst:	MM	Preparation Method:	N/A	Prep Batch:	PB19403	Date Prepared:	5/10/02

Param	Flag	Result	Units	Dilution	RDL
C6-C12		840	mg/Kg	10	50
>C12-C35		1610	mg/Kg	10	50
C6-C35		2450	mg/Kg	10	50

Surrogate	Flag	Result	Units	Dilution	Spike Amount	Percent Recovery	Recovery Limits
n-Triacontane	[1]	235	mg/Kg	1	150	156	70 - 130

[1]Surrogate out of recovery limits due to high hydrocarbons. LCS, ICV, and CCV show the process is in control.

Quality Control Report
Method Blank

Method Blank

QCBatch: QC20286

Param	Flag	Results	Units	Reporting Limit
C6-C12		<50.0	mg/Kg	50
>C12-C35		<50.0	mg/Kg	50
C6-C35		<50.0	mg/Kg	50

Surrogate	Flag	Result	Units	Dilution	Spike Amount	Percent Recovery	Recovery Limits
n-Triacontane		184	mg/Kg	1	150	122	70 - 130

Quality Control Report
Lab Control Spikes and Duplicate Spikes

Laboratory Control Spikes

QCBatch: QC20286

Param	LCS Result	LCSD Result	Units	Dil.	Spike Amount Added	Matrix Result	% Rec	RPD	% Rec Limit	RPD Limit
C6-C12	262	249	mg/Kg	1	250	<50.0	104	5	70 - 130	20
>C12-C35	273	262	mg/Kg	1	250	<50.0	109	4	70 - 130	20
C6-C35	535	511	mg/Kg	1	500	<50.0	107	4	70 - 130	20

Percent recovery is based on the spike result. RPD is based on the spike and spike duplicate result.

Surrogate	LCS Result	LCSD Result	Units	Dilution	Spike Amount	LCS % Rec	LCSD % Rec	Recovery Limits
n-Triacontane	167	178	mg/Kg	1	150	111	119	70 - 130

Quality Control Report
Matrix Spikes and Duplicate Spikes

Matrix Spikes

QCBatch: QC20286

Param	MS Result	MSD Result	Units	Dil.	Spike Amount Added	Matrix Result	% Rec	RPD	% Rec Limit	RPD Limit
C6-C12	[2] 200	207	mg/Kg	1	250	<50.0	80	3	70 - 130	20
>C12-C35	256	266	mg/Kg	1	250	121	54	7	70 - 130	20
C6-C35	456	473	mg/Kg	1	500	121	67	4	70 - 130	20

Percent recovery is based on the spike result. RPD is based on the spike and spike duplicate result.

[2]MS and MSD out of recovery limits due to matrix interference. LCS and LCSD show the process is in control.

Surrogate	MS Result	MSD Result	Units	Dilution	Spike Amount	MS % Rec	MSD % Rec	Recovery Limits
n-Triacontane	155	155	mg/Kg	1	150	103	103	70 - 130

Quality Control Report
Continuing Calibration Verification Standards

CCV (1)

QCBatch: QC20286

Param	Flag	Units	CCVs True Conc.	CCVs Found Conc.	CCVs Percent Recovery	Percent Recovery Limits	Date Analyzed
C6-C12		mg/Kg	250	226	90	70 - 130	5/13/02
>C12-C35		mg/Kg	250	241	96	70 - 130	5/13/02
C6-C35		mg/Kg	500	467	93	70 - 130	5/13/02

CCV (2)

QCBatch: QC20286

Param	Flag	Units	CCVs True Conc.	CCVs Found Conc.	CCVs Percent Recovery	Percent Recovery Limits	Date Analyzed
C6-C12		mg/Kg	250	218	87	70 - 130	5/13/02
>C12-C35		mg/Kg	250	235	94	70 - 130	5/13/02
C6-C35		mg/Kg	500	453	90	70 - 130	5/13/02

ICV (1)

QCBatch: QC20286

Param	Flag	Units	CCVs True Conc.	CCVs Found Conc.	CCVs Percent Recovery	Percent Recovery Limits	Date Analyzed
C6-C12		mg/Kg	250	233	93	75 - 125	5/13/02
>C12-C35		mg/Kg	250	247	98	75 - 125	5/13/02
C6-C35		mg/Kg	500	480	96	75 - 125	5/13/02

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Analytical and Quality Control Report

Kyle Landreneau
Equilon Kyle Landreneau
PMB 284 40 FM 1960 West
Houston, TX 77090

Report Date: May 8, 2002

Order ID Number: A02050404

Project: EQ-112
TA Job Code: Barber Ranch 3000109
Casualty Code: EQ-112
Project Location: Barber Lea County, New Mexico
Enercon Services Inc. / Midland / Jeff Kindley

Enclosed are the Analytical Results and Quality Control Data Reports for the following samples submitted to Trace-Analysis, Inc.

Sample	Description	Matrix	Date Taken	Time Taken	Date Received
196318	MW-6 (13-15')	Soil	5/2/02	9:10	5/3/02
196319	MW-6 (25-27')	Soil	5/2/02	10:15	5/3/02
196320	MW-7 (8-10')	Soil	5/2/02	16:00	5/3/02
196321	MW-7 (25-27')	Soil	5/2/02	17:10	5/3/02
196322	MW-8 (8-10')	Soil	5/2/02	10:12	5/3/02
196323	MW-8 (23-25')	Soil	5/2/02	11:15	5/3/02

These results represent only the samples received in the laboratory. The Quality Control Report is generated on a batch basis. All information contained in this report is for the analytical batch(es) in which your sample(s) were analyzed.
Note: the RDL is equal to MQL for all organic analytes including TPH.
The test results contained within this report meet all requirements of LAC 33:I unless otherwise noted.

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Dr. Blair Leftwich, Director

Analytical Report

Sample: 196318 - MW-6 (13-15')

Analysis:	BTEX	Analytical Method:	S 8021B	QC Batch:	QC20107	Date Analyzed:	5/6/02
Analyst:	CG	Preparation Method:	S 5035	Prep Batch:	PB19273	Date Prepared:	5/6/02

Param	Flag	Result	Units	Dilution	RDL
Benzene		<0.010	mg/Kg	10	0.001
Toluene		<0.010	mg/Kg	10	0.001
Ethylbenzene		<0.010	mg/Kg	10	0.001
M,P,O-Xylene		<0.010	mg/Kg	10	0.001
Total BTEX		<0.010	mg/Kg	10	0.001

Surrogate	Flag	Result	Units	Dilution	Spike Amount	Percent Recovery	Recovery Limits
TFT		0.858	mg/Kg	10	1	86	70 - 130
4-BFB		0.727	mg/Kg	10	1	73	70 - 130

Sample: 196318 - MW-6 (13-15')

Analysis:	TPH DRO	Analytical Method:	Mod. 8015B	QC Batch:	QC20145	Date Analyzed:	5/7/02
Analyst:	MM	Preparation Method:	3550 B	Prep Batch:	PB19299	Date Prepared:	5/7/02

Param	Flag	Result	Units	Dilution	RDL
DRO		<50.0	mg/Kg	1	50

Surrogate	Flag	Result	Units	Dilution	Spike Amount	Percent Recovery	Recovery Limits
n-Triacontane		127	mg/Kg	1	150	85	70 - 130

Sample: 196318 - MW-6 (13-15')

Analysis:	TPH GRO	Analytical Method:	8015B	QC Batch:	QC20108	Date Analyzed:	5/6/02
Analyst:	CG	Preparation Method:	5035	Prep Batch:	PB19273	Date Prepared:	5/6/02

Param	Flag	Result	Units	Dilution	RDL
GRO		<1.00	mg/Kg	10	0.10

Surrogate	Flag	Result	Units	Dilution	Spike Amount	Percent Recovery	Recovery Limits
TFT		0.844	mg/Kg	10	0.10	84	70 - 130
4-BFB		0.887	mg/Kg	10	0.10	89	70 - 130

Sample: 196319 - MW-6 (25-27')

Analysis:	BTEX	Analytical Method:	S 8021B	QC Batch:	QC20107	Date Analyzed:	5/6/02
Analyst:	CG	Preparation Method:	S 5035	Prep Batch:	PB19273	Date Prepared:	5/6/02

Param	Flag	Result	Units	Dilution	RDL
Benzene		<0.010	mg/Kg	10	0.001
Toluene		<0.010	mg/Kg	10	0.001
Ethylbenzene		<0.010	mg/Kg	10	0.001
M,P,O-Xylene		0.0115	mg/Kg	10	0.001
Total BTEX		0.0115	mg/Kg	10	0.001

Surrogate	Flag	Result	Units	Dilution	Spike Amount	Percent Recovery	Recovery Limits
TFT		0.870	mg/Kg	10	1	87	70 - 130
4-BFB		0.747	mg/Kg	10	1	75	70 - 130

Sample: 196319 - MW-6 (25-27')

Analysis:	TPH DRO	Analytical Method:	Mod. 8015B	QC Batch:	QC20145	Date Analyzed:	5/7/02
Analyst:	MM	Preparation Method:	3550 B	Prep Batch:	PB19299	Date Prepared:	5/7/02

Param	Flag	Result	Units	Dilution	RDL
DRO		<50.0	mg/Kg	1	50

Surrogate	Flag	Result	Units	Dilution	Spike Amount	Percent Recovery	Recovery Limits
n-Triacontane		129	mg/Kg	1	150	86	70 - 130

Sample: 196319 - MW-6 (25-27')

Analysis:	TPH GRO	Analytical Method:	8015B	QC Batch:	QC20108	Date Analyzed:	5/6/02
Analyst:	CG	Preparation Method:	5035	Prep Batch:	PB19273	Date Prepared:	5/6/02

Param	Flag	Result	Units	Dilution	RDL
GRO		<1.00	mg/Kg	10	0.10

Surrogate	Flag	Result	Units	Dilution	Spike Amount	Percent Recovery	Recovery Limits
TFT		1.26	mg/Kg	10	0.10	126	70 - 130
4-BFB		0.899	mg/Kg	10	0.10	90	70 - 130

Sample: 196320 - MW-7 (8-10')

Analysis:	BTEX	Analytical Method:	S 8021B	QC Batch:	QC20107	Date Analyzed:	5/6/02
Analyst:	CG	Preparation Method:	S 5035	Prep Batch:	PB19273	Date Prepared:	5/6/02

Param	Flag	Result	Units	Dilution	RDL
Benzene		1.05	mg/Kg	500	0.001
Toluene		<0.500	mg/Kg	500	0.001
Ethylbenzene		6.42	mg/Kg	500	0.001
M,P,O-Xylene		2.17	mg/Kg	500	0.001
Total BTEX		9.64	mg/Kg	500	0.001

Surrogate	Flag	Result	Units	Dilution	Spike Amount	Percent Recovery	Recovery Limits
TFT		0.859	mg/Kg	500	1	86	70 - 130
4-BFB	[1]	13.3	mg/Kg	500	1	1330	70 - 130

Sample: 196320 - MW-7 (8-10')

Analysis:	TPH DRO	Analytical Method:	Mod. 8015B	QC Batch:	QC20162	Date Analyzed:	5/8/02
Analyst:	MM	Preparation Method:	3550 B	Prep Batch:	PB19315	Date Prepared:	5/7/02

Param	Flag	Result	Units	Dilution	RDL
DRO		2700	mg/Kg	5	50

Surrogate	Flag	Result	Units	Dilution	Spike Amount	Percent Recovery	Recovery Limits
n-Triacontane	[2]	263	mg/Kg	5	150	175	70 - 130

Sample: 196320 - MW-7 (8-10')

Analysis:	TPH GRO	Analytical Method:	8015B	QC Batch:	QC20108	Date Analyzed:	5/6/02
Analyst:	CG	Preparation Method:	5035	Prep Batch:	PB19273	Date Prepared:	5/6/02

Param	Flag	Result	Units	Dilution	RDL
GRO		877	mg/Kg	500	0.10

Surrogate	Flag	Result	Units	Dilution	Spike Amount	Percent Recovery	Recovery Limits
TFT	[3]	1.88	mg/Kg	500	0.10	188	70 - 130
4-BFB	[4]	49.7	mg/Kg	500	0.10	4970	70 - 130

Sample: 196321 - MW-7 (25-27')

Analysis:	BTEX	Analytical Method:	S 8021B	QC Batch:	QC20107	Date Analyzed:	5/6/02
Analyst:	CG	Preparation Method:	S 5035	Prep Batch:	PB19273	Date Prepared:	5/6/02

Param	Flag	Result	Units	Dilution	RDL
Benzene		<0.010	mg/Kg	10	0.001
Toluene		<0.010	mg/Kg	10	0.001
Ethylbenzene		0.0203	mg/Kg	10	0.001
M,P,O-Xylene		<0.010	mg/Kg	10	0.001
Total BTEX		0.0203	mg/Kg	10	0.001

Surrogate	Flag	Result	Units	Dilution	Spike Amount	Percent Recovery	Recovery Limits
TFT		0.903	mg/Kg	10	1	90	70 - 130

Continued ...

[1] High surrogate recovery due to peak interference.
[2] Surrogate out of recovery limits due to high hydrocarbons. LCS, ICV, and CCV show the process is in control.
[3] High surrogate recovery due to peak interference.
[4] High surrogate recovery due to peak interference.

Surrogate	Flag	Result	Units	Dilution	Spike Amount	Percent Recovery	Recovery Limits
4-BFB		0.776	mg/Kg	10	1	78	70 - 130

Sample: 196321 - MW-7 (25-27')

Analysis:	TPH DRO	Analytical Method:	Mod. 8015B	QC Batch:	QC20145	Date Analyzed:	5/7/02
Analyst:	MM	Preparation Method:	3550 B	Prep Batch:	PB19299	Date Prepared:	5/7/02

Param	Flag	Result	Units	Dilution	RDL
DRO		<50.0	mg/Kg	1	50

Surrogate	Flag	Result	Units	Dilution	Spike Amount	Percent Recovery	Recovery Limits
n-Triacontane		132	mg/Kg	1	150	88	70 - 130

Sample: 196321 - MW-7 (25-27')

Analysis:	TPH GRO	Analytical Method:	8015B	QC Batch:	QC20108	Date Analyzed:	5/6/02
Analyst:	CG	Preparation Method:	5035	Prep Batch:	PB19273	Date Prepared:	5/6/02

Param	Flag	Result	Units	Dilution	RDL
GRO		<1.00	mg/Kg	10	0.10

Surrogate	Flag	Result	Units	Dilution	Spike Amount	Percent Recovery	Recovery Limits
TFT		0.825	mg/Kg	10	0.10	82	70 - 130
4-BFB		0.897	mg/Kg	10	0.10	90	70 - 130

Sample: 196322 - MW-8 (8-10')

Analysis:	BTEX	Analytical Method:	S 8021B	QC Batch:	QC20107	Date Analyzed:	5/6/02
Analyst:	CG	Preparation Method:	S 5035	Prep Batch:	PB19273	Date Prepared:	5/6/02

Param	Flag	Result	Units	Dilution	RDL
Benzene		<0.010	mg/Kg	10	0.001
Toluene		<0.010	mg/Kg	10	0.001
Ethylbenzene		<0.010	mg/Kg	10	0.001
M,P,O-Xylene		<0.010	mg/Kg	10	0.001
Total BTEX		<0.010	mg/Kg	10	0.001

Surrogate	Flag	Result	Units	Dilution	Spike Amount	Percent Recovery	Recovery Limits
TFT		0.850	mg/Kg	10	1	85	70 - 130
4-BFB		0.726	mg/Kg	10	1	73	70 - 130

Sample: 196322 - MW-8 (8-10')

Analysis:	TPH DRO	Analytical Method:	Mod. 8015B	QC Batch:	QC20145	Date Analyzed:	5/7/02
Analyst:	MM	Preparation Method:	3550 B	Prep Batch:	PB19299	Date Prepared:	5/7/02

Param	Flag	Result	Units	Dilution	RDL
DRO		<50.0	mg/Kg	1	50

Surrogate	Flag	Result	Units	Dilution	Spike Amount	Percent Recovery	Recovery Limits
n-Triacontane		127	mg/Kg	1	150	85	70 - 130

Sample: 196322 - MW-8 (8-10')

Analysis:	TPH GRO	Analytical Method:	8015B	QC Batch:	QC20108	Date Analyzed:	5/6/02
Analyst:	CG	Preparation Method:	5035	Prep Batch:	PB19273	Date Prepared:	5/6/02

Param	Flag	Result	Units	Dilution	RDL
GRO		<1.00	mg/Kg	10	0.10

Surrogate	Flag	Result	Units	Dilution	Spike Amount	Percent Recovery	Recovery Limits
TFT		0.847	mg/Kg	10	0.10	85	70 - 130
4-BFB		0.878	mg/Kg	10	0.10	88	70 - 130

Sample: 196323 - MW-8 (23-25')

Analysis:	BTEX	Analytical Method:	S 8021B	QC Batch:	QC20107	Date Analyzed:	5/6/02
Analyst:	CG	Preparation Method:	S 5035	Prep Batch:	PB19273	Date Prepared:	5/6/02

Param	Flag	Result	Units	Dilution	RDL
Benzene		<0.020	mg/Kg	20	0.001
Toluene		<0.020	mg/Kg	20	0.001
Ethylbenzene		<0.020	mg/Kg	20	0.001
M,P,O-Xylene		<0.020	mg/Kg	20	0.001
Total BTEX		<0.020	mg/Kg	20	0.001
Test Comments	[5]	*	mg/Kg	1	

Surrogate	Flag	Result	Units	Dilution	Spike Amount	Percent Recovery	Recovery Limits
TFT		0.853	mg/Kg	20	1	85	70 - 130
4-BFB	[6]	0.664	mg/Kg	20	1	66	70 - 130

Sample: 196323 - MW-8 (23-25')

Analysis:	TPH DRO	Analytical Method:	Mod. 8015B	QC Batch:	QC20145	Date Analyzed:	5/7/02
Analyst:	MM	Preparation Method:	3550 B	Prep Batch:	PB19299	Date Prepared:	5/7/02

[5]Sample diluted due to lack of sample extract. Sample has a Benzene concentration of less than 0.0047.
[6]Low surrogate recovery due to matrix interference. ICV, CCV, CCV shows the method to be in control.

Param	Flag	Result	Units	Dilution	RDL
DRO		<50.0	mg/Kg	1	50

Surrogate	Flag	Result	Units	Dilution	Spike Amount	Percent Recovery	Recovery Limits
n-Triacontane		126	mg/Kg	1	150	84	70 - 130

Sample: 196323 - MW-8 (23-25')

Analysis:	TPH GRO	Analytical Method:	8015B	QC Batch:	QC20108	Date Analyzed:	5/6/02
Analyst:	CG	Preparation Method:	5035	Prep Batch:	PB19273	Date Prepared:	5/6/02

Param	Flag	Result	Units	Dilution	RDL
GRO		<2.00	mg/Kg	20	0.10

Surrogate	Flag	Result	Units	Dilution	Spike Amount	Percent Recovery	Recovery Limits
TFT		0.847	mg/Kg	20	0.10	85	70 - 130
4-BFB		0.929	mg/Kg	20	0.10	93	70 - 130

Quality Control Report
Method Blank

Method Blank

QCBatch: QC20107

Param	Flag	Results	Units	Reporting Limit
Benzene		<0.010	mg/Kg	0.001
Toluene		<0.010	mg/Kg	0.001
Ethylbenzene		<0.010	mg/Kg	0.001
M,P,O-Xylene		<0.010	mg/Kg	0.001
Total BTEX		<0.010	mg/Kg	0.001

Surrogate	Flag	Result	Units	Dilution	Spike Amount	Percent Recovery	Recovery Limits
TFT		0.920	mg/Kg	10	1	92	70 - 130
4-BFB	[7]	0.523	mg/Kg	10	1	52	70 - 130

Method Blank

QCBatch: QC20108

Param	Flag	Results	Units	Reporting Limit
GRO		<1	mg/Kg	0.10

Surrogate	Flag	Result	Units	Dilution	Spike Amount	Percent Recovery	Recovery Limits
TFT		0.952	mg/Kg	10	0.10	95	70 - 130
4-BFB	[8]	0.625	mg/Kg	10	0.10	62	70 - 130

Method Blank

QCBatch: QC20145

Param	Flag	Results	Units	Reporting Limit
DRO		<50.0	mg/Kg	50

Surrogate	Flag	Result	Units	Dilution	Spike Amount	Percent Recovery	Recovery Limits
n-Triacontane		119	mg/Kg	1	150	79	70 - 130

Method Blank

QCBatch: QC20162

[7]Low surrogate recovery due to prep. ICV, CCV, CCV show the method to be in control.
[8]Low surrogate recovery due to prep. ICV, CCV, CCV show the method to be in control.

Param	Flag	Results	Units	Reporting Limit
DRO		<50.0	mg/Kg	50

Surrogate	Flag	Result	Units	Dilution	Spike Amount	Percent Recovery	Recovery Limits
n-Triacontane		125	mg/Kg	1	150	83	70 - 130

Quality Control Report
Lab Control Spikes and Duplicate Spikes

Laboratory Control Spikes

QCBatch: QC20107

Param	LCS Result	LCSD Result	Units	Dil.	Spike Amount Added	Matrix Result	% Rec	RPD	% Rec Limit	RPD Limit
MTBE	1.01	0.999	mg/Kg	10	1	<0.010	101	1	70 - 130	20
Benzene	0.985	0.968	mg/Kg	10	1	<0.010	98	2	70 - 130	20
Toluene	0.980	0.976	mg/Kg	10	1	<0.010	98	0	70 - 130	20
Ethylbenzene	0.982	0.963	mg/Kg	10	1	<0.010	98	2	70 - 130	20
M,P,O-Xylene	3.01	2.94	mg/Kg	10	3	<0.010	100	2	70 - 130	20

Percent recovery is based on the spike result. RPD is based on the spike and spike duplicate result.

Surrogate	LCS Result	LCSD Result	Units	Dilution	Spike Amount	LCS % Rec	LCSD % Rec	Recovery Limits
TFT	0.997	0.997	mg/Kg	10	1	100	100	70 - 130
4-BFB	0.913	0.911	mg/Kg	10	1	91	91	70 - 130

Laboratory Control Spikes

QCBatch: QC20108

Param	LCS Result	LCSD Result	Units	Dil.	Spike Amount Added	Matrix Result	% Rec	RPD	% Rec Limit	RPD Limit
GRO	8.32	8.48	mg/Kg	10	1	<1	83	1	80 - 120	20

Percent recovery is based on the spike result. RPD is based on the spike and spike duplicate result.

Surrogate	LCS Result	LCSD Result	Units	Dilution	Spike Amount	LCS % Rec	LCSD % Rec	Recovery Limits
TFT	0.882	0.896	mg/Kg	10	0.10	88	90	70 - 130
4-BFB	0.898	0.91	mg/Kg	10	0.10	90	91	70 - 130

Laboratory Control Spikes

QCBatch: QC20145

Param	LCS Result	LCSD Result	Units	Dil.	Spike Amount Added	Matrix Result	% Rec	RPD	% Rec Limit	RPD Limit
DRO	228	233	mg/Kg	1	250	<50.0	91	2	70 - 130	20

Percent recovery is based on the spike result. RPD is based on the spike and spike duplicate result.

Surrogate	LCS Result	LCSD Result	Units	Dilution	Spike Amount	LCS % Rec	LCSD % Rec	Recovery Limits
n-Triacontane	123	120	mg/Kg	1	150	82	80	70 - 130

Laboratory Control Spikes

QCBatch: QC20162

Param	LCS Result	LCSD Result	Units	Dil.	Spike Amount Added	Matrix Result	% Rec	RPD	% Rec Limit	RPD Limit
DRO	261	262	mg/Kg	1	250	<50.0	104	0	70 - 130	20

Percent recovery is based on the spike result. RPD is based on the spike and spike duplicate result.

Surrogate	LCS Result	LCSD Result	Units	Dilution	Spike Amount	LCS % Rec	LCSD % Rec	Recovery Limits
n-Triacontane	133	132	mg/Kg	1	150	89	88	70 - 130

Quality Control Report
Matrix Spikes and Duplicate Spikes

Matrix Spikes

QCBatch: QC20107

Param	MS Result	MSD Result	Units	Dil.	Spike Amount Added	Matrix Result	% Rec	RPD	% Rec Limit	RPD Limit
Benzene	0.845	0.854	mg/Kg	10	1	<0.010	84	1	70 - 130	20
Toluene	0.876	0.878	mg/Kg	10	1	<0.010	87	0	70 - 130	20
Ethylbenzene	0.877	0.891	mg/Kg	10	1	<0.010	87	1	70 - 130	20
M,P,O-Xylene	2.63	2.73	mg/Kg	10	3	<0.010	87	3	70 - 130	20

Percent recovery is based on the spike result. RPD is based on the spike and spike duplicate result.

Surrogate	MS Result	MSD Result	Units	Dilution	Spike Amount	MS % Rec	MSD % Rec	Recovery Limits
TFT	0.842	0.814	mg/Kg	10	1	84	81	70 - 130
4-BFB	0.811	0.783	mg/Kg	10	1	81	78	70 - 130

Matrix Spikes

QCBatch: QC20108

Param	MS Result	MSD Result	Units	Dil.	Spike Amount Added	Matrix Result	% Rec	RPD	% Rec Limit	RPD Limit
GRO	9.45	11.4	mg/Kg	10	1	<1.00	94	18	80 - 120	20

Percent recovery is based on the spike result. RPD is based on the spike and spike duplicate result.

Surrogate	MS Result	MSD Result	Units	Dilution	Spike Amount	MS % Rec	MSD % Rec	Recovery Limits
TFT	0.907	1.07	mg/Kg	10	0.10	91	107	70 - 130
4-BFB	0.885	0.914	mg/Kg	10	0.10	88	91	70 - 130

Matrix Spikes

QCBatch: QC20145

Param	MS Result	MSD Result	Units	Dil.	Spike Amount Added	Matrix Result	% Rec	RPD	% Rec Limit	RPD Limit
DRO	224	263	mg/Kg	1	250	<50.0	89	16	70 - 130	20

Percent recovery is based on the spike result. RPD is based on the spike and spike duplicate result.

Surrogate	MS Result	MSD Result	Units	Dilution	Spike Amount	MS % Rec	MSD % Rec	Recovery Limits
n-Triacontane	112	128	mg/Kg	1	150	75	85	70 - 130

Matrix Spikes

QCBatch: QC20162

Param	MS Result	MSD Result	Units	Dil.	Spike Amount Added	Matrix Result	% Rec	RPD	% Rec Limit	RPD Limit
DRO	455	456	mg/Kg	1	250	195	104	0	70 - 130	20

Percent recovery is based on the spike result. RPD is based on the spike and spike duplicate result.

Surrogate	MS Result	MSD Result	Units	Dilution	Spike Amount	MS % Rec	MSD % Rec	Recovery Limits
n-Triacontane	134	134	mg/Kg	1	150	89	89	70 - 130

Quality Control Report
Continuing Calibration Verification Standards

CCV (1)

QCBatch: QC20107

Param	Flag	Units	CCVs True Conc.	CCVs Found Conc.	CCVs Percent Recovery	Percent Recovery Limits	Date Analyzed
MTBE		mg/L	0.10	0.101	101	85 - 115	5/6/02
Benzene		mg/L	0.10	0.0969	97	85 - 115	5/6/02
Toluene		mg/L	0.10	0.0965	96	85 - 115	5/6/02
Ethylbenzene		mg/L	0.10	0.0959	96	85 - 115	5/6/02
M,P,O-Xylene		mg/L	0.30	0.293	98	85 - 115	5/6/02

CCV (2)

QCBatch: QC20107

Param	Flag	Units	CCVs True Conc.	CCVs Found Conc.	CCVs Percent Recovery	Percent Recovery Limits	Date Analyzed
MTBE		mg/L	0.10	0.109	109	85 - 115	5/6/02
Benzene		mg/L	0.10	0.0954	95	85 - 115	5/6/02
Toluene		mg/L	0.10	0.0971	97	85 - 115	5/6/02
Ethylbenzene		mg/L	0.10	0.101	101	85 - 115	5/6/02
M,P,O-Xylene		mg/L	0.30	0.292	97	85 - 115	5/6/02

ICV (1) QCBatch: QC20107

Param	Flag	Units	CCVs True Conc.	CCVs Found Conc.	CCVs Percent Recovery	Percent Recovery Limits	Date Analyzed
MTBE		mg/L	0.10	0.101	101	85 - 115	5/6/02
Benzene		mg/L	0.10	0.0974	97	85 - 115	5/6/02
Toluene		mg/L	0.10	0.0989	99	85 - 115	5/6/02
Ethylbenzene		mg/L	0.10	0.0971	97	85 - 115	5/6/02
M,P,O-Xylene		mg/L	0.30	0.299	100	85 - 115	5/6/02

CCV (1) QCBatch: QC20108

Param	Flag	Units	CCVs True Conc.	CCVs Found Conc.	CCVs Percent Recovery	Percent Recovery Limits	Date Analyzed
GRO		mg/Kg	1	0.904	90	85 - 115	5/6/02

CCV (2) QCBatch: QC20108

Param	Flag	Units	CCVs True Conc.	CCVs Found Conc.	CCVs Percent Recovery	Percent Recovery Limits	Date Analyzed
GRO		mg/Kg	1	1.09	109	85 - 115	5/6/02

ICV (1) QCBatch: QC20108

Param	Flag	Units	CCVs True Conc.	CCVs Found Conc.	CCVs Percent Recovery	Percent Recovery Limits	Date Analyzed
GRO		mg/Kg	1	0.872	87	85 - 115	5/6/02

CCV (1) QCBatch: QC20145

Param	Flag	Units	CCVs True Conc.	CCVs Found Conc.	CCVs Percent Recovery	Percent Recovery Limits	Date Analyzed
DRO		mg/Kg	250	246	98	75 - 125	5/7/02

CCV (2) QCBatch: QC20145

Param	Flag	Units	CCVs True Conc.	CCVs Found Conc.	CCVs Percent Recovery	Percent Recovery Limits	Date Analyzed
DRO		mg/Kg	250	269	107	75 - 125	5/7/02

ICV (1) QCBatch: QC20145

Param	Flag	Units	CCVs True Conc.	CCVs Found Conc.	CCVs Percent Recovery	Percent Recovery Limits	Date Analyzed
DRO		mg/Kg	250	233	93	75 - 125	5/7/02

CCV (1) QCBatch: QC20162

Param	Flag	Units	CCVs True Conc.	CCVs Found Conc.	CCVs Percent Recovery	Percent Recovery Limits	Date Analyzed
DRO		mg/Kg	250	246	98	75 - 125	5/8/02

CCV (2) QCBatch: QC20162

Param	Flag	Units	CCVs True Conc.	CCVs Found Conc.	CCVs Percent Recovery	Percent Recovery Limits	Date Analyzed
DRO		mg/Kg	250	262	104	75 - 125	5/8/02

ICV (1) QCBatch: QC20162

Param	Flag	Units	CCVs True Conc.	CCVs Found Conc.	CCVs Percent Recovery	Percent Recovery Limits	Date Analyzed
DRO		mg/Kg	250	263	105	75 - 125	5/8/02

Summary Report

Kyle Landreneau
Equilon Kyle Landreneau
PMB 284 40 FM 1960 West
Houston, TX 77090

Report Date: May 13, 2002

Order ID Number: A02050405

Project: EQ-112
TA Job Code: Barber Ranch 3000109
Casualty Code: EQ-112
Project Location: Barber Lea County, New Mexico
Project Address:
Enercon Services Inc. / Midland / Jeff Kindley

Sample	Description	Matrix	Date Taken	Time Taken	Date Received
196324	MW-5	Water	5/2/02	10:30	5/3/02
196325	MW-6	Water	5/3/02	9:30	5/3/02
196326	MW-7	Water	5/3/02	9:45	5/3/02

0 This report consists of a total of 2 page(s) and is intended only as a summary of results for the sample(s) listed above.

	BTEX				
Sample - Field Code	Benzene (ppm)	Toluene (ppm)	Ethylbenzene (ppm)	M,P,O-Xylene (ppm)	Total BTEX (ppm)
196324 - MW-5	0.0351	<0.010	0.0317	0.122	0.189
196325 - MW-6	0.0262	<0.005	<0.005	<0.005	0.0262
196326 - MW-7	0.0116	<0.001	0.0021	0.0012	0.0149

Sample: 196324 - MW-5

Param	Flag	Result	Units
Naphthalene		0.0068	mg/L
Acenaphthylene		<0.0002	mg/L
Acenaphthene		<0.0002	mg/L
Fluorene		0.0003	mg/L
Phenanthrene		0.0002	mg/L
Anthracene		<0.0002	mg/L
Fluoranthene		<0.0002	mg/L
Pyrene		<0.0002	mg/L
Benzo(a)anthracene		<0.0002	mg/L
Chrysene		<0.0002	mg/L
Benzo(b)fluoranthene		<0.0002	mg/L
Benzo(k)fluoranthene		<0.0002	mg/L
Benzo(a)pyrene		<0.0002	mg/L
Indeno(1,2,3-cd)pyrene		<0.0002	mg/L

Continued on next page ...

Sample 196324 continued ...

Param	Flag	Result	Units
Dibenzo(a,h)anthracene		<0.0002	mg/L
Benzo(g,h,i)perylene		<0.0002	mg/L

Sample: 196325 - MW-6

Param	Flag	Result	Units
Naphthalene		0.0004	mg/L
Acenaphthylene		<0.0002	mg/L
Acenaphthene		<0.0002	mg/L
Fluorene		<0.0002	mg/L
Phenanthrene		<0.0002	mg/L
Anthracene		<0.0002	mg/L
Fluoranthene		<0.0002	mg/L
Pyrene		<0.0002	mg/L
Benzo(a)anthracene		<0.0002	mg/L
Chrysene		<0.0002	mg/L
Benzo(b)fluoranthene		<0.0002	mg/L
Benzo(k)fluoranthene		<0.0002	mg/L
Benzo(a)pyrene		<0.0002	mg/L
Indeno(1,2,3-cd)pyrene		<0.0002	mg/L
Dibenzo(a,h)anthracene		<0.0002	mg/L
Benzo(g,h,i)perylene		<0.0002	mg/L

Sample: 196326 - MW-7

Param	Flag	Result	Units
Naphthalene		0.0008	mg/L
Acenaphthylene		<0.0002	mg/L
Acenaphthene		<0.0002	mg/L
Fluorene		<0.0002	mg/L
Phenanthrene		0.0003	mg/L
Anthracene		<0.0002	mg/L
Fluoranthene		<0.0002	mg/L
Pyrene		<0.0002	mg/L
Benzo(a)anthracene		<0.0002	mg/L
Chrysene		<0.0002	mg/L
Benzo(b)fluoranthene		<0.0002	mg/L
Benzo(k)fluoranthene		<0.0002	mg/L
Benzo(a)pyrene		<0.0002	mg/L
Indeno(1,2,3-cd)pyrene		<0.0002	mg/L
Dibenzo(a,h)anthracene		<0.0002	mg/L
Benzo(g,h,i)perylene		<0.0002	mg/L

TRACEANALYSIS, INC.

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Analytical and Quality Control Report

Kyle Landreneau
Equilon Kyle Landreneau
PMB 284 40 FM 1960 West
Houston, TX 77090

Report Date: May 13, 2002

Order ID Number: A02050405

Project: EQ-112
TA Job Code: Barber Ranch 3000109
Casualty Code: EQ-112
Project Location: Barber Lea County, New Mexico
Enercon Services Inc. / Midland / Jeff Kindley

Enclosed are the Analytical Results and Quality Control Data Reports for the following samples submitted to Trace-Analysis, Inc.

Sample	Description	Matrix	Date Taken	Time Taken	Date Received
196324	MW-5	Water	5/2/02	10:30	5/3/02
196325	MW-6	Water	5/3/02	9:30	5/3/02
196326	MW-7	Water	5/3/02	9:45	5/3/02

These results represent only the samples received in the laboratory. The Quality Control Report is generated on a batch basis. All information contained in this report is for the analytical batch(es) in which your sample(s) were analyzed. Note: the RDL is equal to MQL for all organic analytes including TPH.
The test results contained within this report meet all requirements of LAC 33:I unless otherwise noted.

This report consists of a total of 8 pages and shall not be reproduced except in its entirety including the chain of custody (COC), without written approval of TraceAnalysis, Inc.

Dr. Blair Leftwich, Director

Analytical Report

Sample: 196324 - MW-5

Analysis:	BTEX	Analytical Method:	S 8021B	QC Batch:	QC20104	Date Analyzed:	5/6/02
Analyst:	CG	Preparation Method:	S 5030B	Prep Batch:	PB19267	Date Prepared:	5/6/02

Param	Flag	Result	Units	Dilution	RDL
Benzene		0.0351	mg/L	10	0.001
Toluene		<0.010	mg/L	10	0.001
Ethylbenzene		0.0317	mg/L	10	0.001
M,P,O-Xylene		0.122	mg/L	10	0.001
Total BTEX		0.189	mg/L	10	0.001

Surrogate	Flag	Result	Units	Dilution	Spike Amount	Percent Recovery	Recovery Limits
TFT		0.0897	mg/L	10	0.10	89	70 - 130
4-BFB		0.0932	mg/L	10	0.10	93	70 - 130

Sample: 196324 - MW-5

Analysis:	PAH	Analytical Method:	S 8270C	QC Batch:	QC20211	Date Analyzed:	5/7/02
Analyst:	RC	Preparation Method:	E 3510C	Prep Batch:	PB19287	Date Prepared:	5/7/02

Param	Flag	Result	Units	Dilution	RDL
Naphthalene		0.0068	mg/L	1	0.0002
Acenaphthylene		<0.0002	mg/L	1	0.0002
Acenaphthene		<0.0002	mg/L	1	0.0002
Fluorene		0.0003	mg/L	1	0.0002
Phenanthrene		0.0002	mg/L	1	0.0002
Anthracene		<0.0002	mg/L	1	0.0002
Fluoranthene		<0.0002	mg/L	1	0.0002
Pyrene		<0.0002	mg/L	1	0.0002
Benzo(a)anthracene		<0.0002	mg/L	1	0.0002
Chrysene		<0.0002	mg/L	1	0.0002
Benzo(b)fluoranthene		<0.0002	mg/L	1	0.0002
Benzo(k)fluoranthene		<0.0002	mg/L	1	0.0002
Benzo(a)pyrene		<0.0002	mg/L	1	0.0002
Indeno(1,2,3-cd)pyrene		<0.0002	mg/L	1	0.0002
Dibenzo(a,h)anthracene		<0.0002	mg/L	1	0.0002
Benzo(g,h,i)perylene		<0.0002	mg/L	1	0.0002

Surrogate	Flag	Result	Units	Dilution	Spike Amount	Percent Recovery	Recovery Limits
Nitrobenzene-d5		29.74	mg/L	1	80	37	35 - 114
2-Fluorobiphenyl		30.88	mg/L	1	80	38	43 - 116
Terphenyl-d14		43.27	mg/L	1	80	54	33 - 141

Sample: 196325 - MW-6

Analysis:	BTEX	Analytical Method:	S 8021B	QC Batch:	QC20104	Date Analyzed:	5/6/02
Analyst:	CG	Preparation Method:	S 5030B	Prep Batch:	PB19267	Date Prepared:	5/6/02

Param	Flag	Result	Units	Dilution	RDL
Benzene		0.0262	mg/L	5	0.001
Toluene		<0.005	mg/L	5	0.001
Ethylbenzene		<0.005	mg/L	5	0.001
M,P,O-Xylene		<0.005	mg/L	5	0.001
Total BTEX		0.0262	mg/L	5	0.001

Surrogate	Flag	Result	Units	Dilution	Spike Amount	Percent Recovery	Recovery Limits
TFT		0.0946	mg/L	5	0.10	94	70 - 130
4-BFB		0.0934	mg/L	5	0.10	93	70 - 130

Sample: 196325 - MW-6

Analysis:	PAH	Analytical Method:	S 8270C	QC Batch:	QC20211	Date Analyzed:	5/7/02
Analyst:	RC	Preparation Method:	E 3510C	Prep Batch:	PB19287	Date Prepared:	5/7/02

Param	Flag	Result	Units	Dilution	RDL
Naphthalene		0.0004	mg/L	1	0.0002
Acenaphthylene		<0.0002	mg/L	1	0.0002
Acenaphthene		<0.0002	mg/L	1	0.0002
Fluorene		<0.0002	mg/L	1	0.0002
Phenanthrene		<0.0002	mg/L	1	0.0002
Anthracene		<0.0002	mg/L	1	0.0002
Fluoranthene		<0.0002	mg/L	1	0.0002
Pyrene		<0.0002	mg/L	1	0.0002
Benzo(a)anthracene		<0.0002	mg/L	1	0.0002
Chrysene		<0.0002	mg/L	1	0.0002
Benzo(b)fluoranthene		<0.0002	mg/L	1	0.0002
Benzo(k)fluoranthene		<0.0002	mg/L	1	0.0002
Benzo(a)pyrene		<0.0002	mg/L	1	0.0002
Indeno(1,2,3-cd)pyrene		<0.0002	mg/L	1	0.0002
Dibenzo(a,h)anthracene		<0.0002	mg/L	1	0.0002
Benzo(g,h,i)perylene		<0.0002	mg/L	1	0.0002

Surrogate	Flag	Result	Units	Dilution	Spike Amount	Percent Recovery	Recovery Limits
Nitrobenzene-d5		32.62	mg/L	1	80	40	35 - 114
2-Fluorobiphenyl		34.19	mg/L	1	80	42	43 - 116
Terphenyl-d14		33.37	mg/L	1	80	41	33 - 141

Sample: 196326 - MW-7

Analysis:	BTEX	Analytical Method:	S 8021B	QC Batch:	QC20104	Date Analyzed:	5/6/02
Analyst:	CG	Preparation Method:	S 5030B	Prep Batch:	PB19267	Date Prepared:	5/6/02

Param	Flag	Result	Units	Dilution	RDL
Benzene		0.0116	mg/L	1	0.001
Toluene		<0.001	mg/L	1	0.001
Ethylbenzene		0.0021	mg/L	1	0.001
M,P,O-Xylene		0.0012	mg/L	1	0.001
Total BTEX		0.0149	mg/L	1	0.001

Surrogate	Flag	Result	Units	Dilution	Spike Amount	Percent Recovery	Recovery Limits
TFT		0.0945	mg/L	1	0.10	94	70 - 130
4-BFB		0.0919	mg/L	1	0.10	91	70 - 130

Sample: 196326 - MW-7

Analysis:	PAH	Analytical Method:	S 8270C	QC Batch:	QC20211	Date Analyzed:	5/7/02
Analyst:	RC	Preparation Method:	E 3510C	Prep Batch:	PB19287	Date Prepared:	5/7/02

Param	Flag	Result	Units	Dilution	RDL
Naphthalene		0.0008	mg/L	1	0.0002
Acenaphthylene		<0.0002	mg/L	1	0.0002
Acenaphthene		<0.0002	mg/L	1	0.0002
Fluorene		<0.0002	mg/L	1	0.0002
Phenanthrene		0.0003	mg/L	1	0.0002
Anthracene		<0.0002	mg/L	1	0.0002
Fluoranthene		<0.0002	mg/L	1	0.0002
Pyrene		<0.0002	mg/L	1	0.0002
Benzo(a)anthracene		<0.0002	mg/L	1	0.0002
Chrysene		<0.0002	mg/L	1	0.0002
Benzo(b)fluoranthene		<0.0002	mg/L	1	0.0002
Benzo(k)fluoranthene		<0.0002	mg/L	1	0.0002
Benzo(a)pyrene		<0.0002	mg/L	1	0.0002
Indeno(1,2,3-cd)pyrene		<0.0002	mg/L	1	0.0002
Dibenzo(a,h)anthracene		<0.0002	mg/L	1	0.0002
Benzo(g,h,i)perylene		<0.0002	mg/L	1	0.0002

Surrogate	Flag	Result	Units	Dilution	Spike Amount	Percent Recovery	Recovery Limits
Nitrobenzene-d5		27.68	mg/L	1	80	34	35 - 114
2-Fluorobiphenyl		28.35	mg/L	1	80	35	43 - 116
Terphenyl-d14		35.03	mg/L	1	80	43	33 - 141

Quality Control Report
Method Blank

Method Blank

QCBatch: QC20104

Param	Flag	Results	Units	Reporting Limit
Benzene		<0.001	mg/L	0.001
Toluene		<0.001	mg/L	0.001
Ethylbenzene		<0.001	mg/L	0.001
M,P,O-Xylene		<0.001	mg/L	0.001
Total BTEX		<0.001	mg/L	0.001

Surrogate	Flag	Result	Units	Dilution	Spike Amount	Percent Recovery	Recovery Limits
TFT		0.104	mg/L	1	0.10	104	70 - 130
4-BFB		0.0979	mg/L	1	0.10	98	70 - 130

Method Blank

QCBatch: QC20211

Param	Flag	Results	Units	Reporting Limit
Naphthalene		<0.0002	mg/L	0.0002
Acenaphthylene		<0.0002	mg/L	0.0002
Acenaphthene		<0.0002	mg/L	0.0002
Fluorene		<0.0002	mg/L	0.0002
Phenanthrene		<0.0002	mg/L	0.0002
Anthracene		<0.0002	mg/L	0.0002
Fluoranthene		<0.0002	mg/L	0.0002
Pyrene		<0.0002	mg/L	0.0002
Benzo(a)anthracene		<0.0002	mg/L	0.0002
Chrysene		<0.0002	mg/L	0.0002
Benzo(b)fluoranthene		<0.0002	mg/L	0.0002
Benzo(k)fluoranthene		<0.0002	mg/L	0.0002
Benzo(a)pyrene		<0.0002	mg/L	0.0002
Indeno(1,2,3-cd)pyrene		<0.0002	mg/L	0.0002
Dibenzo(a,h)anthracene		<0.0002	mg/L	0.0002
Benzo(g,h,i)perylene		<0.0002	mg/L	0.0002

Surrogate	Flag	Result	Units	Dilution	Spike Amount	Percent Recovery	Recovery Limits
Nitrobenzene-d5		89.97	mg/L	1	80	112	35 - 114
2-Fluorobiphenyl		96.41	mg/L	1	80	120	43 - 116
Terphenyl-d14		86	mg/L	1	80	107	33 - 141

Quality Control Report
Lab Control Spikes and Duplicate Spikes

Laboratory Control Spikes

QCBatch: QC20104

Param	LCS Result	LCSD Result	Units	Dil.	Spike Amount Added	Matrix Result	% Rec	RPD	% Rec Limit	RPD Limit
MTBE	0.102	0.102	mg/L	1	0.10	<0.001	102	0	70 - 130	20
Benzene	0.111	0.103	mg/L	1	0.10	<0.001	111	7	70 - 130	20
Toluene	0.108	0.103	mg/L	1	0.10	<0.001	108	5	70 - 130	20
Ethylbenzene	0.108	0.104	mg/L	1	0.10	<0.001	108	4	70 - 130	20
M,P,O-Xylene	0.315	0.309	mg/L	1	0.30	<0.001	105	2	70 - 130	20

Percent recovery is based on the spike result. RPD is based on the spike and spike duplicate result.

Surrogate	LCS Result	LCSD Result	Units	Dilution	Spike Amount	LCS % Rec	LCSD % Rec	Recovery Limits
TFT	0.107	0.101	mg/L	1	0.10	107	101	70 - 130
4-BFB	0.101	0.101	mg/L	1	0.10	101	101	70 - 130

Laboratory Control Spikes

QCBatch: QC20211

Param	LCS Result	LCSD Result	Units	Dil.	Spike Amount Added	Matrix Result	% Rec	RPD	% Rec Limit	RPD Limit
Naphthalene	16.53	39.82	mg/L	1	80	<0.0002	20	82	16 - 96	20
Acenaphthylene	18.7	47.23	mg/L	1	80	<0.0002	23	86	20 - 110	20
Acenaphthene	17.36	45.28	mg/L	1	80	<0.0002	21	89	18 - 108	20
Fluorene	17.6	47.76	mg/L	1	80	<0.0002	22	92	22 - 102	20
Phenanthrene	16.33	48.56	mg/L	1	80	<0.0002	20	99	25 - 103	20
Anthracene	16.68	50.28	mg/L	1	80	<0.0002	20	100	22 - 110	20
Fluoranthene	21.35	65.13	mg/L	1	80	<0.0002	26	101	21 - 110	20
Pyrene	31.23	55.82	mg/L	1	80	<0.0002	39	56	22 - 100	20
Benzo(a)anthracene	29.98	54.52	mg/L	1	80	<0.0002	37	58	30 - 99	20
Chrysene	26.95	49.62	mg/L	1	80	<0.0002	33	59	27 - 108	20
Benzo(b)fluoranthene	44.89	60.98	mg/L	1	80	<0.0002	56	30	19 - 102	20
Benzo(k)fluoranthene	51.42	62.36	mg/L	1	80	<0.0002	64	19	35 - 103	20
Benzo(a)pyrene	48.44	61.65	mg/L	1	80	<0.0002	60	23	24 - 105	20
Indeno(1,2,3-cd)pyrene	35.08	50.52	mg/L	1	80	<0.0002	43	36	22 - 108	20
Dibenzo(a,h)anthracene	31.71	40.79	mg/L	1	80	<0.0002	39	25	23 - 77	20
Benzo(g,h,i)perylene	41.14	53.31	mg/L	1	80	<0.0002	51	25	19 - 119	20

Percent recovery is based on the spike result. RPD is based on the spike and spike duplicate result.

Surrogate	LCS Result	LCSD Result	Units	Dilution	Spike Amount	LCS % Rec	LCSD % Rec	Recovery Limits
Nitrobenzene-d5	29.1	69.05	mg/L	1	80	36	86	35 - 114
2-Fluorobiphenyl	29.93	74.73	mg/L	1	80	37	93	43 - 116
Terphenyl-d14	51.05	90.12	mg/L	1	80	63	112	33 - 141

Quality Control Report
Continuing Calibration Verification Standards

CCV (1)

QCBatch: QC20104

Param	Flag	Units	CCVs True Conc.	CCVs Found Conc.	CCVs Percent Recovery	Percent Recovery Limits	Date Analyzed
MTBE		mg/L	0.10	0.0997	100	85 - 115	5/6/02
Benzene		mg/L	0.10	0.106	106	85 - 115	5/6/02
Toluene		mg/L	0.10	0.107	107	85 - 115	5/6/02
Ethylbenzene		mg/L	0.10	0.106	106	85 - 115	5/6/02
M,P,O-Xylene		mg/L	0.30	0.316	105	85 - 115	5/6/02

CCV (2)

QCBatch: QC20104

Param	Flag	Units	CCVs True Conc.	CCVs Found Conc.	CCVs Percent Recovery	Percent Recovery Limits	Date Analyzed
MTBE		mg/L	0.10	0.0989	98	85 - 115	5/6/02
Benzene		mg/L	0.10	0.102	102	85 - 115	5/6/02
Toluene		mg/L	0.10	0.102	102	85 - 115	5/6/02
Ethylbenzene		mg/L	0.10	0.101	101	85 - 115	5/6/02
M,P,O-Xylene		mg/L	0.30	0.3	100	85 - 115	5/6/02

ICV (1)

QCBatch: QC20104

Param	Flag	Units	CCVs True Conc.	CCVs Found Conc.	CCVs Percent Recovery	Percent Recovery Limits	Date Analyzed
MTBE		mg/L	0.10	0.105	105	85 - 115	5/6/02
Benzene		mg/L	0.10	0.114	114	85 - 115	5/6/02
Toluene		mg/L	0.10	0.112	112	85 - 115	5/6/02
Ethylbenzene		mg/L	0.10	0.112	112	85 - 115	5/6/02
M,P,O-Xylene		mg/L	0.30	0.333	111	85 - 115	5/6/02

CCV (1)

QCBatch: QC20211

Param	Flag	Units	CCVs True Conc.	CCVs Found Conc.	CCVs Percent Recovery	Percent Recovery Limits	Date Analyzed
Naphthalene		mg/L	60	60.51	100	80 - 120	5/7/02
Acenaphthylene		mg/L	60	63.27	105	80 - 120	5/7/02
Acenaphthene		mg/L	60	61.09	101	80 - 120	5/7/02
Fluorene		mg/L	60	60.09	100	80 - 120	5/7/02
Phenanthrene		mg/L	60	53.08	88	80 - 120	5/7/02
Anthracene		mg/L	60	54.12	90	80 - 120	5/7/02
Fluoranthene		mg/L	60	65.02	108	80 - 120	5/7/02
Pyrene		mg/L	60	60.27	100	80 - 120	5/7/02
Benzo(a)anthracene		mg/L	60	60.83	101	80 - 120	5/7/02
Chrysene		mg/L	60	58.92	98	80 - 120	5/7/02
Benzo(b)fluoranthene		mg/L	60	64.67	107	80 - 120	5/7/02
Benzo(k)fluoranthene		mg/L	60	60.34	100	80 - 120	5/7/02

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Param	Flag	Units	CCVs True Conc.	CCVs Found Conc.	CCVs Percent Recovery	Percent Recovery Limits	Date Analyzed
Benzo(a)pyrene		mg/L	60	62.7	104	80 - 120	5/7/02
Indeno(1,2,3-cd)pyrene		mg/L	60	53.8	89	80 - 120	5/7/02
Dibenzo(a,h)anthracene		mg/L	60	53.89	89	80 - 120	5/7/02
Benzo(g,h,i)perylene		mg/L	60	53.55	89	80 - 120	5/7/02
Nitrobenzene-d5		mg/L	60	62.25	103	80 - 120	5/7/02
2-Fluorobiphenyl		mg/L	60	63.85	106	80 - 120	5/7/02
Terphenyl-d14		mg/L	60	59.23	98	80 - 120	5/7/02

Summary Report

Jeff Kindley
Enercon Services Inc.
306 W. Wall Suite 1312
Midland, Tx. 79701

Report Date: May 13, 2002

Order ID Number: A02050405

Project Number: EQ-112
Project Name: Barber Ranch 3000109
Project Location: Barber Lea County, New Mexico

Sample	Description	Matrix	Date Taken	Time Taken	Date Received
196324	MW-5	Water	5/2/02	10:30	5/3/02
196325	MW-6	Water	5/3/02	9:30	5/3/02
196326	MW-7	Water	5/3/02	9:45	5/3/02

0 This report consists of a total of 2 page(s) and is intended only as a summary of results for the sample(s) listed above.

	BTEX				
Sample - Field Code	Benzene (ppm)	Toluene (ppm)	Ethylbenzene (ppm)	M,P,O-Xylene (ppm)	Total BTEX (ppm)
196324 - MW-5	0.0351	<0.010	0.0317	0.122	0.189
196325 - MW-6	0.0262	<0.005	<0.005	<0.005	0.0262
196326 - MW-7	0.0116	<0.001	0.0021	0.0012	0.0149

Sample: 196324 - MW-5

Param	Flag	Result	Units
Naphthalene		0.0068	mg/L
Acenaphthylene		<0.0002	mg/L
Acenaphthene		<0.0002	mg/L
Fluorene		0.0003	mg/L
Phenanthrene		0.0002	mg/L
Anthracene		<0.0002	mg/L
Fluoranthene		<0.0002	mg/L
Pyrene		<0.0002	mg/L
Benzo(a)anthracene		<0.0002	mg/L
Chrysene		<0.0002	mg/L
Benzo(b)fluoranthene		<0.0002	mg/L
Benzo(k)fluoranthene		<0.0002	mg/L
Benzo(a)pyrene		<0.0002	mg/L
Indeno(1,2,3-cd)pyrene		<0.0002	mg/L
Dibenzo(a,h)anthracene		<0.0002	mg/L
Benzo(g,h,i)perylene		<0.0002	mg/L
Test Comments		<0.0002	mg/L

This is only a summary. Please, refer to the complete report package for quality control data.

Sample: 196325 - MW-6

Param	Flag	Result	Units
Naphthalene		0.0004	mg/L
Acenaphthylene		<0.0002	mg/L
Acenaphthene		<0.0002	mg/L
Fluorene		<0.0002	mg/L
Phenanthrene		<0.0002	mg/L
Anthracene		<0.0002	mg/L
Fluoranthene		<0.0002	mg/L
Pyrene		<0.0002	mg/L
Benzo(a)anthracene		<0.0002	mg/L
Chrysene		<0.0002	mg/L
Benzo(b)fluoranthene		<0.0002	mg/L
Benzo(k)fluoranthene		<0.0002	mg/L
Benzo(a)pyrene		<0.0002	mg/L
Indeno(1,2,3-cd)pyrene		<0.0002	mg/L
Dibenzo(a,h)anthracene		<0.0002	mg/L
Benzo(g,h,i)perylene		<0.0002	mg/L
Test Comments		<0.0002	mg/L

Sample: 196326 - MW-7

Param	Flag	Result	Units
Naphthalene		0.0008	mg/L
Acenaphthylene		<0.0002	mg/L
Acenaphthene		<0.0002	mg/L
Fluorene		<0.0002	mg/L
Phenanthrene		0.0003	mg/L
Anthracene		<0.0002	mg/L
Fluoranthene		<0.0002	mg/L
Pyrene		<0.0002	mg/L
Benzo(a)anthracene		<0.0002	mg/L
Chrysene		<0.0002	mg/L
Benzo(b)fluoranthene		<0.0002	mg/L
Benzo(k)fluoranthene		<0.0002	mg/L
Benzo(a)pyrene		<0.0002	mg/L
Indeno(1,2,3-cd)pyrene		<0.0002	mg/L
Dibenzo(a,h)anthracene		<0.0002	mg/L
Benzo(g,h,i)perylene		<0.0002	mg/L
Test Comments		<0.0002	mg/L

Analytical and Quality Control Report

Jeff Kindley
Enercon Services Inc.
306 W. Wall Suite 1312
Midland, Tx. 79701

Report Date: May 14, 2002

Order ID Number: A02050807

Project Number: EQ-112
Project Name: Barber Ranch 3000109
Project Location: Barber Lea County, New Mexico

Enclosed are the Analytical Results and Quality Control Data Reports for the following samples submitted to Trace-Analysis, Inc.

Sample	Description	Matrix	Date Taken	Time Taken	Date Received
196495	MW-8	Water	5/6/02	12:30	5/8/02
196496	MW-9	Water	5/6/02	15:45	5/8/02

These results represent only the samples received in the laboratory. The Quality Control Report is generated on a batch basis. All information contained in this report is for the analytical batch(es) in which your sample(s) were analyzed. Note: the RDL is equal to MQL for all organic analytes including TPH.
The test results contained within this report meet all requirements of LAC 33:I unless otherwise noted.

This report consists of a total of 7 pages and shall not be reproduced except in its entirety including the chain of custody (COC), without written approval of TraceAnalysis, Inc.

Dr. Blair Leftwich, Director

Analytical Report

Sample: 196495 - MW-8

Analysis:	BTEX	Analytical Method:	S 8021B	QC Batch:	QC20176	Date Analyzed:	5/8/02
Analyst:	CG	Preparation Method:	N/A	Prep Batch:	PB19323	Date Prepared:	5/8/02

Param	Flag	Result	Units	Dilution	RDL
Benzene		<0.005	mg/L	5	0.001
Toluene		<0.005	mg/L	5	0.001
Ethylbenzene		<0.005	mg/L	5	0.001
M,P,O-Xylene		<0.005	mg/L	5	0.001
Total BTEX		<0.005	mg/L	5	0.001

Surrogate	Flag	Result	Units	Dilution	Spike Amount	Percent Recovery	Recovery Limits
TFT		0.099	mg/L	5	0.10	99	70 - 130
4-BFB		0.0986	mg/L	5	0.10	99	70 - 130

Sample: 196495 - MW-8

Analysis:	PAH	Analytical Method:	S 8270C	QC Batch:	QC20214	Date Analyzed:	5/8/02
Analyst:	RC	Preparation Method:	N/A	Prep Batch:	PB19319	Date Prepared:	5/8/02

Param	Flag	Result	Units	Dilution	RDL
Naphthalene		<0.0002	mg/L	1	0.0002
Acenaphthylene		<0.0002	mg/L	1	0.0002
Acenaphthene		<0.0002	mg/L	1	0.0002
Fluorene		<0.0002	mg/L	1	0.0002
Phenanthrene		<0.0002	mg/L	1	0.0002
Anthracene		<0.0002	mg/L	1	0.0002
Fluoranthene		<0.0002	mg/L	1	0.0002
Pyrene		<0.0002	mg/L	1	0.0002
Benzo(a)anthracene		<0.0002	mg/L	1	0.0002
Chrysene		<0.0002	mg/L	1	0.0002
Benzo(b)fluoranthene		<0.0002	mg/L	1	0.0002
Benzo(k)fluoranthene		<0.0002	mg/L	1	0.0002
Benzo(a)pyrene		<0.0002	mg/L	1	0.0002
Indeno(1,2,3-cd)pyrene		<0.0002	mg/L	1	0.0002
Dibenzo(a,h)anthracene		<0.0002	mg/L	1	0.0002
Benzo(g,h,i)perylene		<0.0002	mg/L	1	0.0002

Surrogate	Flag	Result	Units	Dilution	Spike Amount	Percent Recovery	Recovery Limits
Nitrobenzene-d5		28.96	mg/L	1	80	36	35 - 114
2-Fluorobiphenyl		33.96	mg/L	1	80	42	43 - 116
Terphenyl-d14		26.78	mg/L	1	80	33	33 - 141

Sample: 196496 - MW-9

Analysis:	BTEX	Analytical Method:	S 8021B	QC Batch:	QC20176	Date Analyzed:	5/8/02
Analyst:	CG	Preparation Method:	N/A	Prep Batch:	PB19323	Date Prepared:	5/8/02

Param	Flag	Result	Units	Dilution	RDL
Benzene		<0.005	mg/L	5	0.001
Toluene		<0.005	mg/L	5	0.001
Ethylbenzene		<0.005	mg/L	5	0.001
M,P,O-Xylene		<0.005	mg/L	5	0.001
Total BTEX		<0.005	mg/L	5	0.001

Surrogate	Flag	Result	Units	Dilution	Spike Amount	Percent Recovery	Recovery Limits
TFT		0.0999	mg/L	5	0.10	100	70 - 130
4-BFB		0.097	mg/L	5	0.10	97	70 - 130

Sample: 196496 - MW-9

Analysis:	PAH	Analytical Method:	S 8270C	QC Batch:	QC20214	Date Analyzed:	5/8/02
Analyst:	RC	Preparation Method:	N/A	Prep Batch:	PB19319	Date Prepared:	5/8/02

Param	Flag	Result	Units	Dilution	RDL
Naphthalene		0.00089	mg/L	1	0.0002
Acenaphthylene		<0.0002	mg/L	1	0.0002
Acenaphthene		<0.0002	mg/L	1	0.0002
Fluorene		<0.0002	mg/L	1	0.0002
Phenanthrene		<0.0002	mg/L	1	0.0002
Anthracene		<0.0002	mg/L	1	0.0002
Fluoranthene		<0.0002	mg/L	1	0.0002
Pyrene		<0.0002	mg/L	1	0.0002
Benzo(a)anthracene		<0.0002	mg/L	1	0.0002
Chrysene		<0.0002	mg/L	1	0.0002
Benzo(b)fluoranthene		<0.0002	mg/L	1	0.0002
Benzo(k)fluoranthene		<0.0002	mg/L	1	0.0002
Benzo(a)pyrene		<0.0002	mg/L	1	0.0002
Indeno(1,2,3-cd)pyrene		<0.0002	mg/L	1	0.0002
Dibenzo(a,h)anthracene		<0.0002	mg/L	1	0.0002
Benzo(g,h,i)perylene		<0.0002	mg/L	1	0.0002

Surrogate	Flag	Result	Units	Dilution	Spike Amount	Percent Recovery	Recovery Limits
Nitrobenzene-d5		60.6	mg/L	1	80	75	35 - 114
2-Fluorobiphenyl		65.67	mg/L	1	80	82	43 - 116
Terphenyl-d14		39.91	mg/L	1	80	49	33 - 141

Quality Control Report
Method Blank

Method Blank

QCBatch: QC20176

Param	Flag	Results	Units	Reporting Limit
Benzene		<0.001	mg/L	0.001
Toluene		<0.001	mg/L	0.001
Ethylbenzene		<0.001	mg/L	0.001
M,P,O-Xylene		<0.001	mg/L	0.001
Total BTEX		<0.001	mg/L	0.001

Surrogate	Flag	Result	Units	Dilution	Spike Amount	Percent Recovery	Recovery Limits
TFT		0.108	mg/L	1	0.10	108	70 - 130
4-BFB		0.103	mg/L	1	0.10	103	70 - 130

Method Blank

QCBatch: QC20214

Param	Flag	Results	Units	Reporting Limit
Naphthalene		<0.0002	mg/L	0.0002
Acenaphthylene		<0.0002	mg/L	0.0002
Acenaphthene		<0.0002	mg/L	0.0002
Fluorene		<0.0002	mg/L	0.0002
Phenanthrene		<0.0002	mg/L	0.0002
Anthracene		<0.0002	mg/L	0.0002
Fluoranthene		<0.0002	mg/L	0.0002
Pyrene		<0.0002	mg/L	0.0002
Benzo(a)anthracene		<0.0002	mg/L	0.0002
Chrysene		<0.0002	mg/L	0.0002
Benzo(b)fluoranthene		<0.0002	mg/L	0.0002
Benzo(k)fluoranthene		<0.0002	mg/L	0.0002
Benzo(a)pyrene		<0.0002	mg/L	0.0002
Indeno(1,2,3-cd)pyrene		<0.0002	mg/L	0.0002
Dibenzo(a,h)anthracene		<0.0002	mg/L	0.0002
Benzo(g,h,i)perylene		<0.0002	mg/L	0.0002

Surrogate	Flag	Result	Units	Dilution	Spike Amount	Percent Recovery	Recovery Limits
Nitrobenzene-d5		68.71	mg/L	1	80	85	35 - 114
2-Fluorobiphenyl		75.42	mg/L	1	80	94	43 - 116
Terphenyl-d14		41.21	mg/L	1	80	51	33 - 141

Quality Control Report
Lab Control Spikes and Duplicate Spikes

Laboratory Control Spikes

QCBatch: QC20176

Param	LCS Result	LCSD Result	Units	Dil.	Spike Amount Added	Matrix Result	% Rec	RPD	% Rec Limit	RPD Limit
MTBE	0.103	0.102	mg/L	1	0.10	<0.001	103	1	70 - 130	20
Benzene	0.108	0.111	mg/L	1	0.10	<0.001	108	3	70 - 130	20
Toluene	0.107	0.108	mg/L	1	0.10	<0.001	107	1	70 - 130	20
Ethylbenzene	0.107	0.107	mg/L	1	0.10	<0.001	107	0	70 - 130	20
M,P,O-Xylene	0.320	0.318	mg/L	1	0.30	<0.001	107	1	70 - 130	20

Percent recovery is based on the spike result. RPD is based on the spike and spike duplicate result.

Surrogate	LCS Result	LCSD Result	Units	Dilution	Spike Amount	LCS % Rec	LCSD % Rec	Recovery Limits
TFT	0.106	0.109	mg/L	1	0.10	106	109	70 - 130
4-BFB	0.103	0.102	mg/L	1	0.10	103	102	70 - 130

Laboratory Control Spikes

QCBatch: QC20214

Param	LCS Result	LCSD Result	Units	Dil.	Spike Amount Added	Matrix Result	% Rec	RPD	% Rec Limit	RPD Limit
Naphthalene	56.16	59.94	mg/L	1	80	<0.0002	70	6	16 - 96	20
Acenaphthylene	63.57	69.07	mg/L	1	80	<0.0002	79	8	20 - 110	20
Acenaphthene	60.61	65.94	mg/L	1	80	<0.0002	75	8	18 - 108	20
Fluorene	56.98	63.87	mg/L	1	80	<0.0002	71	11	22 - 102	20
Phenanthrene	58.06	61.81	mg/L	1	80	<0.0002	72	6	25 - 103	20
Anthracene	59.98	63.59	mg/L	1	80	<0.0002	74	5	22 - 110	20
Fluoranthene	84.26	83.42	mg/L	1	80	<0.0002	105	1	21 - 110	20
Pyrene	63.91	63.47	mg/L	1	80	<0.0002	79	0	22 - 100	20
Benzo(a)anthracene	63.27	66.91	mg/L	1	80	<0.0002	79	5	30 - 99	20
Chrysene	56.61	61.45	mg/L	1	80	<0.0002	70	8	27 - 108	20
Benzo(b)fluoranthene	70.58	69.71	mg/L	1	80	<0.0002	88	1	19 - 102	20
Benzo(k)fluoranthene	72.81	77.54	mg/L	1	80	<0.0002	91	6	35 - 103	20
Benzo(a)pyrene	67.97	70.8	mg/L	1	80	<0.0002	84	4	24 - 105	20
Indeno(1,2,3-cd)pyrene	50.58	50.43	mg/L	1	80	<0.0002	63	0	22 - 108	20
Dibenzo(a,h)anthracene	42.84	43.81	mg/L	1	80	<0.0002	53	2	23 - 77	20
Benzo(g,h,i)perylene	53.45	61.02	mg/L	1	80	<0.0002	66	13	19 - 119	20

Percent recovery is based on the spike result. RPD is based on the spike and spike duplicate result.

Surrogate	LCS Result	LCSD Result	Units	Dilution	Spike Amount	LCS % Rec	LCSD % Rec	Recovery Limits
Nitrobenzene-d5	68.28	70.92	mg/L	1	80	85	88	35 - 114
2-Fluorobiphenyl	79.07	79.78	mg/L	1	80	98	99	43 - 116
Terphenyl-d14	42.35	42.05	mg/L	1	80	52	52	33 - 141

Quality Control Report
Continuing Calibration Verification Standards

CCV (1)

QCBatch: QC20176

Param	Flag	Units	CCVs True Conc.	CCVs Found Conc.	CCVs Percent Recovery	Percent Recovery Limits	Date Analyzed
MTBE		mg/L	0.10	0.0998	100	85 - 115	5/8/02
Benzene		mg/L	0.10	0.103	103	85 - 115	5/8/02
Toluene		mg/L	0.10	0.103	103	85 - 115	5/8/02
Ethylbenzene		mg/L	0.10	0.104	104	85 - 115	5/8/02
M,P,O-Xylene		mg/L	0.30	0.311	104	85 - 115	5/8/02

CCV (2)

QCBatch: QC20176

Param	Flag	Units	CCVs True Conc.	CCVs Found Conc.	CCVs Percent Recovery	Percent Recovery Limits	Date Analyzed
MTBE		mg/L	0.10	0.101	101	85 - 115	5/8/02
Benzene		mg/L	0.10	0.102	102	85 - 115	5/8/02
Toluene		mg/L	0.10	0.0991	99	85 - 115	5/8/02
Ethylbenzene		mg/L	0.10	0.0987	98	85 - 115	5/8/02
M,P,O-Xylene		mg/L	0.30	0.293	97	85 - 115	5/8/02

ICV (1)

QCBatch: QC20176

Param	Flag	Units	CCVs True Conc.	CCVs Found Conc.	CCVs Percent Recovery	Percent Recovery Limits	Date Analyzed
MTBE		mg/L	0.10	0.0977	98	85 - 115	5/8/02
Benzene		mg/L	0.10	0.0933	93	85 - 115	5/8/02
Toluene		mg/L	0.10	0.0953	95	85 - 115	5/8/02
Ethylbenzene		mg/L	0.10	0.099	99	85 - 115	5/8/02
M,P,O-Xylene		mg/L	0.30	0.299	100	85 - 115	5/8/02

CCV (1)

QCBatch: QC20214

Param	Flag	Units	CCVs True Conc.	CCVs Found Conc.	CCVs Percent Recovery	Percent Recovery Limits	Date Analyzed
Naphthalene		mg/L	60	59.81	99	80 - 120	5/8/02
Acenaphthylene		mg/L	60	63.69	106	80 - 120	5/8/02
Acenaphthene		mg/L	60	61.82	103	80 - 120	5/8/02
Fluorene		mg/L	60	58.4	97	80 - 120	5/8/02
Phenanthrene		mg/L	60	52.6	87	80 - 120	5/8/02
Anthracene		mg/L	60	53.88	89	80 - 120	5/8/02
Fluoranthene		mg/L	60	71.2	118	80 - 120	5/8/02
Pyrene		mg/L	60	59.57	99	80 - 120	5/8/02
Benzo(a)anthracene		mg/L	60	60.85	101	80 - 120	5/8/02
Chrysene		mg/L	60	59.44	99	80 - 120	5/8/02
Benzo(b)fluoranthene		mg/L	60	67.83	113	80 - 120	5/8/02
Benzo(k)fluoranthene		mg/L	60	61.15	101	80 - 120	5/8/02

Continued ...

... Continued

Param	Flag	Units	CCVs True Conc.	CCVs Found Conc.	CCVs Percent Recovery	Percent Recovery Limits	Date Analyzed
Benzo(a)pyrene		mg/L	60	57.46	95	80 - 120	5/8/02
Indeno(1,2,3-cd)pyrene		mg/L	60	50.38	83	80 - 120	5/8/02
Dibenzo(a,h)anthracene		mg/L	60	53.21	88	80 - 120	5/8/02
Benzo(g,h,i)perylene		mg/L	60	53.41	89	80 - 120	5/8/02
Nitrobenzene-d5		mg/L	60	60.79	101	80 - 120	5/8/02
2-Fluorobiphenyl		mg/L	60	65.57	109	80 - 120	5/8/02
Terphenyl-d14		mg/L	60	59.00	98	80 - 120	5/8/02

196324-26

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Lubbock, Texas 79424
Tel (806) 794-1296
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TraceAnalysis, Inc.

155 McCutcheon, Suite H
El Paso, Texas 79932
Tel (915) 585-3443
Fax (915) 585-4944
1 (888) 588-3443

CHAIN-OF-CUSTODY AND ANALYSIS REQUEST

LAB Order ID # 102050405

Company Name: Enercon Services
Phone #: 915-570-8726
Address: (Street, City, Zip) 306 West Wall, Suite 1312, Midland, Tx 79701
Fax #: 915-684-7587
Contact Person: Jeffrey Kindley
Invoice to: (If different from above) EQuiva Services Kyle Landiman
Incident # 300109
Project #: EQ-112
Project Name: Barber Ranch
Project Location: Lea County, New Mexico
Sampler Signature: Jeffrey Kindley

LAB # (LAB USE ONLY)	FIELD CODE	# CONTAINERS	Volume/Amount	MATRIX: WATER	SOIL	AIR	SLUDGE	PRESERVATIVE METHOD: HCl	HNO_3	H_2SO_4	NaOH	ICE	NONE	SAMPLING: DATE	TIME
196324	MW-5	1	1 Liter	✓									✓	05/02/02	1030
	MW-5	3	40ml	✓				✓						05/02/02	1030
25	MW-6	1	1 Liter	✓									✓	05/03/02	930
	MW-6	2	40ml	✓				✓						05/03/02	930
26	MW-7	1	1 Liter	✓									✓	05/03/02	945
	MW-7	2	40ml	✓				✓						05/03/02	945

ANALYSIS REQUEST (Circle or Specify Method No.)

MTBE 8021B/602	BTEX 8021B/602	TPH 418.1/TX1005	PAH 8270C	Total Metals Ag As Ba Cd Cr Pb Se Hg 6010B/200.7	TCLP Metals Ag As Ba Cd Cr Pb Se Hg	TCLP Volatiles	TCLP Semi Volatiles	TCLP Pesticides	RCI	GC/MS Vol. 8260B/624	GC/MS Semi. Vol. 8270C/625	PCB's 8082/608	Pesticides 8081A/608	BOD, TSS, pH	Turn Around Time if different from standard	Hold
	✓		✓													
	✓															
			✓													
	✓															
			✓													
	✓															

Relinquished by: Jeffrey Kindley Date: May 3 2002 Time: 1300
Received by: Date: 5/3/02 Time: 1300
Relinquished by: Date: 5/3/02 Time: 420
Received by: Date: Time:
Relinquished by: Date: Time:
Received at Laboratory by: Mell Green Date: 5-3-02 Time: 4:20 pm

LAB USE ONLY
Intact (Y) / N
Headspace Y / N
Temp 2 °
Log-in Review MM

REMARKS:
5/13 F/P
☐ Check If Special Reporting Limits Are Needed

Carrier # Carry in

Submittal of samples constitutes agreement to Terms and Conditions listed on reverse side of C.O.C.

ORIGINAL COPY

Summary Report

Kyle Landreneau
Equiva Kyle Landreneau
PMB 284 40 FM 1960 West
Houston, TX 77090

Report Date: May 10, 2002

Order ID Number: A02050807

Project: EQ-112
TA Job Code: Barber Ranch 3000109
Casualty Code: EQ-112
Project Location: Barber Lea County, New Mexico
Project Address:
Enercon Services Inc. / Midland / Jeff Kindley

Sample	Description	Matrix	Date Taken	Time Taken	Date Received
196491	MW-9 (13-15')	Soil	5/6/02	10:18	5/8/02
196492	MW-9 (25-27')	Soil	5/6/02	11:00	5/8/02
196493	S-4 (13-15')	Soil	5/6/02	14:30	5/8/02
196494	S-4 (28-29')	Soil	5/6/02	15:30	5/8/02

0 This report consists of a total of 1 page(s) and is intended only as a summary of results for the sample(s) listed above.

	BTEX					TPH DRO	TPH GRO
Sample - Field Code	Benzene (ppm)	Toluene (ppm)	Ethylbenzene (ppm)	M,P,O-Xylene (ppm)	Total BTEX (ppm)	DRO (ppm)	GRO (ppm)
196491 - MW-9 (13-15')	<0.010	<0.010	<0.010	<0.010	<0.010	<50.0	<1
196492 - MW-9 (25-27')	<0.010	<0.010	<0.010	<0.010	<0.010	<50.0	<1
196493 - S-4 (13-15')	<0.010	<0.010	<0.010	<0.010	<0.010	<50.0	<1
196494 - S-4 (28-29')	<0.020	<0.020	<0.020	<0.020	<0.020	<50.0	<2 [1]

[1]Sample diluted due to lack of sample extract.

This is only a summary. Please, refer to the complete report package for quality control data.

Summary Report

Kyle Landreneau
Equiva Kyle Landreneau
PMB 284 40 FM 1960 West
Houston, TX 77090

Report Date: May 13, 2002

Order ID Number: A02050807

Project: EQ-112
TA Job Code: Barber Ranch 3000109
Casualty Code: EQ-112
Project Location: Barber Lea County, New Mexico
Project Address:
Enercon Services Inc. / Midland / Jeff Kindley

Sample	Description	Matrix	Date Taken	Time Taken	Date Received
196495	MW-8	Water	5/6/02	12:30	5/8/02
196496	MW-9	Water	5/6/02	15:45	5/8/02

0 This report consists of a total of 2 page(s) and is intended only as a summary of results for the sample(s) listed above.

	BTEX				
Sample - Field Code	Benzene (ppm)	Toluene (ppm)	Ethylbenzene (ppm)	M,P,O-Xylene (ppm)	Total BTEX (ppm)
196495 - MW-8	<0.005	<0.005	<0.005	<0.005	<0.005
196496 - MW-9	<0.005	<0.005	<0.005	<0.005	<0.005

Sample: 196495 - MW-8

Param	Flag	Result	Units
Naphthalene		<0.0002	mg/L
Acenaphthylene		<0.0002	mg/L
Acenaphthene		<0.0002	mg/L
Fluorene		<0.0002	mg/L
Phenanthrene		<0.0002	mg/L
Anthracene		<0.0002	mg/L
Fluoranthene		<0.0002	mg/L
Pyrene		<0.0002	mg/L
Benzo(a)anthracene		<0.0002	mg/L
Chrysene		<0.0002	mg/L
Benzo(b)fluoranthene		<0.0002	mg/L
Benzo(k)fluoranthene		<0.0002	mg/L
Benzo(a)pyrene		<0.0002	mg/L
Indeno(1,2,3-cd)pyrene		<0.0002	mg/L
Dibenzo(a,h)anthracene		<0.0002	mg/L
Benzo(g,h,i)perylene		<0.0002	mg/L

Sample: 196496 - MW-9

Param	Flag	Result	Units
Naphthalene		0.00089	mg/L
Acenaphthylene		<0.0002	mg/L
Acenaphthene		<0.0002	mg/L
Fluorene		<0.0002	mg/L
Phenanthrene		<0.0002	mg/L
Anthracene		<0.0002	mg/L
Fluoranthene		<0.0002	mg/L
Pyrene		<0.0002	mg/L
Benzo(a)anthracene		<0.0002	mg/L
Chrysene		<0.0002	mg/L
Benzo(b)fluoranthene		<0.0002	mg/L
Benzo(k)fluoranthene		<0.0002	mg/L
Benzo(a)pyrene		<0.0002	mg/L
Indeno(1,2,3-cd)pyrene		<0.0002	mg/L
Dibenzo(a,h)anthracene		<0.0002	mg/L
Benzo(g,h,i)perylene		<0.0002	mg/L

TRACEANALYSIS, INC.

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E-Mail: lab@traceanalysis.com

Analytical and Quality Control Report

Kyle Landreneau
Equiva Kyle Landreneau
PMB 284 40 FM 1960 West
Houston, TX 77090

Report Date: May 13, 2002

Order ID Number: A02050807

Project: EQ-112
TA Job Code: Barber Ranch 3000109
Casualty Code: EQ-112
Project Location: Barber Lea County, New Mexico
Enercon Services Inc. / Midland / Jeff Kindley

Enclosed are the Analytical Results and Quality Control Data Reports for the following samples submitted to Trace-Analysis, Inc.

Sample	Description	Matrix	Date Taken	Time Taken	Date Received
196495	MW-8	Water	5/6/02	12:30	5/8/02
196496	MW-9	Water	5/6/02	15:45	5/8/02

These results represent only the samples received in the laboratory. The Quality Control Report is generated on a batch basis. All information contained in this report is for the analytical batch(es) in which your sample(s) were analyzed. Note: the RDL is equal to MQL for all organic analytes including TPH.
The test results contained within this report meet all requirements of LAC 33:I unless otherwise noted.

This report consists of a total of 7 pages and shall not be reproduced except in its entirety including the chain of custody (COC), without written approval of TraceAnalysis, Inc.

Dr. Blair Leftwich, Director

Analytical Report

Sample: 196495 - MW-8

Analysis:	BTEX	Analytical Method:	S 8021B	QC Batch:	QC20176	Date Analyzed:	5/8/02
Analyst:	CG	Preparation Method:	N/A	Prep Batch:	PB19323	Date Prepared:	5/8/02

Param	Flag	Result	Units	Dilution	RDL
Benzene		<0.005	mg/L	5	0.001
Toluene		<0.005	mg/L	5	0.001
Ethylbenzene		<0.005	mg/L	5	0.001
M,P,O-Xylene		<0.005	mg/L	5	0.001
Total BTEX		<0.005	mg/L	5	0.001

Surrogate	Flag	Result	Units	Dilution	Spike Amount	Percent Recovery	Recovery Limits
TFT		0.099	mg/L	5	0.10	99	70 - 130
4-BFB		0.0986	mg/L	5	0.10	99	70 - 130

Sample: 196495 - MW-8

Analysis:	PAH	Analytical Method:	S 8270C	QC Batch:	QC20214	Date Analyzed:	5/8/02
Analyst:	RC	Preparation Method:	N/A	Prep Batch:	PB19319	Date Prepared:	5/8/02

Param	Flag	Result	Units	Dilution	RDL
Naphthalene		<0.0002	mg/L	1	0.0002
Acenaphthylene		<0.0002	mg/L	1	0.0002
Acenaphthene		<0.0002	mg/L	1	0.0002
Fluorene		<0.0002	mg/L	1	0.0002
Phenanthrene		<0.0002	mg/L	1	0.0002
Anthracene		<0.0002	mg/L	1	0.0002
Fluoranthene		<0.0002	mg/L	1	0.0002
Pyrene		<0.0002	mg/L	1	0.0002
Benzo(a)anthracene		<0.0002	mg/L	1	0.0002
Chrysene		<0.0002	mg/L	1	0.0002
Benzo(b)fluoranthene		<0.0002	mg/L	1	0.0002
Benzo(k)fluoranthene		<0.0002	mg/L	1	0.0002
Benzo(a)pyrene		<0.0002	mg/L	1	0.0002
Indeno(1,2,3-cd)pyrene		<0.0002	mg/L	1	0.0002
Dibenzo(a,h)anthracene		<0.0002	mg/L	1	0.0002
Benzo(g,h,i)perylene		<0.0002	mg/L	1	0.0002

Surrogate	Flag	Result	Units	Dilution	Spike Amount	Percent Recovery	Recovery Limits
Nitrobenzene-d5		28.96	mg/L	1	80	36	35 - 114
2-Fluorobiphenyl		33.96	mg/L	1	80	42	43 - 116
Terphenyl-d14		26.78	mg/L	1	80	33	33 - 141

Sample: 196496 - MW-9

Analysis:	BTEX	Analytical Method:	S 8021B	QC Batch:	QC20176	Date Analyzed:	5/8/02
Analyst:	CG	Preparation Method:	N/A	Prep Batch:	PB19323	Date Prepared:	5/8/02

Param	Flag	Result	Units	Dilution	RDL
Benzene		<0.005	mg/L	5	0.001
Toluene		<0.005	mg/L	5	0.001
Ethylbenzene		<0.005	mg/L	5	0.001
M,P,O-Xylene		<0.005	mg/L	5	0.001
Total BTEX		<0.005	mg/L	5	0.001

Surrogate	Flag	Result	Units	Dilution	Spike Amount	Percent Recovery	Recovery Limits
TFT		0.0999	mg/L	5	0.10	100	70 - 130
4-BFB		0.097	mg/L	5	0.10	97	70 - 130

Sample: 196496 - MW-9

Analysis:	PAH	Analytical Method:	S 8270C	QC Batch:	QC20214	Date Analyzed:	5/8/02
Analyst:	RC	Preparation Method:	N/A	Prep Batch:	PB19319	Date Prepared:	5/8/02

Param	Flag	Result	Units	Dilution	RDL
Naphthalene		0.00089	mg/L	1	0.0002
Acenaphthylene		<0.0002	mg/L	1	0.0002
Acenaphthene		<0.0002	mg/L	1	0.0002
Fluorene		<0.0002	mg/L	1	0.0002
Phenanthrene		<0.0002	mg/L	1	0.0002
Anthracene		<0.0002	mg/L	1	0.0002
Fluoranthene		<0.0002	mg/L	1	0.0002
Pyrene		<0.0002	mg/L	1	0.0002
Benzo(a)anthracene		<0.0002	mg/L	1	0.0002
Chrysene		<0.0002	mg/L	1	0.0002
Benzo(b)fluoranthene		<0.0002	mg/L	1	0.0002
Benzo(k)fluoranthene		<0.0002	mg/L	1	0.0002
Benzo(a)pyrene		<0.0002	mg/L	1	0.0002
Indeno(1,2,3-cd)pyrene		<0.0002	mg/L	1	0.0002
Dibenzo(a,h)anthracene		<0.0002	mg/L	1	0.0002
Benzo(g,h,i)perylene		<0.0002	mg/L	1	0.0002

Surrogate	Flag	Result	Units	Dilution	Spike Amount	Percent Recovery	Recovery Limits
Nitrobenzene-d5		60.6	mg/L	1	80	75	35 - 114
2-Fluorobiphenyl		65.67	mg/L	1	80	82	43 - 116
Terphenyl-d14		39.91	mg/L	1	80	49	33 - 141

Quality Control Report
Method Blank

Method Blank

QCBatch: QC20176

Param	Flag	Results	Units	Reporting Limit
Benzene		<0.001	mg/L	0.001
Toluene		<0.001	mg/L	0.001
Ethylbenzene		<0.001	mg/L	0.001
M,P,O-Xylene		<0.001	mg/L	0.001
Total BTEX		<0.001	mg/L	0.001

Surrogate	Flag	Result	Units	Dilution	Spike Amount	Percent Recovery	Recovery Limits
TFT		0.108	mg/L	1	0.10	108	70 - 130
4-BFB		0.103	mg/L	1	0.10	103	70 - 130

Method Blank

QCBatch: QC20214

Param	Flag	Results	Units	Reporting Limit
Naphthalene		<0.0002	mg/L	0.0002
Acenaphthylene		<0.0002	mg/L	0.0002
Acenaphthene		<0.0002	mg/L	0.0002
Fluorene		<0.0002	mg/L	0.0002
Phenanthrene		<0.0002	mg/L	0.0002
Anthracene		<0.0002	mg/L	0.0002
Fluoranthene		<0.0002	mg/L	0.0002
Pyrene		<0.0002	mg/L	0.0002
Benzo(a)anthracene		<0.0002	mg/L	0.0002
Chrysene		<0.0002	mg/L	0.0002
Benzo(b)fluoranthene		<0.0002	mg/L	0.0002
Benzo(k)fluoranthene		<0.0002	mg/L	0.0002
Benzo(a)pyrene		<0.0002	mg/L	0.0002
Indeno(1,2,3-cd)pyrene		<0.0002	mg/L	0.0002
Dibenzo(a,h)anthracene		<0.0002	mg/L	0.0002
Benzo(g,h,i)perylene		<0.0002	mg/L	0.0002

Surrogate	Flag	Result	Units	Dilution	Spike Amount	Percent Recovery	Recovery Limits
Nitrobenzene-d5		68.71	mg/L	1	80	85	35 - 114
2-Fluorobiphenyl		75.42	mg/L	1	80	94	43 - 116
Terphenyl-d14		41.21	mg/L	1	80	51	33 - 141

Quality Control Report
Lab Control Spikes and Duplicate Spikes

Laboratory Control Spikes

QCBatch: QC20176

Param	LCS Result	LCSD Result	Units	Dil.	Spike Amount Added	Matrix Result	% Rec	RPD	% Rec Limit	RPD Limit
MTBE	0.103	0.102	mg/L	1	0.10	<0.001	103	1	70 - 130	20
Benzene	0.108	0.111	mg/L	1	0.10	<0.001	108	3	70 - 130	20
Toluene	0.107	0.108	mg/L	1	0.10	<0.001	107	1	70 - 130	20
Ethylbenzene	0.107	0.107	mg/L	1	0.10	<0.001	107	0	70 - 130	20
M,P,O-Xylene	0.320	0.318	mg/L	1	0.30	<0.001	107	1	70 - 130	20

Percent recovery is based on the spike result. RPD is based on the spike and spike duplicate result.

Surrogate	LCS Result	LCSD Result	Units	Dilution	Spike Amount	LCS % Rec	LCSD % Rec	Recovery Limits
TFT	0.106	0.109	mg/L	1	0.10	106	109	70 - 130
4-BFB	0.103	0.102	mg/L	1	0.10	103	102	70 - 130

Laboratory Control Spikes

QCBatch: QC20214

Param	LCS Result	LCSD Result	Units	Dil.	Spike Amount Added	Matrix Result	% Rec	RPD	% Rec Limit	RPD Limit
Naphthalene	56.16	59.94	mg/L	1	80	<0.0002	70	6	16 - 96	20
Acenaphthylene	63.57	69.07	mg/L	1	80	<0.0002	79	8	20 - 110	20
Acenaphthene	60.61	65.94	mg/L	1	80	<0.0002	75	8	18 - 108	20
Fluorene	56.98	63.87	mg/L	1	80	<0.0002	71	11	22 - 102	20
Phenanthrene	58.06	61.81	mg/L	1	80	<0.0002	72	6	25 - 103	20
Anthracene	59.98	63.59	mg/L	1	80	<0.0002	74	5	22 - 110	20
Fluoranthene	84.26	83.42	mg/L	1	80	<0.0002	105	1	21 - 110	20
Pyrene	63.91	63.47	mg/L	1	80	<0.0002	79	0	22 - 100	20
Benzo(a)anthracene	63.27	66.91	mg/L	1	80	<0.0002	79	5	30 - 99	20
Chrysene	56.61	61.45	mg/L	1	80	<0.0002	70	8	27 - 108	20
Benzo(b)fluoranthene	70.58	69.71	mg/L	1	80	<0.0002	88	1	19 - 102	20
Benzo(k)fluoranthene	72.81	77.54	mg/L	1	80	<0.0002	91	6	35 - 103	20
Benzo(a)pyrene	67.97	70.8	mg/L	1	80	<0.0002	84	4	24 - 105	20
Indeno(1,2,3-cd)pyrene	50.58	50.43	mg/L	1	80	<0.0002	63	0	22 - 108	20
Dibenzo(a,h)anthracene	42.84	43.81	mg/L	1	80	<0.0002	53	2	23 - 77	20
Benzo(g,h,i)perylene	53.45	61.02	mg/L	1	80	<0.0002	66	13	19 - 119	20

Percent recovery is based on the spike result. RPD is based on the spike and spike duplicate result.

Surrogate	LCS Result	LCSD Result	Units	Dilution	Spike Amount	LCS % Rec	LCSD % Rec	Recovery Limits
Nitrobenzene-d5	68.28	70.92	mg/L	1	80	85	88	35 - 114
2-Fluorobiphenyl	79.07	79.78	mg/L	1	80	98	99	43 - 116
Terphenyl-d14	42.35	42.05	mg/L	1	80	52	52	33 - 141

Quality Control Report
Continuing Calibration Verification Standards

CCV (1)

QCBatch: QC20176

Param	Flag	Units	CCVs True Conc.	CCVs Found Conc.	CCVs Percent Recovery	Percent Recovery Limits	Date Analyzed
MTBE		mg/L	0.10	0.0998	100	85 - 115	5/8/02
Benzene		mg/L	0.10	0.103	103	85 - 115	5/8/02
Toluene		mg/L	0.10	0.103	103	85 - 115	5/8/02
Ethylbenzene		mg/L	0.10	0.104	104	85 - 115	5/8/02
M,P,O-Xylene		mg/L	0.30	0.311	104	85 - 115	5/8/02

CCV (2)

QCBatch: QC20176

Param	Flag	Units	CCVs True Conc.	CCVs Found Conc.	CCVs Percent Recovery	Percent Recovery Limits	Date Analyzed
MTBE		mg/L	0.10	0.101	101	85 - 115	5/8/02
Benzene		mg/L	0.10	0.102	102	85 - 115	5/8/02
Toluene		mg/L	0.10	0.0991	99	85 - 115	5/8/02
Ethylbenzene		mg/L	0.10	0.0987	98	85 - 115	5/8/02
M,P,O-Xylene		mg/L	0.30	0.293	97	85 - 115	5/8/02

ICV (1)

QCBatch: QC20176

Param	Flag	Units	CCVs True Conc.	CCVs Found Conc.	CCVs Percent Recovery	Percent Recovery Limits	Date Analyzed
MTBE		mg/L	0.10	0.0977	98	85 - 115	5/8/02
Benzene		mg/L	0.10	0.0933	93	85 - 115	5/8/02
Toluene		mg/L	0.10	0.0953	95	85 - 115	5/8/02
Ethylbenzene		mg/L	0.10	0.099	99	85 - 115	5/8/02
M,P,O-Xylene		mg/L	0.30	0.299	100	85 - 115	5/8/02

CCV (1)

QCBatch: QC20214

Param	Flag	Units	CCVs True Conc.	CCVs Found Conc.	CCVs Percent Recovery	Percent Recovery Limits	Date Analyzed
Naphthalene		mg/L	60	59.81	99	80 - 120	5/8/02
Acenaphthylene		mg/L	60	63.69	106	80 - 120	5/8/02
Acenaphthene		mg/L	60	61.82	103	80 - 120	5/8/02
Fluorene		mg/L	60	58.4	97	80 - 120	5/8/02
Phenanthrene		mg/L	60	52.6	87	80 - 120	5/8/02
Anthracene		mg/L	60	53.88	89	80 - 120	5/8/02
Fluoranthene		mg/L	60	71.2	118	80 - 120	5/8/02
Pyrene		mg/L	60	59.57	99	80 - 120	5/8/02
Benzo(a)anthracene		mg/L	60	60.85	101	80 - 120	5/8/02
Chrysene		mg/L	60	59.44	99	80 - 120	5/8/02
Benzo(b)fluoranthene		mg/L	60	67.83	113	80 - 120	5/8/02
Benzo(k)fluoranthene		mg/L	60	61.15	101	80 - 120	5/8/02

Continued ...

... Continued

Param	Flag	Units	CCVs True Conc.	CCVs Found Conc.	CCVs Percent Recovery	Percent Recovery Limits	Date Analyzed
Benzo(a)pyrene		mg/L	60	57.46	95	80 - 120	5/8/02
Indeno(1,2,3-cd)pyrene		mg/L	60	50.38	83	80 - 120	5/8/02
Dibenzo(a,h)anthracene		mg/L	60	53.21	88	80 - 120	5/8/02
Benzo(g,h,i)perylene		mg/L	60	53.41	89	80 - 120	5/8/02
Nitrobenzene-d5		mg/L	60	60.79	101	80 - 120	5/8/02
2-Fluorobiphenyl		mg/L	60	65.57	109	80 - 120	5/8/02
Terphenyl-d14		mg/L	60	59.00	98	80 - 120	5/8/02

TRACEANALYSIS, INC.

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Analytical and Quality Control Report

Kyle Landreneau
Equiva Kyle Landreneau
PMB 284 40 FM 1960 West
Houston, TX 77090

Report Date: May 10, 2002

Order ID Number: A02050807

Project: EQ-112
TA Job Code: Barber Ranch 3000109
Casualty Code: EQ-112
Project Location: Barber Lea County, New Mexico
Enercon Services Inc. / Midland / Jeff Kindley

Enclosed are the Analytical Results and Quality Control Data Reports for the following samples submitted to Trace-Analysis, Inc.

Sample	Description	Matrix	Date Taken	Time Taken	Date Received
196491	MW-9 (13-15')	Soil	5/6/02	10:18	5/8/02
196492	MW-9 (25-27')	Soil	5/6/02	11:00	5/8/02
196493	S-4 (13-15')	Soil	5/6/02	14:30	5/8/02
196494	S-4 (28-29')	Soil	5/6/02	15:30	5/8/02

These results represent only the samples received in the laboratory. The Quality Control Report is generated on a batch basis. All information contained in this report is for the analytical batch(es) in which your sample(s) were analyzed. Note: the RDL is equal to MQL for all organic analytes including TPH.
The test results contained within this report meet all requirements of LAC 33:I unless otherwise noted.

This report consists of a total of 10 pages and shall not be reproduced except in its entirety including the chain of custody (COC), without written approval of TraceAnalysis, Inc.

Dr. Blair Leftwich, Director

Analytical Report

Sample: 196491 - MW-9 (13-15')

Analysis:	BTEX	Analytical Method:	S 8021B	QC Batch:	QC20177	Date Analyzed:	5/8/02
Analyst:	CG	Preparation Method:	N/A	Prep Batch:	PB19324	Date Prepared:	5/8/02

Param	Flag	Result	Units	Dilution	RDL
Benzene		<0.010	mg/Kg	10	0.001
Toluene		<0.010	mg/Kg	10	0.001
Ethylbenzene		<0.010	mg/Kg	10	0.001
M,P,O-Xylene		<0.010	mg/Kg	10	0.001
Total BTEX		<0.010	mg/Kg	10	0.001

Surrogate	Flag	Result	Units	Dilution	Spike Amount	Percent Recovery	Recovery Limits
TFT		0.790	mg/Kg	10	1	79	70 - 130
4-BFB		0.724	mg/Kg	10	1	72	70 - 130

Sample: 196491 - MW-9 (13-15')

Analysis:	TPH DRO	Analytical Method:	Mod. 8015B	QC Batch:	QC20207	Date Analyzed:	5/9/02
Analyst:	MM	Preparation Method:	N/A	Prep Batch:	PB19347	Date Prepared:	5/9/02

Param	Flag	Result	Units	Dilution	RDL
DRO		<50.0	mg/Kg	1	50

Surrogate	Flag	Result	Units	Dilution	Spike Amount	Percent Recovery	Recovery Limits
n-Triacontane		126	mg/Kg	1	150	84	70 - 130

Sample: 196491 - MW-9 (13-15')

Analysis:	TPH GRO	Analytical Method:	8015B	QC Batch:	QC20178	Date Analyzed:	5/8/02
Analyst:	CG	Preparation Method:	N/A	Prep Batch:	PB19324	Date Prepared:	5/8/02

Param	Flag	Result	Units	Dilution	RDL
GRO		<1	mg/Kg	10	0.10

Surrogate	Flag	Result	Units	Dilution	Spike Amount	Percent Recovery	Recovery Limits
TFT		1.2	mg/Kg	10	0.10	120	70 - 130
4-BFB		0.906	mg/Kg	10	0.10	91	70 - 130

Sample: 196492 - MW-9 (25-27')

Analysis:	BTEX	Analytical Method:	S 8021B	QC Batch:	QC20177	Date Analyzed:	5/8/02
Analyst:	CG	Preparation Method:	N/A	Prep Batch:	PB19324	Date Prepared:	5/8/02

Param	Flag	Result	Units	Dilution	RDL
Benzene		<0.010	mg/Kg	10	0.001
Toluene		<0.010	mg/Kg	10	0.001
Ethylbenzene		<0.010	mg/Kg	10	0.001
M,P,O-Xylene		<0.010	mg/Kg	10	0.001
Total BTEX		<0.010	mg/Kg	10	0.001

Surrogate	Flag	Result	Units	Dilution	Spike Amount	Percent Recovery	Recovery Limits
TFT		0.739	mg/Kg	10	1	74	70 - 130
4-BFB	[1]	0.667	mg/Kg	10	1	66	70 - 130

Sample: 196492 - MW-9 (25-27')

Analysis: TPH DRO | Analytical Method: Mod. 8015B | QC Batch: QC20207 | Date Analyzed: 5/9/02
Analyst: MM | Preparation Method: N/A | Prep Batch: PB19347 | Date Prepared: 5/9/02

Param	Flag	Result	Units	Dilution	RDL
DRO		<50.0	mg/Kg	1	50

Surrogate	Flag	Result	Units	Dilution	Spike Amount	Percent Recovery	Recovery Limits
n-Triacontane		124	mg/Kg	1	150	83	70 - 130

Sample: 196492 - MW-9 (25-27')

Analysis: TPH GRO | Analytical Method: 8015B | QC Batch: QC20178 | Date Analyzed: 5/8/02
Analyst: CG | Preparation Method: N/A | Prep Batch: PB19324 | Date Prepared: 5/8/02

Param	Flag	Result	Units	Dilution	RDL
GRO		<1	mg/Kg	10	0.10

Surrogate	Flag	Result	Units	Dilution	Spike Amount	Percent Recovery	Recovery Limits
TFT		1.16	mg/Kg	10	0.10	116	70 - 130
4-BFB		0.834	mg/Kg	10	0.10	83	70 - 130

Sample: 196493 - S-4 (13-15')

Analysis: BTEX | Analytical Method: S 8021B | QC Batch: QC20177 | Date Analyzed: 5/8/02
Analyst: CG | Preparation Method: N/A | Prep Batch: PB19324 | Date Prepared: 5/8/02

Param	Flag	Result	Units	Dilution	RDL
Benzene		<0.010	mg/Kg	10	0.001
Toluene		<0.010	mg/Kg	10	0.001
Ethylbenzene		<0.010	mg/Kg	10	0.001
M,P,O-Xylene		<0.010	mg/Kg	10	0.001

Continued ...

[1] Low surrogate recovery due to matrix interference. ICV, CCV, CCV show the method to be in control.

... Continued Sample: 196493 Analysis: BTEX

Param	Flag	Result	Units	Dilution	RDL
Total BTEX		<0.010	mg/Kg	10	0.001

Surrogate	Flag	Result	Units	Dilution	Spike Amount	Percent Recovery	Recovery Limits
TFT		0.831	mg/Kg	10	1	83	70 - 130
4-BFB		0.818	mg/Kg	10	1	82	70 - 130

Sample: 196493 - S-4 (13-15')

Analysis: TPH DRO Analytical Method: Mod. 8015B QC Batch: QC20207 Date Analyzed: 5/9/02
Analyst: MM Preparation Method: N/A Prep Batch: PB19347 Date Prepared: 5/9/02

Param	Flag	Result	Units	Dilution	RDL
DRO		<50.0	mg/Kg	1	50

Surrogate	Flag	Result	Units	Dilution	Spike Amount	Percent Recovery	Recovery Limits
n-Triacontane		123	mg/Kg	1	150	82	70 - 130

Sample: 196493 - S-4 (13-15')

Analysis: TPH GRO Analytical Method: 8015B QC Batch: QC20178 Date Analyzed: 5/8/02
Analyst: CG Preparation Method: N/A Prep Batch: PB19324 Date Prepared: 5/8/02

Param	Flag	Result	Units	Dilution	RDL
GRO		<1	mg/Kg	10	0.10

Surrogate	Flag	Result	Units	Dilution	Spike Amount	Percent Recovery	Recovery Limits
TFT		0.792	mg/Kg	10	0.10	79	70 - 130
4-BFB		0.94	mg/Kg	10	0.10	94	70 - 130

Sample: 196494 - S-4 (28-29')

Analysis: BTEX Analytical Method: S 8021B QC Batch: QC20177 Date Analyzed: 5/8/02
Analyst: CG Preparation Method: N/A Prep Batch: PB19324 Date Prepared: 5/8/02

Param	Flag	Result	Units	Dilution	RDL
Benzene		<0.020	mg/Kg	20	0.001
Toluene		<0.020	mg/Kg	20	0.001
Ethylbenzene		<0.020	mg/Kg	20	0.001
M,P,O-Xylene		<0.020	mg/Kg	20	0.001
Total BTEX		<0.020	mg/Kg	20	0.001
Test Comments	[2]	*	mg/Kg	1	

[2]Sample diluted due to lack of sample extract. Sample has a Benzene concentration of less than 0.0047 which is the MDL.

Surrogate	Flag	Result	Units	Dilution	Spike Amount	Percent Recovery	Recovery Limits
TFT		0.754	mg/Kg	20	1	75	70 - 130
4-BFB	[3]	0.695	mg/Kg	20	1	69	70 - 130

Sample: 196494 - S-4 (28-29')

Analysis:	TPH DRO	Analytical Method:	Mod. 8015B	QC Batch:	QC20207	Date Analyzed:	5/9/02
Analyst:	MM	Preparation Method:	N/A	Prep Batch:	PB19347	Date Prepared:	5/9/02

Param	Flag	Result	Units	Dilution	RDL
DRO		<50.0	mg/Kg	1	50

Surrogate	Flag	Result	Units	Dilution	Spike Amount	Percent Recovery	Recovery Limits
n-Triacontane		124	mg/Kg	1	150	83	70 - 130

Sample: 196494 - S-4 (28-29')

Analysis:	TPH GRO	Analytical Method:	8015B	QC Batch:	QC20178	Date Analyzed:	5/8/02
Analyst:	CG	Preparation Method:	N/A	Prep Batch:	PB19324	Date Prepared:	5/8/02

Param	Flag	Result	Units	Dilution	RDL
GRO	[4]	<2	mg/Kg	20	0.10

Surrogate	Flag	Result	Units	Dilution	Spike Amount	Percent Recovery	Recovery Limits
TFT		1	mg/Kg	20	0.10	100	70 - 130
4-BFB		0.94	mg/Kg	20	0.10	94	70 - 130

[3]Low surrogate recovery due to matrix interference. ICV, CCV, CCV show the method to be in control.
[4]Sample diluted due to lack of sample extract.

Quality Control Report
Method Blank

Method Blank

QCBatch: QC20177

Param	Flag	Results	Units	Reporting Limit
Benzene		<0.010	mg/Kg	0.001
Toluene		<0.010	mg/Kg	0.001
Ethylbenzene		<0.010	mg/Kg	0.001
M,P,O-Xylene		<0.010	mg/Kg	0.001
Total BTEX		<0.010	mg/Kg	0.001

Surrogate	Flag	Result	Units	Dilution	Spike Amount	Percent Recovery	Recovery Limits
TFT		0.948	mg/Kg	10	1	95	70 - 130
4-BFB		0.914	mg/Kg	10	1	91	70 - 130

Method Blank

QCBatch: QC20178

Param	Flag	Results	Units	Reporting Limit
GRO		<1	mg/Kg	0.10

Surrogate	Flag	Result	Units	Dilution	Spike Amount	Percent Recovery	Recovery Limits
TFT		1.01	mg/Kg	10	0.10	101	70 - 130
4-BFB		1.06	mg/Kg	10	0.10	106	70 - 130

Method Blank

QCBatch: QC20207

Param	Flag	Results	Units	Reporting Limit
DRO		<50.0	mg/Kg	50

Surrogate	Flag	Result	Units	Dilution	Spike Amount	Percent Recovery	Recovery Limits
n-Triacontane		125	mg/Kg	1	150	83	70 - 130

Quality Control Report
Lab Control Spikes and Duplicate Spikes

Laboratory Control Spikes

QCBatch: QC20177

Param	LCS Result	LCSD Result	Units	Dil.	Spike Amount Added	Matrix Result	% Rec	RPD	% Rec Limit	RPD Limit
MTBE	0.941	0.996	mg/Kg	10	1	<0.010	94	6	70 - 130	20
Benzene	0.941	0.950	mg/Kg	10	1	<0.010	94	1	70 - 130	20
Toluene	0.970	0.972	mg/Kg	10	1	<0.010	97	0	70 - 130	20
Ethylbenzene	0.955	0.957	mg/Kg	10	1	<0.010	95	0	70 - 130	20
M,P,O-Xylene	2.88	2.91	mg/Kg	10	3	<0.010	96	1	70 - 130	20

Percent recovery is based on the spike result. RPD is based on the spike and spike duplicate result.

Surrogate	LCS Result	LCSD Result	Units	Dilution	Spike Amount	LCS % Rec	LCSD % Rec	Recovery Limits
TFT	0.962	0.948	mg/Kg	10	1	96	95	70 - 130
4-BFB	0.976	0.967	mg/Kg	10	1	98	10	70 - 130

Laboratory Control Spikes

QCBatch: QC20178

Param	LCS Result	LCSD Result	Units	Dil.	Spike Amount Added	Matrix Result	% Rec	RPD	% Rec Limit	RPD Limit
GRO	9.29	9.63	mg/Kg	10	1	<1	93	3	80 - 120	20

Percent recovery is based on the spike result. RPD is based on the spike and spike duplicate result.

Surrogate	LCS Result	LCSD Result	Units	Dilution	Spike Amount	LCS % Rec	LCSD % Rec	Recovery Limits
TFT	0.929	0.968	mg/Kg	10	0.10	93	97	70 - 130
4-BFB	1.13	1.09	mg/Kg	10	0.10	113	109	70 - 130

Laboratory Control Spikes

QCBatch: QC20207

Param	LCS Result	LCSD Result	Units	Dil.	Spike Amount Added	Matrix Result	% Rec	RPD	% Rec Limit	RPD Limit
DRO	238	241	mg/Kg	1	250	<50.0	95	1	70 - 130	20

Percent recovery is based on the spike result. RPD is based on the spike and spike duplicate result.

Surrogate	LCS Result	LCSD Result	Units	Dilution	Spike Amount	LCS % Rec	LCSD % Rec	Recovery Limits
n-Triacontane	121	125	mg/Kg	1	150	81	83	70 - 130

Quality Control Report
Matrix Spikes and Duplicate Spikes

Matrix Spikes

QCBatch: QC20177

Param	MS Result	MSD Result	Units	Dil.	Spike Amount Added	Matrix Result	% Rec	RPD	% Rec Limit	RPD Limit
Benzene	0.772	0.752	mg/Kg	10	1	<0.010	77	3	70 - 130	20
Toluene	0.787	0.777	mg/Kg	10	1	<0.010	79	1	70 - 130	20
Ethylbenzene	0.786	0.765	mg/Kg	10	1	<0.010	79	3	70 - 130	20
M,P,O-Xylene	2.44	2.37	mg/Kg	10	3	<0.010	81	3	70 - 130	20

Percent recovery is based on the spike result. RPD is based on the spike and spike duplicate result.

Surrogate	MS Result	MSD Result	Units	Dilution	Spike Amount	MS % Rec	MSD % Rec	Recovery Limits
TFT	0.800	0.766	mg/Kg	10	1	80	77	70 - 130
4-BFB	0.814	0.776	mg/Kg	10	1	81	78	70 - 130

Matrix Spikes

QCBatch: QC20178

Param	MS Result	MSD Result	Units	Dil.	Spike Amount Added	Matrix Result	% Rec	RPD	% Rec Limit	RPD Limit
GRO	7.56	8.78	mg/Kg	10	1	<1	76	14	80 - 120	20

Percent recovery is based on the spike result. RPD is based on the spike and spike duplicate result.

Surrogate	MS Result	MSD Result	Units	Dilution	Spike Amount	MS % Rec	MSD % Rec	Recovery Limits
TFT	0.761	0.901	mg/Kg	10	0.10	76	90	70 - 130
4-BFB	0.964	0.926	mg/Kg	10	0.10	96	93	70 - 130

Matrix Spikes

QCBatch: QC20207

Param	MS Result	MSD Result	Units	Dil.	Spike Amount Added	Matrix Result	% Rec	RPD	% Rec Limit	RPD Limit
DRO	247	230	mg/Kg	1	250	<50.0	98	7	70 - 130	20

Percent recovery is based on the spike result. RPD is based on the spike and spike duplicate result.

Surrogate	MS Result	MSD Result	Units	Dilution	Spike Amount	MS % Rec	MSD % Rec	Recovery Limits
n-Triacontane	122	118	mg/Kg	1	150	81	79	70 - 130

Quality Control Report
Continuing Calibration Verification Standards

CCV (1)

QCBatch: QC20177

Param	Flag	Units	CCVs True Conc.	CCVs Found Conc.	CCVs Percent Recovery	Percent Recovery Limits	Date Analyzed
MTBE		mg/L	0.10	0.0983	98	85 - 115	5/8/02
Benzene		mg/L	0.10	0.092	92	85 - 115	5/8/02
Toluene		mg/L	0.10	0.0942	94	85 - 115	5/8/02
Ethylbenzene		mg/L	0.10	0.0927	93	85 - 115	5/8/02
M,P,O-Xylene		mg/L	0.30	0.280	93	85 - 115	5/8/02

CCV (2)

QCBatch: QC20177

Param	Flag	Units	CCVs True Conc.	CCVs Found Conc.	CCVs Percent Recovery	Percent Recovery Limits	Date Analyzed
MTBE		mg/L	0.10	0.0952	95	85 - 115	5/8/02
Benzene		mg/L	0.10	0.0867	86	85 - 115	5/8/02
Toluene		mg/L	0.10	0.0876	87	85 - 115	5/8/02
Ethylbenzene		mg/L	0.10	0.0867	86	85 - 115	5/8/02
M,P,O-Xylene		mg/L	0.30	0.273	91	85 - 115	5/8/02

ICV (1)

QCBatch: QC20177

Param	Flag	Units	CCVs True Conc.	CCVs Found Conc.	CCVs Percent Recovery	Percent Recovery Limits	Date Analyzed
MTBE		mg/L	0.10	0.0985	98	85 - 115	5/8/02
Benzene		mg/L	0.10	0.0949	95	85 - 115	5/8/02
Toluene		mg/L	0.10	0.0969	97	85 - 115	5/8/02
Ethylbenzene		mg/L	0.10	0.0965	96	85 - 115	5/8/02
M,P,O-Xylene		mg/L	0.30	0.298	99	85 - 115	5/8/02

CCV (1)

QCBatch: QC20178

Param	Flag	Units	CCVs True Conc.	CCVs Found Conc.	CCVs Percent Recovery	Percent Recovery Limits	Date Analyzed
GRO		mg/Kg	1	0.903	90	85 - 115	5/8/02

ICV (1)

QCBatch: QC20178

Param	Flag	Units	CCVs True Conc.	CCVs Found Conc.	CCVs Percent Recovery	Percent Recovery Limits	Date Analyzed
GRO		mg/Kg	1	0.99	99	85 - 115	5/8/02

CCV (1)

QCBatch: QC20207

Param	Flag	Units	CCVs True Conc.	CCVs Found Conc.	CCVs Percent Recovery	Percent Recovery Limits	Date Analyzed
DRO		mg/Kg	250	259	104	75 - 125	5/9/02

ICV (1)

QCBatch: QC20207

Param	Flag	Units	CCVs True Conc.	CCVs Found Conc.	CCVs Percent Recovery	Percent Recovery Limits	Date Analyzed
DRO		mg/Kg	250	237	94	75 - 125	5/9/02

Analytical and Quality Control Report

Jeff Kindley
Enercon Services Inc.
306 W. Wall Suite 1312
Midland, Tx. 79701

Report Date: May 14, 2002

Order ID Number: A02050807

Project Number: EQ-112
Project Name: Barber Ranch 3000109
Project Location: Barber Lea County, New Mexico

Enclosed are the Analytical Results and Quality Control Data Reports for the following samples submitted to Trace-Analysis, Inc.

Sample	Description	Matrix	Date Taken	Time Taken	Date Received
196491	MW-9 (13-15')	Soil	5/6/02	10:18	5/8/02
196492	MW-9 (25-27')	Soil	5/6/02	11:00	5/8/02
196493	S-4 (13-15')	Soil	5/6/02	14:30	5/8/02
196494	S-4 (28-29')	Soil	5/6/02	15:30	5/8/02

These results represent only the samples received in the laboratory. The Quality Control Report is generated on a batch basis. All information contained in this report is for the analytical batch(es) in which your sample(s) were analyzed. Note: the RDL is equal to MQL for all organic analytes including TPH.
The test results contained within this report meet all requirements of LAC 33:I unless otherwise noted.

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Dr. Blair Leftwich, Director

Analytical Report

Sample: 196491 - MW-9 (13-15')

Analysis:	BTEX	Analytical Method:	S 8021B	QC Batch:	QC20177	Date Analyzed:	5/8/02
Analyst:	CG	Preparation Method:	N/A	Prep Batch:	PB19324	Date Prepared:	5/8/02

Param	Flag	Result	Units	Dilution	RDL
Benzene		<0.010	mg/Kg	10	0.001
Toluene		<0.010	mg/Kg	10	0.001
Ethylbenzene		<0.010	mg/Kg	10	0.001
M,P,O-Xylene		<0.010	mg/Kg	10	0.001
Total BTEX		<0.010	mg/Kg	10	0.001

Surrogate	Flag	Result	Units	Dilution	Spike Amount	Percent Recovery	Recovery Limits
TFT		0.790	mg/Kg	10	1	79	70 - 130
4-BFB		0.724	mg/Kg	10	1	72	70 - 130

Sample: 196491 - MW-9 (13-15')

Analysis:	TPH DRO	Analytical Method:	Mod. 8015B	QC Batch:	QC20207	Date Analyzed:	5/9/02
Analyst:	MM	Preparation Method:	N/A	Prep Batch:	PB19347	Date Prepared:	5/9/02

Param	Flag	Result	Units	Dilution	RDL
DRO		<50.0	mg/Kg	1	50

Surrogate	Flag	Result	Units	Dilution	Spike Amount	Percent Recovery	Recovery Limits
n-Triacontane		126	mg/Kg	1	150	84	70 - 130

Sample: 196491 - MW-9 (13-15')

Analysis:	TPH GRO	Analytical Method:	8015B	QC Batch:	QC20178	Date Analyzed:	5/8/02
Analyst:	CG	Preparation Method:	N/A	Prep Batch:	PB19324	Date Prepared:	5/8/02

Param	Flag	Result	Units	Dilution	RDL
GRO		<1	mg/Kg	10	0.10

Surrogate	Flag	Result	Units	Dilution	Spike Amount	Percent Recovery	Recovery Limits
TFT		1.2	mg/Kg	10	0.10	120	70 - 130
4-BFB		0.906	mg/Kg	10	0.10	91	70 - 130

Sample: 196492 - MW-9 (25-27')

Analysis:	BTEX	Analytical Method:	S 8021B	QC Batch:	QC20177	Date Analyzed:	5/8/02
Analyst:	CG	Preparation Method:	N/A	Prep Batch:	PB19324	Date Prepared:	5/8/02

Param	Flag	Result	Units	Dilution	RDL
Benzene		<0.010	mg/Kg	10	0.001
Toluene		<0.010	mg/Kg	10	0.001
Ethylbenzene		<0.010	mg/Kg	10	0.001
M,P,O-Xylene		<0.010	mg/Kg	10	0.001
Total BTEX		<0.010	mg/Kg	10	0.001

Surrogate	Flag	Result	Units	Dilution	Spike Amount	Percent Recovery	Recovery Limits
TFT		0.739	mg/Kg	10	1	74	70 - 130
4-BFB	[1]	0.667	mg/Kg	10	1	66	70 - 130

Sample: 196492 - MW-9 (25-27')

Analysis:	TPH DRO	Analytical Method:	Mod. 8015B	QC Batch:	QC20207	Date Analyzed:	5/9/02
Analyst:	MM	Preparation Method:	N/A	Prep Batch:	PB19347	Date Prepared:	5/9/02

Param	Flag	Result	Units	Dilution	RDL
DRO		<50.0	mg/Kg	1	50

Surrogate	Flag	Result	Units	Dilution	Spike Amount	Percent Recovery	Recovery Limits
n-Triacontane		124	mg/Kg	1	150	83	70 - 130

Sample: 196492 - MW-9 (25-27')

Analysis:	TPH GRO	Analytical Method:	8015B	QC Batch:	QC20178	Date Analyzed:	5/8/02
Analyst:	CG	Preparation Method:	N/A	Prep Batch:	PB19324	Date Prepared:	5/8/02

Param	Flag	Result	Units	Dilution	RDL
GRO		<1	mg/Kg	10	0.10

Surrogate	Flag	Result	Units	Dilution	Spike Amount	Percent Recovery	Recovery Limits
TFT		1.16	mg/Kg	10	0.10	116	70 - 130
4-BFB		0.834	mg/Kg	10	0.10	83	70 - 130

Sample: 196493 - S-4 (13-15')

Analysis:	BTEX	Analytical Method:	S 8021B	QC Batch:	QC20177	Date Analyzed:	5/8/02
Analyst:	CG	Preparation Method:	N/A	Prep Batch:	PB19324	Date Prepared:	5/8/02

Param	Flag	Result	Units	Dilution	RDL
Benzene		<0.010	mg/Kg	10	0.001
Toluene		<0.010	mg/Kg	10	0.001
Ethylbenzene		<0.010	mg/Kg	10	0.001
M,P,O-Xylene		<0.010	mg/Kg	10	0.001

Continued ...

[1]Low surrogate recovery due to matrix interference. ICV, CCV, CCV show the method to be in control.

... *Continued* Sample: 196493 Analysis: BTEX

Param	Flag	Result	Units	Dilution	RDL
Total BTEX		<0.010	mg/Kg	10	0.001

Surrogate	Flag	Result	Units	Dilution	Spike Amount	Percent Recovery	Recovery Limits
TFT		0.831	mg/Kg	10	1	83	70 - 130
4-BFB		0.818	mg/Kg	10	1	82	70 - 130

Sample: 196493 - S-4 (13-15')

Analysis:	TPH DRO	Analytical Method:	Mod. 8015B	QC Batch:	QC20207	Date Analyzed:	5/9/02
Analyst:	MM	Preparation Method:	N/A	Prep Batch:	PB19347	Date Prepared:	5/9/02

Param	Flag	Result	Units	Dilution	RDL
DRO		<50.0	mg/Kg	1	50

Surrogate	Flag	Result	Units	Dilution	Spike Amount	Percent Recovery	Recovery Limits
n-Triacontane		123	mg/Kg	1	150	82	70 - 130

Sample: 196493 - S-4 (13-15')

Analysis:	TPH GRO	Analytical Method:	8015B	QC Batch:	QC20178	Date Analyzed:	5/8/02
Analyst:	CG	Preparation Method:	N/A	Prep Batch:	PB19324	Date Prepared:	5/8/02

Param	Flag	Result	Units	Dilution	RDL
GRO		<1	mg/Kg	10	0.10

Surrogate	Flag	Result	Units	Dilution	Spike Amount	Percent Recovery	Recovery Limits
TFT		0.792	mg/Kg	10	0.10	79	70 - 130
4-BFB		0.94	mg/Kg	10	0.10	94	70 - 130

Sample: 196494 - S-4 (28-29')

Analysis:	BTEX	Analytical Method:	S 8021B	QC Batch:	QC20177	Date Analyzed:	5/8/02
Analyst:	CG	Preparation Method:	N/A	Prep Batch:	PB19324	Date Prepared:	5/8/02

Param	Flag	Result	Units	Dilution	RDL
Benzene		<0.020	mg/Kg	20	0.001
Toluene		<0.020	mg/Kg	20	0.001
Ethylbenzene		<0.020	mg/Kg	20	0.001
M,P,O-Xylene		<0.020	mg/Kg	20	0.001
Total BTEX		<0.020	mg/Kg	20	0.001
Test Comments	[2]	*	mg/Kg	1	

[2]Sample diluted due to lack of sample extract. Sample has a Benzene concentration of less than 0.0047 which is the MDL.

Surrogate	Flag	Result	Units	Dilution	Spike Amount	Percent Recovery	Recovery Limits
TFT		0.754	mg/Kg	20	1	75	70 - 130
4-BFB	[3]	0.695	mg/Kg	20	1	69	70 - 130

Sample: 196494 - S-4 (28-29')

Analysis:	TPH DRO	Analytical Method:	Mod. 8015B	QC Batch:	QC20207	Date Analyzed:	5/9/02
Analyst:	MM	Preparation Method:	N/A	Prep Batch:	PB19347	Date Prepared:	5/9/02

Param	Flag	Result	Units	Dilution	RDL
DRO		<50.0	mg/Kg	1	50

Surrogate	Flag	Result	Units	Dilution	Spike Amount	Percent Recovery	Recovery Limits
n-Triacontane		124	mg/Kg	1	150	83	70 - 130

Sample: 196494 - S-4 (28-29')

Analysis:	TPH GRO	Analytical Method:	8015B	QC Batch:	QC20178	Date Analyzed:	5/8/02
Analyst:	CG	Preparation Method:	N/A	Prep Batch:	PB19324	Date Prepared:	5/8/02

Param	Flag	Result	Units	Dilution	RDL
GRO	[4]	<2	mg/Kg	20	0.10

Surrogate	Flag	Result	Units	Dilution	Spike Amount	Percent Recovery	Recovery Limits
TFT		1	mg/Kg	20	0.10	100	70 - 130
4-BFB		0.94	mg/Kg	20	0.10	94	70 - 130

[3]Low surrogate recovery due to matrix interference. ICV, CCV, CCV show the method to be in control.
[4]Sample diluted due to lack of sample extract.

Quality Control Report
Method Blank

Method Blank

QCBatch: QC20177

Param	Flag	Results	Units	Reporting Limit
Benzene		<0.010	mg/Kg	0.001
Toluene		<0.010	mg/Kg	0.001
Ethylbenzene		<0.010	mg/Kg	0.001
M,P,O-Xylene		<0.010	mg/Kg	0.001
Total BTEX		<0.010	mg/Kg	0.001

Surrogate	Flag	Result	Units	Dilution	Spike Amount	Percent Recovery	Recovery Limits
TFT		0.948	mg/Kg	10	1	95	70 - 130
4-BFB		0.914	mg/Kg	10	1	91	70 - 130

Method Blank

QCBatch: QC20178

Param	Flag	Results	Units	Reporting Limit
GRO		<1	mg/Kg	0.10

Surrogate	Flag	Result	Units	Dilution	Spike Amount	Percent Recovery	Recovery Limits
TFT		1.01	mg/Kg	10	0.10	101	70 - 130
4-BFB		1.06	mg/Kg	10	0.10	106	70 - 130

Method Blank

QCBatch: QC20207

Param	Flag	Results	Units	Reporting Limit
DRO		<50.0	mg/Kg	50

Surrogate	Flag	Result	Units	Dilution	Spike Amount	Percent Recovery	Recovery Limits
n-Triacontane		125	mg/Kg	1	150	83	70 - 130

Quality Control Report
Lab Control Spikes and Duplicate Spikes

Laboratory Control Spikes

QCBatch: QC20177

Param	LCS Result	LCSD Result	Units	Dil.	Spike Amount Added	Matrix Result	% Rec	RPD	% Rec Limit	RPD Limit
MTBE	0.941	0.996	mg/Kg	10	1	<0.010	94	6	70 - 130	20
Benzene	0.941	0.950	mg/Kg	10	1	<0.010	94	1	70 - 130	20
Toluene	0.970	0.972	mg/Kg	10	1	<0.010	97	0	70 - 130	20
Ethylbenzene	0.955	0.957	mg/Kg	10	1	<0.010	95	0	70 - 130	20
M,P,O-Xylene	2.88	2.91	mg/Kg	10	3	<0.010	96	1	70 - 130	20

Percent recovery is based on the spike result. RPD is based on the spike and spike duplicate result.

Surrogate	LCS Result	LCSD Result	Units	Dilution	Spike Amount	LCS % Rec	LCSD % Rec	Recovery Limits
TFT	0.962	0.948	mg/Kg	10	1	96	95	70 - 130
4-BFB	0.976	0.967	mg/Kg	10	1	98	10	70 - 130

Laboratory Control Spikes

QCBatch: QC20178

Param	LCS Result	LCSD Result	Units	Dil.	Spike Amount Added	Matrix Result	% Rec	RPD	% Rec Limit	RPD Limit
GRO	9.29	9.63	mg/Kg	10	1	<1	93	3	80 - 120	20

Percent recovery is based on the spike result. RPD is based on the spike and spike duplicate result.

Surrogate	LCS Result	LCSD Result	Units	Dilution	Spike Amount	LCS % Rec	LCSD % Rec	Recovery Limits
TFT	0.929	0.968	mg/Kg	10	0.10	93	97	70 - 130
4-BFB	1.13	1.09	mg/Kg	10	0.10	113	109	70 - 130

Laboratory Control Spikes

QCBatch: QC20207

Param	LCS Result	LCSD Result	Units	Dil.	Spike Amount Added	Matrix Result	% Rec	RPD	% Rec Limit	RPD Limit
DRO	238	241	mg/Kg	1	250	<50.0	95	1	70 - 130	20

Percent recovery is based on the spike result. RPD is based on the spike and spike duplicate result.

Surrogate	LCS Result	LCSD Result	Units	Dilution	Spike Amount	LCS % Rec	LCSD % Rec	Recovery Limits
n-Triacontane	121	125	mg/Kg	1	150	81	83	70 - 130

Quality Control Report
Matrix Spikes and Duplicate Spikes

Matrix Spikes

QCBatch: QC20177

Param	MS Result	MSD Result	Units	Dil.	Spike Amount Added	Matrix Result	% Rec	RPD	% Rec Limit	RPD Limit
Benzene	0.772	0.752	mg/Kg	10	1	<0.010	77	3	70 - 130	20
Toluene	0.787	0.777	mg/Kg	10	1	<0.010	79	1	70 - 130	20
Ethylbenzene	0.786	0.765	mg/Kg	10	1	<0.010	79	3	70 - 130	20
M,P,O-Xylene	2.44	2.37	mg/Kg	10	3	<0.010	81	3	70 - 130	20

Percent recovery is based on the spike result. RPD is based on the spike and spike duplicate result.

Surrogate	MS Result	MSD Result	Units	Dilution	Spike Amount	MS % Rec	MSD % Rec	Recovery Limits
TFT	0.800	0.766	mg/Kg	10	1	80	77	70 - 130
4-BFB	0.814	0.776	mg/Kg	10	1	81	78	70 - 130

Matrix Spikes

QCBatch: QC20178

Param	MS Result	MSD Result	Units	Dil.	Spike Amount Added	Matrix Result	% Rec	RPD	% Rec Limit	RPD Limit
GRO	7.56	8.78	mg/Kg	10	1	<1	76	14	80 - 120	20

Percent recovery is based on the spike result. RPD is based on the spike and spike duplicate result.

Surrogate	MS Result	MSD Result	Units	Dilution	Spike Amount	MS % Rec	MSD % Rec	Recovery Limits
TFT	0.761	0.901	mg/Kg	10	0.10	76	90	70 - 130
4-BFB	0.964	0.926	mg/Kg	10	0.10	96	93	70 - 130

Matrix Spikes

QCBatch: QC20207

Param	MS Result	MSD Result	Units	Dil.	Spike Amount Added	Matrix Result	% Rec	RPD	% Rec Limit	RPD Limit
DRO	247	230	mg/Kg	1	250	<50.0	98	7	70 - 130	20

Percent recovery is based on the spike result. RPD is based on the spike and spike duplicate result.

Surrogate	MS Result	MSD Result	Units	Dilution	Spike Amount	MS % Rec	MSD % Rec	Recovery Limits
n-Triacontane	122	118	mg/Kg	1	150	81	79	70 - 130

Quality Control Report
Continuing Calibration Verification Standards

CCV (1)

QCBatch: QC20177

Param	Flag	Units	CCVs True Conc.	CCVs Found Conc.	CCVs Percent Recovery	Percent Recovery Limits	Date Analyzed
MTBE		mg/L	0.10	0.0983	98	85 - 115	5/8/02
Benzene		mg/L	0.10	0.092	92	85 - 115	5/8/02
Toluene		mg/L	0.10	0.0942	94	85 - 115	5/8/02
Ethylbenzene		mg/L	0.10	0.0927	93	85 - 115	5/8/02
M,P,O-Xylene		mg/L	0.30	0.280	93	85 - 115	5/8/02

CCV (2)

QCBatch: QC20177

Param	Flag	Units	CCVs True Conc.	CCVs Found Conc.	CCVs Percent Recovery	Percent Recovery Limits	Date Analyzed
MTBE		mg/L	0.10	0.0952	95	85 - 115	5/8/02
Benzene		mg/L	0.10	0.0867	86	85 - 115	5/8/02
Toluene		mg/L	0.10	0.0876	87	85 - 115	5/8/02
Ethylbenzene		mg/L	0.10	0.0867	86	85 - 115	5/8/02
M,P,O-Xylene		mg/L	0.30	0.273	91	85 - 115	5/8/02

ICV (1)

QCBatch: QC20177

Param	Flag	Units	CCVs True Conc.	CCVs Found Conc.	CCVs Percent Recovery	Percent Recovery Limits	Date Analyzed
MTBE		mg/L	0.10	0.0985	98	85 - 115	5/8/02
Benzene		mg/L	0.10	0.0949	95	85 - 115	5/8/02
Toluene		mg/L	0.10	0.0969	97	85 - 115	5/8/02
Ethylbenzene		mg/L	0.10	0.0965	96	85 - 115	5/8/02
M,P,O-Xylene		mg/L	0.30	0.298	99	85 - 115	5/8/02

CCV (1)

QCBatch: QC20178

Param	Flag	Units	CCVs True Conc.	CCVs Found Conc.	CCVs Percent Recovery	Percent Recovery Limits	Date Analyzed
GRO		mg/Kg	1	0.903	90	85 - 115	5/8/02

ICV (1)

QCBatch: QC20178

Param	Flag	Units	CCVs True Conc.	CCVs Found Conc.	CCVs Percent Recovery	Percent Recovery Limits	Date Analyzed
GRO		mg/Kg	1	0.99	99	85 - 115	5/8/02

CCV (1)

QCBatch: QC20207

Param	Flag	Units	CCVs True Conc.	CCVs Found Conc.	CCVs Percent Recovery	Percent Recovery Limits	Date Analyzed
DRO		mg/Kg	250	259	104	75 - 125	5/9/02

ICV (1)

QCBatch: QC20207

Param	Flag	Units	CCVs True Conc.	CCVs Found Conc.	CCVs Percent Recovery	Percent Recovery Limits	Date Analyzed
DRO		mg/Kg	250	237	94	75 - 125	5/9/02

96491-96

TraceAnalysis, Inc.

6701 Aberdeen Avenue, Ste. 9 Lubbock, Texas 79424
Tel (806) 794 1296 Fax (806) 794 1298
1 (800) 378 1296

CHAIN-OF-CUSTODY RECORD AND ANALYSIS REQUEST

LAB Order ID #: A0205089?

Company Name: Enercon Services Inc
Phone #: 915-570-8726
Address: 3306 West Wall, Suite 1312, Midland, Tx 79701
Fax #: 915-684-7587
Contact Person: Jeffrey Kindley
Invoice to: Equiva Services
(If different from above) Attn: Kyle Landreneau
Incident # 300109
Project #: EQ-112
Project Name: Barber Ranch
Project Location: Lea County, New Mexico
Sampler Signature: Jeffrey Kindley

LAB # (LAB USE ONLY)	FIELD CODE	# CONTAINERS	Volume/Amount	MATRIX: WATER	SOIL	AIR	SLUDGE	PRESERVATIVE METHOD: HCL	HNO3	ICE	NONE	SAMPLING: DATE	TIME
196491	MW-9 (13-15')	1	4oz		✓						✓	05/06/02	1018
92	MW-9 (25-27')	1	4oz		✓						✓	05/06/02	1100
93	S-4 (13-15')	1	4oz		✓						✓	05/06/02	1430
94	S-4 (28-29')	1	4oz		✓						✓	05/06/02	1530
95	MW-8	3	Vials 40ml	✓				✓			✓	05/06/02	1230
96	MW-9	3	Vials 40ml	✓				✓			✓	05/06/02	1545

ANALYSIS REQUEST (Circle or Specify Method No.)

MTBE 8020/602	BTEX 8020/602	TPH	PAH 8270	Total Metals Ag As Ba Cd Cr Pb Hg Se	TCLP Metals Ag As Ba Cd Cr Pb Hg Se	TCLP Volatiles	TCLP Semi Volatiles	RCI	GC/MS Vol. 8240/8260/624	GC/MS Semi. Vol. 8270/625	PCB's 8080/608	Pest. 8080/608	BOD, TSS, PH	TPH (DRO/GRO) 8015 M *	TPH (TX 1005) extend to C38 **			Turn Around Time if different from standard	Hold
	✓												✓	✓					
	✓												✓	✓					
	✓												✓	✓					
	✓												✓	✓					
	✓		✓											✓					
	✓		✓											✓					

RHF 5/14/02 F 5/10

Relinquished by:	Date:	Time:	Received by:	Date:	Time:
Jeffrey Kindley	May 6, 2002	1800			
Relinquished by:	Date:	Time:	Received by:	Date:	Time:
Relinquished by:	Date:	Time:	Received at Laboratory by: Nell Green	Date: 5-8-02	Time: 9:30 am

LAB USE ONLY
Intact (Y) N
Headspace Y (N)
Temp 3°
Log-in Review

REMARKS:
* Need 3 day turnaround on TPH (DRO/GRO) call Jeff Kindley at 915-631-6591 and Bennett Howell at 972-484-3854 with results
** After running TPH (DRO/GRO) call for which Samples to be further analyzed for TX1005

Carrier # Trans 9052-877

Submittal of samples constitutes agreement to Terms and Conditions listed on reverse side of C.O.C.

Analytical and Quality Control Report

Jeff Kindley
Enercon Services Inc.
306 W. Wall Suite 1312
Midland, Tx. 79701

Report Date: May 17, 2002

Order ID Number: A02051010

Project Number: EQ-112
Project Name: Barber Ranch 3000109
Project Location: Barber Lea County, New Mexico

Enclosed are the Analytical Results and Quality Control Data Reports for the following samples submitted to Trace-Analysis, Inc.

Sample	Description	Matrix	Date Taken	Time Taken	Date Received
196728	MW-10 (8-10')	Soil	5/7/02	8:50	5/10/02
196729	MW-10 (25-27')	Soil	5/7/02	9:45	5/10/02
196730	S-1 (13-15')	Soil	5/7/02	15:20	5/10/02
196731	S-1 (27-28')	Soil	5/7/02	16:00	5/10/02
196732	MW-11 (13-15')	Soil	5/8/02	10:36	5/10/02
196733	MW-11 (26-28')	Soil	5/8/02	11:02	5/10/02
196734	MW-12 (13-15')	Soil	5/8/02	13:52	5/10/02
196735	MW-12 (27-28')	Soil	5/8/02	14:40	5/10/02

These results represent only the samples received in the laboratory. The Quality Control Report is generated on a batch basis. All information contained in this report is for the analytical batch(es) in which your sample(s) were analyzed. Note: the RDL is equal to MQL for all organic analytes including TPH.
The test results contained within this report meet all requirements of LAC 33:I unless otherwise noted.

This report consists of a total of 18 pages and shall not be reproduced except in its entirety including the chain of custody (COC), without written approval of TraceAnalysis, Inc.

for
Dr. Blair Leftwich, Director

Analytical Report

Sample: 196728 - MW-10 (8-10')

Analysis:	BTEX	Analytical Method:	S 8021B	QC Batch:	QC20232	Date Analyzed:	5/10/02
Analyst:	CG	Preparation Method:	S 5035	Prep Batch:	PB19360	Date Prepared:	5/10/02

Param	Flag	Result	Units	Dilution	RDL
Benzene		<0.200	mg/Kg	200	0.001
Toluene		0.511	mg/Kg	200	0.001
Ethylbenzene		0.298	mg/Kg	200	0.001
M,P,O-Xylene		0.663	mg/Kg	200	0.001
Total BTEX		1.47	mg/Kg	200	0.001
Test Comments	[1]	*	mg/Kg	1	

Surrogate	Flag	Result	Units	Dilution	Spike Amount	Percent Recovery	Recovery Limits
TFT		0.87	mg/Kg	200	1	87	70 - 130
4-BFB	[2]	4.05	mg/Kg	200	1	405	70 - 130

Sample: 196728 - MW-10 (8-10')

Analysis:	TPH DRO	Analytical Method:	Mod. 8015B	QC Batch:	QC20349	Date Analyzed:	5/15/02
Analyst:	MM	Preparation Method:	3550 B	Prep Batch:	PB19453	Date Prepared:	5/15/02

Param	Flag	Result	Units	Dilution	RDL
DRO		767	mg/Kg	1	50

Surrogate	Flag	Result	Units	Dilution	Spike Amount	Percent Recovery	Recovery Limits
n-Triacontane		140	mg/Kg	1	150	93	70 - 130

Sample: 196728 - MW-10 (8-10')

Analysis:	TPH GRO	Analytical Method:	8015B	QC Batch:	QC20233	Date Analyzed:	5/10/02
Analyst:	CG	Preparation Method:	5035	Prep Batch:	PB19360	Date Prepared:	5/10/02

Param	Flag	Result	Units	Dilution	RDL
GRO		202	mg/Kg	200	0.10

Surrogate	Flag	Result	Units	Dilution	Spike Amount	Percent Recovery	Recovery Limits
TFT	[3]	0.482	mg/Kg	200	0.10	48	70 - 130
4-BFB	[4]	12.6	mg/Kg	200	0.10	126	70 - 130

[1]Samplediluted due to hydrocarbons beyond xylene. Sample has a Benzene concentration of less than 0.0473 which is the MDL.
[2]High surrogate recovery due to peak interference.
[3]Low surrogate recovrey due to matrix interference. ICV, CCV show the method to be in control.
[4]High surrogate recovery due to peak interference.

Sample: 196729 - MW-10 (25-27')

Analysis:	BTEX	Analytical Method:	S 8021B	QC Batch:	QC20232	Date Analyzed:	5/10/02
Analyst:	CG	Preparation Method:	S 5035	Prep Batch:	PB19360	Date Prepared:	5/10/02

Param	Flag	Result	Units	Dilution	RDL
Benzene		<0.050	mg/Kg	50	0.001
Toluene		<0.050	mg/Kg	50	0.001
Ethylbenzene		<0.050	mg/Kg	50	0.001
M,P,O-Xylene		<0.050	mg/Kg	50	0.001
Total BTEX		<0.050	mg/Kg	50	0.001
Test Comments	[5]	*	mg/Kg	1	

Surrogate	Flag	Result	Units	Dilution	Spike Amount	Percent Recovery	Recovery Limits
TFT		0.816	mg/Kg	50	1	81	70 - 130
4-BFB		0.89	mg/Kg	50	1	89	70 - 130

Sample: 196729 - MW-10 (25-27')

Analysis:	TPH DRO	Analytical Method:	Mod. 8015B	QC Batch:	QC20301	Date Analyzed:	5/14/02
Analyst:	MM	Preparation Method:	3550 B	Prep Batch:	PB19416	Date Prepared:	5/13/02

Param	Flag	Result	Units	Dilution	RDL
DRO		<50.0	mg/Kg	1	50

Surrogate	Flag	Result	Units	Dilution	Spike Amount	Percent Recovery	Recovery Limits
n-Triacontane		173	mg/Kg	1	150	115	70 - 130

Sample: 196729 - MW-10 (25-27')

Analysis:	TPH GRO	Analytical Method:	8015B	QC Batch:	QC20233	Date Analyzed:	5/10/02
Analyst:	CG	Preparation Method:	5035	Prep Batch:	PB19360	Date Prepared:	5/10/02

Param	Flag	Result	Units	Dilution	RDL
GRO		17.2	mg/Kg	50	0.10

Surrogate	Flag	Result	Units	Dilution	Spike Amount	Percent Recovery	Recovery Limits
TFT	[6]	0.68	mg/Kg	50	0.10	68	70 - 130
4-BFB	[7]	2.14	mg/Kg	50	0.10	214	70 - 130

Sample: 196730 - S-1 (13-15')

Analysis:	BTEX	Analytical Method:	S 8021B	QC Batch:	QC20232	Date Analyzed:	5/10/02
Analyst:	CG	Preparation Method:	S 5035	Prep Batch:	PB19360	Date Prepared:	5/10/02

[5]Samplediluted due to hydrocarbons beyond xylene. Sample has a Benzene concentration of less than 0.01183 which is the MDL.
[6]Low surrogate recovrey due to matrix interference. ICV, CCV show the method to be in control.
[7]High surrogate recovery due to peak interference.

Param	Flag	Result	Units	Dilution	RDL
Benzene		<0.020	mg/Kg	20	0.001
Toluene		<0.020	mg/Kg	20	0.001
Ethylbenzene		<0.020	mg/Kg	20	0.001
M,P,O-Xylene		<0.020	mg/Kg	20	0.001
Total BTEX		<0.020	mg/Kg	20	0.001
Test Comments	[8]	*	mg/Kg	1	

Surrogate	Flag	Result	Units	Dilution	Spike Amount	Percent Recovery	Recovery Limits
TFT		0.775	mg/Kg	20	1	77	70 - 130
4-BFB		0.743	mg/Kg	20	1	74	70 - 130

Sample: 196730 - S-1 (13-15')

Analysis: TPH DRO | Analytical Method: Mod. 8015B | QC Batch: QC20301 | Date Analyzed: 5/14/02
Analyst: MM | Preparation Method: 3550 B | Prep Batch: PB19416 | Date Prepared: 5/13/02

Param	Flag	Result	Units	Dilution	RDL
DRO		<50.0	mg/Kg	1	50

Surrogate	Flag	Result	Units	Dilution	Spike Amount	Percent Recovery	Recovery Limits
n-Triacontane		166	mg/Kg	1	150	111	70 - 130

Sample: 196730 - S-1 (13-15')

Analysis: TPH GRO | Analytical Method: 8015B | QC Batch: QC20233 | Date Analyzed: 5/10/02
Analyst: CG | Preparation Method: 5035 | Prep Batch: PB19360 | Date Prepared: 5/10/02

Param	Flag	Result	Units	Dilution	RDL
GRO	[9]	<2	mg/Kg	20	0.10

Surrogate	Flag	Result	Units	Dilution	Spike Amount	Percent Recovery	Recovery Limits
TFT		0.794	mg/Kg	20	0.10	79	70 - 130
4-BFB		0.962	mg/Kg	20	0.10	96	70 - 130

Sample: 196731 - S-1 (27-28')

Analysis: BTEX | Analytical Method: S 8021B | QC Batch: QC20274 | Date Analyzed: 5/13/02
Analyst: CG | Preparation Method: S 5035 | Prep Batch: PB19399 | Date Prepared: 5/13/02

Param	Flag	Result	Units	Dilution	RDL
Benzene		<0.010	mg/Kg	10	0.001
Toluene		0.0922	mg/Kg	10	0.001

Continued ...

[8]Sample diluted due to turbidity. Sample has a Benzene concentration of less than 0.00473 which is the MDL.
[9]Sample diluted due to turbidity.

... Continued Sample: 196731 Analysis: BTEX

Param	Flag	Result	Units	Dilution	RDL
Ethylbenzene		0.0146	mg/Kg	10	0.001
M,P,O-Xylene		<0.010	mg/Kg	10	0.001
Total BTEX		0.107	mg/Kg	10	0.001

Surrogate	Flag	Result	Units	Dilution	Spike Amount	Percent Recovery	Recovery Limits
TFT		0.703	mg/Kg	10	1	70	70 - 130
4-BFB		0.738	mg/Kg	10	1	74	70 - 130

Sample: 196731 - S-1 (27-28')

Analysis: TPH DRO | Analytical Method: Mod. 8015B | QC Batch: QC20301 | Date Analyzed: 5/14/02
Analyst: MM | Preparation Method: 3550 B | Prep Batch: PB19416 | Date Prepared: 5/13/02

Param	Flag	Result	Units	Dilution	RDL
DRO		<50.0	mg/Kg	1	50

Surrogate	Flag	Result	Units	Dilution	Spike Amount	Percent Recovery	Recovery Limits
n-Triacontane		173	mg/Kg	1	150	115	70 - 130

Sample: 196731 - S-1 (27-28')

Analysis: TPH GRO | Analytical Method: 8015B | QC Batch: QC20275 | Date Analyzed: 5/13/02
Analyst: CG | Preparation Method: 5035 | Prep Batch: PB19399 | Date Prepared: 5/13/02

Param	Flag	Result	Units	Dilution	RDL
GRO		<1.00	mg/Kg	10	0.10

Surrogate	Flag	Result	Units	Dilution	Spike Amount	Percent Recovery	Recovery Limits
TFT		1.22	mg/Kg	10	0.10	122	70 - 130
4-BFB		0.905	mg/Kg	10	0.10	90	70 - 130

Sample: 196732 - MW-11 (13-15')

Analysis: BTEX | Analytical Method: S 8021B | QC Batch: QC20232 | Date Analyzed: 5/10/02
Analyst: CG | Preparation Method: S 5035 | Prep Batch: PB19360 | Date Prepared: 5/10/02

Param	Flag	Result	Units	Dilution	RDL
Benzene		<0.010	mg/Kg	10	0.001
Toluene		<0.010	mg/Kg	10	0.001
Ethylbenzene		<0.010	mg/Kg	10	0.001
M,P,O-Xylene		<0.010	mg/Kg	10	0.001
Total BTEX		<0.010	mg/Kg	10	0.001

Surrogate	Flag	Result	Units	Dilution	Spike Amount	Percent Recovery	Recovery Limits
TFT	[10]	0.648	mg/Kg	10	1	64	70 - 130
4-BFB	[11]	0.581	mg/Kg	10	1	58	70 - 130

Sample: 196732 - MW-11 (13-15')

Analysis:	TPH DRO	Analytical Method:	Mod. 8015B	QC Batch:	QC20301	Date Analyzed:	5/14/02
Analyst:	MM	Preparation Method:	3550 B	Prep Batch:	PB19416	Date Prepared:	5/13/02

Param	Flag	Result	Units	Dilution	RDL
DRO		<50.0	mg/Kg	1	50

Surrogate	Flag	Result	Units	Dilution	Spike Amount	Percent Recovery	Recovery Limits
n-Triacontane		168	mg/Kg	1	150	112	70 - 130

Sample: 196732 - MW-11 (13-15')

Analysis:	TPH GRO	Analytical Method:	8015B	QC Batch:	QC20233	Date Analyzed:	5/10/02
Analyst:	CG	Preparation Method:	5035	Prep Batch:	PB19360	Date Prepared:	5/10/02

Param	Flag	Result	Units	Dilution	RDL
GRO		<1	mg/Kg	10	0.10

Surrogate	Flag	Result	Units	Dilution	Spike Amount	Percent Recovery	Recovery Limits
TFT		0.785	mg/Kg	10	0.10	79	70 - 130
4-BFB		0.743	mg/Kg	10	0.10	74	70 - 130

Sample: 196733 - MW-11 (26-28')

Analysis:	BTEX	Analytical Method:	S 8021B	QC Batch:	QC20232	Date Analyzed:	5/10/02
Analyst:	CG	Preparation Method:	S 5035	Prep Batch:	PB19360	Date Prepared:	5/10/02

Param	Flag	Result	Units	Dilution	RDL
Benzene		<0.010	mg/Kg	10	0.001
Toluene		<0.010	mg/Kg	10	0.001
Ethylbenzene		<0.010	mg/Kg	10	0.001
M,P,O-Xylene		<0.010	mg/Kg	10	0.001
Total BTEX		<0.010	mg/Kg	10	0.001

Surrogate	Flag	Result	Units	Dilution	Spike Amount	Percent Recovery	Recovery Limits
TFT	[12]	0.66	mg/Kg	10	1	66	70 - 130

Continued ...

[10]Low surrogate recovery due to matrix interference. ICV, CCV show the method to be in control.
[11]Low surrogate recovery due to matrix interference. ICV, CCV show the method to be in control.
[12]Low surrogate recovery due to matrix interference. ICV, CCV show the method to be in control.

Surrogate	Flag	Result	Units	Dilution	Spike Amount	Percent Recovery	Recovery Limits
4-BFB	[13]	0.63	mg/Kg	10	1	63	70 - 130

Sample: 196733 - MW-11 (26-28')

Analysis:	TPH DRO	Analytical Method:	Mod. 8015B	QC Batch:	QC20349	Date Analyzed:	5/15/02
Analyst:	MM	Preparation Method:	3550 B	Prep Batch:	PB19453	Date Prepared:	5/15/02

Param	Flag	Result	Units	Dilution	RDL
DRO		<50.0	mg/Kg	1	50

Surrogate	Flag	Result	Units	Dilution	Spike Amount	Percent Recovery	Recovery Limits
n-Triacontane		128	mg/Kg	1	150	85	70 - 130

Sample: 196733 - MW-11 (26-28')

Analysis:	TPH GRO	Analytical Method:	8015B	QC Batch:	QC20233	Date Analyzed:	5/10/02
Analyst:	CG	Preparation Method:	5035	Prep Batch:	PB19360	Date Prepared:	5/10/02

Param	Flag	Result	Units	Dilution	RDL
GRO		<1	mg/Kg	10	0.10

Surrogate	Flag	Result	Units	Dilution	Spike Amount	Percent Recovery	Recovery Limits
TFT		1.09	mg/Kg	10	0.10	109	70 - 130
4-BFB		0.757	mg/Kg	10	0.10	76	70 - 130

Sample: 196734 - MW-12 (13-15')

Analysis:	BTEX	Analytical Method:	S 8021B	QC Batch:	QC20232	Date Analyzed:	5/10/02
Analyst:	CG	Preparation Method:	S 5035	Prep Batch:	PB19360	Date Prepared:	5/10/02

Param	Flag	Result	Units	Dilution	RDL
Benzene		<0.010	mg/Kg	10	0.001
Toluene		<0.010	mg/Kg	10	0.001
Ethylbenzene		<0.010	mg/Kg	10	0.001
M,P,O-Xylene		<0.010	mg/Kg	10	0.001
Total BTEX		<0.010	mg/Kg	10	0.001

Surrogate	Flag	Result	Units	Dilution	Spike Amount	Percent Recovery	Recovery Limits
TFT		0.778	mg/Kg	10	1	77	70 - 130
4-BFB		0.747	mg/Kg	10	1	74	70 - 130

[13]Low surrogate recovery due to matrix interference. ICV, CCV show the method to be in control.

Sample: 196734 - MW-12 (13-15')

Analysis:	TPH DRO	Analytical Method:	Mod. 8015B	QC Batch:	QC20301	Date Analyzed:	5/14/02
Analyst:	MM	Preparation Method:	3550 B	Prep Batch:	PB19416	Date Prepared:	5/13/02

Param	Flag	Result	Units	Dilution	RDL
DRO		<50.0	mg/Kg	1	50

Surrogate	Flag	Result	Units	Dilution	Spike Amount	Percent Recovery	Recovery Limits
n-Triacontane		161	mg/Kg	1	150	107	70 - 130

Sample: 196734 - MW-12 (13-15')

Analysis:	TPH GRO	Analytical Method:	8015B	QC Batch:	QC20233	Date Analyzed:	5/10/02
Analyst:	CG	Preparation Method:	5035	Prep Batch:	PB19360	Date Prepared:	5/10/02

Param	Flag	Result	Units	Dilution	RDL
GRO		<1	mg/Kg	10	0.10

Surrogate	Flag	Result	Units	Dilution	Spike Amount	Percent Recovery	Recovery Limits
TFT		1.16	mg/Kg	10	0.10	116	70 - 130
4-BFB		0.888	mg/Kg	10	0.10	89	70 - 130

Sample: 196735 - MW-12 (27-28')

Analysis:	BTEX	Analytical Method:	S 8021B	QC Batch:	QC20232	Date Analyzed:	5/10/02
Analyst:	CG	Preparation Method:	S 5035	Prep Batch:	PB19360	Date Prepared:	5/10/02

Param	Flag	Result	Units	Dilution	RDL
Benzene		<0.050	mg/Kg	50	0.001
Toluene		<0.050	mg/Kg	50	0.001
Ethylbenzene		0.397	mg/Kg	50	0.001
M,P,O-Xylene		1.24	mg/Kg	50	0.001
Total BTEX		1.64	mg/Kg	50	0.001
Test Comments	[14]	*	mg/Kg	1	

Surrogate	Flag	Result	Units	Dilution	Spike Amount	Percent Recovery	Recovery Limits
TFT		0.836	mg/Kg	50	1	83	70 - 130
4-BFB	[15]	1.35	mg/Kg	50	1	135	70 - 130

Sample: 196735 - MW-12 (27-28')

Analysis:	TPH DRO	Analytical Method:	Mod. 8015B	QC Batch:	QC20301	Date Analyzed:	5/14/02
Analyst:	MM	Preparation Method:	3550 B	Prep Batch:	PB19416	Date Prepared:	5/13/02

[14]Sample diluted due to hydrocarbons beyond xylene. Sample has a Benzene concentration of less than 0.01183 which is the MDL.
[15]High surrogate recovery due to peak interference.

Param	Flag	Result	Units	Dilution	RDL
DRO		<50.0	mg/Kg	1	50

Surrogate	Flag	Result	Units	Dilution	Spike Amount	Percent Recovery	Recovery Limits
n-Triacontane		167	mg/Kg	1	150	111	70 - 130

Sample: 196735 - MW-12 (27-28')

Analysis:	TPH GRO	Analytical Method:	8015B	QC Batch:	QC20233	Date Analyzed:	5/10/02
Analyst:	CG	Preparation Method:	5035	Prep Batch:	PB19360	Date Prepared:	5/10/02

Param	Flag	Result	Units	Dilution	RDL
GRO		79.7	mg/Kg	50	0.10

Surrogate	Flag	Result	Units	Dilution	Spike Amount	Percent Recovery	Recovery Limits
TFT	[16]	0.468	mg/Kg	50	0.10	47	70 - 130
4-BFB	[17]	2.68	mg/Kg	50	0.10	268	70 - 130

[16] Low surrogate recovrey due to matrix interference. ICV, CCV show the method to be in control.
[17] High surrogate recovery due to peak interference.

Quality Control Report
Method Blank

Method Blank

QCBatch: QC20232

Param	Flag	Results	Units	Reporting Limit
Benzene		<0.010	mg/Kg	0.001
Toluene		<0.010	mg/Kg	0.001
Ethylbenzene		<0.010	mg/Kg	0.001
M,P,O-Xylene		<0.010	mg/Kg	0.001
Total BTEX		<0.010	mg/Kg	0.001

Surrogate	Flag	Result	Units	Dilution	Spike Amount	Percent Recovery	Recovery Limits
TFT		0.905	mg/Kg	10	1	90	70 - 130
4-BFB		0.931	mg/Kg	10	1	93	70 - 130

Method Blank

QCBatch: QC20233

Param	Flag	Results	Units	Reporting Limit
GRO		<1	mg/Kg	0.10

Surrogate	Flag	Result	Units	Dilution	Spike Amount	Percent Recovery	Recovery Limits
TFT		1	mg/Kg	10	0.10	100	70 - 130
4-BFB		1.07	mg/Kg	10	0.10	107	70 - 130

Method Blank

QCBatch: QC20274

Param	Flag	Results	Units	Reporting Limit
Benzene		<0.010	mg/Kg	0.001
Toluene		<0.010	mg/Kg	0.001
Ethylbenzene		<0.010	mg/Kg	0.001
M,P,O-Xylene		<0.010	mg/Kg	0.001
Total BTEX		<0.010	mg/Kg	0.001

Surrogate	Flag	Result	Units	Dilution	Spike Amount	Percent Recovery	Recovery Limits
TFT		0.846	mg/Kg	10	1	85	70 - 130
4-BFB		0.810	mg/Kg	10	1	81	70 - 130

Method Blank

QCBatch: QC20275

Param	Flag	Results	Units	Reporting Limit
GRO		<1	mg/Kg	0.10

Surrogate	Flag	Result	Units	Dilution	Spike Amount	Percent Recovery	Recovery Limits
TFT		1.00	mg/Kg	10	0.10	100	70 - 130
4-BFB		1.04	mg/Kg	10	0.10	104	70 - 130

Method Blank

QCBatch: QC20301

Param	Flag	Results	Units	Reporting Limit
DRO		<50.0	mg/Kg	50

Surrogate	Flag	Result	Units	Dilution	Spike Amount	Percent Recovery	Recovery Limits
n-Triacontane		176	mg/Kg	1	150	117	70 - 130

Method Blank

QCBatch: QC20349

Param	Flag	Results	Units	Reporting Limit
DRO		<50.0	mg/Kg	50

Surrogate	Flag	Result	Units	Dilution	Spike Amount	Percent Recovery	Recovery Limits
n-Triacontane		130	mg/Kg	1	150	86	70 - 130

Quality Control Report
Lab Control Spikes and Duplicate Spikes

Laboratory Control Spikes

QCBatch: QC20232

Param	LCS Result	LCSD Result	Units	Dil.	Spike Amount Added	Matrix Result	% Rec	RPD	% Rec Limit	RPD Limit
MTBE	0.92	0.957	mg/Kg	10	1	<0.010	92	3	70 - 130	20
Benzene	0.925	0.929	mg/Kg	10	1	<0.010	92	0	70 - 130	20
Toluene	0.961	0.951	mg/Kg	10	1	<0.010	96	1	70 - 130	20
Ethylbenzene	0.954	0.941	mg/Kg	10	1	<0.010	95	1	70 - 130	20
M,P,O-Xylene	2.93	2.91	mg/Kg	10	3	<0.010	97	0	70 - 130	20

Percent recovery is based on the spike result. RPD is based on the spike and spike duplicate result.

Surrogate	LCS Result	LCSD Result	Units	Dilution	Spike Amount	LCS % Rec	LCSD % Rec	Recovery Limits
TFT	0.961	0.953	mg/Kg	10	1	96	95	70 - 130
4-BFB	0.978	0.924	mg/Kg	10	1	97	92	70 - 130

Laboratory Control Spikes

QCBatch: QC20233

Param	LCS Result	LCSD Result	Units	Dil.	Spike Amount Added	Matrix Result	% Rec	RPD	% Rec Limit	RPD Limit
GRO	9.72	9.43	mg/Kg	10	1	<1	97	3	80 - 120	20

Percent recovery is based on the spike result. RPD is based on the spike and spike duplicate result.

Surrogate	LCS Result	LCSD Result	Units	Dilution	Spike Amount	LCS % Rec	LCSD % Rec	Recovery Limits
TFT	0.895	0.883	mg/Kg	10	0.10	89	88	70 - 130
4-BFB	1.1	1.09	mg/Kg	10	0.10	110	109	70 - 130

Laboratory Control Spikes

QCBatch: QC20274

Param	LCS Result	LCSD Result	Units	Dil.	Spike Amount Added	Matrix Result	% Rec	RPD	% Rec Limit	RPD Limit
MTBE	0.865	0.890	mg/Kg	10	1	<0.010	86	2	70 - 130	20
Benzene	0.895	0.905	mg/Kg	10	1	<0.010	89	1	70 - 130	20
Toluene	0.916	0.911	mg/Kg	10	1	<0.010	91	0	70 - 130	20
Ethylbenzene	0.846	0.909	mg/Kg	10	1	<0.010	84	7	70 - 130	20
M,P,O-Xylene	2.73	2.69	mg/Kg	10	3	<0.010	91	1	70 - 130	20

Percent recovery is based on the spike result. RPD is based on the spike and spike duplicate result.

Surrogate	LCS Result	LCSD Result	Units	Dilution	Spike Amount	LCS % Rec	LCSD % Rec	Recovery Limits
TFT	0.826	0.836	mg/Kg	10	1	82	83	70 - 130
4-BFB	0.837	0.916	mg/Kg	10	1	83	91	70 - 130

Laboratory Control Spikes

QCBatch: QC20275

Param	LCS Result	LCSD Result	Units	Dil.	Spike Amount Added	Matrix Result	% Rec	RPD	% Rec Limit	RPD Limit
GRO	10.5	10.7	mg/Kg	10	1	<1	105	1	80 - 120	20

Percent recovery is based on the spike result. RPD is based on the spike and spike duplicate result.

Surrogate	LCS Result	LCSD Result	Units	Dilution	Spike Amount	LCS % Rec	LCSD % Rec	Recovery Limits
TFT	1.01	1.01	mg/Kg	10	0.10	101	101	70 - 130
4-BFB	1.09	1.1	mg/Kg	10	0.10	109	110	70 - 130

Laboratory Control Spikes

QCBatch: QC20301

Param	LCS Result	LCSD Result	Units	Dil.	Spike Amount Added	Matrix Result	% Rec	RPD	% Rec Limit	RPD Limit
DRO	269	268	mg/Kg	1	250	<50.0	108	0	70 - 130	20

Percent recovery is based on the spike result. RPD is based on the spike and spike duplicate result.

Surrogate	LCS Result	LCSD Result	Units	Dilution	Spike Amount	LCS % Rec	LCSD % Rec	Recovery Limits
n-Triacontane	178	174	mg/Kg	1	150	119	116	70 - 130

Laboratory Control Spikes

QCBatch: QC20349

Param	LCS Result	LCSD Result	Units	Dil.	Spike Amount Added	Matrix Result	% Rec	RPD	% Rec Limit	RPD Limit
DRO	247	263	mg/Kg	1	250	<50.0	99	6	70 - 130	20

Percent recovery is based on the spike result. RPD is based on the spike and spike duplicate result.

Surrogate	LCS Result	LCSD Result	Units	Dilution	Spike Amount	LCS % Rec	LCSD % Rec	Recovery Limits
n-Triacontane	132	144	mg/Kg	1	150	88	96	70 - 130

Quality Control Report
Matrix Spikes and Duplicate Spikes

Matrix Spikes

QCBatch: QC20232

Param	MS Result	MSD Result	Units	Dil.	Spike Amount Added	Matrix Result	% Rec	RPD	% Rec Limit	RPD Limit
Benzene	0.74	[18] 0.644	mg/Kg	10	1	<0.010	74	13	70 - 130	20
Toluene	0.758	[19] 0.642	mg/Kg	10	1	<0.010	75	16	70 - 130	20
Ethylbenzene	0.756	[20] 0.641	mg/Kg	10	1	<0.010	75	16	70 - 130	20
M,P,O-Xylene	2.34	[21] 1.95	mg/Kg	10	3	<0.010	78	18	70 - 130	20

Percent recovery is based on the spike result. RPD is based on the spike and spike duplicate result.

Surrogate	MS Result	MSD Result	Units	Dilution	Spike Amount	MS % Rec	MSD % Rec	Recovery Limits
TFT	0.754	[22] 0.668	mg/Kg	10	1	75	66	70 - 130
4-BFB	0.76	[23] 0.633	mg/Kg	10	1	76	63	70 - 130

[18]Low MSD recovery due to prep. LCS, LCSD, MS show the method to be in control.
[19]Low MSD recovery due to prep. LCS, LCSD, MS show the method to be in control.
[20]Low MSD recovery due to prep. LCS, LCSD, MS show the method to be in control.
[21]Low MSD recovery due to prep. LCS, LCSD, MS show the method to be in control.
[22]Low MSD recovery due to prep. LCS, LCSD, MS show the method to be in control.
[23]Low MSD recovery due to prep. LCS, LCSD, MS show the method to be in control.

Matrix Spikes

QCBatch: QC20274

Param	MS Result	MSD Result	Units	Dil.	Spike Amount Added	Matrix Result	% Rec	RPD	% Rec Limit	RPD Limit
Benzene	[24] 0.676	[25] 0.65	mg/Kg	10	1	<0.010	67	3	70 - 130	20
Toluene	[26] 0.711	[27] 0.71	mg/Kg	10	1	0.0922	61	0	70 - 130	20
Ethylbenzene	0.704	0.714	mg/Kg	10	1	0.0146	68	1	70 - 130	20
M,P,O-Xylene	2.29	2.13	mg/Kg	10	3	<0.010	76	7	70 - 130	20

Percent recovery is based on the spike result. RPD is based on the spike and spike duplicate result.

Surrogate	MS Result	MSD Result	Units	Dilution	Spike Amount	MS % Rec	MSD % Rec	Recovery Limits
TFT	[28] 0.678	[29] 0.636	mg/Kg	10	1	67	63	70 - 130
4-BFB	[30] 0.626	[31] 0.596	mg/Kg	10	1	62	59	70 - 130

Matrix Spikes

QCBatch: QC20275

Param	MS Result	MSD Result	Units	Dil.	Spike Amount Added	Matrix Result	% Rec	RPD	% Rec Limit	RPD Limit
GRO	9.72	9.45	mg/Kg	10	1	<1.00	97	2	80 - 120	20

Percent recovery is based on the spike result. RPD is based on the spike and spike duplicate result.

Surrogate	MS Result	MSD Result	Units	Dilution	Spike Amount	MS % Rec	MSD % Rec	Recovery Limits
TFT	0.914	0.939	mg/Kg	10	0.10	91	94	70 - 130
4-BFB	0.909	0.86	mg/Kg	10	0.10	91	86	70 - 130

Matrix Spikes

QCBatch: QC20301

Param	MS Result	MSD Result	Units	Dil.	Spike Amount Added	Matrix Result	% Rec	RPD	% Rec Limit	RPD Limit
DRO	241	236	mg/Kg	1	250	<50.0	96	2	70 - 130	20

Percent recovery is based on the spike result. RPD is based on the spike and spike duplicate result.

Surrogate	MS Result	MSD Result	Units	Dilution	Spike Amount	MS % Rec	MSD % Rec	Recovery Limits
n-Triacontane	164	164	mg/Kg	1	150	109	109	70 - 130

[24]Low MS/MSD recovery due to prep. LCS, LCSD show the method to be in control.
[25]Low MS/MSD recovery due to prep. LCS, LCSD show the method to be in control.
[26]Low MS/MSD recovery due to prep. LCS, LCSD show the method to be in control.
[27]Low MS/MSD recovery due to prep. LCS, LCSD show the method to be in control.
[28]Low MS/MSD recovery due to prep. LCS, LCSD show the method to be in control.
[29]Low MS/MSD recovery due to prep. LCS, LCSD show the method to be in control.
[30]Low MS/MSD recovery due to prep. LCS, LCSD show the method to be in control.
[31]Low MS/MSD recovery due to prep. LCS, LCSD show the method to be in control.

Matrix Spikes

QCBatch: QC20349

Param	MS Result	MSD Result	Units	Dil.	Spike Amount Added	Matrix Result	% Rec	RPD	% Rec Limit	RPD Limit
DRO	226	222	mg/Kg	1	250	<50.0	90	2	70 - 130	20

Percent recovery is based on the spike result. RPD is based on the spike and spike duplicate result.

Surrogate	MS Result	MSD Result	Units	Dilution	Spike Amount	MS % Rec	MSD % Rec	Recovery Limits
n-Triacontane	119	116	mg/Kg	1	150	79	77	70 - 130

Quality Control Report
Continuing Calibration Verification Standards

CCV (1)

QCBatch: QC20232

Param	Flag	Units	CCVs True Conc.	CCVs Found Conc.	CCVs Percent Recovery	Percent Recovery Limits	Date Analyzed
MTBE		mg/L	0.10	0.0942	94	85 - 115	5/10/02
Benzene		mg/L	0.10	0.0914	91	85 - 115	5/10/02
Toluene		mg/L	0.10	0.0915	91	85 - 115	5/10/02
Ethylbenzene		mg/L	0.10	0.0922	92	85 - 115	5/10/02
M,P,O-Xylene		mg/L	0.30	0.284	94	85 - 115	5/10/02

ICV (1)

QCBatch: QC20232

Param	Flag	Units	CCVs True Conc.	CCVs Found Conc.	CCVs Percent Recovery	Percent Recovery Limits	Date Analyzed
MTBE		mg/L	0.10	0.1	100	85 - 115	5/10/02
Benzene		mg/L	0.10	0.093	93	85 - 115	5/10/02
Toluene		mg/L	0.10	0.0943	94	85 - 115	5/10/02
Ethylbenzene		mg/L	0.10	0.0948	94	85 - 115	5/10/02
M,P,O-Xylene		mg/L	0.30	0.289	96	85 - 115	5/10/02

CCV (1)

QCBatch: QC20233

Param	Flag	Units	CCVs True Conc.	CCVs Found Conc.	CCVs Percent Recovery	Percent Recovery Limits	Date Analyzed
GRO		mg/Kg	1	0.953	95	85 - 115	5/10/02

ICV (1) QCBatch: QC20233

Param	Flag	Units	CCVs True Conc.	CCVs Found Conc.	CCVs Percent Recovery	Percent Recovery Limits	Date Analyzed
GRO		mg/Kg	1	1.02	102	85 - 115	5/10/02

CCV (1) QCBatch: QC20274

Param	Flag	Units	CCVs True Conc.	CCVs Found Conc.	CCVs Percent Recovery	Percent Recovery Limits	Date Analyzed
MTBE		mg/L	0.10	0.105	105	85 - 115	5/13/02
Benzene		mg/L	0.10	0.086	86	85 - 115	5/13/02
Toluene		mg/L	0.10	0.0913	91	85 - 115	5/13/02
Ethylbenzene	[32]	mg/L	0.10	0.0837	84	85 - 115	5/13/02
M,P,O-Xylene		mg/L	0.30	0.265	88	85 - 115	5/13/02

CCV (2) QCBatch: QC20274

Param	Flag	Units	CCVs True Conc.	CCVs Found Conc.	CCVs Percent Recovery	Percent Recovery Limits	Date Analyzed
MTBE		mg/L	0.10	0.0935	93	85 - 115	5/13/02
Benzene	[33]	mg/L	0.10	0.0833	83	85 - 115	5/13/02
Toluene		mg/L	0.10	0.085	85	85 - 115	5/13/02
Ethylbenzene		mg/L	0.10	0.0889	88	85 - 115	5/13/02
M,P,O-Xylene		mg/L	0.30	0.267	89	85 - 115	5/13/02

ICV (1) QCBatch: QC20274

Param	Flag	Units	CCVs True Conc.	CCVs Found Conc.	CCVs Percent Recovery	Percent Recovery Limits	Date Analyzed
MTBE		mg/L	0.10	0.0941	94	85 - 115	5/13/02
Benzene	[34]	mg/L	0.10	0.0841	84	85 - 115	5/13/02
Toluene		mg/L	0.10	0.0853	85	85 - 115	5/13/02
Ethylbenzene		mg/L	0.10	0.085	85	85 - 115	5/13/02
M,P,O-Xylene		mg/L	0.30	0.262	87	85 - 115	5/13/02

CCV (1) QCBatch: QC20275

[32]Ethylbenzene outside normal limits. Average (91) of CCV components within acceptable range.
[33]Benzene outside normal limits. Average (88) of CCV components within acceptable range.
[34]Benzene outside normal limits. Average (87) of ICV components within acceptable range.

Param	Flag	Units	CCVs True Conc.	CCVs Found Conc.	CCVs Percent Recovery	Percent Recovery Limits	Date Analyzed
GRO		mg/Kg	1	1.04	104	85 - 115	5/13/02

CCV (2) QCBatch: QC20275

Param	Flag	Units	CCVs True Conc.	CCVs Found Conc.	CCVs Percent Recovery	Percent Recovery Limits	Date Analyzed
GRO		mg/Kg	1	0.973	97	85 - 115	5/13/02

ICV (1) QCBatch: QC20275

Param	Flag	Units	CCVs True Conc.	CCVs Found Conc.	CCVs Percent Recovery	Percent Recovery Limits	Date Analyzed
GRO		mg/Kg	1	1.07	107	85 - 115	5/13/02

CCV (1) QCBatch: QC20301

Param	Flag	Units	CCVs True Conc.	CCVs Found Conc.	CCVs Percent Recovery	Percent Recovery Limits	Date Analyzed
DRO		mg/Kg	250	272	109	75 - 125	5/14/02

CCV (2) QCBatch: QC20301

Param	Flag	Units	CCVs True Conc.	CCVs Found Conc.	CCVs Percent Recovery	Percent Recovery Limits	Date Analyzed
DRO		mg/Kg	250	272	108	75 - 125	5/14/02

CCV (3) QCBatch: QC20301

Param	Flag	Units	CCVs True Conc.	CCVs Found Conc.	CCVs Percent Recovery	Percent Recovery Limits	Date Analyzed
DRO		mg/Kg	250	274	109	75 - 125	5/14/02

ICV (1) QCBatch: QC20301

Param	Flag	Units	CCVs True Conc.	CCVs Found Conc.	CCVs Percent Recovery	Percent Recovery Limits	Date Analyzed
DRO		mg/Kg	250	266	106	75 - 125	5/14/02

CCV (1)

QCBatch: QC20349

Param	Flag	Units	CCVs True Conc.	CCVs Found Conc.	CCVs Percent Recovery	Percent Recovery Limits	Date Analyzed
DRO		mg/Kg	250	248	99	75 - 125	5/15/02

CCV (2)

QCBatch: QC20349

Param	Flag	Units	CCVs True Conc.	CCVs Found Conc.	CCVs Percent Recovery	Percent Recovery Limits	Date Analyzed
DRO		mg/Kg	250	252	100	75 - 125	5/15/02

CCV (3)

QCBatch: QC20349

Param	Flag	Units	CCVs True Conc.	CCVs Found Conc.	CCVs Percent Recovery	Percent Recovery Limits	Date Analyzed
DRO		mg/Kg	250	263	105	75 - 125	5/15/02

ICV (1)

QCBatch: QC20349

Param	Flag	Units	CCVs True Conc.	CCVs Found Conc.	CCVs Percent Recovery	Percent Recovery Limits	Date Analyzed
DRO		mg/Kg	250	234	94	75 - 125	5/15/02

Summary Report

Kyle Landreneau
Equiva Kyle Landreneau
PMB 284 40 FM 1960 West
Houston, TX 77090

Report Date: May 17, 2002

Order ID Number: A02051010

Project: EQ-112
TA Job Code: Barber Ranch 3000109
Casualty Code: EQ-112
Project Location: Barber Lea County, New Mexico
Project Address:
Enercon Services Inc. / Midland / Jeff Kindley

Sample	Description	Matrix	Date Taken	Time Taken	Date Received
196728	MW-10 (8-10')	Soil	5/7/02	8:50	5/10/02
196729	MW-10 (25-27')	Soil	5/7/02	9:45	5/10/02
196730	S-1 (13-15')	Soil	5/7/02	15:20	5/10/02
196731	S-1 (27-28')	Soil	5/7/02	16:00	5/10/02
196732	MW-11 (13-15')	Soil	5/8/02	10:36	5/10/02
196733	MW-11 (26-28')	Soil	5/8/02	11:02	5/10/02
196734	MW-12 (13-15')	Soil	5/8/02	13:52	5/10/02
196735	MW-12 (27-28')	Soil	5/8/02	14:40	5/10/02

0 This report consists of a total of 1 page(s) and is intended only as a summary of results for the sample(s) listed above.

	BTEX						TPH DRO	TPH GRO
	Benzene	Toluene	Ethylbenzene	M,P,O-Xylene	Total BTEX	Test Comments	DRO	GRO
Sample - Field Code	(ppm)	(ppm)	(ppm)	(ppm)	(ppm)	(ppm)	(ppm)	(ppm)
196728 - MW-10 (8-10')	<0.200	0.511	0.298	0.663	1.47	* [1]	767	202
196729 - MW-10 (25-27')	<0.050	<0.050	<0.050	<0.050	<0.050	* [2]	<50.0	17.2
196730 - S-1 (13-15')	<0.020	<0.020	<0.020	<0.020	<0.020	* [3]	<50.0	<2 [4]
196731 - S-1 (27-28')	<0.010	0.0922	0.0146	<0.010	0.107	-	<50.0	<1.00
196732 - MW-11 (13-15')	<0.010	<0.010	<0.010	<0.010	<0.010	-	<50.0	<1
196733 - MW-11 (26-28')	<0.010	<0.010	<0.010	<0.010	<0.010	-	<50.0	<1
196734 - MW-12 (13-15')	<0.010	<0.010	<0.010	<0.010	<0.010	-	<50.0	<1
196735 - MW-12 (27-28')	<0.050	<0.050	0.397	1.24	1.64	* [5]	<50.0	79.7

[1]Sampledilute due to hydrocarbons beyond xylene. Sample has a Benzene concentration of less than 0.0473 which is the MDL.
[2]Sampledilute due to hydrocarbons beyond xylene. Sample has a Benzene concentration of less than 0.01183 which is the MDL.
[3]Sample diluted due to turbidity. Sample has a Benzene concentration of less than 0.00473 which is the MDL.
[4]Sample diluted due to turbidity.
[5]Sample diluted due to hydrocarbons beyond xylene. Sample has a Benzene concentration of less than 0.01183 which is the MDL.

This is only a summary. Please, refer to the complete report package for quality control data.

TRACEANALYSIS, INC.

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Analytical and Quality Control Report

Kyle Landreneau
Equiva Kyle Landreneau
PMB 284 40 FM 1960 West
Houston, TX 77090

Report Date: May 17, 2002

Order ID Number: A02051010

Project: EQ-112
TA Job Code: Barber Ranch 3000109
Casualty Code: EQ-112
Project Location: Barber Lea County, New Mexico
Enercon Services Inc. / Midland / Jeff Kindley

Enclosed are the Analytical Results and Quality Control Data Reports for the following samples submitted to Trace-Analysis, Inc.

Sample	Description	Matrix	Date Taken	Time Taken	Date Received
196728	MW-10 (8-10')	Soil	5/7/02	8:50	5/10/02
196729	MW-10 (25-27')	Soil	5/7/02	9:45	5/10/02
196730	S-1 (13-15')	Soil	5/7/02	15:20	5/10/02
196731	S-1 (27-28')	Soil	5/7/02	16:00	5/10/02
196732	MW-11 (13-15')	Soil	5/8/02	10:36	5/10/02
196733	MW-11 (26-28')	Soil	5/8/02	11:02	5/10/02
196734	MW-12 (13-15')	Soil	5/8/02	13:52	5/10/02
196735	MW-12 (27-28')	Soil	5/8/02	14:40	5/10/02

These results represent only the samples received in the laboratory. The Quality Control Report is generated on a batch basis. All information contained in this report is for the analytical batch(es) in which your sample(s) were analyzed. Note: the RDL is equal to MQL for all organic analytes including TPH.
The test results contained within this report meet all requirements of LAC 33:I unless otherwise noted.

This report consists of a total of 18 pages and shall not be reproduced except in its entirety including the chain of custody (COC), without written approval of TraceAnalysis, Inc.

Dr. Blair Leftwich, Director

Analytical Report

Sample: 196728 - MW-10 (8-10')

Analysis:	BTEX	Analytical Method:	S 8021B	QC Batch:	QC20232	Date Analyzed:	5/10/02
Analyst:	CG	Preparation Method:	S 5035	Prep Batch:	PB19360	Date Prepared:	5/10/02

Param	Flag	Result	Units	Dilution	RDL
Benzene		<0.200	mg/Kg	200	0.001
Toluene		0.511	mg/Kg	200	0.001
Ethylbenzene		0.298	mg/Kg	200	0.001
M,P,O-Xylene		0.663	mg/Kg	200	0.001
Total BTEX		1.47	mg/Kg	200	0.001
Test Comments	[1]	*	mg/Kg	1	

Surrogate	Flag	Result	Units	Dilution	Spike Amount	Percent Recovery	Recovery Limits
TFT		0.87	mg/Kg	200	1	87	70 - 130
4-BFB	[2]	4.05	mg/Kg	200	1	405	70 - 130

Sample: 196728 - MW-10 (8-10')

Analysis:	TPH DRO	Analytical Method:	Mod. 8015B	QC Batch:	QC20349	Date Analyzed:	5/15/02
Analyst:	MM	Preparation Method:	3550 B	Prep Batch:	PB19453	Date Prepared:	5/15/02

Param	Flag	Result	Units	Dilution	RDL
DRO		767	mg/Kg	1	50

Surrogate	Flag	Result	Units	Dilution	Spike Amount	Percent Recovery	Recovery Limits
n-Triacontane		140	mg/Kg	1	150	93	70 - 130

Sample: 196728 - MW-10 (8-10')

Analysis:	TPH GRO	Analytical Method:	8015B	QC Batch:	QC20233	Date Analyzed:	5/10/02
Analyst:	CG	Preparation Method:	5035	Prep Batch:	PB19360	Date Prepared:	5/10/02

Param	Flag	Result	Units	Dilution	RDL
GRO		202	mg/Kg	200	0.10

Surrogate	Flag	Result	Units	Dilution	Spike Amount	Percent Recovery	Recovery Limits
TFT	[3]	0.482	mg/Kg	200	0.10	48	70 - 130
4-BFB	[4]	12.6	mg/Kg	200	0.10	126	70 - 130

[1] Samplediluted due to hydrocarbons beyond xylene. Sample has a Benzene concentration of less than 0.0473 which is the MDL.
[2] High surrogate recovery due to peak interference.
[3] Low surrogate recovrey due to matrix interference. ICV, CCV show the method to be in control.
[4] High surrogate recovery due to peak interference.

Sample: 196729 - MW-10 (25-27')

Analysis:	BTEX	Analytical Method:	S 8021B	QC Batch:	QC20232	Date Analyzed:	5/10/02
Analyst:	CG	Preparation Method:	S 5035	Prep Batch:	PB19360	Date Prepared:	5/10/02

Param	Flag	Result	Units	Dilution	RDL
Benzene		<0.050	mg/Kg	50	0.001
Toluene		<0.050	mg/Kg	50	0.001
Ethylbenzene		<0.050	mg/Kg	50	0.001
M,P,O-Xylene		<0.050	mg/Kg	50	0.001
Total BTEX		<0.050	mg/Kg	50	0.001
Test Comments	[5]	*	mg/Kg	1	

Surrogate	Flag	Result	Units	Dilution	Spike Amount	Percent Recovery	Recovery Limits
TFT		0.816	mg/Kg	50	1	81	70 - 130
4-BFB		0.89	mg/Kg	50	1	89	70 - 130

Sample: 196729 - MW-10 (25-27')

Analysis:	TPH DRO	Analytical Method:	Mod. 8015B	QC Batch:	QC20301	Date Analyzed:	5/14/02
Analyst:	MM	Preparation Method:	3550 B	Prep Batch:	PB19416	Date Prepared:	5/13/02

Param	Flag	Result	Units	Dilution	RDL
DRO		<50.0	mg/Kg	1	50

Surrogate	Flag	Result	Units	Dilution	Spike Amount	Percent Recovery	Recovery Limits
n-Triacontane		173	mg/Kg	1	150	115	70 - 130

Sample: 196729 - MW-10 (25-27')

Analysis:	TPH GRO	Analytical Method:	8015B	QC Batch:	QC20233	Date Analyzed:	5/10/02
Analyst:	CG	Preparation Method:	5035	Prep Batch:	PB19360	Date Prepared:	5/10/02

Param	Flag	Result	Units	Dilution	RDL
GRO		17.2	mg/Kg	50	0.10

Surrogate	Flag	Result	Units	Dilution	Spike Amount	Percent Recovery	Recovery Limits
TFT	[6]	0.68	mg/Kg	50	0.10	68	70 - 130
4-BFB	[7]	2.14	mg/Kg	50	0.10	214	70 - 130

Sample: 196730 - S-1 (13-15')

Analysis:	BTEX	Analytical Method:	S 8021B	QC Batch:	QC20232	Date Analyzed:	5/10/02
Analyst:	CG	Preparation Method:	S 5035	Prep Batch:	PB19360	Date Prepared:	5/10/02

[5] Sampledilluted due to hydrocarbons beyond xylene. Sample has a Benzene concentration of less than 0.01183 which is the MDL.
[6] Low surrogate recovrey due to matrix interference. ICV, CCV show the method to be in control.
[7] High surrogate recovery due to peak interference.

Param	Flag	Result	Units	Dilution	RDL
Benzene		<0.020	mg/Kg	20	0.001
Toluene		<0.020	mg/Kg	20	0.001
Ethylbenzene		<0.020	mg/Kg	20	0.001
M,P,O-Xylene		<0.020	mg/Kg	20	0.001
Total BTEX		<0.020	mg/Kg	20	0.001
Test Comments	[8]	*	mg/Kg	1	

Surrogate	Flag	Result	Units	Dilution	Spike Amount	Percent Recovery	Recovery Limits
TFT		0.775	mg/Kg	20	1	77	70 - 130
4-BFB		0.743	mg/Kg	20	1	74	70 - 130

Sample: 196730 - S-1 (13-15')

Analysis: TPH DRO | Analytical Method: Mod. 8015B | QC Batch: QC20301 | Date Analyzed: 5/14/02
Analyst: MM | Preparation Method: 3550 B | Prep Batch: PB19416 | Date Prepared: 5/13/02

Param	Flag	Result	Units	Dilution	RDL
DRO		<50.0	mg/Kg	1	50

Surrogate	Flag	Result	Units	Dilution	Spike Amount	Percent Recovery	Recovery Limits
n-Triacontane		166	mg/Kg	1	150	111	70 - 130

Sample: 196730 - S-1 (13-15')

Analysis: TPH GRO | Analytical Method: 8015B | QC Batch: QC20233 | Date Analyzed: 5/10/02
Analyst: CG | Preparation Method: 5035 | Prep Batch: PB19360 | Date Prepared: 5/10/02

Param	Flag	Result	Units	Dilution	RDL
GRO	[9]	<2	mg/Kg	20	0.10

Surrogate	Flag	Result	Units	Dilution	Spike Amount	Percent Recovery	Recovery Limits
TFT		0.794	mg/Kg	20	0.10	79	70 - 130
4-BFB		0.962	mg/Kg	20	0.10	96	70 - 130

Sample: 196731 - S-1 (27-28')

Analysis: BTEX | Analytical Method: S 8021B | QC Batch: QC20274 | Date Analyzed: 5/13/02
Analyst: CG | Preparation Method: S 5035 | Prep Batch: PB19399 | Date Prepared: 5/13/02

Param	Flag	Result	Units	Dilution	RDL
Benzene		<0.010	mg/Kg	10	0.001
Toluene		0.0922	mg/Kg	10	0.001

Continued ...

[8] Sample diluted due to turbidity. Sample has a Benzene concentration of less than 0.00473 which is the MDL.
[9] Sample diluted due to turbidity.

... *Continued* Sample: 196731 Analysis: BTEX

Param	Flag	Result	Units	Dilution	RDL
Ethylbenzene		0.0146	mg/Kg	10	0.001
M,P,O-Xylene		<0.010	mg/Kg	10	0.001
Total BTEX		0.107	mg/Kg	10	0.001

Surrogate	Flag	Result	Units	Dilution	Spike Amount	Percent Recovery	Recovery Limits
TFT		0.703	mg/Kg	10	1	70	70 - 130
4-BFB		0.738	mg/Kg	10	1	74	70 - 130

Sample: 196731 - S-1 (27-28')

Analysis: TPH DRO Analytical Method: Mod. 8015B QC Batch: QC20301 Date Analyzed: 5/14/02
Analyst: MM Preparation Method: 3550 B Prep Batch: PB19416 Date Prepared: 5/13/02

Param	Flag	Result	Units	Dilution	RDL
DRO		<50.0	mg/Kg	1	50

Surrogate	Flag	Result	Units	Dilution	Spike Amount	Percent Recovery	Recovery Limits
n-Triacontane		173	mg/Kg	1	150	115	70 - 130

Sample: 196731 - S-1 (27-28')

Analysis: TPH GRO Analytical Method: 8015B QC Batch: QC20275 Date Analyzed: 5/13/02
Analyst: CG Preparation Method: 5035 Prep Batch: PB19399 Date Prepared: 5/13/02

Param	Flag	Result	Units	Dilution	RDL
GRO		<1.00	mg/Kg	10	0.10

Surrogate	Flag	Result	Units	Dilution	Spike Amount	Percent Recovery	Recovery Limits
TFT		1.22	mg/Kg	10	0.10	122	70 - 130
4-BFB		0.905	mg/Kg	10	0.10	90	70 - 130

Sample: 196732 - MW-11 (13-15')

Analysis: BTEX Analytical Method: S 8021B QC Batch: QC20232 Date Analyzed: 5/10/02
Analyst: CG Preparation Method: S 5035 Prep Batch: PB19360 Date Prepared: 5/10/02

Param	Flag	Result	Units	Dilution	RDL
Benzene		<0.010	mg/Kg	10	0.001
Toluene		<0.010	mg/Kg	10	0.001
Ethylbenzene		<0.010	mg/Kg	10	0.001
M,P,O-Xylene		<0.010	mg/Kg	10	0.001
Total BTEX		<0.010	mg/Kg	10	0.001

Surrogate	Flag	Result	Units	Dilution	Spike Amount	Percent Recovery	Recovery Limits
TFT	[10]	0.648	mg/Kg	10	1	64	70 - 130
4-BFB	[11]	0.581	mg/Kg	10	1	58	70 - 130

Sample: 196732 - MW-11 (13-15')

Analysis:	TPH DRO	Analytical Method:	Mod. 8015B	QC Batch:	QC20301	Date Analyzed:	5/14/02
Analyst:	MM	Preparation Method:	3550 B	Prep Batch:	PB19416	Date Prepared:	5/13/02

Param	Flag	Result	Units	Dilution	RDL
DRO		<50.0	mg/Kg	1	50

Surrogate	Flag	Result	Units	Dilution	Spike Amount	Percent Recovery	Recovery Limits
n-Triacontane		168	mg/Kg	1	150	112	70 - 130

Sample: 196732 - MW-11 (13-15')

Analysis:	TPH GRO	Analytical Method:	8015B	QC Batch:	QC20233	Date Analyzed:	5/10/02
Analyst:	CG	Preparation Method:	5035	Prep Batch:	PB19360	Date Prepared:	5/10/02

Param	Flag	Result	Units	Dilution	RDL
GRO		<1	mg/Kg	10	0.10

Surrogate	Flag	Result	Units	Dilution	Spike Amount	Percent Recovery	Recovery Limits
TFT		0.785	mg/Kg	10	0.10	79	70 - 130
4-BFB		0.743	mg/Kg	10	0.10	74	70 - 130

Sample: 196733 - MW-11 (26-28')

Analysis:	BTEX	Analytical Method:	S 8021B	QC Batch:	QC20232	Date Analyzed:	5/10/02
Analyst:	CG	Preparation Method:	S 5035	Prep Batch:	PB19360	Date Prepared:	5/10/02

Param	Flag	Result	Units	Dilution	RDL
Benzene		<0.010	mg/Kg	10	0.001
Toluene		<0.010	mg/Kg	10	0.001
Ethylbenzene		<0.010	mg/Kg	10	0.001
M,P,O-Xylene		<0.010	mg/Kg	10	0.001
Total BTEX		<0.010	mg/Kg	10	0.001

Surrogate	Flag	Result	Units	Dilution	Spike Amount	Percent Recovery	Recovery Limits
TFT	[12]	0.66	mg/Kg	10	1	66	70 - 130

Continued ...

[10]Low surrogate recovery due to matrix interference. ICV, CCV show the method to be in control.
[11]Low surrogate recovery due to matrix interference. ICV, CCV show the method to be in control.
[12]Low surrogate recovery due to matrix interference. ICV, CCV show the method to be in control.

Surrogate	Flag	Result	Units	Dilution	Spike Amount	Percent Recovery	Recovery Limits
4-BFB	[13]	0.63	mg/Kg	10	1	63	70 - 130

Sample: 196733 - MW-11 (26-28')

Analysis:	TPH DRO	Analytical Method:	Mod. 8015B	QC Batch:	QC20349	Date Analyzed:	5/15/02
Analyst:	MM	Preparation Method:	3550 B	Prep Batch:	PB19453	Date Prepared:	5/15/02

Param	Flag	Result	Units	Dilution	RDL
DRO		<50.0	mg/Kg	1	50

Surrogate	Flag	Result	Units	Dilution	Spike Amount	Percent Recovery	Recovery Limits
n-Triacontane		128	mg/Kg	1	150	85	70 - 130

Sample: 196733 - MW-11 (26-28')

Analysis:	TPH GRO	Analytical Method:	8015B	QC Batch:	QC20233	Date Analyzed:	5/10/02
Analyst:	CG	Preparation Method:	5035	Prep Batch:	PB19360	Date Prepared:	5/10/02

Param	Flag	Result	Units	Dilution	RDL
GRO		<1	mg/Kg	10	0.10

Surrogate	Flag	Result	Units	Dilution	Spike Amount	Percent Recovery	Recovery Limits
TFT		1.09	mg/Kg	10	0.10	109	70 - 130
4-BFB		0.757	mg/Kg	10	0.10	76	70 - 130

Sample: 196734 - MW-12 (13-15')

Analysis:	BTEX	Analytical Method:	S 8021B	QC Batch:	QC20232	Date Analyzed:	5/10/02
Analyst:	CG	Preparation Method:	S 5035	Prep Batch:	PB19360	Date Prepared:	5/10/02

Param	Flag	Result	Units	Dilution	RDL
Benzene		<0.010	mg/Kg	10	0.001
Toluene		<0.010	mg/Kg	10	0.001
Ethylbenzene		<0.010	mg/Kg	10	0.001
M,P,O-Xylene		<0.010	mg/Kg	10	0.001
Total BTEX		<0.010	mg/Kg	10	0.001

Surrogate	Flag	Result	Units	Dilution	Spike Amount	Percent Recovery	Recovery Limits
TFT		0.778	mg/Kg	10	1	77	70 - 130
4-BFB		0.747	mg/Kg	10	1	74	70 - 130

[13] Low surrogate recovery due to matrix interference. ICV, CCV show the method to be in control.

Sample: 196734 - MW-12 (13-15')

Analysis:	TPH DRO	Analytical Method:	Mod. 8015B	QC Batch:	QC20301	Date Analyzed:	5/14/02
Analyst:	MM	Preparation Method:	3550 B	Prep Batch:	PB19416	Date Prepared:	5/13/02

Param	Flag	Result	Units	Dilution	RDL
DRO		<50.0	mg/Kg	1	50

Surrogate	Flag	Result	Units	Dilution	Spike Amount	Percent Recovery	Recovery Limits
n-Triacontane		161	mg/Kg	1	150	107	70 - 130

Sample: 196734 - MW-12 (13-15')

Analysis:	TPH GRO	Analytical Method:	8015B	QC Batch:	QC20233	Date Analyzed:	5/10/02
Analyst:	CG	Preparation Method:	5035	Prep Batch:	PB19360	Date Prepared:	5/10/02

Param	Flag	Result	Units	Dilution	RDL
GRO		<1	mg/Kg	10	0.10

Surrogate	Flag	Result	Units	Dilution	Spike Amount	Percent Recovery	Recovery Limits
TFT		1.16	mg/Kg	10	0.10	116	70 - 130
4-BFB		0.888	mg/Kg	10	0.10	89	70 - 130

Sample: 196735 - MW-12 (27-28')

Analysis:	BTEX	Analytical Method:	S 8021B	QC Batch:	QC20232	Date Analyzed:	5/10/02
Analyst:	CG	Preparation Method:	S 5035	Prep Batch:	PB19360	Date Prepared:	5/10/02

Param	Flag	Result	Units	Dilution	RDL
Benzene		<0.050	mg/Kg	50	0.001
Toluene		<0.050	mg/Kg	50	0.001
Ethylbenzene		0.397	mg/Kg	50	0.001
M,P,O-Xylene		1.24	mg/Kg	50	0.001
Total BTEX		1.64	mg/Kg	50	0.001
Test Comments	[14]	*	mg/Kg	1	

Surrogate	Flag	Result	Units	Dilution	Spike Amount	Percent Recovery	Recovery Limits
TFT		0.836	mg/Kg	50	1	83	70 - 130
4-BFB	[15]	1.35	mg/Kg	50	1	135	70 - 130

Sample: 196735 - MW-12 (27-28')

Analysis:	TPH DRO	Analytical Method:	Mod. 8015B	QC Batch:	QC20301	Date Analyzed:	5/14/02
Analyst:	MM	Preparation Method:	3550 B	Prep Batch:	PB19416	Date Prepared:	5/13/02

[14]Sample diluted due to hydrocarbons beyond xylene. Sample has a Benzene concentration of less than 0.01183 which is the MDL.
[15]High surrogate recovery due to peak interference.

Param	Flag	Result	Units	Dilution	RDL
DRO		<50.0	mg/Kg	1	50

Surrogate	Flag	Result	Units	Dilution	Spike Amount	Percent Recovery	Recovery Limits
n-Triacontane		167	mg/Kg	1	150	111	70 - 130

Sample: 196735 - MW-12 (27-28')

Analysis:	TPH GRO	Analytical Method:	8015B	QC Batch:	QC20233	Date Analyzed:	5/10/02
Analyst:	CG	Preparation Method:	5035	Prep Batch:	PB19360	Date Prepared:	5/10/02

Param	Flag	Result	Units	Dilution	RDL
GRO		79.7	mg/Kg	50	0.10

Surrogate	Flag	Result	Units	Dilution	Spike Amount	Percent Recovery	Recovery Limits
TFT	[16]	0.468	mg/Kg	50	0.10	47	70 - 130
4-BFB	[17]	2.68	mg/Kg	50	0.10	268	70 - 130

[16] Low surrogate recovrey due to matrix interference. ICV, CCV show the method to be in control.
[17] High surrogate recovery due to peak interference.

Quality Control Report
Method Blank

Method Blank

QCBatch: QC20232

Param	Flag	Results	Units	Reporting Limit
Benzene		<0.010	mg/Kg	0.001
Toluene		<0.010	mg/Kg	0.001
Ethylbenzene		<0.010	mg/Kg	0.001
M,P,O-Xylene		<0.010	mg/Kg	0.001
Total BTEX		<0.010	mg/Kg	0.001

Surrogate	Flag	Result	Units	Dilution	Spike Amount	Percent Recovery	Recovery Limits
TFT		0.905	mg/Kg	10	1	90	70 - 130
4-BFB		0.931	mg/Kg	10	1	93	70 - 130

Method Blank

QCBatch: QC20233

Param	Flag	Results	Units	Reporting Limit
GRO		<1	mg/Kg	0.10

Surrogate	Flag	Result	Units	Dilution	Spike Amount	Percent Recovery	Recovery Limits
TFT		1	mg/Kg	10	0.10	100	70 - 130
4-BFB		1.07	mg/Kg	10	0.10	107	70 - 130

Method Blank

QCBatch: QC20274

Param	Flag	Results	Units	Reporting Limit
Benzene		<0.010	mg/Kg	0.001
Toluene		<0.010	mg/Kg	0.001
Ethylbenzene		<0.010	mg/Kg	0.001
M,P,O-Xylene		<0.010	mg/Kg	0.001
Total BTEX		<0.010	mg/Kg	0.001

Surrogate	Flag	Result	Units	Dilution	Spike Amount	Percent Recovery	Recovery Limits
TFT		0.846	mg/Kg	10	1	85	70 - 130
4-BFB		0.810	mg/Kg	10	1	81	70 - 130

Method Blank

QCBatch: QC20275

Param	Flag	Results	Units	Reporting Limit
GRO		<1	mg/Kg	0.10

Surrogate	Flag	Result	Units	Dilution	Spike Amount	Percent Recovery	Recovery Limits
TFT		1.00	mg/Kg	10	0.10	100	70 - 130
4-BFB		1.04	mg/Kg	10	0.10	104	70 - 130

Method Blank

QCBatch: QC20301

Param	Flag	Results	Units	Reporting Limit
DRO		<50.0	mg/Kg	50

Surrogate	Flag	Result	Units	Dilution	Spike Amount	Percent Recovery	Recovery Limits
n-Triacontane		176	mg/Kg	1	150	117	70 - 130

Method Blank

QCBatch: QC20349

Param	Flag	Results	Units	Reporting Limit
DRO		<50.0	mg/Kg	50

Surrogate	Flag	Result	Units	Dilution	Spike Amount	Percent Recovery	Recovery Limits
n-Triacontane		130	mg/Kg	1	150	86	70 - 130

Quality Control Report
Lab Control Spikes and Duplicate Spikes

Laboratory Control Spikes

QCBatch: QC20232

Param	LCS Result	LCSD Result	Units	Dil.	Spike Amount Added	Matrix Result	% Rec	RPD	% Rec Limit	RPD Limit
MTBE	0.92	0.957	mg/Kg	10	1	<0.010	92	3	70 - 130	20
Benzene	0.925	0.929	mg/Kg	10	1	<0.010	92	0	70 - 130	20
Toluene	0.961	0.951	mg/Kg	10	1	<0.010	96	1	70 - 130	20
Ethylbenzene	0.954	0.941	mg/Kg	10	1	<0.010	95	1	70 - 130	20
M,P,O-Xylene	2.93	2.91	mg/Kg	10	3	<0.010	97	0	70 - 130	20

Percent recovery is based on the spike result. RPD is based on the spike and spike duplicate result.

Surrogate	LCS Result	LCSD Result	Units	Dilution	Spike Amount	LCS % Rec	LCSD % Rec	Recovery Limits
TFT	0.961	0.953	mg/Kg	10	1	96	95	70 - 130
4-BFB	0.978	0.924	mg/Kg	10	1	97	92	70 - 130

Laboratory Control Spikes

QCBatch: QC20233

Param	LCS Result	LCSD Result	Units	Dil.	Spike Amount Added	Matrix Result	% Rec	RPD	% Rec Limit	RPD Limit
GRO	9.72	9.43	mg/Kg	10	1	<1	97	3	80 - 120	20

Percent recovery is based on the spike result. RPD is based on the spike and spike duplicate result.

Surrogate	LCS Result	LCSD Result	Units	Dilution	Spike Amount	LCS % Rec	LCSD % Rec	Recovery Limits
TFT	0.895	0.883	mg/Kg	10	0.10	89	88	70 - 130
4-BFB	1.1	1.09	mg/Kg	10	0.10	110	109	70 - 130

Laboratory Control Spikes

QCBatch: QC20274

Param	LCS Result	LCSD Result	Units	Dil.	Spike Amount Added	Matrix Result	% Rec	RPD	% Rec Limit	RPD Limit
MTBE	0.865	0.890	mg/Kg	10	1	<0.010	86	2	70 - 130	20
Benzene	0.895	0.905	mg/Kg	10	1	<0.010	89	1	70 - 130	20
Toluene	0.916	0.911	mg/Kg	10	1	<0.010	91	0	70 - 130	20
Ethylbenzene	0.846	0.909	mg/Kg	10	1	<0.010	84	7	70 - 130	20
M,P,O-Xylene	2.73	2.69	mg/Kg	10	3	<0.010	91	1	70 - 130	20

Percent recovery is based on the spike result. RPD is based on the spike and spike duplicate result.

Surrogate	LCS Result	LCSD Result	Units	Dilution	Spike Amount	LCS % Rec	LCSD % Rec	Recovery Limits
TFT	0.826	0.836	mg/Kg	10	1	82	83	70 - 130
4-BFB	0.837	0.916	mg/Kg	10	1	83	91	70 - 130

Laboratory Control Spikes

QCBatch: QC20275

Param	LCS Result	LCSD Result	Units	Dil.	Spike Amount Added	Matrix Result	% Rec	RPD	% Rec Limit	RPD Limit
GRO	10.5	10.7	mg/Kg	10	1	<1	105	1	80 - 120	20

Percent recovery is based on the spike result. RPD is based on the spike and spike duplicate result.

Surrogate	LCS Result	LCSD Result	Units	Dilution	Spike Amount	LCS % Rec	LCSD % Rec	Recovery Limits
TFT	1.01	1.01	mg/Kg	10	0.10	101	101	70 - 130
4-BFB	1.09	1.1	mg/Kg	10	0.10	109	110	70 - 130

Laboratory Control Spikes

QCBatch: QC20301

Param	LCS Result	LCSD Result	Units	Dil.	Spike Amount Added	Matrix Result	% Rec	RPD	% Rec Limit	RPD Limit
DRO	269	268	mg/Kg	1	250	<50.0	108	0	70 - 130	20

Percent recovery is based on the spike result. RPD is based on the spike and spike duplicate result.

Surrogate	LCS Result	LCSD Result	Units	Dilution	Spike Amount	LCS % Rec	LCSD % Rec	Recovery Limits
n-Triacontane	178	174	mg/Kg	1	150	119	116	70 - 130

Laboratory Control Spikes

QCBatch: QC20349

Param	LCS Result	LCSD Result	Units	Dil.	Spike Amount Added	Matrix Result	% Rec	RPD	% Rec Limit	RPD Limit
DRO	247	263	mg/Kg	1	250	<50.0	99	6	70 - 130	20

Percent recovery is based on the spike result. RPD is based on the spike and spike duplicate result.

Surrogate	LCS Result	LCSD Result	Units	Dilution	Spike Amount	LCS % Rec	LCSD % Rec	Recovery Limits
n-Triacontane	132	144	mg/Kg	1	150	88	96	70 - 130

Quality Control Report
Matrix Spikes and Duplicate Spikes

Matrix Spikes

QCBatch: QC20232

Param	MS Result	MSD Result	Units	Dil.	Spike Amount Added	Matrix Result	% Rec	RPD	% Rec Limit	RPD Limit
Benzene	0.74	[18] 0.644	mg/Kg	10	1	<0.010	74	13	70 - 130	20
Toluene	0.758	[19] 0.642	mg/Kg	10	1	<0.010	75	16	70 - 130	20
Ethylbenzene	0.756	[20] 0.641	mg/Kg	10	1	<0.010	75	16	70 - 130	20
M,P,O-Xylene	2.34	[21] 1.95	mg/Kg	10	3	<0.010	78	18	70 - 130	20

Percent recovery is based on the spike result. RPD is based on the spike and spike duplicate result.

Surrogate	MS Result	MSD Result	Units	Dilution	Spike Amount	MS % Rec	MSD % Rec	Recovery Limits
TFT	0.754	[22] 0.668	mg/Kg	10	1	75	66	70 - 130
4-BFB	0.76	[23] 0.633	mg/Kg	10	1	76	63	70 - 130

[18]Low MSD recovery due to prep. LCS, LCSD, MS show the method to be in control.
[19]Low MSD recovery due to prep. LCS, LCSD, MS show the method to be in control.
[20]Low MSD recovery due to prep. LCS, LCSD, MS show the method to be in control.
[21]Low MSD recovery due to prep. LCS, LCSD, MS show the method to be in control.
[22]Low MSD recovery due to prep. LCS, LCSD, MS show the method to be in control.
[23]Low MSD recovery due to prep. LCS, LCSD, MS show the method to be in control.

Matrix Spikes

QCBatch: QC20274

Param	MS Result	MSD Result	Units	Dil.	Spike Amount Added	Matrix Result	% Rec	RPD	% Rec Limit	RPD Limit
Benzene	[24] 0.676	[25] 0.65	mg/Kg	10	1	<0.010	67	3	70 - 130	20
Toluene	[26] 0.711	[27] 0.71	mg/Kg	10	1	0.0922	61	0	70 - 130	20
Ethylbenzene	0.704	0.714	mg/Kg	10	1	0.0146	68	1	70 - 130	20
M,P,O-Xylene	2.29	2.13	mg/Kg	10	3	<0.010	76	7	70 - 130	20

Percent recovery is based on the spike result. RPD is based on the spike and spike duplicate result.

Surrogate	MS Result	MSD Result	Units	Dilution	Spike Amount	MS % Rec	MSD % Rec	Recovery Limits
TFT	[28] 0.678	[29] 0.636	mg/Kg	10	1	67	63	70 - 130
4-BFB	[30] 0.626	[31] 0.596	mg/Kg	10	1	62	59	70 - 130

Matrix Spikes

QCBatch: QC20275

Param	MS Result	MSD Result	Units	Dil.	Spike Amount Added	Matrix Result	% Rec	RPD	% Rec Limit	RPD Limit
GRO	9.72	9.45	mg/Kg	10	1	<1.00	97	2	80 - 120	20

Percent recovery is based on the spike result. RPD is based on the spike and spike duplicate result.

Surrogate	MS Result	MSD Result	Units	Dilution	Spike Amount	MS % Rec	MSD % Rec	Recovery Limits
TFT	0.914	0.939	mg/Kg	10	0.10	91	94	70 - 130
4-BFB	0.909	0.86	mg/Kg	10	0.10	91	86	70 - 130

Matrix Spikes

QCBatch: QC20301

Param	MS Result	MSD Result	Units	Dil.	Spike Amount Added	Matrix Result	% Rec	RPD	% Rec Limit	RPD Limit
DRO	241	236	mg/Kg	1	250	<50.0	96	2	70 - 130	20

Percent recovery is based on the spike result. RPD is based on the spike and spike duplicate result.

Surrogate	MS Result	MSD Result	Units	Dilution	Spike Amount	MS % Rec	MSD % Rec	Recovery Limits
n-Triacontane	164	164	mg/Kg	1	150	109	109	70 - 130

[24]Low MS/MSD recovery due to prep. LCS, LCSD show the method to be in control.
[25]Low MS/MSD recovery due to prep. LCS, LCSD show the method to be in control.
[26]Low MS/MSD recovery due to prep. LCS, LCSD show the method to be in control.
[27]Low MS/MSD recovery due to prep. LCS, LCSD show the method to be in control.
[28]Low MS/MSD recovery due to prep. LCS, LCSD show the method to be in control.
[29]Low MS/MSD recovery due to prep. LCS, LCSD show the method to be in control.
[30]Low MS/MSD recovery due to prep. LCS, LCSD show the method to be in control.
[31]Low MS/MSD recovery due to prep. LCS, LCSD show the method to be in control.

Matrix Spikes

QCBatch: QC20349

Param	MS Result	MSD Result	Units	Dil.	Spike Amount Added	Matrix Result	% Rec	RPD	% Rec Limit	RPD Limit
DRO	226	222	mg/Kg	1	250	<50.0	90	2	70 - 130	20

Percent recovery is based on the spike result. RPD is based on the spike and spike duplicate result.

Surrogate	MS Result	MSD Result	Units	Dilution	Spike Amount	MS % Rec	MSD % Rec	Recovery Limits
n-Triacontane	119	116	mg/Kg	1	150	79	77	70 - 130

Quality Control Report
Continuing Calibration Verification Standards

CCV (1)

QCBatch: QC20232

Param	Flag	Units	CCVs True Conc.	CCVs Found Conc.	CCVs Percent Recovery	Percent Recovery Limits	Date Analyzed
MTBE		mg/L	0.10	0.0942	94	85 - 115	5/10/02
Benzene		mg/L	0.10	0.0914	91	85 - 115	5/10/02
Toluene		mg/L	0.10	0.0915	91	85 - 115	5/10/02
Ethylbenzene		mg/L	0.10	0.0922	92	85 - 115	5/10/02
M,P,O-Xylene		mg/L	0.30	0.284	94	85 - 115	5/10/02

ICV (1)

QCBatch: QC20232

Param	Flag	Units	CCVs True Conc.	CCVs Found Conc.	CCVs Percent Recovery	Percent Recovery Limits	Date Analyzed
MTBE		mg/L	0.10	0.1	100	85 - 115	5/10/02
Benzene		mg/L	0.10	0.093	93	85 - 115	5/10/02
Toluene		mg/L	0.10	0.0943	94	85 - 115	5/10/02
Ethylbenzene		mg/L	0.10	0.0948	94	85 - 115	5/10/02
M,P,O-Xylene		mg/L	0.30	0.289	96	85 - 115	5/10/02

CCV (1)

QCBatch: QC20233

Param	Flag	Units	CCVs True Conc.	CCVs Found Conc.	CCVs Percent Recovery	Percent Recovery Limits	Date Analyzed
GRO		mg/Kg	1	0.953	95	85 - 115	5/10/02

ICV (1) QCBatch: QC20233

Param	Flag	Units	CCVs True Conc.	CCVs Found Conc.	CCVs Percent Recovery	Percent Recovery Limits	Date Analyzed
GRO		mg/Kg	1	1.02	102	85 - 115	5/10/02

CCV (1) QCBatch: QC20274

Param	Flag	Units	CCVs True Conc.	CCVs Found Conc.	CCVs Percent Recovery	Percent Recovery Limits	Date Analyzed
MTBE		mg/L	0.10	0.105	105	85 - 115	5/13/02
Benzene		mg/L	0.10	0.086	86	85 - 115	5/13/02
Toluene		mg/L	0.10	0.0913	91	85 - 115	5/13/02
Ethylbenzene	[32]	mg/L	0.10	0.0837	84	85 - 115	5/13/02
M,P,O-Xylene		mg/L	0.30	0.265	88	85 - 115	5/13/02

CCV (2) QCBatch: QC20274

Param	Flag	Units	CCVs True Conc.	CCVs Found Conc.	CCVs Percent Recovery	Percent Recovery Limits	Date Analyzed
MTBE		mg/L	0.10	0.0935	93	85 - 115	5/13/02
Benzene	[33]	mg/L	0.10	0.0833	83	85 - 115	5/13/02
Toluene		mg/L	0.10	0.085	85	85 - 115	5/13/02
Ethylbenzene		mg/L	0.10	0.0889	88	85 - 115	5/13/02
M,P,O-Xylene		mg/L	0.30	0.267	89	85 - 115	5/13/02

ICV (1) QCBatch: QC20274

Param	Flag	Units	CCVs True Conc.	CCVs Found Conc.	CCVs Percent Recovery	Percent Recovery Limits	Date Analyzed
MTBE		mg/L	0.10	0.0941	94	85 - 115	5/13/02
Benzene	[34]	mg/L	0.10	0.0841	84	85 - 115	5/13/02
Toluene		mg/L	0.10	0.0853	85	85 - 115	5/13/02
Ethylbenzene		mg/L	0.10	0.085	85	85 - 115	5/13/02
M,P,O-Xylene		mg/L	0.30	0.262	87	85 - 115	5/13/02

CCV (1) QCBatch: QC20275

[32]Ethylbenzene outside normal limits. Average (91) of CCV components within acceptable range.
[33]Benzene outside normal limits. Average (88) of CCV components within acceptable range.
[34]Benzene outside normal limits. Average (87) of ICV components within acceptable range.

Param	Flag	Units	CCVs True Conc.	CCVs Found Conc.	CCVs Percent Recovery	Percent Recovery Limits	Date Analyzed
GRO		mg/Kg	1	1.04	104	85 - 115	5/13/02

CCV (2) QCBatch: QC20275

Param	Flag	Units	CCVs True Conc.	CCVs Found Conc.	CCVs Percent Recovery	Percent Recovery Limits	Date Analyzed
GRO		mg/Kg	1	0.973	97	85 - 115	5/13/02

ICV (1) QCBatch: QC20275

Param	Flag	Units	CCVs True Conc.	CCVs Found Conc.	CCVs Percent Recovery	Percent Recovery Limits	Date Analyzed
GRO		mg/Kg	1	1.07	107	85 - 115	5/13/02

CCV (1) QCBatch: QC20301

Param	Flag	Units	CCVs True Conc.	CCVs Found Conc.	CCVs Percent Recovery	Percent Recovery Limits	Date Analyzed
DRO		mg/Kg	250	272	109	75 - 125	5/14/02

CCV (2) QCBatch: QC20301

Param	Flag	Units	CCVs True Conc.	CCVs Found Conc.	CCVs Percent Recovery	Percent Recovery Limits	Date Analyzed
DRO		mg/Kg	250	272	108	75 - 125	5/14/02

CCV (3) QCBatch: QC20301

Param	Flag	Units	CCVs True Conc.	CCVs Found Conc.	CCVs Percent Recovery	Percent Recovery Limits	Date Analyzed
DRO		mg/Kg	250	274	109	75 - 125	5/14/02

ICV (1) QCBatch: QC20301

Param	Flag	Units	CCVs True Conc.	CCVs Found Conc.	CCVs Percent Recovery	Percent Recovery Limits	Date Analyzed
DRO		mg/Kg	250	266	106	75 - 125	5/14/02

CCV (1)

QCBatch: QC20349

Param	Flag	Units	CCVs True Conc.	CCVs Found Conc.	CCVs Percent Recovery	Percent Recovery Limits	Date Analyzed
DRO		mg/Kg	250	248	99	75 - 125	5/15/02

CCV (2)

QCBatch: QC20349

Param	Flag	Units	CCVs True Conc.	CCVs Found Conc.	CCVs Percent Recovery	Percent Recovery Limits	Date Analyzed
DRO		mg/Kg	250	252	100	75 - 125	5/15/02

CCV (3)

QCBatch: QC20349

Param	Flag	Units	CCVs True Conc.	CCVs Found Conc.	CCVs Percent Recovery	Percent Recovery Limits	Date Analyzed
DRO		mg/Kg	250	263	105	75 - 125	5/15/02

ICV (1)

QCBatch: QC20349

Param	Flag	Units	CCVs True Conc.	CCVs Found Conc.	CCVs Percent Recovery	Percent Recovery Limits	Date Analyzed
DRO		mg/Kg	250	234	94	75 - 125	5/15/02

TraceAnalysis, Inc.

6701 Aberdeen Avenue, Ste. 9 Lubbock, Texas 79424
Tel (806) 794 1296 Fax (806) 794 1298
1 (800) 378 1296

CHAIN-OF-CUSTODY RECORD AND ANALYSIS REQUEST

LAB Order ID # A02051010

Company Name: Enercon Services Inc
Phone #: 915-570-8726
Address: 306 West Wall, Suite 1312, Midland, Tx 79701
Fax #: 915-684-7587
Contact Person: Jeffrey Kindley
Invoice to: (If different from above) Kyle Landonnau Equiva Services Inc. Incident # 300109
Project #: EQ-112
Project Name: Barber Ranch
Project Location: Lea County, New Mexico
Sampler Signature: Jeffrey Kindley

ANALYSIS REQUEST (Circle or Specify Method No.)

LAB # (LAB USE ONLY)	FIELD CODE	# CONTAINERS	Volume/Amount	MATRIX: WATER	MATRIX: SOIL	MATRIX: AIR	MATRIX: SLUDGE	PRESERVATIVE METHOD: HCL	PRESERVATIVE METHOD: HNO3	PRESERVATIVE METHOD: ICE	PRESERVATIVE METHOD: NONE	SAMPLING: DATE	SAMPLING: TIME	MTBE 8020/602	BTEX 8020/602	TPH	PAH 8270	Total Metals Ag As Ba Cd Cr Pb Hg Se	TCLP Metals Ag As Ba Cd Cr Pb Hg Se	TCLP Volatiles	TCLP Semi Volatiles	RCI	GC.MS Vol. 8240/8260/624	GC/MS Semi. Vol. 8270/625	PCB's 8080/608	Pest. 8080/608	BOD, TSS, PH	TPH (DRO/GRO) 8015M *	TPH (Tx 1005) extend to C35 **	~~SPLP~~	Turn Around Time if different from standard	Hold
196728	MW-10 (8-10')	1	4oz		✓						✓	05/07/02	0850		✓													✓		X		
729	MW-10 (25-27')	1	4oz		✓						✓	05/07/02	0945		✓													✓				
730	S-1 (13-15')	1	4oz		✓						✓	05/07/02	1520		✓													✓				
731	S-1 (27-28')	1	4oz		✓						✓	05/07/02	1600		✓													✓				
732	MW-11 (13-15')	1	4oz		✓						✓	05/08/02	1036		✓													✓				
733	MW-11 (26-28')	1	4oz		✓						✓	05/08/02	1102		✓													✓				
734	MW-12 (13-15')	1	4oz		✓						✓	05/08/02	1352		✓													✓				
735	MW-12 (27-28')	1	4oz		✓						✓	05/08/02	1440		✓													✓				

✓ 5/15

Relinquished by:	Date:	Time:	Received by:	Date:	Time:
Jeffrey Kindley	May 9, 2002	1200			
Relinquished by:	Date:	Time:	Received by:	Date:	Time:
Relinquished by:	Date:	Time:	Received at Laboratory by: [signature]	Date: 5-10-02	Time: 10:00

LAB USE ONLY
Intact Y / N
Headspace Y / N
Temp 4 °
Log-in Review CR

REMARKS:
* Need 3-day turnaround on TPH (DRO/GRO) Call Jeff Kindley at 915-631-6591 and Bennett Howell at 972-484-3854 with results
** After running TPH (DRO/GRO) call Jeff or Bennett for possible Further analysis of TPH (Tx 1005

[redacted]ubmit[redacted]samp[redacted]nstitu[redacted]reem[redacted]Terms[redacted]Cond[redacted]listed[redacted]verse[redacted]f C.O.C. [redacted] [redacted] [redacted]rier # [redacted]15 [redacted]2 [redacted]7 [redacted]9 [redacted] [redacted]

ORIGINAL COPY

Analytical and Quality Control Report

Jeff Kindley
Enercon Services Inc.
306 W. Wall Suite 1312
Midland, Tx. 79701

Report Date: May 17, 2002

Order ID Number: A02051011

Project Number: EQ-112
Project Name: Barber Ranch 3000109
Project Location: Barber Lea County, New Mexico

Enclosed are the Analytical Results and Quality Control Data Reports for the following samples submitted to Trace-Analysis, Inc.

Sample	Description	Matrix	Date Taken	Time Taken	Date Received
196736	MW-11	Water	5/8/02	13:50	5/10/02
196737	MW-12	Water	5/8/02	16:15	5/10/02

These results represent only the samples received in the laboratory. The Quality Control Report is generated on a batch basis. All information contained in this report is for the analytical batch(es) in which your sample(s) were analyzed. Note: the RDL is equal to MQL for all organic analytes including TPH.
The test results contained within this report meet all requirements of LAC 33:I unless otherwise noted.

This report consists of a total of 7 pages and shall not be reproduced except in its entirety including the chain of custody (COC), without written approval of TraceAnalysis, Inc.

Dr. Blair Leftwich, Director

Analytical Report

Sample: 196736 - MW-11

Analysis:	BTEX	Analytical Method:	S 8021B	QC Batch:	QC20230	Date Analyzed:	5/10/02
Analyst:	CG	Preparation Method:	S 5030B	Prep Batch:	PB19358	Date Prepared:	5/10/02

Param	Flag	Result	Units	Dilution	RDL
Benzene		<0.005	mg/L	5	0.001
Toluene		<0.005	mg/L	5	0.001
Ethylbenzene		<0.005	mg/L	5	0.001
M,P,O-Xylene		<0.005	mg/L	5	0.001
Total BTEX		<0.005	mg/L	5	0.001

Surrogate	Flag	Result	Units	Dilution	Spike Amount	Percent Recovery	Recovery Limits
TFT		0.0923	mg/L	5	0.10	92	70 - 130
4-BFB		0.0959	mg/L	5	0.10	95	70 - 130

Sample: 196736 - MW-11

Analysis:	PAH	Analytical Method:	S 8270C	QC Batch:	QC20367	Date Analyzed:	5/14/02
Analyst:	RC	Preparation Method:	E 3510C	Prep Batch:	PB19413	Date Prepared:	5/14/02

Param	Flag	Result	Units	Dilution	RDL
Naphthalene		0.0008	mg/L	1	0.0002
Acenaphthylene		<0.0002	mg/L	1	0.0002
Acenaphthene		<0.0002	mg/L	1	0.0002
Fluorene		<0.0002	mg/L	1	0.0002
Phenanthrene		<0.0002	mg/L	1	0.0002
Anthracene		<0.0002	mg/L	1	0.0002
Fluoranthene		<0.0002	mg/L	1	0.0002
Pyrene		<0.0002	mg/L	1	0.0002
Benzo(a)anthracene		<0.0002	mg/L	1	0.0002
Chrysene		<0.0002	mg/L	1	0.0002
Benzo(b)fluoranthene		<0.0002	mg/L	1	0.0002
Benzo(k)fluoranthene		<0.0002	mg/L	1	0.0002
Benzo(a)pyrene		<0.0002	mg/L	1	0.0002
Indeno(1,2,3-cd)pyrene		<0.0002	mg/L	1	0.0002
Dibenzo(a,h)anthracene		<0.0002	mg/L	1	0.0002
Benzo(g,h,i)perylene		<0.0002	mg/L	1	0.0002

Surrogate	Flag	Result	Units	Dilution	Spike Amount	Percent Recovery	Recovery Limits
Nitrobenzene-d5		50.76	mg/L	1	80	63	35 - 114
2-Fluorobiphenyl		52.13	mg/L	1	80	65	43 - 116
Terphenyl-d14		23.66	mg/L	1	80	29	33 - 141

Sample: 196737 - MW-12

Analysis:	BTEX	Analytical Method:	S 8021B	QC Batch:	QC20230	Date Analyzed:	5/10/02
Analyst:	CG	Preparation Method:	S 5030B	Prep Batch:	PB19358	Date Prepared:	5/10/02

Param	Flag	Result	Units	Dilution	RDL
Benzene		0.002	mg/L	1	0.001
Toluene		<0.001	mg/L	1	0.001
Ethylbenzene		<0.001	mg/L	1	0.001
M,P,O-Xylene		0.0026	mg/L	1	0.001
Total BTEX		0.0046	mg/L	1	0.001

Surrogate	Flag	Result	Units	Dilution	Spike Amount	Percent Recovery	Recovery Limits
TFT		0.100	mg/L	1	0.10	100	70 - 130
4-BFB		0.101	mg/L	1	0.10	101	70 - 130

Sample: 196737 - MW-12

Analysis:	PAH	Analytical Method:	S 8270C	QC Batch:	QC20367	Date Analyzed:	5/14/02
Analyst:	RC	Preparation Method:	E 3510C	Prep Batch:	PB19413	Date Prepared:	5/14/02

Param	Flag	Result	Units	Dilution	RDL
Naphthalene		0.0008	mg/L	1	0.0002
Acenaphthylene		<0.0002	mg/L	1	0.0002
Acenaphthene		<0.0002	mg/L	1	0.0002
Fluorene		0.0002	mg/L	1	0.0002
Phenanthrene		<0.0002	mg/L	1	0.0002
Anthracene		0.0006	mg/L	1	0.0002
Fluoranthene		<0.0002	mg/L	1	0.0002
Pyrene		<0.0002	mg/L	1	0.0002
Benzo(a)anthracene		0.0007	mg/L	1	0.0002
Chrysene		0.0008	mg/L	1	0.0002
Benzo(b)fluoranthene		0.0013	mg/L	1	0.0002
Benzo(k)fluoranthene		0.0015	mg/L	1	0.0002
Benzo(a)pyrene		0.0014	mg/L	1	0.0002
Indeno(1,2,3-cd)pyrene		<0.0002	mg/L	1	0.0002
Dibenzo(a,h)anthracene		<0.0002	mg/L	1	0.0002
Benzo(g,h,i)perylene		<0.0002	mg/L	1	0.0002

Surrogate	Flag	Result	Units	Dilution	Spike Amount	Percent Recovery	Recovery Limits
Nitrobenzene-d5		56.12	mg/L	1	80	70	35 - 114
2-Fluorobiphenyl		59.15	mg/L	1	80	73	43 - 116
Terphenyl-d14		23.93	mg/L	1	80	29	33 - 141

Quality Control Report
Method Blank

Method Blank

QCBatch: QC20230

Param	Flag	Results	Units	Reporting Limit
Benzene		<0.001	mg/L	0.001
Toluene		<0.001	mg/L	0.001
Ethylbenzene		<0.001	mg/L	0.001
M,P,O-Xylene		<0.001	mg/L	0.001
Total BTEX		<0.001	mg/L	0.001

Surrogate	Flag	Result	Units	Dilution	Spike Amount	Percent Recovery	Recovery Limits
TFT		0.105	mg/L	1	0.10	105	70 - 130
4-BFB		0.104	mg/L	1	0.10	104	70 - 130

Method Blank

QCBatch: QC20367

Param	Flag	Results	Units	Reporting Limit
Naphthalene		<0.0002	mg/L	0.0002
Acenaphthylene		<0.0002	mg/L	0.0002
Acenaphthene		<0.0002	mg/L	0.0002
Fluorene		<0.0002	mg/L	0.0002
Phenanthrene		<0.0002	mg/L	0.0002
Anthracene		<0.0002	mg/L	0.0002
Fluoranthene		<0.0002	mg/L	0.0002
Pyrene		<0.0002	mg/L	0.0002
Benzo(a)anthracene		<0.0002	mg/L	0.0002
Chrysene		<0.0002	mg/L	0.0002
Benzo(b)fluoranthene		<0.0002	mg/L	0.0002
Benzo(k)fluoranthene		<0.0002	mg/L	0.0002
Benzo(a)pyrene		<0.0002	mg/L	0.0002
Indeno(1,2,3-cd)pyrene		<0.0002	mg/L	0.0002
Dibenzo(a,h)anthracene		<0.0002	mg/L	0.0002
Benzo(g,h,i)perylene		<0.0002	mg/L	0.0002

Surrogate	Flag	Result	Units	Dilution	Spike Amount	Percent Recovery	Recovery Limits
Nitrobenzene-d5		37.43	mg/L	1	80	46	35 - 114
2-Fluorobiphenyl		38.08	mg/L	1	80	47	43 - 116
Terphenyl-d14		62.17	mg/L	1	80	77	33 - 141

Quality Control Report
Lab Control Spikes and Duplicate Spikes

Laboratory Control Spikes

QCBatch: QC20230

Param	LCS Result	LCSD Result	Units	Dil.	Spike Amount Added	Matrix Result	% Rec	RPD	% Rec Limit	RPD Limit
MTBE	0.0984	0.102	mg/L	1	0.10	<0.001	98	4	70 - 130	20
Benzene	0.105	0.107	mg/L	1	0.10	<0.001	105	2	70 - 130	20
Toluene	0.103	0.106	mg/L	1	0.10	<0.001	103	3	70 - 130	20
Ethylbenzene	0.103	0.108	mg/L	1	0.10	<0.001	103	5	70 - 130	20
M,P,O-Xylene	0.306	0.316	mg/L	1	0.30	<0.001	102	3	70 - 130	20

Percent recovery is based on the spike result. RPD is based on the spike and spike duplicate result.

Surrogate	LCS Result	LCSD Result	Units	Dilution	Spike Amount	LCS % Rec	LCSD % Rec	Recovery Limits
TFT	0.105	0.105	mg/L	1	0.10	105	105	70 - 130
4-BFB	0.101	0.103	mg/L	1	0.10	101	103	70 - 130

Laboratory Control Spikes

QCBatch: QC20367

Param	LCS Result	LCSD Result	Units	Dil.	Spike Amount Added	Matrix Result	% Rec	RPD	% Rec Limit	RPD Limit
Naphthalene	40.46	33.65	mg/L	1	80	<0.0002	50	18	16 - 96	20
Acenaphthylene	41.22	40.09	mg/L	1	80	<0.0002	51	2	20 - 110	20
Acenaphthene	45.58	44.59	mg/L	1	80	<0.0002	56	2	18 - 108	20
Fluorene	50.06	49.39	mg/L	1	80	<0.0002	62	1	22 - 102	20
Phenanthrene	57.04	58.94	mg/L	1	80	<0.0002	71	3	25 - 103	20
Anthracene	58.63	59.3	mg/L	1	80	<0.0002	73	1	22 - 110	20
Fluoranthene	60.24	60.67	mg/L	1	80	<0.0002	75	0	21 - 110	20
Pyrene	53.99	53.16	mg/L	1	80	<0.0002	67	1	22 - 100	20
Benzo(a)anthracene	58.57	58.86	mg/L	1	80	<0.0002	73	0	30 - 99	20
Chrysene	53.66	54.28	mg/L	1	80	<0.0002	67	1	27 - 108	20
Benzo(b)fluoranthene	51.69	48.99	mg/L	1	80	<0.0002	64	5	19 - 102	20
Benzo(k)fluoranthene	53.9	56.25	mg/L	1	80	<0.0002	67	4	35 - 103	20
Benzo(a)pyrene	50.46	50.75	mg/L	1	80	<0.0002	63	0	24 - 105	20
Indeno(1,2,3-cd)pyrene	55.6	53.82	mg/L	1	80	<0.0002	69	3	22 - 108	20
Dibenzo(a,h)anthracene	55.25	55.54	mg/L	1	80	<0.0002	69	0	23 - 77	20
Benzo(g,h,i)perylene	49.34	49.24	mg/L	1	80	<0.0002	61	0	19 - 119	20

Percent recovery is based on the spike result. RPD is based on the spike and spike duplicate result.

Surrogate	LCS Result	LCSD Result	Units	Dilution	Spike Amount	LCS % Rec	LCSD % Rec	Recovery Limits
Nitrobenzene-d5	46.66	37.15	mg/L	1	80	58	46	35 - 114
2-Fluorobiphenyl	47.74	42.74	mg/L	1	80	59	53	43 - 116
Terphenyl-d14	62.51	60.66	mg/L	1	80	78	75	33 - 141

Quality Control Report
Continuing Calibration Verification Standards

CCV (1)

QCBatch: QC20230

Param	Flag	Units	CCVs True Conc.	CCVs Found Conc.	CCVs Percent Recovery	Percent Recovery Limits	Date Analyzed
MTBE		mg/L	0.10	0.0988	99	85 - 115	5/10/02
Benzene		mg/L	0.10	0.101	101	85 - 115	5/10/02
Toluene		mg/L	0.10	0.100	100	85 - 115	5/10/02
Ethylbenzene		mg/L	0.10	0.101	101	85 - 115	5/10/02
M,P,O-Xylene		mg/L	0.30	0.302	101	85 - 115	5/10/02

CCV (2)

QCBatch: QC20230

Param	Flag	Units	CCVs True Conc.	CCVs Found Conc.	CCVs Percent Recovery	Percent Recovery Limits	Date Analyzed
MTBE		mg/L	0.10	0.0946	94	85 - 115	5/10/02
Benzene		mg/L	0.10	0.101	101	85 - 115	5/10/02
Toluene		mg/L	0.10	0.0983	98	85 - 115	5/10/02
Ethylbenzene		mg/L	0.10	0.0985	98	85 - 115	5/10/02
M,P,O-Xylene		mg/L	0.30	0.292	97	85 - 115	5/10/02

ICV (1)

QCBatch: QC20230

Param	Flag	Units	CCVs True Conc.	CCVs Found Conc.	CCVs Percent Recovery	Percent Recovery Limits	Date Analyzed
MTBE		mg/L	0.10	0.103	103	85 - 115	5/10/02
Benzene		mg/L	0.10	0.104	104	85 - 115	5/10/02
Toluene		mg/L	0.10	0.103	103	85 - 115	5/10/02
Ethylbenzene		mg/L	0.10	0.106	106	85 - 115	5/10/02
M,P,O-Xylene		mg/L	0.30	0.316	105	85 - 115	5/10/02

CCV (1)

QCBatch: QC20367

Param	Flag	Units	CCVs True Conc.	CCVs Found Conc.	CCVs Percent Recovery	Percent Recovery Limits	Date Analyzed
Naphthalene		mg/L	60	59.37	98	80 - 120	5/14/02
Acenaphthylene		mg/L	60	59.8	99	80 - 120	5/14/02
Acenaphthene		mg/L	60	60.24	100	80 - 120	5/14/02
Fluorene		mg/L	60	60.35	100	80 - 120	5/14/02
Phenanthrene		mg/L	60	59.26	98	80 - 120	5/14/02
Anthracene		mg/L	60	59.62	99	80 - 120	5/14/02
Fluoranthene		mg/L	60	60.68	101	80 - 120	5/14/02
Pyrene		mg/L	60	55.96	93	80 - 120	5/14/02
Benzo(a)anthracene		mg/L	60	60.23	100	80 - 120	5/14/02
Chrysene		mg/L	60	57.45	95	80 - 120	5/14/02
Benzo(b)fluoranthene		mg/L	60	62.08	103	80 - 120	5/14/02
Benzo(k)fluoranthene		mg/L	60	55.29	92	80 - 120	5/14/02

Continued ...

... Continued

Param	Flag	Units	CCVs True Conc.	CCVs Found Conc.	CCVs Percent Recovery	Percent Recovery Limits	Date Analyzed
Benzo(a)pyrene		mg/L	60	55.75	92	80 - 120	5/14/02
Indeno(1,2,3-cd)pyrene		mg/L	60	55.55	92	80 - 120	5/14/02
Dibenzo(a,h)anthracene		mg/L	60	53.26	88	80 - 120	5/14/02
Benzo(g,h,i)perylene		mg/L	60	52.52	87	80 - 120	5/14/02
Nitrobenzene-d5		mg/L	60	61.21	102	80 - 120	5/14/02
2-Fluorobiphenyl		mg/L	60	59.62	99	80 - 120	5/14/02
Terphenyl-d14		mg/L	60	57.39	95	80 - 120	5/14/02

Analytical and Quality Control Report

Jeff Kindley
Enercon Services Inc.
306 W. Wall Suite 1312
Midland, Tx. 79701

Report Date: May 20, 2002

Order ID Number: A02051011

Project Number: EQ-112
Project Name: Barber Ranch 3000109
Project Location: Barber Lea County, New Mexico

Enclosed are the Analytical Results and Quality Control Data Reports for the following samples submitted to Trace-Analysis, Inc.

Sample	Description	Matrix	Date Taken	Time Taken	Date Received
196736	MW-11	Water	5/8/02	13:50	5/10/02
196737	MW-12	Water	5/8/02	16:15	5/10/02

These results represent only the samples received in the laboratory. The Quality Control Report is generated on a batch basis. All information contained in this report is for the analytical batch(es) in which your sample(s) were analyzed. Note: the RDL is equal to MQL for all organic analytes including TPH.
The test results contained within this report meet all requirements of LAC 33:I unless otherwise noted.

This report consists of a total of 7 pages and shall not be reproduced except in its entirety including the chain of custody (COC), without written approval of TraceAnalysis, Inc.

Dr. Blair Leftwich, Director

Analytical Report

Sample: 196736 - MW-11

Analysis:	BTEX	Analytical Method:	S 8021B	QC Batch:	QC20230	Date Analyzed:	5/10/02
Analyst:	CG	Preparation Method:	S 5030B	Prep Batch:	PB19358	Date Prepared:	5/10/02

Param	Flag	Result	Units	Dilution	RDL
Benzene		<0.005	mg/L	5	0.001
Toluene		<0.005	mg/L	5	0.001
Ethylbenzene		<0.005	mg/L	5	0.001
M,P,O-Xylene		<0.005	mg/L	5	0.001
Total BTEX		<0.005	mg/L	5	0.001

Surrogate	Flag	Result	Units	Dilution	Spike Amount	Percent Recovery	Recovery Limits
TFT		0.0923	mg/L	5	0.10	92	70 - 130
4-BFB		0.0959	mg/L	5	0.10	95	70 - 130

Sample: 196736 - MW-11

Analysis:	PAH	Analytical Method:	S 8270C	QC Batch:	QC20367	Date Analyzed:	5/14/02
Analyst:	RC	Preparation Method:	E 3510C	Prep Batch:	PB19413	Date Prepared:	5/14/02

Param	Flag	Result	Units	Dilution	RDL
Naphthalene		0.0008	mg/L	1	0.0002
Acenaphthylene		<0.0002	mg/L	1	0.0002
Acenaphthene		<0.0002	mg/L	1	0.0002
Fluorene		<0.0002	mg/L	1	0.0002
Phenanthrene		<0.0002	mg/L	1	0.0002
Anthracene		<0.0002	mg/L	1	0.0002
Fluoranthene		<0.0002	mg/L	1	0.0002
Pyrene		<0.0002	mg/L	1	0.0002
Benzo(a)anthracene		<0.0002	mg/L	1	0.0002
Chrysene		<0.0002	mg/L	1	0.0002
Benzo(b)fluoranthene		<0.0002	mg/L	1	0.0002
Benzo(k)fluoranthene		<0.0002	mg/L	1	0.0002
Benzo(a)pyrene		<0.0002	mg/L	1	0.0002
Indeno(1,2,3-cd)pyrene		<0.0002	mg/L	1	0.0002
Dibenzo(a,h)anthracene		<0.0002	mg/L	1	0.0002
Benzo(g,h,i)perylene		<0.0002	mg/L	1	0.0002

Surrogate	Flag	Result	Units	Dilution	Spike Amount	Percent Recovery	Recovery Limits
Nitrobenzene-d5		50.76	mg/L	1	80	63	35 - 114
2-Fluorobiphenyl		52.13	mg/L	1	80	65	43 - 116
Terphenyl-d14		23.66	mg/L	1	80	29	33 - 141

Sample: 196737 - MW-12

Analysis:	BTEX	Analytical Method:	S 8021B	QC Batch:	QC20230	Date Analyzed:	5/10/02
Analyst:	CG	Preparation Method:	S 5030B	Prep Batch:	PB19358	Date Prepared:	5/10/02

Param	Flag	Result	Units	Dilution	RDL
Benzene		0.002	mg/L	1	0.001
Toluene		<0.001	mg/L	1	0.001
Ethylbenzene		<0.001	mg/L	1	0.001
M,P,O-Xylene		0.0026	mg/L	1	0.001
Total BTEX		0.0046	mg/L	1	0.001

Surrogate	Flag	Result	Units	Dilution	Spike Amount	Percent Recovery	Recovery Limits
TFT		0.100	mg/L	1	0.10	100	70 - 130
4-BFB		0.101	mg/L	1	0.10	101	70 - 130

Sample: 196737 - MW-12

Analysis:	PAH	Analytical Method:	S 8270C	QC Batch:	QC20367	Date Analyzed:	5/14/02
Analyst:	RC	Preparation Method:	E 3510C	Prep Batch:	PB19413	Date Prepared:	5/14/02

Param	Flag	Result	Units	Dilution	RDL
Naphthalene		0.0008	mg/L	1	0.0002
Acenaphthylene		<0.0002	mg/L	1	0.0002
Acenaphthene		<0.0002	mg/L	1	0.0002
Fluorene		0.0002	mg/L	1	0.0002
Phenanthrene		<0.0002	mg/L	1	0.0002
Anthracene		0.0006	mg/L	1	0.0002
Fluoranthene		<0.0002	mg/L	1	0.0002
Pyrene		<0.0002	mg/L	1	0.0002
Benzo(a)anthracene		0.0007	mg/L	1	0.0002
Chrysene		0.0008	mg/L	1	0.0002
Benzo(b)fluoranthene		0.0013	mg/L	1	0.0002
Benzo(k)fluoranthene		0.0015	mg/L	1	0.0002
Benzo(a)pyrene		0.0014	mg/L	1	0.0002
Indeno(1,2,3-cd)pyrene		<0.0002	mg/L	1	0.0002
Dibenzo(a,h)anthracene		<0.0002	mg/L	1	0.0002
Benzo(g,h,i)perylene		<0.0002	mg/L	1	0.0002

Surrogate	Flag	Result	Units	Dilution	Spike Amount	Percent Recovery	Recovery Limits
Nitrobenzene-d5		56.12	mg/L	1	80	70	35 - 114
2-Fluorobiphenyl		59.15	mg/L	1	80	73	43 - 116
Terphenyl-d14		23.93	mg/L	1	80	29	33 - 141

Quality Control Report
Method Blank

Method Blank

QCBatch: QC20230

Param	Flag	Results	Units	Reporting Limit
Benzene		<0.001	mg/L	0.001
Toluene		<0.001	mg/L	0.001
Ethylbenzene		<0.001	mg/L	0.001
M,P,O-Xylene		<0.001	mg/L	0.001
Total BTEX		<0.001	mg/L	0.001

Surrogate	Flag	Result	Units	Dilution	Spike Amount	Percent Recovery	Recovery Limits
TFT		0.105	mg/L	1	0.10	105	70 - 130
4-BFB		0.104	mg/L	1	0.10	104	70 - 130

Method Blank

QCBatch: QC20367

Param	Flag	Results	Units	Reporting Limit
Naphthalene		<0.0002	mg/L	0.0002
Acenaphthylene		<0.0002	mg/L	0.0002
Acenaphthene		<0.0002	mg/L	0.0002
Fluorene		<0.0002	mg/L	0.0002
Phenanthrene		<0.0002	mg/L	0.0002
Anthracene		<0.0002	mg/L	0.0002
Fluoranthene		<0.0002	mg/L	0.0002
Pyrene		<0.0002	mg/L	0.0002
Benzo(a)anthracene		<0.0002	mg/L	0.0002
Chrysene		<0.0002	mg/L	0.0002
Benzo(b)fluoranthene		<0.0002	mg/L	0.0002
Benzo(k)fluoranthene		<0.0002	mg/L	0.0002
Benzo(a)pyrene		<0.0002	mg/L	0.0002
Indeno(1,2,3-cd)pyrene		<0.0002	mg/L	0.0002
Dibenzo(a,h)anthracene		<0.0002	mg/L	0.0002
Benzo(g,h,i)perylene		<0.0002	mg/L	0.0002

Surrogate	Flag	Result	Units	Dilution	Spike Amount	Percent Recovery	Recovery Limits
Nitrobenzene-d5		37.43	mg/L	1	80	46	35 - 114
2-Fluorobiphenyl		38.08	mg/L	1	80	47	43 - 116
Terphenyl-d14		62.17	mg/L	1	80	77	33 - 141

Quality Control Report
Lab Control Spikes and Duplicate Spikes

Laboratory Control Spikes

QCBatch: QC20230

Param	LCS Result	LCSD Result	Units	Dil.	Spike Amount Added	Matrix Result	% Rec	RPD	% Rec Limit	RPD Limit
MTBE	0.0984	0.102	mg/L	1	0.10	<0.001	98	4	70 - 130	20
Benzene	0.105	0.107	mg/L	1	0.10	<0.001	105	2	70 - 130	20
Toluene	0.103	0.106	mg/L	1	0.10	<0.001	103	3	70 - 130	20
Ethylbenzene	0.103	0.108	mg/L	1	0.10	<0.001	103	5	70 - 130	20
M,P,O-Xylene	0.306	0.316	mg/L	1	0.30	<0.001	102	3	70 - 130	20

Percent recovery is based on the spike result. RPD is based on the spike and spike duplicate result.

Surrogate	LCS Result	LCSD Result	Units	Dilution	Spike Amount	LCS % Rec	LCSD % Rec	Recovery Limits
TFT	0.105	0.105	mg/L	1	0.10	105	105	70 - 130
4-BFB	0.101	0.103	mg/L	1	0.10	101	103	70 - 130

Laboratory Control Spikes

QCBatch: QC20367

Param	LCS Result	LCSD Result	Units	Dil.	Spike Amount Added	Matrix Result	% Rec	RPD	% Rec Limit	RPD Limit
Naphthalene	40.46	33.65	mg/L	1	80	<0.0002	50	18	16 - 96	20
Acenaphthylene	41.22	40.09	mg/L	1	80	<0.0002	51	2	20 - 110	20
Acenaphthene	45.58	44.59	mg/L	1	80	<0.0002	56	2	18 - 108	20
Fluorene	50.06	49.39	mg/L	1	80	<0.0002	62	1	22 - 102	20
Phenanthrene	57.04	58.94	mg/L	1	80	<0.0002	71	3	25 - 103	20
Anthracene	58.63	59.3	mg/L	1	80	<0.0002	73	1	22 - 110	20
Fluoranthene	60.24	60.67	mg/L	1	80	<0.0002	75	0	21 - 110	20
Pyrene	53.99	53.16	mg/L	1	80	<0.0002	67	1	22 - 100	20
Benzo(a)anthracene	58.57	58.86	mg/L	1	80	<0.0002	73	0	30 - 99	20
Chrysene	53.66	54.28	mg/L	1	80	<0.0002	67	1	27 - 108	20
Benzo(b)fluoranthene	51.69	48.99	mg/L	1	80	<0.0002	64	5	19 - 102	20
Benzo(k)fluoranthene	53.9	56.25	mg/L	1	80	<0.0002	67	4	35 - 103	20
Benzo(a)pyrene	50.46	50.75	mg/L	1	80	<0.0002	63	0	24 - 105	20
Indeno(1,2,3-cd)pyrene	55.6	53.82	mg/L	1	80	<0.0002	69	3	22 - 108	20
Dibenzo(a,h)anthracene	55.25	55.54	mg/L	1	80	<0.0002	69	0	23 - 77	20
Benzo(g,h,i)perylene	49.34	49.24	mg/L	1	80	<0.0002	61	0	19 - 119	20

Percent recovery is based on the spike result. RPD is based on the spike and spike duplicate result.

Surrogate	LCS Result	LCSD Result	Units	Dilution	Spike Amount	LCS % Rec	LCSD % Rec	Recovery Limits
Nitrobenzene-d5	46.66	37.15	mg/L	1	80	58	46	35 - 114
2-Fluorobiphenyl	47.74	42.74	mg/L	1	80	59	53	43 - 116
Terphenyl-d14	62.51	60.66	mg/L	1	80	78	75	33 - 141

Quality Control Report
Continuing Calibration Verification Standards

CCV (1)

QCBatch: QC20230

Param	Flag	Units	CCVs True Conc.	CCVs Found Conc.	CCVs Percent Recovery	Percent Recovery Limits	Date Analyzed
MTBE		mg/L	0.10	0.0988	99	85 - 115	5/10/02
Benzene		mg/L	0.10	0.101	101	85 - 115	5/10/02
Toluene		mg/L	0.10	0.100	100	85 - 115	5/10/02
Ethylbenzene		mg/L	0.10	0.101	101	85 - 115	5/10/02
M,P,O-Xylene		mg/L	0.30	0.302	101	85 - 115	5/10/02

CCV (2)

QCBatch: QC20230

Param	Flag	Units	CCVs True Conc.	CCVs Found Conc.	CCVs Percent Recovery	Percent Recovery Limits	Date Analyzed
MTBE		mg/L	0.10	0.0946	94	85 - 115	5/10/02
Benzene		mg/L	0.10	0.101	101	85 - 115	5/10/02
Toluene		mg/L	0.10	0.0983	98	85 - 115	5/10/02
Ethylbenzene		mg/L	0.10	0.0985	98	85 - 115	5/10/02
M,P,O-Xylene		mg/L	0.30	0.292	97	85 - 115	5/10/02

ICV (1)

QCBatch: QC20230

Param	Flag	Units	CCVs True Conc.	CCVs Found Conc.	CCVs Percent Recovery	Percent Recovery Limits	Date Analyzed
MTBE		mg/L	0.10	0.103	103	85 - 115	5/10/02
Benzene		mg/L	0.10	0.104	104	85 - 115	5/10/02
Toluene		mg/L	0.10	0.103	103	85 - 115	5/10/02
Ethylbenzene		mg/L	0.10	0.106	106	85 - 115	5/10/02
M,P,O-Xylene		mg/L	0.30	0.316	105	85 - 115	5/10/02

CCV (1)

QCBatch: QC20367

Param	Flag	Units	CCVs True Conc.	CCVs Found Conc.	CCVs Percent Recovery	Percent Recovery Limits	Date Analyzed
Naphthalene		mg/L	60	59.37	98	80 - 120	5/14/02
Acenaphthylene		mg/L	60	59.8	99	80 - 120	5/14/02
Acenaphthene		mg/L	60	60.24	100	80 - 120	5/14/02
Fluorene		mg/L	60	60.35	100	80 - 120	5/14/02
Phenanthrene		mg/L	60	59.26	98	80 - 120	5/14/02
Anthracene		mg/L	60	59.62	99	80 - 120	5/14/02
Fluoranthene		mg/L	60	60.68	101	80 - 120	5/14/02
Pyrene		mg/L	60	55.96	93	80 - 120	5/14/02
Benzo(a)anthracene		mg/L	60	60.23	100	80 - 120	5/14/02
Chrysene		mg/L	60	57.45	95	80 - 120	5/14/02
Benzo(b)fluoranthene		mg/L	60	62.08	103	80 - 120	5/14/02
Benzo(k)fluoranthene		mg/L	60	55.29	92	80 - 120	5/14/02

Continued ...

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Param	Flag	Units	CCVs True Conc.	CCVs Found Conc.	CCVs Percent Recovery	Percent Recovery Limits	Date Analyzed
Benzo(a)pyrene		mg/L	60	55.75	92	80 - 120	5/14/02
Indeno(1,2,3-cd)pyrene		mg/L	60	55.55	92	80 - 120	5/14/02
Dibenzo(a,h)anthracene		mg/L	60	53.26	88	80 - 120	5/14/02
Benzo(g,h,i)perylene		mg/L	60	52.52	87	80 - 120	5/14/02
Nitrobenzene-d5		mg/L	60	61.21	102	80 - 120	5/14/02
2-Fluorobiphenyl		mg/L	60	59.62	99	80 - 120	5/14/02
Terphenyl-d14		mg/L	60	57.39	95	80 - 120	5/14/02

Summary Report

Kyle Landreneau
Equiva Kyle Landreneau
PMB 284 40 FM 1960 West
Houston, TX 77090

Report Date: May 20, 2002

Order ID Number: A02051011

Project: EQ-112
TA Job Code: Barber Ranch 3000109
Casualty Code: EQ-112
Project Location: Barber Lea County, New Mexico
Project Address:
Enercon Services Inc. / Midland / Jeff Kindley

Sample	Description	Matrix	Date Taken	Time Taken	Date Received
196736	MW-11	Water	5/8/02	13:50	5/10/02
196737	MW-12	Water	5/8/02	16:15	5/10/02

0 This report consists of a total of 2 page(s) and is intended only as a summary of results for the sample(s) listed above.

	BTEX				
Sample - Field Code	Benzene (ppm)	Toluene (ppm)	Ethylbenzene (ppm)	M,P,O-Xylene (ppm)	Total BTEX (ppm)
196736 - MW-11	<0.005	<0.005	<0.005	<0.005	<0.005
196737 - MW-12	0.002	<0.001	<0.001	0.0026	0.0046

Sample: 196736 - MW-11

Param	Flag	Result	Units
Naphthalene		0.0008	mg/L
Acenaphthylene		<0.0002	mg/L
Acenaphthene		<0.0002	mg/L
Fluorene		<0.0002	mg/L
Phenanthrene		<0.0002	mg/L
Anthracene		<0.0002	mg/L
Fluoranthene		<0.0002	mg/L
Pyrene		<0.0002	mg/L
Benzo(a)anthracene		<0.0002	mg/L
Chrysene		<0.0002	mg/L
Benzo(b)fluoranthene		<0.0002	mg/L
Benzo(k)fluoranthene		<0.0002	mg/L
Benzo(a)pyrene		<0.0002	mg/L
Indeno(1,2,3-cd)pyrene		<0.0002	mg/L
Dibenzo(a,h)anthracene		<0.0002	mg/L
Benzo(g,h,i)perylene		<0.0002	mg/L

This is only a summary. Please, refer to the complete report package for quality control data.

Sample: 196737 - MW-12

Param	Flag	Result	Units
Naphthalene		0.0008	mg/L
Acenaphthylene		<0.0002	mg/L
Acenaphthene		<0.0002	mg/L
Fluorene		0.0002	mg/L
Phenanthrene		<0.0002	mg/L
Anthracene		0.0006	mg/L
Fluoranthene		<0.0002	mg/L
Pyrene		<0.0002	mg/L
Benzo(a)anthracene		0.0007	mg/L
Chrysene		0.0008	mg/L
Benzo(b)fluoranthene		0.0013	mg/L
Benzo(k)fluoranthene		0.0015	mg/L
Benzo(a)pyrene		0.0014	mg/L
Indeno(1,2,3-cd)pyrene		<0.0002	mg/L
Dibenzo(a,h)anthracene		<0.0002	mg/L
Benzo(g,h,i)perylene		<0.0002	mg/L

TRACEANALYSIS, INC.

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Analytical and Quality Control Report

Kyle Landreneau
Equiva Kyle Landreneau
PMB 284 40 FM 1960 West
Houston, TX 77090

Report Date: May 20, 2002

Order ID Number: A02051011

Project: EQ-112
TA Job Code: Barber Ranch 3000109
Casualty Code: EQ-112
Project Location: Barber Lea County, New Mexico
Enercon Services Inc. / Midland / Jeff Kindley

Enclosed are the Analytical Results and Quality Control Data Reports for the following samples submitted to Trace-Analysis, Inc.

Sample	Description	Matrix	Date Taken	Time Taken	Date Received
196736	MW-11	Water	5/8/02	13:50	5/10/02
196737	MW-12	Water	5/8/02	16:15	5/10/02

These results represent only the samples received in the laboratory. The Quality Control Report is generated on a batch basis. All information contained in this report is for the analytical batch(es) in which your sample(s) were analyzed. Note: the RDL is equal to MQL for all organic analytes including TPH.
The test results contained within this report meet all requirements of LAC 33:I unless otherwise noted.

This report consists of a total of 7 pages and shall not be reproduced except in its entirety including the chain of custody (COC), without written approval of TraceAnalysis, Inc.

Dr. Blair Leftwich, Director

Analytical Report

Sample: 196736 - MW-11

Analysis:	BTEX	Analytical Method:	S 8021B	QC Batch:	QC20230	Date Analyzed:	5/10/02
Analyst:	CG	Preparation Method:	S 5030B	Prep Batch:	PB19358	Date Prepared:	5/10/02

Param	Flag	Result	Units	Dilution	RDL
Benzene		<0.005	mg/L	5	0.001
Toluene		<0.005	mg/L	5	0.001
Ethylbenzene		<0.005	mg/L	5	0.001
M,P,O-Xylene		<0.005	mg/L	5	0.001
Total BTEX		<0.005	mg/L	5	0.001

Surrogate	Flag	Result	Units	Dilution	Spike Amount	Percent Recovery	Recovery Limits
TFT		0.0923	mg/L	5	0.10	92	70 - 130
4-BFB		0.0959	mg/L	5	0.10	95	70 - 130

Sample: 196736 - MW-11

Analysis:	PAH	Analytical Method:	S 8270C	QC Batch:	QC20367	Date Analyzed:	5/14/02
Analyst:	RC	Preparation Method:	E 3510C	Prep Batch:	PB19413	Date Prepared:	5/14/02

Param	Flag	Result	Units	Dilution	RDL
Naphthalene		0.0008	mg/L	1	0.0002
Acenaphthylene		<0.0002	mg/L	1	0.0002
Acenaphthene		<0.0002	mg/L	1	0.0002
Fluorene		<0.0002	mg/L	1	0.0002
Phenanthrene		<0.0002	mg/L	1	0.0002
Anthracene		<0.0002	mg/L	1	0.0002
Fluoranthene		<0.0002	mg/L	1	0.0002
Pyrene		<0.0002	mg/L	1	0.0002
Benzo(a)anthracene		<0.0002	mg/L	1	0.0002
Chrysene		<0.0002	mg/L	1	0.0002
Benzo(b)fluoranthene		<0.0002	mg/L	1	0.0002
Benzo(k)fluoranthene		<0.0002	mg/L	1	0.0002
Benzo(a)pyrene		<0.0002	mg/L	1	0.0002
Indeno(1,2,3-cd)pyrene		<0.0002	mg/L	1	0.0002
Dibenzo(a,h)anthracene		<0.0002	mg/L	1	0.0002
Benzo(g,h,i)perylene		<0.0002	mg/L	1	0.0002

Surrogate	Flag	Result	Units	Dilution	Spike Amount	Percent Recovery	Recovery Limits
Nitrobenzene-d5		50.76	mg/L	1	80	63	35 - 114
2-Fluorobiphenyl		52.13	mg/L	1	80	65	43 - 116
Terphenyl-d14		23.66	mg/L	1	80	29	33 - 141

Sample: 196737 - MW-12

Analysis:	BTEX	Analytical Method:	S 8021B	QC Batch:	QC20230	Date Analyzed:	5/10/02
Analyst:	CG	Preparation Method:	S 5030B	Prep Batch:	PB19358	Date Prepared:	5/10/02

Param	Flag	Result	Units	Dilution	RDL
Benzene		0.002	mg/L	1	0.001
Toluene		<0.001	mg/L	1	0.001
Ethylbenzene		<0.001	mg/L	1	0.001
M,P,O-Xylene		0.0026	mg/L	1	0.001
Total BTEX		0.0046	mg/L	1	0.001

Surrogate	Flag	Result	Units	Dilution	Spike Amount	Percent Recovery	Recovery Limits
TFT		0.100	mg/L	1	0.10	100	70 - 130
4-BFB		0.101	mg/L	1	0.10	101	70 - 130

Sample: 196737 - MW-12

Analysis:	PAH	Analytical Method:	S 8270C	QC Batch:	QC20367	Date Analyzed:	5/14/02
Analyst:	RC	Preparation Method:	E 3510C	Prep Batch:	PB19413	Date Prepared:	5/14/02

Param	Flag	Result	Units	Dilution	RDL
Naphthalene		0.0008	mg/L	1	0.0002
Acenaphthylene		<0.0002	mg/L	1	0.0002
Acenaphthene		<0.0002	mg/L	1	0.0002
Fluorene		0.0002	mg/L	1	0.0002
Phenanthrene		<0.0002	mg/L	1	0.0002
Anthracene		0.0006	mg/L	1	0.0002
Fluoranthene		<0.0002	mg/L	1	0.0002
Pyrene		<0.0002	mg/L	1	0.0002
Benzo(a)anthracene		0.0007	mg/L	1	0.0002
Chrysene		0.0008	mg/L	1	0.0002
Benzo(b)fluoranthene		0.0013	mg/L	1	0.0002
Benzo(k)fluoranthene		0.0015	mg/L	1	0.0002
Benzo(a)pyrene		0.0014	mg/L	1	0.0002
Indeno(1,2,3-cd)pyrene		<0.0002	mg/L	1	0.0002
Dibenzo(a,h)anthracene		<0.0002	mg/L	1	0.0002
Benzo(g,h,i)perylene		<0.0002	mg/L	1	0.0002

Surrogate	Flag	Result	Units	Dilution	Spike Amount	Percent Recovery	Recovery Limits
Nitrobenzene-d5		56.12	mg/L	1	80	70	35 - 114
2-Fluorobiphenyl		59.15	mg/L	1	80	73	43 - 116
Terphenyl-d14		23.93	mg/L	1	80	29	33 - 141

Quality Control Report
Method Blank

Method Blank

QCBatch: QC20230

Param	Flag	Results	Units	Reporting Limit
Benzene		<0.001	mg/L	0.001
Toluene		<0.001	mg/L	0.001
Ethylbenzene		<0.001	mg/L	0.001
M,P,O-Xylene		<0.001	mg/L	0.001
Total BTEX		<0.001	mg/L	0.001

Surrogate	Flag	Result	Units	Dilution	Spike Amount	Percent Recovery	Recovery Limits
TFT		0.105	mg/L	1	0.10	105	70 - 130
4-BFB		0.104	mg/L	1	0.10	104	70 - 130

Method Blank

QCBatch: QC20367

Param	Flag	Results	Units	Reporting Limit
Naphthalene		<0.0002	mg/L	0.0002
Acenaphthylene		<0.0002	mg/L	0.0002
Acenaphthene		<0.0002	mg/L	0.0002
Fluorene		<0.0002	mg/L	0.0002
Phenanthrene		<0.0002	mg/L	0.0002
Anthracene		<0.0002	mg/L	0.0002
Fluoranthene		<0.0002	mg/L	0.0002
Pyrene		<0.0002	mg/L	0.0002
Benzo(a)anthracene		<0.0002	mg/L	0.0002
Chrysene		<0.0002	mg/L	0.0002
Benzo(b)fluoranthene		<0.0002	mg/L	0.0002
Benzo(k)fluoranthene		<0.0002	mg/L	0.0002
Benzo(a)pyrene		<0.0002	mg/L	0.0002
Indeno(1,2,3-cd)pyrene		<0.0002	mg/L	0.0002
Dibenzo(a,h)anthracene		<0.0002	mg/L	0.0002
Benzo(g,h,i)perylene		<0.0002	mg/L	0.0002

Surrogate	Flag	Result	Units	Dilution	Spike Amount	Percent Recovery	Recovery Limits
Nitrobenzene-d5		37.43	mg/L	1	80	46	35 - 114
2-Fluorobiphenyl		38.08	mg/L	1	80	47	43 - 116
Terphenyl-d14		62.17	mg/L	1	80	77	33 - 141

Quality Control Report
Lab Control Spikes and Duplicate Spikes

Laboratory Control Spikes

QCBatch: QC20230

Param	LCS Result	LCSD Result	Units	Dil.	Spike Amount Added	Matrix Result	% Rec	RPD	% Rec Limit	RPD Limit
MTBE	0.0984	0.102	mg/L	1	0.10	<0.001	98	4	70 - 130	20
Benzene	0.105	0.107	mg/L	1	0.10	<0.001	105	2	70 - 130	20
Toluene	0.103	0.106	mg/L	1	0.10	<0.001	103	3	70 - 130	20
Ethylbenzene	0.103	0.108	mg/L	1	0.10	<0.001	103	5	70 - 130	20
M,P,O-Xylene	0.306	0.316	mg/L	1	0.30	<0.001	102	3	70 - 130	20

Percent recovery is based on the spike result. RPD is based on the spike and spike duplicate result.

Surrogate	LCS Result	LCSD Result	Units	Dilution	Spike Amount	LCS % Rec	LCSD % Rec	Recovery Limits
TFT	0.105	0.105	mg/L	1	0.10	105	105	70 - 130
4-BFB	0.101	0.103	mg/L	1	0.10	101	103	70 - 130

Laboratory Control Spikes

QCBatch: QC20367

Param	LCS Result	LCSD Result	Units	Dil.	Spike Amount Added	Matrix Result	% Rec	RPD	% Rec Limit	RPD Limit
Naphthalene	40.46	33.65	mg/L	1	80	<0.0002	50	18	16 - 96	20
Acenaphthylene	41.22	40.09	mg/L	1	80	<0.0002	51	2	20 - 110	20
Acenaphthene	45.58	44.59	mg/L	1	80	<0.0002	56	2	18 - 108	20
Fluorene	50.06	49.39	mg/L	1	80	<0.0002	62	1	22 - 102	20
Phenanthrene	57.04	58.94	mg/L	1	80	<0.0002	71	3	25 - 103	20
Anthracene	58.63	59.3	mg/L	1	80	<0.0002	73	1	22 - 110	20
Fluoranthene	60.24	60.67	mg/L	1	80	<0.0002	75	0	21 - 110	20
Pyrene	53.99	53.16	mg/L	1	80	<0.0002	67	1	22 - 100	20
Benzo(a)anthracene	58.57	58.86	mg/L	1	80	<0.0002	73	0	30 - 99	20
Chrysene	53.66	54.28	mg/L	1	80	<0.0002	67	1	27 - 108	20
Benzo(b)fluoranthene	51.69	48.99	mg/L	1	80	<0.0002	64	5	19 - 102	20
Benzo(k)fluoranthene	53.9	56.25	mg/L	1	80	<0.0002	67	4	35 - 103	20
Benzo(a)pyrene	50.46	50.75	mg/L	1	80	<0.0002	63	0	24 - 105	20
Indeno(1,2,3-cd)pyrene	55.6	53.82	mg/L	1	80	<0.0002	69	3	22 - 108	20
Dibenzo(a,h)anthracene	55.25	55.54	mg/L	1	80	<0.0002	69	0	23 - 77	20
Benzo(g,h,i)perylene	49.34	49.24	mg/L	1	80	<0.0002	61	0	19 - 119	20

Percent recovery is based on the spike result. RPD is based on the spike and spike duplicate result.

Surrogate	LCS Result	LCSD Result	Units	Dilution	Spike Amount	LCS % Rec	LCSD % Rec	Recovery Limits
Nitrobenzene-d5	46.66	37.15	mg/L	1	80	58	46	35 - 114
2-Fluorobiphenyl	47.74	42.74	mg/L	1	80	59	53	43 - 116
Terphenyl-d14	62.51	60.66	mg/L	1	80	78	75	33 - 141

Quality Control Report
Continuing Calibration Verification Standards

CCV (1)

QCBatch: QC20230

Param	Flag	Units	CCVs True Conc.	CCVs Found Conc.	CCVs Percent Recovery	Percent Recovery Limits	Date Analyzed
MTBE		mg/L	0.10	0.0988	99	85 - 115	5/10/02
Benzene		mg/L	0.10	0.101	101	85 - 115	5/10/02
Toluene		mg/L	0.10	0.100	100	85 - 115	5/10/02
Ethylbenzene		mg/L	0.10	0.101	101	85 - 115	5/10/02
M,P,O-Xylene		mg/L	0.30	0.302	101	85 - 115	5/10/02

CCV (2)

QCBatch: QC20230

Param	Flag	Units	CCVs True Conc.	CCVs Found Conc.	CCVs Percent Recovery	Percent Recovery Limits	Date Analyzed
MTBE		mg/L	0.10	0.0946	94	85 - 115	5/10/02
Benzene		mg/L	0.10	0.101	101	85 - 115	5/10/02
Toluene		mg/L	0.10	0.0983	98	85 - 115	5/10/02
Ethylbenzene		mg/L	0.10	0.0985	98	85 - 115	5/10/02
M,P,O-Xylene		mg/L	0.30	0.292	97	85 - 115	5/10/02

ICV (1)

QCBatch: QC20230

Param	Flag	Units	CCVs True Conc.	CCVs Found Conc.	CCVs Percent Recovery	Percent Recovery Limits	Date Analyzed
MTBE		mg/L	0.10	0.103	103	85 - 115	5/10/02
Benzene		mg/L	0.10	0.104	104	85 - 115	5/10/02
Toluene		mg/L	0.10	0.103	103	85 - 115	5/10/02
Ethylbenzene		mg/L	0.10	0.106	106	85 - 115	5/10/02
M,P,O-Xylene		mg/L	0.30	0.316	105	85 - 115	5/10/02

CCV (1)

QCBatch: QC20367

Param	Flag	Units	CCVs True Conc.	CCVs Found Conc.	CCVs Percent Recovery	Percent Recovery Limits	Date Analyzed
Naphthalene		mg/L	60	59.37	98	80 - 120	5/14/02
Acenaphthylene		mg/L	60	59.8	99	80 - 120	5/14/02
Acenaphthene		mg/L	60	60.24	100	80 - 120	5/14/02
Fluorene		mg/L	60	60.35	100	80 - 120	5/14/02
Phenanthrene		mg/L	60	59.26	98	80 - 120	5/14/02
Anthracene		mg/L	60	59.62	99	80 - 120	5/14/02
Fluoranthene		mg/L	60	60.68	101	80 - 120	5/14/02
Pyrene		mg/L	60	55.96	93	80 - 120	5/14/02
Benzo(a)anthracene		mg/L	60	60.23	100	80 - 120	5/14/02
Chrysene		mg/L	60	57.45	95	80 - 120	5/14/02
Benzo(b)fluoranthene		mg/L	60	62.08	103	80 - 120	5/14/02
Benzo(k)fluoranthene		mg/L	60	55.29	92	80 - 120	5/14/02

Continued ...

... Continued

Param	Flag	Units	CCVs True Conc.	CCVs Found Conc.	CCVs Percent Recovery	Percent Recovery Limits	Date Analyzed
Benzo(a)pyrene		mg/L	60	55.75	92	80 - 120	5/14/02
Indeno(1,2,3-cd)pyrene		mg/L	60	55.55	92	80 - 120	5/14/02
Dibenzo(a,h)anthracene		mg/L	60	53.26	88	80 - 120	5/14/02
Benzo(g,h,i)perylene		mg/L	60	52.52	87	80 - 120	5/14/02
Nitrobenzene-d5		mg/L	60	61.21	102	80 - 120	5/14/02
2-Fluorobiphenyl		mg/L	60	59.62	99	80 - 120	5/14/02
Terphenyl-d14		mg/L	60	57.39	95	80 - 120	5/14/02

196736-37

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TraceAnalysis, Inc.

6701 Aberdeen Avenue, Ste. 9 Lubbock, Texas 79424
Tel (806) 794 1296 Fax (806) 794 1298
1 (800) 378 1296

CHAIN-OF-CUSTODY RECORD AND ANALYSIS REQUE

LAB Order ID # A02051011

Company Name: Enercon Services
Phone #: 915-570-8726
Address: 306 West Wall Suite 1312, Midland, Tx 79701
Fax #: 915-684-7587
Contact Person: Jeffrey Kindley
Invoice to: (If different from above) Kyle Landreneau Equiva Services Incident # 300109
Project #: EQ-112
Project Name: Barber Ranch
Project Location: Lea County, New Mexico
Sampler Signature: Jeffrey Kindley

ANALYSIS REQUEST (Circle or Specify Method No.)

LAB # (LAB USE ONLY)	FIELD CODE	# CONTAINERS	Volume/Amount	MATRIX: WATER	SOIL	AIR	SLUDGE		PRESERVATIVE METHOD: HCL	HNO3	ICE	NONE		SAMPLING: DATE	TIME	MTBE 8020/602	BTEX 8020/602	TPH	PAH 8270	Total Metals Ag As Ba Cd Cr Pb Hg Se	TCLP Metals Ag As Ba Cd Cr Pb Hg Se	TCLP Volatiles	TCLP Semi Volatiles	RCI	GC.MS Vol. 8240/8260/624	GC/MS Semi. Vol. 8270/625	PCB's 8080/608	Pest. 8080/608	BOD, TSS, PH					Turn Around Time if different from standard	Hold
196736	MW-11	1	Liter	✓								✓		05/08/02	1350		✓		✓																
5	MW-11	2	40ml	✓					✓					05/08/02	1350		✓																		
737	MW-12	1	Liter	✓								✓		05/08/02	1615				✓																
	MW-12	2	40ml	✓					✓					05/08/02	1615		✓																		

Relinquished by:	Date:	Time:	Received by:	Date:	Time:
Jeffrey Kindley	May 9 2002	1200			
Relinquished by:	Date:	Time:	Received by:	Date:	Time:
Relinquished by:	Date:	Time:	Received at Laboratory by: Vicki Densly	Date: 5-10-02	Time: 10:00

LAB USE ONLY
Intact Y / N
Headspace Y / N
Temp 4 °
Log-in Review CG

REMARKS: F+P 5/17/02

Submittal of samples constitutes agreement to Terms and Conditions listed on reverse side of C.O.C.

Carrier # B46 902 877 979 3

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TRACEANALYSIS, INC.

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155 McCutcheon, Suite H El Paso, Texas 79932 888•588•3443 915•585•3443 FAX 915•585•4944
E-Mail: lab@traceanalysis.com

Analytical and Quality Control Report

Kyle Landreneau
Equiva Kyle Landreneau
PMB 284 40 FM 1960 West
Houston, TX 77090

Report Date: May 21, 2002

Order ID Number: A02051504

Project: EQ-110
TA Job Code: 300110
Casualty Code: EQ-110
Project Location: Monument, New Mexico
Enercon Services Inc. / Midland / Jeff Kindley

Enclosed are the Analytical Results and Quality Control Data Reports for the following samples submitted to Trace-Analysis, Inc.

Sample	Description	Matrix	Date Taken	Time Taken	Date Received
197042	MW-1	Water	5/13/02	12:50	5/15/02
197043	MW-2	Water	5/13/02	15:44	5/15/02
197044	MW-3	Water	5/13/02	15:35	5/15/02
197045	MW-5	Water	5/13/02	16:05	5/15/02

These results represent only the samples received in the laboratory. The Quality Control Report is generated on a batch basis. All information contained in this report is for the analytical batch(es) in which your sample(s) were analyzed. Note: the RDL is equal to MQL for all organic analytes including TPH.
The test results contained within this report meet all requirements of LAC 33:I unless otherwise noted.

This report consists of a total of 8 pages and shall not be reproduced except in its entirety including the chain of custody (COC), without written approval of TraceAnalysis, Inc.

Dr. Blair Leftwich, Director

Analytical Report

Sample: 197042 - MW-1

Analysis:	BTEX	Analytical Method:	S 8021B	QC Batch:	QC20321	Date Analyzed:	5/15/02
Analyst:	CG	Preparation Method:	S 5030B	Prep Batch:	PB19433	Date Prepared:	5/15/02

Param	Flag	Result	Units	Dilution	RDL
Benzene		<0.001	mg/L	1	0.001
Toluene		<0.001	mg/L	1	0.001
Ethylbenzene		<0.001	mg/L	1	0.001
M,P,O-Xylene		<0.001	mg/L	1	0.001
Total BTEX		<0.001	mg/L	1	0.001

Surrogate	Flag	Result	Units	Dilution	Spike Amount	Percent Recovery	Recovery Limits
TFT		0.0872	mg/L	1	0.10	87	70 - 130
4-BFB		0.0879	mg/L	1	0.10	88	70 - 130

Sample: 197042 - MW-1

Analysis:	PAH	Analytical Method:	S 8270C	QC Batch:	QC20489	Date Analyzed:	5/19/02
Analyst:	RC	Preparation Method:	E 3510C	Prep Batch:	PB19488	Date Prepared:	5/19/02

Param	Flag	Result	Units	Dilution	RDL
Naphthalene		<0.0002	mg/L	1	0.0002
Acenaphthylene		<0.0002	mg/L	1	0.0002
Acenaphthene		<0.0002	mg/L	1	0.0002
Fluorene		<0.0002	mg/L	1	0.0002
Phenanthrene		<0.0002	mg/L	1	0.0002
Anthracene		<0.0002	mg/L	1	0.0002
Fluoranthene		<0.0002	mg/L	1	0.0002
Pyrene		<0.0002	mg/L	1	0.0002
Benzo(a)anthracene		<0.0002	mg/L	1	0.0002
Chrysene		<0.0002	mg/L	1	0.0002
Benzo(b)fluoranthene		<0.0002	mg/L	1	0.0002
Benzo(k)fluoranthene		<0.0002	mg/L	1	0.0002
Benzo(a)pyrene		<0.0002	mg/L	1	0.0002
Indeno(1,2,3-cd)pyrene		<0.0002	mg/L	1	0.0002
Dibenzo(a,h)anthracene		<0.0002	mg/L	1	0.0002
Benzo(g,h,i)perylene		<0.0002	mg/L	1	0.0002

Surrogate	Flag	Result	Units	Dilution	Spike Amount	Percent Recovery	Recovery Limits
Nitrobenzene-d5		62.98	mg/L	1	80	78	35 - 114
2-Fluorobiphenyl		61.05	mg/L	1	80	76	43 - 116
Terphenyl-d14		28.22	mg/L	1	80	35	33 - 141

Sample: 197043 - MW-2

Analysis:	BTEX	Analytical Method:	S 8021B	QC Batch:	QC20321	Date Analyzed:	5/15/02
Analyst:	CG	Preparation Method:	S 5030B	Prep Batch:	PB19433	Date Prepared:	5/15/02

Param	Flag	Result	Units	Dilution	RDL
Benzene		<0.001	mg/L	1	0.001
Toluene		<0.001	mg/L	1	0.001
Ethylbenzene		<0.001	mg/L	1	0.001
M,P,O-Xylene		<0.001	mg/L	1	0.001
Total BTEX		<0.001	mg/L	1	0.001

Surrogate	Flag	Result	Units	Dilution	Spike Amount	Percent Recovery	Recovery Limits
TFT		0.089	mg/L	1	0.10	89	70 - 130
4-BFB		0.0948	mg/L	1	0.10	95	70 - 130

Sample: 197043 - MW-2

Analysis:	PAH	Analytical Method:	S 8270C	QC Batch:	QC20489	Date Analyzed:	5/19/02
Analyst:	RC	Preparation Method:	E 3510C	Prep Batch:	PB19488	Date Prepared:	5/19/02

Param	Flag	Result	Units	Dilution	RDL
Naphthalene		<0.0002	mg/L	1	0.0002
Acenaphthylene		<0.0002	mg/L	1	0.0002
Acenaphthene		<0.0002	mg/L	1	0.0002
Fluorene		0.00026	mg/L	1	0.0002
Phenanthrene		0.00044	mg/L	1	0.0002
Anthracene		<0.0002	mg/L	1	0.0002
Fluoranthene		<0.0002	mg/L	1	0.0002
Pyrene		<0.0002	mg/L	1	0.0002
Benzo(a)anthracene		<0.0002	mg/L	1	0.0002
Chrysene		<0.0002	mg/L	1	0.0002
Benzo(b)fluoranthene		<0.0002	mg/L	1	0.0002
Benzo(k)fluoranthene		<0.0002	mg/L	1	0.0002
Benzo(a)pyrene		<0.0002	mg/L	1	0.0002
Indeno(1,2,3-cd)pyrene		<0.0002	mg/L	1	0.0002
Dibenzo(a,h)anthracene		<0.0002	mg/L	1	0.0002
Benzo(g,h,i)perylene		<0.0002	mg/L	1	0.0002

Surrogate	Flag	Result	Units	Dilution	Spike Amount	Percent Recovery	Recovery Limits
Nitrobenzene-d5		40.15	mg/L	1	80	50	35 - 114
2-Fluorobiphenyl		42.87	mg/L	1	80	53	43 - 116
Terphenyl-d14		19.77	mg/L	1	80	24	33 - 141

Sample: 197044 - MW-3

Analysis:	BTEX	Analytical Method:	S 8021B	QC Batch:	QC20321	Date Analyzed:	5/15/02
Analyst:	CG	Preparation Method:	S 5030B	Prep Batch:	PB19433	Date Prepared:	5/15/02

Param	Flag	Result	Units	Dilution	RDL
Benzene		<0.001	mg/L	1	0.001
Toluene		<0.001	mg/L	1	0.001
Ethylbenzene		<0.001	mg/L	1	0.001
M,P,O-Xylene		<0.001	mg/L	1	0.001
Total BTEX		<0.001	mg/L	1	0.001

Surrogate	Flag	Result	Units	Dilution	Spike Amount	Percent Recovery	Recovery Limits
TFT		0.090	mg/L	1	0.10	90	70 - 130
4-BFB		0.0956	mg/L	1	0.10	96	70 - 130

Sample: 197044 - MW-3

Analysis: PAH | Analytical Method: S 8270C | QC Batch: QC20489 | Date Analyzed: 5/19/02
Analyst: RC | Preparation Method: E 3510C | Prep Batch: PB19488 | Date Prepared: 5/19/02

Param	Flag	Result	Units	Dilution	RDL
Naphthalene		<0.0002	mg/L	1	0.0002
Acenaphthylene		<0.0002	mg/L	1	0.0002
Acenaphthene		<0.0002	mg/L	1	0.0002
Fluorene		<0.0002	mg/L	1	0.0002
Phenanthrene		<0.0002	mg/L	1	0.0002
Anthracene		<0.0002	mg/L	1	0.0002
Fluoranthene		<0.0002	mg/L	1	0.0002
Pyrene		<0.0002	mg/L	1	0.0002
Benzo(a)anthracene		<0.0002	mg/L	1	0.0002
Chrysene		<0.0002	mg/L	1	0.0002
Benzo(b)fluoranthene		<0.0002	mg/L	1	0.0002
Benzo(k)fluoranthene		<0.0002	mg/L	1	0.0002
Benzo(a)pyrene		<0.0002	mg/L	1	0.0002
Indeno(1,2,3-cd)pyrene		<0.0002	mg/L	1	0.0002
Dibenzo(a,h)anthracene		<0.0002	mg/L	1	0.0002
Benzo(g,h,i)perylene		<0.0002	mg/L	1	0.0002

Surrogate	Flag	Result	Units	Dilution	Spike Amount	Percent Recovery	Recovery Limits
Nitrobenzene-d5		61.63	mg/L	1	80	77	35 - 114
2-Fluorobiphenyl		66.87	mg/L	1	80	83	43 - 116
Terphenyl-d14		31.9	mg/L	1	80	39	33 - 141

Sample: 197045 - MW-5

Analysis: BTEX | Analytical Method: S 8021B | QC Batch: QC20321 | Date Analyzed: 5/15/02
Analyst: CG | Preparation Method: S 5030B | Prep Batch: PB19433 | Date Prepared: 5/15/02

Param	Flag	Result	Units	Dilution	RDL
Benzene		<0.001	mg/L	1	0.001
Toluene		<0.001	mg/L	1	0.001
Ethylbenzene		<0.001	mg/L	1	0.001
M,P,O-Xylene		<0.001	mg/L	1	0.001

Continued ...

... Continued Sample: 197045 Analysis: BTEX

Param	Flag	Result	Units	Dilution	RDL
Total BTEX		<0.001	mg/L	1	0.001

Surrogate	Flag	Result	Units	Dilution	Spike Amount	Percent Recovery	Recovery Limits
TFT		0.0911	mg/L	1	0.10	91	70 - 130
4-BFB		0.0966	mg/L	1	0.10	97	70 - 130

Sample: 197045 - MW-5

Analysis: PAH Analytical Method: S 8270C QC Batch: QC20489 Date Analyzed: 5/19/02
Analyst: RC Preparation Method: E 3510C Prep Batch: PB19488 Date Prepared: 5/19/02

Param	Flag	Result	Units	Dilution	RDL
Naphthalene		<0.0002	mg/L	1	0.0002
Acenaphthylene		<0.0002	mg/L	1	0.0002
Acenaphthene		<0.0002	mg/L	1	0.0002
Fluorene		<0.0002	mg/L	1	0.0002
Phenanthrene		<0.0002	mg/L	1	0.0002
Anthracene		<0.0002	mg/L	1	0.0002
Fluoranthene		<0.0002	mg/L	1	0.0002
Pyrene		<0.0002	mg/L	1	0.0002
Benzo(a)anthracene		<0.0002	mg/L	1	0.0002
Chrysene		<0.0002	mg/L	1	0.0002
Benzo(b)fluoranthene		<0.0002	mg/L	1	0.0002
Benzo(k)fluoranthene		<0.0002	mg/L	1	0.0002
Benzo(a)pyrene		<0.0002	mg/L	1	0.0002
Indeno(1,2,3-cd)pyrene		<0.0002	mg/L	1	0.0002
Dibenzo(a,h)anthracene		<0.0002	mg/L	1	0.0002
Benzo(g,h,i)perylene		<0.0002	mg/L	1	0.0002

Surrogate	Flag	Result	Units	Dilution	Spike Amount	Percent Recovery	Recovery Limits
Nitrobenzene-d5		58.78	mg/L	1	80	73	35 - 114
2-Fluorobiphenyl		60.64	mg/L	1	80	75	43 - 116
Terphenyl-d14		28.22	mg/L	1	80	35	33 - 141

Quality Control Report
Method Blank

Method Blank

QCBatch: QC20321

Param	Flag	Results	Units	Reporting Limit
Benzene		<0.001	mg/L	0.001
Toluene		<0.001	mg/L	0.001
Ethylbenzene		<0.001	mg/L	0.001
M,P,O-Xylene		<0.001	mg/L	0.001
Total BTEX		<0.001	mg/L	0.001

Surrogate	Flag	Result	Units	Dilution	Spike Amount	Percent Recovery	Recovery Limits
TFT		0.0914	mg/L	1	0.10	91	70 - 130
4-BFB		0.0923	mg/L	1	0.10	92	70 - 130

Method Blank

QCBatch: QC20489

Param	Flag	Results	Units	Reporting Limit
Naphthalene		<0.0002	mg/L	0.0002
Acenaphthylene		<0.0002	mg/L	0.0002
Acenaphthene		<0.0002	mg/L	0.0002
Fluorene		<0.0002	mg/L	0.0002
Phenanthrene		<0.0002	mg/L	0.0002
Anthracene		<0.0002	mg/L	0.0002
Fluoranthene		<0.0002	mg/L	0.0002
Pyrene		<0.0002	mg/L	0.0002
Benzo(a)anthracene		<0.0002	mg/L	0.0002
Chrysene		<0.0002	mg/L	0.0002
Benzo(b)fluoranthene		<0.0002	mg/L	0.0002
Benzo(k)fluoranthene		<0.0002	mg/L	0.0002
Benzo(a)pyrene		<0.0002	mg/L	0.0002
Indeno(1,2,3-cd)pyrene		<0.0002	mg/L	0.0002
Dibenzo(a,h)anthracene		<0.0002	mg/L	0.0002
Benzo(g,h,i)perylene		<0.0002	mg/L	0.0002

Surrogate	Flag	Result	Units	Dilution	Spike Amount	Percent Recovery	Recovery Limits
Nitrobenzene-d5		56.26	mg/L	1	80	70	35 - 114
2-Fluorobiphenyl		54.88	mg/L	1	80	68	43 - 116
Terphenyl-d14		43.06	mg/L	1	80	53	33 - 141

Quality Control Report
Lab Control Spikes and Duplicate Spikes

Laboratory Control Spikes

QCBatch: QC20321

Param	LCS Result	LCSD Result	Units	Dil.	Spike Amount Added	Matrix Result	% Rec	RPD	% Rec Limit	RPD Limit
MTBE	0.0909	0.0912	mg/L	1	0.10	<0.001	91	0	70 - 130	20
Benzene	0.0921	0.0953	mg/L	1	0.10	<0.001	92	3	70 - 130	20
Toluene	0.093	0.0952	mg/L	1	0.10	<0.001	93	2	70 - 130	20
Ethylbenzene	0.0946	0.0953	mg/L	1	0.10	<0.001	95	1	70 - 130	20
M,P,O-Xylene	0.281	0.284	mg/L	1	0.30	<0.001	94	1	70 - 130	20

Percent recovery is based on the spike result. RPD is based on the spike and spike duplicate result.

Surrogate	LCS Result	LCSD Result	Units	Dilution	Spike Amount	LCS % Rec	LCSD % Rec	Recovery Limits
TFT	0.0915	0.0948	mg/L	1	0.10	92	95	70 - 130
4-BFB	0.0926	0.0944	mg/L	1	0.10	93	94	70 - 130

Laboratory Control Spikes

QCBatch: QC20489

Param	LCS Result	LCSD Result	Units	Dil.	Spike Amount Added	Matrix Result	% Rec	RPD	% Rec Limit	RPD Limit
Naphthalene	51.12	51.64	mg/L	1	80	<0.0002	63	1	16 - 96	20
Acenaphthylene	57.5	58.58	mg/L	1	80	<0.0002	71	1	20 - 110	20
Acenaphthene	55.65	57.07	mg/L	1	80	<0.0002	69	2	18 - 108	20
Fluorene	58.7	59.56	mg/L	1	80	<0.0002	73	1	22 - 102	20
Phenanthrene	63.65	61.33	mg/L	1	80	<0.0002	79	3	25 - 103	20
Anthracene	64.81	62.23	mg/L	1	80	<0.0002	81	4	22 - 110	20
Fluoranthene	71.73	61.2	mg/L	1	80	<0.0002	89	15	21 - 110	20
Pyrene	51.22	53.69	mg/L	1	80	<0.0002	64	4	22 - 100	20
Benzo(a)anthracene	59.56	59.66	mg/L	1	80	<0.0002	74	0	30 - 99	20
Chrysene	43.72	43.86	mg/L	1	80	<0.0002	54	0	27 - 108	20
Benzo(b)fluoranthene	50.95	48.95	mg/L	1	80	<0.0002	63	4	19 - 102	20
Benzo(k)fluoranthene	57.13	56.97	mg/L	1	80	<0.0002	71	0	35 - 103	20
Benzo(a)pyrene	52.11	49.83	mg/L	1	80	<0.0002	65	4	24 - 105	20
Indeno(1,2,3-cd)pyrene	50.61	49.83	mg/L	1	80	<0.0002	63	1	22 - 108	20
Dibenzo(a,h)anthracene	35.94	34.04	mg/L	1	80	<0.0002	44	5	23 - 77	20
Benzo(g,h,i)perylene	45.39	47.77	mg/L	1	80	<0.0002	56	5	19 - 119	20

Percent recovery is based on the spike result. RPD is based on the spike and spike duplicate result.

Surrogate	LCS Result	LCSD Result	Units	Dilution	Spike Amount	LCS % Rec	LCSD % Rec	Recovery Limits
Nitrobenzene-d5	59.84	60.33	mg/L	1	80	74	75	35 - 114
2-Fluorobiphenyl	61.23	60.89	mg/L	1	80	76	76	43 - 116
Terphenyl-d14	37.98	41.59	mg/L	1	80	47	51	33 - 141

Quality Control Report
Continuing Calibration Verification Standards

CCV (1)

QCBatch: QC20321

Param	Flag	Units	CCVs True Conc.	CCVs Found Conc.	CCVs Percent Recovery	Percent Recovery Limits	Date Analyzed
MTBE		mg/L	0.10	0.0967	96	85 - 115	5/15/02
Benzene		mg/L	0.10	0.1	100	85 - 115	5/15/02
Toluene		mg/L	0.10	0.0989	98	85 - 115	5/15/02
Ethylbenzene		mg/L	0.10	0.0976	97	85 - 115	5/15/02
M,P,O-Xylene		mg/L	0.30	0.288	96	85 - 115	5/15/02

ICV (1)

QCBatch: QC20321

Param	Flag	Units	CCVs True Conc.	CCVs Found Conc.	CCVs Percent Recovery	Percent Recovery Limits	Date Analyzed
MTBE		mg/L	0.10	0.0931	93	85 - 115	5/15/02
Benzene		mg/L	0.10	0.0964	96	85 - 115	5/15/02
Toluene		mg/L	0.10	0.0965	96	85 - 115	5/15/02
Ethylbenzene		mg/L	0.10	0.0981	98	85 - 115	5/15/02
M,P,O-Xylene		mg/L	0.30	0.292	97	85 - 115	5/15/02

CCV (1)

QCBatch: QC20489

Param	Flag	Units	CCVs True Conc.	CCVs Found Conc.	CCVs Percent Recovery	Percent Recovery Limits	Date Analyzed
Naphthalene		mg/L	60	63.88	106	80 - 120	5/19/02
Acenaphthylene		mg/L	60	64.09	106	80 - 120	5/19/02
Acenaphthene		mg/L	60	63.94	106	80 - 120	5/19/02
Fluorene		mg/L	60	58.28	97	80 - 120	5/19/02
Phenanthrene		mg/L	60	62.9	104	80 - 120	5/19/02
Anthracene		mg/L	60	63.00	105	80 - 120	5/19/02
Fluoranthene		mg/L	60	58.82	98	80 - 120	5/19/02
Pyrene		mg/L	60	54.92	91	80 - 120	5/19/02
Benzo(a)anthracene		mg/L	60	61.19	101	80 - 120	5/19/02
Chrysene		mg/L	60	64.67	107	80 - 120	5/19/02
Benzo(b)fluoranthene		mg/L	60	49.99	83	80 - 120	5/19/02
Benzo(k)fluoranthene		mg/L	60	60.56	100	80 - 120	5/19/02
Benzo(a)pyrene		mg/L	60	53.67	89	80 - 120	5/19/02
Indeno(1,2,3-cd)pyrene		mg/L	60	53.08	88	80 - 120	5/19/02
Dibenzo(a,h)anthracene		mg/L	60	51.59	85	80 - 120	5/19/02
Benzo(g,h,i)perylene		mg/L	60	49.94	83	80 - 120	5/19/02
Nitrobenzene-d5		mg/L	60	67.14	111	80 - 120	5/19/02
2-Fluorobiphenyl		mg/L	60	70.94	118	80 - 120	5/19/02
Terphenyl-d14		mg/L	60	55.47	92	80 - 120	5/19/02

TraceAnalysis, Inc.

6701 Aberdeen Avenue, Ste. 9 Lubbock, Texas 79424
Tel (806) 794 1296 Fax (806) 794 1298
1 (800) 378 1296

CHAIN-OF-CUSTODY RECORD AND ANALYSIS REQUEST

LAB Order ID # A0205I504

Company Name: Enercon Services Inc
Phone #: 915-570-8726
Address: 306 West Wall, Suite 1312, Midland, Tx 79701
Fax #: 915-684-7587
Contact Person: Jeffrey Kindley
Invoice to: (If different from above) Equiva Services Kyle Landreneau Incident # 300110
Project #: EQ-110
Project Name: John Hendrix
Project Location: Monument, Lea County, New Mexico
Sampler Signature: Jeffrey Kindley

ANALYSIS REQUEST (Circle or Specify Method No.)

LAB # (LAB USE ONLY)	FIELD CODE	# CONTAINERS	Volume/Amount	MATRIX: WATER	SOIL	AIR	SLUDGE	PRESERVATIVE METHOD: HCL	HNO3	ICE	NONE	SAMPLING: DATE	TIME
197042	MW-1	1	Liter	✓						X	✓	05/13/02	1250
	MW-1	2	40ml	✓				✓		X		05/13/02	1250
43	MW-2	1	Liter	✓						X	✓	05/13/02	1544
	MW-2	2	40ml	✓				✓		X		05/13/02	1544
44	MW-3	1	Liter	✓						X	✓	05/13/02	1535
	MW-3	2	40ml	✓				✓		X		05/13/02	1535
45	MW-5	1	Liter	✓						X	✓	05/13/02	1605
	MW-5	2	40ml	✓				✓		X		05/13/02	1605

FIELD CODE	MTBE 8020/602	BTEX 8020/602	TPH	PAH 8270	Total Metals Ag As Ba Cd Cr Pb Hg Se	TCLP Metals Ag As Ba Cd Cr Pb Hg Se	TCLP Volatiles	TCLP Semi Volatiles	RCI	GC.MS Vol. 8240/8260/624	GC/MS Semi. Vol. 8270/625	PCB's 8080/608	Pest. 8080/608	BOD, TSS, PH	Turn Around Time if different from standard	Hold
MW-1				✓												
MW-1		✓														
MW-2				✓												
MW-2		✓														
MW-3				✓												
MW-3		✓														
MW-5				✓												
MW-5		✓														

Relinquished by: Jeffrey Kindley Date: May 14, 2002 Time: 0700
Received by: Helen Shelton Date: 5/14/02 Time: 0700

Relinquished by: Helen Shelton Date: 5/14/02 Time: 1830
Received by: Date: Time:

Relinquished by: Date: Time:
Received at Laboratory by: Vicki [illegible] Date: 5-15-02 Time: 10:00

LAB USE ONLY
Intact (Y) / N
Headspace Y / N
Temp 4 °
Log-in Review [illegible]

REMARKS: 5/21 F/P

Carrier # Greyhound 113-544-7219-3

Submittal of samples constitutes agreement to Terms and Conditions listed on reverse side of C.O.C. 12 samples + S

ORIGINAL COPY

Summary Report

Kyle Landreneau
Equiva Kyle Landreneau
PMB 284 40 FM 1960 West
Houston, TX 77090

Report Date: May 21, 2002

Order ID Number: A02051619

Project: EQ-110
TA Job Code: 300110
Casualty Code: EQ-110
Project Location: Monument, New Mexico
Project Address:
Enercon Services Inc. / Midland / Jeff Kindley

Sample	Description	Matrix	Date Taken	Time Taken	Date Received
197161	MW-3	Water	5/14/02	12:45	5/16/02

0 This report consists of a total of 1 page(s) and is intended only as a summary of results for the sample(s) listed above.

	BTEX				
Sample - Field Code	Benzene (ppm)	Toluene (ppm)	Ethylbenzene (ppm)	M,P,O-Xylene (ppm)	Total BTEX (ppm)
197161 - MW-3	0.0042	<0.001	<0.001	<0.001	0.0042

Sample: 197161 - MW-3

Param	Flag	Result	Units
Naphthalene		<0.0002	mg/L
Acenaphthylene		<0.0002	mg/L
Acenaphthene		<0.0002	mg/L
Fluorene		<0.0002	mg/L
Phenanthrene		<0.0002	mg/L
Anthracene		<0.0002	mg/L
Fluoranthene		<0.0002	mg/L
Pyrene		<0.0002	mg/L
Benzo(a)anthracene		<0.0002	mg/L
Chrysene		<0.0002	mg/L
Benzo(b)fluoranthene		<0.0002	mg/L
Benzo(k)fluoranthene		<0.0002	mg/L
Benzo(a)pyrene		<0.0002	mg/L
Indeno(1,2,3-cd)pyrene		<0.0002	mg/L
Dibenzo(a,h)anthracene		<0.0002	mg/L
Benzo(g,h,i)perylene		<0.0002	mg/L

Summary Report

Kyle Landreneau
Equiva Kyle Landreneau
PMB 284 40 FM 1960 West
Houston, TX 77090

Report Date: May 17, 2002

Order ID Number: A02051619

Project: EQ-110
TA Job Code: 300110
Casualty Code: EQ-110
Project Location: Monument, New Mexico
Project Address:
Enercon Services Inc. / Midland / Jeff Kindley

Sample	Description	Matrix	Date Taken	Time Taken	Date Received
197159	SB-1 (15-17')	Soil	5/14/02	10:24	5/16/02
197160	SB-1 (30-32')	Soil	5/14/02	11:15	5/16/02

0 This report consists of a total of 1 page(s) and is intended only as a summary of results for the sample(s) listed above.

	BTEX					TPH DRO	TPH GRO
Sample - Field Code	Benzene (ppm)	Toluene (ppm)	Ethylbenzene (ppm)	M,P,O-Xylene (ppm)	Total BTEX (ppm)	DRO (ppm)	GRO (ppm)
197159 - SB-1 (15-17')	<0.010	<0.010	<0.010	0.0146	0.0146	<50.0	<1
197160 - SB-1 (30-32')	<0.010	<0.010	<0.010	<0.010	<0.010	<50	<1

This is only a summary. Please, refer to the complete report package for quality control data.

TRACEANALYSIS, INC.

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155 McCutcheon, Suite H El Paso, Texas 79932 888•588•3443 915•585•3443 FAX 915•585•4944
E-Mail: lab@traceanalysis.com

Analytical and Quality Control Report

Kyle Landreneau
Equiva Kyle Landreneau
PMB 284 40 FM 1960 West
Houston, TX 77090

Report Date: May 21, 2002

Order ID Number: A02051619

Project: EQ-110
TA Job Code: 300110
Casualty Code: EQ-110
Project Location: Monument, New Mexico
Enercon Services Inc. / Midland / Jeff Kindley

Enclosed are the Analytical Results and Quality Control Data Reports for the following samples submitted to Trace-Analysis, Inc.

Sample	Description	Matrix	Date Taken	Time Taken	Date Received
197161	MW-3	Water	5/14/02	12:45	5/16/02

These results represent only the samples received in the laboratory. The Quality Control Report is generated on a batch basis. All information contained in this report is for the analytical batch(es) in which your sample(s) were analyzed. Note: the RDL is equal to MQL for all organic analytes including TPH.
The test results contained within this report meet all requirements of LAC 33:I unless otherwise noted.

This report consists of a total of 6 pages and shall not be reproduced except in its entirety including the chain of custody (COC), without written approval of TraceAnalysis, Inc.

Dr. Blair Leftwich, Director

Analytical Report

Sample: 197161 - MW-3

Analysis:	BTEX	Analytical Method:	S 8021B	QC Batch:	QC20364	Date Analyzed:	5/16/02
Analyst:	CG	Preparation Method:	S 5030B	Prep Batch:	PB19462	Date Prepared:	5/16/02

Param	Flag	Result	Units	Dilution	RDL
Benzene		0.0042	mg/L	1	0.001
Toluene		<0.001	mg/L	1	0.001
Ethylbenzene		<0.001	mg/L	1	0.001
M,P,O-Xylene		<0.001	mg/L	1	0.001
Total BTEX		0.0042	mg/L	1	0.001

Surrogate	Flag	Result	Units	Dilution	Spike Amount	Percent Recovery	Recovery Limits
TFT		0.0799	mg/L	1	0.10	80	70 - 130
4-BFB		0.0779	mg/L	1	0.10	78	70 - 130

Sample: 197161 - MW-3

Analysis:	PAH	Analytical Method:	S 8270C	QC Batch:	QC20489	Date Analyzed:	5/19/02
Analyst:	RC	Preparation Method:	E 3510C	Prep Batch:	PB19488	Date Prepared:	5/19/02

Param	Flag	Result	Units	Dilution	RDL
Naphthalene		<0.0002	mg/L	1	0.0002
Acenaphthylene		<0.0002	mg/L	1	0.0002
Acenaphthene		<0.0002	mg/L	1	0.0002
Fluorene		<0.0002	mg/L	1	0.0002
Phenanthrene		<0.0002	mg/L	1	0.0002
Anthracene		<0.0002	mg/L	1	0.0002
Fluoranthene		<0.0002	mg/L	1	0.0002
Pyrene		<0.0002	mg/L	1	0.0002
Benzo(a)anthracene		<0.0002	mg/L	1	0.0002
Chrysene		<0.0002	mg/L	1	0.0002
Benzo(b)fluoranthene		<0.0002	mg/L	1	0.0002
Benzo(k)fluoranthene		<0.0002	mg/L	1	0.0002
Benzo(a)pyrene		<0.0002	mg/L	1	0.0002
Indeno(1,2,3-cd)pyrene		<0.0002	mg/L	1	0.0002
Dibenzo(a,h)anthracene		<0.0002	mg/L	1	0.0002
Benzo(g,h,i)perylene		<0.0002	mg/L	1	0.0002

Surrogate	Flag	Result	Units	Dilution	Spike Amount	Percent Recovery	Recovery Limits
Nitrobenzene-d5		62.71	mg/L	1	80	78	35 - 114
2-Fluorobiphenyl		62.98	mg/L	1	80	78	43 - 116
Terphenyl-d14		23.83	mg/L	1	80	29	33 - 141

Quality Control Report
Method Blank

Method Blank

QCBatch: QC20364

Param	Flag	Results	Units	Reporting Limit
Benzene		<0.001	mg/L	0.001
Toluene		<0.001	mg/L	0.001
Ethylbenzene		<0.001	mg/L	0.001
M,P,O-Xylene		<0.001	mg/L	0.001
Total BTEX		<0.001	mg/L	0.001

Surrogate	Flag	Result	Units	Dilution	Spike Amount	Percent Recovery	Recovery Limits
TFT		0.0833	mg/L	1	0.10	83	70 - 130
4-BFB		0.0824	mg/L	1	0.10	82	70 - 130

Method Blank

QCBatch: QC20489

Param	Flag	Results	Units	Reporting Limit
Naphthalene		<0.0002	mg/L	0.0002
Acenaphthylene		<0.0002	mg/L	0.0002
Acenaphthene		<0.0002	mg/L	0.0002
Fluorene		<0.0002	mg/L	0.0002
Phenanthrene		<0.0002	mg/L	0.0002
Anthracene		<0.0002	mg/L	0.0002
Fluoranthene		<0.0002	mg/L	0.0002
Pyrene		<0.0002	mg/L	0.0002
Benzo(a)anthracene		<0.0002	mg/L	0.0002
Chrysene		<0.0002	mg/L	0.0002
Benzo(b)fluoranthene		<0.0002	mg/L	0.0002
Benzo(k)fluoranthene		<0.0002	mg/L	0.0002
Benzo(a)pyrene		<0.0002	mg/L	0.0002
Indeno(1,2,3-cd)pyrene		<0.0002	mg/L	0.0002
Dibenzo(a,h)anthracene		<0.0002	mg/L	0.0002
Benzo(g,h,i)perylene		<0.0002	mg/L	0.0002

Surrogate	Flag	Result	Units	Dilution	Spike Amount	Percent Recovery	Recovery Limits
Nitrobenzene-d5		56.26	mg/L	1	80	70	35 - 114
2-Fluorobiphenyl		54.88	mg/L	1	80	68	43 - 116
Terphenyl-d14		43.06	mg/L	1	80	53	33 - 141

Quality Control Report
Lab Control Spikes and Duplicate Spikes

Laboratory Control Spikes

QCBatch: QC20364

Param	LCS Result	LCSD Result	Units	Dil.	Spike Amount Added	Matrix Result	% Rec	RPD	% Rec Limit	RPD Limit
MTBE	0.0851	0.0906	mg/L	1	0.10	<0.001	85	6	70 - 130	20
Benzene	0.0827	0.0891	mg/L	1	0.10	<0.001	83	7	70 - 130	20
Toluene	0.0776	0.0854	mg/L	1	0.10	<0.001	78	10	70 - 130	20
Ethylbenzene	0.0773	0.0851	mg/L	1	0.10	<0.001	77	10	70 - 130	20
M,P,O-Xylene	0.242	0.260	mg/L	1	0.30	<0.001	81	7	70 - 130	20

Percent recovery is based on the spike result. RPD is based on the spike and spike duplicate result.

Surrogate	LCS Result	LCSD Result	Units	Dilution	Spike Amount	LCS % Rec	LCSD % Rec	Recovery Limits
TFT	0.0806	0.0885	mg/L	1	0.10	81	88	70 - 130
4-BFB	0.0833	0.0896	mg/L	1	0.10	83	90	70 - 130

Laboratory Control Spikes

QCBatch: QC20489

Param	LCS Result	LCSD Result	Units	Dil.	Spike Amount Added	Matrix Result	% Rec	RPD	% Rec Limit	RPD Limit
Naphthalene	51.12	51.64	mg/L	1	80	<0.0002	63	1	16 - 96	20
Acenaphthylene	57.5	58.58	mg/L	1	80	<0.0002	71	1	20 - 110	20
Acenaphthene	55.65	57.07	mg/L	1	80	<0.0002	69	2	18 - 108	20
Fluorene	58.7	59.56	mg/L	1	80	<0.0002	73	1	22 - 102	20
Phenanthrene	63.65	61.33	mg/L	1	80	<0.0002	79	3	25 - 103	20
Anthracene	64.81	62.23	mg/L	1	80	<0.0002	81	4	22 - 110	20
Fluoranthene	71.73	61.2	mg/L	1	80	<0.0002	89	15	21 - 110	20
Pyrene	51.22	53.69	mg/L	1	80	<0.0002	64	4	22 - 100	20
Benzo(a)anthracene	59.56	59.66	mg/L	1	80	<0.0002	74	0	30 - 99	20
Chrysene	43.72	43.86	mg/L	1	80	<0.0002	54	0	27 - 108	20
Benzo(b)fluoranthene	50.95	48.95	mg/L	1	80	<0.0002	63	4	19 - 102	20
Benzo(k)fluoranthene	57.13	56.97	mg/L	1	80	<0.0002	71	0	35 - 103	20
Benzo(a)pyrene	52.11	49.83	mg/L	1	80	<0.0002	65	4	24 - 105	20
Indeno(1,2,3-cd)pyrene	50.61	49.83	mg/L	1	80	<0.0002	63	1	22 - 108	20
Dibenzo(a,h)anthracene	35.94	34.04	mg/L	1	80	<0.0002	44	5	23 - 77	20
Benzo(g,h,i)perylene	45.39	47.77	mg/L	1	80	<0.0002	56	5	19 - 119	20

Percent recovery is based on the spike result. RPD is based on the spike and spike duplicate result.

Surrogate	LCS Result	LCSD Result	Units	Dilution	Spike Amount	LCS % Rec	LCSD % Rec	Recovery Limits
Nitrobenzene-d5	59.84	60.33	mg/L	1	80	74	75	35 - 114
2-Fluorobiphenyl	61.23	60.89	mg/L	1	80	76	76	43 - 116
Terphenyl-d14	37.98	41.59	mg/L	1	80	47	51	33 - 141

Quality Control Report
Continuing Calibration Verification Standards

CCV (1)

QCBatch: QC20364

Param	Flag	Units	CCVs True Conc.	CCVs Found Conc.	CCVs Percent Recovery	Percent Recovery Limits	Date Analyzed
MTBE		mg/L	0.10	0.0895	89	85 - 115	5/16/02
Benzene		mg/L	0.10	0.0895	89	85 - 115	5/16/02
Toluene		mg/L	0.10	0.085	85	85 - 115	5/16/02
Ethylbenzene		mg/L	0.10	0.086	86	85 - 115	5/16/02
M,P,O-Xylene		mg/L	0.30	0.2657	88	85 - 115	5/16/02

CCV (2)

QCBatch: QC20364

Param	Flag	Units	CCVs True Conc.	CCVs Found Conc.	CCVs Percent Recovery	Percent Recovery Limits	Date Analyzed
MTBE		mg/L	0.10	0.0917	91	85 - 115	5/16/02
Benzene		mg/L	0.10	0.0917	91	85 - 115	5/16/02
Toluene		mg/L	0.10	0.0878	87	85 - 115	5/16/02
Ethylbenzene		mg/L	0.10	0.0866	86	85 - 115	5/16/02
M,P,O-Xylene		mg/L	0.30	0.266	88	85 - 115	5/16/02

ICV (1)

QCBatch: QC20364

Param	Flag	Units	CCVs True Conc.	CCVs Found Conc.	CCVs Percent Recovery	Percent Recovery Limits	Date Analyzed
MTBE		mg/L	0.10	0.101	101	85 - 115	5/16/02
Benzene		mg/L	0.10	0.0965	96	85 - 115	5/16/02
Toluene		mg/L	0.10	0.095	95	85 - 115	5/16/02
Ethylbenzene		mg/L	0.10	0.0934	93	85 - 115	5/16/02
M,P,O-Xylene		mg/L	0.30	0.279	93	85 - 115	5/16/02

CCV (1)

QCBatch: QC20489

Param	Flag	Units	CCVs True Conc.	CCVs Found Conc.	CCVs Percent Recovery	Percent Recovery Limits	Date Analyzed
Naphthalene		mg/L	60	63.88	106	80 - 120	5/19/02
Acenaphthylene		mg/L	60	64.09	106	80 - 120	5/19/02
Acenaphthene		mg/L	60	63.94	106	80 - 120	5/19/02
Fluorene		mg/L	60	58.28	97	80 - 120	5/19/02
Phenanthrene		mg/L	60	62.9	104	80 - 120	5/19/02
Anthracene		mg/L	60	63.00	105	80 - 120	5/19/02
Fluoranthene		mg/L	60	58.82	98	80 - 120	5/19/02
Pyrene		mg/L	60	54.92	91	80 - 120	5/19/02
Benzo(a)anthracene		mg/L	60	61.19	101	80 - 120	5/19/02
Chrysene		mg/L	60	64.67	107	80 - 120	5/19/02
Benzo(b)fluoranthene		mg/L	60	49.99	83	80 - 120	5/19/02
Benzo(k)fluoranthene		mg/L	60	60.56	100	80 - 120	5/19/02

Continued ...

... Continued

Param	Flag	Units	CCVs True Conc.	CCVs Found Conc.	CCVs Percent Recovery	Percent Recovery Limits	Date Analyzed
Benzo(a)pyrene		mg/L	60	53.67	89	80 - 120	5/19/02
Indeno(1,2,3-cd)pyrene		mg/L	60	53.08	88	80 - 120	5/19/02
Dibenzo(a,h)anthracene		mg/L	60	51.59	85	80 - 120	5/19/02
Benzo(g,h,i)perylene		mg/L	60	49.94	83	80 - 120	5/19/02
Nitrobenzene-d5		mg/L	60	67.14	111	80 - 120	5/19/02
2-Fluorobiphenyl		mg/L	60	70.94	118	80 - 120	5/19/02
Terphenyl-d14		mg/L	60	55.47	92	80 - 120	5/19/02

TRACEANALYSIS, INC.

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Analytical and Quality Control Report

Kyle Landreneau
Equiva Kyle Landreneau
PMB 284 40 FM 1960 West
Houston, TX 77090

Report Date: May 17, 2002

Order ID Number: A02051619

Project: EQ-110
TA Job Code: 300110
Casualty Code: EQ-110
Project Location: Monument, New Mexico
Enercon Services Inc. / Midland / Jeff Kindley

Enclosed are the Analytical Results and Quality Control Data Reports for the following samples submitted to Trace-Analysis, Inc.

Sample	Description	Matrix	Date Taken	Time Taken	Date Received
197159	SB-1 (15-17')	Soil	5/14/02	10:24	5/16/02
197160	SB-1 (30-32')	Soil	5/14/02	11:15	5/16/02

These results represent only the samples received in the laboratory. The Quality Control Report is generated on a batch basis. All information contained in this report is for the analytical batch(es) in which your sample(s) were analyzed. Note: the RDL is equal to MQL for all organic analytes including TPH.
The test results contained within this report meet all requirements of LAC 33:I unless otherwise noted.

This report consists of a total of 8 pages and shall not be reproduced except in its entirety including the chain of custody (COC), without written approval of TraceAnalysis, Inc.

Dr. Blair Leftwich, Director

Analytical Report

Sample: 197159 - SB-1 (15-17')

Analysis:	BTEX	Analytical Method:	S 8021B	QC Batch:	QC20381	Date Analyzed:	5/16/02
Analyst:	CG	Preparation Method:	S 5035	Prep Batch:	PB19475	Date Prepared:	5/16/02

Param	Flag	Result	Units	Dilution	RDL
Benzene		<0.010	mg/Kg	10	0.001
Toluene		<0.010	mg/Kg	10	0.001
Ethylbenzene		<0.010	mg/Kg	10	0.001
M,P,O-Xylene		0.0146	mg/Kg	10	0.001
Total BTEX		0.0146	mg/Kg	10	0.001

Surrogate	Flag	Result	Units	Dilution	Spike Amount	Percent Recovery	Recovery Limits
TFT		0.857	mg/Kg	10	1	85	70 - 130
4-BFB		0.719	mg/Kg	10	1	71	70 - 130

Sample: 197159 - SB-1 (15-17')

Analysis:	TPH DRO	Analytical Method:	Mod. 8015B	QC Batch:	QC20372	Date Analyzed:	5/16/02
Analyst:	MM	Preparation Method:	3550 B	Prep Batch:	PB19467	Date Prepared:	5/16/02

Param	Flag	Result	Units	Dilution	RDL
DRO		<50.0	mg/Kg	1	50

Surrogate	Flag	Result	Units	Dilution	Spike Amount	Percent Recovery	Recovery Limits
n-Triacontane		136	mg/Kg	1	150	91	70 - 130

Sample: 197159 - SB-1 (15-17')

Analysis:	TPH GRO	Analytical Method:	8015B	QC Batch:	QC20382	Date Analyzed:	5/16/02
Analyst:	CG	Preparation Method:	5035	Prep Batch:	PB19475	Date Prepared:	5/16/02

Param	Flag	Result	Units	Dilution	RDL
GRO		<1	mg/Kg	10	0.10

Surrogate	Flag	Result	Units	Dilution	Spike Amount	Percent Recovery	Recovery Limits
TFT		1.25	mg/Kg	10	0.10	125	70 - 130
4-BFB		0.921	mg/Kg	10	0.10	92	70 - 130

Sample: 197160 - SB-1 (30-32')

Analysis:	BTEX	Analytical Method:	S 8021B	QC Batch:	QC20381	Date Analyzed:	5/16/02
Analyst:	CG	Preparation Method:	S 5035	Prep Batch:	PB19475	Date Prepared:	5/16/02

Param	Flag	Result	Units	Dilution	RDL
Benzene		<0.010	mg/Kg	10	0.001
Toluene		<0.010	mg/Kg	10	0.001
Ethylbenzene		<0.010	mg/Kg	10	0.001
M,P,O-Xylene		<0.010	mg/Kg	10	0.001
Total BTEX		<0.010	mg/Kg	10	0.001

Surrogate	Flag	Result	Units	Dilution	Spike Amount	Percent Recovery	Recovery Limits
TFT		0.806	mg/Kg	10	1	80	70 - 130
4-BFB		0.731	mg/Kg	10	1	73	70 - 130

Sample: 197160 - SB-1 (30-32')

Analysis: TPH DRO | Analytical Method: Mod. 8015B | QC Batch: QC20372 | Date Analyzed: 5/16/02
Analyst: MM | Preparation Method: 3550 B | Prep Batch: PB19467 | Date Prepared: 5/16/02

Param	Flag	Result	Units	Dilution	RDL
DRO		<50	mg/Kg	1	50

Surrogate	Flag	Result	Units	Dilution	Spike Amount	Percent Recovery	Recovery Limits
n-Triacontane		132	mg/Kg	1	150	88	70 - 130

Sample: 197160 - SB-1 (30-32')

Analysis: TPH GRO | Analytical Method: 8015B | QC Batch: QC20382 | Date Analyzed: 5/16/02
Analyst: CG | Preparation Method: 5035 | Prep Batch: PB19475 | Date Prepared: 5/16/02

Param	Flag	Result	Units	Dilution	RDL
GRO		<1	mg/Kg	10	0.10

Surrogate	Flag	Result	Units	Dilution	Spike Amount	Percent Recovery	Recovery Limits
TFT		1.22	mg/Kg	10	0.10	122	70 - 130
4-BFB		0.853	mg/Kg	10	0.10	85	70 - 130

Quality Control Report
Method Blank

Method Blank

QCBatch: QC20372

Param	Flag	Results	Units	Reporting Limit
DRO		<50.0	mg/Kg	50

Surrogate	Flag	Result	Units	Dilution	Spike Amount	Percent Recovery	Recovery Limits
n-Triacontane		132	mg/Kg	1	150	88	70 - 130

Method Blank

QCBatch: QC20381

Param	Flag	Results	Units	Reporting Limit
Benzene		<0.010	mg/Kg	0.001
Toluene		<0.010	mg/Kg	0.001
Ethylbenzene		<0.010	mg/Kg	0.001
M,P,O-Xylene		<0.010	mg/Kg	0.001
Total BTEX		<0.010	mg/Kg	0.001

Surrogate	Flag	Result	Units	Dilution	Spike Amount	Percent Recovery	Recovery Limits
TFT		0.964	mg/Kg	10	1	96	70 - 130
4-BFB		0.842	mg/Kg	10	1	84	70 - 130

Method Blank

QCBatch: QC20382

Param	Flag	Results	Units	Reporting Limit
GRO		<1	mg/Kg	0.10

Surrogate	Flag	Result	Units	Dilution	Spike Amount	Percent Recovery	Recovery Limits
TFT		0.997	mg/Kg	10	0.10	100	70 - 130
4-BFB		0.993	mg/Kg	10	0.10	99	70 - 130

Quality Control Report
Lab Control Spikes and Duplicate Spikes

Laboratory Control Spikes

QCBatch: QC20372

Param	LCS Result	LCSD Result	Units	Dil.	Spike Amount Added	Matrix Result	% Rec	RPD	% Rec Limit	RPD Limit
DRO	238	254	mg/Kg	1	250	<50.0	95	6	70 - 130	20

Percent recovery is based on the spike result. RPD is based on the spike and spike duplicate result.

Surrogate	LCS Result	LCSD Result	Units	Dilution	Spike Amount	LCS % Rec	LCSD % Rec	Recovery Limits
n-Triacontane	134	132	mg/Kg	1	150	89	88	70 - 130

Laboratory Control Spikes

QCBatch: QC20381

Param	LCS Result	LCSD Result	Units	Dil.	Spike Amount Added	Matrix Result	% Rec	RPD	% Rec Limit	RPD Limit
MTBE	0.949	0.984	mg/Kg	10	1	<0.010	94	3	70 - 130	20
Benzene	0.976	0.988	mg/Kg	10	1	<0.010	97	1	70 - 130	20
Toluene	0.957	0.969	mg/Kg	10	1	<0.010	95	1	70 - 130	20
Ethylbenzene	0.951	0.892	mg/Kg	10	1	<0.010	95	6	70 - 130	20
M,P,O-Xylene	2.97	3.07	mg/Kg	10	3	<0.010	99	3	70 - 130	20

Percent recovery is based on the spike result. RPD is based on the spike and spike duplicate result.

Surrogate	LCS Result	LCSD Result	Units	Dilution	Spike Amount	LCS % Rec	LCSD % Rec	Recovery Limits
TFT	0.887	0.939	mg/Kg	10	1	88	93	70 - 130
4-BFB	0.912	0.856	mg/Kg	10	1	91	85	70 - 130

Laboratory Control Spikes

QCBatch: QC20382

Param	LCS Result	LCSD Result	Units	Dil.	Spike Amount Added	Matrix Result	% Rec	RPD	% Rec Limit	RPD Limit
GRO	9.36	8.58	mg/Kg	10	1	<1	94	8	80 - 120	20

Percent recovery is based on the spike result. RPD is based on the spike and spike duplicate result.

Surrogate	LCS Result	LCSD Result	Units	Dilution	Spike Amount	LCS % Rec	LCSD % Rec	Recovery Limits
TFT	0.891	0.892	mg/Kg	10	0.10	89	89	70 - 130
4-BFB	1.06	1.06	mg/Kg	10	0.10	106	106	70 - 130

Quality Control Report
Matrix Spikes and Duplicate Spikes

Matrix Spikes

QCBatch: QC20372

Param	MS Result	MSD Result	Units	Dil.	Spike Amount Added	Matrix Result	% Rec	RPD	% Rec Limit	RPD Limit
DRO	248	250	mg/Kg	1	250	<50.0	99	1	70 - 130	20

Percent recovery is based on the spike result. RPD is based on the spike and spike duplicate result.

Surrogate	MS Result	MSD Result	Units	Dilution	Spike Amount	MS % Rec	MSD % Rec	Recovery Limits
n-Triacontane	127	129	mg/Kg	1	150	85	86	70 - 130

Matrix Spikes

QCBatch: QC20381

Param	MS Result	MSD Result	Units	Dil.	Spike Amount Added	Matrix Result	% Rec	RPD	% Rec Limit	RPD Limit
Benzene	0.83	0.817	mg/Kg	10	1	<0.010	83	1	70 - 130	20
Toluene	0.826	0.767	mg/Kg	10	1	<0.010	82	7	70 - 130	20
Ethylbenzene	0.782	0.819	mg/Kg	10	1	<0.010	78	4	70 - 130	20
M,P,O-Xylene	2.54	2.5	mg/Kg	10	3	0.0146	84	1	70 - 130	20

Percent recovery is based on the spike result. RPD is based on the spike and spike duplicate result.

Surrogate	MS Result	MSD Result	Units	Dilution	Spike Amount	MS % Rec	MSD % Rec	Recovery Limits
TFT	0.845	0.834	mg/Kg	10	1	84	83	70 - 130
4-BFB	0.734	0.728	mg/Kg	10	1	73	72	70 - 130

Matrix Spikes

QCBatch: QC20382

Param	MS Result	MSD Result	Units	Dil.	Spike Amount Added	Matrix Result	% Rec	RPD	% Rec Limit	RPD Limit
GRO	9.05	8.79	mg/Kg	10	1	<1	90	2	80 - 120	20

Percent recovery is based on the spike result. RPD is based on the spike and spike duplicate result.

Surrogate	MS Result	MSD Result	Units	Dilution	Spike Amount	MS % Rec	MSD % Rec	Recovery Limits
TFT	0.905	0.89	mg/Kg	10	0.10	90	89	70 - 130
4-BFB	0.901	0.896	mg/Kg	10	0.10	90	90	70 - 130

Quality Control Report
Continuing Calibration Verification Standards

CCV (1)

QCBatch: QC20372

Param	Flag	Units	CCVs True Conc.	CCVs Found Conc.	CCVs Percent Recovery	Percent Recovery Limits	Date Analyzed
DRO		mg/Kg	250	258	103	75 - 125	5/16/02

ICV (1) QCBatch: QC20372

Param	Flag	Units	CCVs True Conc.	CCVs Found Conc.	CCVs Percent Recovery	Percent Recovery Limits	Date Analyzed
DRO		mg/Kg	250	242	96	75 - 125	5/16/02

CCV (1) QCBatch: QC20381

Param	Flag	Units	CCVs True Conc.	CCVs Found Conc.	CCVs Percent Recovery	Percent Recovery Limits	Date Analyzed
MTBE		mg/L	0.10	0.0988	98	85 - 115	5/16/02
Benzene		mg/L	0.10	0.0984	98	85 - 115	5/16/02
Toluene		mg/L	0.10	0.0914	91	85 - 115	5/16/02
Ethylbenzene		mg/L	0.10	0.0898	89	85 - 115	5/16/02
M,P,O-Xylene		mg/L	0.30	0.292	97	85 - 115	5/16/02

ICV (1) QCBatch: QC20381

Param	Flag	Units	CCVs True Conc.	CCVs Found Conc.	CCVs Percent Recovery	Percent Recovery Limits	Date Analyzed
MTBE		mg/L	0.10	0.0987	98	85 - 115	5/16/02
Benzene		mg/L	0.10	0.0961	96	85 - 115	5/16/02
Toluene		mg/L	0.10	0.09320	93	85 - 115	5/16/02
Ethylbenzene		mg/L	0.10	0.0966	96	85 - 115	5/16/02
M,P,O-Xylene		mg/L	0.30	0.287	95	85 - 115	5/16/02

CCV (1) QCBatch: QC20382

Param	Flag	Units	CCVs True Conc.	CCVs Found Conc.	CCVs Percent Recovery	Percent Recovery Limits	Date Analyzed
GRO		mg/Kg	1	1.04	104	85 - 115	5/16/02

ICV (1) QCBatch: QC20382

Param	Flag	Units	CCVs True Conc.	CCVs Found Conc.	CCVs Percent Recovery	Percent Recovery Limits	Date Analyzed
GRO		mg/Kg	1	0.893	89	85 - 115	5/16/02

77159-61

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El Paso, Texas 79932
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CHAIN-OF-CUSTODY AND ANALYSIS REQUEST

LAB Order ID # A0205161 9

Company Name: Enercon Services Inc
Phone #: 915-570-8726
Address: (Street, City, Zip) 306 West Wall, Suite 1312, Midland, Tx 79701
Fax #: 915-684-7587
Contact Person: Jeffrey Kindley
Invoice to: (If different from above) Kyle Landreneau, Equinox Services
Incident # 300110
Project #: EQ-110
Project Name: John Mendrix
Project Location: Monument, Lea Co. New Mexico
Sampler Signature: Jeffrey Kindley

LAB # (LAB USE ONLY)	FIELD CODE	# CONTAINERS	Volume/Amount	MATRIX: WATER	SOIL	AIR	SLUDGE	PRESERVATIVE METHOD: HCl	HNO_3	H_2SO_4	NaOH	ICE	NONE	SAMPLING: DATE	TIME
77159	SB-1 (15 to 17')	1	4oz		✓									05/14/02	1024
160	SB-1 (30 to 32')	1	4oz		✓									05/14/02	1115
161	MW-3	2	40ml	✓				✓						05/14/02	1245
	MW-3	1	Liter	✓									✓	05/14/02	1245

ANALYSIS REQUEST (Circle or Specify Method No.)

MTBE 8021B/602	BTEX 8021B/602	TPH 418.1/TX1005 8015_M (DRO/GRO) *	PAH 8270C	Total Metals Ag As Ba Cd Cr Pb Se Hg 6010B/200.7	TCLP Metals Ag As Ba Cd Cr Pb Se Hg	TCLP Volatiles	TCLP Semi Volatiles	TCLP Pesticides	RCI	GC/MS Vol. 8260B/624	GC/MS Semi. Vol. 8270C/625	PCB's 8082/608	Pesticides 8081A/608	BOD, TSS, pH	Turn Around Time if different from standard	Hold
	✓	✓														
	✓	✓														
✓																
			✓													

Relinquished by: Jeffrey Kindley Date: May 15 2002 Time: 0700
Received by: Helen Shelton Date: 5/15/02 Time: 0700
Relinquished by: Helen Shelton Date: 5/15/02 Time: 1830
Received by: Date: Time:
Relinquished by: Date: Time:
Received at Laboratory by: Date: Time:

LAB USE ONLY
Intact Y / N
Headspace Y / N
Temp 4 °
Log-in Review

REMARKS:
* Any TPH (DRO/GRO) that is ≥ 100ppm total is to be further analyzed for SPLP TPH (DRO/GRO)
Do not run SPLP per BC 5-17 JD
☐ Check If Special Reporting Limits Are Needed 5/21 FIP JD

Carrier # Greyhound 1635641771-5

Submittal of samples constitutes agreement to Terms and Conditions listed on reverse side of C.O.C. 5 samples-HS

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Summary Report

Kyle Landreneau
Equiva Kyle Landreneau
PMB 284 40 FM 1960 West
Houston, TX 77090

Report Date: May 30, 2002

Order ID Number: A02052214

Project: EQ-112 Monument
TA Job Code: Barber Ranch 3000109
Casualty Code: EQ-112
Project Location: Monument, Lea County,New Mexico
Project Address:
Enercon Services Inc. / Midland / Jeff Kindley

Sample	Description	Matrix	Date Taken	Time Taken	Date Received
197615	MW-1	Water	5/20/02	8:30	5/22/02

0 This report consists of a total of 1 page(s) and is intended only as a summary of results for the sample(s) listed above.

Sample: 197615 - MW-1

Param	Flag	Result	Units
Naphthalene		<0.0002	mg/L
Acenaphthylene		<0.0002	mg/L
Acenaphthene		<0.0002	mg/L
Fluorene		<0.0002	mg/L
Phenanthrene		<0.0002	mg/L
Anthracene		<0.0002	mg/L
Fluoranthene		<0.0002	mg/L
Pyrene		<0.0002	mg/L
Benzo(a)anthracene		<0.0002	mg/L
Chrysene		<0.0002	mg/L
Benzo(b)fluoranthene		<0.0002	mg/L
Benzo(k)fluoranthene		<0.0002	mg/L
Benzo(a)pyrene		<0.0002	mg/L
Indeno(1,2,3-cd)pyrene		<0.0002	mg/L
Dibenzo(a,h)anthracene		<0.0002	mg/L
Benzo(g,h,i)perylene		<0.0002	mg/L

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E-Mail: lab@traceanalysis.com

Analytical and Quality Control Report

Kyle Landreneau
Equiva Kyle Landreneau
PMB 284 40 FM 1960 West
Houston, TX 77090

Report Date: May 30, 2002

Order ID Number: A02052214

Project: EQ-112 Monument
TA Job Code: Barber Ranch 3000109
Casualty Code: EQ-112
Project Location: Monument, Lea County,New Mexico
Enercon Services Inc. / Midland / Jeff Kindley

Enclosed are the Analytical Results and Quality Control Data Reports for the following samples submitted to Trace-Analysis, Inc.

Sample	Description	Matrix	Date Taken	Time Taken	Date Received
197615	MW-1	Water	5/20/02	8:30	5/22/02

These results represent only the samples received in the laboratory. The Quality Control Report is generated on a batch basis. All information contained in this report is for the analytical batch(es) in which your sample(s) were analyzed. Note: the RDL is equal to MQL for all organic analytes including TPH.
The test results contained within this report meet all requirements of LAC 33:I unless otherwise noted.

This report consists of a total of 4 pages and shall not be reproduced except in its entirety including the chain of custody (COC), without written approval of TraceAnalysis, Inc.

Dr. Blair Leftwich, Director

Analytical Report

Sample: 197615 - MW-1

Analysis:	PAH	Analytical Method:	S 8270C	QC Batch:	QC20435	Date Analyzed:	5/28/02
Analyst:	RC	Preparation Method:	E 3510C	Prep Batch:	PB19526	Date Prepared:	5/23/02

Param	Flag	Result	Units	Dilution	RDL
Naphthalene		<0.0002	mg/L	1	0.0002
Acenaphthylene		<0.0002	mg/L	1	0.0002
Acenaphthene		<0.0002	mg/L	1	0.0002
Fluorene		<0.0002	mg/L	1	0.0002
Phenanthrene		<0.0002	mg/L	1	0.0002
Anthracene		<0.0002	mg/L	1	0.0002
Fluoranthene		<0.0002	mg/L	1	0.0002
Pyrene		<0.0002	mg/L	1	0.0002
Benzo(a)anthracene		<0.0002	mg/L	1	0.0002
Chrysene		<0.0002	mg/L	1	0.0002
Benzo(b)fluoranthene		<0.0002	mg/L	1	0.0002
Benzo(k)fluoranthene		<0.0002	mg/L	1	0.0002
Benzo(a)pyrene		<0.0002	mg/L	1	0.0002
Indeno(1,2,3-cd)pyrene		<0.0002	mg/L	1	0.0002
Dibenzo(a,h)anthracene		<0.0002	mg/L	1	0.0002
Benzo(g,h,i)perylene		<0.0002	mg/L	1	0.0002

Surrogate	Flag	Result	Units	Dilution	Spike Amount	Percent Recovery	Recovery Limits
Nitrobenzene-d5		33.69	mg/L	1	80	42	35 - 114
2-Fluorobiphenyl		38.26	mg/L	1	80	47	43 - 116
Terphenyl-d14		70.87	mg/L	1	80	88	33 - 141

Quality Control Report
Method Blank

Method Blank

QCBatch: QC20435

Param	Flag	Results	Units	Reporting Limit
Naphthalene		<0.0002	mg/L	0.0002
Acenaphthylene		<0.0002	mg/L	0.0002
Acenaphthene		<0.0002	mg/L	0.0002
Fluorene		<0.0002	mg/L	0.0002
Phenanthrene		<0.0002	mg/L	0.0002
Anthracene		<0.0002	mg/L	0.0002
Fluoranthene		<0.0002	mg/L	0.0002
Pyrene		<0.0002	mg/L	0.0002
Benzo(a)anthracene		<0.0002	mg/L	0.0002
Chrysene		<0.0002	mg/L	0.0002
Benzo(b)fluoranthene		<0.0002	mg/L	0.0002
Benzo(k)fluoranthene		<0.0002	mg/L	0.0002
Benzo(a)pyrene		<0.0002	mg/L	0.0002
Indeno(1,2,3-cd)pyrene		<0.0002	mg/L	0.0002
Dibenzo(a,h)anthracene		<0.0002	mg/L	0.0002
Benzo(g,h,i)perylene		<0.0002	mg/L	0.0002

Surrogate	Flag	Result	Units	Dilution	Spike Amount	Percent Recovery	Recovery Limits
Nitrobenzene-d5		32.79	mg/L	1	80	40	35 - 114
2-Fluorobiphenyl		35.72	mg/L	1	80	44	43 - 116
Terphenyl-d14		47.49	mg/L	1	80	59	33 - 141

Quality Control Report
Lab Control Spikes and Duplicate Spikes

Laboratory Control Spikes

QCBatch: QC20435

Param	LCS Result	LCSD Result	Units	Dil.	Spike Amount Added	Matrix Result	% Rec	RPD	% Rec Limit	RPD Limit
Naphthalene	22.72	25.94	mg/L	1	80	<0.0002	28	13	16 - 96	20
Acenaphthylene	24.06	28.76	mg/L	1	80	<0.0002	30	17	20 - 110	20
Acenaphthene	23.73	28.94	mg/L	1	80	<0.0002	29	19	18 - 108	20
Fluorene	26.31	31.13	mg/L	1	80	<0.0002	32	16	22 - 102	20
Phenanthrene	28.61	33.91	mg/L	1	80	<0.0002	35	16	25 - 103	20
Anthracene	29.48	35.19	mg/L	1	80	<0.0002	36	17	22 - 110	20
Fluoranthene	23.56	[1] 43.1	mg/L	1	80	<0.0002	29	58	21 - 110	20
Pyrene	56.64	[2] 84.21	mg/L	1	80	<0.0002	70	39	22 - 100	20
Benzo(a)anthracene	35.16	42.53	mg/L	1	80	<0.0002	43	18	30 - 99	20
Chrysene	26.77	32.1	mg/L	1	80	<0.0002	33	18	27 - 108	20

Continued ...

[1]RPD values out of limits due to poor prep.
[2]RPD values out of limits due to poor prep.

... Continued

Param	LCS Result	LCSD Result	Units	Dil.	Spike Amount Added	Matrix Result	% Rec	RPD	% Rec Limit	RPD Limit
Benzo(b)fluoranthene	33.1	[3] 40.98	mg/L	1	80	<0.0002	41	21	19 - 102	20
Benzo(k)fluoranthene	39.58	46.85	mg/L	1	80	<0.0002	49	16	35 - 103	20
Benzo(a)pyrene	33.04	[4] 40.91	mg/L	1	80	<0.0002	41	21	24 - 105	20
Indeno(1,2,3-cd)pyrene	31.38	38.53	mg/L	1	80	<0.0002	39	20	22 - 108	20
Dibenzo(a,h)anthracene	22.48	27.07	mg/L	1	80	<0.0002	28	18	23 - 77	20
Benzo(g,h,i)perylene	31.13	37.06	mg/L	1	80	<0.0002	38	17	19 - 119	20

Percent recovery is based on the spike result. RPD is based on the spike and spike duplicate result.

Surrogate	LCS Result	LCSD Result	Units	Dilution	Spike Amount	LCS % Rec	LCSD % Rec	Recovery Limits
Nitrobenzene-d5	24.6	26.3	mg/L	1	80	30	32	35 - 114
2-Fluorobiphenyl	25.71	28.97	mg/L	1	80	32	36	43 - 116
Terphenyl-d14	39.04	71.94	mg/L	1	80	48	89	33 - 141

Quality Control Report
Continuing Calibration Verification Standards

CCV (1)

QCBatch: QC20435

Param	Flag	Units	CCVs True Conc.	CCVs Found Conc.	CCVs Percent Recovery	Percent Recovery Limits	Date Analyzed
Naphthalene		mg/L	60	60.1	100	80 - 120	5/28/02
Acenaphthylene		mg/L	60	59.67	99	80 - 120	5/28/02
Acenaphthene		mg/L	60	60.17	100	80 - 120	5/28/02
Fluorene		mg/L	60	62.32	103	80 - 120	5/28/02
Phenanthrene		mg/L	60	57.9	96	80 - 120	5/28/02
Anthracene		mg/L	60	53.04	88	80 - 120	5/28/02
Fluoranthene		mg/L	60	48.37	80	80 - 120	5/28/02
Pyrene		mg/L	60	66.75	111	80 - 120	5/28/02
Benzo(a)anthracene		mg/L	60	58.42	97	80 - 120	5/28/02
Chrysene		mg/L	60	58.79	97	80 - 120	5/28/02
Benzo(b)fluoranthene		mg/L	60	52.04	86	80 - 120	5/28/02
Benzo(k)fluoranthene		mg/L	60	64.77	107	80 - 120	5/28/02
Benzo(a)pyrene		mg/L	60	53.95	89	80 - 120	5/28/02
Indeno(1,2,3-cd)pyrene		mg/L	60	48.11	80	80 - 120	5/28/02
Dibenzo(a,h)anthracene		mg/L	60	49.28	82	80 - 120	5/28/02
Benzo(g,h,i)perylene		mg/L	60	51.98	86	80 - 120	5/28/02
Nitrobenzene-d5		mg/L	60	55.5	92	80 - 120	5/28/02
2-Fluorobiphenyl		mg/L	60	59.3	98	80 - 120	5/28/02
Terphenyl-d14		mg/L	60	62.58	104	80 - 120	5/28/02

[3]RPD values out of limits due to poor prep.
[4]RPD values out of limits due to poor prep.

197615

A02052214

1 of 1

TraceAnalysis, Inc.

6701 Aberdeen Avenue Lubbock, Texas 79424
Tel (806) 794 1296 Fax (806) 794 1298
1 (800) 378 1296

CHAIN-OF-CUSTODY RECORD AND ANALYSIS REQUEST

Project Manager: Jeffrey Kindley

Phone #: 915-570-8726

FAX #: 915-684-7587

Company Name & Address: Enercon Services Inc. 306 West Wall, Suite 1312 Midland, Tx 79701

Attn Kyle Landreneau Equiva Services

Project #: Incident # 3000109 EQ-112

Project Name: Barber Lease

Project Location: Monument, Lea County, New Mexico

Sampler Signature: Jeffrey Kindley

LAB # (LAB USE ONLY)	FIELD CODE	# CONTAINERS	Volume/Amount	MATRIX: WATER	MATRIX: SOIL	MATRIX: AIR	MATRIX: SLUDGE		PRESERVATIVE METHOD: HCL	PRESERVATIVE METHOD: HNO3	PRESERVATIVE METHOD: ICE	PRESERVATIVE METHOD: NONE		SAMPLING: DATE	SAMPLING: TIME	BTEX, MTBE	TPH	Total Metals Ag As Ba Cd Cr Pb Hg Se	TCLP Metals Ag As Ba Cd Cr Pb Hg Se	TCLP Volatiles	TCLP Semi Volatiles	RCI	8240 / 8260	8270 PAH					Turn around # of days	Fax ASAP	Hold		
197615	MW-1	1	Liter	✓								✓		05/20/02	830									✓									

Relinquished by:	Date:	Time:	Received by:	Date:	Time:
Jeffrey Kindley	May 21, 2002	900	Helen Shelton	5/21/02	900
Helen Shelton	5/21/02	1830			
			Received at Laboratory by: Vicki Vessel	5-22-02	10:00 am

REMARKS Bus 1635 66 7759
3°

Shipped Greyhound 1 sample - HS

TRACEANALYSIS, INC.

6701 Aberdeen Avenue, Suite 9 Lubbock, Texas 79424 800•378•1296 806•794•1296 FAX 806•794•1298
155 McCutcheon, Suite H El Paso, Texas 79932 888•588•3443 915•585•3443 FAX 915•585•4944
E-Mail: lab@traceanalysis.com

Analytical and Quality Control Report

Kyle Landreneau
Equiva Kyle Landreneau
PMB 284 40 FM 1960 West
Houston, TX 77090

Report Date: June 18, 2002

Order ID Number: A02061107

Project: EQ-110
TA Job Code: 300110
Casualty Code: EQ-110
Project Location: Monument, New Mexico
Enercon Services Inc. / Midland / Jeff Kindley

Enclosed are the Analytical Results and Quality Control Data Reports for the following samples submitted to Trace-Analysis, Inc.

Sample	Description	Matrix	Date Taken	Time Taken	Date Received
198992	MW-4	Water	6/10/02	13:00	6/11/02

These results represent only the samples received in the laboratory. The Quality Control Report is generated on a batch basis. All information contained in this report is for the analytical batch(es) in which your sample(s) were analyzed. Note: the RDL is equal to MQL for all organic analytes including TPH.
The test results contained within this report meet all requirements of LAC 33:I unless otherwise noted.

This report consists of a total of 6 pages and shall not be reproduced except in its entirety including the chain of custody (COC), without written approval of TraceAnalysis, Inc.

Dr. Blair Leftwich, Director

Analytical Report

Sample: 198992 - MW-4

Analysis:	BTEX	Analytical Method:	S 8021B	QC Batch:	QC20961	Date Analyzed:	6/11/02
Analyst:	CG	Preparation Method:	S 5030B	Prep Batch:	PB19958	Date Prepared:	6/11/02

Param	Flag	Result	Units	Dilution	RDL
Benzene		0.005	mg/L	5	0.001
Toluene		0.013	mg/L	5	0.001
Ethylbenzene		<0.005	mg/L	5	0.001
M,P,O-Xylene		<0.005	mg/L	5	0.001
Total BTEX		0.018	mg/L	5	0.001

Surrogate	Flag	Result	Units	Dilution	Spike Amount	Percent Recovery	Recovery Limits
TFT		0.092	mg/L	5	0.10	92	70 - 130
4-BFB		0.089	mg/L	5	0.10	89	70 - 130

Sample: 198992 - MW-4

Analysis:	PAH	Analytical Method:	S 8270C	QC Batch:	QC21047	Date Analyzed:	6/13/02
Analyst:	RC	Preparation Method:	E 3510C	Prep Batch:	PB20042	Date Prepared:	6/12/02

Param	Flag	Result	Units	Dilution	RDL
Naphthalene		<0.0002	mg/L	1	0.0002
Acenaphthylene		<0.0002	mg/L	1	0.0002
Acenaphthene		<0.0002	mg/L	1	0.0002
Fluorene		<0.0002	mg/L	1	0.0002
Phenanthrene		<0.0002	mg/L	1	0.0002
Anthracene		<0.0002	mg/L	1	0.0002
Fluoranthene		<0.0002	mg/L	1	0.0002
Pyrene		<0.0002	mg/L	1	0.0002
Benzo(a)anthracene		<0.0002	mg/L	1	0.0002
Chrysene		<0.0002	mg/L	1	0.0002
Benzo(b)fluoranthene		<0.0002	mg/L	1	0.0002
Benzo(k)fluoranthene		<0.0002	mg/L	1	0.0002
Benzo(a)pyrene		<0.0002	mg/L	1	0.0002
Indeno(1,2,3-cd)pyrene		<0.0002	mg/L	1	0.0002
Dibenzo(a,h)anthracene		<0.0002	mg/L	1	0.0002
Benzo(g,h,i)perylene		<0.0002	mg/L	1	0.0002

Surrogate	Flag	Result	Units	Dilution	Spike Amount	Percent Recovery	Recovery Limits
Nitrobenzene-d5		66.23	mg/L	1	80	82	35 - 114
2-Fluorobiphenyl		64.67	mg/L	1	80	80	43 - 116
Terphenyl-d14		45.37	mg/L	1	80	56	33 - 141

Quality Control Report
Method Blank

Method Blank

QCBatch: QC20961

Param	Flag	Results	Units	Reporting Limit
Benzene		<0.001	mg/L	0.001
Toluene		<0.001	mg/L	0.001
Ethylbenzene		<0.001	mg/L	0.001
M,P,O-Xylene		<0.001	mg/L	0.001
Total BTEX		<0.001	mg/L	0.001

Surrogate	Flag	Result	Units	Dilution	Spike Amount	Percent Recovery	Recovery Limits
TFT		0.0921	mg/L	1	0.10	92	70 - 130
4-BFB		0.0913	mg/L	1	0.10	91	70 - 130

Method Blank

QCBatch: QC21047

Param	Flag	Results	Units	Reporting Limit
Naphthalene		<0.0002	mg/L	0.0002
Acenaphthylene		<0.0002	mg/L	0.0002
Acenaphthene		<0.0002	mg/L	0.0002
Fluorene		<0.0002	mg/L	0.0002
Phenanthrene		<0.0002	mg/L	0.0002
Anthracene		<0.0002	mg/L	0.0002
Fluoranthene		<0.0002	mg/L	0.0002
Pyrene		<0.0002	mg/L	0.0002
Benzo(a)anthracene		<0.0002	mg/L	0.0002
Chrysene		<0.0002	mg/L	0.0002
Benzo(b)fluoranthene		<0.0002	mg/L	0.0002
Benzo(k)fluoranthene		<0.0002	mg/L	0.0002
Benzo(a)pyrene		<0.0002	mg/L	0.0002
Indeno(1,2,3-cd)pyrene		<0.0002	mg/L	0.0002
Dibenzo(a,h)anthracene		<0.0002	mg/L	0.0002
Benzo(g,h,i)perylene		<0.0002	mg/L	0.0002

Surrogate	Flag	Result	Units	Dilution	Spike Amount	Percent Recovery	Recovery Limits
Nitrobenzene-d5		65.26	mg/L	1	80	81	35 - 114
2-Fluorobiphenyl		62.86	mg/L	1	80	78	43 - 116
Terphenyl-d14		62.34	mg/L	1	80	77	33 - 141

Quality Control Report
Lab Control Spikes and Duplicate Spikes

Laboratory Control Spikes

QCBatch: QC20961

Param	LCS Result	LCSD Result	Units	Dil.	Spike Amount Added	Matrix Result	% Rec	RPD	% Rec Limit	RPD Limit
MTBE	0.0938	0.0937	mg/L	1	0.10	<0.001	94	0	70 - 130	20
Benzene	0.0944	0.0941	mg/L	1	0.10	<0.001	94	0	70 - 130	20
Toluene	0.0911	0.0924	mg/L	1	0.10	<0.001	91	1	70 - 130	20
Ethylbenzene	0.0909	0.0904	mg/L	1	0.10	<0.001	91	0	70 - 130	20
M,P,O-Xylene	0.270	0.269	mg/L	1	0.30	<0.001	90	0	70 - 130	20

Percent recovery is based on the spike result. RPD is based on the spike and spike duplicate result.

Surrogate	LCS Result	LCSD Result	Units	Dilution	Spike Amount	LCS % Rec	LCSD % Rec	Recovery Limits
TFT	0.0924	0.0895	mg/L	1	0.10	92	90	70 - 130
4-BFB	0.0946	0.0924	mg/L	1	0.10	95	92	70 - 130

Laboratory Control Spikes

QCBatch: QC21047

Param	LCS Result	LCSD Result	Units	Dil.	Spike Amount Added	Matrix Result	% Rec	RPD	% Rec Limit	RPD Limit
Naphthalene	53.57	63.86	mg/L	1	80	<0.0002	66	17	16 - 96	20
Acenaphthylene	58.61	69.45	mg/L	1	80	<0.0002	73	16	20 - 110	20
Acenaphthene	56.84	66.8	mg/L	1	80	<0.0002	71	16	18 - 108	20
Fluorene	55.95	66.5	mg/L	1	80	<0.0002	69	17	22 - 102	20
Phenanthrene	57.71	68.73	mg/L	1	80	<0.0002	72	17	25 - 103	20
Anthracene	60.4	71.06	mg/L	1	80	<0.0002	75	16	22 - 110	20
Fluoranthene	69.64	80.67	mg/L	1	80	<0.0002	87	14	21 - 110	20
Pyrene	51.84	62.82	mg/L	1	80	<0.0002	64	19	22 - 100	20
Benzo(a)anthracene	55.5	67.76	mg/L	1	80	<0.0002	69	19	30 - 99	20
Chrysene	43.73	51.45	mg/L	1	80	<0.0002	54	16	27 - 108	20
Benzo(b)fluoranthene	49.9	60.76	mg/L	1	80	<0.0002	62	19	19 - 102	20
Benzo(k)fluoranthene	54.88	65.84	mg/L	1	80	<0.0002	68	18	35 - 103	20
Benzo(a)pyrene	47.48	58.02	mg/L	1	80	<0.0002	59	19	24 - 105	20
Indeno(1,2,3-cd)pyrene	34.41	42.59	mg/L	1	80	<0.0002	43	21	22 - 108	20
Dibenzo(a,h)anthracene	23.86	28.89	mg/L	1	80	<0.0002	29	19	23 - 77	20
Benzo(g,h,i)perylene	35.67	43.21	mg/L	1	80	<0.0002	44	19	19 - 119	20

Percent recovery is based on the spike result. RPD is based on the spike and spike duplicate result.

Surrogate	LCS Result	LCSD Result	Units	Dilution	Spike Amount	LCS % Rec	LCSD % Rec	Recovery Limits
Nitrobenzene-d5	64.5	66.8	mg/L	1	80	80	83	35 - 114
2-Fluorobiphenyl	64.84	65.19	mg/L	1	80	81	81	43 - 116
Terphenyl-d14	54.64	57.75	mg/L	1	80	68	72	33 - 141

Quality Control Report
Continuing Calibration Verification Standards

CCV (1)

QCBatch: QC20961

Param	Flag	Units	CCVs True Conc.	CCVs Found Conc.	CCVs Percent Recovery	Percent Recovery Limits	Date Analyzed
MTBE		mg/L	0.10	0.112	112	85 - 115	6/11/02
Benzene		mg/L	0.10	0.0962	96	85 - 115	6/11/02
Toluene		mg/L	0.10	0.0973	97	85 - 115	6/11/02
Ethylbenzene		mg/L	0.10	0.0924	92	85 - 115	6/11/02
M,P,O-Xylene		mg/L	0.30	0.275	91	85 - 115	6/11/02

CCV (2)

QCBatch: QC20961

Param	Flag	Units	CCVs True Conc.	CCVs Found Conc.	CCVs Percent Recovery	Percent Recovery Limits	Date Analyzed
MTBE		mg/L	0.10	0.106	106	85 - 115	6/11/02
Benzene		mg/L	0.10	0.091	91	85 - 115	6/11/02
Toluene		mg/L	0.10	0.091	91	85 - 115	6/11/02
Ethylbenzene		mg/L	0.10	0.089	89	85 - 115	6/11/02
M,P,O-Xylene		mg/L	0.30	0.265	88	85 - 115	6/11/02

ICV (1)

QCBatch: QC20961

Param	Flag	Units	CCVs True Conc.	CCVs Found Conc.	CCVs Percent Recovery	Percent Recovery Limits	Date Analyzed
MTBE		mg/L	0.10	0.0924	92	85 - 115	6/11/02
Benzene		mg/L	0.10	0.0949	94	85 - 115	6/11/02
Toluene		mg/L	0.10	0.0932	93	85 - 115	6/11/02
Ethylbenzene		mg/L	0.10	0.0931	93	85 - 115	6/11/02
M,P,O-Xylene		mg/L	0.30	0.277	92	85 - 115	6/11/02

CCV (1)

QCBatch: QC21047

Param	Flag	Units	CCVs True Conc.	CCVs Found Conc.	CCVs Percent Recovery	Percent Recovery Limits	Date Analyzed
Naphthalene		mg/L	60	62.12	103	80 - 120	6/13/02
Acenaphthylene		mg/L	60	62.22	103	80 - 120	6/13/02
Acenaphthene		mg/L	60	62.49	104	80 - 120	6/13/02
Fluorene		mg/L	60	59.16	98	80 - 120	6/13/02
Phenanthrene		mg/L	60	60.21	100	80 - 120	6/13/02
Anthracene		mg/L	60	62.1	103	80 - 120	6/13/02
Fluoranthene		mg/L	60	66.85	111	80 - 120	6/13/02
Pyrene		mg/L	60	69.58	115	80 - 120	6/13/02
Benzo(a)anthracene		mg/L	60	61.66	102	80 - 120	6/13/02
Chrysene		mg/L	60	59.47	99	80 - 120	6/13/02
Benzo(b)fluoranthene		mg/L	60	58.8	98	80 - 120	6/13/02
Benzo(k)fluoranthene		mg/L	60	62.51	104	80 - 120	6/13/02

Continued ...

... Continued

Param	Flag	Units	CCVs True Conc.	CCVs Found Conc.	CCVs Percent Recovery	Percent Recovery Limits	Date Analyzed
Benzo(a)pyrene		mg/L	60	59.8	99	80 - 120	6/13/02
Indeno(1,2,3-cd)pyrene		mg/L	60	58.8	98	80 - 120	6/13/02
Dibenzo(a,h)anthracene		mg/L	60	54.1	90	80 - 120	6/13/02
Benzo(g,h,i)perylene		mg/L	60	54.4	90	80 - 120	6/13/02
Nitrobenzene-d5		mg/L	60	64.88	108	80 - 120	6/13/02
2-Fluorobiphenyl		mg/L	60	64.24	107	80 - 120	6/13/02
Terphenyl-d14		mg/L	60	61.75	102	80 - 120	6/13/02

TraceAnalysis, Inc. 6701 Aberdeen Ave., Suite 9 Lubbock, TX 79424-1515 (806) 794-1296

Summary Report

Kyle Landreneau
Equiva Kyle Landreneau
PMB 284 40 FM 1960 West
Houston, TX 77090

Report Date: June 18, 2002

Order ID Number: A02061107

Project: EQ-110
TA Job Code: 300110
Casualty Code: EQ-110
Project Location: Monument, New Mexico
Project Address:
Enercon Services Inc. / Midland / Jeff Kindley

Sample	Description	Matrix	Date Taken	Time Taken	Date Received
198992	MW-4	Water	6/10/02	13:00	6/11/02

0 This report consists of a total of 1 page(s) and is intended only as a summary of results for the sample(s) listed above.

	BTEX				
Sample - Field Code	Benzene (ppm)	Toluene (ppm)	Ethylbenzene (ppm)	M,P,O-Xylene (ppm)	Total BTEX (ppm)
198992 - MW-4	0.005	0.013	<0.005	<0.005	0.018

Sample: 198992 - MW-4

Param	Flag	Result	Units
Naphthalene		<0.0002	mg/L
Acenaphthylene		<0.0002	mg/L
Acenaphthene		<0.0002	mg/L
Fluorene		<0.0002	mg/L
Phenanthrene		<0.0002	mg/L
Anthracene		<0.0002	mg/L
Fluoranthene		<0.0002	mg/L
Pyrene		<0.0002	mg/L
Benzo(a)anthracene		<0.0002	mg/L
Chrysene		<0.0002	mg/L
Benzo(b)fluoranthene		<0.0002	mg/L
Benzo(k)fluoranthene		<0.0002	mg/L
Benzo(a)pyrene		<0.0002	mg/L
Indeno(1,2,3-cd)pyrene		<0.0002	mg/L
Dibenzo(a,h)anthracene		<0.0002	mg/L
Benzo(g,h,i)perylene		<0.0002	mg/L

This is only a summary. Please, refer to the complete report package for quality control data.

198992

5701 Aberdeen Avenue, Ste. 9
Lubbock, Texas 79424
Tel (806) 794-1296
Fax (806) 794-1298
1 (800) 378-1296

TraceAnalysis, Inc.

155 McCutcheon,Suite H
El Paso, Texas 79932
Tel (915) 585-3443
Fax (915) 585-4944
1 (888) 588-3443

CHAIN-OF-CUSTODY AND ANALYSIS REQUEST

LAB Order ID # A02061107

mpany Name: Jeffrey Kindley
Phone #: 915-570-8726 9
dress: (Street, City, Zip) 306 West Wall, Suite 1312, Midland, Tx 79701
Fax #: 915-684-7587
ntact Person: Jeffrey Kindley
oice to: (different from above) Kyle Landeneau Equiva Services
oject #: EQ-110
Project Name: John Hendrix
oject Location: Monument, New Mexico
Sampler Signature: Jeffrey Kindley

ANALYSIS REQUEST
(Circle or Specify Method No.)

LAB # (LAB USE ONLY)	FIELD CODE	# CONTAINERS	Volume/Amount	MATRIX: WATER	SOIL	AIR	SLUDGE		PRESERVATIVE METHOD: HCl	HNO_3	H_2SO_4	NaOH	ICE	NONE		SAMPLING: DATE	TIME	MTBE 8021B/602	BTEX 8021B/602	TPH 418.1/TX1005	PAH 8270C	Total Metals Ag As Ba Cd Cr Pb Se Hg 6010B/200.7	TCLP Metals Ag As Ba Cd Cr Pb Se Hg	TCLP Volatiles	TCLP Semi Volatiles	TCLP Pesticides	RCI	GC/MS Vol. 8260B/624	GC/MS Semi. Vol. 8270C/625	PCB's 8082/608	Pesticides 8081A/608	BOD, TSS, pH						Turn Around Time if different from standard	Hold
198992	MW-4	3	(2) 40ml 1 Liter	✓					✓					✓		06/10/02	1300		✓		✓																		

Relinquished by:	Date:	Time:	Received by:	Date:	Time:
Jeffrey Kindley	June 10, 2002	1800	Helen Shelton	6/10/02	1800
Helen Shelton	6/10/02	1830			
			Received at Laboratory by: Vick Chung	6-11-02	10:00

LAB USE ONLY
Intact Y / N
Headspace Y / N
Temp 4°
Log-in Review [illegible]

REMARKS:
24 to 48 hr Turnaround
FTP 6/17/02
4/19 FTP

☐ Check If Special Reporting Limits Are Needed

bmittal of samples constitutes agreement to Terms and Conditions listed on reverse side of C.O.C. 3 samples HS

Carrier # Greyhound 165 303 1462

ORIGINAL CO

Summary Report

Kyle Landreneau
Equiva Kyle Landreneau
PMB 284 40 FM 1960 West
Houston, TX 77090

Report Date: June 26, 2002

Order ID Number: A02062412

Project: EQ-112
TA Job Code: Barber Ranch 3000109
Casualty Code: EQ-112
Project Location: Barber Lea County, New Mexico
Project Address:
Enercon Services Inc. / Midland / Jeff Kindley

Sample	Description	Matrix	Date Taken	Time Taken	Date Received
199919	MW-13 (13-15')	Soil	6/19/02	10:20	6/22/02
199920	MW-13 (25-27')	Soil	6/19/02	11:00	6/22/02
199921	MW-14 (13-15')	Soil	6/20/02	15:05	6/22/02
199922	MW-14 (25-27')	Soil	6/20/02	15:40	6/22/02

0 This report consists of a total of 1 page(s) and is intended only as a summary of results for the sample(s) listed above.

	BTEX						TPH DRO	TPH GRO
	Benzene	Toluene	Ethylbenzene	M,P,O-Xylene	Total BTEX	Test Comments	DRO	GRO
Sample - Field Code	(ppm)	(ppm)	(ppm)	(ppm)	(ppm)	(ppm)	(ppm)	(ppm)
199919 - MW-13 (13-15')	<0.020	<0.020	<0.020	<0.020	<0.020	* [1]	<50.0	<2.00
199920 - MW-13 (25-27')	<0.010	<0.010	<0.010	<0.010	<0.010	-	<50.0	<1.00
199921 - MW-14 (13-15')	<0.010	<0.010	<0.010	<0.010	<0.010	-	<50.0	<1.00
199922 - MW-14 (25-27')	<0.010	<0.010	<0.010	<0.010	<0.010	-	<50.0	<1.00

[1]Sample diluted due to turbidity. Sample has a Benzene concenntration of less than 0.00473 which is the MDL.

This is only a summary. Please, refer to the complete report package for quality control data.

TRACEANALYSIS, INC.

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155 McCutcheon, Suite H El Paso, Texas 79932 888•588•3443 915•585•3443 FAX 915•585•4944
E-Mail: lab@traceanalysis.com

Analytical and Quality Control Report

Kyle Landreneau
Equiva Kyle Landreneau
PMB 284 40 FM 1960 West
Houston, TX 77090

Report Date: June 26, 2002

Order ID Number: A02062412

Project: EQ-112
TA Job Code: Barber Ranch 3000109
Casualty Code: EQ-112
Project Location: Barber Lea County, New Mexico
Enercon Services Inc. / Midland / Jeff Kindley

Enclosed are the Analytical Results and Quality Control Data Reports for the following samples submitted to Trace-Analysis, Inc.

Sample	Description	Matrix	Date Taken	Time Taken	Date Received
199919	MW-13 (13-15')	Soil	6/19/02	10:20	6/22/02
199920	MW-13 (25-27')	Soil	6/19/02	11:00	6/22/02
199921	MW-14 (13-15')	Soil	6/20/02	15:05	6/22/02
199922	MW-14 (25-27')	Soil	6/20/02	15:40	6/22/02

These results represent only the samples received in the laboratory. The Quality Control Report is generated on a batch basis. All information contained in this report is for the analytical batch(es) in which your sample(s) were analyzed. Note: the RDL is equal to MQL for all organic analytes including TPH.
The test results contained within this report meet all requirements of LAC 33:I unless otherwise noted.

This report consists of a total of 10 pages and shall not be reproduced except in its entirety including the chain of custody (COC), without written approval of TraceAnalysis, Inc.

Dr. Blair Leftwich, Director

Analytical Report

Sample: 199919 - MW-13 (13-15')

Analysis:	BTEX	Analytical Method:	S 8021B	QC Batch:	QC21329	Date Analyzed:	6/24/02
Analyst:	CG	Preparation Method:	S 5035	Prep Batch:	PB20269	Date Prepared:	6/24/02

Param	Flag	Result	Units	Dilution	RDL
Benzene		<0.020	mg/Kg	20	0.001
Toluene		<0.020	mg/Kg	20	0.001
Ethylbenzene		<0.020	mg/Kg	20	0.001
M,P,O-Xylene		<0.020	mg/Kg	20	0.001
Total BTEX		<0.020	mg/Kg	20	0.001
Test Comments	[1]	*	mg/Kg	1	

Surrogate	Flag	Result	Units	Dilution	Spike Amount	Percent Recovery	Recovery Limits
TFT		0.817	mg/Kg	20	1	82	70 - 130
4-BFB		0.778	mg/Kg	20	1	78	70 - 130

Sample: 199919 - MW-13 (13-15')

Analysis:	TPH DRO	Analytical Method:	Mod. 8015B	QC Batch:	QC21368	Date Analyzed:	6/25/02
Analyst:	MM	Preparation Method:	3550 B	Prep Batch:	PB20301	Date Prepared:	6/25/02

Param	Flag	Result	Units	Dilution	RDL
DRO		<50.0	mg/Kg	1	50

Surrogate	Flag	Result	Units	Dilution	Spike Amount	Percent Recovery	Recovery Limits
n-Triacontane		150	mg/Kg	1	150	100	70 - 130

Sample: 199919 - MW-13 (13-15')

Analysis:	TPH GRO	Analytical Method:	8015B	QC Batch:	QC21330	Date Analyzed:	6/24/02
Analyst:	CG	Preparation Method:	5035	Prep Batch:	PB20269	Date Prepared:	6/24/02

Param	Flag	Result	Units	Dilution	RDL
GRO		<2.00	mg/Kg	20	0.10

Surrogate	Flag	Result	Units	Dilution	Spike Amount	Percent Recovery	Recovery Limits
TFT	[2]	0.613	mg/Kg	20	0.10	61	70 - 130
4-BFB	[3]	0.625	mg/Kg	20	0.10	62	70 - 130

[1]Sample diluted due to turbidity. Sample has a Benzene concenntration of less than 0.00473 which is the MDL.
[2]Low surrogate recovery due to matrix interference. ICV, CCV show the method to be in control.
[3]Low surrogate recovery due to matrix interference. ICV, CCV show the method to be in control.

Sample: 199920 - MW-13 (25-27')

Analysis:	BTEX	Analytical Method:	S 8021B	QC Batch:	QC21329	Date Analyzed:	6/24/02
Analyst:	CG	Preparation Method:	S 5035	Prep Batch:	PB20269	Date Prepared:	6/24/02

Param	Flag	Result	Units	Dilution	RDL
Benzene		<0.010	mg/Kg	10	0.001
Toluene		<0.010	mg/Kg	10	0.001
Ethylbenzene		<0.010	mg/Kg	10	0.001
M,P,O-Xylene		<0.010	mg/Kg	10	0.001
Total BTEX		<0.010	mg/Kg	10	0.001

Surrogate	Flag	Result	Units	Dilution	Spike Amount	Percent Recovery	Recovery Limits
TFT		1.09	mg/Kg	10	1	109	70 - 130
4-BFB		0.814	mg/Kg	10	1	81	70 - 130

Sample: 199920 - MW-13 (25-27')

Analysis:	TPH DRO	Analytical Method:	Mod. 8015B	QC Batch:	QC21368	Date Analyzed:	6/25/02
Analyst:	MM	Preparation Method:	3550 B	Prep Batch:	PB20301	Date Prepared:	6/25/02

Param	Flag	Result	Units	Dilution	RDL
DRO		<50.0	mg/Kg	1	50

Surrogate	Flag	Result	Units	Dilution	Spike Amount	Percent Recovery	Recovery Limits
n-Triacontane		155	mg/Kg	1	150	103	70 - 130

Sample: 199920 - MW-13 (25-27')

Analysis:	TPH GRO	Analytical Method:	8015B	QC Batch:	QC21330	Date Analyzed:	6/24/02
Analyst:	CG	Preparation Method:	5035	Prep Batch:	PB20269	Date Prepared:	6/24/02

Param	Flag	Result	Units	Dilution	RDL
GRO		<1.00	mg/Kg	10	0.10

Surrogate	Flag	Result	Units	Dilution	Spike Amount	Percent Recovery	Recovery Limits
TFT		1.23	mg/Kg	10	0.10	123	70 - 130
4-BFB		0.749	mg/Kg	10	0.10	75	70 - 130

Sample: 199921 - MW-14 (13-15')

Analysis:	BTEX	Analytical Method:	S 8021B	QC Batch:	QC21329	Date Analyzed:	6/24/02
Analyst:	CG	Preparation Method:	S 5035	Prep Batch:	PB20269	Date Prepared:	6/24/02

Param	Flag	Result	Units	Dilution	RDL
Benzene		<0.010	mg/Kg	10	0.001

Continued ...

... Continued Sample: 199921 Analysis: BTEX

Param	Flag	Result	Units	Dilution	RDL
Toluene		<0.010	mg/Kg	10	0.001
Ethylbenzene		<0.010	mg/Kg	10	0.001
M,P,O-Xylene		<0.010	mg/Kg	10	0.001
Total BTEX		<0.010	mg/Kg	10	0.001

Surrogate	Flag	Result	Units	Dilution	Spike Amount	Percent Recovery	Recovery Limits
TFT		1.00	mg/Kg	10	1	100	70 - 130
4-BFB		0.955	mg/Kg	10	1	95	70 - 130

Sample: 199921 - MW-14 (13-15')

Analysis: TPH DRO Analytical Method: Mod. 8015B QC Batch: QC21368 Date Analyzed: 6/25/02
Analyst: MM Preparation Method: 3550 B Prep Batch: PB20301 Date Prepared: 6/25/02

Param	Flag	Result	Units	Dilution	RDL
DRO		<50.0	mg/Kg	1	50

Surrogate	Flag	Result	Units	Dilution	Spike Amount	Percent Recovery	Recovery Limits
n-Triacontane		159	mg/Kg	1	150	106	70 - 130

Sample: 199921 - MW-14 (13-15')

Analysis: TPH GRO Analytical Method: 8015B QC Batch: QC21330 Date Analyzed: 6/24/02
Analyst: CG Preparation Method: 5035 Prep Batch: PB20269 Date Prepared: 6/24/02

Param	Flag	Result	Units	Dilution	RDL
GRO		<1.00	mg/Kg	10	0.10

Surrogate	Flag	Result	Units	Dilution	Spike Amount	Percent Recovery	Recovery Limits
TFT		0.857	mg/Kg	10	0.10	86	70 - 130
4-BFB		0.862	mg/Kg	10	0.10	86	70 - 130

Sample: 199922 - MW-14 (25-27')

Analysis: BTEX Analytical Method: S 8021B QC Batch: QC21329 Date Analyzed: 6/24/02
Analyst: CG Preparation Method: S 5035 Prep Batch: PB20269 Date Prepared: 6/24/02

Param	Flag	Result	Units	Dilution	RDL
Benzene		<0.010	mg/Kg	10	0.001
Toluene		<0.010	mg/Kg	10	0.001
Ethylbenzene		<0.010	mg/Kg	10	0.001
M,P,O-Xylene		<0.010	mg/Kg	10	0.001
Total BTEX		<0.010	mg/Kg	10	0.001

Surrogate	Flag	Result	Units	Dilution	Spike Amount	Percent Recovery	Recovery Limits
TFT		0.964	mg/Kg	10	1	96	70 - 130
4-BFB		0.987	mg/Kg	10	1	99	70 - 130

Sample: 199922 - MW-14 (25-27')

Analysis:	TPH DRO	Analytical Method:	Mod. 8015B	QC Batch:	QC21368	Date Analyzed:	6/25/02
Analyst:	MM	Preparation Method:	3550 B	Prep Batch:	PB20301	Date Prepared:	6/25/02

Param	Flag	Result	Units	Dilution	RDL
DRO		<50.0	mg/Kg	1	50

Surrogate	Flag	Result	Units	Dilution	Spike Amount	Percent Recovery	Recovery Limits
n-Triacontane		139	mg/Kg	1	150	93	70 - 130

Sample: 199922 - MW-14 (25-27')

Analysis:	TPH GRO	Analytical Method:	8015B	QC Batch:	QC21330	Date Analyzed:	6/24/02
Analyst:	CG	Preparation Method:	5035	Prep Batch:	PB20269	Date Prepared:	6/24/02

Param	Flag	Result	Units	Dilution	RDL
GRO		<1.00	mg/Kg	10	0.10

Surrogate	Flag	Result	Units	Dilution	Spike Amount	Percent Recovery	Recovery Limits
TFT		0.832	mg/Kg	10	0.10	83	70 - 130
4-BFB		0.892	mg/Kg	10	0.10	89	70 - 130

Quality Control Report
Method Blank

Method Blank

QCBatch: QC21329

Param	Flag	Results	Units	Reporting Limit
Benzene		<0.010	mg/Kg	0.001
Toluene		<0.010	mg/Kg	0.001
Ethylbenzene		<0.010	mg/Kg	0.001
M,P,O-Xylene		<0.010	mg/Kg	0.001
Total BTEX		<0.010	mg/Kg	0.001

Surrogate	Flag	Result	Units	Dilution	Spike Amount	Percent Recovery	Recovery Limits
TFT		1.10	mg/Kg	10	1	110	70 - 130
4-BFB		1.01	mg/Kg	10	1	101	70 - 130

Method Blank

QCBatch: QC21330

Param	Flag	Results	Units	Reporting Limit
GRO		<1	mg/Kg	0.10

Surrogate	Flag	Result	Units	Dilution	Spike Amount	Percent Recovery	Recovery Limits
TFT		1.07	mg/Kg	10	0.10	107	70 - 130
4-BFB		0.943	mg/Kg	10	0.10	94	70 - 130

Method Blank

QCBatch: QC21368

Param	Flag	Results	Units	Reporting Limit
DRO		<50.0	mg/Kg	50

Surrogate	Flag	Result	Units	Dilution	Spike Amount	Percent Recovery	Recovery Limits
n-Triacontane		152	mg/Kg	1	150	101	70 - 130

Quality Control Report
Lab Control Spikes and Duplicate Spikes

Laboratory Control Spikes

QCBatch: QC21329

Param	LCS Result	LCSD Result	Units	Dil.	Spike Amount Added	Matrix Result	% Rec	RPD	% Rec Limit	RPD Limit
MTBE	1.12	1.1	mg/Kg	10	1	<0.010	112	1	70 - 130	20
Benzene	1.06	1.04	mg/Kg	10	1	<0.010	106	1	70 - 130	20
Toluene	1.03	1.02	mg/Kg	10	1	<0.010	103	0	70 - 130	20
Ethylbenzene	1	0.998	mg/Kg	10	1	<0.010	100	0	70 - 130	20
M,P,O-Xylene	2.92	2.91	mg/Kg	10	3	<0.010	97	0	70 - 130	20

Percent recovery is based on the spike result. RPD is based on the spike and spike duplicate result.

Surrogate	LCS Result	LCSD Result	Units	Dilution	Spike Amount	LCS % Rec	LCSD % Rec	Recovery Limits
TFT	1.07	1.07	mg/Kg	10	1	107	107	70 - 130
4-BFB	1.01	1.01	mg/Kg	10	1	101	101	70 - 130

Laboratory Control Spikes

QCBatch: QC21330

Param	LCS Result	LCSD Result	Units	Dil.	Spike Amount Added	Matrix Result	% Rec	RPD	% Rec Limit	RPD Limit
GRO	< 1	< 1	mg/Kg	10	1	<1	91	0	80 - 120	20

Percent recovery is based on the spike result. RPD is based on the spike and spike duplicate result.

Surrogate	LCS Result	LCSD Result	Units	Dilution	Spike Amount	LCS % Rec	LCSD % Rec	Recovery Limits
TFT	0.91	1.03	mg/Kg	10	0.10	91	103	70 - 130
4-BFB	0.918	0.918	mg/Kg	10	0.10	92	92	70 - 130

Laboratory Control Spikes

QCBatch: QC21368

Param	LCS Result	LCSD Result	Units	Dil.	Spike Amount Added	Matrix Result	% Rec	RPD	% Rec Limit	RPD Limit
DRO	241	232	mg/Kg	1	250	<50.0	96	3	70 - 130	20

Percent recovery is based on the spike result. RPD is based on the spike and spike duplicate result.

Surrogate	LCS Result	LCSD Result	Units	Dilution	Spike Amount	LCS % Rec	LCSD % Rec	Recovery Limits
n-Triacontane	143	145	mg/Kg	1	150	95	97	70 - 130

Quality Control Report
Matrix Spikes and Duplicate Spikes

Matrix Spikes

QCBatch: QC21330

Param	MS Result	MSD Result	Units	Dil.	Spike Amount Added	Matrix Result	% Rec	RPD	% Rec Limit	RPD Limit
GRO	1.03	< 1	mg/Kg	10	1	<1.00	103	11	80 - 120	20

Percent recovery is based on the spike result. RPD is based on the spike and spike duplicate result.

Surrogate	MS Result	MSD Result	Units	Dilution	Spike Amount	MS % Rec	MSD % Rec	Recovery Limits
TFT	[4] 0.323	1.03	mg/Kg	10	0.10	32	103	70 - 130
4-BFB	[5] 0.368	0.754	mg/Kg	10	0.10	37	75	70 - 130

Matrix Spikes

QCBatch: QC21368

Param	MS Result	MSD Result	Units	Dil.	Spike Amount Added	Matrix Result	% Rec	RPD	% Rec Limit	RPD Limit
DRO	[6] <500	[7] <500	mg/Kg	10	250	160	-64	-200	70 - 130	20

Percent recovery is based on the spike result. RPD is based on the spike and spike duplicate result.

Surrogate	MS Result	MSD Result	Units	Dilution	Spike Amount	MS % Rec	MSD % Rec	Recovery Limits
n-Triacontane	166	314	mg/Kg	10	150	11	21	70 - 130

Quality Control Report
Continuing Calibration Verification Standards

CCV (1)

QCBatch: QC21329

Param	Flag	Units	CCVs True Conc.	CCVs Found Conc.	CCVs Percent Recovery	Percent Recovery Limits	Date Analyzed
MTBE		mg/L	0.10	0.107	107	85 - 115	6/24/02
Benzene		mg/L	0.10	0.105	105	85 - 115	6/24/02
Toluene		mg/L	0.10	0.103	103	85 - 115	6/24/02
Ethylbenzene		mg/L	0.10	0.101	101	85 - 115	6/24/02
M,P,O-Xylene		mg/L	0.30	0.294	98	85 - 115	6/24/02

CCV (2)

QCBatch: QC21329

[4]Low surrogate recovery due to prep. ICV, CCV show the method to be in control.
[5]Low surrogate recovery due to prep. ICV, CCV show the method to be in control.
[6]MS and MSD out of recovery limits due to matrix interference. LCS and LCSD show the process is in control.
[7]MS and MSD out of recovery limits due to matrix interference. LCS and LCSD show the process is in control.

Param	Flag	Units	CCVs True Conc.	CCVs Found Conc.	CCVs Percent Recovery	Percent Recovery Limits	Date Analyzed
MTBE		mg/L	0.10	0.103	103	85 - 115	6/24/02
Benzene		mg/L	0.10	0.102	102	85 - 115	6/24/02
Toluene		mg/L	0.10	0.0993	99	85 - 115	6/24/02
Ethylbenzene		mg/L	0.10	0.098	98	85 - 115	6/24/02
M,P,O-Xylene		mg/L	0.30	0.284	94	85 - 115	6/24/02

ICV (1) QCBatch: QC21329

Param	Flag	Units	CCVs True Conc.	CCVs Found Conc.	CCVs Percent Recovery	Percent Recovery Limits	Date Analyzed
MTBE		mg/L	0.10	0.106	106	85 - 115	6/24/02
Benzene		mg/L	0.10	0.105	105	85 - 115	6/24/02
Toluene		mg/L	0.10	0.102	102	85 - 115	6/24/02
Ethylbenzene		mg/L	0.10	0.099	99	85 - 115	6/24/02
M,P,O-Xylene		mg/L	0.30	0.288	96	85 - 115	6/24/02

CCV (1) QCBatch: QC21330

Param	Flag	Units	CCVs True Conc.	CCVs Found Conc.	CCVs Percent Recovery	Percent Recovery Limits	Date Analyzed
GRO		mg/Kg	1	0.931	93	85 - 115	6/24/02

CCV (2) QCBatch: QC21330

Param	Flag	Units	CCVs True Conc.	CCVs Found Conc.	CCVs Percent Recovery	Percent Recovery Limits	Date Analyzed
GRO		mg/Kg	1	1.15	115	85 - 115	6/24/02

ICV (1) QCBatch: QC21330

Param	Flag	Units	CCVs True Conc.	CCVs Found Conc.	CCVs Percent Recovery	Percent Recovery Limits	Date Analyzed
GRO		mg/Kg	1	1.14	114	85 - 115	6/24/02

CCV (1) QCBatch: QC21368

Param	Flag	Units	CCVs True Conc.	CCVs Found Conc.	CCVs Percent Recovery	Percent Recovery Limits	Date Analyzed
DRO		mg/Kg	250	256	102	75 - 125	6/25/02

CCV (2)

QCBatch: QC21368

Param	Flag	Units	CCVs True Conc.	CCVs Found Conc.	CCVs Percent Recovery	Percent Recovery Limits	Date Analyzed
DRO		mg/Kg	250	279	111	75 - 125	6/25/02

CCV (3)

QCBatch: QC21368

Param	Flag	Units	CCVs True Conc.	CCVs Found Conc.	CCVs Percent Recovery	Percent Recovery Limits	Date Analyzed
DRO		mg/Kg	250	239	95	75 - 125	6/25/02

ICV (1)

QCBatch: QC21368

Param	Flag	Units	CCVs True Conc.	CCVs Found Conc.	CCVs Percent Recovery	Percent Recovery Limits	Date Analyzed
DRO		mg/Kg	250	231	92	75 - 125	6/25/02

5701 Aberdeen Avenue, Ste. 9
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Fax (806) 794-1298
1 (800) 378-1296

TraceAnalysis, Inc.

155 McCutcheon, Suite H
El Paso, Texas 79932
Tel (915) 585-3443
Fax (915) 585-4944
1 (888) 588-3443

CHAIN-OF-CUSTODY AND ANALYSIS REQUEST

LAB Order ID # A02062412

mpany Name: Enercon Services Inc
Phone #: 915-570-8726
dress: (Street, City, Zip) 306 West Wall, Suite 1312, Midland, Tx 79701
Fax #: 915-684-7587
ntact Person: Jeffrey Kindley
oice to: (different from above) Kyle Landrenau
Incident # 300109
oject #: EQ-112
Project Name: Barber Ranch
oject Location: Lea County, New Mexico
Sampler Signature: Jeffry Kindly

ANALYSIS REQUEST
(Circle or Specify Method No.)

LAB # (LAB USE ONLY)	FIELD CODE	# CONTAINERS	Volume/Amount	MATRIX: WATER	SOIL	AIR	SLUDGE		PRESERVATIVE METHOD: HCl	HNO_3	H_2SO_4	NaOH	ICE	NONE		SAMPLING: DATE	TIME	MTBE 8021B/602	BTEX 8021B/602	TPH 418.1/TX1005	PAH 8270C	Total Metals Ag As Ba Cd Cr Pb Se Hg 6010B/200.7	TCLP Metals Ag As Ba Cd Cr Pb Se Hg	TCLP Volatiles	TCLP Semi Volatiles	TCLP Pesticides	RCI	GC/MS Vol. 8260B/624	GC/MS Semi. Vol. 8270C/625	PCB's 8082/608	Pesticides 8081A/608	BOD, TSS, pH	TPH (DRO/GRO) 8015m *	SPLP TPH **				Turn Around Time if different from standard	Hold
99919	MW-13 (13-15')	1	4oz		✓									✓		06/19/02	1020		✓														✓						
20	MW-13 (25-27')	1	4oz		✓									✓		06/19/02	1100		✓														✓						
21	MW-14 (13-15')	1	4oz		✓									✓		06/20/02	1505		✓														✓						
22	MW-14 (25-27')	1	4oz		✓									✓		06/20/02	1540		✓														✓						

Relinquished by:	Date:	Time:	Received by:	Date:	Time:
Jeffrey Kindley	June 21, 2002	0900	Helen Shelton	6/21/02	0900
Helen Shelton	6/21/02	1830			
			Received at Laboratory by:	Date:	Time:
			[signature]	6/22/02	1030 Sam

LAB USE ONLY
Intact Y / N
Headspace Y / N
Temp 5 °
Log-in Review M

REMARKS:
* Need 3day turnaround on TPH (DRO/GRO) Call Jeff Kindly or Bennett Howell - (915) 631-6591 or 972-484-3854
** Any sample ≥ 100 DRO/GRO) or with Benzene ≥ 5ppm 6/27P

☐ Check if Special Reporting Limits Are Needed

Carrier # 163566767 1 or total BTEX ≥ 50ppm

bmittal of samples constitutes agreement to Terms and Conditions listed on reverse side of C.O.C. 4 samples - HS

ORIGINAL COPY

Summary Report

Kyle Landreneau
Equiva Kyle Landreneau
PMB 284 40 FM 1960 West
Houston, TX 77090

Report Date: July 3, 2002

Order ID Number: A02062512

Project: EQ-112
TA Job Code: Barber Ranch 3000109
Casualty Code: EQ-112
Project Location: Barber Lea County, New Mexico
Project Address:
Enercon Services Inc. / Midland / Jeff Kindley

Sample	Description	Matrix	Date Taken	Time Taken	Date Received
200016	MW-15 (3-5')	Soil	6/21/02	8:30	6/25/02
200017	MW-15 (25-27')	Soil	6/21/02	9:25	6/25/02
200018	MW-16 (13-15')	Soil	6/21/02	13:50	6/25/02
200019	MW-16 (25-27')	Soil	6/21/02	14:20	6/25/02

0 This report consists of a total of 1 page(s) and is intended only as a summary of results for the sample(s) listed above.

	BTEX					TPH DRO	TPH GRO
	Benzene	Toluene	Ethylbenzene	M,P,O-Xylene	Total BTEX	DRO	GRO
Sample - Field Code	(ppm)	(ppm)	(ppm)	(ppm)	(ppm)	(ppm)	(ppm)
200016 - MW-15 (3-5')	<0.010	<0.010	<0.010	<0.010	<0.010	<50.0	4.64
200017 - MW-15 (25-27')	<0.010	<0.010	0.0361	0.0254	0.0615	<50.0	<1
200018 - MW-16 (13-15')	<0.010	<0.010	<0.010	<0.010	<0.010	<50.0	<1
200019 - MW-16 (25-27')	<0.010	<0.010	<0.010	<0.010	<0.010	<50.0	<1

This is only a summary. Please, refer to the complete report package for quality control data.

TRACEANALYSIS, INC.

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Analytical and Quality Control Report

Kyle Landreneau
Equiva Kyle Landreneau
PMB 284 40 FM 1960 West
Houston, TX 77090

Report Date: July 3, 2002

Order ID Number: A02062512

Project: EQ-112
TA Job Code: Barber Ranch 3000109
Casualty Code: EQ-112
Project Location: Barber Lea County, New Mexico
Enercon Services Inc. / Midland / Jeff Kindley

Enclosed are the Analytical Results and Quality Control Data Reports for the following samples submitted to Trace-Analysis, Inc.

Sample	Description	Matrix	Date Taken	Time Taken	Date Received
200016	MW-15 (3-5')	Soil	6/21/02	8:30	6/25/02
200017	MW-15 (25-27')	Soil	6/21/02	9:25	6/25/02
200018	MW-16 (13-15')	Soil	6/21/02	13:50	6/25/02
200019	MW-16 (25-27')	Soil	6/21/02	14:20	6/25/02

These results represent only the samples received in the laboratory. The Quality Control Report is generated on a batch basis. All information contained in this report is for the analytical batch(es) in which your sample(s) were analyzed. Note: the RDL is equal to MQL for all organic analytes including TPH.
The test results contained within this report meet all requirements of LAC 33:I unless otherwise noted.

This report consists of a total of 11 pages and shall not be reproduced except in its entirety including the chain of custody (COC), without written approval of TraceAnalysis, Inc.

Dr. Blair Leftwich, Director

Analytical Report

Sample: 200016 - MW-15 (3-5')

Analysis:	BTEX	Analytical Method:	S 8021B	QC Batch:	QC21359	Date Analyzed:	6/25/02
Analyst:	CG	Preparation Method:	S 5035	Prep Batch:	PB20297	Date Prepared:	6/25/02

Param	Flag	Result	Units	Dilution	RDL
Benzene		<0.010	mg/Kg	10	0.001
Toluene		<0.010	mg/Kg	10	0.001
Ethylbenzene		<0.010	mg/Kg	10	0.001
M,P,O-Xylene		<0.010	mg/Kg	10	0.001
Total BTEX		<0.010	mg/Kg	10	0.001

Surrogate	Flag	Result	Units	Dilution	Spike Amount	Percent Recovery	Recovery Limits
TFT		1.00	mg/Kg	10	1	100	70 - 130
4-BFB		0.746	mg/Kg	10	1	75	70 - 130

Sample: 200016 - MW-15 (3-5')

Analysis:	TPH DRO	Analytical Method:	Mod. 8015B	QC Batch:	QC21403	Date Analyzed:	6/27/02
Analyst:	MM	Preparation Method:	3550 B	Prep Batch:	PB20329	Date Prepared:	6/26/02

Param	Flag	Result	Units	Dilution	RDL
DRO		<50.0	mg/Kg	1	50

Surrogate	Flag	Result	Units	Dilution	Spike Amount	Percent Recovery	Recovery Limits
n-Triacontane		121	mg/Kg	1	150	81	70 - 130

Sample: 200016 - MW-15 (3-5')

Analysis:	TPH GRO	Analytical Method:	8015B	QC Batch:	QC21360	Date Analyzed:	6/25/02
Analyst:	CG	Preparation Method:	5035	Prep Batch:	PB20297	Date Prepared:	6/25/02

Param	Flag	Result	Units	Dilution	RDL
GRO		4.64	mg/Kg	10	0.10

Surrogate	Flag	Result	Units	Dilution	Spike Amount	Percent Recovery	Recovery Limits
TFT	[1]	0.696	mg/Kg	10	0.10	70	70 - 130
4-BFB	[2]	0.676	mg/Kg	10	0.10	68	70 - 130

[1]Low surrogate recovery due to matrix interference. ICV, CCV show the method to be in control.
[2]Low surrogate recovery due to matrix interference. ICV, CCV show the method to be in control.

Sample: 200017 - MW-15 (25-27')

Analysis:	BTEX	Analytical Method:	S 8021B	QC Batch:	QC21359	Date Analyzed:	6/25/02
Analyst:	CG	Preparation Method:	S 5035	Prep Batch:	PB20297	Date Prepared:	6/25/02

Param	Flag	Result	Units	Dilution	RDL
Benzene		<0.010	mg/Kg	10	0.001
Toluene		<0.010	mg/Kg	10	0.001
Ethylbenzene		0.0361	mg/Kg	10	0.001
M,P,O-Xylene		0.0254	mg/Kg	10	0.001
Total BTEX		0.0615	mg/Kg	10	0.001

Surrogate	Flag	Result	Units	Dilution	Spike Amount	Percent Recovery	Recovery Limits
TFT		0.819	mg/Kg	10	1	81	70 - 130
4-BFB		0.757	mg/Kg	10	1	75	70 - 130

Sample: 200017 - MW-15 (25-27')

Analysis:	TPH DRO	Analytical Method:	Mod. 8015B	QC Batch:	QC21368	Date Analyzed:	6/25/02
Analyst:	MM	Preparation Method:	3550 B	Prep Batch:	PB20301	Date Prepared:	6/25/02

Param	Flag	Result	Units	Dilution	RDL
DRO		<50.0	mg/Kg	1	50

Surrogate	Flag	Result	Units	Dilution	Spike Amount	Percent Recovery	Recovery Limits
n-Triacontane		119	mg/Kg	1	150	79	70 - 130

Sample: 200017 - MW-15 (25-27')

Analysis:	TPH GRO	Analytical Method:	8015B	QC Batch:	QC21360	Date Analyzed:	6/25/02
Analyst:	CG	Preparation Method:	5035	Prep Batch:	PB20297	Date Prepared:	6/25/02

Param	Flag	Result	Units	Dilution	RDL
GRO		<1	mg/Kg	10	0.10

Surrogate	Flag	Result	Units	Dilution	Spike Amount	Percent Recovery	Recovery Limits
TFT		0.723	mg/Kg	10	0.10	72	70 - 130
4-BFB		0.706	mg/Kg	10	0.10	71	70 - 130

Sample: 200018 - MW-16 (13-15')

Analysis:	BTEX	Analytical Method:	S 8021B	QC Batch:	QC21359	Date Analyzed:	6/25/02
Analyst:	CG	Preparation Method:	S 5035	Prep Batch:	PB20297	Date Prepared:	6/25/02

Param	Flag	Result	Units	Dilution	RDL
Benzene		<0.010	mg/Kg	10	0.001

Continued ...

... Continued Sample: 200018 Analysis: BTEX

Param	Flag	Result	Units	Dilution	RDL
Toluene		<0.010	mg/Kg	10	0.001
Ethylbenzene		<0.010	mg/Kg	10	0.001
M,P,O-Xylene		<0.010	mg/Kg	10	0.001
Total BTEX		<0.010	mg/Kg	10	0.001

Surrogate	Flag	Result	Units	Dilution	Spike Amount	Percent Recovery	Recovery Limits
TFT		0.798	mg/Kg	10	1	80	70 - 130
4-BFB		0.754	mg/Kg	10	1	75	70 - 130

Sample: 200018 - MW-16 (13-15')

Analysis: TPH DRO Analytical Method: Mod. 8015B QC Batch: QC21368 Date Analyzed: 6/25/02
Analyst: MM Preparation Method: 3550 B Prep Batch: PB20301 Date Prepared: 6/25/02

Param	Flag	Result	Units	Dilution	RDL
DRO		<50.0	mg/Kg	1	50

Surrogate	Flag	Result	Units	Dilution	Spike Amount	Percent Recovery	Recovery Limits
n-Triacontane		118	mg/Kg	1	150	79	70 - 130

Sample: 200018 - MW-16 (13-15')

Analysis: TPH GRO Analytical Method: 8015B QC Batch: QC21360 Date Analyzed: 6/25/02
Analyst: CG Preparation Method: 5035 Prep Batch: PB20297 Date Prepared: 6/25/02

Param	Flag	Result	Units	Dilution	RDL
GRO		<1	mg/Kg	10	0.10

Surrogate	Flag	Result	Units	Dilution	Spike Amount	Percent Recovery	Recovery Limits
TFT	[3]	0.679	mg/Kg	10	0.10	68	70 - 130
4-BFB	[4]	0.661	mg/Kg	10	0.10	66	70 - 130

Sample: 200019 - MW-16 (25-27')

Analysis: BTEX Analytical Method: S 8021B QC Batch: QC21359 Date Analyzed: 6/25/02
Analyst: CG Preparation Method: S 5035 Prep Batch: PB20297 Date Prepared: 6/25/02

Param	Flag	Result	Units	Dilution	RDL
Benzene		<0.010	mg/Kg	10	0.001
Toluene		<0.010	mg/Kg	10	0.001
Ethylbenzene		<0.010	mg/Kg	10	0.001

Continued ...

[3]Low surrogate recovery due to matrix interference. ICV, CCV show the method to be in control.
[4]Low surrogate recovery due to matrix interference. ICV, CCV show the method to be in control.

... *Continued* Sample: 200019 Analysis: BTEX

Param	Flag	Result	Units	Dilution	RDL
M,P,O-Xylene		<0.010	mg/Kg	10	0.001
Total BTEX		<0.010	mg/Kg	10	0.001

Surrogate	Flag	Result	Units	Dilution	Spike Amount	Percent Recovery	Recovery Limits
TFT		0.870	mg/Kg	10	1	87	70 - 130
4-BFB		0.815	mg/Kg	10	1	81	70 - 130

Sample: 200019 - MW-16 (25-27')

Analysis:	TPH DRO	Analytical Method:	Mod. 8015B	QC Batch:	QC21368	Date Analyzed:	6/25/02
Analyst:	MM	Preparation Method:	3550 B	Prep Batch:	PB20301	Date Prepared:	6/25/02

Param	Flag	Result	Units	Dilution	RDL
DRO		<50.0	mg/Kg	1	50

Surrogate	Flag	Result	Units	Dilution	Spike Amount	Percent Recovery	Recovery Limits
n-Triacontane		116	mg/Kg	1	150	77	70 - 130

Sample: 200019 - MW-16 (25-27')

Analysis:	TPH GRO	Analytical Method:	8015B	QC Batch:	QC21360	Date Analyzed:	6/25/02
Analyst:	CG	Preparation Method:	5035	Prep Batch:	PB20297	Date Prepared:	6/25/02

Param	Flag	Result	Units	Dilution	RDL
GRO		<1	mg/Kg	10	0.10

Surrogate	Flag	Result	Units	Dilution	Spike Amount	Percent Recovery	Recovery Limits
TFT		0.724	mg/Kg	10	0.10	72	70 - 130
4-BFB		0.719	mg/Kg	10	0.10	72	70 - 130

Quality Control Report
Method Blank

Method Blank

QCBatch: QC21359

Param	Flag	Results	Units	Reporting Limit
Benzene		<0.010	mg/Kg	0.001
Toluene		<0.010	mg/Kg	0.001
Ethylbenzene		<0.010	mg/Kg	0.001
M,P,O-Xylene		<0.010	mg/Kg	0.001
Total BTEX		<0.010	mg/Kg	0.001

Surrogate	Flag	Result	Units	Dilution	Spike Amount	Percent Recovery	Recovery Limits
TFT		1.11	mg/Kg	10	1	111	70 - 130
4-BFB		0.994	mg/Kg	10	1	99	70 - 130

Method Blank

QCBatch: QC21360

Param	Flag	Results	Units	Reporting Limit
GRO		<1	mg/Kg	0.10

Surrogate	Flag	Result	Units	Dilution	Spike Amount	Percent Recovery	Recovery Limits
TFT		1.07	mg/Kg	10	0.10	107	70 - 130
4-BFB		0.933	mg/Kg	10	0.10	93	70 - 130

Method Blank

QCBatch: QC21368

Param	Flag	Results	Units	Reporting Limit
DRO		<50.0	mg/Kg	50

Surrogate	Flag	Result	Units	Dilution	Spike Amount	Percent Recovery	Recovery Limits
n-Triacontane		152	mg/Kg	1	150	101	70 - 130

Method Blank

QCBatch: QC21403

Param	Flag	Results	Units	Reporting Limit
DRO		104	mg/Kg	50

Surrogate	Flag	Result	Units	Dilution	Spike Amount	Percent Recovery	Recovery Limits
n-Triacontane		23.5	mg/Kg	1	150	16	70 - 130

Quality Control Report
Lab Control Spikes and Duplicate Spikes

Laboratory Control Spikes

QCBatch: QC21359

Param	LCS Result	LCSD Result	Units	Dil.	Spike Amount Added	Matrix Result	% Rec	RPD	% Rec Limit	RPD Limit
MTBE	1.04	1.04	mg/Kg	10	1	<0.010	104	0	70 - 130	20
Benzene	1.05	1.04	mg/Kg	10	1	<0.010	105	0	70 - 130	20
Toluene	1.03	1.02	mg/Kg	10	1	<0.010	103	0	70 - 130	20
Ethylbenzene	1	1	mg/Kg	10	1	<0.010	100	0	70 - 130	20
M,P,O-Xylene	2.94	2.92	mg/Kg	10	3	<0.010	98	0	70 - 130	20

Percent recovery is based on the spike result. RPD is based on the spike and spike duplicate result.

Surrogate	LCS Result	LCSD Result	Units	Dilution	Spike Amount	LCS % Rec	LCSD % Rec	Recovery Limits
TFT	1.08	1.1	mg/Kg	10	1	108	110	70 - 130
4-BFB	1.01	1.04	mg/Kg	10	1	101	104	70 - 130

Laboratory Control Spikes

QCBatch: QC21360

Param	LCS Result	LCSD Result	Units	Dil.	Spike Amount Added	Matrix Result	% Rec	RPD	% Rec Limit	RPD Limit
GRO	8.71	10.5	mg/Kg	10	1	<1	87	18	80 - 120	20

Percent recovery is based on the spike result. RPD is based on the spike and spike duplicate result.

Surrogate	LCS Result	LCSD Result	Units	Dilution	Spike Amount	LCS % Rec	LCSD % Rec	Recovery Limits
TFT	0.883	1.08	mg/Kg	10	0.10	88	108	70 - 130
4-BFB	0.93	0.96	mg/Kg	10	0.10	93	96	70 - 130

Laboratory Control Spikes

QCBatch: QC21368

Param	LCS Result	LCSD Result	Units	Dil.	Spike Amount Added	Matrix Result	% Rec	RPD	% Rec Limit	RPD Limit
DRO	241	232	mg/Kg	1	250	<50.0	96	3	70 - 130	20

Percent recovery is based on the spike result. RPD is based on the spike and spike duplicate result.

Continued ...

Surrogate	LCS Result	LCSD Result	Units	Dilution	Spike Amount	LCS % Rec	LCSD % Rec	Recovery Limits

Surrogate	LCS Result	LCSD Result	Units	Dilution	Spike Amount	LCS % Rec	LCSD % Rec	Recovery Limits
n-Triacontane	143	145	mg/Kg	1	150	95	97	70 - 130

Laboratory Control Spikes

QCBatch: QC21403

Param	LCS Result	LCSD Result	Units	Dil.	Spike Amount Added	Matrix Result	% Rec	RPD	% Rec Limit	RPD Limit
DRO	232	228	mg/Kg	1	250	<50	93	2	70 - 130	20

Percent recovery is based on the spike result. RPD is based on the spike and spike duplicate result.

Surrogate	LCS Result	LCSD Result	Units	Dilution	Spike Amount	LCS % Rec	LCSD % Rec	Recovery Limits
n-Triacontane	112	16.0	mg/Kg	1	150	75	11	70 - 130

Quality Control Report
Matrix Spikes and Duplicate Spikes

Matrix Spikes

QCBatch: QC21359

Param	MS Result	MSD Result	Units	Dil.	Spike Amount Added	Matrix Result	% Rec	RPD	% Rec Limit	RPD Limit
Benzene	0.901	0.702	mg/Kg	10	1	<0.010	90	24	70 - 130	20
Toluene	0.938	0.71	mg/Kg	10	1	<0.010	93	27	70 - 130	20
Ethylbenzene	0.880	0.696	mg/Kg	10	1	0.0104	86	23	70 - 130	20
M,P,O-Xylene	2.57	2.01	mg/Kg	10	3	<0.010	85	24	70 - 130	20

Percent recovery is based on the spike result. RPD is based on the spike and spike duplicate result.

Surrogate	MS Result	MSD Result	Units	Dilution	Spike Amount	MS % Rec	MSD % Rec	Recovery Limits
TFT	0.947	0.898	mg/Kg	10	1	94	89	70 - 130
4-BFB	0.89	0.83	mg/Kg	10	1	89	83	70 - 130

Matrix Spikes

QCBatch: QC21360

Param	MS Result	MSD Result	Units	Dil.	Spike Amount Added	Matrix Result	% Rec	RPD	% Rec Limit	RPD Limit
GRO	8.85	11.1	mg/Kg	10	1	<1	88	22	80 - 120	20

Percent recovery is based on the spike result. RPD is based on the spike and spike duplicate result.

Surrogate	MS Result	MSD Result	Units	Dilution	Spike Amount	MS % Rec	MSD % Rec	Recovery Limits
TFT	0.922	1.09	mg/Kg	10	0.10	92	109	70 - 130
4-BFB	[5] 0.695	0.874	mg/Kg	10	0.10	69	87	70 - 130

Matrix Spikes

QCBatch: QC21368

Param	MS Result	MSD Result	Units	Dil.	Spike Amount Added	Matrix Result	% Rec	RPD	% Rec Limit	RPD Limit
DRO	[6] <500	[7] <500	mg/Kg	10	250	160	-64	-200	70 - 130	20

Percent recovery is based on the spike result. RPD is based on the spike and spike duplicate result.

Surrogate	MS Result	MSD Result	Units	Dilution	Spike Amount	MS % Rec	MSD % Rec	Recovery Limits
n-Triacontane	166	314	mg/Kg	10	150	11	21	70 - 130

Matrix Spikes

QCBatch: QC21403

Param	MS Result	MSD Result	Units	Dil.	Spike Amount Added	Matrix Result	% Rec	RPD	% Rec Limit	RPD Limit
DRO	226	240	mg/Kg	1	250	<50.0	90	6	70 - 130	20

Percent recovery is based on the spike result. RPD is based on the spike and spike duplicate result.

Surrogate	MS Result	MSD Result	Units	Dilution	Spike Amount	MS % Rec	MSD % Rec	Recovery Limits
n-Triacontane	111	111	mg/Kg	1	150	74	74	70 - 130

Quality Control Report
Continuing Calibration Verification Standards

CCV (1)

QCBatch: QC21359

Param	Flag	Units	CCVs True Conc.	CCVs Found Conc.	CCVs Percent Recovery	Percent Recovery Limits	Date Analyzed
MTBE		mg/L	0.10	0.108	108	85 - 115	6/25/02
Benzene		mg/L	0.10	0.102	102	85 - 115	6/25/02
Toluene		mg/L	0.10	0.102	102	85 - 115	6/25/02
Ethylbenzene		mg/L	0.10	0.0964	96	85 - 115	6/25/02
M,P,O-Xylene		mg/L	0.30	0.282	94	85 - 115	6/25/02

[5]Low surrogate recovery due to prep. ICV, CCV show the method to be in control.
[6]MS and MSD out of recovery limits due to matrix interference. LCS and LCSD show the process is in control.
[7]MS and MSD out of recovery limits due to matrix interference. LCS and LCSD show the process is in control.

CCV (2) QCBatch: QC21359

Param	Flag	Units	CCVs True Conc.	CCVs Found Conc.	CCVs Percent Recovery	Percent Recovery Limits	Date Analyzed
MTBE		mg/L	0.10	0.110	110	85 - 115	6/25/02
Benzene		mg/L	0.10	0.101	101	85 - 115	6/25/02
Toluene		mg/L	0.10	0.0988	98	85 - 115	6/25/02
Ethylbenzene		mg/L	0.10	0.0954	95	85 - 115	6/25/02
M,P,O-Xylene		mg/L	0.30	0.277	92	85 - 115	6/25/02

ICV (1) QCBatch: QC21359

Param	Flag	Units	CCVs True Conc.	CCVs Found Conc.	CCVs Percent Recovery	Percent Recovery Limits	Date Analyzed
MTBE		mg/L	0.10	0.107	107	85 - 115	6/25/02
Benzene		mg/L	0.10	0.105	105	85 - 115	6/25/02
Toluene		mg/L	0.10	0.103	103	85 - 115	6/25/02
Ethylbenzene		mg/L	0.10	0.100	100	85 - 115	6/25/02
M,P,O-Xylene		mg/L	0.30	0.293	98	85 - 115	6/25/02

CCV (1) QCBatch: QC21360

Param	Flag	Units	CCVs True Conc.	CCVs Found Conc.	CCVs Percent Recovery	Percent Recovery Limits	Date Analyzed
GRO		mg/Kg	1	1.03	103	85 - 115	6/25/02

ICV (1) QCBatch: QC21360

Param	Flag	Units	CCVs True Conc.	CCVs Found Conc.	CCVs Percent Recovery	Percent Recovery Limits	Date Analyzed
GRO		mg/Kg	1	1.1	110	85 - 115	6/25/02

CCV (1) QCBatch: QC21368

Param	Flag	Units	CCVs True Conc.	CCVs Found Conc.	CCVs Percent Recovery	Percent Recovery Limits	Date Analyzed
DRO		mg/Kg	250	256	102	75 - 125	6/25/02

CCV (2) QCBatch: QC21368

Param	Flag	Units	CCVs True Conc.	CCVs Found Conc.	CCVs Percent Recovery	Percent Recovery Limits	Date Analyzed
DRO		mg/Kg	250	279	111	75 - 125	6/25/02

CCV (3) QCBatch: QC21368

Param	Flag	Units	CCVs True Conc.	CCVs Found Conc.	CCVs Percent Recovery	Percent Recovery Limits	Date Analyzed
DRO		mg/Kg	250	239	95	75 - 125	6/25/02

ICV (1) QCBatch: QC21368

Param	Flag	Units	CCVs True Conc.	CCVs Found Conc.	CCVs Percent Recovery	Percent Recovery Limits	Date Analyzed
DRO		mg/Kg	250	231	92	75 - 125	6/25/02

CCV (1) QCBatch: QC21403

Param	Flag	Units	CCVs True Conc.	CCVs Found Conc.	CCVs Percent Recovery	Percent Recovery Limits	Date Analyzed
DRO		mg/Kg	250	224	90	75 - 125	6/27/02

ICV (1) QCBatch: QC21403

Param	Flag	Units	CCVs True Conc.	CCVs Found Conc.	CCVs Percent Recovery	Percent Recovery Limits	Date Analyzed
DRO		mg/Kg	250	222	89	75 - 125	6/27/02

200016-19

Equiva Services, LLC

TraceAnalysis, Inc.

6701 Aberdeen Ave, Ste 9
Lubbock, Texas 79424
Tel (806) 794-1296
Fax (806) 794-1298
1 (800) 378-1296

CHAIN-OF-CUSTODY AND ANALYSIS REQUEST

LAB Order ID # H020625-12

Consulting Company Name: Enercon Services Inc
Phone #: 915-570-8726
Consulting Company Address: 306 West Wall, Suite 1312 Midland, Tx 79701
Fax #: 915-684-7587
Consulting Contact: Jeff Kindley
Equiva Contact: Kyle Landreneau
Location/SAP: Barber Ranch
Incident #: # 300109
Location Address: Monument, New Mexico
Project Task:
Consultant Job#: EQ-112
Sampler Signature: Jeffy Kindley

LAB # (LAB USE ONLY)	FIELD CODE	# CONTAINERS	Volume/Amount	MATRIX: WATER	SOIL	AIR	SLUDGE	PRESERVATIVE METHOD: HCL	HNO_3	$NaHSO_4$	H_2SO_4	ICE	NONE	SAMPLING: DATE	TIME
200016	MW-15 (3-5')	1	4oz		✓							✓	✓	6/21/02	830
17	MW-15 (25-27')	1	4oz		✓							✓	✓	6/21/02	925
18	MW-16 (13-15')	1	4oz		✓							✓	✓	6/21/02	1350
19	MW-16 (25-27')	1	4oz		✓							✓	✓	6/21/02	1420

ANALYSIS REQUEST (Circle or Specify Method No.)

MTBE 8021B/602	BTEX 8021B/602	TPH 418.1/TX1005	PAH 8270C	Total Metals Ag As Ba Cd Cr Pb Se Hg 6010B/200.7	TCLP Metals Ag As Ba Cd Cr Pb Se Hg	TCLP Volatiles	TCLP Semi Volatiles	TCLP Pesticides	RCI	GC-MS Vol. 8260B/624	GC/MS Semi. Vol. 8270C/625	PCB's 8082/608	Pesticides 8081A/608	BOD, TSS, pH	TPH - 8015M (DRO/GRO) *	SPLP-TPH			Turn Around Time if different from standard	Hold
	*														✓					
	*														✓					
	✓														✓					
	✓														✓					
	✓														✓					
	✓														✓		✓		6-26	

Relinquished by: Jeffy Kindley Date: Jun 24, 02 Time: 0900
Received by: Helen Shelton 6/24/02 0900

Relinquished by: Helen Shelton 6/24/02 1830
Received by: Date: Time:

Relinquished by: Date: Time:
Received at Laboratory by: Date: Time:

LAB USE ONLY
Intact Y / N
Headspace Y / N
Temp 3 °
Log-in Review MS

REMARKS:
Need 3 Day Turnaround on TPH DRO/GRO
☐ Check if special reporting limits needed.
* IF TPH DRO/GRO exceeds total of 100ppm Then Run SPLP TPH NO SPLP TPH
** IF Benzene exceeds 10 ppm + NO SPLP BTEX BTEX exceeds 50 ppm run SPLP

Carrier # Greyhound For that analyte. 763-566-8925

4 samples-HS

Submittal of samples constitutes agreement to Terms and Conditions listed on reverse side of COC

ORIGINAL COPY

Summary Report

Kyle Landreneau
Equiva Kyle Landreneau
PMB 284 40 FM 1960 West
Houston, TX 77090

Report Date: July 10, 2002

Order ID Number: A02062614

Project: EQ-112 Monument
TA Job Code: Barber Ranch 3000109
Casualty Code: EQ-112
Project Location: Monument, Lea County,New Mexico
Project Address:
Enercon Services Inc. / Midland / Jeff Kindley

Sample	Description	Matrix	Date Taken	Time Taken	Date Received
200148	MW-17 (25-27')	Soil	6/24/02	10:10	6/26/02
200150	MW-18 (25-27')	Soil	6/24/02	15:15	6/26/02

0 This report consists of a total of 1 page(s) and is intended only as a summary of results for the sample(s) listed above.

Sample: 200148 - MW-17 (25-27')

Param	Flag	Result	Units
SPLP DRO		<5.00	mg/L
SPLP GRO		<0.1	mg/L

Sample: 200150 - MW-18 (25-27')

Param	Flag	Result	Units
SPLP DRO		<5.00	mg/L
SPLP GRO		<0.1	mg/L

This is only a summary. Please, refer to the complete report package for quality control data.

Summary Report

Kyle Landreneau
Equiva Kyle Landreneau
PMB 284 40 FM 1960 West
Houston, TX 77090

Report Date: July 8, 2002

Order ID Number: A02062614

Project: EQ-112 Monument
TA Job Code: Barber Ranch 3000109
Casualty Code: EQ-112
Project Location: Monument, Lea County,New Mexico
Project Address:
Enercon Services Inc. / Midland / Jeff Kindley

Sample	Description	Matrix	Date Taken	Time Taken	Date Received
200147	MW-17 (13-15')	Soil	6/24/02	9:15	6/26/02
200148	MW-17 (25-27')	Soil	6/24/02	10:10	6/26/02
200149	MW-18 (13-15')	Soil	6/24/02	14:45	6/26/02
200150	MW-18 (25-27')	Soil	6/24/02	15:15	6/26/02

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	BTEX					TPH DRO	TPH GRO
Sample - Field Code	Benzene (ppm)	Toluene (ppm)	Ethylbenzene (ppm)	M,P,O-Xylene (ppm)	Total BTEX (ppm)	DRO (ppm)	GRO (ppm)
200147 - MW-17 (13-15')	<0.010	<0.010	<0.010	<0.010	<0.010	<50.0	<1.00
200148 - MW-17 (25-27')	<0.020	<0.020	<0.020	0.0247	0.0247	201	13.0
200149 - MW-18 (13-15')	<0.010	<0.010	<0.010	<0.010	<0.010	<50.0	<1.00
200150 - MW-18 (25-27')	<0.020	<0.020	0.264	1.17	1.43	311	220

This is only a summary. Please, refer to the complete report package for quality control data.

TRACEANALYSIS, INC.

6701 Aberdeen Avenue, Suite 9 Lubbock, Texas 79424 800•378•1296 806•794•1296 FAX 806•794•1298
155 McCutcheon, Suite H El Paso, Texas 79932 888•588•3443 915•585•3443 FAX 915•585•4944
E-Mail: lab@traceanalysis.com

Analytical and Quality Control Report

Kyle Landreneau
Equiva Kyle Landreneau
PMB 284 40 FM 1960 West
Houston, TX 77090

Report Date: July 10, 2002

Order ID Number: A02062614

Project: EQ-112 Monument
TA Job Code: Barber Ranch 3000109
Casualty Code: EQ-112
Project Location: Monument, Lea County,New Mexico
Enercon Services Inc. / Midland / Jeff Kindley

Enclosed are the Analytical Results and Quality Control Data Reports for the following samples submitted to Trace-Analysis, Inc.

Sample	Description	Matrix	Date Taken	Time Taken	Date Received
200148	MW-17 (25-27')	Soil	6/24/02	10:10	6/26/02
200150	MW-18 (25-27')	Soil	6/24/02	15:15	6/26/02

These results represent only the samples received in the laboratory. The Quality Control Report is generated on a batch basis. All information contained in this report is for the analytical batch(es) in which your sample(s) were analyzed. Note: the RDL is equal to MQL for all organic analytes including TPH.
The test results contained within this report meet all requirements of LAC 33:I unless otherwise noted.

This report consists of a total of 4 pages and shall not be reproduced except in its entirety including the chain of custody (COC), without written approval of TraceAnalysis, Inc.

Dr. Blair Leftwich, Director

Analytical Report

Sample: 200148 - MW-17 (25-27')

Analysis:	SPLP DRO	Analytical Method:	Mod. 8015B	QC Batch:	QC21664	Date Analyzed:	7/7/02
Analyst:	MM	Preparation Method:	1312	Prep Batch:	PB20538	Date Prepared:	7/7/02

Param	Flag	Result	Units	Dilution	RDL
SPLP DRO		<5.00	mg/L	1	50

Sample: 200148 - MW-17 (25-27')

Analysis:	SPLP GRO	Analytical Method:	8015	QC Batch:	QC21683	Date Analyzed:	7/7/02
Analyst:	CG	Preparation Method:	1312	Prep Batch:	PB20557	Date Prepared:	7/7/02

Param	Flag	Result	Units	Dilution	RDL
SPLP GRO		<0.1	mg/L	1	0.10

Sample: 200150 - MW-18 (25-27')

Analysis:	SPLP DRO	Analytical Method:	Mod. 8015B	QC Batch:	QC21664	Date Analyzed:	7/7/02
Analyst:	MM	Preparation Method:	1312	Prep Batch:	PB20538	Date Prepared:	7/7/02

Param	Flag	Result	Units	Dilution	RDL
SPLP DRO		<5.00	mg/L	1	50

Sample: 200150 - MW-18 (25-27')

Analysis:	SPLP GRO	Analytical Method:	8015	QC Batch:	QC21683	Date Analyzed:	7/7/02
Analyst:	CG	Preparation Method:	1312	Prep Batch:	PB20557	Date Prepared:	7/7/02

Param	Flag	Result	Units	Dilution	RDL
SPLP GRO		<0.1	mg/L	1	0.10

Quality Control Report
Method Blank

Method Blank

QCBatch: QC21664

Param	Flag	Results	Units	Reporting Limit
SPLP DRO		<5.00	mg/L	50

Method Blank

QCBatch: QC21683

Param	Flag	Results	Units	Reporting Limit
SPLP GRO		<0.1	mg/L	0.10

Quality Control Report
Lab Control Spikes and Duplicate Spikes

Laboratory Control Spikes

QCBatch: QC21664

Param	LCS Result	LCSD Result	Units	Dil.	Spike Amount Added	Matrix Result	% Rec	RPD	% Rec Limit	RPD Limit
SPLP DRO	< 50	< 50	mg/L	1	250	<5.00	95	7	70 - 130	20

Percent recovery is based on the spike result. RPD is based on the spike and spike duplicate result.

Laboratory Control Spikes

QCBatch: QC21683

Param	LCS Result	LCSD Result	Units	Dil.	Spike Amount Added	Matrix Result	% Rec	RPD	% Rec Limit	RPD Limit
SPLP GRO	0.982	0.915	mg/L	1	1	<0.1	98	7	70 - 130	20

Percent recovery is based on the spike result. RPD is based on the spike and spike duplicate result.

Quality Control Report
Continuing Calibration Verification Standards

CCV (1)

QCBatch: QC21664

Param	Flag	Units	CCVs True Conc.	CCVs Found Conc.	CCVs Percent Recovery	Percent Recovery Limits	Date Analyzed
SPLP DRO		mg/L	250	237	94	75 - 125	7/7/02

ICV (1)

QCBatch: QC21664

Param	Flag	Units	CCVs True Conc.	CCVs Found Conc.	CCVs Percent Recovery	Percent Recovery Limits	Date Analyzed
SPLP DRO		mg/L	250	232	92	75 - 125	7/7/02

CCV (1)

QCBatch: QC21683

Param	Flag	Units	CCVs True Conc.	CCVs Found Conc.	CCVs Percent Recovery	Percent Recovery Limits	Date Analyzed
SPLP GRO		mg/L	1	0.979	97	85 - 115	7/7/02

ICV (1)

QCBatch: QC21683

Param	Flag	Units	CCVs True Conc.	CCVs Found Conc.	CCVs Percent Recovery	Percent Recovery Limits	Date Analyzed
SPLP GRO		mg/L	1	0.914	91	85 - 115	7/7/02

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E-Mail: lab@traceanalysis.com

Analytical and Quality Control Report

Kyle Landreneau
Equiva Kyle Landreneau
PMB 284 40 FM 1960 West
Houston, TX 77090

Report Date: July 8, 2002

Order ID Number: A02062614

Project: EQ-112 Monument
TA Job Code: Barber Ranch 3000109
Casualty Code: EQ-112
Project Location: Monument, Lea County,New Mexico
Enercon Services Inc. / Midland / Jeff Kindley

Enclosed are the Analytical Results and Quality Control Data Reports for the following samples submitted to Trace-Analysis, Inc.

Sample	Description	Matrix	Date Taken	Time Taken	Date Received
200147	MW-17 (13-15')	Soil	6/24/02	9:15	6/26/02
200148	MW-17 (25-27')	Soil	6/24/02	10:10	6/26/02
200149	MW-18 (13-15')	Soil	6/24/02	14:45	6/26/02
200150	MW-18 (25-27')	Soil	6/24/02	15:15	6/26/02

These results represent only the samples received in the laboratory. The Quality Control Report is generated on a batch basis. All information contained in this report is for the analytical batch(es) in which your sample(s) were analyzed. Note: the RDL is equal to MQL for all organic analytes including TPH.
The test results contained within this report meet all requirements of LAC 33:I unless otherwise noted.

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Dr. Blair Leftwich, Director

Analytical Report

Sample: 200147 - MW-17 (13-15')

Analysis:	BTEX	Analytical Method:	S 8021B	QC Batch:	QC21385	Date Analyzed:	6/26/02
Analyst:	CG	Preparation Method:	S 5035	Prep Batch:	PB20317	Date Prepared:	6/25/02

Param	Flag	Result	Units	Dilution	RDL
Benzene		<0.010	mg/Kg	10	0.001
Toluene		<0.010	mg/Kg	10	0.001
Ethylbenzene		<0.010	mg/Kg	10	0.001
M,P,O-Xylene		<0.010	mg/Kg	10	0.001
Total BTEX		<0.010	mg/Kg	10	0.001

Surrogate	Flag	Result	Units	Dilution	Spike Amount	Percent Recovery	Recovery Limits
TFT		0.909	mg/Kg	10	1	91.	70 - 130
4-BFB		0.852	mg/Kg	10	1	85	70 - 130

Sample: 200147 - MW-17 (13-15')

Analysis:	TPH DRO	Analytical Method:	Mod. 8015B	QC Batch:	QC21403	Date Analyzed:	6/27/02
Analyst:	MM	Preparation Method:	3550 B	Prep Batch:	PB20329	Date Prepared:	6/26/02

Param	Flag	Result	Units	Dilution	RDL
DRO		<50.0	mg/Kg	1	50

Surrogate	Flag	Result	Units	Dilution	Spike Amount	Percent Recovery	Recovery Limits
n-Triacontane		19.4	mg/Kg	1	15	126	70 - 130

Sample: 200147 - MW-17 (13-15')

Analysis:	TPH GRO	Analytical Method:	8015B	QC Batch:	QC21386	Date Analyzed:	6/26/02
Analyst:	CG	Preparation Method:	5035	Prep Batch:	PB20317	Date Prepared:	6/25/02

Param	Flag	Result	Units	Dilution	RDL
GRO		<1.00	mg/Kg	10	0.10

Surrogate	Flag	Result	Units	Dilution	Spike Amount	Percent Recovery	Recovery Limits
TFT		1.14	mg/Kg	10	0.10	114	70 - 130
4-BFB		0.774	mg/Kg	10	0.10	77	70 - 130

Sample: 200148 - MW-17 (25-27')

Analysis:	BTEX	Analytical Method:	S 8021B	QC Batch:	QC21385	Date Analyzed:	6/26/02
Analyst:	CG	Preparation Method:	S 5035	Prep Batch:	PB20317	Date Prepared:	6/25/02

Param	Flag	Result	Units	Dilution	RDL
Benzene		<0.020	mg/Kg	20	0.001
Toluene		<0.020	mg/Kg	20	0.001
Ethylbenzene		<0.020	mg/Kg	20	0.001
M,P,O-Xylene		0.0247	mg/Kg	20	0.001
Total BTEX		0.0247	mg/Kg	20	0.001
Test Comments	[1]	*	mg/Kg	1	

Surrogate	Flag	Result	Units	Dilution	Spike Amount	Percent Recovery	Recovery Limits
TFT		0.907	mg/Kg	20	1	91	70 - 130
4-BFB		0.831	mg/Kg	20	1	83	70 - 130

Sample: 200148 - MW-17 (25-27')

Analysis:	TPH DRO	Analytical Method:	Mod. 8015B	QC Batch:	QC21403	Date Analyzed:	6/27/02
Analyst:	MM	Preparation Method:	3550 B	Prep Batch:	PB20329	Date Prepared:	6/26/02

Param	Flag	Result	Units	Dilution	RDL
DRO		201	mg/Kg	1	50

Surrogate	Flag	Result	Units	Dilution	Spike Amount	Percent Recovery	Recovery Limits
n-Triacontane		119	mg/Kg	1	150	79	70 - 130

Sample: 200148 - MW-17 (25-27')

Analysis:	TPH GRO	Analytical Method:	8015B	QC Batch:	QC21386	Date Analyzed:	6/26/02
Analyst:	CG	Preparation Method:	5035	Prep Batch:	PB20317	Date Prepared:	6/25/02

Param	Flag	Result	Units	Dilution	RDL
GRO		13.0	mg/Kg	20	0.10

Surrogate	Flag	Result	Units	Dilution	Spike Amount	Percent Recovery	Recovery Limits
TFT	[2]	0.962	mg/Kg	20	0.10	48	70 - 130
4-BFB	[3]	1.22	mg/Kg	20	0.10	61	70 - 130

Sample: 200149 - MW-18 (13-15')

Analysis:	BTEX	Analytical Method:	S 8021B	QC Batch:	QC21385	Date Analyzed:	6/26/02
Analyst:	CG	Preparation Method:	S 5035	Prep Batch:	PB20317	Date Prepared:	6/25/02

Param	Flag	Result	Units	Dilution	RDL
Benzene		<0.010	mg/Kg	10	0.001

Continued ...

[1]Sample diluted due to hydrocarbons beyond xylene. Sample has a Benzene concentration of less than 0.00473 which is the MDL.
[2]Low surrogate due to matrix interference.
[3]Low surrogate due to matrix interference.

... Continued Sample: 200149 Analysis: BTEX

Param	Flag	Result	Units	Dilution	RDL
Toluene		<0.010	mg/Kg	10	0.001
Ethylbenzene		<0.010	mg/Kg	10	0.001
M,P,O-Xylene		<0.010	mg/Kg	10	0.001
Total BTEX		<0.010	mg/Kg	10	0.001

Surrogate	Flag	Result	Units	Dilution	Spike Amount	Percent Recovery	Recovery Limits
TFT		0.996	mg/Kg	10	1	100	70 - 130
4-BFB		0.888	mg/Kg	10	1	89	70 - 130

Sample: 200149 - MW-18 (13-15')

Analysis: TPH DRO Analytical Method: Mod. 8015B QC Batch: QC21403 Date Analyzed: 6/27/02
Analyst: MM Preparation Method: 3550 B Prep Batch: PB20329 Date Prepared: 6/26/02

Param	Flag	Result	Units	Dilution	RDL
DRO		<50.0	mg/Kg	1	50

Surrogate	Flag	Result	Units	Dilution	Spike Amount	Percent Recovery	Recovery Limits
n-Triacontane		17.2	mg/Kg	1	15	113	70 - 130

Sample: 200149 - MW-18 (13-15')

Analysis: TPH GRO Analytical Method: 8015B QC Batch: QC21386 Date Analyzed: 6/26/02
Analyst: CG Preparation Method: 5035 Prep Batch: PB20317 Date Prepared: 6/25/02

Param	Flag	Result	Units	Dilution	RDL
GRO		<1.00	mg/Kg	10	0.10

Surrogate	Flag	Result	Units	Dilution	Spike Amount	Percent Recovery	Recovery Limits
TFT	[4]	1.43	mg/Kg	10	0.10	143	70 - 130
4-BFB		0.841	mg/Kg	10	0.10	84	70 - 130

Sample: 200150 - MW-18 (25-27')

Analysis: BTEX Analytical Method: S 8021B QC Batch: QC21385 Date Analyzed: 6/26/02
Analyst: CG Preparation Method: S 5035 Prep Batch: PB20317 Date Prepared: 6/25/02

Param	Flag	Result	Units	Dilution	RDL
Benzene		<0.020	mg/Kg	20	0.001
Toluene		<0.020	mg/Kg	20	0.001
Ethylbenzene		0.264	mg/Kg	20	0.001
M,P,O-Xylene		1.17	mg/Kg	20	0.001

Continued ...

[4]High surrogate due to peak interference.

... *Continued* Sample: 200150 Analysis: BTEX

Param	Flag	Result	Units	Dilution	RDL
Total BTEX		1.43	mg/Kg	20	0.001
Test Comments	[5]	*	mg/Kg	1	

Surrogate	Flag	Result	Units	Dilution	Spike Amount	Percent Recovery	Recovery Limits
TFT		0.972	mg/Kg	20	1	97	70 - 130
4-BFB	[6]	4.84	mg/Kg	20	1	484	70 - 130

Sample: 200150 - MW-18 (25-27')

Analysis:	TPH DRO	Analytical Method:	Mod. 8015B	QC Batch:	QC21403	Date Analyzed:	6/27/02
Analyst:	MM	Preparation Method:	3550 B	Prep Batch:	PB20329	Date Prepared:	6/26/02

Param	Flag	Result	Units	Dilution	RDL
DRO		311	mg/Kg	1	50

Surrogate	Flag	Result	Units	Dilution	Spike Amount	Percent Recovery	Recovery Limits
n-Triacontane		136	mg/Kg	1	150	91	70 - 130

Sample: 200150 - MW-18 (25-27')

Analysis:	TPH GRO	Analytical Method:	8015B	QC Batch:	QC21386	Date Analyzed:	6/26/02
Analyst:	CG	Preparation Method:	5035	Prep Batch:	PB20317	Date Prepared:	6/25/02

Param	Flag	Result	Units	Dilution	RDL
GRO		220	mg/Kg	20	0.10

Surrogate	Flag	Result	Units	Dilution	Spike Amount	Percent Recovery	Recovery Limits
TFT	[7]	0.807	mg/Kg	20	0.10	40	70 - 130
4-BFB	[8]	11.4	mg/Kg	20	0.10	570	70 - 130

[5]Sample diluted due to hydrocarbons beyond xylene. Sample has a Benzene concentration of less than 0.00473 which is the MDL.
[6]High surrogate recovery due to peak interference.
[7]Low surrogate due to matrix interference.
[8]High surrogate due to peak interference.

Quality Control Report
Method Blank

Method Blank

QCBatch: QC21385

Param	Flag	Results	Units	Reporting Limit
Benzene		<0.010	mg/Kg	0.001
Toluene		<0.010	mg/Kg	0.001
Ethylbenzene		<0.010	mg/Kg	0.001
M,P,O-Xylene		<0.010	mg/Kg	0.001
Total BTEX		<0.010	mg/Kg	0.001

Surrogate	Flag	Result	Units	Dilution	Spike Amount	Percent Recovery	Recovery Limits
TFT		1.08	mg/Kg	10	1	108	70 - 130
4-BFB		0.978	mg/Kg	10	1	97	70 - 130

Method Blank

QCBatch: QC21386

Param	Flag	Results	Units	Reporting Limit
GRO		1.42	mg/Kg	0.10

Surrogate	Flag	Result	Units	Dilution	Spike Amount	Percent Recovery	Recovery Limits
TFT		1.04	mg/Kg	10	0.10	104	70 - 130
4-BFB		0.904	mg/Kg	10	0.10	90	70 - 130

Method Blank

QCBatch: QC21403

Param	Flag	Results	Units	Reporting Limit
DRO		<50	mg/Kg	50

Surrogate	Flag	Result	Units	Dilution	Spike Amount	Percent Recovery	Recovery Limits
n-Triacontane		235	mg/Kg	1	15	153	70 - 130

Quality Control Report
Lab Control Spikes and Duplicate Spikes

Laboratory Control Spikes

QCBatch: QC21385

Param	LCS Result	LCSD Result	Units	Dil.	Spike Amount Added	Matrix Result	% Rec	RPD	% Rec Limit	RPD Limit
MTBE	1.09	1.08	mg/Kg	10	1	<0.010	109	0	70 - 130	20
Benzene	1.05	1.03	mg/Kg	10	1	<0.010	105	1	70 - 130	20
Toluene	1.02	1.01	mg/Kg	10	1	<0.010	102	0	70 - 130	20
Ethylbenzene	0.988	0.983	mg/Kg	10	1	<0.010	98	0	70 - 130	20
M,P,O-Xylene	2.88	2.86	mg/Kg	10	3	<0.010	96	0	70 - 130	20

Percent recovery is based on the spike result. RPD is based on the spike and spike duplicate result.

Surrogate	LCS Result	LCSD Result	Units	Dilution	Spike Amount	LCS % Rec	LCSD % Rec	Recovery Limits
TFT	1.05	1.07	mg/Kg	10	1	105	107	70 - 130
4-BFB	1	1.02	mg/Kg	10	1	100	102	70 - 130

Laboratory Control Spikes

QCBatch: QC21403

Param	LCS Result	LCSD Result	Units	Dil.	Spike Amount Added	Matrix Result	% Rec	RPD	% Rec Limit	RPD Limit
DRO	232	228	mg/Kg	1	250	<50	93	2	70 - 130	20

Percent recovery is based on the spike result. RPD is based on the spike and spike duplicate result.

Surrogate	LCS Result	LCSD Result	Units	Dilution	Spike Amount	LCS % Rec	LCSD % Rec	Recovery Limits
n-Triacontane	112	160	mg/Kg	1	150	75	106	70 - 130

Quality Control Report
Matrix Spikes and Duplicate Spikes

Matrix Spikes

QCBatch: QC21385

Param	MS Result	MSD Result	Units	Dil.	Spike Amount Added	Matrix Result	% Rec	RPD	% Rec Limit	RPD Limit
Benzene	0.876	0.696	mg/Kg	10	1	<0.010	87	22	70 - 130	20
Toluene	0.866	0.69	mg/Kg	10	1	<0.010	86	22	70 - 130	20
Ethylbenzene	0.851	0.679	mg/Kg	10	1	<0.010	85	22	70 - 130	20
M,P,O-Xylene	2.46	1.95	mg/Kg	10	3	<0.010	82	23	70 - 130	20

Percent recovery is based on the spike result. RPD is based on the spike and spike duplicate result.

Surrogate	MS Result	MSD Result	Units	Dilution	Spike Amount	MS % Rec	MSD % Rec	Recovery Limits
TFT	[9] 0.68	[10] 0.692	mg/Kg	10	1	68	69	70 - 130
4-BFB	[11] 0.646	[12] 0.63	mg/Kg	10	1	64	63	70 - 130

[9]Low surrogate recovery due to prep. ICV, CCV show the method to be in control.
[10]Low surrogate recovery due to prep. ICV, CCV show the method to be in control.
[11]Low surrogate recovery due to prep. ICV, CCV show the method to be in control.
[12]Low surrogate recovery due to prep. ICV, CCV show the method to be in control.

Matrix Spikes

QCBatch: QC21386

Param	MS Result	MSD Result	Units	Dil.	Spike Amount Added	Matrix Result	% Rec	RPD	% Rec Limit	RPD Limit
GRO	15.0	13.5	mg/Kg	10	1	<1.00	150	10	80 - 120	20

Percent recovery is based on the spike result. RPD is based on the spike and spike duplicate result.

Surrogate	MS Result	MSD Result	Units	Dilution	Spike Amount	MS % Rec	MSD % Rec	Recovery Limits
TFT	1.12	1.36	mg/Kg	10	0.10	112	136	70 - 130
4-BFB	0.577	0.640	mg/Kg	10	0.10	58	64	70 - 130

Matrix Spikes

QCBatch: QC21403

Param	MS Result	MSD Result	Units	Dil.	Spike Amount Added	Matrix Result	% Rec	RPD	% Rec Limit	RPD Limit
DRO	226	240	mg/Kg	1	250	<50.0	90	6	70 - 130	20

Percent recovery is based on the spike result. RPD is based on the spike and spike duplicate result.

Surrogate	MS Result	MSD Result	Units	Dilution	Spike Amount	MS % Rec	MSD % Rec	Recovery Limits
n-Triacontane	111	111	mg/Kg	1	150	74	74	70 - 130

Quality Control Report
Continuing Calibration Verification Standards

CCV (1)

QCBatch: QC21385

Param	Flag	Units	CCVs True Conc.	CCVs Found Conc.	CCVs Percent Recovery	Percent Recovery Limits	Date Analyzed
MTBE		mg/L	0.10	0.0997	99	85 - 115	6/26/02
Benzene		mg/L	0.10	0.103	103	85 - 115	6/26/02
Toluene		mg/L	0.10	0.1	100	85 - 115	6/26/02
Ethylbenzene		mg/L	0.10	0.0988	98	85 - 115	6/26/02
M,P,O-Xylene		mg/L	0.30	0.288	96	85 - 115	6/26/02

CCV (2)

QCBatch: QC21385

Param	Flag	Units	CCVs True Conc.	CCVs Found Conc.	CCVs Percent Recovery	Percent Recovery Limits	Date Analyzed
MTBE		mg/L	0.10	0.103	103	85 - 115	6/26/02
Benzene		mg/L	0.10	0.102	102	85 - 115	6/26/02
Toluene		mg/L	0.10	0.0991	99	85 - 115	6/26/02
Ethylbenzene		mg/L	0.10	0.0982	98	85 - 115	6/26/02
M,P,O-Xylene		mg/L	0.30	0.284	94	85 - 115	6/26/02

ICV (1)

QCBatch: QC21385

Param	Flag	Units	CCVs True Conc.	CCVs Found Conc.	CCVs Percent Recovery	Percent Recovery Limits	Date Analyzed
MTBE		mg/L	0.10	0.11	110	85 - 115	6/26/02
Benzene		mg/L	0.10	0.101	101	85 - 115	6/26/02
Toluene		mg/L	0.10	0.0988	98	85 - 115	6/26/02
Ethylbenzene		mg/L	0.10	0.0954	95	85 - 115	6/26/02
M,P,O-Xylene		mg/L	0.30	0.277	92	85 - 115	6/26/02

CCV (1)

QCBatch: QC21403

Param	Flag	Units	CCVs True Conc.	CCVs Found Conc.	CCVs Percent Recovery	Percent Recovery Limits	Date Analyzed
DRO		mg/Kg	250	224	90	75 - 125	6/27/02

ICV (1)

QCBatch: QC21403

Param	Flag	Units	CCVs True Conc.	CCVs Found Conc.	CCVs Percent Recovery	Percent Recovery Limits	Date Analyzed
DRO		mg/Kg	250	222	89	75 - 125	6/27/02

Equiva Services, LLC

TraceAnalysis, Inc.

6701 Aberdeen Ave, Ste 9
Lubbock, Texas 79424
Tel (806) 794-1296
Fax (806) 794-1298
1 (800) 378-1296

CHAIN-OF-CUSTODY AND ANALYSIS REQUEST

LAB Order ID # AD2062614

onsulting Company Name: Enercon Services Inc
Phone #: 915-570-8726
onsulting Company Address: 306 West Wall, Suite 1312 Midland, Tx 79701
Fax #: 915-684-7587
onsulting Contact: Jeff Kindley
Equiva Contact: Kyle Landreneau
ocation/SAP: Barber Ranch
Incident #: # 300109
ocation Address: Monument, New Mexico
Project Task:
onsultant Job#: EQ-112
Sampler Signature: Jeffrey Kindley

ANALYSIS REQUEST (Circle or Specify Method No.)

LAB # (LAB USE ONLY)	FIELD CODE	# CONTAINERS	Volume/Amount	MATRIX: WATER	MATRIX: SOIL	MATRIX: AIR	MATRIX: SLUDGE		PRESERVATIVE METHOD: HCL	PRESERVATIVE METHOD: HNO_3	PRESERVATIVE METHOD: $NaHSO_4$	PRESERVATIVE METHOD: H_2SO_4	PRESERVATIVE METHOD: ICE	PRESERVATIVE METHOD: NONE	SAMPLING: DATE	SAMPLING: TIME	MTBE 8021B/602	BTEX 8021B/602 **	TPH 418.1/TX1005	PAH 8270C	Total Metals Ag As Ba Cd Cr Pb Se Hg 6010B/200.7	TCLP Metals Ag As Ba Cd Cr Pb Se Hg	TCLP Volatiles	TCLP Semi Volatiles	TCLP Pesticides	RCI	GC-MS Vol. 8260B/624	GC/MS Semi. Vol. 8270C/625	PCB's 8082/608	Pesticides 8081A/608	BOD, TSS, pH	TPH-8015M (DRO/GRO) *	SPLP TPH GRO DRO				Turn Around Time if different from standard	Hold
200147	MW-17 (13-15')	1	4oz		✓								✓	✓	6/24/02	915		✓														•	•				
48	MW-17 (25-27')	1	4oz		✓								✓	✓	6/24/02	1010		✓														•	X				
49	MW-18 (13-15')	1	4oz		✓								✓	✓	6/24/02	1415		✓														•					
50	MW-18 (25-27')	1	4oz		✓								✓	✓	6/24/02	1515		✓														•	X				

elinquished by: Jeffrey Kindley Date: June 25, 2002 Time: 900
Received by: Helen Shelton Date: 6/25/02 Time: 900
elinquished by: Helen Shelton Date: 6/25/02 Time: 1830
Received by: Date: Time:
elinquished by: Date: Time:
Received at Laboratory by: Date: 6-26-02 Time: 10:00

LAB USE ONLY
Intact Y/N
Headspace Y/N
Temp <4 °
Log-in Review NJ

REMARKS: 7/11 F/P
☐ Check if special reporting limits needed.
Need 3 Day Turnaround
Add 200198 Add 200150 SPLP DRO/GRO per BL 7-1
* If TPH DRO/GRO exceeds total of 100ppm Then run SPLP TPH on that Sample
NO SPLP BTEX per BL 6-1
** If benzene exceeds 10ppm and/or Total BTEX exceeds 50ppm then run SPLP For that analyte

Carrier #

ubmittal of samples constitutes agreement to Terms and Conditions listed on reverse side of COC

4 samples - HS

163-566-890-3

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TRACEANALYSIS, INC.

6701 Aberdeen Avenue, Suite 9 Lubbock, Texas 79424 800•378•1296 806•794•1296 FAX 806•794•1298
155 McCutcheon, Suite H El Paso, Texas 79932 888•588•3443 915•585•3443 FAX 915•585•4944
E-Mail: lab@traceanalysis.com

Analytical and Quality Control Report

Kyle Landreneau
Equiva Kyle Landreneau
PMB 284 40 FM 1960 West
Houston, TX 77090

Report Date: July 5, 2002

Order ID Number: A02062724

Project: EQ-112
TA Job Code: Barber Ranch 3000109
Casualty Code: EQ-112
Project Location: Barber Lea County, New Mexico
Enercon Services Inc. / Midland / Jeff Kindley

Enclosed are the Analytical Results and Quality Control Data Reports for the following samples submitted to Trace-Analysis, Inc.

Sample	Description	Matrix	Date Taken	Time Taken	Date Received
200236	MW-14	Water	6/25/02	13:40	6/27/02
200237	MW-15	Water	6/25/02	14:00	6/27/02
200238	MW-17	Water	6/25/02	15:30	6/27/02
200239	MW-18	Water	6/25/02	15:45	6/27/02

These results represent only the samples received in the laboratory. The Quality Control Report is generated on a batch basis. All information contained in this report is for the analytical batch(es) in which your sample(s) were analyzed. Note: the RDL is equal to MQL for all organic analytes including TPH.
The test results contained within this report meet all requirements of LAC 33:I unless otherwise noted.

This report consists of a total of 9 pages and shall not be reproduced except in its entirety including the chain of custody (COC), without written approval of TraceAnalysis, Inc.

Dr. Blair Leftwich, Director

Analytical Report

Sample: 200236 - MW-14

Analysis:	BTEX	Analytical Method:	S 8021B	QC Batch:	QC21592	Date Analyzed:	6/27/02
Analyst:	DN	Preparation Method:	S 5030B	Prep Batch:	PB20483	Date Prepared:	6/27/02

Param	Flag	Result	Units	Dilution	RDL
Benzene		0.0032	mg/L	1	0.001
Toluene		<0.001	mg/L	1	0.001
Ethylbenzene		<0.001	mg/L	1	0.001
M,P,O-Xylene		<0.001	mg/L	1	0.001
Total BTEX		0.0032	mg/L	1	0.001

Surrogate	Flag	Result	Units	Dilution	Spike Amount	Percent Recovery	Recovery Limits
TFT		0.095	mg/L	1	0.10	95	70 - 130
4-BFB		0.091	mg/L	1	0.10	90	70 - 130

Sample: 200236 - MW-14

Analysis:	PAH	Analytical Method:	S 8270C	QC Batch:	QC21441	Date Analyzed:	6/28/02
Analyst:	RC	Preparation Method:	E 3510C	Prep Batch:	PB20358	Date Prepared:	6/27/02

Param	Flag	Result	Units	Dilution	RDL
Naphthalene		<0.0002	mg/L	1	0.0002
Acenaphthylene		<0.0002	mg/L	1	0.0002
Acenaphthene		<0.0002	mg/L	1	0.0002
Fluorene		<0.0002	mg/L	1	0.0002
Phenanthrene		<0.0002	mg/L	1	0.0002
Anthracene		<0.0002	mg/L	1	0.0002
Fluoranthene		<0.0002	mg/L	1	0.0002
Pyrene		<0.0002	mg/L	1	0.0002
Benzo(a)anthracene		<0.0002	mg/L	1	0.0002
Chrysene		<0.0002	mg/L	1	0.0002
Benzo(b)fluoranthene		<0.0002	mg/L	1	0.0002
Benzo(k)fluoranthene		<0.0002	mg/L	1	0.0002
Benzo(a)pyrene		<0.0002	mg/L	1	0.0002
Indeno(1,2,3-cd)pyrene		<0.0002	mg/L	1	0.0002
Dibenzo(a,h)anthracene		<0.0002	mg/L	1	0.0002
Benzo(g,h,i)perylene		<0.0002	mg/L	1	0.0002

Surrogate	Flag	Result	Units	Dilution	Spike Amount	Percent Recovery	Recovery Limits
Nitrobenzene-d5		61.18	mg/L	1	80	76	35 - 114
2-Fluorobiphenyl		57.72	mg/L	1	80	72	43 - 116
Terphenyl-d14		41.88	mg/L	1	80	52	33 - 141

Sample: 200237 - MW-15

Analysis: BTEX | Analytical Method: S 8021B | QC Batch: QC21592 | Date Analyzed: 6/27/02
Analyst: DN | Preparation Method: S 5030B | Prep Batch: PB20483 | Date Prepared: 6/27/02

Param	Flag	Result	Units	Dilution	RDL
Benzene		<0.001	mg/L	1	0.001
Toluene		<0.001	mg/L	1	0.001
Ethylbenzene		<0.001	mg/L	1	0.001
M,P,O-Xylene		<0.001	mg/L	1	0.001
Total BTEX		<0.001	mg/L	1	0.001

Surrogate	Flag	Result	Units	Dilution	Spike Amount	Percent Recovery	Recovery Limits
TFT		0.0948	mg/L	1	0.10	94	70 - 130
4-BFB		0.0884	mg/L	1	0.10	88	70 - 130

Sample: 200238 - MW-17

Analysis: BTEX | Analytical Method: S 8021B | QC Batch: QC21592 | Date Analyzed: 6/27/02
Analyst: DN | Preparation Method: S 5030B | Prep Batch: PB20483 | Date Prepared: 6/27/02

Param	Flag	Result	Units	Dilution	RDL
Benzene		<0.005	mg/L	5	0.001
Toluene		<0.005	mg/L	5	0.001
Ethylbenzene		<0.005	mg/L	5	0.001
M,P,O-Xylene		<0.005	mg/L	5	0.001
Total BTEX		<0.005	mg/L	5	0.001

Surrogate	Flag	Result	Units	Dilution	Spike Amount	Percent Recovery	Recovery Limits
TFT		0.0877	mg/L	5	0.10	87	70 - 130
4-BFB		0.0825	mg/L	5	0.10	82	70 - 130

Sample: 200238 - MW-17

Analysis: PAH | Analytical Method: S 8270C | QC Batch: QC21441 | Date Analyzed: 6/28/02
Analyst: RC | Preparation Method: E 3510C | Prep Batch: PB20358 | Date Prepared: 6/27/02

Param	Flag	Result	Units	Dilution	RDL
Naphthalene		<0.0002	mg/L	1	0.0002
Acenaphthylene		<0.0002	mg/L	1	0.0002
Acenaphthene		<0.0002	mg/L	1	0.0002
Fluorene		<0.0002	mg/L	1	0.0002
Phenanthrene		<0.0002	mg/L	1	0.0002
Anthracene		<0.0002	mg/L	1	0.0002
Fluoranthene		<0.0002	mg/L	1	0.0002
Pyrene		<0.0002	mg/L	1	0.0002
Benzo(a)anthracene		<0.0002	mg/L	1	0.0002
Chrysene		<0.0002	mg/L	1	0.0002
Benzo(b)fluoranthene		<0.0002	mg/L	1	0.0002
Benzo(k)fluoranthene		<0.0002	mg/L	1	0.0002

Continued ...

... *Continued* Sample: 200238 Analysis: PAH

Param	Flag	Result	Units	Dilution	RDL
Benzo(a)pyrene		<0.0002	mg/L	1	0.0002
Indeno(1,2,3-cd)pyrene		<0.0002	mg/L	1	0.0002
Dibenzo(a,h)anthracene		<0.0002	mg/L	1	0.0002
Benzo(g,h,i)perylene		<0.0002	mg/L	1	0.0002

Surrogate	Flag	Result	Units	Dilution	Spike Amount	Percent Recovery	Recovery Limits
Nitrobenzene-d5		66.76	mg/L	1	80	83	35 - 114
2-Fluorobiphenyl		62.41	mg/L	1	80	78	43 - 116
Terphenyl-d14		39.54	mg/L	1	80	49	33 - 141

Sample: 200239 - MW-18

Analysis:	BTEX	Analytical Method:	S 8021B	QC Batch:	QC21592	Date Analyzed:	6/27/02
Analyst:	DN	Preparation Method:	S 5030B	Prep Batch:	PB20483	Date Prepared:	6/27/02

Param	Flag	Result	Units	Dilution	RDL
Benzene		0.0014	mg/L	1	0.001
Toluene		<0.001	mg/L	1	0.001
Ethylbenzene		<0.001	mg/L	1	0.001
M,P,O-Xylene		<0.001	mg/L	1	0.001
Total BTEX		0.0014	mg/L	1	0.001

Surrogate	Flag	Result	Units	Dilution	Spike Amount	Percent Recovery	Recovery Limits
TFT		0.0934	mg/L	1	0.10	93	70 - 130
4-BFB		0.0873	mg/L	1	0.10	87	70 - 130

Sample: 200239 - MW-18

Analysis:	PAH	Analytical Method:	S 8270C	QC Batch:	QC21441	Date Analyzed:	6/28/02
Analyst:	RC	Preparation Method:	E 3510C	Prep Batch:	PB20358	Date Prepared:	6/27/02

Param	Flag	Result	Units	Dilution	RDL
Naphthalene		<0.0002	mg/L	1	0.0002
Acenaphthylene		<0.0002	mg/L	1	0.0002
Acenaphthene		<0.0002	mg/L	1	0.0002
Fluorene		<0.0002	mg/L	1	0.0002
Phenanthrene		<0.0002	mg/L	1	0.0002
Anthracene		<0.0002	mg/L	1	0.0002
Fluoranthene		<0.0002	mg/L	1	0.0002
Pyrene		<0.0002	mg/L	1	0.0002
Benzo(a)anthracene		<0.0002	mg/L	1	0.0002
Chrysene		<0.0002	mg/L	1	0.0002
Benzo(b)fluoranthene		<0.0002	mg/L	1	0.0002
Benzo(k)fluoranthene		<0.0002	mg/L	1	0.0002
Benzo(a)pyrene		<0.0002	mg/L	1	0.0002
Indeno(1,2,3-cd)pyrene		<0.0002	mg/L	1	0.0002
Dibenzo(a,h)anthracene		<0.0002	mg/L	1	0.0002

Continued ...

... *Continued* Sample: 200239 Analysis: PAH

Param	Flag	Result	Units	Dilution	RDL
Benzo(g,h,i)perylene		<0.0002	mg/L	1	0.0002

Surrogate	Flag	Result	Units	Dilution	Spike Amount	Percent Recovery	Recovery Limits
Nitrobenzene-d5		64.99	mg/L	1	80	81	35 - 114
2-Fluorobiphenyl		59.09	mg/L	1	80	73	43 - 116
Terphenyl-d14		44.49	mg/L	1	80	55	33 - 141

Quality Control Report
Method Blank

Method Blank

QCBatch: QC21441

Param	Flag	Results	Units	Reporting Limit
Naphthalene		<0.0002	mg/L	0.0002
Acenaphthylene		<0.0002	mg/L	0.0002
Acenaphthene		<0.0002	mg/L	0.0002
Fluorene		<0.0002	mg/L	0.0002
Phenanthrene		<0.0002	mg/L	0.0002
Anthracene		<0.0002	mg/L	0.0002
Fluoranthene		<0.0002	mg/L	0.0002
Pyrene		<0.0002	mg/L	0.0002
Benzo(a)anthracene		<0.0002	mg/L	0.0002
Chrysene		<0.0002	mg/L	0.0002
Benzo(b)fluoranthene		<0.0002	mg/L	0.0002
Benzo(k)fluoranthene		<0.0002	mg/L	0.0002
Benzo(a)pyrene		<0.0002	mg/L	0.0002
Indeno(1,2,3-cd)pyrene		<0.0002	mg/L	0.0002
Dibenzo(a,h)anthracene		<0.0002	mg/L	0.0002
Benzo(g,h,i)perylene		<0.0002	mg/L	0.0002

Surrogate	Flag	Result	Units	Dilution	Spike Amount	Percent Recovery	Recovery Limits
Nitrobenzene-d5		69.24	mg/L	1	80	86	35 - 114
2-Fluorobiphenyl		61.89	mg/L	1	80	77	43 - 116
Terphenyl-d14		58.99	mg/L	1	80	73	33 - 141

Method Blank

QCBatch: QC21592

Param	Flag	Results	Units	Reporting Limit
Benzene		<0.001	mg/L	0.001
Toluene		<0.001	mg/L	0.001
Ethylbenzene		<0.001	mg/L	0.001
M,P,O-Xylene		<0.001	mg/L	0.001
Total BTEX		< 0.001	mg/L	0.001

Surrogate	Flag	Result	Units	Dilution	Spike Amount	Percent Recovery	Recovery Limits
TFT		0.0926	mg/L	1	0.10	92	70 - 130
4-BFB		0.0869	mg/L	1	0.10	86	70 - 130

Quality Control Report
Lab Control Spikes and Duplicate Spikes

Laboratory Control Spikes

QCBatch: QC21441

Param	LCS Result	LCSD Result	Units	Dil.	Spike Amount Added	Matrix Result	% Rec	RPD	% Rec Limit	RPD Limit
Naphthalene	60.15	64.15	mg/L	1	80	<0.0002	75	6	16 - 96	20
Acenaphthylene	65.7	68.7	mg/L	1	80	<0.0002	82	4	20 - 110	20
Acenaphthene	62.68	65.47	mg/L	1	80	<0.0002	78	4	18 - 108	20
Fluorene	64.96	68.58	mg/L	1	80	<0.0002	81	5	22 - 102	20
Phenanthrene	64.63	67.45	mg/L	1	80	<0.0002	80	4	25 - 103	20
Anthracene	65.32	68.62	mg/L	1	80	<0.0002	81	4	22 - 110	20
Fluoranthene	81.3	87.2	mg/L	1	80	<0.0002	101	7	21 - 110	20
Pyrene	90.55	83.21	mg/L	1	80	<0.0002	113	8	22 - 100	20
Benzo(a)anthracene	61.12	66.22	mg/L	1	80	<0.0002	76	8	30 - 99	20
Chrysene	58.26	59.6	mg/L	1	80	<0.0002	72	2	27 - 108	20
Benzo(b)fluoranthene	50.73	52.08	mg/L	1	80	<0.0002	63	2	19 - 102	20
Benzo(k)fluoranthene	63.07	65.25	mg/L	1	80	<0.0002	78	3	35 - 103	20
Benzo(a)pyrene	51.18	54.19	mg/L	1	80	<0.0002	63	5	24 - 105	20
Indeno(1,2,3-cd)pyrene	50.09	52.65	mg/L	1	80	<0.0002	62	4	22 - 108	20
Dibenzo(a,h)anthracene	33.84	35.31	mg/L	1	80	<0.0002	42	4	23 - 77	20
Benzo(g,h,i)perylene	44.55	45.88	mg/L	1	80	<0.0002	55	2	19 - 119	20

Percent recovery is based on the spike result. RPD is based on the spike and spike duplicate result.

Surrogate	LCS Result	LCSD Result	Units	Dilution	Spike Amount	LCS % Rec	LCSD % Rec	Recovery Limits
Nitrobenzene-d5	62.06	68.2	mg/L	1	80	77	85	35 - 114
2-Fluorobiphenyl	58.28	61.3	mg/L	1	80	72	76	43 - 116
Terphenyl-d14	72.8	69.13	mg/L	1	80	91	86	33 - 141

Laboratory Control Spikes

QCBatch: QC21592

Param	LCS Result	LCSD Result	Units	Dil.	Spike Amount Added	Matrix Result	% Rec	RPD	% Rec Limit	RPD Limit
MTBE	0.0938	0.0954	mg/L	1	0.10	<0.001	93	1	70 - 130	20
Benzene	0.0934	0.0958	mg/L	1	0.10	<0.001	93	2	70 - 130	20
Toluene	0.0905	0.0933	mg/L	1	0.10	<0.001	90	3	70 - 130	20
Ethylbenzene	0.0906	0.0939	mg/L	1	0.10	<0.001	90	3	70 - 130	20
M,P,O-Xylene	0.271	0.283	mg/L	1	0.30	<0.001	90	4	70 - 130	20

Percent recovery is based on the spike result. RPD is based on the spike and spike duplicate result.

Surrogate	LCS Result	LCSD Result	Units	Dilution	Spike Amount	LCS % Rec	LCSD % Rec	Recovery Limits
TFT	0.091	0.093	mg/L	1	0.10	91	93	70 - 130
4-BFB	0.0906	0.0938	mg/L	1	0.10	90	93	70 - 130

Quality Control Report
Continuing Calibration Verification Standards

CCV (1)

QCBatch: QC21441

Param	Flag	Units	CCVs True Conc.	CCVs Found Conc.	CCVs Percent Recovery	Percent Recovery Limits	Date Analyzed
Naphthalene		mg/L	60	68.09	113	80 - 120	6/28/02
Acenaphthylene		mg/L	60	69.4	115	80 - 120	6/28/02
Acenaphthene		mg/L	60	69.22	115	80 - 120	6/28/02
Fluorene		mg/L	60	70.05	116	80 - 120	6/28/02
Phenanthrene		mg/L	60	67.11	111	80 - 120	6/28/02
Anthracene		mg/L	60	66.0	110	80 - 120	6/28/02
Fluoranthene		mg/L	60	67.63	112	80 - 120	6/28/02
Pyrene		mg/L	60	70.99	118	80 - 120	6/28/02
Benzo(a)anthracene		mg/L	60	62.07	103	80 - 120	6/28/02
Chrysene		mg/L	60	61.82	103	80 - 120	6/28/02
Benzo(b)fluoranthene		mg/L	60	59.3	98	80 - 120	6/28/02
Benzo(k)fluoranthene		mg/L	60	66.15	110	80 - 120	6/28/02
Benzo(a)pyrene		mg/L	60	58.63	97	80 - 120	6/28/02
Indeno(1,2,3-cd)pyrene		mg/L	60	57.98	96	80 - 120	6/28/02
Dibenzo(a,h)anthracene		mg/L	60	53.82	89	80 - 120	6/28/02
Benzo(g,h,i)perylene		mg/L	60	52.01	86	80 - 120	6/28/02
Nitrobenzene-d5		mg/L	60	69.1	115	80 - 120	6/28/02
2-Fluorobiphenyl		mg/L	60	68.34	113	80 - 120	6/28/02
Terphenyl-d14		mg/L	60	69.35	115	80 - 120	6/28/02

CCV (1)

QCBatch: QC21592

Param	Flag	Units	CCVs True Conc.	CCVs Found Conc.	CCVs Percent Recovery	Percent Recovery Limits	Date Analyzed
MTBE		mg/L	0.10	0.0887	88	85 - 115	6/27/02
Benzene		mg/L	0.10	0.0901	90	85 - 115	6/27/02
Toluene		mg/L	0.10	0.0878	87	85 - 115	6/27/02
Ethylbenzene		mg/L	0.10	0.0891	89	85 - 115	6/27/02
M,P,O-Xylene		mg/L	0.30	0.266	88	85 - 115	6/27/02

CCV (2)

QCBatch: QC21592

Param	Flag	Units	CCVs True Conc.	CCVs Found Conc.	CCVs Percent Recovery	Percent Recovery Limits	Date Analyzed
MTBE		mg/L	0.10	0.0915	91	85 - 115	6/27/02
Benzene		mg/L	0.10	0.0902	90	85 - 115	6/27/02
Toluene		mg/L	0.10	0.0875	87	85 - 115	6/27/02
Ethylbenzene		mg/L	0.10	0.0882	88	85 - 115	6/27/02
M,P,O-Xylene		mg/L	0.30	0.261	87	85 - 115	6/27/02

ICV (1)

QCBatch: QC21592

Param	Flag	Units	CCVs True Conc.	CCVs Found Conc.	CCVs Percent Recovery	Percent Recovery Limits	Date Analyzed
MTBE		mg/L	0.10	0.0934	93	85 - 115	6/27/02
Benzene		mg/L	0.10	0.0941	94	85 - 115	6/27/02
Toluene		mg/L	0.10	0.0931	93	85 - 115	6/27/02
Ethylbenzene		mg/L	0.10	0.0931	93	85 - 115	6/27/02
M,P,O-Xylene		mg/L	0.30	0.28	93	85 - 115	6/27/02

200236-39 Page 1 of 2

701 Aberdeen Avenue, Ste. 9
Lubbock, Texas 79424
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1 (800) 378-1296

TraceAnalysis, Inc.

155 McCutcheon, Suite H
El Paso, Texas 79932
Tel (915) 585-3443
Fax (915) 585-4944
1 (888) 588-3443

CHAIN-OF-CUSTODY AND ANALYSIS REQUEST

LAB Order ID # A02062724

mpany Name: Enercon Services Inc
Phone #: 915-570-8726
dress: (Street, City, Zip) 306 West Wall, Suite 1312, Midland, Tx 79701
Fax #: 915-684-7587
ntact Person: Jeffrey Kindley
oice to: (different from above) Kyle Landreneau Equiva Services
Incident # 300109
ject #: EQ-112
Project Name: Barber Ranch
ject Location: Lea County, New Mexico
Sampler Signature: Jeffrey Kindley

ANALYSIS REQUEST
(Circle or Specify Method No.)

LAB # (LAB USE ONLY)	FIELD CODE	# CONTAINERS	Volume/Amount	MATRIX: WATER	SOIL	AIR	SLUDGE	PRESERVATIVE METHOD: HCl	HNO_3	H_2SO_4	NaOH	ICE	NONE	SAMPLING: DATE	TIME	MTBE 8021B/602	BTEX 8021B/602	TPH 418.1/TX1005	PAH 8270C	Total Metals Ag As Ba Cd Cr Pb Se Hg 6010B/200.7	TCLP Metals Ag As Ba Cd Cr Pb Se Hg	TCLP Volatiles	TCLP Semi Volatiles	TCLP Pesticides	RCI	GC/MS Vol. 8260B/624	GC/MS Semi. Vol. 8270C/625	PCB's 8082/608	Pesticides 8081A/608	BOD, TSS, pH	Turn Around Time if different from standard	Hold
200236	MW-14	2	40ml	✓				✓						6/25/02	1340		✓															
36	MW-14	1	Liter	✓									✓	6/25/02	1340				✓													
37	MW-15	2	40ml	✓				✓						6/25/02	1400		✓															
38	MW-17	2	40ml	✓				✓						6/25/02	1530		✓															
38	MW-17	1	Liter	✓									✓	6/25/02	1530				✓													
39	MW-18	2	40ml	✓				✓						6/25/02	1545		✓															
39	MW-18	1	Liter	✓									✓	6/25/02	1545				✓													

Relinquished by:	Date:	Time:	Received by:	Date:	Time:
Jeffrey Kindley	June 26, 2002	0900	Helen Shelton	6/26/02	0900
Helen Shelton	6/26/02	1830			
			Received at Laboratory by:	Date:	Time:
			[signature]	6-27-02	10:00

11 samples-HS

LAB USE ONLY
Intact (Y) / N
Headspace Y / (N)
Temp -1°
Log-in Review [initials]

REMARKS: Normal Turnaround
7/11 F/P
7/9 F
☐ Check If Special Reporting Limits Are Needed

Carrier # Greyhound GLI 763-566-8870

bmittal of samples constitutes agreement to Terms and Conditions listed on reverse side of C.O.C.

ORIGINAL COPY

Summary Report

Kyle Landreneau
Equiva Kyle Landreneau
PMB 284 40 FM 1960 West
Houston, TX 77090

Report Date: July 10, 2002

Order ID Number: A02062724

Project: EQ-112
TA Job Code: Barber Ranch 3000109
Casualty Code: EQ-112
Project Location: Barber Lea County, New Mexico
Project Address:
Enercon Services Inc. / Midland / Jeff Kindley

Sample	Description	Matrix	Date Taken	Time Taken	Date Received
200240	S-5 (8-10')	Soil	6/25/02	15:08	6/27/02
200242	S-6 (8-10')	Soil	6/25/02	16:15	6/27/02

0 This report consists of a total of 1 page(s) and is intended only as a summary of results for the sample(s) listed above.

Sample: 200240 - S-5 (8-10')

Param	Flag	Result	Units
SPLP DRO		<5.00	mg/L
SPLP GRO		2.32	mg/L

Sample: 200242 - S-6 (8-10')

Param	Flag	Result	Units
SPLP DRO		<5.00	mg/L
SPLP GRO		1.1	mg/L

Summary Report

Kyle Landreneau
Equiva Kyle Landreneau
PMB 284 40 FM 1960 West
Houston, TX 77090

Report Date: July 8, 2002

Order ID Number: A02062724

Project: EQ-112
TA Job Code: Barber Ranch 3000109
Casualty Code: EQ-112
Project Location: Barber Lea County, New Mexico
Project Address:
Enercon Services Inc. / Midland / Jeff Kindley

Sample	Description	Matrix	Date Taken	Time Taken	Date Received
200240	S-5 (8-10')	Soil	6/25/02	15:08	6/27/02
200241	S-5 (30-32')	Soil	6/25/02	15:40	6/27/02
200242	S-6 (8-10')	Soil	6/25/02	16:15	6/27/02
200243	S-6 (25-27')	Soil	6/25/02	16:50	6/27/02

0 This report consists of a total of 1 page(s) and is intended only as a summary of results for the sample(s) listed above.

	BTEX						TPH DRO	TPH GRO
	Benzene	Toluene	Ethylbenzene	M,P,O-Xylene	Total BTEX	Test Comments	DRO	GRO
Sample - Field Code	(ppm)	(ppm)	(ppm)	(ppm)	(ppm)	(ppm)	(ppm)	(ppm)
200240 - S-5 (8-10')	5.74	34.9	16.5	9.23	66.4	*	6900	2766
200241 - S-5 (30-32')	0.0124	0.0991	0.0118	0.0237	0.147	-	<50	<1
200242 - S-6 (8-10')	0.0823	0.424	1.12	2.40	4.03	-	544	126
200243 - S-6 (25-27')	0.0696	0.141	0.0184	0.0612	0.290	-	59.1	9.47

This is only a summary. Please, refer to the complete report package for quality control data.

Summary Report

Kyle Landreneau
Equiva Kyle Landreneau
PMB 284 40 FM 1960 West
Houston, TX 77090

Report Date: July 5, 2002

Order ID Number: A02062724

Project: EQ-112
TA Job Code: Barber Ranch 3000109
Casualty Code: EQ-112
Project Location: Barber Lea County, New Mexico
Project Address:
Enercon Services Inc. / Midland / Jeff Kindley

Sample	Description	Matrix	Date Taken	Time Taken	Date Received
200236	MW-14	Water	6/25/02	13:40	6/27/02
200237	MW-15	Water	6/25/02	14:00	6/27/02
200238	MW-17	Water	6/25/02	15:30	6/27/02
200239	MW-18	Water	6/25/02	15:45	6/27/02

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	BTEX				
Sample - Field Code	Benzene (ppm)	Toluene (ppm)	Ethylbenzene (ppm)	M,P,O-Xylene (ppm)	Total BTEX (ppm)
200236 - MW-14	0.0032	<0.001	<0.001	<0.001	0.0032
200237 - MW-15	<0.001	<0.001	<0.001	<0.001	<0.001
200238 - MW-17	<0.005	<0.005	<0.005	<0.005	<0.005
200239 - MW-18	0.0014	<0.001	<0.001	<0.001	0.0014

Sample: 200236 - MW-14

Param	Flag	Result	Units
Naphthalene		<0.0002	mg/L
Acenaphthylene		<0.0002	mg/L
Acenaphthene		<0.0002	mg/L
Fluorene		<0.0002	mg/L
Phenanthrene		<0.0002	mg/L
Anthracene		<0.0002	mg/L
Fluoranthene		<0.0002	mg/L
Pyrene		<0.0002	mg/L
Benzo(a)anthracene		<0.0002	mg/L
Chrysene		<0.0002	mg/L
Benzo(b)fluoranthene		<0.0002	mg/L
Benzo(k)fluoranthene		<0.0002	mg/L

Continued on next page ...

Sample 200236 continued ...

Param	Flag	Result	Units
Benzo(a)pyrene		<0.0002	mg/L
Indeno(1,2,3-cd)pyrene		<0.0002	mg/L
Dibenzo(a,h)anthracene		<0.0002	mg/L
Benzo(g,h,i)perylene		<0.0002	mg/L

Sample: 200238 - MW-17

Param	Flag	Result	Units
Naphthalene		<0.0002	mg/L
Acenaphthylene		<0.0002	mg/L
Acenaphthene		<0.0002	mg/L
Fluorene		<0.0002	mg/L
Phenanthrene		<0.0002	mg/L
Anthracene		<0.0002	mg/L
Fluoranthene		<0.0002	mg/L
Pyrene		<0.0002	mg/L
Benzo(a)anthracene		<0.0002	mg/L
Chrysene		<0.0002	mg/L
Benzo(b)fluoranthene		<0.0002	mg/L
Benzo(k)fluoranthene		<0.0002	mg/L
Benzo(a)pyrene		<0.0002	mg/L
Indeno(1,2,3-cd)pyrene		<0.0002	mg/L
Dibenzo(a,h)anthracene		<0.0002	mg/L
Benzo(g,h,i)perylene		<0.0002	mg/L

Sample: 200239 - MW-18

Param	Flag	Result	Units
Naphthalene		<0.0002	mg/L
Acenaphthylene		<0.0002	mg/L
Acenaphthene		<0.0002	mg/L
Fluorene		<0.0002	mg/L
Phenanthrene		<0.0002	mg/L
Anthracene		<0.0002	mg/L
Fluoranthene		<0.0002	mg/L
Pyrene		<0.0002	mg/L
Benzo(a)anthracene		<0.0002	mg/L
Chrysene		<0.0002	mg/L
Benzo(b)fluoranthene		<0.0002	mg/L
Benzo(k)fluoranthene		<0.0002	mg/L
Benzo(a)pyrene		<0.0002	mg/L
Indeno(1,2,3-cd)pyrene		<0.0002	mg/L
Dibenzo(a,h)anthracene		<0.0002	mg/L
Benzo(g,h,i)perylene		<0.0002	mg/L

TRACEANALYSIS, INC.

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E-Mail: lab@traceanalysis.com

Analytical and Quality Control Report

Kyle Landreneau
Equiva Kyle Landreneau
PMB 284 40 FM 1960 West
Houston, TX 77090

Report Date: July 10, 2002

Order ID Number: A02062724

Project: EQ-112
TA Job Code: Barber Ranch 3000109
Casualty Code: EQ-112
Project Location: Barber Lea County, New Mexico
Enercon Services Inc. / Midland / Jeff Kindley

Enclosed are the Analytical Results and Quality Control Data Reports for the following samples submitted to Trace-Analysis, Inc.

Sample	Description	Matrix	Date Taken	Time Taken	Date Received
200240	S-5 (8-10')	Soil	6/25/02	15:08	6/27/02
200242	S-6 (8-10')	Soil	6/25/02	16:15	6/27/02

These results represent only the samples received in the laboratory. The Quality Control Report is generated on a batch basis. All information contained in this report is for the analytical batch(es) in which your sample(s) were analyzed. Note: the RDL is equal to MQL for all organic analytes including TPH.
The test results contained within this report meet all requirements of LAC 33:I unless otherwise noted.

This report consists of a total of 4 pages and shall not be reproduced except in its entirety including the chain of custody (COC), without written approval of TraceAnalysis, Inc.

Dr. Blair Leftwich, Director

Analytical Report

Sample: 200240 - S-5 (8-10')

Analysis:	SPLP DRO	Analytical Method:	Mod. 8015B	QC Batch:	QC21664	Date Analyzed:	7/7/02
Analyst:	MM	Preparation Method:	1312	Prep Batch:	PB20538	Date Prepared:	7/7/02

Param	Flag	Result	Units	Dilution	RDL
SPLP DRO		<5.00	mg/L	1	50

Sample: 200240 - S-5 (8-10')

Analysis:	SPLP GRO	Analytical Method:	8015	QC Batch:	QC21683	Date Analyzed:	7/7/02
Analyst:	CG	Preparation Method:	1312	Prep Batch:	PB20557	Date Prepared:	7/7/02

Param	Flag	Result	Units	Dilution	RDL
SPLP GRO		2.32	mg/L	5	0.10

Sample: 200242 - S-6 (8-10')

Analysis:	SPLP DRO	Analytical Method:	Mod. 8015B	QC Batch:	QC21664	Date Analyzed:	7/7/02
Analyst:	MM	Preparation Method:	1312	Prep Batch:	PB20538	Date Prepared:	7/7/02

Param	Flag	Result	Units	Dilution	RDL
SPLP DRO		<5.00	mg/L	1	50

Sample: 200242 - S-6 (8-10')

Analysis:	SPLP GRO	Analytical Method:	8015	QC Batch:	QC21683	Date Analyzed:	7/7/02
Analyst:	CG	Preparation Method:	1312	Prep Batch:	PB20557	Date Prepared:	7/7/02

Param	Flag	Result	Units	Dilution	RDL
SPLP GRO		1.1	mg/L	5	0.10

Quality Control Report
Method Blank

Method Blank

QCBatch: QC21664

Param	Flag	Results	Units	Reporting Limit
SPLP DRO		<5.00	mg/L	50

Method Blank

QCBatch: QC21683

Param	Flag	Results	Units	Reporting Limit
SPLP GRO		<0.1	mg/L	0.10

Quality Control Report
Lab Control Spikes and Duplicate Spikes

Laboratory Control Spikes

QCBatch: QC21664

Param	LCS Result	LCSD Result	Units	Dil.	Spike Amount Added	Matrix Result	% Rec	RPD	% Rec Limit	RPD Limit
SPLP DRO	< 50	< 50	mg/L	1	250	<5.00	95	7	70 - 130	20

Percent recovery is based on the spike result. RPD is based on the spike and spike duplicate result.

Laboratory Control Spikes

QCBatch: QC21683

Param	LCS Result	LCSD Result	Units	Dil.	Spike Amount Added	Matrix Result	% Rec	RPD	% Rec Limit	RPD Limit
SPLP GRO	0.982	0.915	mg/L	1	1	<0.1	98	7	70 - 130	20

Percent recovery is based on the spike result. RPD is based on the spike and spike duplicate result.

Quality Control Report
Continuing Calibration Verification Standards

CCV (1)

QCBatch: QC21664

Param	Flag	Units	CCVs True Conc.	CCVs Found Conc.	CCVs Percent Recovery	Percent Recovery Limits	Date Analyzed
SPLP DRO		mg/L	250	237	94	75 - 125	7/7/02

ICV (1)

QCBatch: QC21664

Param	Flag	Units	CCVs True Conc.	CCVs Found Conc.	CCVs Percent Recovery	Percent Recovery Limits	Date Analyzed
SPLP DRO		mg/L	250	232	92	75 - 125	7/7/02

CCV (1)

QCBatch: QC21683

Param	Flag	Units	CCVs True Conc.	CCVs Found Conc.	CCVs Percent Recovery	Percent Recovery Limits	Date Analyzed
SPLP GRO		mg/L	1	0.979	97	85 - 115	7/7/02

ICV (1)

QCBatch: QC21683

Param	Flag	Units	CCVs True Conc.	CCVs Found Conc.	CCVs Percent Recovery	Percent Recovery Limits	Date Analyzed
SPLP GRO		mg/L	1	0.914	91	85 - 115	7/7/02

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E-Mail: lab@traceanalysis.com

Analytical and Quality Control Report

Kyle Landreneau
Equiva Kyle Landreneau
PMB 284 40 FM 1960 West
Houston, TX 77090

Report Date: July 8, 2002

Order ID Number: A02062724

Project: EQ-112
TA Job Code: Barber Ranch 3000109
Casualty Code: EQ-112
Project Location: Barber Lea County, New Mexico
Enercon Services Inc. / Midland / Jeff Kindley

Enclosed are the Analytical Results and Quality Control Data Reports for the following samples submitted to Trace-Analysis, Inc.

Sample	Description	Matrix	Date Taken	Time Taken	Date Received
200240	S-5 (8-10')	Soil	6/25/02	15:08	6/27/02
200241	S-5 (30-32')	Soil	6/25/02	15:40	6/27/02
200242	S-6 (8-10')	Soil	6/25/02	16:15	6/27/02
200243	S-6 (25-27')	Soil	6/25/02	16:50	6/27/02

These results represent only the samples received in the laboratory. The Quality Control Report is generated on a batch basis. All information contained in this report is for the analytical batch(es) in which your sample(s) were analyzed. Note: the RDL is equal to MQL for all organic analytes including TPH.
The test results contained within this report meet all requirements of LAC 33:I unless otherwise noted.

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Dr. Blair Leftwich, Director

Analytical Report

Sample: 200240 - S-5 (8-10')

Analysis:	BTEX	Analytical Method:	S 8021B	QC Batch:	QC21408	Date Analyzed:	6/27/02
Analyst:	CG	Preparation Method:	S 5035	Prep Batch:	PB20333	Date Prepared:	6/27/02

Param	Flag	Result	Units	Dilution	RDL
Benzene		5.74	mg/Kg	500	0.001
Toluene		34.9	mg/Kg	500	0.001
Ethylbenzene		16.5	mg/Kg	500	0.001
M,P,O-Xylene		9.23	mg/Kg	500	0.001
Total BTEX		66.4	mg/Kg	500	0.001
Test Comments		*	mg/Kg	1	

Surrogate	Flag	Result	Units	Dilution	Spike Amount	Percent Recovery	Recovery Limits
TFT	[1]	2.62	mg/Kg	500	1	262	70 - 130
4-BFB	[2]	38.4	mg/Kg	500	1	3840	70 - 130

Sample: 200240 - S-5 (8-10')

Analysis:	TPH DRO	Analytical Method:	Mod. 8015B	QC Batch:	QC21430	Date Analyzed:	6/27/02
Analyst:	MM	Preparation Method:	3550 B	Prep Batch:	PB20349	Date Prepared:	6/27/02

Param	Flag	Result	Units	Dilution	RDL
DRO		6900	mg/Kg	1	50

Surrogate	Flag	Result	Units	Dilution	Spike Amount	Percent Recovery	Recovery Limits
n-Triacontane	[3]	840	mg/Kg	1	150	560	70 - 130

Sample: 200240 - S-5 (8-10')

Analysis:	TPH GRO	Analytical Method:	8015B	QC Batch:	QC21409	Date Analyzed:	6/27/02
Analyst:	CG	Preparation Method:	5035	Prep Batch:	PB20333	Date Prepared:	6/27/02

Param	Flag	Result	Units	Dilution	RDL
GRO		2766	mg/Kg	1	0.10

Surrogate	Flag	Result	Units	Dilution	Spike Amount	Percent Recovery	Recovery Limits
TFT	[4]	0	mg/Kg	500	0.10	0	70 - 130
4-BFB	[5]	78.7	mg/Kg	500	0.10	78700	70 - 130

[1] High surrogate recovery due to peak interference.
[2] High surrogate recovery due to peak interference.
[3] Surrogate out of recovery limits due to peak interference. LCS, ICV, and CCV show the process is in control.
[4] Low surrogate recovery due to matrix interference. ICV, CCV, CCV show the method to be in control.
[5] High surrogate recovery due to peak interference.

Sample: 200241 - S-5 (30-32')

Analysis:	BTEX	Analytical Method:	S 8021B	QC Batch:	QC21408	Date Analyzed:	6/27/02
Analyst:	CG	Preparation Method:	S 5035	Prep Batch:	PB20333	Date Prepared:	6/27/02

Param	Flag	Result	Units	Dilution	RDL
Benzene		0.0124	mg/Kg	10	0.001
Toluene		0.0991	mg/Kg	10	0.001
Ethylbenzene		0.0118	mg/Kg	10	0.001
M,P,O-Xylene		0.0237	mg/Kg	10	0.001
Total BTEX		0.147	mg/Kg	10	0.001

Surrogate	Flag	Result	Units	Dilution	Spike Amount	Percent Recovery	Recovery Limits
TFT		1.03	mg/Kg	10	1	103	70 - 130
4-BFB		0.862	mg/Kg	10	1	86	70 - 130

Sample: 200241 - S-5 (30-32')

Analysis:	TPH DRO	Analytical Method:	Mod. 8015B	QC Batch:	QC21430	Date Analyzed:	6/27/02
Analyst:	MM	Preparation Method:	3550 B	Prep Batch:	PB20349	Date Prepared:	6/27/02

Param	Flag	Result	Units	Dilution	RDL
DRO		<50	mg/Kg	1	50

Surrogate	Flag	Result	Units	Dilution	Spike Amount	Percent Recovery	Recovery Limits
n-Triacontane		111	mg/Kg	1	150	74	70 - 130

Sample: 200241 - S-5 (30-32')

Analysis:	TPH GRO	Analytical Method:	8015B	QC Batch:	QC21409	Date Analyzed:	6/27/02
Analyst:	CG	Preparation Method:	5035	Prep Batch:	PB20333	Date Prepared:	6/27/02

Param	Flag	Result	Units	Dilution	RDL
GRO		<1	mg/Kg	1	0.10

Surrogate	Flag	Result	Units	Dilution	Spike Amount	Percent Recovery	Recovery Limits
TFT		1.04	mg/Kg	10	0.10	104	70 - 130
4-BFB		0.875	mg/Kg	10	0.10	87	70 - 130

Sample: 200242 - S-6 (8-10')

Analysis:	BTEX	Analytical Method:	S 8021B	QC Batch:	QC21408	Date Analyzed:	6/27/02
Analyst:	CG	Preparation Method:	S 5035	Prep Batch:	PB20333	Date Prepared:	6/27/02

Param	Flag	Result	Units	Dilution	RDL
Benzene		0.0823	mg/Kg	20	0.001

Continued ...

... *Continued* Sample: 200242 Analysis: BTEX

Param	Flag	Result	Units	Dilution	RDL
Toluene		0.424	mg/Kg	20	0.001
Ethylbenzene		1.12	mg/Kg	20	0.001
M,P,O-Xylene		2.40	mg/Kg	20	0.001
Total BTEX		4.03	mg/Kg	20	0.001

Surrogate	Flag	Result	Units	Dilution	Spike Amount	Percent Recovery	Recovery Limits
TFT		0.905	mg/Kg	20	1	90	70 - 130
4-BFB	[6]	2.52	mg/Kg	20	1	252	70 - 130

Sample: 200242 - S-6 (8-10')

Analysis: TPH DRO | Analytical Method: Mod. 8015B | QC Batch: QC21430 | Date Analyzed: 6/27/02
Analyst: MM | Preparation Method: 3550 B | Prep Batch: PB20349 | Date Prepared: 6/27/02

Param	Flag	Result	Units	Dilution	RDL
DRO		544	mg/Kg	1	50

Surrogate	Flag	Result	Units	Dilution	Spike Amount	Percent Recovery	Recovery Limits
n-Triacontane		190	mg/Kg	1	150	126	70 - 130

Sample: 200242 - S-6 (8-10')

Analysis: TPH GRO | Analytical Method: 8015B | QC Batch: QC21409 | Date Analyzed: 6/27/02
Analyst: CG | Preparation Method: 5035 | Prep Batch: PB20333 | Date Prepared: 6/27/02

Param	Flag	Result	Units	Dilution	RDL
GRO		126	mg/Kg	1	0.10

Surrogate	Flag	Result	Units	Dilution	Spike Amount	Percent Recovery	Recovery Limits
TFT	[7]	0.694	mg/Kg	20	0.10	69	70 - 130
4-BFB	[8]	4.85	mg/Kg	20	0.10	485	70 - 130

Sample: 200243 - S-6 (25-27')

Analysis: BTEX | Analytical Method: S 8021B | QC Batch: QC21408 | Date Analyzed: 6/27/02
Analyst: CG | Preparation Method: S 5035 | Prep Batch: PB20333 | Date Prepared: 6/27/02

Param	Flag	Result	Units	Dilution	RDL
Benzene		0.0696	mg/Kg	10	0.001
Toluene		0.141	mg/Kg	10	0.001

Continued ...

[6]High surrogate recovery due to peak interference.
[7]Low surrogate recovery due to matrix interference. ICV, CCV, CCV show the method to be in control.
[8]High surrogate recovery due to peak interference.

... Continued Sample: 200243 Analysis: BTEX

Param	Flag	Result	Units	Dilution	RDL
Ethylbenzene		0.0184	mg/Kg	10	0.001
M,P,O-Xylene		0.0612	mg/Kg	10	0.001
Total BTEX		0.290	mg/Kg	10	0.001

Surrogate	Flag	Result	Units	Dilution	Spike Amount	Percent Recovery	Recovery Limits
TFT		1.14	mg/Kg	1	1	114	70 - 130
4-BFB		0.859	mg/Kg	1	1	85	70 - 130

Sample: 200243 - S-6 (25-27')

Analysis:	TPH DRO	Analytical Method:	Mod. 8015B	QC Batch:	QC21430	Date Analyzed:	6/27/02
Analyst:	MM	Preparation Method:	3550 B	Prep Batch:	PB20349	Date Prepared:	6/27/02

Param	Flag	Result	Units	Dilution	RDL
DRO		59.1	mg/Kg	1	50

Surrogate	Flag	Result	Units	Dilution	Spike Amount	Percent Recovery	Recovery Limits
n-Triacontane		110	mg/Kg	1	150	73	70 - 130

Sample: 200243 - S-6 (25-27')

Analysis:	TPH GRO	Analytical Method:	8015B	QC Batch:	QC21409	Date Analyzed:	6/27/02
Analyst:	CG	Preparation Method:	5035	Prep Batch:	PB20333	Date Prepared:	6/27/02

Param	Flag	Result	Units	Dilution	RDL
GRO		9.47	mg/Kg	1	0.10

Surrogate	Flag	Result	Units	Dilution	Spike Amount	Percent Recovery	Recovery Limits
TFT		1	mg/Kg	10	0.10	100	70 - 130
4-BFB		1.27	mg/Kg	10	0.10	127	70 - 130

Quality Control Report
Method Blank

Method Blank

QCBatch: QC21408

Param	Flag	Results	Units	Reporting Limit
Benzene		<0.010	mg/Kg	0.001
Toluene		<0.010	mg/Kg	0.001
Ethylbenzene		<0.010	mg/Kg	0.001
M,P,O-Xylene		<0.010	mg/Kg	0.001
Total BTEX		<0.010	mg/Kg	0.001

Surrogate	Flag	Result	Units	Dilution	Spike Amount	Percent Recovery	Recovery Limits
TFT		1.10	mg/Kg	10	1	110	70 - 130
4-BFB		0.980	mg/Kg	10	1	98	70 - 130

Method Blank

QCBatch: QC21409

Param	Flag	Results	Units	Reporting Limit
GRO		<1	mg/Kg	0.10

Surrogate	Flag	Result	Units	Dilution	Spike Amount	Percent Recovery	Recovery Limits
TFT		1.07	mg/Kg	10	0.10	107	70 - 130
4-BFB		0.906	mg/Kg	10	0.10	91	70 - 130

Method Blank

QCBatch: QC21430

Param	Flag	Results	Units	Reporting Limit
DRO		<50.0	mg/Kg	50

Surrogate	Flag	Result	Units	Dilution	Spike Amount	Percent Recovery	Recovery Limits
n-Triacontane		114	mg/Kg	1	150	76	70 - 130

Quality Control Report
Lab Control Spikes and Duplicate Spikes

Laboratory Control Spikes

QCBatch: QC21408

Param	LCS Result	LCSD Result	Units	Dil.	Spike Amount Added	Matrix Result	% Rec	RPD	% Rec Limit	RPD Limit
MTBE	1	0.951	mg/Kg	10	1	<0.010	100	5	70 - 130	20
Benzene	1.02	0.845	mg/Kg	10	1	<0.010	102	18	70 - 130	20
Toluene	1.01	0.822	mg/Kg	10	1	<0.010	101	20	70 - 130	20
Ethylbenzene	0.993	0.812	mg/Kg	10	1	<0.010	99	20	70 - 130	20
M,P,O-Xylene	2.89	2.36	mg/Kg	10	3	<0.010	96	20	70 - 130	20

Percent recovery is based on the spike result. RPD is based on the spike and spike duplicate result.

Surrogate	LCS Result	LCSD Result	Units	Dilution	Spike Amount	LCS % Rec	LCSD % Rec	Recovery Limits
TFT	1.06	0.898	mg/Kg	10	1	106	89	70 - 130
4-BFB	0.999	0.825	mg/Kg	10	1	99	82	70 - 130

Laboratory Control Spikes

QCBatch: QC21409

Param	LCS Result	LCSD Result	Units	Dil.	Spike Amount Added	Matrix Result	% Rec	RPD	% Rec Limit	RPD Limit
GRO	9.1	9.09	mg/Kg	10	1	<1	91	0	80 - 120	20

Percent recovery is based on the spike result. RPD is based on the spike and spike duplicate result.

Surrogate	LCS Result	LCSD Result	Units	Dilution	Spike Amount	LCS % Rec	LCSD % Rec	Recovery Limits
TFT	0.883	0.863	mg/Kg	10	0.10	88	86	70 - 130
4-BFB	0.944	0.935	mg/Kg	10	0.10	94	93	70 - 130

Laboratory Control Spikes

QCBatch: QC21430

Param	LCS Result	LCSD Result	Units	Dil.	Spike Amount Added	Matrix Result	% Rec	RPD	% Rec Limit	RPD Limit
DRO	236	247	mg/Kg	1	250	<50.0	94	4	70 - 130	20

Percent recovery is based on the spike result. RPD is based on the spike and spike duplicate result.

Surrogate	LCS Result	LCSD Result	Units	Dilution	Spike Amount	LCS % Rec	LCSD % Rec	Recovery Limits
n-Triacontane	111	117	mg/Kg	1	150	74	78	70 - 130

Quality Control Report
Matrix Spikes and Duplicate Spikes

Matrix Spikes

QCBatch: QC21408

Param	MS Result	MSD Result	Units	Dil.	Spike Amount Added	Matrix Result	% Rec	RPD	% Rec Limit	RPD Limit
Benzene	0.872	0.884	mg/Kg	10	1	<0.010	87	1	70 - 130	20
Toluene	0.881	0.891	mg/Kg	10	1	<0.010	88	1	70 - 130	20
Ethylbenzene	0.859	0.874	mg/Kg	10	1	0.0107	84	1	70 - 130	20
M,P,O-Xylene	2.48	2.53	mg/Kg	10	3	0.0165	82	2	70 - 130	20

Percent recovery is based on the spike result. RPD is based on the spike and spike duplicate result.

Surrogate	MS Result	MSD Result	Units	Dilution	Spike Amount	MS % Rec	MSD % Rec	Recovery Limits
TFT	0.895	0.916	mg/Kg	10	1	89	91	70 - 130
4-BFB	0.843	0.885	mg/Kg	10	1	84	88	70 - 130

Matrix Spikes

QCBatch: QC21409

Param	MS Result	MSD Result	Units	Dil.	Spike Amount Added	Matrix Result	% Rec	RPD	% Rec Limit	RPD Limit
GRO	8.94	8.33	mg/Kg	10	1	<1	89	7	80 - 120	20

Percent recovery is based on the spike result. RPD is based on the spike and spike duplicate result.

Surrogate	MS Result	MSD Result	Units	Dilution	Spike Amount	MS % Rec	MSD % Rec	Recovery Limits
TFT	0.793	0.75	mg/Kg	10	0.10	79	75	70 - 130
4-BFB	0.876	0.819	mg/Kg	10	0.10	88	82	70 - 130

Matrix Spikes

QCBatch: QC21430

Param	MS Result	MSD Result	Units	Dil.	Spike Amount Added	Matrix Result	% Rec	RPD	% Rec Limit	RPD Limit
DRO	217	221	mg/Kg	1	250	<50	87	2	70 - 130	20

Percent recovery is based on the spike result. RPD is based on the spike and spike duplicate result.

Surrogate	MS Result	MSD Result	Units	Dilution	Spike Amount	MS % Rec	MSD % Rec	Recovery Limits
n-Triacontane	105	107	mg/Kg	1	150	70	71	70 - 130

Quality Control Report
Continuing Calibration Verification Standards

CCV (1)

QCBatch: QC21408

Param	Flag	Units	CCVs True Conc.	CCVs Found Conc.	CCVs Percent Recovery	Percent Recovery Limits	Date Analyzed
MTBE		mg/L	0.10	0.103	103	85 - 115	6/27/02
Benzene		mg/L	0.10	0.103	103	85 - 115	6/27/02
Toluene		mg/L	0.10	0.1	100	85 - 115	6/27/02
Ethylbenzene		mg/L	0.10	0.0979	97	85 - 115	6/27/02
M,P,O-Xylene		mg/L	0.30	0.284	94	85 - 115	6/27/02

CCV (2)

QCBatch: QC21408

Param	Flag	Units	CCVs True Conc.	CCVs Found Conc.	CCVs Percent Recovery	Percent Recovery Limits	Date Analyzed
MTBE		mg/L	0.10	0.106	106	85 - 115	6/27/02
Benzene		mg/L	0.10	0.103	103	85 - 115	6/27/02
Toluene		mg/L	0.10	0.102	102	85 - 115	6/27/02
Ethylbenzene		mg/L	0.10	0.0985	98	85 - 115	6/27/02
M,P,O-Xylene		mg/L	0.30	0.287	95	85 - 115	6/27/02

ICV (1)

QCBatch: QC21408

Param	Flag	Units	CCVs True Conc.	CCVs Found Conc.	CCVs Percent Recovery	Percent Recovery Limits	Date Analyzed
MTBE		mg/L	0.10	0.0975	97	85 - 115	6/27/02
Benzene		mg/L	0.10	0.102	102	85 - 115	6/27/02
Toluene		mg/L	0.10	0.0998	99	85 - 115	6/27/02
Ethylbenzene		mg/L	0.10	0.0974	97	85 - 115	6/27/02
M,P,O-Xylene		mg/L	0.30	0.28	93	85 - 115	6/27/02

CCV (1)

QCBatch: QC21409

Param	Flag	Units	CCVs True Conc.	CCVs Found Conc.	CCVs Percent Recovery	Percent Recovery Limits	Date Analyzed
GRO		mg/Kg	1	0.939	93	85 - 115	6/27/02

CCV (2)

QCBatch: QC21409

Param	Flag	Units	CCVs True Conc.	CCVs Found Conc.	CCVs Percent Recovery	Percent Recovery Limits	Date Analyzed
GRO		mg/Kg	1	0.909	90	85 - 115	6/27/02

ICV (1)

QCBatch: QC21409

Param	Flag	Units	CCVs True Conc.	CCVs Found Conc.	CCVs Percent Recovery	Percent Recovery Limits	Date Analyzed
GRO		mg/Kg	1	0.944	94	85 - 115	6/27/02

CCV (1)

QCBatch: QC21430

Param	Flag	Units	CCVs True Conc.	CCVs Found Conc.	CCVs Percent Recovery	Percent Recovery Limits	Date Analyzed
DRO		mg/Kg	250	231	92	75 - 125	6/27/02

ICV (1)

QCBatch: QC21430

Param	Flag	Units	CCVs True Conc.	CCVs Found Conc.	CCVs Percent Recovery	Percent Recovery Limits	Date Analyzed
DRO		mg/Kg	250	244	98	75 - 125	6/27/02

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CHAIN-OF-CUSTODY AND ANALYSIS REQUEST

LAB Order ID #: A02062724

Company Name: Enercon Services Inc.
Phone #: 915-570-8726
Address: (Street, City, Zip) 306 West Wall, Suite 1312, Midland, Tx 79701
Fax #: 915-684-7587
Contact Person: Jeffrey Kindley
Invoice to: (If different from above) Kyle Landreneau EQUIVA SERVICES
Incident # 300109
Project #: EQ-112
Project Name: Barber Ranch
Project Location: Loa County, New Mexico
Sampler Signature: Jeffrey Kindley

ANALYSIS REQUEST (Circle or Specify Method No.)

LAB # (LAB USE ONLY)	FIELD CODE	# CONTAINERS	Volume/Amount	MATRIX: WATER	SOIL	AIR	SLUDGE	PRESERVATIVE METHOD: HCL	HNO3	ICE	NONE	SAMPLING: DATE	TIME	MTBE 8021B/602	BTEX 8021B/602 *	TPH 418.1/TX1005	PAH 8270C	Total Metals Ag As Ba Cd Cr Pb Se Hg 6010B/200.7	TCLP Metals Ag As Ba Cd Cr Pb Se Hg	TCLP Volatiles	TCLP Semi Volatiles	TCLP Pesticides	RCI	GC-MS Vol. 8260B/624	GC/MS Semi. Vol. 8270C/625	PCB's 8082/608	Pesticides 8081A/608	BOD, TSS, pH	TPH (DRO/GRO) 8015M **	TPH SPLP - x so note DRO GRO		Turn Around Time if different from standard	Hold
200240	S-5 (8-10')	1	4oz		✓						✓	6/25/02	1508		✓														✓	X			
41	S-5 (30-32')	1	4oz		✓						✓	6/25/02	1540		✓														✓				
42	S-6 (8-10')	1	4oz		✓						✓	6/25/02	1615		✓														✓	X			
43	S-6 (25-27')	1	4oz		✓						✓	6/25/02	1650		✓														✓				

NO SPLP BTEX per BL 7-1
Add SPLP DRO/GRO 200240, 200242

Relinquished by:	Date:	Time:	Received by:	Date:	Time:
Jeffrey Kindley	June 24, 2002	0900	Helen Shelton	6/26/02	0900
Helen Shelton	6/26/02	1830			
			Received at Laboratory by:	Date:	Time:
			[signature]	6-27-02	10:00

LAB USE ONLY
Intact Y / N
Headspace Y / N
Temp
Log-in Review MS

REMARKS:
Need 3-day Turnaround on TPH. Also after running TPH if any sample DRO/GRO combined is ≥ 100 ppm run TPH SPLP on that sample. For BTEX any sample with Benzene ≥ 10 ppm or Total [redacted] Ex [redacted] on [redacted]

Sub[redacted] of sa[redacted] cons[redacted] agre[redacted] to Te[redacted]nd Co[redacted]ns lis[redacted] reve[redacted]de of [redacted] 4 [redacted] HS [redacted]
Carri[redacted]

Summary Report

Kyle Landreneau
Equiva Kyle Landreneau
PMB 284 40 FM 1960 West
Houston, TX 77090

Report Date: July 16, 2002

Order ID Number: A02062825

Project: EQ-112
TA Job Code: Barber Ranch 3000109
Casualty Code: EQ-112
Project Location: Barber Lea County, New Mexico
Project Address:
Enercon Services Inc. / Midland / Jeff Kindley

Sample	Description	Matrix	Date Taken	Time Taken	Date Received
200386	S-7 (3-5')	Soil	6/26/02	9:15	6/28/02
200387	S-7 (25-27')	Soil	6/26/02	10:05	6/28/02

0 This report consists of a total of 1 page(s) and is intended only as a summary of results for the sample(s) listed above.

Sample: 200386 - S-7 (3-5')

Param	Flag	Result	Units
SPLP DRO		<5.00	mg/L
SPLP GRO		0.751	mg/L

Sample: 200387 - S-7 (25-27')

Param	Flag	Result	Units
SPLP DRO		<5.00	mg/L
SPLP GRO		<0.1	mg/L

This is only a summary. Please, refer to the complete report package for quality control data.

Summary Report

Kyle Landreneau
Equiva Kyle Landreneau
PMB 284 40 FM 1960 West
Houston, TX 77090

Report Date: July 8, 2002

Order ID Number: A02062825

Project: EQ-112
TA Job Code: Barber Ranch 3000109
Casualty Code: EQ-112
Project Location: Barber Lea County, New Mexico
Project Address:
Enercon Services Inc. / Midland / Jeff Kindley

Sample	Description	Matrix	Date Taken	Time Taken	Date Received
200386	S-7 (3-5')	Soil	6/26/02	9:15	6/28/02
200387	S-7 (25-27')	Soil	6/26/02	10:05	6/28/02
200388	S-8 (13-15')	Soil	6/26/02	11:10	6/28/02
200389	S-8 (30-32')	Soil	6/26/02	12:10	6/28/02

0 This report consists of a total of 1 page(s) and is intended only as a summary of results for the sample(s) listed above.

	BTEX					TPH DRO	TPH GRO
Sample - Field Code	Benzene (ppm)	Toluene (ppm)	Ethylbenzene (ppm)	M,P,O-Xylene (ppm)	Total BTEX (ppm)	DRO (ppm)	GRO (ppm)
200386 - S-7 (3-5')	1.30	<0.050	2.58	2.79	6.67	1870	502
200387 - S-7 (25-27')	0.0114	<0.01	0.0328	0.0744	0.119	92.7	10.8
200388 - S-8 (13-15')	<0.020	0.125	<0.020	0.0584	0.183	<50.0	<2.00
200389 - S-8 (30-32')	<0.010	<0.010	<0.010	<0.010	<0.010	<50.0	<1.00

This is only a summary. Please, refer to the complete report package for quality control data.

TRACEANALYSIS, INC.

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E-Mail: lab@traceanalysis.com

Analytical and Quality Control Report

Kyle Landreneau
Equiva Kyle Landreneau
PMB 284 40 FM 1960 West
Houston, TX 77090

Report Date: July 16, 2002

Order ID Number: A02062825

Project: EQ-112
TA Job Code: Barber Ranch 3000109
Casualty Code: EQ-112
Project Location: Barber Lea County, New Mexico
Enercon Services Inc. / Midland / Jeff Kindley

Enclosed are the Analytical Results and Quality Control Data Reports for the following samples submitted to Trace-Analysis, Inc.

Sample	Description	Matrix	Date Taken	Time Taken	Date Received
200386	S-7 (3-5')	Soil	6/26/02	9:15	6/28/02
200387	S-7 (25-27')	Soil	6/26/02	10:05	6/28/02

These results represent only the samples received in the laboratory. The Quality Control Report is generated on a batch basis. All information contained in this report is for the analytical batch(es) in which your sample(s) were analyzed. Note: the RDL is equal to MQL for all organic analytes including TPH.
The test results contained within this report meet all requirements of LAC 33:I unless otherwise noted.

This report consists of a total of 4 pages and shall not be reproduced except in its entirety including the chain of custody (COC), without written approval of TraceAnalysis, Inc.

Dr. Blair Leftwich, Director

Analytical Report

Sample: 200386 - S-7 (3-5')

Analysis:	SPLP DRO	Analytical Method:	Mod. 8015B	QC Batch:	QC21864	Date Analyzed:	7/14/02
Analyst:	MM	Preparation Method:	1312	Prep Batch:	PB20694	Date Prepared:	7/10/02

Param	Flag	Result	Units	Dilution	RDL
SPLP DRO		<5.00	mg/L	0.10	50

Sample: 200386 - S-7 (3-5')

Analysis:	SPLP GRO	Analytical Method:	8015	QC Batch:	QC21772	Date Analyzed:	7/10/02
Analyst:	CG	Preparation Method:	1312	Prep Batch:	PB20626	Date Prepared:	7/10/02

Param	Flag	Result	Units	Dilution	RDL
SPLP GRO		0.751	mg/L	1	0.10

Sample: 200387 - S-7 (25-27')

Analysis:	SPLP DRO	Analytical Method:	Mod. 8015B	QC Batch:	QC21864	Date Analyzed:	7/14/02
Analyst:	MM	Preparation Method:	1312	Prep Batch:	PB20694	Date Prepared:	7/10/02

Param	Flag	Result	Units	Dilution	RDL
SPLP DRO		<5.00	mg/L	0.10	50

Sample: 200387 - S-7 (25-27')

Analysis:	SPLP GRO	Analytical Method:	8015	QC Batch:	QC21772	Date Analyzed:	7/10/02
Analyst:	CG	Preparation Method:	1312	Prep Batch:	PB20626	Date Prepared:	7/10/02

Param	Flag	Result	Units	Dilution	RDL
SPLP GRO		<0.1	mg/L	1	0.10

Quality Control Report
Method Blank

Method Blank

QCBatch: QC21772

Param	Flag	Results	Units	Reporting Limit
SPLP GRO		<0.1	mg/L	0.10

Method Blank

QCBatch: QC21864

Param	Flag	Results	Units	Reporting Limit
SPLP DRO		<5.00	mg/L	50

Quality Control Report
Lab Control Spikes and Duplicate Spikes

Laboratory Control Spikes

QCBatch: QC21772

Param	LCS Result	LCSD Result	Units	Dil.	Spike Amount Added	Matrix Result	% Rec	RPD	% Rec Limit	RPD Limit
SPLP GRO	0.912	0.886	mg/L	1	1	<0.1	91	2	70 - 130	20

Percent recovery is based on the spike result. RPD is based on the spike and spike duplicate result.

Laboratory Control Spikes

QCBatch: QC21864

Param	LCS Result	LCSD Result	Units	Dil.	Spike Amount Added	Matrix Result	% Rec	RPD	% Rec Limit	RPD Limit
SPLP DRO	28	26.2	mg/L	0.10	250	<5.00	112	6	70 - 130	20

Percent recovery is based on the spike result. RPD is based on the spike and spike duplicate result.

Quality Control Report
Continuing Calibration Verification Standards

CCV (1)

QCBatch: QC21772

Param	Flag	Units	CCVs True Conc.	CCVs Found Conc.	CCVs Percent Recovery	Percent Recovery Limits	Date Analyzed
SPLP GRO		mg/L	1	0.852	85	85 - 115	7/10/02

ICV (1) QCBatch: QC21772

Param	Flag	Units	CCVs True Conc.	CCVs Found Conc.	CCVs Percent Recovery	Percent Recovery Limits	Date Analyzed
SPLP GRO		mg/L	1	0.901	90	85 - 115	7/10/02

CCV (1) QCBatch: QC21864

Param	Flag	Units	CCVs True Conc.	CCVs Found Conc.	CCVs Percent Recovery	Percent Recovery Limits	Date Analyzed
SPLP DRO		mg/L	250	267	106	75 - 125	7/14/02

CCV (2) QCBatch: QC21864

Param	Flag	Units	CCVs True Conc.	CCVs Found Conc.	CCVs Percent Recovery	Percent Recovery Limits	Date Analyzed
SPLP DRO		mg/L	250	265	106	75 - 125	7/14/02

ICV (1) QCBatch: QC21864

Param	Flag	Units	CCVs True Conc.	CCVs Found Conc.	CCVs Percent Recovery	Percent Recovery Limits	Date Analyzed
SPLP DRO		mg/L	250	279	111	75 - 125	7/14/02

TRACEANALYSIS, INC.

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Analytical and Quality Control Report

Kyle Landreneau
Equiva Kyle Landreneau
PMB 284 40 FM 1960 West
Houston, TX 77090

Report Date: July 8, 2002

Order ID Number: A02062825

Project: EQ-112
TA Job Code: Barber Ranch 3000109
Casualty Code: EQ-112
Project Location: Barber Lea County, New Mexico
Enercon Services Inc. / Midland / Jeff Kindley

Enclosed are the Analytical Results and Quality Control Data Reports for the following samples submitted to Trace-Analysis, Inc.

Sample	Description	Matrix	Date Taken	Time Taken	Date Received
200386	S-7 (3-5')	Soil	6/26/02	9:15	6/28/02
200387	S-7 (25-27')	Soil	6/26/02	10:05	6/28/02
200388	S-8 (13-15')	Soil	6/26/02	11:10	6/28/02
200389	S-8 (30-32')	Soil	6/26/02	12:10	6/28/02

These results represent only the samples received in the laboratory. The Quality Control Report is generated on a batch basis. All information contained in this report is for the analytical batch(es) in which your sample(s) were analyzed. Note: the RDL is equal to MQL for all organic analytes including TPH.
The test results contained within this report meet all requirements of LAC 33:I unless otherwise noted.

This report consists of a total of 10 pages and shall not be reproduced except in its entirety including the chain of custody (COC), without written approval of TraceAnalysis, Inc.

Dr. Blair Leftwich, Director

Analytical Report

Sample: 200386 - S-7 (3-5')

Analysis:	BTEX	Analytical Method:	S 8021B	QC Batch:	QC21507	Date Analyzed:	7/1/02
Analyst:	DN	Preparation Method:	S 5035	Prep Batch:	PB20408	Date Prepared:	7/1/02

Param	Flag	Result	Units	Dilution	RDL
Benzene		1.30	mg/Kg	50	0.001
Toluene		<0.050	mg/Kg	50	0.001
Ethylbenzene		2.58	mg/Kg	50	0.001
M,P,O-Xylene		2.79	mg/Kg	50	0.001
Total BTEX		6.67	mg/Kg	50	0.001

Surrogate	Flag	Result	Units	Dilution	Spike Amount	Percent Recovery	Recovery Limits
TFT		0.744	mg/Kg	50	1	74	70 - 130
4-BFB	[1]	8.72	mg/Kg	50	1	872	70 - 130

Sample: 200386 - S-7 (3-5')

Analysis:	TPH DRO	Analytical Method:	Mod. 8015B	QC Batch:	QC21584	Date Analyzed:	7/2/02
Analyst:	MM	Preparation Method:	3550 B	Prep Batch:	PB20480	Date Prepared:	7/1/02

Param	Flag	Result	Units	Dilution	RDL
DRO		1870	mg/Kg	5	50

Surrogate	Flag	Result	Units	Dilution	Spike Amount	Percent Recovery	Recovery Limits
n-Triacontane	[2]	232	mg/Kg	5	150	154	70 - 130

Sample: 200386 - S-7 (3-5')

Analysis:	TPH GRO	Analytical Method:	8015B	QC Batch:	QC21508	Date Analyzed:	7/1/02
Analyst:	DN	Preparation Method:	5035	Prep Batch:	PB20408	Date Prepared:	7/1/02

Param	Flag	Result	Units	Dilution	RDL
GRO		502	mg/Kg	50	0.10

Surrogate	Flag	Result	Units	Dilution	Spike Amount	Percent Recovery	Recovery Limits
TFT	[3]	0.422	mg/Kg	50	0.10	42	70 - 130
4-BFB	[4]	20.8	mg/Kg	50	0.10	2080	70 - 130

[1] High surrogate recovery due to peak interference.
[2] Poor surrogate recovery due to dilution. LCS and LCSD show the process is in control.
[3] Low surrogate recovery due to matrix interfernce. ICV, CCV, CCV show the method to be in control.
[4] High surrogate recovery due to peak interference.

Sample: 200387 - S-7 (25-27')

Analysis:	BTEX	Analytical Method:	S 8021B	QC Batch:	QC21507	Date Analyzed:	7/1/02
Analyst:	DN	Preparation Method:	S 5035	Prep Batch:	PB20408	Date Prepared:	7/1/02

Param	Flag	Result	Units	Dilution	RDL
Benzene		0.0114	mg/Kg	10	0.001
Toluene		<0.01	mg/Kg	10	0.001
Ethylbenzene		0.0328	mg/Kg	10	0.001
M,P,O-Xylene		0.0744	mg/Kg	10	0.001
Total BTEX		0.119	mg/Kg	10	0.001

Surrogate	Flag	Result	Units	Dilution	Spike Amount	Percent Recovery	Recovery Limits
TFT		0.881	mg/Kg	10	1	89	70 - 130
4-BFB		0.903	mg/Kg	10	1	90	70 - 130

Sample: 200387 - S-7 (25-27')

Analysis:	TPH DRO	Analytical Method:	Mod. 8015B	QC Batch:	QC21584	Date Analyzed:	7/2/02
Analyst:	MM	Preparation Method:	3550 B	Prep Batch:	PB20480	Date Prepared:	7/1/02

Param	Flag	Result	Units	Dilution	RDL
DRO		92.7	mg/Kg	1	50

Surrogate	Flag	Result	Units	Dilution	Spike Amount	Percent Recovery	Recovery Limits
n-Triacontane		106	mg/Kg	1	150	71	70 - 130

Sample: 200387 - S-7 (25-27')

Analysis:	TPH GRO	Analytical Method:	8015B	QC Batch:	QC21508	Date Analyzed:	7/1/02
Analyst:	DN	Preparation Method:	5035	Prep Batch:	PB20408	Date Prepared:	7/1/02

Param	Flag	Result	Units	Dilution	RDL
GRO		10.8	mg/Kg	10	0.10

Surrogate	Flag	Result	Units	Dilution	Spike Amount	Percent Recovery	Recovery Limits
TFT		0.798	mg/Kg	10	0.10	80	70 - 130
4-BFB	[5]	1.35	mg/Kg	10	0.10	135	70 - 130

Sample: 200388 - S-8 (13-15')

Analysis:	BTEX	Analytical Method:	S 8021B	QC Batch:	QC21507	Date Analyzed:	7/1/02
Analyst:	DN	Preparation Method:	S 5035	Prep Batch:	PB20408	Date Prepared:	7/1/02

[5] High surrogate recovery due to peak interference.

Param	Flag	Result	Units	Dilution	RDL
Benzene		<0.020	mg/Kg	20	0.001
Toluene		0.125	mg/Kg	20	0.001
Ethylbenzene		<0.020	mg/Kg	20	0.001
M,P,O-Xylene		0.0584	mg/Kg	20	0.001
Total BTEX		0.183	mg/Kg	20	0.001
Test Comments	[6]	*	mg/Kg	1	

Surrogate	Flag	Result	Units	Dilution	Spike Amount	Percent Recovery	Recovery Limits
TFT	[7]	0.689	mg/Kg	20	1	68	70 - 130
4-BFB	[8]	0.643	mg/Kg	20	1	64	70 - 130

Sample: 200388 - S-8 (13-15')

Analysis: TPH DRO Analytical Method: Mod. 8015B QC Batch: QC21584 Date Analyzed: 7/2/02
Analyst: MM Preparation Method: 3550 B Prep Batch: PB20480 Date Prepared: 7/1/02

Param	Flag	Result	Units	Dilution	RDL
DRO		<50.0	mg/Kg	1	50

Surrogate	Flag	Result	Units	Dilution	Spike Amount	Percent Recovery	Recovery Limits
n-Triacontane		109	mg/Kg	1	150	73	70 - 130

Sample: 200388 - S-8 (13-15')

Analysis: TPH GRO Analytical Method: 8015B QC Batch: QC21508 Date Analyzed: 7/1/02
Analyst: DN Preparation Method: 5035 Prep Batch: PB20408 Date Prepared: 7/1/02

Param	Flag	Result	Units	Dilution	RDL
GRO		<2.00	mg/Kg	20	0.10

Surrogate	Flag	Result	Units	Dilution	Spike Amount	Percent Recovery	Recovery Limits
TFT		0.717	mg/Kg	20	0.10	72	70 - 130
4-BFB	[9]	0.592	mg/Kg	20	0.10	59	70 - 130

Sample: 200389 - S-8 (30-32')

Analysis: BTEX Analytical Method: S 8021B QC Batch: QC21507 Date Analyzed: 7/1/02
Analyst: DN Preparation Method: S 5035 Prep Batch: PB20408 Date Prepared: 7/1/02

Param	Flag	Result	Units	Dilution	RDL
Benzene		<0.010	mg/Kg	10	0.001

Continued ...

[6]Sample ran at a dilution due to hydrocarbons beyond xylene. Sample has a benzene concentration of less than 0.00473 which is the MDL.
[7]Low surrogate recovery due to matrix interference. ICV, CCV, CCV show the method to be in control.
[8]Low surrogate recovery due to matrix interference. ICV, CCV, CCV show the method to be in control.
[9]Low BFB surrogate recovery due to matrix interference. TFT surrogate recovery shows the method to be in control.

... *Continued* Sample: 200389 Analysis: BTEX

Param	Flag	Result	Units	Dilution	RDL
Toluene		<0.010	mg/Kg	10	0.001
Ethylbenzene		<0.010	mg/Kg	10	0.001
M,P,O-Xylene		<0.010	mg/Kg	10	0.001
Total BTEX		<0.010	mg/Kg	10	0.001

Surrogate	Flag	Result	Units	Dilution	Spike Amount	Percent Recovery	Recovery Limits
TFT		0.753	mg/Kg	10	1	75	70 - 130
4-BFB	[10]	0.676	mg/Kg	10	1	67	70 - 130

Sample: 200389 - S-8 (30-32')

Analysis:	TPH DRO	Analytical Method:	Mod. 8015B	QC Batch:	QC21584	Date Analyzed:	7/2/02
Analyst:	MM	Preparation Method:	3550 B	Prep Batch:	PB20480	Date Prepared:	7/1/02

Param	Flag	Result	Units	Dilution	RDL
DRO		<50.0	mg/Kg	1	50

Surrogate	Flag	Result	Units	Dilution	Spike Amount	Percent Recovery	Recovery Limits
n-Triacontane		114	mg/Kg	1	150	76	70 - 130

Sample: 200389 - S-8 (30-32')

Analysis:	TPH GRO	Analytical Method:	8015B	QC Batch:	QC21508	Date Analyzed:	7/1/02
Analyst:	DN	Preparation Method:	5035	Prep Batch:	PB20408	Date Prepared:	7/1/02

Param	Flag	Result	Units	Dilution	RDL
GRO		<1.00	mg/Kg	10	0.10

Surrogate	Flag	Result	Units	Dilution	Spike Amount	Percent Recovery	Recovery Limits
TFT		1.03	mg/Kg	10	0.10	103	70 - 130
4-BFB	[11]	0.630	mg/Kg	10	0.10	63	70 - 130

[10]Low BFB surrogate recovery due to matrix interference. TFT surrogate recovery shows the method to be in control.
[11]Low BFB surrogate recovery due to matrix interference. TFT surrogate recovery shows the method to be in control.

Quality Control Report
Method Blank

Method Blank

QCBatch: QC21507

Param	Flag	Results	Units	Reporting Limit
Benzene		<0.010	mg/Kg	0.001
Toluene		<0.010	mg/Kg	0.001
Ethylbenzene		<0.010	mg/Kg	0.001
M,P,O-Xylene		<0.010	mg/Kg	0.001
Total BTEX		< 0.01	mg/Kg	0.001

Surrogate	Flag	Result	Units	Dilution	Spike Amount	Percent Recovery	Recovery Limits
TFT		1.06	mg/Kg	10	1	106	70 - 130
4-BFB		0.959	mg/Kg	10	1	96	70 - 130

Method Blank

QCBatch: QC21508

Param	Flag	Results	Units	Reporting Limit
GRO		<1	mg/Kg	0.10

Surrogate	Flag	Result	Units	Dilution	Spike Amount	Percent Recovery	Recovery Limits
TFT		1.03	mg/Kg	10	0.10	103	70 - 130
4-BFB		0.901	mg/Kg	10	0.10	90	70 - 130

Method Blank

QCBatch: QC21584

Param	Flag	Results	Units	Reporting Limit
DRO		<50.0	mg/Kg	50

Surrogate	Flag	Result	Units	Dilution	Spike Amount	Percent Recovery	Recovery Limits
n-Triacontane		112	mg/Kg	1	150	80	70 - 130

Quality Control Report
Lab Control Spikes and Duplicate Spikes

Laboratory Control Spikes

QCBatch: QC21507

Param	LCS Result	LCSD Result	Units	Dil.	Spike Amount Added	Matrix Result	% Rec	RPD	% Rec Limit	RPD Limit
MTBE	1.06	1.04	mg/Kg	10	1	<0.010	106	2	70 - 130	20
Benzene	1.03	1.03	mg/Kg	10	1	<0.010	103	0	70 - 130	20
Toluene	1.01	1.01	mg/Kg	10	1	<0.010	101	0	70 - 130	20
Ethylbenzene	0.998	0.997	mg/Kg	10	1	<0.010	100	0	70 - 130	20
M,P,O-Xylene	2.91	2.92	mg/Kg	10	3	<0.010	97	0	70 - 130	20

Percent recovery is based on the spike result. RPD is based on the spike and spike duplicate result.

Surrogate	LCS Result	LCSD Result	Units	Dilution	Spike Amount	LCS % Rec	LCSD % Rec	Recovery Limits
TFT	1.02	1.03	mg/Kg	10	1	102	103	70 - 130
4-BFB	0.975	0.983	mg/Kg	10	1	98	98	70 - 130

Laboratory Control Spikes

QCBatch: QC21508

Param	LCS Result	LCSD Result	Units	Dil.	Spike Amount Added	Matrix Result	% Rec	RPD	% Rec Limit	RPD Limit
GRO	9.67	9.54	mg/Kg	10	1	<1	97	1	80 - 120	20

Percent recovery is based on the spike result. RPD is based on the spike and spike duplicate result.

Surrogate	LCS Result	LCSD Result	Units	Dilution	Spike Amount	LCS % Rec	LCSD % Rec	Recovery Limits
TFT	0.909	0.89	mg/Kg	10	0.10	91	89	70 - 130
4-BFB	0.958	0.935	mg/Kg	10	0.10	96	94	70 - 130

Laboratory Control Spikes

QCBatch: QC21584

Param	LCS Result	LCSD Result	Units	Dil.	Spike Amount Added	Matrix Result	% Rec	RPD	% Rec Limit	RPD Limit
DRO	238	225	mg/Kg	1	250	<50.0	95	6	70 - 130	20

Percent recovery is based on the spike result. RPD is based on the spike and spike duplicate result.

Surrogate	LCS Result	LCSD Result	Units	Dilution	Spike Amount	LCS % Rec	LCSD % Rec	Recovery Limits
n-Triacontane	117	105	mg/Kg	1	150	78	70	70 - 130

Quality Control Report
Matrix Spikes and Duplicate Spikes

Matrix Spikes

QCBatch: QC21507

Param	MS Result	MSD Result	Units	Dil.	Spike Amount Added	Matrix Result	% Rec	RPD	% Rec Limit	RPD Limit
Benzene	1.06	0.971	mg/Kg	10	1	<0.010	106	8	70 - 130	20
Toluene	1.01	0.95	mg/Kg	10	1	<0.010	101	6	70 - 130	20
Ethylbenzene	0.95	0.861	mg/Kg	10	1	<0.010	95	9	70 - 130	20
M,P,O-Xylene	2.7	2.42	mg/Kg	10	3	0.0135	89	10	70 - 130	20

Percent recovery is based on the spike result. RPD is based on the spike and spike duplicate result.

Surrogate	MS Result	MSD Result	Units	Dilution	Spike Amount	MS % Rec	MSD % Rec	Recovery Limits
TFT	1.08	1.06	mg/Kg	10	1	108	106	70 - 130
4-BFB	0.916	0.839	mg/Kg	10	1	91	83	70 - 130

Matrix Spikes

QCBatch: QC21508

Param	MS Result	MSD Result	Units	Dil.	Spike Amount Added	Matrix Result	% Rec	RPD	% Rec Limit	RPD Limit
GRO	9.3	8.5	mg/Kg	10	1	3	93	13	80 - 120	20

Percent recovery is based on the spike result. RPD is based on the spike and spike duplicate result.

Surrogate	MS Result	MSD Result	Units	Dilution	Spike Amount	MS % Rec	MSD % Rec	Recovery Limits
TFT	0.945	0.877	mg/Kg	10	0.10	95	88	70 - 130
4-BFB	0.732	0.721	mg/Kg	10	0.10	73	72	70 - 130

Matrix Spikes

QCBatch: QC21584

Param	MS Result	MSD Result	Units	Dil.	Spike Amount Added	Matrix Result	% Rec	RPD	% Rec Limit	RPD Limit
DRO	227	208	mg/Kg	1	250	<50.0	91	9	70 - 130	20

Percent recovery is based on the spike result. RPD is based on the spike and spike duplicate result.

Surrogate	MS Result	MSD Result	Units	Dilution	Spike Amount	MS % Rec	MSD % Rec	Recovery Limits
n-Triacontane	119	101	mg/Kg	1	150	79	67	70 - 130

Quality Control Report
Continuing Calibration Verification Standards

CCV (1)

QCBatch: QC21507

Param	Flag	Units	CCVs True Conc.	CCVs Found Conc.	CCVs Percent Recovery	Percent Recovery Limits	Date Analyzed
MTBE		mg/L	0.10	0.101	101	85 - 115	7/1/02
Benzene		mg/L	0.10	0.101	101	85 - 115	7/1/02
Toluene		mg/L	0.10	0.101	101	85 - 115	7/1/02
Ethylbenzene		mg/L	0.10	0.1	100	85 - 115	7/1/02
M,P,O-Xylene		mg/L	0.30	0.291	97	85 - 115	7/1/02

CCV (2)

QCBatch: QC21507

Param	Flag	Units	CCVs True Conc.	CCVs Found Conc.	CCVs Percent Recovery	Percent Recovery Limits	Date Analyzed
MTBE		mg/L	0.10	0.103	103	85 - 115	7/1/02
Benzene		mg/L	0.10	0.103	103	85 - 115	7/1/02
Toluene		mg/L	0.10	0.101	101	85 - 115	7/1/02
Ethylbenzene		mg/L	0.10	0.0987	98	85 - 115	7/1/02
M,P,O-Xylene		mg/L	0.30	0.287	95	85 - 115	7/1/02

ICV (1)

QCBatch: QC21507

Param	Flag	Units	CCVs True Conc.	CCVs Found Conc.	CCVs Percent Recovery	Percent Recovery Limits	Date Analyzed
MTBE		mg/L	0.10	0.107	107	85 - 115	7/1/02
Benzene		mg/L	0.10	0.105	105	85 - 115	7/1/02
Toluene		mg/L	0.10	0.103	103	85 - 115	7/1/02
Ethylbenzene		mg/L	0.10	0.101	101	85 - 115	7/1/02
M,P,O-Xylene		mg/L	0.30	0.295	98	85 - 115	7/1/02

CCV (1)

QCBatch: QC21508

Param	Flag	Units	CCVs True Conc.	CCVs Found Conc.	CCVs Percent Recovery	Percent Recovery Limits	Date Analyzed
GRO		mg/Kg	1	0.9522	95	85 - 115	7/1/02

CCV (2)

QCBatch: QC21508

Param	Flag	Units	CCVs True Conc.	CCVs Found Conc.	CCVs Percent Recovery	Percent Recovery Limits	Date Analyzed
GRO		mg/Kg	1	0.961	96	85 - 115	7/1/02

ICV (1)

QCBatch: QC21508

Param	Flag	Units	CCVs True Conc.	CCVs Found Conc.	CCVs Percent Recovery	Percent Recovery Limits	Date Analyzed
GRO		mg/Kg	1	0.9468	94	85 - 115	7/1/02

CCV (1)

QCBatch: QC21584

Param	Flag	Units	CCVs True Conc.	CCVs Found Conc.	CCVs Percent Recovery	Percent Recovery Limits	Date Analyzed
DRO		mg/Kg	250	237	95	75 - 125	7/2/02

ICV (1)

QCBatch: QC21584

Param	Flag	Units	CCVs True Conc.	CCVs Found Conc.	CCVs Percent Recovery	Percent Recovery Limits	Date Analyzed
DRO		mg/Kg	250	221	88	75 - 125	7/2/02

TraceAnalysis, Inc.

6701 Aberdeen Avenue, Ste. 9 Lubbock, Texas 79424
Tel (806) 794 1296 Fax (806) 794 1298
1 (800) 378 1296

CHAIN-OF-CUSTODY RECORD AND ANALYSIS REQUEST

LAB Order ID # A02062825

Company Name: Enercon Services Inc
Phone #: 915-570-8726
Address: 306 West Wall, Suite 1312, Midland, Tx 79701
Fax #: 915-684-7587
Contact Person: Jeffrey Kindley
Invoice to: (If different from above) Kyle Landsnow, Equiva Services
Project #: EQ-112
Project Name: Barber Ranch
Project Location: Lea County, New Mexico
Sampler Signature: Jeffy Kindley

ANALYSIS REQUEST
(Circle or Specify Method No.)

LAB # (LAB USE ONLY)	FIELD CODE	# CONTAINERS	Volume/Amount	MATRIX: WATER	MATRIX: SOIL	MATRIX: AIR	MATRIX: SLUDGE		PRESERVATIVE METHOD: HCL	PRESERVATIVE METHOD: HNO3	PRESERVATIVE METHOD: ICE	PRESERVATIVE METHOD: NONE		SAMPLING: DATE	SAMPLING: TIME	MTBE 8020/602	BTEX 8020/602 *	TPH	PAH 8270	Total Metals Ag As Ba Cd Cr Pb Hg Se	TCLP Metals Ag As Ba Cd Cr Pb Hg Se	TCLP Volatiles	TCLP Semi Volatiles	RCI	GC.MS Vol. 8240/8260/624	GC/MS Semi. Vol. 8270/625	PCB's 8080/608	Pest. 8080/608	BOD, TSS, PH	TPH (DRO/GRO) 8015M **	SPLP TPH *** GRO DRO			Turn Around Time if different from standard	Hold
200385	MW-15	1	Liter	✓								✓		6/26/02	0740				✓																
86	S-7 (3-5')	1	4oz		✓							✓		6/26/02	0915		✓													✓	X				
87	S-7 (25-27')	1	4oz		✓							✓		6/26/02	1005		✓													✓	X				
88	S-8 (13-15')	1	4oz		✓							✓		6/26/02	1110		✓													✓					
89	S-8 (30-32')	1	4oz		✓							✓		6/26/02	1210		✓													✓					

Relinquished by:	Date:	Time:	Received by:	Date:	Time:
Jeffrey Kindley	June 27 2002	0900	Helen Shelton	6/27/02	0900
Helen Shelton	6/27/02	1830			
			Received at Laboratory by: Nell Green	6-28-02	10:00am

LAB USE ONLY
Intact Y / N
Headspace Y / N
Temp 3°
Log-in Review MA

REMARKS:
** - Run TPH DRO/GRO in 3 Days.
*** Run SPLP TPH on any sample that has a RRO/GRO of ≥ 100 ppm. Add SPLP GRO/DRO 200386-87 per BL 7-8
*** Run SPLP on BTEX if Benzene is ≥ 10ppm and/or Total BTEX is ≥ 50ppm. NO SPLP BTEX per BL 7-2

Submittal of samples constitutes agreement to Terms and Conditions listed on reverse side of C.O.C. 5 Sampler-HS

Carrier # Greyhound GLI 163566884-8

ORIGINAL COPY

Summary Report

Kyle Landreneau
Equilon Kyle Landreneau
PMB 284 40 FM 1960 West
Houston, TX 77090

Report Date: July 16, 2002

Order ID Number: A02070111

Project: EQ-112
TA Job Code: Barber Ranch 3000109
Casualty Code: EQ-112
Project Location: Barber Lea County, New Mexico
Project Address:
Enercon Services Inc. / Midland / Jeff Kindley

Sample	Description	Matrix	Date Taken	Time Taken	Date Received
200480	S-9 (25-27)	Soil	6/27/02	10:00	6/29/02
200481	S-10 (8-10)	Soil	6/27/02	11:10	6/29/02
200482	S-10 (26-28)	Soil	6/27/02	11:40	6/29/02
200483	S-11 (8-10)	Soil	6/27/02	14:40	6/29/02
200484	S-11 (25-27)	Soil	6/27/02	15:10	6/29/02

0 This report consists of a total of 2 page(s) and is intended only as a summary of results for the sample(s) listed above.

Sample: 200480 - S-9 (25-27)

Param	Flag	Result	Units
SPLP DRO		<5.00	mg/L
SPLP GRO		<0.5	mg/L

Sample: 200481 - S-10 (8-10)

Param	Flag	Result	Units
SPLP DRO		<5.00	mg/L
SPLP GRO		<0.5	mg/L

Sample: 200482 - S-10 (26-28)

Param	Flag	Result	Units
SPLP DRO		<5.00	mg/L
SPLP GRO		0.232	mg/L

This is only a summary. Please, refer to the complete report package for quality control data.

Sample: 200483 - S-11 (8-10)

Param	Flag	Result	Units
SPLP DRO		<5.00	mg/L
SPLP GRO		<0.5	mg/L

Sample: 200484 - S-11 (25-27)

Param	Flag	Result	Units
SPLP DRO		<5.00	mg/L
SPLP GRO		<0.5	mg/L

Summary Report

Kyle Landreneau
Equilon Kyle Landreneau
PMB 284 40 FM 1960 West
Houston, TX 77090

Report Date: July 8, 2002

Order ID Number: A02070111

Project: EQ-112
TA Job Code: Barber Ranch 3000109
Casualty Code: EQ-112
Project Location: Barber Lea County, New Mexico
Project Address:
Enercon Services Inc. / Midland / Jeff Kindley

Sample	Description	Matrix	Date Taken	Time Taken	Date Received
200479	S-9 (13-15)	Soil	6/27/02	9:45	6/29/02
200480	S-9 (25-27)	Soil	6/27/02	10:00	6/29/02
200481	S-10 (8-10)	Soil	6/27/02	11:10	6/29/02
200482	S-10 (26-28)	Soil	6/27/02	11:40	6/29/02
200483	S-11 (8-10)	Soil	6/27/02	14:40	6/29/02
200484	S-11 (25-27)	Soil	6/27/02	15:10	6/29/02
200485	S-12 (13-15)	Soil	6/27/02	16:15	6/29/02
200486	S-12 (30-32)	Soil	6/27/02	16:50	6/29/02

0 This report consists of a total of 1 page(s) and is intended only as a summary of results for the sample(s) listed above.

	BTEX					TPH DRO	TPH GRO
Sample - Field Code	Benzene (ppm)	Toluene (ppm)	Ethylbenzene (ppm)	M,P,O-Xylene (ppm)	Total BTEX (ppm)	DRO (ppm)	GRO (ppm)
200479 - S-9 (13-15)	<0.010	<0.010	0.0114	0.011	0.0224	<50.0	<1.00
200480 - S-9 (25-27)	<0.020	<0.020	<0.020	<0.020	<0.020	194	9.1
200481 - S-10 (8-10)	<0.050	<0.050	0.342	0.52	0.862	1550	171
200482 - S-10 (26-28)	0.170	<0.010	0.495	1.51	2.18	464	202
200483 - S-11 (8-10)	<0.020	<0.020	0.106	0.2006	0.307	789	69.6
200484 - S-11 (25-27)	<0.010	<0.010	0.0388	0.07	0.109	85.5	17
200485 - S-12 (13-15)	<0.010	<0.010	<0.010	0.0542	0.0542	<50.0	3
200486 - S-12 (30-32)	<0.010	0.0918	0.0102	0.051	0.153	<50.0	<1.00

This is only a summary. Please, refer to the complete report package for quality control data.

TRACEANALYSIS, INC.

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Analytical and Quality Control Report

Kyle Landreneau
Equilon Kyle Landreneau
PMB 284 40 FM 1960 West
Houston, TX 77090

Report Date: July 16, 2002

Order ID Number: A02070111

Project: EQ-112
TA Job Code: Barber Ranch 3000109
Casualty Code: EQ-112
Project Location: Barber Lea County, New Mexico
Enercon Services Inc. / Midland / Jeff Kindley

Enclosed are the Analytical Results and Quality Control Data Reports for the following samples submitted to Trace-Analysis, Inc.

Sample	Description	Matrix	Date Taken	Time Taken	Date Received
200480	S-9 (25-27)	Soil	6/27/02	10:00	6/29/02
200481	S-10 (8-10)	Soil	6/27/02	11:10	6/29/02
200482	S-10 (26-28)	Soil	6/27/02	11:40	6/29/02
200483	S-11 (8-10)	Soil	6/27/02	14:40	6/29/02
200484	S-11 (25-27)	Soil	6/27/02	15:10	6/29/02

These results represent only the samples received in the laboratory. The Quality Control Report is generated on a batch basis. All information contained in this report is for the analytical batch(es) in which your sample(s) were analyzed. Note: the RDL is equal to MQL for all organic analytes including TPH.
The test results contained within this report meet all requirements of LAC 33:I unless otherwise noted.

This report consists of a total of 5 pages and shall not be reproduced except in its entirety including the chain of custody (COC), without written approval of TraceAnalysis, Inc.

Dr. Blair Leftwich, Director

Analytical Report

Sample: 200480 - S-9 (25-27)

Analysis:	SPLP DRO	Analytical Method:	Mod. 8015B	QC Batch:	QC21864	Date Analyzed:	7/14/02
Analyst:	MM	Preparation Method:	1312	Prep Batch:	PB20694	Date Prepared:	7/11/02

Param	Flag	Result	Units	Dilution	RDL
SPLP DRO		<5.00	mg/L	0.10	50

Sample: 200480 - S-9 (25-27)

Analysis:	SPLP GRO	Analytical Method:	8015	QC Batch:	QC21772	Date Analyzed:	7/10/02
Analyst:	CG	Preparation Method:	1312	Prep Batch:	PB20626	Date Prepared:	7/10/02

Param	Flag	Result	Units	Dilution	RDL
SPLP GRO		<0.5	mg/L	5	0.10

Sample: 200481 - S-10 (8-10)

Analysis:	SPLP DRO	Analytical Method:	Mod. 8015B	QC Batch:	QC21864	Date Analyzed:	7/14/02
Analyst:	MM	Preparation Method:	1312	Prep Batch:	PB20694	Date Prepared:	7/11/02

Param	Flag	Result	Units	Dilution	RDL
SPLP DRO		<5.00	mg/L	0.10	50

Sample: 200481 - S-10 (8-10)

Analysis:	SPLP GRO	Analytical Method:	8015	QC Batch:	QC21772	Date Analyzed:	7/10/02
Analyst:	CG	Preparation Method:	1312	Prep Batch:	PB20626	Date Prepared:	7/10/02

Param	Flag	Result	Units	Dilution	RDL
SPLP GRO		<0.5	mg/L	5	0.10

Sample: 200482 - S-10 (26-28)

Analysis:	SPLP DRO	Analytical Method:	Mod. 8015B	QC Batch:	QC21864	Date Analyzed:	7/14/02
Analyst:	MM	Preparation Method:	1312	Prep Batch:	PB20694	Date Prepared:	7/11/02

Param	Flag	Result	Units	Dilution	RDL
SPLP DRO		<5.00	mg/L	0.10	50

Sample: 200482 - S-10 (26-28)

Analysis:	SPLP GRO	Analytical Method:	8015	QC Batch:	QC21772	Date Analyzed:	7/10/02
Analyst:	CG	Preparation Method:	1312	Prep Batch:	PB20626	Date Prepared:	7/10/02

Param	Flag	Result	Units	Dilution	RDL
SPLP GRO		0.232	mg/L	1	0.10

Sample: 200483 - S-11 (8-10)

Analysis:	SPLP DRO	Analytical Method:	Mod. 8015B	QC Batch:	QC21864	Date Analyzed:	7/14/02
Analyst:	MM	Preparation Method:	1312	Prep Batch:	PB20694	Date Prepared:	7/11/02

Param	Flag	Result	Units	Dilution	RDL
SPLP DRO		<5.00	mg/L	0.10	50

Sample: 200483 - S-11 (8-10)

Analysis:	SPLP GRO	Analytical Method:	8015	QC Batch:	QC21772	Date Analyzed:	7/10/02
Analyst:	CG	Preparation Method:	1312	Prep Batch:	PB20626	Date Prepared:	7/10/02

Param	Flag	Result	Units	Dilution	RDL
SPLP GRO		<0.5	mg/L	5	0.10

Sample: 200484 - S-11 (25-27)

Analysis:	SPLP DRO	Analytical Method:	Mod. 8015B	QC Batch:	QC21864	Date Analyzed:	7/14/02
Analyst:	MM	Preparation Method:	1312	Prep Batch:	PB20694	Date Prepared:	7/11/02

Param	Flag	Result	Units	Dilution	RDL
SPLP DRO		<5.00	mg/L	0.10	50

Sample: 200484 - S-11 (25-27)

Analysis:	SPLP GRO	Analytical Method:	8015	QC Batch:	QC21772	Date Analyzed:	7/10/02
Analyst:	CG	Preparation Method:	1312	Prep Batch:	PB20626	Date Prepared:	7/10/02

Param	Flag	Result	Units	Dilution	RDL
SPLP GRO		<0.5	mg/L	5	0.10

Quality Control Report
Method Blank

Method Blank

QCBatch: QC21772

Param	Flag	Results	Units	Reporting Limit
SPLP GRO		<0.1	mg/L	0.10

Method Blank

QCBatch: QC21864

Param	Flag	Results	Units	Reporting Limit
SPLP DRO		<5.00	mg/L	50

Quality Control Report
Lab Control Spikes and Duplicate Spikes

Laboratory Control Spikes

QCBatch: QC21772

Param	LCS Result	LCSD Result	Units	Dil.	Spike Amount Added	Matrix Result	% Rec	RPD	% Rec Limit	RPD Limit
SPLP GRO	0.912	0.886	mg/L	1	1	<0.1	91	2	70 - 130	20

Percent recovery is based on the spike result. RPD is based on the spike and spike duplicate result.

Laboratory Control Spikes

QCBatch: QC21864

Param	LCS Result	LCSD Result	Units	Dil.	Spike Amount Added	Matrix Result	% Rec	RPD	% Rec Limit	RPD Limit
SPLP DRO	28	26.2	mg/L	0.10	250	<5.00	112	6	70 - 130	20

Percent recovery is based on the spike result. RPD is based on the spike and spike duplicate result.

Quality Control Report
Continuing Calibration Verification Standards

CCV (1)

QCBatch: QC21772

Param	Flag	Units	CCVs True Conc.	CCVs Found Conc.	CCVs Percent Recovery	Percent Recovery Limits	Date Analyzed
SPLP GRO		mg/L	1	0.852	85	85 - 115	7/10/02

ICV (1) QCBatch: QC21772

Param	Flag	Units	CCVs True Conc.	CCVs Found Conc.	CCVs Percent Recovery	Percent Recovery Limits	Date Analyzed
SPLP GRO		mg/L	1	0.901	90	85 - 115	7/10/02

CCV (1) QCBatch: QC21864

Param	Flag	Units	CCVs True Conc.	CCVs Found Conc.	CCVs Percent Recovery	Percent Recovery Limits	Date Analyzed
SPLP DRO		mg/L	250	267	106	75 - 125	7/14/02

CCV (2) QCBatch: QC21864

Param	Flag	Units	CCVs True Conc.	CCVs Found Conc.	CCVs Percent Recovery	Percent Recovery Limits	Date Analyzed
SPLP DRO		mg/L	250	265	106	75 - 125	7/14/02

ICV (1) QCBatch: QC21864

Param	Flag	Units	CCVs True Conc.	CCVs Found Conc.	CCVs Percent Recovery	Percent Recovery Limits	Date Analyzed
SPLP DRO		mg/L	250	279	111	75 - 125	7/14/02

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Analytical and Quality Control Report

Kyle Landreneau
Equilon Kyle Landreneau
PMB 284 40 FM 1960 West
Houston, TX 77090

Report Date: July 8, 2002

Order ID Number: A02070111

Project: EQ-112
TA Job Code: Barber Ranch 3000109
Casualty Code: EQ-112
Project Location: Barber Lea County, New Mexico
Enercon Services Inc. / Midland / Jeff Kindley

Enclosed are the Analytical Results and Quality Control Data Reports for the following samples submitted to Trace-Analysis, Inc.

Sample	Description	Matrix	Date Taken	Time Taken	Date Received
200479	S-9 (13-15)	Soil	6/27/02	9:45	6/29/02
200480	S-9 (25-27)	Soil	6/27/02	10:00	6/29/02
200481	S-10 (8-10)	Soil	6/27/02	11:10	6/29/02
200482	S-10 (26-28)	Soil	6/27/02	11:40	6/29/02
200483	S-11 (8-10)	Soil	6/27/02	14:40	6/29/02
200484	S-11 (25-27)	Soil	6/27/02	15:10	6/29/02
200485	S-12 (13-15)	Soil	6/27/02	16:15	6/29/02
200486	S-12 (30-32)	Soil	6/27/02	16:50	6/29/02

These results represent only the samples received in the laboratory. The Quality Control Report is generated on a batch basis. All information contained in this report is for the analytical batch(es) in which your sample(s) were analyzed. Note: the RDL is equal to MQL for all organic analytes including TPH.
The test results contained within this report meet all requirements of LAC 33:I unless otherwise noted.

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Dr. Blair Leftwich, Director

Analytical Report

Sample: 200479 - S-9 (13-15)

Analysis:	BTEX	Analytical Method:	S 8021B	QC Batch:	QC21507	Date Analyzed:	7/1/02
Analyst:	DN	Preparation Method:	S 5035	Prep Batch:	PB20408	Date Prepared:	7/1/02

Param	Flag	Result	Units	Dilution	RDL
Benzene		<0.010	mg/Kg	10	0.001
Toluene		<0.010	mg/Kg	10	0.001
Ethylbenzene		0.0114	mg/Kg	10	0.001
M,P,O-Xylene		0.011	mg/Kg	10	0.001
Total BTEX		0.0224	mg/Kg	10	0.001

Surrogate	Flag	Result	Units	Dilution	Spike Amount	Percent Recovery	Recovery Limits
TFT		0.822	mg/Kg	10	1	82	70 - 130
4-BFB		0.792	mg/Kg	10	1	80	70 - 130

Sample: 200479 - S-9 (13-15)

Analysis:	TPH DRO	Analytical Method:	Mod. 8015B	QC Batch:	QC21586	Date Analyzed:	7/2/02
Analyst:	MM	Preparation Method:	3550 B	Prep Batch:	PB20481	Date Prepared:	7/2/02

Param	Flag	Result	Units	Dilution	RDL
DRO		<50.0	mg/Kg	1	50

Surrogate	Flag	Result	Units	Dilution	Spike Amount	Percent Recovery	Recovery Limits
n-Triacontane		106	mg/Kg	1	150	71	70 - 130

Sample: 200479 - S-9 (13-15)

Analysis:	TPH GRO	Analytical Method:	8015B	QC Batch:	QC21508	Date Analyzed:	7/1/02
Analyst:	DN	Preparation Method:	5035	Prep Batch:	PB20408	Date Prepared:	7/1/02

Param	Flag	Result	Units	Dilution	RDL
GRO		<1.00	mg/Kg	10	0.10

Surrogate	Flag	Result	Units	Dilution	Spike Amount	Percent Recovery	Recovery Limits
TFT	[1]	0.68	mg/Kg	10	0.10	68	70 - 130
4-BFB		0.723	mg/Kg	10	0.10	72	70 - 130

[1]Low surrogate recoverydue to matrix interference. ICV, CCV, CCV show the method to be in control.

Sample: 200480 - S-9 (25-27)

Analysis:	BTEX	Analytical Method:	S 8021B	QC Batch:	QC21507	Date Analyzed:	7/1/02
Analyst:	DN	Preparation Method:	S 5035	Prep Batch:	PB20408	Date Prepared:	7/1/02

Param	Flag	Result	Units	Dilution	RDL
Benzene		<0.020	mg/Kg	20	0.001
Toluene		<0.020	mg/Kg	20	0.001
Ethylbenzene		<0.020	mg/Kg	20	0.001
M,P,O-Xylene		<0.020	mg/Kg	20	0.001
Total BTEX		<0.020	mg/Kg	20	0.001
Test Comments	[2]	*	mg/Kg	1	

Surrogate	Flag	Result	Units	Dilution	Spike Amount	Percent Recovery	Recovery Limits
TFT		0.834	mg/Kg	20	1	83	70 - 130
4-BFB		0.857	mg/Kg	20	1	86	70 - 130

Sample: 200480 - S-9 (25-27)

Analysis:	TPH DRO	Analytical Method:	Mod. 8015B	QC Batch:	QC21586	Date Analyzed:	7/2/02
Analyst:	MM	Preparation Method:	3550 B	Prep Batch:	PB20481	Date Prepared:	7/2/02

Param	Flag	Result	Units	Dilution	RDL
DRO		194	mg/Kg	1	50

Surrogate	Flag	Result	Units	Dilution	Spike Amount	Percent Recovery	Recovery Limits
n-Triacontane		121	mg/Kg	1	150	81	70 - 130

Sample: 200480 - S-9 (25-27)

Analysis:	TPH GRO	Analytical Method:	8015B	QC Batch:	QC21508	Date Analyzed:	7/1/02
Analyst:	DN	Preparation Method:	5035	Prep Batch:	PB20408	Date Prepared:	7/1/02

Param	Flag	Result	Units	Dilution	RDL
GRO		9.1	mg/Kg	20	0.10

Surrogate	Flag	Result	Units	Dilution	Spike Amount	Percent Recovery	Recovery Limits
TFT	[3]	0.63	mg/Kg	20	0.10	63	70 - 130
4-BFB		1.08	mg/Kg	20	0.10	108	70 - 130

Sample: 200481 - S-10 (8-10)

Analysis:	BTEX	Analytical Method:	S 8021B	QC Batch:	QC21507	Date Analyzed:	7/1/02
Analyst:	DN	Preparation Method:	S 5035	Prep Batch:	PB20408	Date Prepared:	7/1/02

[2]Sample diluted at a dilution due to hydrocarbons beyond xylene. Sample has a benzene concentration of less than 0.00473 which is the MDL.

[3]Low surrogate recovery due to matrix interference. ICV, CCV, CCV show the method to be in control.

Param	Flag	Result	Units	Dilution	RDL
Benzene		<0.050	mg/Kg	50	0.001
Toluene		<0.050	mg/Kg	50	0.001
Ethylbenzene		0.342	mg/Kg	50	0.001
M,P,O-Xylene		0.52	mg/Kg	50	0.001
Total BTEX		0.862	mg/Kg	50	0.001
Test Comments	[4]	*	mg/Kg	1	

Surrogate	Flag	Result	Units	Dilution	Spike Amount	Percent Recovery	Recovery Limits
TFT		0.934	mg/Kg	50	1	93	70 - 130
4-BFB	[5]	4.19	mg/Kg	50	1	419	70 - 130

Sample: 200481 - S-10 (8-10)

Analysis: TPH DRO | Analytical Method: Mod. 8015B | QC Batch: QC21586 | Date Analyzed: 7/2/02
Analyst: MM | Preparation Method: 3550 B | Prep Batch: PB20481 | Date Prepared: 7/2/02

Param	Flag	Result	Units	Dilution	RDL
DRO		1550	mg/Kg	5	50

Surrogate	Flag	Result	Units	Dilution	Spike Amount	Percent Recovery	Recovery Limits
n-Triacontane	[6]	236	mg/Kg	5	150	157	70 - 130

Sample: 200481 - S-10 (8-10)

Analysis: TPH GRO | Analytical Method: 8015B | QC Batch: QC21508 | Date Analyzed: 7/1/02
Analyst: DN | Preparation Method: 5035 | Prep Batch: PB20408 | Date Prepared: 7/1/02

Param	Flag	Result	Units	Dilution	RDL
GRO		171	mg/Kg	50	0.10

Surrogate	Flag	Result	Units	Dilution	Spike Amount	Percent Recovery	Recovery Limits
TFT		0.956	mg/Kg	50	0.10	96	70 - 130
4-BFB	[7]	8.19	mg/Kg	50	0.10	819	70 - 130

Sample: 200482 - S-10 (26-28)

Analysis: BTEX | Analytical Method: S 8021B | QC Batch: QC21507 | Date Analyzed: 7/1/02
Analyst: DN | Preparation Method: S 5035 | Prep Batch: PB20408 | Date Prepared: 7/1/02

Param	Flag	Result	Units	Dilution	RDL
Benzene		0.170	mg/Kg	10	0.001

Continued ...

[4]Sample ran at a dilution due to hydrocarbons beyond xylene. Sample has a benzene concentration of less than 0.1183 which is the MDL.
[5]High surrogate recovery due to peak interference.
[6]Poor surrogate recovery due to dilution. LCS and LCSD show the process is in control.
[7]High surrogate recovery due to peak interference.

... *Continued* Sample: 200482 Analysis: BTEX

Param	Flag	Result	Units	Dilution	RDL
Toluene		<0.010	mg/Kg	10	0.001
Ethylbenzene		0.495	mg/Kg	10	0.001
M,P,O-Xylene		1.51	mg/Kg	10	0.001
Total BTEX		2.18	mg/Kg	10	0.001

Surrogate	Flag	Result	Units	Dilution	Spike Amount	Percent Recovery	Recovery Limits
TFT		0.927	mg/Kg	10	1	93	70 - 130
4-BFB	[8]	5.04	mg/Kg	10	1	504	70 - 130

Sample: 200482 - S-10 (26-28)

Analysis:	TPH DRO	Analytical Method:	Mod. 8015B	QC Batch:	QC21586	Date Analyzed:	7/2/02
Analyst:	MM	Preparation Method:	3550 B	Prep Batch:	PB20481	Date Prepared:	7/2/02

Param	Flag	Result	Units	Dilution	RDL
DRO		464	mg/Kg	1	50

Surrogate	Flag	Result	Units	Dilution	Spike Amount	Percent Recovery	Recovery Limits
n-Triacontane		148	mg/Kg	1	150	99	70 - 130

Sample: 200482 - S-10 (26-28)

Analysis:	TPH GRO	Analytical Method:	8015B	QC Batch:	QC21508	Date Analyzed:	7/1/02
Analyst:	DN	Preparation Method:	5035	Prep Batch:	PB20408	Date Prepared:	7/1/02

Param	Flag	Result	Units	Dilution	RDL
GRO		202	mg/Kg	10	0.10

Surrogate	Flag	Result	Units	Dilution	Spike Amount	Percent Recovery	Recovery Limits
TFT	[9]	0.614	mg/Kg	10	0.10	62	70 - 130
4-BFB	[10]	21.5	mg/Kg	10	0.10	2150	70 - 130

Sample: 200483 - S-11 (8-10)

Analysis:	BTEX	Analytical Method:	S 8021B	QC Batch:	QC21507	Date Analyzed:	7/1/02
Analyst:	DN	Preparation Method:	S 5035	Prep Batch:	PB20408	Date Prepared:	7/1/02

Param	Flag	Result	Units	Dilution	RDL
Benzene		<0.020	mg/Kg	20	0.001
Toluene		<0.020	mg/Kg	20	0.001

Continued ...

[8]High surrogate recovery due to peak interference.
[9]Low surrogate recovery due to matrix interference. ICV, CCV, CCV show the method to be in control.
[10]High surrogate recovery due to peak interference.

... *Continued* Sample: 200483 Analysis: BTEX

Param	Flag	Result	Units	Dilution	RDL
Ethylbenzene		0.106	mg/Kg	20	0.001
M,P,O-Xylene		0.2006	mg/Kg	20	0.001
Total BTEX		0.307	mg/Kg	20	0.001
Test Comments	[11]	*	mg/Kg	1	

Surrogate	Flag	Result	Units	Dilution	Spike Amount	Percent Recovery	Recovery Limits
TFT		0.837	mg/Kg	20	1	84	70 - 130
4-BFB	[12]	1.97	mg/Kg	20	1	197	70 - 130

Sample: 200483 - S-11 (8-10)

Analysis: TPH DRO | Analytical Method: Mod. 8015B | QC Batch: QC21586 | Date Analyzed: 7/2/02
Analyst: MM | Preparation Method: 3550 B | Prep Batch: PB20481 | Date Prepared: 7/2/02

Param	Flag	Result	Units	Dilution	RDL
DRO		789	mg/Kg	1	50

Surrogate	Flag	Result	Units	Dilution	Spike Amount	Percent Recovery	Recovery Limits
n-Triacontane		142	mg/Kg	1	150	95	70 - 130

Sample: 200483 - S-11 (8-10)

Analysis: TPH GRO | Analytical Method: 8015B | QC Batch: QC21508 | Date Analyzed: 7/1/02
Analyst: DN | Preparation Method: 5035 | Prep Batch: PB20408 | Date Prepared: 7/1/02

Param	Flag	Result	Units	Dilution	RDL
GRO		69.6	mg/Kg	20	0.10

Surrogate	Flag	Result	Units	Dilution	Spike Amount	Percent Recovery	Recovery Limits
TFT		0.996	mg/Kg	20	0.10	100	70 - 130
4-BFB	[13]	3.60	mg/Kg	20	0.10	360	70 - 130

Sample: 200484 - S-11 (25-27)

Analysis: BTEX | Analytical Method: S 8021B | QC Batch: QC21507 | Date Analyzed: 7/1/02
Analyst: DN | Preparation Method: S 5035 | Prep Batch: PB20408 | Date Prepared: 7/1/02

Param	Flag	Result	Units	Dilution	RDL
Benzene		<0.010	mg/Kg	10	0.001
Toluene		<0.010	mg/Kg	10	0.001

Continued ...

[11] Sample ran at a dilution due to hydrocarbons beyond xylene. Sample has a benzene concentration of less than 0.00473 which is the MDL.
[12] High surrogate recovery due to peak interfernce.
[13] High surrogate recovery due to peak interference.

... *Continued* Sample: 200484 Analysis: BTEX

Param	Flag	Result	Units	Dilution	RDL
Ethylbenzene		0.0388	mg/Kg	10	0.001
M,P,O-Xylene		0.07	mg/Kg	10	0.001
Total BTEX		0.109	mg/Kg	10	0.001

Surrogate	Flag	Result	Units	Dilution	Spike Amount	Percent Recovery	Recovery Limits
TFT		0.869	mg/Kg	10	1	87	70 - 130
4-BFB		1.10	mg/Kg	10	1	110	70 - 130

Sample: 200484 - S-11 (25-27)

Analysis: TPH DRO Analytical Method: Mod. 8015B QC Batch: QC21586 Date Analyzed: 7/2/02
Analyst: MM Preparation Method: 3550 B Prep Batch: PB20481 Date Prepared: 7/2/02

Param	Flag	Result	Units	Dilution	RDL
DRO		85.5	mg/Kg	1	50

Surrogate	Flag	Result	Units	Dilution	Spike Amount	Percent Recovery	Recovery Limits
n-Triacontane		105	mg/Kg	1	150	70	70 - 130

Sample: 200484 - S-11 (25-27)

Analysis: TPH GRO Analytical Method: 8015B QC Batch: QC21508 Date Analyzed: 7/1/02
Analyst: DN Preparation Method: 5035 Prep Batch: PB20408 Date Prepared: 7/1/02

Param	Flag	Result	Units	Dilution	RDL
GRO		17	mg/Kg	10	0.10

Surrogate	Flag	Result	Units	Dilution	Spike Amount	Percent Recovery	Recovery Limits
TFT		0.883	mg/Kg	10	0.10	88	70 - 130
4-BFB	[14]	1.50	mg/Kg	10	0.10	150	70 - 130

Sample: 200485 - S-12 (13-15)

Analysis: BTEX Analytical Method: S 8021B QC Batch: QC21507 Date Analyzed: 7/1/02
Analyst: DN Preparation Method: S 5035 Prep Batch: PB20408 Date Prepared: 7/1/02

Param	Flag	Result	Units	Dilution	RDL
Benzene		<0.010	mg/Kg	10	0.001
Toluene		<0.010	mg/Kg	10	0.001
Ethylbenzene		<0.010	mg/Kg	10	0.001
M,P,O-Xylene		0.0542	mg/Kg	10	0.001
Total BTEX		0.0542	mg/Kg	10	0.001

[14]High surrogate recovery due to peak interference.

Surrogate	Flag	Result	Units	Dilution	Spike Amount	Percent Recovery	Recovery Limits
TFT		0.911	mg/Kg	10	1	91	70 - 130
4-BFB		0.767	mg/Kg	10	1	76	70 - 130

Sample: 200485 - S-12 (13-15)

Analysis:	TPH DRO	Analytical Method:	Mod. 8015B	QC Batch:	QC21586	Date Analyzed:	7/2/02
Analyst:	MM	Preparation Method:	3550 B	Prep Batch:	PB20481	Date Prepared:	7/2/02

Param	Flag	Result	Units	Dilution	RDL
DRO		<50.0	mg/Kg	1	50

Surrogate	Flag	Result	Units	Dilution	Spike Amount	Percent Recovery	Recovery Limits
n-Triacontane		108	mg/Kg	1	150	72	70 - 130

Sample: 200485 - S-12 (13-15)

Analysis:	TPH GRO	Analytical Method:	8015B	QC Batch:	QC21508	Date Analyzed:	7/1/02
Analyst:	DN	Preparation Method:	5035	Prep Batch:	PB20408	Date Prepared:	7/1/02

Param	Flag	Result	Units	Dilution	RDL
GRO		3	mg/Kg	10	0.10

Surrogate	Flag	Result	Units	Dilution	Spike Amount	Percent Recovery	Recovery Limits
TFT		1.18	mg/Kg	10	0.10	118	70 - 130
4-BFB		0.833	mg/Kg	10	0.10	83	70 - 130

Sample: 200486 - S-12 (30-32)

Analysis:	BTEX	Analytical Method:	S 8021B	QC Batch:	QC21507	Date Analyzed:	7/1/02
Analyst:	DN	Preparation Method:	S 5035	Prep Batch:	PB20408	Date Prepared:	7/1/02

Param	Flag	Result	Units	Dilution	RDL
Benzene		<0.010	mg/Kg	10	0.001
Toluene		0.0918	mg/Kg	10	0.001
Ethylbenzene		0.0102	mg/Kg	10	0.001
M,P,O-Xylene		0.051	mg/Kg	10	0.001
Total BTEX		0.153	mg/Kg	10	0.001

Surrogate	Flag	Result	Units	Dilution	Spike Amount	Percent Recovery	Recovery Limits
TFT		0.990	mg/Kg	10	1	99	70 - 130
4-BFB		0.846	mg/Kg	10	1	85	70 - 130

Sample: 200486 - S-12 (30-32)

Analysis:	TPH DRO	Analytical Method:	Mod. 8015B	QC Batch:	QC21586	Date Analyzed:	7/2/02
Analyst:	MM	Preparation Method:	3550 B	Prep Batch:	PB20481	Date Prepared:	7/2/02

Param	Flag	Result	Units	Dilution	RDL
DRO		<50.0	mg/Kg	1	50

Surrogate	Flag	Result	Units	Dilution	Spike Amount	Percent Recovery	Recovery Limits
n-Triacontane		107	mg/Kg	1	150	71	70 - 130

Sample: 200486 - S-12 (30-32)

Analysis:	TPH GRO	Analytical Method:	8015B	QC Batch:	QC21508	Date Analyzed:	7/1/02
Analyst:	DN	Preparation Method:	5035	Prep Batch:	PB20408	Date Prepared:	7/1/02

Param	Flag	Result	Units	Dilution	RDL
GRO		<1.00	mg/Kg	10	0.10

Surrogate	Flag	Result	Units	Dilution	Spike Amount	Percent Recovery	Recovery Limits
TFT		1.26	mg/Kg	10	0.10	126	70 - 130
4-BFB		0.785	mg/Kg	10	0.10	78	70 - 130

Quality Control Report
Method Blank

Method Blank

QCBatch: QC21507

Param	Flag	Results	Units	Reporting Limit
Benzene		<0.010	mg/Kg	0.001
Toluene		<0.010	mg/Kg	0.001
Ethylbenzene		<0.010	mg/Kg	0.001
M,P,O-Xylene		<0.010	mg/Kg	0.001
Total BTEX		< 0.01	mg/Kg	0.001

Surrogate	Flag	Result	Units	Dilution	Spike Amount	Percent Recovery	Recovery Limits
TFT		1.06	mg/Kg	10	1	106	70 - 130
4-BFB		0.959	mg/Kg	10	1	96	70 - 130

Method Blank

QCBatch: QC21508

Param	Flag	Results	Units	Reporting Limit
GRO		<1	mg/Kg	0.10

Surrogate	Flag	Result	Units	Dilution	Spike Amount	Percent Recovery	Recovery Limits
TFT		1.03	mg/Kg	10	0.10	103	70 - 130
4-BFB		0.901	mg/Kg	10	0.10	90	70 - 130

Method Blank

QCBatch: QC21586

Param	Flag	Results	Units	Reporting Limit
DRO		<50.0	mg/Kg	50

Surrogate	Flag	Result	Units	Dilution	Spike Amount	Percent Recovery	Recovery Limits
n-Triacontane		118	mg/Kg	1	150	73	70 - 130

Quality Control Report
Lab Control Spikes and Duplicate Spikes

Laboratory Control Spikes

QCBatch: QC21507

Param	LCS Result	LCSD Result	Units	Dil.	Spike Amount Added	Matrix Result	% Rec	RPD	% Rec Limit	RPD Limit
MTBE	1.06	1.04	mg/Kg	10	1	<0.010	106	2	70 - 130	20
Benzene	1.03	1.03	mg/Kg	10	1	<0.010	103	0	70 - 130	20
Toluene	1.01	1.01	mg/Kg	10	1	<0.010	101	0	70 - 130	20
Ethylbenzene	0.998	0.997	mg/Kg	10	1	<0.010	100	0	70 - 130	20
M,P,O-Xylene	2.91	2.92	mg/Kg	10	3	<0.010	97	0	70 - 130	20

Percent recovery is based on the spike result. RPD is based on the spike and spike duplicate result.

Surrogate	LCS Result	LCSD Result	Units	Dilution	Spike Amount	LCS % Rec	LCSD % Rec	Recovery Limits
TFT	1.02	1.03	mg/Kg	10	1	102	103	70 - 130
4-BFB	0.975	0.983	mg/Kg	10	1	98	98	70 - 130

Laboratory Control Spikes

QCBatch: QC21508

Param	LCS Result	LCSD Result	Units	Dil.	Spike Amount Added	Matrix Result	% Rec	RPD	% Rec Limit	RPD Limit
GRO	9.67	9.54	mg/Kg	10	1	<1	97	1	80 - 120	20

Percent recovery is based on the spike result. RPD is based on the spike and spike duplicate result.

Surrogate	LCS Result	LCSD Result	Units	Dilution	Spike Amount	LCS % Rec	LCSD % Rec	Recovery Limits
TFT	0.909	0.89	mg/Kg	10	0.10	91	89	70 - 130
4-BFB	0.958	0.935	mg/Kg	10	0.10	96	94	70 - 130

Laboratory Control Spikes

QCBatch: QC21586

Param	LCS Result	LCSD Result	Units	Dil.	Spike Amount Added	Matrix Result	% Rec	RPD	% Rec Limit	RPD Limit
DRO	240	225	mg/Kg	1	250	<50.0	96	6	70 - 130	20

Percent recovery is based on the spike result. RPD is based on the spike and spike duplicate result.

Surrogate	LCS Result	LCSD Result	Units	Dilution	Spike Amount	LCS % Rec	LCSD % Rec	Recovery Limits
n-Triacontane	124	115	mg/Kg	1	150	83	77	70 - 130

Quality Control Report
Matrix Spikes and Duplicate Spikes

Matrix Spikes

QCBatch: QC21507

Param	MS Result	MSD Result	Units	Dil.	Spike Amount Added	Matrix Result	% Rec	RPD	% Rec Limit	RPD Limit
Benzene	1.06	0.971	mg/Kg	10	1	<0.010	106	8	70 - 130	20
Toluene	1.01	0.95	mg/Kg	10	1	<0.010	101	6	70 - 130	20
Ethylbenzene	0.95	0.861	mg/Kg	10	1	<0.010	95	9	70 - 130	20
M,P,O-Xylene	2.7	2.42	mg/Kg	10	3	0.0135	89	10	70 - 130	20

Percent recovery is based on the spike result. RPD is based on the spike and spike duplicate result.

Surrogate	MS Result	MSD Result	Units	Dilution	Spike Amount	MS % Rec	MSD % Rec	Recovery Limits
TFT	1.08	1.06	mg/Kg	10	1	108	106	70 - 130
4-BFB	0.916	0.839	mg/Kg	10	1	91	83	70 - 130

Matrix Spikes

QCBatch: QC21508

Param	MS Result	MSD Result	Units	Dil.	Spike Amount Added	Matrix Result	% Rec	RPD	% Rec Limit	RPD Limit
GRO	9.3	8.5	mg/Kg	10	1	3	93	13	80 - 120	20

Percent recovery is based on the spike result. RPD is based on the spike and spike duplicate result.

Surrogate	MS Result	MSD Result	Units	Dilution	Spike Amount	MS % Rec	MSD % Rec	Recovery Limits
TFT	0.945	0.877	mg/Kg	10	0.10	95	88	70 - 130
4-BFB	0.732	0.721	mg/Kg	10	0.10	73	72	70 - 130

Matrix Spikes

QCBatch: QC21586

Param	MS Result	MSD Result	Units	Dil.	Spike Amount Added	Matrix Result	% Rec	RPD	% Rec Limit	RPD Limit
DRO	195	198	mg/Kg	1	250	<50.0	78	2	70 - 130	20

Percent recovery is based on the spike result. RPD is based on the spike and spike duplicate result.

Surrogate	MS Result	MSD Result	Units	Dilution	Spike Amount	MS % Rec	MSD % Rec	Recovery Limits
n-Triacontane	98.2	101	mg/Kg	1	150	65	67	70 - 130

Quality Control Report
Continuing Calibration Verification Standards

CCV (1)

QCBatch: QC21507

Param	Flag	Units	CCVs True Conc.	CCVs Found Conc.	CCVs Percent Recovery	Percent Recovery Limits	Date Analyzed
MTBE		mg/L	0.10	0.101	101	85 - 115	7/1/02
Benzene		mg/L	0.10	0.101	101	85 - 115	7/1/02
Toluene		mg/L	0.10	0.101	101	85 - 115	7/1/02
Ethylbenzene		mg/L	0.10	0.1	100	85 - 115	7/1/02
M,P,O-Xylene		mg/L	0.30	0.291	97	85 - 115	7/1/02

CCV (2) QCBatch: QC21507

Param	Flag	Units	CCVs True Conc.	CCVs Found Conc.	CCVs Percent Recovery	Percent Recovery Limits	Date Analyzed
MTBE		mg/L	0.10	0.103	103	85 - 115	7/1/02
Benzene		mg/L	0.10	0.103	103	85 - 115	7/1/02
Toluene		mg/L	0.10	0.101	101	85 - 115	7/1/02
Ethylbenzene		mg/L	0.10	0.0987	98	85 - 115	7/1/02
M,P,O-Xylene		mg/L	0.30	0.287	95	85 - 115	7/1/02

ICV (1) QCBatch: QC21507

Param	Flag	Units	CCVs True Conc.	CCVs Found Conc.	CCVs Percent Recovery	Percent Recovery Limits	Date Analyzed
MTBE		mg/L	0.10	0.107	107	85 - 115	7/1/02
Benzene		mg/L	0.10	0.105	105	85 - 115	7/1/02
Toluene		mg/L	0.10	0.103	103	85 - 115	7/1/02
Ethylbenzene		mg/L	0.10	0.101	101	85 - 115	7/1/02
M,P,O-Xylene		mg/L	0.30	0.295	98	85 - 115	7/1/02

CCV (1) QCBatch: QC21508

Param	Flag	Units	CCVs True Conc.	CCVs Found Conc.	CCVs Percent Recovery	Percent Recovery Limits	Date Analyzed
GRO		mg/Kg	1	0.9522	95	85 - 115	7/1/02

CCV (2) QCBatch: QC21508

Param	Flag	Units	CCVs True Conc.	CCVs Found Conc.	CCVs Percent Recovery	Percent Recovery Limits	Date Analyzed
GRO		mg/Kg	1	0.961	96	85 - 115	7/1/02

ICV (1)

QCBatch: QC21508

Param	Flag	Units	CCVs True Conc.	CCVs Found Conc.	CCVs Percent Recovery	Percent Recovery Limits	Date Analyzed
GRO		mg/Kg	1	0.9468	94	85 - 115	7/1/02

CCV (1)

QCBatch: QC21586

Param	Flag	Units	CCVs True Conc.	CCVs Found Conc.	CCVs Percent Recovery	Percent Recovery Limits	Date Analyzed
DRO		mg/Kg	250	218	87	75 - 125	7/2/02

CCV (2)

QCBatch: QC21586

Param	Flag	Units	CCVs True Conc.	CCVs Found Conc.	CCVs Percent Recovery	Percent Recovery Limits	Date Analyzed
DRO		mg/Kg	250	225	90	75 - 125	7/2/02

CCV (3)

QCBatch: QC21586

Param	Flag	Units	CCVs True Conc.	CCVs Found Conc.	CCVs Percent Recovery	Percent Recovery Limits	Date Analyzed
DRO		mg/Kg	250	232	92	75 - 125	7/2/02

ICV (1)

QCBatch: QC21586

Param	Flag	Units	CCVs True Conc.	CCVs Found Conc.	CCVs Percent Recovery	Percent Recovery Limits	Date Analyzed
DRO		mg/Kg	250	214	86	75 - 125	7/2/02

TraceAnalysis, Inc.

6701 Aberdeen Avenue, Ste. 9 Lubbock, Texas 79424
Tel (806) 794 1296 Fax (806) 794 1298
1 (800) 378 1296

CHAIN-OF-CUSTODY RECORD AND ANALYSIS REC

LAB Order ID # A02070111

Company Name: Enercon Services Inc
Phone #: 915-570-8726
Address: 306 West Wall, Suite 1312, Midland, TX 79701
Fax #: 915-684-7587
Contact Person: Jeffrey Kindley
Invoice to: (If different from above) Kylee Landreneau Equiva Services
Incident # 300109
Project #: EQ-112
Project Name: Barber Ranch
Project Location: Lea County, New Mexico
Sampler Signature: Jeffrey Kindley

ANALYSIS REQUEST
(Circle or Specify Method No.)

LAB # (LAB USE ONLY)	FIELD CODE	# CONTAINERS	Volume/Amount	MATRIX: WATER	MATRIX: SOIL	MATRIX: AIR	MATRIX: SLUDGE		PRESERVATIVE METHOD: HCL	PRESERVATIVE METHOD: HNO3	PRESERVATIVE METHOD: ICE	PRESERVATIVE METHOD: NONE		SAMPLING: DATE	SAMPLING: TIME	MTBE 8020/602	BTEX 8020/602	TPH	PAH 8270	Total Metals Ag As Ba Cd Cr Pb Hg Se	TCLP Metals Ag As Ba Cd Cr Pb Hg Se	TCLP Volatiles	TCLP Semi Volatiles	RCI	GC.MS Vol. 8240/8260/624	GC/MS Semi. Vol. 8270/625	PCB's 8080/608	Pest. 8080/608	BOD, TSS, PH	TPH (DRO/GRO)	SPLP TPH GRO DRO pr BL 2-8			Turn Around Time if different from standard	Hold
200479	S-9 (13-15)	1	4oz		✓							✓		6/27/02	0945		✓													✓					
80	S-9 (25-27)	1	4oz		✓							✓		6/27/02	1000		✓													✓	X				
81	S-10 (8-10)	1	4oz		✓							✓		6/27/02	1110		✓													✓	X				
82	S-10 (26-28) Label (25-27)	1	4oz		✓							✓		6/27/02	1140		✓													✓	X				
83	S-11 (8-10)	1	4oz		✓							✓		06/27/02	1440		✓													✓	X				
84	S-11 (25-27)	1	4oz		✓							✓		6/27/02	1510		✓													✓	X				
85	S-12 (13-15)	1	4oz		✓							✓		6/27/02	1615		✓													✓					
86	S-12 (30-32')	1	4oz		✓							✓		6/27/02	1650		✓													✓					

Relinquished by:	Date:	Time:	Received by:	Date:	Time:
Jeffrey Kindley	June 29, 2002	0900	Helen Shelton	6/28/02	0900
Helen Shelton	6/28/02	1830			
			Received at Laboratory by:	Date:	Time:
			[signature]	6-29-02	0930

LAB USE ONLY
Intact Y / N
Headspace Y / N
Temp 4 °
Log-in Review MA

REMARKS:
TPH DRO/GRO Turnaround in 3 Days. Any TPH DRO/GRO ≥ 100 ppm run additional analysis for SPLP TPH
NO SPLP BTEX per BL 2-3
Any Benzene ≥ 10 ppm and/or Total BTEX ≥ 50 ppm run

Carrier # [signature]

Submittal of samples constitutes agreement to Terms and Conditions listed on reverse side of C.O.C.

8 Sample - HS

ORIGINAL COPY # [illegible]

Summary Report

Kyle Landreneau
Equiva Kyle Landreneau
PMB 284 40 FM 1960 West
Houston, TX 77090

Report Date: July 16, 2002

Order ID Number: A02070207

Project: EQ-112
TA Job Code: Barber Ranch 3000109
Casualty Code: EQ-112
Project Location: Barber Lea County, New Mexico
Project Address:
Enercon Services Inc. / Midland / Jeff Kindley

Sample	Description	Matrix	Date Taken	Time Taken	Date Received
200610	5-13 (13-15')	Soil	6/28/02	9:45	7/2/02
200612	S-14 (8-10')	Soil	6/28/02	11:03	7/2/02

0 This report consists of a total of 1 page(s) and is intended only as a summary of results for the sample(s) listed above.

Sample: 200610 - 5-13 (13-15')

Param	Flag	Result	Units
SPLP DRO		<5.00	mg/L
SPLP GRO		<0.5	mg/L

Sample: 200612 - S-14 (8-10')

Param	Flag	Result	Units
SPLP DRO		<5.00	mg/L
SPLP GRO		<0.5	mg/L

This is only a summary. Please, refer to the complete report package for quality control data.

Summary Report

Kyle Landreneau
Equiva Kyle Landreneau
PMB 284 40 FM 1960 West
Houston, TX 77090

Report Date: July 11, 2002

Order ID Number: A02070207

Project: EQ-112
TA Job Code: Barber Ranch 3000109
Casualty Code: EQ-112
Project Location: Barber Lea County, New Mexico
Project Address:
Enercon Services Inc. / Midland / Jeff Kindley

Sample	Description	Matrix	Date Taken	Time Taken	Date Received
200610	5-13 (13-15')	Soil	6/28/02	9:45	7/2/02
200611	S-13 (25-27')	Soil	6/28/02	10:00	7/2/02
200612	S-14 (8-10')	Soil	6/28/02	11:03	7/2/02
200613	S-14 25-27')	Soil	6/28/02	11:35	7/2/02
200614	MW-19 (13-15')	Soil	6/28/02	14:20	7/2/02
200615	MW-19 (25-27')	Soil	6/28/02	14:50	7/2/02

0 This report consists of a total of 1 page(s) and is intended only as a summary of results for the sample(s) listed above.

	BTEX					TPH DRO	TPH GRO
Sample - Field Code	Benzene (ppm)	Toluene (ppm)	Ethylbenzene (ppm)	M,P,O-Xylene (ppm)	Total BTEX (ppm)	DRO (ppm)	GRO (ppm)
200610 - 5-13 (13-15')	<0.010	<0.010	0.549	0.8	1.35	104	123
200611 - S-13 (25-27')	<0.010	<0.010	0.014	0.0135	0.0275	<50.0	6.67
200612 - S-14 (8-10')	<0.050	<0.050	3.89	5.16	9.05	1100	447
200613 - S-14 25-27')	<0.010	<0.010	0.0896	0.147	0.237	<50.0	42.4
200614 - MW-19 (13-15')	<0.010	<0.010	0.0193	0.0536	0.0729	<50.0	7.72
200615 - MW-19 (25-27')	<0.010	<0.010	<0.010	<0.010	<0.010	<50.0	<1.00

This is only a summary. Please, refer to the complete report package for quality control data.

TRACEANALYSIS, INC.

6701 Aberdeen Avenue, Suite 9 Lubbock, Texas 79424 800•378•1296 806•794•1296 FAX 806•794•1298
155 McCutcheon, Suite H El Paso, Texas 79932 888•588•3443 915•585•3443 FAX 915•585•4944
E-Mail: lab@traceanalysis.com

Analytical and Quality Control Report

Kyle Landreneau
Equiva Kyle Landreneau
PMB 284 40 FM 1960 West
Houston, TX 77090

Report Date: July 16, 2002

Order ID Number: A02070207

Project: EQ-112
TA Job Code: Barber Ranch 3000109
Casualty Code: EQ-112
Project Location: Barber Lea County, New Mexico
Enercon Services Inc. / Midland / Jeff Kindley

Enclosed are the Analytical Results and Quality Control Data Reports for the following samples submitted to Trace-Analysis, Inc.

Sample	Description	Matrix	Date Taken	Time Taken	Date Received
200610	5-13 (13-15')	Soil	6/28/02	9:45	7/2/02
200612	S-14 (8-10')	Soil	6/28/02	11:03	7/2/02

These results represent only the samples received in the laboratory. The Quality Control Report is generated on a batch basis. All information contained in this report is for the analytical batch(es) in which your sample(s) were analyzed. Note: the RDL is equal to MQL for all organic analytes including TPH.
The test results contained within this report meet all requirements of LAC 33:I unless otherwise noted.

This report consists of a total of 5 pages and shall not be reproduced except in its entirety including the chain of custody (COC), without written approval of TraceAnalysis, Inc.

Dr. Blair Leftwich, Director

Analytical Report

Sample: 200610 - 5-13 (13-15')

Analysis:	SPLP DRO	Analytical Method:	Mod. 8015B	QC Batch:	QC21864	Date Analyzed:	7/14/02
Analyst:	MM	Preparation Method:	1312	Prep Batch:	PB20694	Date Prepared:	7/11/02

Param	Flag	Result	Units	Dilution	RDL
SPLP DRO		<5.00	mg/L	1	50

Sample: 200610 - 5-13 (13-15')

Analysis:	SPLP GRO	Analytical Method:	Mod. 602	QC Batch:	QC21802	Date Analyzed:	7/10/02
Analyst:	CG	Preparation Method:	1312	Prep Batch:	PB20649	Date Prepared:	7/10/02

Param	Flag	Result	Units	Dilution	RDL
SPLP GRO		<0.5	mg/L	5	0.10

Sample: 200612 - S-14 (8-10')

Analysis:	SPLP DRO	Analytical Method:	Mod. 8015B	QC Batch:	QC21864	Date Analyzed:	7/14/02
Analyst:	MM	Preparation Method:	1312	Prep Batch:	PB20694	Date Prepared:	7/11/02

Param	Flag	Result	Units	Dilution	RDL
SPLP DRO		<5.00	mg/L	0.10	50

Sample: 200612 - S-14 (8-10')

Analysis:	SPLP GRO	Analytical Method:	Mod. 602	QC Batch:	QC21772	Date Analyzed:	7/10/02
Analyst:	CG	Preparation Method:	1312	Prep Batch:	PB20626	Date Prepared:	7/10/02

Param	Flag	Result	Units	Dilution	RDL
SPLP GRO		<0.5	mg/L	5	0.10

Quality Control Report
Method Blank

Method Blank QCBatch: QC21772

Param	Flag	Results	Units	Reporting Limit
SPLP GRO		<0.1	mg/L	0.10

Method Blank QCBatch: QC21802

Param	Flag	Results	Units	Reporting Limit
SPLP GRO		<0.1	mg/L	0.10

Method Blank QCBatch: QC21864

Param	Flag	Results	Units	Reporting Limit
SPLP DRO		<5.00	mg/L	50

Quality Control Report
Lab Control Spikes and Duplicate Spikes

Laboratory Control Spikes QCBatch: QC21772

Param	LCS Result	LCSD Result	Units	Dil.	Spike Amount Added	Matrix Result	% Rec	RPD	% Rec Limit	RPD Limit
SPLP GRO	0.912	0.886	mg/L	1	1	<0.1	91	2	70 - 130	20

Percent recovery is based on the spike result. RPD is based on the spike and spike duplicate result.

Laboratory Control Spikes QCBatch: QC21802

Param	LCS Result	LCSD Result	Units	Dil.	Spike Amount Added	Matrix Result	% Rec	RPD	% Rec Limit	RPD Limit
SPLP GRO	0.924	0.872	mg/L	1	1	<0.1	92	5	70 - 130	20

Percent recovery is based on the spike result. RPD is based on the spike and spike duplicate result.

Laboratory Control Spikes QCBatch: QC21864

Param	LCS Result	LCSD Result	Units	Dil.	Spike Amount Added	Matrix Result	% Rec	RPD	% Rec Limit	RPD Limit
SPLP DRO	28	26.2	mg/L	0.10	250	<5.00	112	6	70 - 130	20

Percent recovery is based on the spike result. RPD is based on the spike and spike duplicate result.

Quality Control Report
Continuing Calibration Verification Standards

CCV (1) QCBatch: QC21772

Param	Flag	Units	CCVs True Conc.	CCVs Found Conc.	CCVs Percent Recovery	Percent Recovery Limits	Date Analyzed
SPLP GRO		mg/L	1	0.852	85	85 - 115	7/10/02

ICV (1) QCBatch: QC21772

Param	Flag	Units	CCVs True Conc.	CCVs Found Conc.	CCVs Percent Recovery	Percent Recovery Limits	Date Analyzed
SPLP GRO		mg/L	1	0.901	90	85 - 115	7/10/02

CCV (1) QCBatch: QC21802

Param	Flag	Units	CCVs True Conc.	CCVs Found Conc.	CCVs Percent Recovery	Percent Recovery Limits	Date Analyzed
SPLP GRO		mg/L	1	0.923	92	85 - 115	7/10/02

ICV (1) QCBatch: QC21802

Param	Flag	Units	CCVs True Conc.	CCVs Found Conc.	CCVs Percent Recovery	Percent Recovery Limits	Date Analyzed
SPLP GRO		mg/L	1	0.852	85	85 - 115	7/10/02

CCV (1) QCBatch: QC21864

Param	Flag	Units	CCVs True Conc.	CCVs Found Conc.	CCVs Percent Recovery	Percent Recovery Limits	Date Analyzed
SPLP DRO		mg/L	250	267	106	75 - 125	7/14/02

CCV (2)

QCBatch: QC21864

Param	Flag	Units	CCVs True Conc.	CCVs Found Conc.	CCVs Percent Recovery	Percent Recovery Limits	Date Analyzed
SPLP DRO		mg/L	250	265	106	75 - 125	7/14/02

ICV (1)

QCBatch: QC21864

Param	Flag	Units	CCVs True Conc.	CCVs Found Conc.	CCVs Percent Recovery	Percent Recovery Limits	Date Analyzed
SPLP DRO		mg/L	250	279	111	75 - 125	7/14/02

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Analytical and Quality Control Report

Kyle Landreneau
Equiva Kyle Landreneau
PMB 284 40 FM 1960 West
Houston, TX 77090

Report Date: July 11, 2002

Order ID Number: A02070207

Project: EQ-112
TA Job Code: Barber Ranch 3000109
Casualty Code: EQ-112
Project Location: Barber Lea County, New Mexico
Enercon Services Inc. / Midland / Jeff Kindley

Enclosed are the Analytical Results and Quality Control Data Reports for the following samples submitted to Trace-Analysis, Inc.

Sample	Description	Matrix	Date Taken	Time Taken	Date Received
200610	5-13 (13-15')	Soil	6/28/02	9:45	7/2/02
200611	S-13 (25-27')	Soil	6/28/02	10:00	7/2/02
200612	S-14 (8-10')	Soil	6/28/02	11:03	7/2/02
200613	S-14 25-27')	Soil	6/28/02	11:35	7/2/02
200614	MW-19 (13-15')	Soil	6/28/02	14:20	7/2/02
200615	MW-19 (25-27')	Soil	6/28/02	14:50	7/2/02

These results represent only the samples received in the laboratory. The Quality Control Report is generated on a batch basis. All information contained in this report is for the analytical batch(es) in which your sample(s) were analyzed. Note: the RDL is equal to MQL for all organic analytes including TPH.
The test results contained within this report meet all requirements of LAC 33:I unless otherwise noted.

This report consists of a total of 15 pages and shall not be reproduced except in its entirety including the chain of custody (COC), without written approval of TraceAnalysis, Inc.

Dr. Blair Leftwich, Director

Analytical Report

Sample: 200610 - 5-13 (13-15')

Analysis:	BTEX	Analytical Method:	S 8021B	QC Batch:	QC21576	Date Analyzed:	7/2/02
Analyst:	DN	Preparation Method:	S 5035	Prep Batch:	PB20472	Date Prepared:	7/2/02

Param	Flag	Result	Units	Dilution	RDL
Benzene		<0.010	mg/Kg	10	0.001
Toluene		<0.010	mg/Kg	10	0.001
Ethylbenzene		0.549	mg/Kg	10	0.001
M,P,O-Xylene		0.8	mg/Kg	10	0.001
Total BTEX		1.35	mg/Kg	10	0.001

Surrogate	Flag	Result	Units	Dilution	Spike Amount	Percent Recovery	Recovery Limits
TFT		0.719	mg/Kg	10	1	72	70 - 130
4-BFB	[1]	3.93	mg/Kg	10	1	393	70 - 130

Sample: 200610 - 5-13 (13-15')

Analysis:	TPH DRO	Analytical Method:	Mod. 8015B	QC Batch:	QC21574	Date Analyzed:	7/3/02
Analyst:	MM	Preparation Method:	3550 B	Prep Batch:	PB20471	Date Prepared:	7/3/02

Param	Flag	Result	Units	Dilution	RDL
DRO		104	mg/Kg	1	50

Surrogate	Flag	Result	Units	Dilution	Spike Amount	Percent Recovery	Recovery Limits
n-Triacontane		105	mg/Kg	1	150	72	70 - 130

Sample: 200610 - 5-13 (13-15')

Analysis:	TPH GRO	Analytical Method:	8015B	QC Batch:	QC21575	Date Analyzed:	7/2/02
Analyst:	DN	Preparation Method:	5035	Prep Batch:	PB20472	Date Prepared:	7/2/02

Param	Flag	Result	Units	Dilution	RDL
GRO		123	mg/Kg	10	0.10

Surrogate	Flag	Result	Units	Dilution	Spike Amount	Percent Recovery	Recovery Limits
TFT	[2]	0.558	mg/Kg	10	0.10	56	70 - 130
4-BFB	[3]	2.78	mg/Kg	10	0.10	278	70 - 130

[1]High surrogate recovery due to peak interference.
[2]Low surrogate recovery due to matrix interference. ICV, CCV, CCV show the method to be in control.
[3]High surrogate recovery due to peak interference.

Sample: 200611 - S-13 (25-27')

Analysis:	BTEX	Analytical Method:	S 8021B	QC Batch:	QC21576	Date Analyzed:	7/2/02
Analyst:	DN	Preparation Method:	S 5035	Prep Batch:	PB20472	Date Prepared:	7/2/02

Param	Flag	Result	Units	Dilution	RDL
Benzene		<0.010	mg/Kg	10	0.001
Toluene		<0.010	mg/Kg	10	0.001
Ethylbenzene		0.014	mg/Kg	10	0.001
M,P,O-Xylene		0.0135	mg/Kg	10	0.001
Total BTEX		0.0275	mg/Kg	10	0.001

Surrogate	Flag	Result	Units	Dilution	Spike Amount	Percent Recovery	Recovery Limits
TFT		0.768	mg/Kg	10	1	77	70 - 130
4-BFB		0.749	mg/Kg	10	1	75	70 - 130

Sample: 200611 - S-13 (25-27')

Analysis:	TPH DRO	Analytical Method:	Mod. 8015B	QC Batch:	QC21574	Date Analyzed:	7/3/02
Analyst:	MM	Preparation Method:	3550 B	Prep Batch:	PB20471	Date Prepared:	7/3/02

Param	Flag	Result	Units	Dilution	RDL
DRO		<50.0	mg/Kg	1	50

Surrogate	Flag	Result	Units	Dilution	Spike Amount	Percent Recovery	Recovery Limits
n-Triacontane		110	mg/Kg	1	150	73	70 - 130

Sample: 200611 - S-13 (25-27')

Analysis:	TPH GRO	Analytical Method:	8015B	QC Batch:	QC21575	Date Analyzed:	7/2/02
Analyst:	DN	Preparation Method:	5035	Prep Batch:	PB20472	Date Prepared:	7/2/02

Param	Flag	Result	Units	Dilution	RDL
GRO		6.67	mg/Kg	10	0.10

Surrogate	Flag	Result	Units	Dilution	Spike Amount	Percent Recovery	Recovery Limits
TFT		0.940	mg/Kg	10	0.10	94	70 - 130
4-BFB		0.869	mg/Kg	10	0.10	87	70 - 130

Sample: 200612 - S-14 (8-10')

Analysis:	BTEX	Analytical Method:	S 8021B	QC Batch:	QC21784	Date Analyzed:	7/10/02
Analyst:	CG	Preparation Method:	S 5035	Prep Batch:	PB20626	Date Prepared:	7/10/02

Param	Flag	Result	Units	Dilution	RDL
Benzene		<0.050	mg/Kg	50	0.001

Continued ...

... Continued Sample: 200612 Analysis: BTEX

Param	Flag	Result	Units	Dilution	RDL
Toluene		<0.050	mg/Kg	50	0.001
Ethylbenzene		3.89	mg/Kg	50	0.001
M,P,O-Xylene		5.16	mg/Kg	50	0.001
Total BTEX		9.05	mg/Kg	50	0.001
Test Comments	[4]	*	mg/Kg	1	

Surrogate	Flag	Result	Units	Dilution	Spike Amount	Percent Recovery	Recovery Limits
TFT		0.871	mg/Kg	50	1	87	70 - 130
4-BFB	[5]	9.81	mg/Kg	50	1	981	70 - 130

Sample: 200612 - S-14 (8-10')

Analysis: TPH DRO | Analytical Method: Mod. 8015B | QC Batch: QC21574 | Date Analyzed: 7/3/02
Analyst: MM | Preparation Method: 3550 B | Prep Batch: PB20471 | Date Prepared: 7/3/02

Param	Flag	Result	Units	Dilution	RDL
DRO		1100	mg/Kg	1	50

Surrogate	Flag	Result	Units	Dilution	Spike Amount	Percent Recovery	Recovery Limits
n-Triacontane		132	mg/Kg	1	150	88	70 - 130

Sample: 200612 - S-14 (8-10')

Analysis: TPH GRO | Analytical Method: 8015B | QC Batch: QC21773 | Date Analyzed: 7/10/02
Analyst: CG | Preparation Method: 5035 | Prep Batch: PB20626 | Date Prepared: 7/10/02

Param	Flag	Result	Units	Dilution	RDL
GRO		447	mg/Kg	10	0.10

Surrogate	Flag	Result	Units	Dilution	Spike Amount	Percent Recovery	Recovery Limits
TFT	[6]	0.493	mg/Kg	10	0.10	49	70 - 130
4-BFB	[7]	24.3	mg/Kg	10	0.10	2430	70 - 130

Sample: 200613 - S-14 25-27')

Analysis: BTEX | Analytical Method: S 8021B | QC Batch: QC21576 | Date Analyzed: 7/2/02
Analyst: DN | Preparation Method: S 5035 | Prep Batch: PB20472 | Date Prepared: 7/2/02

Param	Flag	Result	Units	Dilution	RDL
Benzene		<0.010	mg/Kg	10	0.001

Continued ...

[4]Sample diluted due to hydrocarbons beyond xylene. Sample has a Benzene concentration of less than 0.01183 which is the MDL.
[5]High surrogate recovery due to peak interference.
[6]Low surrogate recovery due to matrix interference. ICV, CCV show the method to be in control.
[7]High surrogate recovery due to peak interference.

... Continued Sample: 200613 Analysis: BTEX

Param	Flag	Result	Units	Dilution	RDL
Toluene		<0.010	mg/Kg	10	0.001
Ethylbenzene		0.0896	mg/Kg	10	0.001
M,P,O-Xylene		0.147	mg/Kg	10	0.001
Total BTEX		0.237	mg/Kg	10	0.001

Surrogate	Flag	Result	Units	Dilution	Spike Amount	Percent Recovery	Recovery Limits
TFT		0.808	mg/Kg	10	1	81	70 - 130
4-BFB		1.14	mg/Kg	10	1	114	70 - 130

Sample: 200613 - S-14 25-27')

Analysis: TPH DRO Analytical Method: Mod. 8015B QC Batch: QC21574 Date Analyzed: 7/3/02
Analyst: MM Preparation Method: 3550 B Prep Batch: PB20471 Date Prepared: 7/3/02

Param	Flag	Result	Units	Dilution	RDL
DRO		<50.0	mg/Kg	1	50

Surrogate	Flag	Result	Units	Dilution	Spike Amount	Percent Recovery	Recovery Limits
n-Triacontane		107	mg/Kg	1	150	71	70 - 130

Sample: 200613 - S-14 25-27')

Analysis: TPH GRO Analytical Method: 8015B QC Batch: QC21575 Date Analyzed: 7/2/02
Analyst: DN Preparation Method: 5035 Prep Batch: PB20472 Date Prepared: 7/2/02

Param	Flag	Result	Units	Dilution	RDL
GRO		42.4	mg/Kg	10	0.10

Surrogate	Flag	Result	Units	Dilution	Spike Amount	Percent Recovery	Recovery Limits
TFT		0.823	mg/Kg	10	0.10	82	70 - 130
4-BFB	[8]	1.41	mg/Kg	10	0.10	141	70 - 130

Sample: 200614 - MW-19 (13-15')

Analysis: BTEX Analytical Method: S 8021B QC Batch: QC21576 Date Analyzed: 7/2/02
Analyst: DN Preparation Method: S 5035 Prep Batch: PB20472 Date Prepared: 7/2/02

Param	Flag	Result	Units	Dilution	RDL
Benzene		<0.010	mg/Kg	10	0.001
Toluene		<0.010	mg/Kg	10	0.001
Ethylbenzene		0.0193	mg/Kg	10	0.001
M,P,O-Xylene		0.0536	mg/Kg	10	0.001

Continued ...

[8]High surrogate recovery due to peak interference.

... Continued Sample: 200614 Analysis: BTEX

Param	Flag	Result	Units	Dilution	RDL
Total BTEX		0.0729	mg/Kg	10	0.001

Surrogate	Flag	Result	Units	Dilution	Spike Amount	Percent Recovery	Recovery Limits
TFT		0.900	mg/Kg	10	1	90	70 - 130
4-BFB		0.757	mg/Kg	10	1	76	70 - 130

Sample: 200614 - MW-19 (13-15')

Analysis:	TPH DRO	Analytical Method:	Mod. 8015B	QC Batch:	QC21574	Date Analyzed:	7/3/02
Analyst:	MM	Preparation Method:	3550 B	Prep Batch:	PB20471	Date Prepared:	7/3/02

Param	Flag	Result	Units	Dilution	RDL
DRO		<50.0	mg/Kg	1	50

Surrogate	Flag	Result	Units	Dilution	Spike Amount	Percent Recovery	Recovery Limits
n-Triacontane		107	mg/Kg	1	150	71	70 - 130

Sample: 200614 - MW-19 (13-15')

Analysis:	TPH GRO	Analytical Method:	8015B	QC Batch:	QC21575	Date Analyzed:	7/2/02
Analyst:	DN	Preparation Method:	5035	Prep Batch:	PB20472	Date Prepared:	7/2/02

Param	Flag	Result	Units	Dilution	RDL
GRO		7.72	mg/Kg	10	0.10

Surrogate	Flag	Result	Units	Dilution	Spike Amount	Percent Recovery	Recovery Limits
TFT		0.758	mg/Kg	10	0.10	76	70 - 130
4-BFB		1.07	mg/Kg	10	0.10	107	70 - 130

Sample: 200615 - MW-19 (25-27')

Analysis:	BTEX	Analytical Method:	S 8021B	QC Batch:	QC21576	Date Analyzed:	7/2/02
Analyst:	DN	Preparation Method:	S 5035	Prep Batch:	PB20472	Date Prepared:	7/2/02

Param	Flag	Result	Units	Dilution	RDL
Benzene		<0.010	mg/Kg	10	0.001
Toluene		<0.010	mg/Kg	10	0.001
Ethylbenzene		<0.010	mg/Kg	10	0.001
M,P,O-Xylene		<0.010	mg/Kg	10	0.001
Total BTEX		<0.010	mg/Kg	10	0.001

Surrogate	Flag	Result	Units	Dilution	Spike Amount	Percent Recovery	Recovery Limits
TFT		0.796	mg/Kg	10	1	80	70 - 130
4-BFB		0.737	mg/Kg	10	1	74	70 - 130

Sample: 200615 - MW-19 (25-27')

Analysis:	TPH DRO	Analytical Method:	Mod. 8015B	QC Batch:	QC21574	Date Analyzed:	7/3/02
Analyst:	MM	Preparation Method:	3550 B	Prep Batch:	PB20471	Date Prepared:	7/3/02

Param	Flag	Result	Units	Dilution	RDL
DRO		<50.0	mg/Kg	1	50

Surrogate	Flag	Result	Units	Dilution	Spike Amount	Percent Recovery	Recovery Limits
n-Triacontane		110	mg/Kg	1	150	73	70 - 130

Sample: 200615 - MW-19 (25-27')

Analysis:	TPH GRO	Analytical Method:	8015B	QC Batch:	QC21575	Date Analyzed:	7/2/02
Analyst:	DN	Preparation Method:	5035	Prep Batch:	PB20472	Date Prepared:	7/2/02

Param	Flag	Result	Units	Dilution	RDL
GRO		<1.00	mg/Kg	10	0.10

Surrogate	Flag	Result	Units	Dilution	Spike Amount	Percent Recovery	Recovery Limits
TFT		0.936	mg/Kg	10	0.10	94	70 - 130
4-BFB		0.750	mg/Kg	10	0.10	75	70 - 130

Quality Control Report
Method Blank

Method Blank

QCBatch: QC21574

Param	Flag	Results	Units	Reporting Limit
DRO		<50.0	mg/Kg	50

Surrogate	Flag	Result	Units	Dilution	Spike Amount	Percent Recovery	Recovery Limits
n-Triacontane		111	mg/Kg	1	150	74	70 - 130

Method Blank

QCBatch: QC21575

Param	Flag	Results	Units	Reporting Limit
GRO		<1	mg/Kg	0.10

Surrogate	Flag	Result	Units	Dilution	Spike Amount	Percent Recovery	Recovery Limits
TFT		1.06	mg/Kg	10	0.10	106	70 - 130
4-BFB		0.920	mg/Kg	10	0.10	92	70 - 130

Method Blank

QCBatch: QC21576

Param	Flag	Results	Units	Reporting Limit
Benzene		<0.010	mg/Kg	0.001
Toluene		<0.010	mg/Kg	0.001
Ethylbenzene		<0.010	mg/Kg	0.001
M,P,O-Xylene		<0.010	mg/Kg	0.001
Total BTEX		< 0.01	mg/Kg	0.001

Surrogate	Flag	Result	Units	Dilution	Spike Amount	Percent Recovery	Recovery Limits
TFT		1.05	mg/Kg	10	1	105	70 - 130
4-BFB		0.931	mg/Kg	10	1	93	70 - 130

Method Blank

QCBatch: QC21773

Param	Flag	Results	Units	Reporting Limit
GRO		<1	mg/Kg	0.10

Surrogate	Flag	Result	Units	Dilution	Spike Amount	Percent Recovery	Recovery Limits
TFT		0.932	mg/Kg	10	0.10	93	70 - 130
4-BFB	[9]	0.634	mg/Kg	10	0.10	63	70 - 130

Method Blank

QCBatch: QC21784

Param	Flag	Results	Units	Reporting Limit
Benzene		<0.010	mg/Kg	0.001
Toluene		<0.010	mg/Kg	0.001
Ethylbenzene		<0.010	mg/Kg	0.001
M,P,O-Xylene		<0.010	mg/Kg	0.001
Total BTEX		<0.010	mg/Kg	0.001

Surrogate	Flag	Result	Units	Dilution	Spike Amount	Percent Recovery	Recovery Limits
TFT		0.926	mg/Kg	10	1	92	70 - 130
4-BFB	[10]	0.685	mg/Kg	10	1	68	70 - 130

Quality Control Report
Lab Control Spikes and Duplicate Spikes

Laboratory Control Spikes

QCBatch: QC21574

Param	LCS Result	LCSD Result	Units	Dil.	Spike Amount Added	Matrix Result	% Rec	RPD	% Rec Limit	RPD Limit
DRO	213	209	mg/Kg	1	250	<50.0	85	2	70 - 130	20

Percent recovery is based on the spike result. RPD is based on the spike and spike duplicate result.

Surrogate	LCS Result	LCSD Result	Units	Dilution	Spike Amount	LCS % Rec	LCSD % Rec	Recovery Limits
n-Triacontane	108	107	mg/Kg	1	150	72	71	70 - 130

Laboratory Control Spikes

QCBatch: QC21575

Param	LCS Result	LCSD Result	Units	Dil.	Spike Amount Added	Matrix Result	% Rec	RPD	% Rec Limit	RPD Limit
GRO	9.36	9.75	mg/Kg	10	1	<1	94	0	80 - 120	20

Percent recovery is based on the spike result. RPD is based on the spike and spike duplicate result.

[9]Low surrogate recovery due to prep. ICV, CCV show the method to be in control.
[10]Low surrogate recovery due to prep. ICV, CCV show the method to be in control.

Surrogate	LCS Result	LCSD Result	Units	Dilution	Spike Amount	LCS % Rec	LCSD % Rec	Recovery Limits
TFT	0.89	0.9	mg/Kg	10	0.10	89	90	70 - 130
4-BFB	0.895	0.947	mg/Kg	10	0.10	89	95	70 - 130

Laboratory Control Spikes

QCBatch: QC21576

Param	LCS Result	LCSD Result	Units	Dil.	Spike Amount Added	Matrix Result	% Rec	RPD	% Rec Limit	RPD Limit
MTBE	0.999	0.964	mg/Kg	10	1	<0.010	99	4	70 - 130	20
Benzene	1.04	1.01	mg/Kg	10	1	<0.010	104	3	70 - 130	20
Toluene	1.02	0.989	mg/Kg	10	1	<0.010	102	3	70 - 130	20
Ethylbenzene	1.02	0.986	mg/Kg	10	1	<0.010	102	3	70 - 130	20
M,P,O-Xylene	2.94	2.86	mg/Kg	10	3	<0.010	98	3	70 - 130	20

Percent recovery is based on the spike result. RPD is based on the spike and spike duplicate result.

Surrogate	LCS Result	LCSD Result	Units	Dilution	Spike Amount	LCS % Rec	LCSD % Rec	Recovery Limits
TFT	1.03	1.02	mg/Kg	10	1	103	102	70 - 130
4-BFB	0.965	0.959	mg/Kg	10	1	97	96	70 - 130

Laboratory Control Spikes

QCBatch: QC21773

Param	LCS Result	LCSD Result	Units	Dil.	Spike Amount Added	Matrix Result	% Rec	RPD	% Rec Limit	RPD Limit
GRO	9.12	8.86	mg/Kg	10	1	<1	91	2	80 - 120	20

Percent recovery is based on the spike result. RPD is based on the spike and spike duplicate result.

Surrogate	LCS Result	LCSD Result	Units	Dilution	Spike Amount	LCS % Rec	LCSD % Rec	Recovery Limits
TFT	1.01	1.03	mg/Kg	10	0.10	101	103	70 - 130
4-BFB	0.839	0.836	mg/Kg	10	0.10	84	84	70 - 130

Laboratory Control Spikes

QCBatch: QC21784

Param	LCS Result	LCSD Result	Units	Dil.	Spike Amount Added	Matrix Result	% Rec	RPD	% Rec Limit	RPD Limit
MTBE	0.961	0.955	mg/Kg	10	1	<0.010	96	0	70 - 130	20
Benzene	0.983	0.983	mg/Kg	10	1	<0.010	98	0	70 - 130	20
Toluene	0.961	0.961	mg/Kg	10	1	<0.010	96	0	70 - 130	20
Ethylbenzene	0.925	0.936	mg/Kg	10	1	<0.010	92	1	70 - 130	20
M,P,O-Xylene	2.64	2.66	mg/Kg	10	3	<0.010	88	0	70 - 130	20

Percent recovery is based on the spike result. RPD is based on the spike and spike duplicate result.

Surrogate	LCS Result	LCSD Result	Units	Dilution	Spike Amount	LCS % Rec	LCSD % Rec	Recovery Limits
TFT	0.933	0.927	mg/Kg	10	1	93	92	70 - 130
4-BFB	0.862	0.858	mg/Kg	10	1	86	85	70 - 130

Quality Control Report
Matrix Spikes and Duplicate Spikes

Matrix Spikes

QCBatch: QC21574

Param	MS Result	MSD Result	Units	Dil.	Spike Amount Added	Matrix Result	% Rec	RPD	% Rec Limit	RPD Limit
DRO	213	207	mg/Kg	1	250	<50.0	85	3	70 - 130	20

Percent recovery is based on the spike result. RPD is based on the spike and spike duplicate result.

Surrogate	MS Result	MSD Result	Units	Dilution	Spike Amount	MS % Rec	MSD % Rec	Recovery Limits
n-Triacontane	101	103	mg/Kg	1	150	67	69	70 - 130

Matrix Spikes

QCBatch: QC21575

Param	MS Result	MSD Result	Units	Dil.	Spike Amount Added	Matrix Result	% Rec	RPD	% Rec Limit	RPD Limit
GRO	6.86	8.91	mg/Kg	10	1	7.72	69	0	80 - 120	20

Percent recovery is based on the spike result. RPD is based on the spike and spike duplicate result.

Surrogate	MS Result	MSD Result	Units	Dilution	Spike Amount	MS % Rec	MSD % Rec	Recovery Limits
TFT	[11] 0.653	0.884	mg/Kg	10	0.10	65	88	70 - 130
4-BFB	[12] 0.548	0.756	mg/Kg	10	0.10	58	76	70 - 130

Matrix Spikes

QCBatch: QC21576

Param	MS Result	MSD Result	Units	Dil.	Spike Amount Added	Matrix Result	% Rec	RPD	% Rec Limit	RPD Limit
Benzene	0.792	0.721	mg/Kg	10	1	<0.010	79	9	70 - 130	20
Toluene	0.861	0.752	mg/Kg	10	1	<0.010	86	157	70 - 130	20
Ethylbenzene	0.811	0.712	mg/Kg	10	1	0.0193	81	13	70 - 130	20
M,P,O-Xylene	2.40	2.05	mg/Kg	10	3	0.0536	80	16	70 - 130	20

Percent recovery is based on the spike result. RPD is based on the spike and spike duplicate result.

[11]Low surrogate recovery due to matrix interference. ICV, CCV show the method to be in control.
[12]Low surrogate recovery due to matrix interference. ICV, CCV show the method to be in control.

Surrogate	MS Result	MSD Result	Units	Dilution	Spike Amount	MS % Rec	MSD % Rec	Recovery Limits
TFT	0.819	0.721	mg/Kg	10	1	82	72	70 - 130
4-BFB	0.807	[13] 0.661	mg/Kg	10	1	81	66	70 - 130

Matrix Spikes

QCBatch: QC21773

Param	MS Result	MSD Result	Units	Dil.	Spike Amount Added	Matrix Result	% Rec	RPD	% Rec Limit	RPD Limit
GRO	[14] 593	559	mg/Kg	10	1	447	146	0	80 - 120	20

Percent recovery is based on the spike result. RPD is based on the spike and spike duplicate result.

Surrogate	MS Result	MSD Result	Units	Dilution	Spike Amount	MS % Rec	MSD % Rec	Recovery Limits
TFT	[15] 0.641	[16] 0.637	mg/Kg	10	0.10	64	64	70 - 130
4-BFB	[17] 29.6	[18] 30	mg/Kg	10	0.10	2960	3000	70 - 130

Quality Control Report
Continuing Calibration Verification Standards

CCV (1)

QCBatch: QC21574

Param	Flag	Units	CCVs True Conc.	CCVs Found Conc.	CCVs Percent Recovery	Percent Recovery Limits	Date Analyzed
DRO		mg/Kg	250	219	87	75 - 125	7/3/02

CCV (2)

QCBatch: QC21574

Param	Flag	Units	CCVs True Conc.	CCVs Found Conc.	CCVs Percent Recovery	Percent Recovery Limits	Date Analyzed
DRO		mg/Kg	250	217	86	75 - 125	7/3/02

CCV (3)

QCBatch: QC21574

[13]Low BFB surrogate recovery due to matrix interference. TFT surrogate recovery shows the method to be in control.
[14]High MS recovery due to high amounts of analytes in the sample.
[15]Low surrogate recovery due to matrix interference. ICV, CCV show the method to be in control.
[16]Low surrogate recovery due to matrix interference. ICV, CCV show the method to be in control.
[17]High MS recovery due to high amounts of analytes in the sample.
[18]High MSD recovery due to high amounts of analytes in the sample.

Param	Flag	Units	CCVs True Conc.	CCVs Found Conc.	CCVs Percent Recovery	Percent Recovery Limits	Date Analyzed
DRO		mg/Kg	250	260	104	75 - 125	7/3/02

ICV (1) QCBatch: QC21574

Param	Flag	Units	CCVs True Conc.	CCVs Found Conc.	CCVs Percent Recovery	Percent Recovery Limits	Date Analyzed
DRO		mg/Kg	250	228	91	75 - 125	7/3/02

CCV (1) QCBatch: QC21575

Param	Flag	Units	CCVs True Conc.	CCVs Found Conc.	CCVs Percent Recovery	Percent Recovery Limits	Date Analyzed
GRO		mg/Kg	1	0.978	97	85 - 115	7/2/02

CCV (2) QCBatch: QC21575

Param	Flag	Units	CCVs True Conc.	CCVs Found Conc.	CCVs Percent Recovery	Percent Recovery Limits	Date Analyzed
GRO		mg/Kg	1	1.04	104	85 - 115	7/2/02

ICV (1) QCBatch: QC21575

Param	Flag	Units	CCVs True Conc.	CCVs Found Conc.	CCVs Percent Recovery	Percent Recovery Limits	Date Analyzed
GRO		mg/Kg	1	0.9766	97	85 - 115	7/2/02

CCV (1) QCBatch: QC21576

Param	Flag	Units	CCVs True Conc.	CCVs Found Conc.	CCVs Percent Recovery	Percent Recovery Limits	Date Analyzed
MTBE		mg/L	0.10	0.0919	92	85 - 115	7/2/02
Benzene		mg/L	0.10	0.0992	99	85 - 115	7/2/02
Toluene		mg/L	0.10	0.0989	99	85 - 115	7/2/02
Ethylbenzene		mg/L	0.10	0.0972	97	85 - 115	7/2/02
M,P,O-Xylene		mg/L	0.30	0.283	94	85 - 115	7/2/02

CCV (2)

QCBatch: QC21576

Param	Flag	Units	CCVs True Conc.	CCVs Found Conc.	CCVs Percent Recovery	Percent Recovery Limits	Date Analyzed
MTBE		mg/L	0.10	0.1012	101	85 - 115	7/2/02
Benzene		mg/L	0.10	0.1002	100	85 - 115	7/2/02
Toluene		mg/L	0.10	0.1008	100	85 - 115	7/2/02
Ethylbenzene		mg/L	0.10	0.0964	96	85 - 115	7/2/02
M,P,O-Xylene		mg/L	0.30	0.2907	96	85 - 115	7/2/02

ICV (1)

QCBatch: QC21576

Param	Flag	Units	CCVs True Conc.	CCVs Found Conc.	CCVs Percent Recovery	Percent Recovery Limits	Date Analyzed
MTBE		mg/L	0.10	0.0995	100	85 - 115	7/2/02
Benzene		mg/L	0.10	0.103	103	85 - 115	7/2/02
Toluene		mg/L	0.10	0.100	100	85 - 115	7/2/02
Ethylbenzene		mg/L	0.10	0.106	106	85 - 115	7/2/02
M,P,O-Xylene		mg/L	0.30	0.301	100	85 - 115	7/2/02

CCV (1)

QCBatch: QC21773

Param	Flag	Units	CCVs True Conc.	CCVs Found Conc.	CCVs Percent Recovery	Percent Recovery Limits	Date Analyzed
GRO		mg/Kg	1	0.852	85	85 - 115	7/10/02

ICV (1)

QCBatch: QC21773

Param	Flag	Units	CCVs True Conc.	CCVs Found Conc.	CCVs Percent Recovery	Percent Recovery Limits	Date Analyzed
GRO		mg/Kg	1	0.901	90	85 - 115	7/10/02

CCV (1)

QCBatch: QC21784

Param	Flag	Units	CCVs True Conc.	CCVs Found Conc.	CCVs Percent Recovery	Percent Recovery Limits	Date Analyzed
MTBE		mg/L	0.10	0.0969	96	85 - 115	7/10/02
Benzene		mg/L	0.10	0.1	100	85 - 115	7/10/02
Toluene		mg/L	0.10	0.0993	99	85 - 115	7/10/02
Ethylbenzene		mg/L	0.10	0.0924	92	85 - 115	7/10/02
M,P,O-Xylene		mg/L	0.30	0.264	88	85 - 115	7/10/02

ICV (1)

QCBatch: QC21784

Param	Flag	Units	CCVs True Conc.	CCVs Found Conc.	CCVs Percent Recovery	Percent Recovery Limits	Date Analyzed
MTBE		mg/L	0.10	0.0947	94	85 - 115	7/10/02
Benzene		mg/L	0.10	0.0977	97	85 - 115	7/10/02
Toluene		mg/L	0.10	0.095	95	85 - 115	7/10/02
Ethylbenzene		mg/L	0.10	0.0925	92	85 - 115	7/10/02
M,P,O-Xylene		mg/L	0.30	0.265	88	85 - 115	7/10/02

TraceAnalysis, Inc.

6701 Aberdeen Avenue, Ste. 9 Lubbock, Texas 79424
Tel (806) 794 1296 Fax (806) 794 1298
1 (800) 378 1296

CHAIN-OF-CUSTODY RECORD AND ANALYSIS REQUEST

LAB Order ID # A02070207

Company Name: Environ Services Inc
Phone #: 915-570-8726
Address: 306 West Wall, Suite 1312, Midland, Tx 79701
Fax #: 915-684-7587
Contact Person: Jeffrey Kindley
Invoice to: (If different from above) Kyle Londrenow Equiva Services Incident # 300109
Project #: EQ-112
Project Name: Barber Ranch
Project Location: Lea County, New Mexico
Sampler Signature: Jeffrey Kindley

ANALYSIS REQUEST
(Circle or Specify Method No.)

LAB # (LAB USE ONLY)	FIELD CODE	# CONTAINERS	Volume/Amount	MATRIX: WATER	MATRIX: SOIL	MATRIX: AIR	MATRIX: SLUDGE	PRESERVATIVE METHOD: HCL	PRESERVATIVE METHOD: HNO3	PRESERVATIVE METHOD: ICE	PRESERVATIVE METHOD: NONE	SAMPLING: DATE	SAMPLING: TIME	MTBE 8020/602	BTEX 8020/602	TPH	PAH 8270	Total Metals Ag As Ba Cd Cr Pb Hg Se	TCLP Metals Ag As Ba Cd Cr Pb Hg Se	TCLP Volatiles	TCLP Semi Volatiles	RCI	GC.MS Vol. 8240/8260/624	GC/MS Semi. Vol. 8270/625	PCB's 8080/608	Pest. 8080/608	BOD, TSS, PH	TPH (DRO/GRO) 8015M	TPH SPLP GRO DRO			Turn Around Time if different from standard	Hold
200610	S-13 (13-15')	1	4oz		✓						✓	6/28/02	945		✓													✓	X				
611	S-13 (25-27')	1	4oz		✓						✓	6/28/02	1000		✓													✓					
612	S-14 (8-10')	1	4oz		✓						✓	6/28/02	1103		✓													✓	X				
613	S-14 (25-27')	1	4oz		✓						✓	6/28/02	1135		✓													✓					
614	MW-19 (13-15')	1	4oz		✓						✓	6/28/02	1420		✓													✓					
615	MW-19 (25-27')	1	4oz		✓						✓	6/28/02	1450		✓													✓					

Add SPLP GRO/DRO per BC 7-9
200610, 200612
No SPLP BTEX per BC 7-11

Relinquished by:	Date:	Time:	Received by:	Date:	Time:
Jeffrey Kindley	July 1, 2002	11:15AM	Helen Shelton	7/01/02	11:15 AM
Helen Shelton	7/01/02	1830	—		
—			Received at Laboratory by:	7-2-02	10:00

LAB USE ONLY
Intact (Y) / N
Headspace Y / N
Temp 3°
Log-in Review [illegible]

REMARKS:
3 Day Turnaround on TPH [illegible]
Any sample with combined [illegible]
of ≥ 100ppm run SPLP TPH on
that sample. Any sample with 7/12F
Benzene ≥ 10 ppm [illegible]
[illegible]

Carrier # Greyhound [illegible] 7/10/[illegible]

Submittal of samples constitutes agreement to Terms and Conditions listed on reverse side of C.O.C. 6 samples - HS

ORIGINAL COPY

TraceAnalysis, Inc. 6701 Aberdeen Ave., Suite 9 Lubbock, TX 79424-1515 (806) 794-1296

Summary Report

Kyle Landreneau
Equilon Kyle Landreneau
PMB 284 40 FM 1960 West
Houston, TX 77090

Report Date: July 16, 2002

Order ID Number: A02070313

Project: EQ-112 Monument
TA Job Code: Barber Ranch 3000109
Casualty Code: EQ-112
Project Location: Monument, Lea County,New Mexico
Project Address:
Enercon Services Inc. / Midland / Jeff Kindley

Sample	Description	Matrix	Date Taken	Time Taken	Date Received
200724	MW-16	Water	7/1/02	13:10	7/3/02

0 This report consists of a total of 1 page(s) and is intended only as a summary of results for the sample(s) listed above.

	BTEX				
Sample - Field Code	Benzene (ppm)	Toluene (ppm)	Ethylbenzene (ppm)	M,P,O-Xylene (ppm)	Total BTEX (ppm)
200724 - MW-16	<0.005	<0.005	<0.005	<0.005	<0.005

Sample: 200724 - MW-16

Param	Flag	Result	Units
Naphthalene		<0.0002	mg/L
Acenaphthylene		<0.0002	mg/L
Acenaphthene		<0.0002	mg/L
Fluorene		<0.0002	mg/L
Phenanthrene		<0.0002	mg/L
Anthracene		<0.0002	mg/L
Fluoranthene		<0.0002	mg/L
Pyrene		<0.0002	mg/L
Benzo(a)anthracene		<0.0002	mg/L
Chrysene		<0.0002	mg/L
Benzo(b)fluoranthene		<0.0002	mg/L
Benzo(k)fluoranthene		<0.0002	mg/L
Benzo(a)pyrene		<0.0002	mg/L
Indeno(1,2,3-cd)pyrene		<0.0002	mg/L
Dibenzo(a,h)anthracene		<0.0002	mg/L
Benzo(g,h,i)perylene		<0.0002	mg/L

This is only a summary. Please, refer to the complete report package for quality control data.

TRACEANALYSIS, INC.

6701 Aberdeen Avenue, Suite 9 Lubbock, Texas 79424 800•378•1296 806•794•1296 FAX 806•794•1298
155 McCutcheon, Suite H El Paso, Texas 79932 888•588•3443 915•585•3443 FAX 915•585•4944
E-Mail: lab@traceanalysis.com

Analytical and Quality Control Report

Kyle Landreneau
Equilon Kyle Landreneau
PMB 284 40 FM 1960 West
Houston, TX 77090

Report Date: July 16, 2002

Order ID Number: A02070313

Project: EQ-112 Monument
TA Job Code: Barber Ranch 3000109
Casualty Code: EQ-112
Project Location: Monument, Lea County,New Mexico
Enercon Services Inc. / Midland / Jeff Kindley

Enclosed are the Analytical Results and Quality Control Data Reports for the following samples submitted to Trace-Analysis, Inc.

Sample	Description	Matrix	Date Taken	Time Taken	Date Received
200724	MW-16	Water	7/1/02	13:10	7/3/02

These results represent only the samples received in the laboratory. The Quality Control Report is generated on a batch basis. All information contained in this report is for the analytical batch(es) in which your sample(s) were analyzed. Note: the RDL is equal to MQL for all organic analytes including TPH.
The test results contained within this report meet all requirements of LAC 33:I unless otherwise noted.

This report consists of a total of 6 pages and shall not be reproduced except in its entirety including the chain of custody (COC), without written approval of TraceAnalysis, Inc.

Dr. Blair Leftwich, Director

Analytical Report

Sample: 200724 - MW-16

Analysis: BTEX | Analytical Method: S 8021B | QC Batch: QC21599 | Date Analyzed: 7/5/02
Analyst: DN | Preparation Method: S 5030B | Prep Batch: PB20488 | Date Prepared: 7/5/02

Param	Flag	Result	Units	Dilution	RDL
Benzene		<0.005	mg/L	5	0.001
Toluene		<0.005	mg/L	5	0.001
Ethylbenzene		<0.005	mg/L	5	0.001
M,P,O-Xylene		<0.005	mg/L	5	0.001
Total BTEX		<0.005	mg/L	5	0.001

Surrogate	Flag	Result	Units	Dilution	Spike Amount	Percent Recovery	Recovery Limits
TFT		0.107	mg/L	5	0.10	107	70 - 130
4-BFB		0.109	mg/L	5	0.10	109	70 - 130

Sample: 200724 - MW-16

Analysis: PAH | Analytical Method: S 8270C | QC Batch: QC21902 | Date Analyzed: 7/12/02
Analyst: RC | Preparation Method: E 3510C | Prep Batch: PB20672 | Date Prepared: 7/8/02

Param	Flag	Result	Units	Dilution	RDL
Naphthalene		<0.0002	mg/L	1	0.0002
Acenaphthylene		<0.0002	mg/L	1	0.0002
Acenaphthene		<0.0002	mg/L	1	0.0002
Fluorene		<0.0002	mg/L	1	0.0002
Phenanthrene		<0.0002	mg/L	1	0.0002
Anthracene		<0.0002	mg/L	1	0.0002
Fluoranthene		<0.0002	mg/L	1	0.0002
Pyrene		<0.0002	mg/L	1	0.0002
Benzo(a)anthracene		<0.0002	mg/L	1	0.0002
Chrysene		<0.0002	mg/L	1	0.0002
Benzo(b)fluoranthene		<0.0002	mg/L	1	0.0002
Benzo(k)fluoranthene		<0.0002	mg/L	1	0.0002
Benzo(a)pyrene		<0.0002	mg/L	1	0.0002
Indeno(1,2,3-cd)pyrene		<0.0002	mg/L	1	0.0002
Dibenzo(a,h)anthracene		<0.0002	mg/L	1	0.0002
Benzo(g,h,i)perylene		<0.0002	mg/L	1	0.0002

Surrogate	Flag	Result	Units	Dilution	Spike Amount	Percent Recovery	Recovery Limits
Nitrobenzene-d5		64.82	mg/L	1	80	81	35 - 114
2-Fluorobiphenyl		58.8	mg/L	1	80	73	43 - 116
Terphenyl-d14		47.22	mg/L	1	80	59	33 - 141

Quality Control Report
Method Blank

Method Blank

QCBatch: QC21599

Param	Flag	Results	Units	Reporting Limit
Benzene		<0.001	mg/L	0.001
Toluene		<0.001	mg/L	0.001
Ethylbenzene		<0.001	mg/L	0.001
M,P,O-Xylene		<0.001	mg/L	0.001
Total BTEX		< 0.001	mg/L	0.001

Surrogate	Flag	Result	Units	Dilution	Spike Amount	Percent Recovery	Recovery Limits
TFT		0.0917	mg/L	1	0.10	92	70 - 130
4-BFB		0.0873	mg/L	1	0.10	87	70 - 130

Method Blank

QCBatch: QC21902

Param	Flag	Results	Units	Reporting Limit
Naphthalene		<0.0002	mg/L	0.0002
Acenaphthylene		<0.0002	mg/L	0.0002
Acenaphthene		<0.0002	mg/L	0.0002
Fluorene		<0.0002	mg/L	0.0002
Phenanthrene		<0.0002	mg/L	0.0002
Anthracene		<0.0002	mg/L	0.0002
Fluoranthene		<0.0002	mg/L	0.0002
Pyrene		<0.0002	mg/L	0.0002
Benzo(a)anthracene		<0.0002	mg/L	0.0002
Chrysene		<0.0002	mg/L	0.0002
Benzo(b)fluoranthene		<0.0002	mg/L	0.0002
Benzo(k)fluoranthene		<0.0002	mg/L	0.0002
Benzo(a)pyrene		<0.0002	mg/L	0.0002
Indeno(1,2,3-cd)pyrene		<0.0002	mg/L	0.0002
Dibenzo(a,h)anthracene		<0.0002	mg/L	0.0002
Benzo(g,h,i)perylene		<0.0002	mg/L	0.0002

Quality Control Report
Lab Control Spikes and Duplicate Spikes

Laboratory Control Spikes

QCBatch: QC21599

Param	LCS Result	LCSD Result	Units	Dil.	Spike Amount Added	Matrix Result	% Rec	RPD	% Rec Limit	RPD Limit
MTBE	0.0954	0.0948	mg/L	1	0.10	<0.001	95	1	70 - 130	20

Continued ...

... Continued

Param	LCS Result	LCSD Result	Units	Dil.	Spike Amount Added	Matrix Result	% Rec	RPD	% Rec Limit	RPD Limit
Benzene	0.102	0.104	mg/L	1	0.10	<0.001	102	2	70 - 130	20
Toluene	0.102	0.106	mg/L	1	0.10	<0.001	102	4	70 - 130	20
Ethylbenzene	0.105	0.106	mg/L	1	0.10	<0.001	105	1	70 - 130	20
M,P,O-Xylene	0.309	0.312	mg/L	1	0.30	<0.001	103	1	70 - 130	20

Percent recovery is based on the spike result. RPD is based on the spike and spike duplicate result.

Surrogate	LCS Result	LCSD Result	Units	Dilution	Spike Amount	LCS % Rec	LCSD % Rec	Recovery Limits
TFT	0.112	0.115	mg/L	1	0.10	112	115	70 - 130
4-BFB	0.113	0.111	mg/L	1	0.10	113	111	70 - 130

Laboratory Control Spikes

QCBatch: QC21902

Param	LCS Result	LCSD Result	Units	Dil.	Spike Amount Added	Matrix Result	% Rec	RPD	% Rec Limit	RPD Limit
Naphthalene	68.06	64.5	mg/L	1	80	<0.0002	85	5	16 - 96	20
Acenaphthylene	72.61	72.3	mg/L	1	80	<0.0002	90	0	20 - 110	20
Acenaphthene	69.84	70.54	mg/L	1	80	<0.0002	87	0	18 - 108	20
Fluorene	66.78	66.9	mg/L	1	80	<0.0002	83	0	22 - 102	20
Phenanthrene	70.47	68.77	mg/L	1	80	<0.0002	88	2	25 - 103	20
Anthracene	71.59	71.62	mg/L	1	80	<0.0002	89	0	22 - 110	20
Fluoranthene	86.55	87.63	mg/L	1	80	<0.0002	108	1	21 - 110	20
Pyrene	61.77	59.13	mg/L	1	80	<0.0002	77	4	22 - 100	20
Benzo(a)anthracene	66.41	66.32	mg/L	1	80	<0.0002	83	0	30 - 99	20
Chrysene	61.34	61.63	mg/L	1	80	<0.0002	76	0	27 - 108	20
Benzo(b)fluoranthene	50.81	51.42	mg/L	1	80	<0.0002	63	1	19 - 102	20
Benzo(k)fluoranthene	63.72	62.85	mg/L	1	80	<0.0002	79	1	35 - 103	20
Benzo(a)pyrene	53.22	51.64	mg/L	1	80	<0.0002	66	3	24 - 105	20
Indeno(1,2,3-cd)pyrene	59.58	55.3	mg/L	1	80	<0.0002	74	7	22 - 108	20
Dibenzo(a,h)anthracene	41.51	40.41	mg/L	1	80	<0.0002	51	2	23 - 77	20
Benzo(g,h,i)perylene	52.84	50.23	mg/L	1	80	<0.0002	66	5	19 - 119	20

Percent recovery is based on the spike result. RPD is based on the spike and spike duplicate result.

Surrogate	LCS Result	LCSD Result	Units	Dilution	Spike Amount	LCS % Rec	LCSD % Rec	Recovery Limits
Nitrobenzene-d5	80.93	79.38	mg/L	1	80	101	99	35 - 114
2-Fluorobiphenyl	74.86	74.26	mg/L	1	80	93	92	43 - 116
Terphenyl-d14	29.72	28.88	mg/L	1	80	37	36	33 - 141

Quality Control Report
Continuing Calibration Verification Standards

CCV (1)

QCBatch: QC21599

Param	Flag	Units	CCVs True Conc.	CCVs Found Conc.	CCVs Percent Recovery	Percent Recovery Limits	Date Analyzed
MTBE		mg/L	0.10	0.094	94	85 - 115	7/5/02
Benzene		mg/L	0.10	0.101	101	85 - 115	7/5/02
Toluene		mg/L	0.10	0.101	101	85 - 115	7/5/02
Ethylbenzene		mg/L	0.10	0.104	104	85 - 115	7/5/02
M,P,O-Xylene		mg/L	0.30	0.308	103	85 - 115	7/5/02

CCV (2) QCBatch: QC21599

Param	Flag	Units	CCVs True Conc.	CCVs Found Conc.	CCVs Percent Recovery	Percent Recovery Limits	Date Analyzed
MTBE		mg/L	0.10	0.0959	95	85 - 115	7/5/02
Benzene		mg/L	0.10	0.102	102	85 - 115	7/5/02
Toluene		mg/L	0.10	0.101	101	85 - 115	7/5/02
Ethylbenzene		mg/L	0.10	0.103	103	85 - 115	7/5/02
M,P,O-Xylene		mg/L	0.30	0.304	101	85 - 115	7/5/02

ICV (1) QCBatch: QC21599

Param	Flag	Units	CCVs True Conc.	CCVs Found Conc.	CCVs Percent Recovery	Percent Recovery Limits	Date Analyzed
MTBE		mg/L	0.10	0.0953	95	85 - 115	7/5/02
Benzene		mg/L	0.10	0.102	102	85 - 115	7/5/02
Toluene		mg/L	0.10	0.102	102	85 - 115	7/5/02
Ethylbenzene		mg/L	0.10	0.105	105	85 - 115	7/5/02
M,P,O-Xylene		mg/L	0.30	0.313	104	85 - 115	7/5/02

CCV (1) QCBatch: QC21902

Param	Flag	Units	CCVs True Conc.	CCVs Found Conc.	CCVs Percent Recovery	Percent Recovery Limits	Date Analyzed
Naphthalene		mg/L	60	67.87	113	80 - 120	7/12/02
Acenaphthylene		mg/L	60	70.11	116	80 - 120	7/12/02
Acenaphthene		mg/L	60	69.3	115	80 - 120	7/12/02
Fluorene		mg/L	60	67.17	111	80 - 120	7/12/02
Phenanthrene		mg/L	60	70.25	117	80 - 120	7/12/02
Anthracene		mg/L	60	69.74	116	80 - 120	7/12/02
Fluoranthene		mg/L	60	67.97	113	80 - 120	7/12/02
Pyrene		mg/L	60	64.23	107	80 - 120	7/12/02
Benzo(a)anthracene		mg/L	60	63.94	106	80 - 120	7/12/02
Chrysene		mg/L	60	65.87	109	80 - 120	7/12/02
Benzo(b)fluoranthene		mg/L	60	53.42	89	80 - 120	7/12/02
Benzo(k)fluoranthene		mg/L	60	69.11	115	80 - 120	7/12/02

Continued ...

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Param	Flag	Units	CCVs True Conc.	CCVs Found Conc.	CCVs Percent Recovery	Percent Recovery Limits	Date Analyzed
Benzo(a)pyrene		mg/L	60	55.16	91	80 - 120	7/12/02
Indeno(1,2,3-cd)pyrene		mg/L	60	59.87	99	80 - 120	7/12/02
Dibenzo(a,h)anthracene		mg/L	60	58.18	96	80 - 120	7/12/02
Benzo(g,h,i)perylene		mg/L	60	55.8	93	80 - 120	7/12/02
Nitrobenzene-d5		mg/L	60	64.19	106	80 - 120	7/12/02
2-Fluorobiphenyl		mg/L	60	70.94	118	80 - 120	7/12/02
Terphenyl-d14		mg/L	60	60.03	100	80 - 120	7/12/02

CCV (2)

QCBatch: QC21902

Param	Flag	Units	CCVs True Conc.	CCVs Found Conc.	CCVs Percent Recovery	Percent Recovery Limits	Date Analyzed
Naphthalene		mg/L	60	67.02	111	80 - 120	7/12/02
Acenaphthylene		mg/L	60	70.84	118	80 - 120	7/12/02
Acenaphthene		mg/L	60	69.08	115	80 - 120	7/12/02
Fluorene		mg/L	60	64.76	107	80 - 120	7/12/02
Phenanthrene		mg/L	60	69.67	116	80 - 120	7/12/02
Anthracene		mg/L	60	68.86	114	80 - 120	7/12/02
Fluoranthene		mg/L	60	66.83	111	80 - 120	7/12/02
Pyrene		mg/L	60	59.33	98	80 - 120	7/12/02
Benzo(a)anthracene		mg/L	60	61.16	101	80 - 120	7/12/02
Chrysene		mg/L	60	62.15	103	80 - 120	7/12/02
Benzo(b)fluoranthene		mg/L	60	51.49	85	80 - 120	7/12/02
Benzo(k)fluoranthene		mg/L	60	65.76	109	80 - 120	7/12/02
Benzo(a)pyrene		mg/L	60	54.97	91	80 - 120	7/12/02
Indeno(1,2,3-cd)pyrene		mg/L	60	62.23	103	80 - 120	7/12/02
Dibenzo(a,h)anthracene		mg/L	60	59.88	99	80 - 120	7/12/02
Benzo(g,h,i)perylene		mg/L	60	56.84	94	80 - 120	7/12/02
Nitrobenzene-d5		mg/L	60	68.21	113	80 - 120	7/12/02
2-Fluorobiphenyl		mg/L	60	69.8	116	80 - 120	7/12/02
Terphenyl-d14		mg/L	60	57.14	95	80 - 120	7/12/02

Summary Report

Kyle Landreneau
Equiva Kyle Landreneau
PMB 284 40 FM 1960 West
Houston, TX 77090

Report Date: July 10, 2002

Order ID Number: A02070508

Project: EQ 102
TA Job Code: 97236398
Casualty Code: EQ 102
Project Location: Lea Station
Project Address:
Enercon Services Inc. / Midland / Jeff Kindley

Sample	Description	Matrix	Date Taken	Time Taken	Date Received
200879	MW-6	Water	7/2/02	14:00	7/3/02
200880	MW-7	Water	7/2/02	14:20	7/3/02
200881	MW-10	Water	7/2/02	13:15	7/3/02
200882	MW-5	Water	7/2/02	13:45	7/3/02
200883	MW-9	Water	7/2/02	12:50	7/3/02
200884	MW-4	Water	7/2/02	12:10	7/3/02

0 This report consists of a total of 1 page(s) and is intended only as a summary of results for the sample(s) listed above.

	BTEX				
Sample - Field Code	Benzene (ppm)	Toluene (ppm)	Ethylbenzene (ppm)	M,P,O-Xylene (ppm)	Total BTEX (ppm)
200879 - MW-6	<0.005	<0.005	<0.005	<0.005	<0.005
200880 - MW-7	<0.001	<0.001	<0.001	<0.001	<0.001
200881 - MW-10	<0.005	<0.005	<0.005	<0.005	<0.005
200882 - MW-5	<0.005	<0.005	<0.005	<0.005	<0.005
200883 - MW-9	<0.001	<0.001	<0.001	<0.001	<0.001
200884 - MW-4	<0.001	<0.001	<0.001	<0.001	<0.001

This is only a summary. Please, refer to the complete report package for quality control data.

701 Aberdeen Avenue, Ste. 9
Lubbock, Texas 79424
Tel (806) 794-1296
Fax (806) 794-1298
1 (800) 378-1296

TraceAnalysis, Inc.

155 McCutcheon, Suite H
El Paso, Texas 79932
Tel (915) 585-3443
Fax (915) 585-4944
1 (888) 588-3443

CHAIN-OF-CUSTODY AND ANALYSIS REQUEST

LAB Order ID # A02070508

npany Name: Enercon Services Inc.
Phone #: 915-570-8726
lress: (Street, City, Zip) 306 West Wall, Suite 1312, Midland, Tx 79701
Fax #: 915-684-7587
ntact Person: Jeffrey Kindley
oice to: (different from above) Kyle Landreneau Equiva Services
Incident # 97236398
ject #: EQ-102
Project Name: Lea Station
ject Location: Lea County, New Mexico
Sampler Signature: Jeffrey Kindley

ANALYSIS REQUEST
(Circle or Specify Method No.)

LAB # (LAB USE ONLY)	FIELD CODE	# CONTAINERS	Volume/Amount	MATRIX: WATER	SOIL	AIR	SLUDGE	PRESERVATIVE METHOD: HCl	HNO_3	H_2SO_4	NaOH	ICE	NONE	SAMPLING: DATE	TIME	MTBE 8021B/602	BTEX 8021B/602	TPH 418.1/TX1005	PAH 8270C	Total Metals Ag As Ba Cd Cr Pb Se Hg 6010B/200.7	TCLP Metals Ag As Ba Cd Cr Pb Se Hg	TCLP Volatiles	TCLP Semi Volatiles	TCLP Pesticides	RCI	GC/MS Vol. 8260B/624	GC/MS Semi. Vol. 8270C/625	PCB's 8082/608	Pesticides 8081A/608	BOD, TSS, pH	Turn Around Time if different from standard	Hold
00879	MW-6	2	40ml	✓				✓						7/02/02	1400		✓															
80	MW-7	2	40ml	✓				✓						7/02/02	1420		✓															
81	MW-10	2	40ml	✓				✓						7/02/02	1315		✓															
82	MW-5	2	40ml	✓				✓						7/02/02	1345		✓															
83	MW-9	2	40ml	✓				✓						7/2/02	1250		✓															
84	MW-4	2	40ml	✓				✓						7/2/02	1210		✓															

Relinquished by:	Date:	Time:	Received by:	Date:	Time:
Jeffrey Kindley	July 3, 2002	1630	Helen Shelton	7/03/02	1630
Helen Shelton	7/03/02	1830			
			Received at Laboratory by:	07/04/02	1400

LAB USE ONLY
Intact Y / N
Headspace Y / N
Temp 3 °
Log-in Review MA

REMARKS:
Normal
7/10 F/P
☐ Check If Special Reporting Limits Are Needed

Carrier # Greyhound

omittal of samples constitutes agreement to Terms and Conditions listed on reverse side of C.O.C.

12 samples

ORIGINAL COPY

TRACEANALYSIS, INC.

6701 Aberdeen Avenue, Suite 9 Lubbock, Texas 79424 800•378•1296 806•794•1296 FAX 806•794•1298
155 McCutcheon, Suite H El Paso, Texas 79932 888•588•3443 915•585•3443 FAX 915•585•4944
E-Mail: lab@traceanalysis.com

Analytical and Quality Control Report

Kyle Landreneau
Equiva Kyle Landreneau
PMB 284 40 FM 1960 West
Houston, TX 77090

Report Date: July 10, 2002

Order ID Number: A02070508

Project: EQ 102
TA Job Code: 97236398
Casualty Code: EQ 102
Project Location: Lea Station
Enercon Services Inc. / Midland / Jeff Kindley

Enclosed are the Analytical Results and Quality Control Data Reports for the following samples submitted to Trace-Analysis, Inc.

Sample	Description	Matrix	Date Taken	Time Taken	Date Received
200879	MW-6	Water	7/2/02	14:00	7/3/02
200880	MW-7	Water	7/2/02	14:20	7/3/02
200881	MW-10	Water	7/2/02	13:15	7/3/02
200882	MW-5	Water	7/2/02	13:45	7/3/02
200883	MW-9	Water	7/2/02	12:50	7/3/02
200884	MW-4	Water	7/2/02	12:10	7/3/02

These results represent only the samples received in the laboratory. The Quality Control Report is generated on a batch basis. All information contained in this report is for the analytical batch(es) in which your sample(s) were analyzed. Note: the RDL is equal to MQL for all organic analytes including TPH.
The test results contained within this report meet all requirements of LAC 33:I unless otherwise noted.

This report consists of a total of 9 pages and shall not be reproduced except in its entirety including the chain of custody (COC), without written approval of TraceAnalysis, Inc.

Dr. Blair Leftwich, Director

Analytical Report

Sample: 200879 - MW-6

Analysis:	BTEX	Analytical Method:	S 8021B	QC Batch:	QC21600	Date Analyzed:	7/5/02
Analyst:	DN	Preparation Method:	S 5030B	Prep Batch:	PB20489	Date Prepared:	7/5/02

Param	Flag	Result	Units	Dilution	RDL
Benzene		<0.005	mg/L	5	0.001
Toluene		<0.005	mg/L	5	0.001
Ethylbenzene		<0.005	mg/L	5	0.001
M,P,O-Xylene		<0.005	mg/L	5	0.001
Total BTEX		<0.005	mg/L	5	0.001

Surrogate	Flag	Result	Units	Dilution	Spike Amount	Percent Recovery	Recovery Limits
TFT		0.104	mg/L	5	0.10	104	70 - 130
4-BFB		0.112	mg/L	5	0.10	112	70 - 130

Sample: 200880 - MW-7

Analysis:	BTEX	Analytical Method:	S 8021B	QC Batch:	QC21600	Date Analyzed:	7/5/02
Analyst:	DN	Preparation Method:	S 5030B	Prep Batch:	PB20489	Date Prepared:	7/5/02

Param	Flag	Result	Units	Dilution	RDL
Benzene		<0.001	mg/L	1	0.001
Toluene		<0.001	mg/L	1	0.001
Ethylbenzene		<0.001	mg/L	1	0.001
M,P,O-Xylene		<0.001	mg/L	1	0.001
Total BTEX		<0.001	mg/L	1	0.001

Surrogate	Flag	Result	Units	Dilution	Spike Amount	Percent Recovery	Recovery Limits
TFT		0.106	mg/L	1	0.10	106	70 - 130
4-BFB		0.110	mg/L	1	0.10	110	70 - 130

Sample: 200881 - MW-10

Analysis:	BTEX	Analytical Method:	S 8021B	QC Batch:	QC21637	Date Analyzed:	7/7/02
Analyst:	DN	Preparation Method:	S 5030B	Prep Batch:	PB20518	Date Prepared:	7/7/02

Param	Flag	Result	Units	Dilution	RDL
Benzene		<0.005	mg/L	5	0.001
Toluene		<0.005	mg/L	5	0.001
Ethylbenzene		<0.005	mg/L	5	0.001
M,P,O-Xylene		<0.005	mg/L	5	0.001
Total BTEX		<0.005	mg/L	5	0.001

Surrogate	Flag	Result	Units	Dilution	Spike Amount	Percent Recovery	Recovery Limits
TFT		0.111	mg/L	5	0.10	111	70 - 130
4-BFB		0.112	mg/L	5	0.10	112	70 - 130

Sample: 200882 - MW-5

Analysis:	BTEX	Analytical Method:	S 8021B	QC Batch:	QC21665	Date Analyzed:	7/7/02
Analyst:	DN	Preparation Method:	S 5030B	Prep Batch:	PB20539	Date Prepared:	7/7/02

Param	Flag	Result	Units	Dilution	RDL
Benzene		<0.005	mg/L	5	0.001
Toluene		<0.005	mg/L	5	0.001
Ethylbenzene		<0.005	mg/L	5	0.001
M,P,O-Xylene		<0.005	mg/L	5	0.001
Total BTEX		<0.005	mg/L	5	0.001

Surrogate	Flag	Result	Units	Dilution	Spike Amount	Percent Recovery	Recovery Limits
TFT		0.102	mg/L	5	0.10	102	70 - 130
4-BFB		0.104	mg/L	5	0.10	104	70 - 130

Sample: 200883 - MW-9

Analysis:	BTEX	Analytical Method:	S 8021B	QC Batch:	QC21637	Date Analyzed:	7/7/02
Analyst:	DN	Preparation Method:	S 5030B	Prep Batch:	PB20518	Date Prepared:	7/7/02

Param	Flag	Result	Units	Dilution	RDL
Benzene		<0.001	mg/L	1	0.001
Toluene		<0.001	mg/L	1	0.001
Ethylbenzene		<0.001	mg/L	1	0.001
M,P,O-Xylene		<0.001	mg/L	1	0.001
Total BTEX		<0.001	mg/L	1	0.001

Surrogate	Flag	Result	Units	Dilution	Spike Amount	Percent Recovery	Recovery Limits
TFT		0.112	mg/L	1	0.10	112	70 - 130
4-BFB		0.118	mg/L	1	0.10	118	70 - 130

Sample: 200884 - MW-4

Analysis:	BTEX	Analytical Method:	S 8021B	QC Batch:	QC21637	Date Analyzed:	7/7/02
Analyst:	DN	Preparation Method:	S 5030B	Prep Batch:	PB20518	Date Prepared:	7/7/02

Param	Flag	Result	Units	Dilution	RDL
Benzene		<0.001	mg/L	1	0.001
Toluene		<0.001	mg/L	1	0.001
Ethylbenzene		<0.001	mg/L	1	0.001
M,P,O-Xylene		<0.001	mg/L	1	0.001
Total BTEX		<0.001	mg/L	1	0.001

Surrogate	Flag	Result	Units	Dilution	Spike Amount	Percent Recovery	Recovery Limits
TFT		0.113	mg/L	1	0.10	113	70 - 130
4-BFB		0.119	mg/L	1	0.10	119	70 - 130

Quality Control Report
Method Blank

Method Blank

QCBatch: QC21600

Param	Flag	Results	Units	Reporting Limit
Benzene		<0.001	mg/L	0.001
Toluene		<0.001	mg/L	0.001
Ethylbenzene		<0.001	mg/L	0.001
M,P,O-Xylene		<0.001	mg/L	0.001
Total BTEX		< 0.001	mg/L	0.001

Surrogate	Flag	Result	Units	Dilution	Spike Amount	Percent Recovery	Recovery Limits
TFT		0.103	mg/L	1	0.10	103	70 - 130
4-BFB		0.101	mg/L	1	0.10	101	70 - 130

Method Blank

QCBatch: QC21637

Param	Flag	Results	Units	Reporting Limit
Benzene		<0.001	mg/L	0.001
Toluene		<0.001	mg/L	0.001
Ethylbenzene		<0.001	mg/L	0.001
M,P,O-Xylene		<0.001	mg/L	0.001
Total BTEX		< 0.001	mg/L	0.001

Surrogate	Flag	Result	Units	Dilution	Spike Amount	Percent Recovery	Recovery Limits
TFT		0.121	mg/L	1	0.10	121	70 - 130
4-BFB		0.119	mg/L	1	0.10	119	70 - 130

Method Blank

QCBatch: QC21665

Param	Flag	Results	Units	Reporting Limit
Benzene		<0.001	mg/L	0.001
Toluene		<0.001	mg/L	0.001
Ethylbenzene		<0.001	mg/L	0.001
M,P,O-Xylene		<0.001	mg/L	0.001
Total BTEX		< 0.001	mg/L	0.001

Surrogate	Flag	Result	Units	Dilution	Spike Amount	Percent Recovery	Recovery Limits
TFT		0.106	mg/L	1	0.10	106	70 - 130

Continued ...

Surrogate	Flag	Result	Units	Dilution	Spike Amount	Percent Recovery	Recovery Limits
4-BFB		0.106	mg/L	1	0.10	106	70 - 130

Quality Control Report
Lab Control Spikes and Duplicate Spikes

Laboratory Control Spikes

QCBatch: QC21600

Param	LCS Result	LCSD Result	Units	Dil.	Spike Amount Added	Matrix Result	% Rec	RPD	% Rec Limit	RPD Limit
MTBE	0.0924	0.0955	mg/L	1	0.10	<0.001	92	3	70 - 130	20
Benzene	0.0953	0.0999	mg/L	1	0.10	<0.001	95	5	70 - 130	20
Toluene	0.0945	0.0993	mg/L	1	0.10	<0.001	94	5	70 - 130	20
Ethylbenzene	0.0968	0.104	mg/L	1	0.10	<0.001	97	7	70 - 130	20
M,P,O-Xylene	0.289	0.307	mg/L	1	0.30	<0.001	96	6	70 - 130	20

Percent recovery is based on the spike result. RPD is based on the spike and spike duplicate result.

Surrogate	LCS Result	LCSD Result	Units	Dilution	Spike Amount	LCS % Rec	LCSD % Rec	Recovery Limits
TFT	0.103	0.107	mg/L	1	0.10	103	107	70 - 130
4-BFB	0.107	0.111	mg/L	1	0.10	107	111	70 - 130

Laboratory Control Spikes

QCBatch: QC21637

Param	LCS Result	LCSD Result	Units	Dil.	Spike Amount Added	Matrix Result	% Rec	RPD	% Rec Limit	RPD Limit
MTBE	0.104	0.104	mg/L	1	0.10	<0.001	104	0	70 - 130	20
Benzene	0.105	0.103	mg/L	1	0.10	<0.001	105	2	70 - 130	20
Toluene	0.104	0.103	mg/L	1	0.10	<0.001	104	1	70 - 130	20
Ethylbenzene	0.109	0.106	mg/L	1	0.10	<0.001	109	3	70 - 130	20
M,P,O-Xylene	0.324	0.318	mg/L	1	0.30	<0.001	108	2	70 - 130	20

Percent recovery is based on the spike result. RPD is based on the spike and spike duplicate result.

Surrogate	LCS Result	LCSD Result	Units	Dilution	Spike Amount	LCS % Rec	LCSD % Rec	Recovery Limits
TFT	0.116	0.113	mg/L	1	0.10	116	113	70 - 130
4-BFB	0.118	0.118	mg/L	1	0.10	118	118	70 - 130

Laboratory Control Spikes

QCBatch: QC21665

Param	LCS Result	LCSD Result	Units	Dil.	Spike Amount Added	Matrix Result	% Rec	RPD	% Rec Limit	RPD Limit
MTBE	0.0978	0.0998	mg/L	1	0.10	<0.001	98	2	70 - 130	20
Benzene	0.0992	0.0993	mg/L	1	0.10	<0.001	99	0	70 - 130	20
Toluene	0.098	0.0991	mg/L	1	0.10	<0.001	98	1	70 - 130	20

Continued ...

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Param	LCS Result	LCSD Result	Units	Dil.	Spike Amount Added	Matrix Result	% Rec	RPD	% Rec Limit	RPD Limit
Ethylbenzene	0.101	0.102	mg/L	1	0.10	<0.001	101	1	70 - 130	20
M,P,O-Xylene	0.300	0.305	mg/L	1	0.30	<0.001	100	2	70 - 130	20

Percent recovery is based on the spike result. RPD is based on the spike and spike duplicate result.

Surrogate	LCS Result	LCSD Result	Units	Dilution	Spike Amount	LCS % Rec	LCSD % Rec	Recovery Limits
TFT	0.107	0.109	mg/L	1	0.10	107	109	70 - 130
4-BFB	0.111	0.113	mg/L	1	0.10	111	113	70 - 130

Quality Control Report
Continuing Calibration Verification Standards

CCV (1)

QCBatch: QC21600

Param	Flag	Units	CCVs True Conc.	CCVs Found Conc.	CCVs Percent Recovery	Percent Recovery Limits	Date Analyzed
MTBE		mg/L	0.10	0.0961	96	85 - 115	7/5/02
Benzene		mg/L	0.10	0.100	100	85 - 115	7/5/02
Toluene		mg/L	0.10	0.0997	100	85 - 115	7/5/02
Ethylbenzene		mg/L	0.10	0.102	102	85 - 115	7/5/02
M,P,O-Xylene		mg/L	0.30	0.300	100	85 - 115	7/5/02

CCV (2)

QCBatch: QC21600

Param	Flag	Units	CCVs True Conc.	CCVs Found Conc.	CCVs Percent Recovery	Percent Recovery Limits	Date Analyzed
MTBE		mg/L	0.10	0.096	96	85 - 115	7/5/02
Benzene		mg/L	0.10	0.0986	98	85 - 115	7/5/02
Toluene		mg/L	0.10	0.0981	98	85 - 115	7/5/02
Ethylbenzene		mg/L	0.10	0.1	100	85 - 115	7/5/02
M,P,O-Xylene		mg/L	0.30	0.299	99	85 - 115	7/5/02

ICV (1)

QCBatch: QC21600

Param	Flag	Units	CCVs True Conc.	CCVs Found Conc.	CCVs Percent Recovery	Percent Recovery Limits	Date Analyzed
MTBE		mg/L	0.10	0.0882	88	85 - 115	7/5/02
Benzene		mg/L	0.10	0.0952	95	85 - 115	7/5/02
Toluene		mg/L	0.10	0.0947	95	85 - 115	7/5/02
Ethylbenzene		mg/L	0.10	0.0975	98	85 - 115	7/5/02
M,P,O-Xylene		mg/L	0.30	0.289	96	85 - 115	7/5/02

CCV (1) QCBatch: QC21637

Param	Flag	Units	CCVs True Conc.	CCVs Found Conc.	CCVs Percent Recovery	Percent Recovery Limits	Date Analyzed
MTBE		mg/L	0.10	0.102	102	85 - 115	7/7/02
Benzene		mg/L	0.10	0.102	102	85 - 115	7/7/02
Toluene		mg/L	0.10	0.103	103	85 - 115	7/7/02
Ethylbenzene		mg/L	0.10	0.106	106	85 - 115	7/7/02
M,P,O-Xylene		mg/L	0.30	0.317	106	85 - 115	7/7/02

CCV (2) QCBatch: QC21637

Param	Flag	Units	CCVs True Conc.	CCVs Found Conc.	CCVs Percent Recovery	Percent Recovery Limits	Date Analyzed
MTBE		mg/L	0.10	0.1	100	85 - 115	7/7/02
Benzene		mg/L	0.10	0.0997	99	85 - 115	7/7/02
Toluene		mg/L	0.10	0.0991	99	85 - 115	7/7/02
Ethylbenzene		mg/L	0.10	0.102	102	85 - 115	7/7/02
M,P,O-Xylene		mg/L	0.30	0.3047	101	85 - 115	7/7/02

ICV (1) QCBatch: QC21637

Param	Flag	Units	CCVs True Conc.	CCVs Found Conc.	CCVs Percent Recovery	Percent Recovery Limits	Date Analyzed
MTBE		mg/L	0.10	0.110	110	85 - 115	7/7/02
Benzene		mg/L	0.10	0.109	109	85 - 115	7/7/02
Toluene		mg/L	0.10	0.109	109	85 - 115	7/7/02
Ethylbenzene		mg/L	0.10	0.115	115	85 - 115	7/7/02
M,P,O-Xylene		mg/L	0.30	0.342	114	85 - 115	7/7/02

CCV (1) QCBatch: QC21665

Param	Flag	Units	CCVs True Conc.	CCVs Found Conc.	CCVs Percent Recovery	Percent Recovery Limits	Date Analyzed
MTBE		mg/L	0.10	0.0968	97	85 - 115	7/7/02
Benzene		mg/L	0.10	0.0965	96	85 - 115	7/7/02
Toluene		mg/L	0.10	0.0954	95	85 - 115	7/7/02
Ethylbenzene		mg/L	0.10	0.0978	98	85 - 115	7/7/02
M,P,O-Xylene		mg/L	0.30	0.295	98	85 - 115	7/7/02

CCV (2) QCBatch: QC21665

Param	Flag	Units	CCVs True Conc.	CCVs Found Conc.	CCVs Percent Recovery	Percent Recovery Limits	Date Analyzed
MTBE		mg/L	0.10	0.0975	97	85 - 115	7/7/02
Benzene		mg/L	0.10	0.0988	98	85 - 115	7/7/02
Toluene		mg/L	0.10	0.0986	98	85 - 115	7/7/02
Ethylbenzene		mg/L	0.10	0.101	101	85 - 115	7/7/02
M,P,O-Xylene		mg/L	0.30	0.3011	100	85 - 115	7/7/02

ICV (1)

QCBatch: QC21665

Param	Flag	Units	CCVs True Conc.	CCVs Found Conc.	CCVs Percent Recovery	Percent Recovery Limits	Date Analyzed
MTBE		mg/L	0.10	0.0998	100	85 - 115	7/7/02
Benzene		mg/L	0.10	0.101	101	85 - 115	7/7/02
Toluene		mg/L	0.10	0.0993	99	85 - 115	7/7/02
Ethylbenzene		mg/L	0.10	0.103	103	85 - 115	7/7/02
M,P,O-Xylene		mg/L	0.30	0.308	103	85 - 115	7/7/02

200724 Page 1 of 1

TraceAnalysis, Inc.

6701 Aberdeen Avenue, Ste. 9 Lubbock, Texas 79424
Tel (806) 794 1296 Fax (806) 794 1298
1 (800) 378 1296

CHAIN-OF-CUSTODY RECORD AND ANALYSIS REQUEST

LAB Order ID # A0207031 3

Company Name: Enercon Services Inc. Phone #: 915-570-8726
Address: 306 West Wall, Suite 1312, Midland, Tx 79701 Fax #: 915-684-7587
Contact Person: Jeffrey Kindley
Invoice to: Kyle Landreneau (If different from above) Equiva Services Incident # 300109
Project #: EQ-112 Project Name: Barker Ranch
Project Location: Monument, Lea County New Mexico Sampler Signature: Jeffrey Kindley

LAB # (LAB USE ONLY)	FIELD CODE	# CONTAINERS	Volume/Amount	MATRIX: WATER	SOIL	AIR	SLUDGE	PRESERVATIVE METHOD: HCL	HNO3	ICE	NONE	SAMPLING: DATE	TIME
200724	MW-16	2	40ml	✓				✓				07/01/02	1310
	MW-16	1	1Liter	✓							✓	07/01/02	1310

ANALYSIS REQUEST (Circle or Specify Method No.)

MTBE 8020/602	BTEX 8020/602	TPH	PAH 8270	Total Metals Ag As Ba Cd Cr Pb Hg Se	TCLP Metals Ag As Ba Cd Cr Pb Hg Se	TCLP Volatiles	TCLP Semi Volatiles	RCI	GC.MS Vol. 8240/8260/624	GC/MS Semi. Vol. 8270/625	PCB's 8080/608	Pest. 8080/608	BOD, TSS, PH					Turn Around Time if different from standard	Hold
	✓																		
			✓																

Relinquished by: Jeffrey Kindley Date: July 2, 2002 Time: 0900
Received by: Helen Shelton Date: 7/02/02 Time: 0900
Relinquished by: Helen Shelton Date: 7/02/02 Time: 1830
Received by: Date: Time:
Relinquished by: Date: Time:
Received at Laboratory by: Date: Time:

LAB USE ONLY
Intact (Y) / N
Headspace Y / N
Temp 2 °C
Log-in Review

REMARKS: 7/16 F/P

Carrier # Greyhound

Submittal of samples constitutes agreement to Terms and Conditions listed on reverse side of C.O.C. 3 samples-HS

ORIGINAL COPY

Summary Report

Kyle Landreneau
Equiva Kyle Landreneau
PMB 284 40 FM 1960 West
Houston, TX 77090

Report Date: September 13, 2002

Order ID Number: A02082317

Project: EQ-112
TA Job Code: Barber Ranch 3000109
Casualty Code: EQ-112
Project Location: Barber Lea County, New Mexico
Project Address:
Enercon Services Inc. / Midland / Jeff Kindley

Sample	Description	Matrix	Date Taken	Time Taken	Date Received
206055	MW-21 (25-27')	Soil	8/20/02	13:40	8/23/02

0 This report consists of a total of 1 page(s) and is intended only as a summary of results for the sample(s) listed above.

Sample: 206055 - MW-21 (25-27')

Param	Flag	Result	Units
SPLP DRO		<5.0	mg/L

TRACEANALYSIS, INC.

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155 McCutcheon, Suite H El Paso, Texas 79932 888•588•3443 915•585•3443 FAX 915•585•4944
E-Mail: lab@traceanalysis.com

Analytical and Quality Control Report

Kyle Landreneau
Equiva Kyle Landreneau
PMB 284 40 FM 1960 West
Houston, TX 77090

Report Date: September 13, 2002

Order ID Number: A02082317

Project: EQ-112
TA Job Code: Barber Ranch 3000109
Casualty Code: EQ-112
Project Location: Barber Lea County, New Mexico
Enercon Services Inc. / Midland / Jeff Kindley

Enclosed are the Analytical Results and Quality Control Data Reports for the following samples submitted to Trace-Analysis, Inc.

Sample	Description	Matrix	Date Taken	Time Taken	Date Received
206055	MW-21 (25-27')	Soil	8/20/02	13:40	8/23/02

These results represent only the samples received in the laboratory. The Quality Control Report is generated on a batch basis. All information contained in this report is for the analytical batch(es) in which your sample(s) were analyzed. Note: the RDL is equal to MQL for all organic analytes including TPH.
The test results contained within this report meet all requirements of LAC 33:I unless otherwise noted.

This report consists of a total of 3 pages and shall not be reproduced except in its entirety including the chain of custody (COC), without written approval of TraceAnalysis, Inc.

Note: Samples will be disposed of 30 days from the report date unless the lab is contacted before the 30 days has past.

Dr. Blair Leftwich, Director

Analytical Report

Sample: 206055 - MW-21 (25-27')

Analysis:	SPLP DRO	Analytical Method:	Mod. 8015B	QC Batch:	QC23512	Date Analyzed:	9/13/02
Analyst:	BP	Preparation Method:	1312	Prep Batch:	PB22022	Date Prepared:	9/3/02

Param	Flag	Result	Units	Dilution	RDL
SPLP DRO		<5.0	mg/L	1	50

Quality Control Report
Method Blank

Method Blank QCBatch: QC23512

Param	Flag	Results	Units	Reporting Limit
SPLP DRO		<5.0	mg/L	50

Quality Control Report
Lab Control Spikes and Duplicate Spikes

Laboratory Control Spikes QCBatch: QC23512

Param	LCS Result	LCSD Result	Units	Dil.	Spike Amount Added	Matrix Result	% Rec	RPD	% Rec Limit	RPD Limit
SPLP DRO	< 50	< 50	mg/L	1	25	<5.0	98	1	70 - 130	20

Percent recovery is based on the spike result. RPD is based on the spike and spike duplicate result.

Quality Control Report
Continuing Calibration Verification Standards

CCV (1) QCBatch: QC23512

Param	Flag	Units	CCVs True Conc.	CCVs Found Conc.	CCVs Percent Recovery	Percent Recovery Limits	Date Analyzed
SPLP DRO		mg/L	250	248	99	75 - 125	9/13/02

ICV (1) QCBatch: QC23512

Param	Flag	Units	CCVs True Conc.	CCVs Found Conc.	CCVs Percent Recovery	Percent Recovery Limits	Date Analyzed
SPLP DRO		mg/L	250	244	97	75 - 125	9/13/02

Summary Report

Kyle Landreneau
Equiva Kyle Landreneau
PMB 284 40 FM 1960 West
Houston, TX 77090

Report Date: September 4, 2002

Order ID Number: A02082317

Project: EQ-112
TA Job Code: Barber Ranch 3000109
Casualty Code: EQ-112
Project Location: Barber Lea County, New Mexico
Project Address:
Enercon Services Inc. / Midland / Jeff Kindley

Sample	Description	Matrix	Date Taken	Time Taken	Date Received
206054	MW-21 (13-15')	Soil	8/20/02	13:14	8/23/02
206055	MW-21 (25-27')	Soil	8/20/02	13:40	8/23/02
206056	MW-20 (13-15')	Soil	8/20/02	9:00	8/23/02
206057	MW-20 (33-34)	Soil	8/20/02	9:55	8/23/02
206058	MW-22 (13-15')	Soil	8/20/02	15:05	8/23/02
206059	MW-22 (25-27')	Soil	8/20/02	15:28	8/23/02
206060	MW-23 (13-15')	Soil	8/20/02	16:50	8/23/02
206061	MW-23 (35-37')	Soil	8/20/02	17:40	8/23/02

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	BTEX					TPH DRO	TPH GRO
Sample - Field Code	Benzene (ppm)	Toluene (ppm)	Ethylbenzene (ppm)	M,P,O-Xylene (ppm)	Total BTEX (ppm)	DRO (ppm)	GRO (ppm)
206054 - MW-21 (13-15')	<0.010	<0.010	<0.010	<0.010	<0.010	<50.0	<1
206055 - MW-21 (25-27')	<0.010	<0.010	0.0288	0.103	0.132	733	6.63
206056 - MW-20 (13-15')	<0.010	<0.010	<0.010	<0.010	<0.010	<50.0	<1
206057 - MW-20 (33-34)	<0.010	<0.010	<0.010	<0.010	<0.010	<50.0	<1
206058 - MW-22 (13-15')	<0.010	<0.010	<0.010	<0.010	<0.010	<50.0	<1
206059 - MW-22 (25-27')	<0.010	<0.010	<0.010	<0.010	<0.010	<50.0	<1
206060 - MW-23 (13-15')	<0.010	<0.010	<0.010	<0.010	<0.010	<50.0	<1
206061 - MW-23 (35-37')	<0.010	<0.010	<0.010	<0.010	<0.010	<50.0	<1

This is only a summary. Please, refer to the complete report package for quality control data.

TRACEANALYSIS, INC.

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E-Mail: lab@traceanalysis.com

Analytical and Quality Control Report

Kyle Landreneau
Equiva Kyle Landreneau
PMB 284 40 FM 1960 West
Houston, TX 77090

Report Date: September 4, 2002

Order ID Number: A02082317

Project: EQ-112
TA Job Code: Barber Ranch 3000109
Casualty Code: EQ-112
Project Location: Barber Lea County, New Mexico
Enercon Services Inc. / Midland / Jeff Kindley

Enclosed are the Analytical Results and Quality Control Data Reports for the following samples submitted to Trace-Analysis, Inc.

Sample	Description	Matrix	Date Taken	Time Taken	Date Received
206054	MW-21 (13-15')	Soil	8/20/02	13:14	8/23/02
206055	MW-21 (25-27')	Soil	8/20/02	13:40	8/23/02
206056	MW-20 (13-15')	Soil	8/20/02	9:00	8/23/02
206057	MW-20 (33-34)	Soil	8/20/02	9:55	8/23/02
206058	MW-22 (13-15')	Soil	8/20/02	15:05	8/23/02
206059	MW-22 (25-27')	Soil	8/20/02	15:28	8/23/02
206060	MW-23 (13-15')	Soil	8/20/02	16:50	8/23/02
206061	MW-23 (35-37')	Soil	8/20/02	17:40	8/23/02

These results represent only the samples received in the laboratory. The Quality Control Report is generated on a batch basis. All information contained in this report is for the analytical batch(es) in which your sample(s) were analyzed. Note: the RDL is equal to MQL for all organic analytes including TPH.
The test results contained within this report meet all requirements of LAC 33:I unless otherwise noted.

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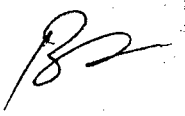
Note: Samples will be disposed of 30 days from the report date unless the lab is contacted before the 30 days has past.



Dr. Blair Leftwich, Director

Analytical Report

Sample: 206054 - MW-21 (13-15')

Analysis:	BTEX	Analytical Method:	S 8021B	QC Batch:	QC23053	Date Analyzed:	8/23/02
Analyst:	CG	Preparation Method:	S 5035	Prep Batch:	PB21656	Date Prepared:	8/23/02

Param	Flag	Result	Units	Dilution	RDL
Benzene		<0.010	mg/Kg	10	0.001
Toluene		<0.010	mg/Kg	10	0.001
Ethylbenzene		<0.010	mg/Kg	10	0.001
M,P,O-Xylene		<0.010	mg/Kg	10	0.001
Total BTEX		<0.010	mg/Kg	10	0.001

Surrogate	Flag	Result	Units	Dilution	Spike Amount	Percent Recovery	Recovery Limits
TFT		0.879	mg/Kg	10	1	88	70 - 130
4-BFB		0.809	mg/Kg	10	1	81	70 - 130

Sample: 206054 - MW-21 (13-15')

Analysis:	TPH DRO	Analytical Method:	Mod. 8015B	QC Batch:	QC23203	Date Analyzed:	8/29/02
Analyst:	BP	Preparation Method:	3550 B	Prep Batch:	PB21777	Date Prepared:	8/27/02

Param	Flag	Result	Units	Dilution	RDL
DRO		<50.0	mg/Kg	1	50

Surrogate	Flag	Result	Units	Dilution	Spike Amount	Percent Recovery	Recovery Limits
n-Triacontane		158	mg/Kg	1	150	105	70 - 130

Sample: 206054 - MW-21 (13-15')

Analysis:	TPH GRO	Analytical Method:	8015B	QC Batch:	QC23054	Date Analyzed:	8/23/02
Analyst:	CG	Preparation Method:	5035	Prep Batch:	PB21656	Date Prepared:	8/23/02

Param	Flag	Result	Units	Dilution	RDL
GRO		<1	mg/Kg	10	0.10

Surrogate	Flag	Result	Units	Dilution	Spike Amount	Percent Recovery	Recovery Limits
TFT		0.792	mg/Kg	10	0.10	79	70 - 130
4-BFB		0.81	mg/Kg	10	0.10	81	70 - 130

Sample: 206055 - MW-21 (25-27')

Analysis:	BTEX	Analytical Method:	S 8021B	QC Batch:	QC23053	Date Analyzed:	8/23/02
Analyst:	CG	Preparation Method:	S 5035	Prep Batch:	PB21656	Date Prepared:	8/23/02

Param	Flag	Result	Units	Dilution	RDL
Benzene		<0.010	mg/Kg	10	0.001
Toluene		<0.010	mg/Kg	10	0.001
Ethylbenzene		0.0288	mg/Kg	10	0.001
M,P,O-Xylene		0.103	mg/Kg	10	0.001
Total BTEX		0.132	mg/Kg	10	0.001

Surrogate	Flag	Result	Units	Dilution	Spike Amount	Percent Recovery	Recovery Limits
TFT		0.807	mg/Kg	10	1	81	70 - 130
4-BFB		0.773	mg/Kg	10	1	77	70 - 130

Sample: 206055 - MW-21 (25-27')

Analysis: TPH DRO | Analytical Method: Mod. 8015B | QC Batch: QC23203 | Date Analyzed: 8/29/02
Analyst: BP | Preparation Method: 3550 B | Prep Batch: PB21777 | Date Prepared: 8/27/02

Param	Flag	Result	Units	Dilution	RDL
DRO		733	mg/Kg	10	50

Surrogate	Flag	Result	Units	Dilution	Spike Amount	Percent Recovery	Recovery Limits
n-Triacontane	[1]	371	mg/Kg	10	150	247	70 - 130

Sample: 206055 - MW-21 (25-27')

Analysis: TPH GRO | Analytical Method: 8015B | QC Batch: QC23054 | Date Analyzed: 8/23/02
Analyst: CG | Preparation Method: 5035 | Prep Batch: PB21656 | Date Prepared: 8/23/02

Param	Flag	Result	Units	Dilution	RDL
GRO		6.63	mg/Kg	10	0.10

Surrogate	Flag	Result	Units	Dilution	Spike Amount	Percent Recovery	Recovery Limits
TFT		0.79	mg/Kg	10	0.10	79	70 - 130
4-BFB		0.874	mg/Kg	10	0.10	87	70 - 130

Sample: 206056 - MW-20 (13-15')

Analysis: BTEX | Analytical Method: S 8021B | QC Batch: QC23053 | Date Analyzed: 8/23/02
Analyst: CG | Preparation Method: S 5035 | Prep Batch: PB21656 | Date Prepared: 8/23/02

Param	Flag	Result	Units	Dilution	RDL
Benzene		<0.010	mg/Kg	10	0.001
Toluene		<0.010	mg/Kg	10	0.001
Ethylbenzene		<0.010	mg/Kg	10	0.001
M,P,O-Xylene		<0.010	mg/Kg	10	0.001

Continued ...

[1]High surrogate due to peak interference.

... Continued Sample: 206056 Analysis: BTEX

Param	Flag	Result	Units	Dilution	RDL
Total BTEX		<0.010	mg/Kg	10	0.001

Surrogate	Flag	Result	Units	Dilution	Spike Amount	Percent Recovery	Recovery Limits
TFT		0.786	mg/Kg	10	1	79	70 - 130
4-BFB		0.721	mg/Kg	10	1	72	70 - 130

Sample: 206056 - MW-20 (13-15')

Analysis: TPH DRO Analytical Method: Mod. 8015B QC Batch: QC23203 Date Analyzed: 8/29/02
Analyst: BP Preparation Method: 3550 B Prep Batch: PB21777 Date Prepared: 8/27/02

Param	Flag	Result	Units	Dilution	RDL
DRO		<50.0	mg/Kg	1	50

Surrogate	Flag	Result	Units	Dilution	Spike Amount	Percent Recovery	Recovery Limits
n-Triacontane		153	mg/Kg	1	150	102	70 - 130

Sample: 206056 - MW-20 (13-15')

Analysis: TPH GRO Analytical Method: 8015B QC Batch: QC23054 Date Analyzed: 8/23/02
Analyst: CG Preparation Method: 5035 Prep Batch: PB21656 Date Prepared: 8/23/02

Param	Flag	Result	Units	Dilution	RDL
GRO		<1	mg/Kg	10	0.10

Surrogate	Flag	Result	Units	Dilution	Spike Amount	Percent Recovery	Recovery Limits
TFT		0.942	mg/Kg	10	0.10	94	70 - 130
4-BFB		0.717	mg/Kg	10	0.10	72	70 - 130

Sample: 206057 - MW-20 (33-34)

Analysis: BTEX Analytical Method: S 8021B QC Batch: QC23053 Date Analyzed: 8/23/02
Analyst: CG Preparation Method: S 5035 Prep Batch: PB21656 Date Prepared: 8/23/02

Param	Flag	Result	Units	Dilution	RDL
Benzene		<0.010	mg/Kg	10	0.001
Toluene		<0.010	mg/Kg	10	0.001
Ethylbenzene		<0.010	mg/Kg	10	0.001
M,P,O-Xylene		<0.010	mg/Kg	10	0.001
Total BTEX		<0.010	mg/Kg	10	0.001

Surrogate	Flag	Result	Units	Dilution	Spike Amount	Percent Recovery	Recovery Limits
TFT		0.726	mg/Kg	10	1	73	70 - 130
4-BFB	[2]	0.664	mg/Kg	10	1	66	70 - 130

Sample: 206057 - MW-20 (33-34)

Analysis:	TPH DRO	Analytical Method:	Mod. 8015B	QC Batch:	QC23203	Date Analyzed:	8/29/02
Analyst:	BP	Preparation Method:	3550 B	Prep Batch:	PB21777	Date Prepared:	8/27/02

Param	Flag	Result	Units	Dilution	RDL
DRO		<50.0	mg/Kg	1	50

Surrogate	Flag	Result	Units	Dilution	Spike Amount	Percent Recovery	Recovery Limits
n-Triacontane		157	mg/Kg	1	150	105	70 - 130

Sample: 206057 - MW-20 (33-34)

Analysis:	TPH GRO	Analytical Method:	8015B	QC Batch:	QC23054	Date Analyzed:	8/23/02
Analyst:	CG	Preparation Method:	5035	Prep Batch:	PB21656	Date Prepared:	8/23/02

Param	Flag	Result	Units	Dilution	RDL
GRO		<1	mg/Kg	10	0.10

Surrogate	Flag	Result	Units	Dilution	Spike Amount	Percent Recovery	Recovery Limits
TFT		0.849	mg/Kg	10	0.10	85	70 - 130
4-BFB	[3]	0.674	mg/Kg	10	0.10	67	70 - 130

Sample: 206058 - MW-22 (13-15')

Analysis:	BTEX	Analytical Method:	S 8021B	QC Batch:	QC23053	Date Analyzed:	8/23/02
Analyst:	CG	Preparation Method:	S 5035	Prep Batch:	PB21656	Date Prepared:	8/23/02

Param	Flag	Result	Units	Dilution	RDL
Benzene		<0.010	mg/Kg	10	0.001
Toluene		<0.010	mg/Kg	10	0.001
Ethylbenzene		<0.010	mg/Kg	10	0.001
M,P,O-Xylene		<0.010	mg/Kg	10	0.001
Total BTEX		<0.010	mg/Kg	10	0.001

Surrogate	Flag	Result	Units	Dilution	Spike Amount	Percent Recovery	Recovery Limits
TFT		0.798	mg/Kg	10	1	80	70 - 130
4-BFB		0.744	mg/Kg	10	1	74	70 - 130

[2]Surrogate within acceptable limits according to GC-2 soil control chart.
[3]Low surrogate recovery due to matrix interference. ICV, CCV show the method to be in control.

Sample: 206058 - MW-22 (13-15')

Analysis:	TPH DRO	Analytical Method:	Mod. 8015B	QC Batch:	QC23203	Date Analyzed:	8/29/02
Analyst:	BP	Preparation Method:	3550 B	Prep Batch:	PB21777	Date Prepared:	8/27/02

Param	Flag	Result	Units	Dilution	RDL
DRO		<50.0	mg/Kg	1	50

Surrogate	Flag	Result	Units	Dilution	Spike Amount	Percent Recovery	Recovery Limits
n-Triacontane		153	mg/Kg	1	150	102	70 - 130

Sample: 206058 - MW-22 (13-15')

Analysis:	TPH GRO	Analytical Method:	8015B	QC Batch:	QC23054	Date Analyzed:	8/23/02
Analyst:	CG	Preparation Method:	5035	Prep Batch:	PB21656	Date Prepared:	8/23/02

Param	Flag	Result	Units	Dilution	RDL
GRO		<1	mg/Kg	10	0.10

Surrogate	Flag	Result	Units	Dilution	Spike Amount	Percent Recovery	Recovery Limits
TFT		0.709	mg/Kg	10	0.10	71	70 - 130
4-BFB		0.743	mg/Kg	10	0.10	74	70 - 130

Sample: 206059 - MW-22 (25-27')

Analysis:	BTEX	Analytical Method:	S 8021B	QC Batch:	QC23053	Date Analyzed:	8/23/02
Analyst:	CG	Preparation Method:	S 5035	Prep Batch:	PB21656	Date Prepared:	8/23/02

Param	Flag	Result	Units	Dilution	RDL
Benzene		<0.010	mg/Kg	10	0.001
Toluene		<0.010	mg/Kg	10	0.001
Ethylbenzene		<0.010	mg/Kg	10	0.001
M,P,O-Xylene		<0.010	mg/Kg	10	0.001
Total BTEX		<0.010	mg/Kg	10	0.001

Surrogate	Flag	Result	Units	Dilution	Spike Amount	Percent Recovery	Recovery Limits
TFT	[4]	0.652	mg/Kg	10	1	65	70 - 130
4-BFB	[5]	0.601	mg/Kg	10	1	60	70 - 130

Sample: 206059 - MW-22 (25-27')

Analysis:	TPH DRO	Analytical Method:	Mod. 8015B	QC Batch:	QC23203	Date Analyzed:	8/29/02
Analyst:	BP	Preparation Method:	3550 B	Prep Batch:	PB21777	Date Prepared:	8/27/02

[4]Surrogate within acceptable limits according to GC-2 soil control chart.
[5]Surrogate within acceptable limits according to GC-2 soil control chart.

Param	Flag	Result	Units	Dilution	RDL
DRO		<50.0	mg/Kg	1	50

Surrogate	Flag	Result	Units	Dilution	Spike Amount	Percent Recovery	Recovery Limits
n-Triacontane		116	mg/Kg	1	150	77	70 - 130

Sample: 206059 - MW-22 (25-27')

Analysis:	TPH GRO	Analytical Method:	8015B	QC Batch:	QC23054	Date Analyzed:	8/23/02
Analyst:	CG	Preparation Method:	5035	Prep Batch:	PB21656	Date Prepared:	8/23/02

Param	Flag	Result	Units	Dilution	RDL
GRO		<1	mg/Kg	10	0.10

Surrogate	Flag	Result	Units	Dilution	Spike Amount	Percent Recovery	Recovery Limits
TFT		0.825	mg/Kg	10	0.10	82	70 - 130
4-BFB	[6]	0.613	mg/Kg	10	0.10	61	70 - 130

Sample: 206060 - MW-23 (13-15')

Analysis:	BTEX	Analytical Method:	S 8021B	QC Batch:	QC23053	Date Analyzed:	8/23/02
Analyst:	CG	Preparation Method:	S 5035	Prep Batch:	PB21656	Date Prepared:	8/23/02

Param	Flag	Result	Units	Dilution	RDL
Benzene		<0.010	mg/Kg	10	0.001
Toluene		<0.010	mg/Kg	10	0.001
Ethylbenzene		<0.010	mg/Kg	10	0.001
M,P,O-Xylene		<0.010	mg/Kg	10	0.001
Total BTEX		<0.010	mg/Kg	10	0.001

Surrogate	Flag	Result	Units	Dilution	Spike Amount	Percent Recovery	Recovery Limits
TFT	[7]	0.621	mg/Kg	10	1	62	70 - 130
4-BFB	[8]	0.581	mg/Kg	10	1	58	70 - 130

Sample: 206060 - MW-23 (13-15')

Analysis:	TPH DRO	Analytical Method:	Mod. 8015B	QC Batch:	QC23203	Date Analyzed:	8/29/02
Analyst:	BP	Preparation Method:	3550 B	Prep Batch:	PB21777	Date Prepared:	8/27/02

Param	Flag	Result	Units	Dilution	RDL
DRO		<50.0	mg/Kg	1	50

[6]Low surrogate recovery due to matrix interference. ICV, CCV show the method to be in control.
[7]Surrogate within acceptable limits according to GC-2 soil control chart.
[8]Surrogate within acceptable limits according to GC-2 soil control chart.

Surrogate	Flag	Result	Units	Dilution	Spike Amount	Percent Recovery	Recovery Limits
n-Triacontane		154	mg/Kg	1	150	103	70 - 130

Sample: 206060 - MW-23 (13-15')

Analysis:	TPH GRO	Analytical Method:	8015B	QC Batch:	QC23054	Date Analyzed:	8/23/02
Analyst:	CG	Preparation Method:	5035	Prep Batch:	PB21656	Date Prepared:	8/23/02

Param	Flag	Result	Units	Dilution	RDL
GRO		<1	mg/Kg	10	0.10

Surrogate	Flag	Result	Units	Dilution	Spike Amount	Percent Recovery	Recovery Limits
TFT	[9]	0.58	mg/Kg	10	0.10	58	70 - 130
4-BFB	[10]	0.567	mg/Kg	10	0.10	57	70 - 130

Sample: 206061 - MW-23 (35-37')

Analysis:	BTEX	Analytical Method:	S 8021B	QC Batch:	QC23053	Date Analyzed:	8/23/02
Analyst:	CG	Preparation Method:	S 5035	Prep Batch:	PB21656	Date Prepared:	8/23/02

Param	Flag	Result	Units	Dilution	RDL
Benzene		<0.010	mg/Kg	10	0.001
Toluene		<0.010	mg/Kg	10	0.001
Ethylbenzene		<0.010	mg/Kg	10	0.001
M,P,O-Xylene		<0.010	mg/Kg	10	0.001
Total BTEX		<0.010	mg/Kg	10	0.001

Surrogate	Flag	Result	Units	Dilution	Spike Amount	Percent Recovery	Recovery Limits
TFT	[11]	0.676	mg/Kg	10	1	67	70 - 130
4-BFB	[12]	0.610	mg/Kg	10	1	61	70 - 130

Sample: 206061 - MW-23 (35-37')

Analysis:	TPH DRO	Analytical Method:	Mod. 8015B	QC Batch:	QC23203	Date Analyzed:	8/29/02
Analyst:	BP	Preparation Method:	3550 B	Prep Batch:	PB21777	Date Prepared:	8/27/02

Param	Flag	Result	Units	Dilution	RDL
DRO		<50.0	mg/Kg	1	50

Surrogate	Flag	Result	Units	Dilution	Spike Amount	Percent Recovery	Recovery Limits
n-Triacontane		169	mg/Kg	1	150	113	70 - 130

[9]Low surrogate recovery due to matrix interference. ICV, CCV show the method to be in control.
[10]Low surrogate recovery due to matrix interference. ICV, CCV show the method to be in control.
[11]Surrogate within acceptable limits according to GC-2 soil control chart.
[12]Surrogate within acceptable limits according to GC-2 soil control chart.

Sample: 206061 - MW-23 (35-37')

Analysis:	TPH GRO	Analytical Method:	8015B	QC Batch:	QC23054	Date Analyzed:	8/23/02
Analyst:	CG	Preparation Method:	5035	Prep Batch:	PB21656	Date Prepared:	8/23/02

Param	Flag	Result	Units	Dilution	RDL
GRO		<1	mg/Kg	10	0.10

Surrogate	Flag	Result	Units	Dilution	Spike Amount	Percent Recovery	Recovery Limits
TFT		0.778	mg/Kg	10	0.10	78	70 - 130
4-BFB	[13]	0.61	mg/Kg	10	0.10	61	70 - 130

[13] Low surrogate recovery due to matrix interference. ICV, CCV show the method to be in control.

Quality Control Report
Method Blank

Method Blank QCBatch: QC23053

Param	Flag	Results	Units	Reporting Limit
Benzene		<0.010	mg/Kg	0.001
Toluene		<0.010	mg/Kg	0.001
Ethylbenzene		<0.010	mg/Kg	0.001
M,P,O-Xylene		<0.010	mg/Kg	0.001
Total BTEX		<0.010	mg/Kg	0.001

Surrogate	Flag	Result	Units	Dilution	Spike Amount	Percent Recovery	Recovery Limits
TFT		1.02	mg/Kg	10	1	102	70 - 130
4-BFB		0.933	mg/Kg	10	1	93	70 - 130

Method Blank QCBatch: QC23054

Param	Flag	Results	Units	Reporting Limit
GRO		<1	mg/Kg	0.10

Surrogate	Flag	Result	Units	Dilution	Spike Amount	Percent Recovery	Recovery Limits
TFT		1.05	mg/Kg	10	0.10	105	70 - 130
4-BFB		0.934	mg/Kg	10	0.10	93	70 - 130

Method Blank QCBatch: QC23203

Param	Flag	Results	Units	Reporting Limit
DRO		<50.0	mg/Kg	50

Surrogate	Flag	Result	Units	Dilution	Spike Amount	Percent Recovery	Recovery Limits
n-Triacontane		157	mg/Kg	1	150	105	70 - 130

Quality Control Report
Lab Control Spikes and Duplicate Spikes

Laboratory Control Spikes QCBatch: QC23053

Param	LCS Result	LCSD Result	Units	Dil.	Spike Amount Added	Matrix Result	% Rec	RPD	% Rec Limit	RPD Limit
MTBE	1	1.03	mg/Kg	10	1	<0.010	100	2	70 - 130	20
Benzene	1.02	1.01	mg/Kg	10	1	<0.010	102	0	70 - 130	20
Toluene	1.01	1.01	mg/Kg	10	1	<0.010	101	0	70 - 130	20
Ethylbenzene	1.01	1.01	mg/Kg	10	1	<0.010	101	0	70 - 130	20
M,P,O-Xylene	2.91	2.94	mg/Kg	10	3	<0.010	97	1	70 - 130	20

Percent recovery is based on the spike result. RPD is based on the spike and spike duplicate result.

Surrogate	LCS Result	LCSD Result	Units	Dilution	Spike Amount	LCS % Rec	LCSD % Rec	Recovery Limits
TFT	0.988	0.96	mg/Kg	10	1	98	96	70 - 130
4-BFB	0.912	0.91	mg/Kg	10	1	91	91	70 - 130

Laboratory Control Spikes

QCBatch: QC23054

Param	LCS Result	LCSD Result	Units	Dil.	Spike Amount Added	Matrix Result	% Rec	RPD	% Rec Limit	RPD Limit
GRO	9.84	9.72	mg/Kg	10	1	<1	98	1	80 - 120	20

Percent recovery is based on the spike result. RPD is based on the spike and spike duplicate result.

Surrogate	LCS Result	LCSD Result	Units	Dilution	Spike Amount	LCS % Rec	LCSD % Rec	Recovery Limits
TFT	0.874	0.867	mg/Kg	10	0.10	87	87	70 - 130
4-BFB	0.924	0.911	mg/Kg	10	0.10	92	91	70 - 130

Laboratory Control Spikes

QCBatch: QC23203

Param	LCS Result	LCSD Result	Units	Dil.	Spike Amount Added	Matrix Result	% Rec	RPD	% Rec Limit	RPD Limit
DRO	213	214	mg/Kg	1	250	<50.0	85	0	70 - 130	20

Percent recovery is based on the spike result. RPD is based on the spike and spike duplicate result.

Surrogate	LCS Result	LCSD Result	Units	Dilution	Spike Amount	LCS % Rec	LCSD % Rec	Recovery Limits
n-Triacontane	157	152	mg/Kg	1	150	105	101	70 - 130

Quality Control Report
Matrix Spikes and Duplicate Spikes

Matrix Spikes

QCBatch: QC23053

Param	MS Result	MSD Result	Units	Dil.	Spike Amount Added	Matrix Result	% Rec	RPD	% Rec Limit	RPD Limit
Benzene	0.862	0.886	mg/Kg	10	1	<0.010	86	2	70 - 130	20
Toluene	0.865	0.886	mg/Kg	10	1	<0.010	86	2	70 - 130	20
Ethylbenzene	0.878	0.904	mg/Kg	10	1	<0.010	87	2	70 - 130	20
M,P,O-Xylene	2.54	2.61	mg/Kg	10	3	<0.010	84	2	70 - 130	20

Percent recovery is based on the spike result. RPD is based on the spike and spike duplicate result.

Surrogate	MS Result	MSD Result	Units	Dilution	Spike Amount	MS % Rec	MSD % Rec	Recovery Limits
TFT	0.784	0.859	mg/Kg	10	1	78	85	70 - 130
4-BFB	0.753	0.81	mg/Kg	10	1	75	81	70 - 130

Matrix Spikes

QCBatch: QC23203

Param	MS Result	MSD Result	Units	Dil.	Spike Amount Added	Matrix Result	% Rec	RPD	% Rec Limit	RPD Limit
DRO	197	213	mg/Kg	1	250	<50.0	79	8	70 - 130	20

Percent recovery is based on the spike result. RPD is based on the spike and spike duplicate result.

Surrogate	MS Result	MSD Result	Units	Dilution	Spike Amount	MS % Rec	MSD % Rec	Recovery Limits
n-Triacontane	148	158	mg/Kg	1	150	99	105	70 - 130

Quality Control Report
Continuing Calibration Verification Standards

CCV (1)

QCBatch: QC23053

Param	Flag	Units	CCVs True Conc.	CCVs Found Conc.	CCVs Percent Recovery	Percent Recovery Limits	Date Analyzed
MTBE		mg/L	0.10	0.101	101	85 - 115	8/23/02
Benzene		mg/L	0.10	0.100	100	85 - 115	8/23/02
Toluene		mg/L	0.10	0.100	100	85 - 115	8/23/02
Ethylbenzene		mg/L	0.10	0.100	100	85 - 115	8/23/02
M,P,O-Xylene		mg/L	0.30	0.290	97	85 - 115	8/23/02

CCV (2)

QCBatch: QC23053

Continued ...

... Continued

Param	Flag	Units	CCVs True Conc.	CCVs Found Conc.	CCVs Percent Recovery	Percent Recovery Limits	Date Analyzed
MTBE		mg/L	0.10	0.103	103	85 - 115	8/23/02
Benzene		mg/L	0.10	0.102	102	85 - 115	8/23/02
Toluene		mg/L	0.10	0.101	101	85 - 115	8/23/02
Ethylbenzene		mg/L	0.10	0.101	101	85 - 115	8/23/02
M,P,O-Xylene		mg/L	0.30	0.292	97	85 - 115	8/23/02

ICV (1) QCBatch: QC23053

Param	Flag	Units	CCVs True Conc.	CCVs Found Conc.	CCVs Percent Recovery	Percent Recovery Limits	Date Analyzed
MTBE		mg/L	0.10	0.107	107	85 - 115	8/23/02
Benzene		mg/L	0.10	0.105	105	85 - 115	8/23/02
Toluene		mg/L	0.10	0.105	105	85 - 115	8/23/02
Ethylbenzene		mg/L	0.10	0.105	105	85 - 115	8/23/02
M,P,O-Xylene		mg/L	0.30	0.303	101	85 - 115	8/23/02

CCV (1) QCBatch: QC23054

Param	Flag	Units	CCVs True Conc.	CCVs Found Conc.	CCVs Percent Recovery	Percent Recovery Limits	Date Analyzed
GRO		mg/Kg	1	1.01	101	85 - 115	8/23/02

ICV (1) QCBatch: QC23054

Param	Flag	Units	CCVs True Conc.	CCVs Found Conc.	CCVs Percent Recovery	Percent Recovery Limits	Date Analyzed
GRO		mg/Kg	1	1	100	85 - 115	8/23/02

CCV (1) QCBatch: QC23203

Param	Flag	Units	CCVs True Conc.	CCVs Found Conc.	CCVs Percent Recovery	Percent Recovery Limits	Date Analyzed
DRO		mg/Kg	250	210	84	75 - 125	8/29/02

ICV (1) QCBatch: QC23203

Param	Flag	Units	CCVs True Conc.	CCVs Found Conc.	CCVs Percent Recovery	Percent Recovery Limits	Date Analyzed
DRO		mg/Kg	250	206	82	75 - 125	8/29/02

6701 Aberdeen Avenue, Ste. 9
Lubbock, Texas 79424
Tel (806) 794-1296
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1 (800) 378-1296

TraceAnalysis, Inc.

155 McCutcheon, Suite H
El Paso, Texas 79932
Tel (915) 585-3443
Fax (915) 585-4944
1 (888) 588-3443

CHAIN-OF-CUSTODY AND ANALYSIS REQUEST

LAB Order ID # A0208217

Company Name: Enexus Services Inc
Phone #: 915-570-8726
Address: (Street, City, Zip) 306 West Wall, Suite 1312 Midland, Tx 79701
Fax #: 915-684-7587
Contact Person: Jeffrey Kindley
Invoice to: (if different from above) Kyle Landreneau, Equiva Services
Incident # 300109
Project #: EQ-112
Project Name: Barber Ranch
Project Location: Monument, Lea Co., New Mexico
Sampler Signature: Jeffrey Kindley

LAB # (LAB USE ONLY)	FIELD CODE	# CONTAINERS	Volume/Amount	MATRIX: WATER	SOIL	AIR	SLUDGE	PRESERVATIVE METHOD: HCl	HNO_3	H_2SO_4	NaOH	ICE	NONE	SAMPLING: DATE	TIME
06054	MW-21 (13-15')	1	4oz		✓							✓		8/20/02	1314
55	MW-21 (25-27')	1	4oz		✓							✓		8/20/02	1340
56	MW-20 (13-15')	1	4oz		✓							✓		8/20/02	900
57	MW-20 (33-34')	1	4oz		✓							✓		8/20/02	955
58	MW-22 (13-15')	1	4oz		✓							✓		8/20/02	1505
59	MW-22 (25-27')	1	4oz		✓							✓		8/20/02	1528
60	MW-23 (13-15')	1	4oz		✓							✓		8/20/02	1650
61	MW-23 (35-37')	1	4oz		✓							✓		8/20/02	1740

ANALYSIS REQUEST

(Circle or Specify Method No.)

MTBE 8021B/602	BTEX 8021B/602	TPH ~~418.1/TX1005~~ 8015M (DRO/GRO)	PAH 8270C	Total Metals Ag As Ba Cd Cr Pb Se Hg 6010B/200.7	TCLP Metals Ag As Ba Cd Cr Pb Se Hg	TCLP Volatiles	TCLP Semi Volatiles	TCLP Pesticides	RCI	GC/MS Vol. 8260B/624	GC/MS Semi. Vol. 8270C/625	PCB's 8082/608	Pesticides 8081A/608	BOD, TSS, pH	TPH DRO/GRO SPLP *					Turn Around Time if different from standard	Hold
	✓	✓																			
	✓	✓													X						
	✓	✓																			
	✓	✓																			
	✓	✓																			
	✓	✓																			
	✓	✓																			
	✓	✓																			

Relinquished by: Jeffrey Kindley Date: 8/22/02 Time: 0900
Received by: Helen Shelton Date: 8/22/02 Time: 0900

Relinquished by: Helen Shelton Date: 8/22/02 Time: 1830
Received by: Date: Time:

Relinquished by: Date: Time:
Received at Laboratory by: Vicki Dinsley Date: 8-23-02 Time: 1000

Submittal of samples constitutes agreement to Terms and Conditions listed on reverse side of C.O.C. 8 samples-HS

ORIGINAL COPY

LAB USE ONLY

Intact Y / N
Headspace Y / N
Temp 4° C
Log-in Review

REMARKS:

* Any sample with a TPH 8015M combined of ≥100 ppm, run further analysis on that sample for TPH SPLP DRO/GRO

☐ Check If Special Reporting Limits Are Needed

9/4F 9/11F

Carrier # Hugh Bound GLZ/163 566 5548

Analytical and Quality Control Report

Jeff Kindley
Enercon Services Inc.
306 W. Wall Suite 1312
Midland, Tx. 79701

Report Date: September 6, 2002

Order ID Number: A02082311

Project Number: EQ-112
Project Name: Barber Ranch 3000109
Project Location: Barber Lea County, New Mexico

Enclosed are the Analytical Results and Quality Control Data Reports for the following samples submitted to Trace-Analysis, Inc.

Sample	Description	Matrix	Date Taken	Time Taken	Date Received
206043	MW-20	Water	8/21/02	:	8/23/02
206044	MW-21	Water	8/21/02	:	8/23/02
206045	MW-22	Water	8/21/02	:	8/23/02

These results represent only the samples received in the laboratory. The Quality Control Report is generated on a batch basis. All information contained in this report is for the analytical batch(es) in which your sample(s) were analyzed. Note: the RDL is equal to MQL for all organic analytes including TPH.
The test results contained within this report meet all requirements of LAC 33:I unless otherwise noted.

This report consists of a total of 9 pages and shall not be reproduced except in its entirety including the chain of custody (COC), without written approval of TraceAnalysis, Inc.

Note: Samples will be disposed of 30 days from the report date unless the lab is contacted before the 30 days has past.

for
Dr. Blair Leftwich, Director

Analytical Report

Sample: 206043 - MW-20

Analysis:	BTEX	Analytical Method:	S 8021B	QC Batch:	QC23119	Date Analyzed:	8/26/02
Analyst:	CG	Preparation Method:	S 5030B	Prep Batch:	PB21714	Date Prepared:	8/26/02

Param	Flag	Result	Units	Dilution	RDL
Benzene		<0.005	mg/L	5	0.001
Toluene		<0.005	mg/L	5	0.001
Ethylbenzene		<0.005	mg/L	5	0.001
M,P,O-Xylene		0.0092	mg/L	5	0.001
Total BTEX		0.0092	mg/L	5	0.001

Surrogate	Flag	Result	Units	Dilution	Spike Amount	Percent Recovery	Recovery Limits
TFT		0.089	mg/L	5	0.10	89	70 - 130
4-BFB		0.0881	mg/L	5	0.10	88	70 - 130

Sample: 206043 - MW-20

Analysis:	PAH	Analytical Method:	S 8270C	QC Batch:	QC23256	Date Analyzed:	8/28/02
Analyst:	RC	Preparation Method:	E 3510C	Prep Batch:	PB21753	Date Prepared:	8/26/02

Param	Flag	Result	Units	Dilution	RDL
Naphthalene		0.0011	mg/L	1	0.0002
Acenaphthylene		<0.0002	mg/L	1	0.0002
Acenaphthene		<0.0002	mg/L	1	0.0002
Fluorene		<0.0002	mg/L	1	0.0002
Phenanthrene		<0.0002	mg/L	1	0.0002
Anthracene		<0.0002	mg/L	1	0.0002
Fluoranthene		<0.0002	mg/L	1	0.0002
Pyrene		<0.0002	mg/L	1	0.0002
Benzo(a)anthracene		<0.0002	mg/L	1	0.0002
Chrysene		<0.0002	mg/L	1	0.0002
Benzo(b)fluoranthene		<0.0002	mg/L	1	0.0002
Benzo(k)fluoranthene		<0.0002	mg/L	1	0.0002
Benzo(a)pyrene		<0.0002	mg/L	1	0.0002
Indeno(1,2,3-cd)pyrene		<0.0002	mg/L	1	0.0002
Dibenzo(a,h)anthracene		<0.0002	mg/L	1	0.0002
Benzo(g,h,i)perylene		<0.0002	mg/L	1	0.0002

Surrogate	Flag	Result	Units	Dilution	Spike Amount	Percent Recovery	Recovery Limits
Nitrobenzene-d5		58.5	mg/L	1	80	73	35 - 114
2-Fluorobiphenyl		58.5	mg/L	1	80	73	43 - 116
Terphenyl-d14		57.38	mg/L	1	80	71	33 - 141

Sample: 206044 - MW-21

Analysis:	BTEX	Analytical Method:	S 8021B	QC Batch:	QC23040	Date Analyzed:	8/23/02
Analyst:	CG	Preparation Method:	S 5030B	Prep Batch:	PB21650	Date Prepared:	8/23/02

Param	Flag	Result	Units	Dilution	RDL
Benzene		0.152	mg/L	50	0.001
Toluene		0.427	mg/L	50	0.001
Ethylbenzene		0.470	mg/L	50	0.001
M,P,O-Xylene		1.35	mg/L	50	0.001
Total BTEX		2.40	mg/L	50	0.001

Surrogate	Flag	Result	Units	Dilution	Spike Amount	Percent Recovery	Recovery Limits
TFT		0.101	mg/L	50	0.10	101	70 - 130
4-BFB		0.0845	mg/L	50	0.10	84	70 - 130

Sample: 206044 - MW-21

Analysis:	PAH	Analytical Method:	S 8270C	QC Batch:	QC23256	Date Analyzed:	8/28/02
Analyst:	RC	Preparation Method:	E 3510C	Prep Batch:	PB21753	Date Prepared:	8/26/02

Param	Flag	Result	Units	Dilution	RDL
Naphthalene		0.0200	mg/L	1	0.0002
Acenaphthylene		<0.0002	mg/L	1	0.0002
Acenaphthene		<0.0002	mg/L	1	0.0002
Fluorene		<0.0002	mg/L	1	0.0002
Phenanthrene		<0.0002	mg/L	1	0.0002
Anthracene		0.0003	mg/L	1	0.0002
Fluoranthene		<0.0002	mg/L	1	0.0002
Pyrene		<0.0002	mg/L	1	0.0002
Benzo(a)anthracene		<0.0002	mg/L	1	0.0002
Chrysene		<0.0002	mg/L	1	0.0002
Benzo(b)fluoranthene		<0.0002	mg/L	1	0.0002
Benzo(k)fluoranthene		<0.0002	mg/L	1	0.0002
Benzo(a)pyrene		<0.0002	mg/L	1	0.0002
Indeno(1,2,3-cd)pyrene		<0.0002	mg/L	1	0.0002
Dibenzo(a,h)anthracene		<0.0002	mg/L	1	0.0002
Benzo(g,h,i)perylene		<0.0002	mg/L	1	0.0002

Surrogate	Flag	Result	Units	Dilution	Spike Amount	Percent Recovery	Recovery Limits
Nitrobenzene-d5		71.38	mg/L	1	80	89	35 - 114
2-Fluorobiphenyl		74.07	mg/L	1	80	92	43 - 116
Terphenyl-d14		45.59	mg/L	1	80	56	33 - 141

Sample: 206045 - MW-22

Analysis:	BTEX	Analytical Method:	S 8021B	QC Batch:	QC23040	Date Analyzed:	8/23/02
Analyst:	CG	Preparation Method:	S 5030B	Prep Batch:	PB21650	Date Prepared:	8/23/02

Param	Flag	Result	Units	Dilution	RDL
Benzene		0.0663	mg/L	20	0.001
Toluene		<0.020	mg/L	20	0.001
Ethylbenzene		<0.020	mg/L	20	0.001
M,P,O-Xylene		0.519	mg/L	20	0.001
Total BTEX		0.585	mg/L	20	0.001

Surrogate	Flag	Result	Units	Dilution	Spike Amount	Percent Recovery	Recovery Limits
TFT		0.1	mg/L	20	0.10	100	70 - 130
4-BFB		0.0809	mg/L	20	0.10	80	70 - 130

Sample: 206045 - MW-22

Analysis:	PAH	Analytical Method:	S 8270C	QC Batch:	QC23256	Date Analyzed:	8/28/02
Analyst:	RC	Preparation Method:	E 3510C	Prep Batch:	PB21753	Date Prepared:	8/26/02

Param	Flag	Result	Units	Dilution	RDL
Naphthalene		0.0097	mg/L	1	0.0002
Acenaphthylene		<0.0002	mg/L	1	0.0002
Acenaphthene		<0.0002	mg/L	1	0.0002
Fluorene		<0.0002	mg/L	1	0.0002
Phenanthrene		<0.0002	mg/L	1	0.0002
Anthracene		<0.0002	mg/L	1	0.0002
Fluoranthene		<0.0002	mg/L	1	0.0002
Pyrene		<0.0002	mg/L	1	0.0002
Benzo(a)anthracene		<0.0002	mg/L	1	0.0002
Chrysene		<0.0002	mg/L	1	0.0002
Benzo(b)fluoranthene		<0.0002	mg/L	1	0.0002
Benzo(k)fluoranthene		<0.0002	mg/L	1	0.0002
Benzo(a)pyrene		<0.0002	mg/L	1	0.0002
Indeno(1,2,3-cd)pyrene		<0.0002	mg/L	1	0.0002
Dibenzo(a,h)anthracene		<0.0002	mg/L	1	0.0002
Benzo(g,h,i)perylene		<0.0002	mg/L	1	0.0002

Surrogate	Flag	Result	Units	Dilution	Spike Amount	Percent Recovery	Recovery Limits
Nitrobenzene-d5		55.99	mg/L	1	80	69	35 - 114
2-Fluorobiphenyl		54.6	mg/L	1	80	68	43 - 116
Terphenyl-d14		41.21	mg/L	1	80	51	33 - 141

Quality Control Report
Method Blank

Method Blank

QCBatch: QC23040

Param	Flag	Results	Units	Reporting Limit
Benzene		<0.001	mg/L	0.001
Toluene		<0.001	mg/L	0.001
Ethylbenzene		<0.001	mg/L	0.001
M,P,O-Xylene		<0.001	mg/L	0.001
Total BTEX		<0.001	mg/L	0.001

Surrogate	Flag	Result	Units	Dilution	Spike Amount	Percent Recovery	Recovery Limits
TFT		0.109	mg/L	1	0.10	109	70 - 130
4-BFB		0.0869	mg/L	1	0.10	87	70 - 130

Method Blank

QCBatch: QC23119

Param	Flag	Results	Units	Reporting Limit
Benzene		<0.001	mg/L	0.001
Toluene		<0.001	mg/L	0.001
Ethylbenzene		<0.001	mg/L	0.001
M,P,O-Xylene		<0.001	mg/L	0.001
Total BTEX		<0.001	mg/L	0.001

Surrogate	Flag	Result	Units	Dilution	Spike Amount	Percent Recovery	Recovery Limits
TFT		0.0937	mg/L	1	0.10	94	70 - 130
4-BFB		0.0909	mg/L	1	0.10	91	70 - 130

Method Blank

QCBatch: QC23256

Param	Flag	Results	Units	Reporting Limit
Naphthalene		<0.0002	mg/L	0.0002
Acenaphthylene		<0.0002	mg/L	0.0002
Acenaphthene		<0.0002	mg/L	0.0002
Fluorene		<0.0002	mg/L	0.0002
Phenanthrene		<0.0002	mg/L	0.0002
Anthracene		<0.0002	mg/L	0.0002
Fluoranthene		<0.0002	mg/L	0.0002
Pyrene		<0.0002	mg/L	0.0002
Benzo(a)anthracene		<0.0002	mg/L	0.0002
Chrysene		<0.0002	mg/L	0.0002

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Param	Flag	Results	Units	Reporting Limit
Benzo(b)fluoranthene		<0.0002	mg/L	0.0002
Benzo(k)fluoranthene		<0.0002	mg/L	0.0002
Benzo(a)pyrene		<0.0002	mg/L	0.0002
Indeno(1,2,3-cd)pyrene		<0.0002	mg/L	0.0002
Dibenzo(a,h)anthracene		<0.0002	mg/L	0.0002
Benzo(g,h,i)perylene		<0.0002	mg/L	0.0002

Surrogate	Flag	Result	Units	Dilution	Spike Amount	Percent Recovery	Recovery Limits
Nitrobenzene-d5		66.23	mg/L	1	80	82	35 - 114
2-Fluorobiphenyl		61.27	mg/L	1	80	76	43 - 116
Terphenyl-d14		66.16	mg/L	1	80	82	33 - 141

Quality Control Report
Lab Control Spikes and Duplicate Spikes

Laboratory Control Spikes

QCBatch: QC23040

Param	LCS Result	LCSD Result	Units	Dil.	Spike Amount Added	Matrix Result	% Rec	RPD	% Rec Limit	RPD Limit
MTBE	0.108	0.109	mg/L	1	0.10	<0.001	108	1	70 - 130	20
Benzene	0.108	0.111	mg/L	1	0.10	<0.001	108	3	70 - 130	20
Toluene	0.101	0.106	mg/L	1	0.10	<0.001	101	5	70 - 130	20
Ethylbenzene	0.0994	0.106	mg/L	1	0.10	<0.001	99	6	70 - 130	20
M,P,O-Xylene	0.304	0.319	mg/L	1	0.30	<0.001	101	5	70 - 130	20

Percent recovery is based on the spike result. RPD is based on the spike and spike duplicate result.

Surrogate	LCS Result	LCSD Result	Units	Dilution	Spike Amount	LCS % Rec	LCSD % Rec	Recovery Limits
TFT	0.104	0.110	mg/L	1	0.10	104	110	70 - 130
4-BFB	0.101	0.107	mg/L	1	0.10	101	107	70 - 130

Laboratory Control Spikes

QCBatch: QC23119

Param	LCS Result	LCSD Result	Units	Dil.	Spike Amount Added	Matrix Result	% Rec	RPD	% Rec Limit	RPD Limit
MTBE	0.0961	0.0987	mg/L	1	0.10	<0.001	96	3	70 - 130	20
Benzene	0.0935	0.093	mg/L	1	0.10	<0.001	94	0	70 - 130	20
Toluene	0.0918	0.0933	mg/L	1	0.10	<0.001	92	2	70 - 130	20
Ethylbenzene	0.0955	0.095	mg/L	1	0.10	<0.001	96	0	70 - 130	20
M,P,O-Xylene	0.291	0.291	mg/L	1	0.30	<0.001	97	0	70 - 130	20

Percent recovery is based on the spike result. RPD is based on the spike and spike duplicate result.

Surrogate	LCS Result	LCSD Result	Units	Dilution	Spike Amount	LCS % Rec	LCSD % Rec	Recovery Limits
TFT	0.0883	0.0891	mg/L	1	0.10	88	89	70 - 130
4-BFB	0.0929	0.0926	mg/L	1	0.10	93	93	70 - 130

Laboratory Control Spikes

QCBatch: QC23256

Param	LCS Result	LCSD Result	Units	Dil.	Spike Amount Added	Matrix Result	% Rec	RPD	% Rec Limit	RPD Limit
Naphthalene	67.76	65.43	mg/L	1	80	<0.0002	84	3	16 - 96	20
Acenaphthylene	74.19	71.3	mg/L	1	80	<0.0002	92	3	20 - 110	20
Acenaphthene	71.59	68.32	mg/L	1	80	<0.0002	89	4	18 - 108	20
Fluorene	72.21	69.4	mg/L	1	80	<0.0002	90	3	22 - 102	20
Phenanthrene	73.37	70.47	mg/L	1	80	<0.0002	91	4	25 - 103	20
Anthracene	76.66	72.95	mg/L	1	80	<0.0002	95	4	22 - 110	20
Fluoranthene	80.57	74.97	mg/L	1	80	<0.0002	100	7	21 - 110	20
Pyrene	70.94	73.5	mg/L	1	80	<0.0002	88	3	22 - 100	20
Benzo(a)anthracene	76.64	75.41	mg/L	1	80	<0.0002	95	1	30 - 99	20
Chrysene	62.83	62.45	mg/L	1	80	<0.0002	78	0	27 - 108	20
Benzo(b)fluoranthene	73.85	71.89	mg/L	1	80	<0.0002	92	2	19 - 102	20
Benzo(k)fluoranthene	69.31	66.52	mg/L	1	80	<0.0002	86	4	35 - 103	20
Benzo(a)pyrene	73.35	72.01	mg/L	1	80	<0.0002	91	1	24 - 105	20
Indeno(1,2,3-cd)pyrene	69.05	67.95	mg/L	1	80	<0.0002	86	1	22 - 108	20
Dibenzo(a,h)anthracene	50.99	53.72	mg/L	1	80	<0.0002	63	5	23 - 77	20
Benzo(g,h,i)perylene	81.59	82.53	mg/L	1	80	<0.0002	101	1	19 - 119	20

Percent recovery is based on the spike result. RPD is based on the spike and spike duplicate result.

Surrogate	LCS Result	LCSD Result	Units	Dilution	Spike Amount	LCS % Rec	LCSD % Rec	Recovery Limits
Nitrobenzene-d5	80.94	78.45	mg/L	1	80	101	98	35 - 114
2-Fluorobiphenyl	79.77	76.72	mg/L	1	80	99	95	43 - 116
Terphenyl-d14	82.38	84.2	mg/L	1	80	102	105	33 - 141

Quality Control Report
Continuing Calibration Verification Standards

CCV (1)

QCBatch: QC23040

Param	Flag	Units	CCVs True Conc.	CCVs Found Conc.	CCVs Percent Recovery	Percent Recovery Limits	Date Analyzed
MTBE		mg/L	0.10	0.110	110	85 - 115	8/23/02
Benzene		mg/L	0.10	0.106	106	85 - 115	8/23/02
Toluene		mg/L	0.10	0.104	104	85 - 115	8/23/02
Ethylbenzene		mg/L	0.10	0.104	104	85 - 115	8/23/02
M,P,O-Xylene		mg/L	0.30	0.309	103	85 - 115	8/23/02

CCV (2)

QCBatch: QC23040

Param	Flag	Units	CCVs True Conc.	CCVs Found Conc.	CCVs Percent Recovery	Percent Recovery Limits	Date Analyzed
MTBE		mg/L	0.10	0.108	108	85 - 115	8/23/02
Benzene		mg/L	0.10	0.102	102	85 - 115	8/23/02
Toluene		mg/L	0.10	0.105	105	85 - 115	8/23/02
Ethylbenzene		mg/L	0.10	0.110	110	85 - 115	8/23/02
M,P,O-Xylene		mg/L	0.30	0.322	107	85 - 115	8/23/02

ICV (1) QCBatch: QC23040

Param	Flag	Units	CCVs True Conc.	CCVs Found Conc.	CCVs Percent Recovery	Percent Recovery Limits	Date Analyzed
MTBE		mg/L	0.10	0.105	105	85 - 115	8/23/02
Benzene		mg/L	0.10	0.110	110	85 - 115	8/23/02
Toluene		mg/L	0.10	0.105	105	85 - 115	8/23/02
Ethylbenzene		mg/L	0.10	0.102	102	85 - 115	8/23/02
M,P,O-Xylene		mg/L	0.30	0.314	105	85 - 115	8/23/02

CCV (1) QCBatch: QC23119

Param	Flag	Units	CCVs True Conc.	CCVs Found Conc.	CCVs Percent Recovery	Percent Recovery Limits	Date Analyzed
MTBE		mg/L	0.10	0.0919	92	85 - 115	8/26/02
Benzene		mg/L	0.10	0.092	92	85 - 115	8/26/02
Toluene		mg/L	0.10	0.0921	92	85 - 115	8/26/02
Ethylbenzene		mg/L	0.10	0.0915	92	85 - 115	8/26/02
M,P,O-Xylene		mg/L	0.30	0.279	93	85 - 115	8/26/02

CCV (2) QCBatch: QC23119

Param	Flag	Units	CCVs True Conc.	CCVs Found Conc.	CCVs Percent Recovery	Percent Recovery Limits	Date Analyzed
MTBE		mg/L	0.10	0.0883	88	85 - 115	8/26/02
Benzene		mg/L	0.10	0.0886	88	85 - 115	8/26/02
Toluene		mg/L	0.10	0.0876	87	85 - 115	8/26/02
Ethylbenzene		mg/L	0.10	0.0889	88	85 - 115	8/26/02
M,P,O-Xylene		mg/L	0.30	0.272	90	85 - 115	8/26/02

ICV (1) QCBatch: QC23119

Param	Flag	Units	CCVs True Conc.	CCVs Found Conc.	CCVs Percent Recovery	Percent Recovery Limits	Date Analyzed
MTBE		mg/L	0.10	0.0971	97	85 - 115	8/26/02
Benzene		mg/L	0.10	0.0967	97	85 - 115	8/26/02
Toluene		mg/L	0.10	0.0977	98	85 - 115	8/26/02
Ethylbenzene		mg/L	0.10	0.0987	99	85 - 115	8/26/02
M,P,O-Xylene		mg/L	0.30	0.300	100	85 - 115	8/26/02

CCV (1)

QCBatch: QC23256

Param	Flag	Units	CCVs True Conc.	CCVs Found Conc.	CCVs Percent Recovery	Percent Recovery Limits	Date Analyzed
Naphthalene		mg/L	60	57.79	96	80 - 120	8/28/02
Acenaphthylene		mg/L	60	57.22	95	80 - 120	8/28/02
Acenaphthene		mg/L	60	57.28	95	80 - 120	8/28/02
Fluorene		mg/L	60	56.8	94	80 - 120	8/28/02
Phenanthrene		mg/L	60	58.36	97	80 - 120	8/28/02
Anthracene		mg/L	60	58.59	97	80 - 120	8/28/02
Fluoranthene		mg/L	60	56.89	94	80 - 120	8/28/02
Pyrene		mg/L	60	55.86	93	80 - 120	8/28/02
Benzo(a)anthracene		mg/L	60	62.58	104	80 - 120	8/28/02
Chrysene		mg/L	60	57.69	96	80 - 120	8/28/02
Benzo(b)fluoranthene		mg/L	60	71.02	118	80 - 120	8/28/02
Benzo(k)fluoranthene		mg/L	60	50.82	84	80 - 120	8/28/02
Benzo(a)pyrene		mg/L	60	59.55	99	80 - 120	8/28/02
Indeno(1,2,3-cd)pyrene		mg/L	60	61.39	102	80 - 120	8/28/02
Dibenzo(a,h)anthracene		mg/L	60	60.71	101	80 - 120	8/28/02
Benzo(g,h,i)perylene		mg/L	60	65.21	108	80 - 120	8/28/02
Nitrobenzene-d5		mg/L	60	63.21	105	80 - 120	8/28/02
2-Fluorobiphenyl		mg/L	60	60.25	100	80 - 120	8/28/02
Terphenyl-d14		mg/L	60	58.45	97	80 - 120	8/28/02

Summary Report

Jeff Kindley
Enercon Services Inc.
306 W. Wall Suite 1312
Midland, Tx. 79701

Report Date: September 6, 2002

Order ID Number: A02082311

Project Number: EQ-112
Project Name: Barber Ranch 3000109
Project Location: Barber Lea County, New Mexico

Sample	Description	Matrix	Date Taken	Time Taken	Date Received
206043	MW-20	Water	8/21/02	:	8/23/02
206044	MW-21	Water	8/21/02	:	8/23/02
206045	MW-22	Water	8/21/02	:	8/23/02

0 This report consists of a total of 2 page(s) and is intended only as a summary of results for the sample(s) listed above.

	BTEX				
Sample - Field Code	Benzene (ppm)	Toluene (ppm)	Ethylbenzene (ppm)	M,P,O-Xylene (ppm)	Total BTEX (ppm)
206043 - MW-20	<0.005	<0.005	<0.005	0.0092	0.0092
206044 - MW-21	0.152	0.427	0.470	1.35	2.40
206045 - MW-22	0.0663	<0.020	<0.020	0.519	0.585

Sample: 206043 - MW-20

Param	Flag	Result	Units
Naphthalene		0.0011	mg/L
Acenaphthylene		<0.0002	mg/L
Acenaphthene		<0.0002	mg/L
Fluorene		<0.0002	mg/L
Phenanthrene		<0.0002	mg/L
Anthracene		<0.0002	mg/L
Fluoranthene		<0.0002	mg/L
Pyrene		<0.0002	mg/L
Benzo(a)anthracene		<0.0002	mg/L
Chrysene		<0.0002	mg/L
Benzo(b)fluoranthene		<0.0002	mg/L
Benzo(k)fluoranthene		<0.0002	mg/L
Benzo(a)pyrene		<0.0002	mg/L
Indeno(1,2,3-cd)pyrene		<0.0002	mg/L
Dibenzo(a,h)anthracene		<0.0002	mg/L
Benzo(g,h,i)perylene		<0.0002	mg/L

This is only a summary. Please, refer to the complete report package for quality control data.

Sample: 206044 - MW-21

Param	Flag	Result	Units
Naphthalene		0.0200	mg/L
Acenaphthylene		<0.0002	mg/L
Acenaphthene		<0.0002	mg/L
Fluorene		<0.0002	mg/L
Phenanthrene		<0.0002	mg/L
Anthracene		0.0003	mg/L
Fluoranthene		<0.0002	mg/L
Pyrene		<0.0002	mg/L
Benzo(a)anthracene		<0.0002	mg/L
Chrysene		<0.0002	mg/L
Benzo(b)fluoranthene		<0.0002	mg/L
Benzo(k)fluoranthene		<0.0002	mg/L
Benzo(a)pyrene		<0.0002	mg/L
Indeno(1,2,3-cd)pyrene		<0.0002	mg/L
Dibenzo(a,h)anthracene		<0.0002	mg/L
Benzo(g,h,i)perylene		<0.0002	mg/L

Sample: 206045 - MW-22

Param	Flag	Result	Units
Naphthalene		0.0097	mg/L
Acenaphthylene		<0.0002	mg/L
Acenaphthene		<0.0002	mg/L
Fluorene		<0.0002	mg/L
Phenanthrene		<0.0002	mg/L
Anthracene		<0.0002	mg/L
Fluoranthene		<0.0002	mg/L
Pyrene		<0.0002	mg/L
Benzo(a)anthracene		<0.0002	mg/L
Chrysene		<0.0002	mg/L
Benzo(b)fluoranthene		<0.0002	mg/L
Benzo(k)fluoranthene		<0.0002	mg/L
Benzo(a)pyrene		<0.0002	mg/L
Indeno(1,2,3-cd)pyrene		<0.0002	mg/L
Dibenzo(a,h)anthracene		<0.0002	mg/L
Benzo(g,h,i)perylene		<0.0002	mg/L

Summary Report

Kyle Landreneau
Equiva Kyle Landreneau
PMB 284 40 FM 1960 West
Houston, TX 77090

Report Date: September 6, 2002

Order ID Number: A02082311

Project: EQ-112
TA Job Code: Barber Ranch 3000109
Casualty Code: EQ-112
Project Location: Barber Lea County, New Mexico
Project Address:
Enercon Services Inc. / Midland / Jeff Kindley

Sample	Description	Matrix	Date Taken	Time Taken	Date Received
206043	MW-20	Water	8/21/02	:	8/23/02
206044	MW-21	Water	8/21/02	:	8/23/02
206045	MW-22	Water	8/21/02	:	8/23/02

0 This report consists of a total of 2 page(s) and is intended only as a summary of results for the sample(s) listed above.

	BTEX				
Sample - Field Code	Benzene (ppm)	Toluene (ppm)	Ethylbenzene (ppm)	M,P,O-Xylene (ppm)	Total BTEX (ppm)
206043 - MW-20	<0.005	<0.005	<0.005	0.0092	0.0092
206044 - MW-21	0.152	0.427	0.470	1.35	2.40
206045 - MW-22	0.0663	<0.020	<0.020	0.519	0.585

Sample: 206043 - MW-20

Param	Flag	Result	Units
Naphthalene		0.0011	mg/L
Acenaphthylene		<0.0002	mg/L
Acenaphthene		<0.0002	mg/L
Fluorene		<0.0002	mg/L
Phenanthrene		<0.0002	mg/L
Anthracene		<0.0002	mg/L
Fluoranthene		<0.0002	mg/L
Pyrene		<0.0002	mg/L
Benzo(a)anthracene		<0.0002	mg/L
Chrysene		<0.0002	mg/L
Benzo(b)fluoranthene		<0.0002	mg/L
Benzo(k)fluoranthene		<0.0002	mg/L
Benzo(a)pyrene		<0.0002	mg/L
Indeno(1,2,3-cd)pyrene		<0.0002	mg/L

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Sample 206043 continued ...

Param	Flag	Result	Units
Dibenzo(a,h)anthracene		<0.0002	mg/L
Benzo(g,h,i)perylene		<0.0002	mg/L

Sample: 206044 - MW-21

Param	Flag	Result	Units
Naphthalene		0.0200	mg/L
Acenaphthylene		<0.0002	mg/L
Acenaphthene		<0.0002	mg/L
Fluorene		<0.0002	mg/L
Phenanthrene		<0.0002	mg/L
Anthracene		0.0003	mg/L
Fluoranthene		<0.0002	mg/L
Pyrene		<0.0002	mg/L
Benzo(a)anthracene		<0.0002	mg/L
Chrysene		<0.0002	mg/L
Benzo(b)fluoranthene		<0.0002	mg/L
Benzo(k)fluoranthene		<0.0002	mg/L
Benzo(a)pyrene		<0.0002	mg/L
Indeno(1,2,3-cd)pyrene		<0.0002	mg/L
Dibenzo(a,h)anthracene		<0.0002	mg/L
Benzo(g,h,i)perylene		<0.0002	mg/L

Sample: 206045 - MW-22

Param	Flag	Result	Units
Naphthalene		0.0097	mg/L
Acenaphthylene		<0.0002	mg/L
Acenaphthene		<0.0002	mg/L
Fluorene		<0.0002	mg/L
Phenanthrene		<0.0002	mg/L
Anthracene		<0.0002	mg/L
Fluoranthene		<0.0002	mg/L
Pyrene		<0.0002	mg/L
Benzo(a)anthracene		<0.0002	mg/L
Chrysene		<0.0002	mg/L
Benzo(b)fluoranthene		<0.0002	mg/L
Benzo(k)fluoranthene		<0.0002	mg/L
Benzo(a)pyrene		<0.0002	mg/L
Indeno(1,2,3-cd)pyrene		<0.0002	mg/L
Dibenzo(a,h)anthracene		<0.0002	mg/L
Benzo(g,h,i)perylene		<0.0002	mg/L

TRACEANALYSIS, INC.

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Analytical and Quality Control Report

Kyle Landreneau
Equiva Kyle Landreneau
PMB 284 40 FM 1960 West
Houston, TX 77090

Report Date: September 6, 2002

Order ID Number: A02082311

Project: EQ-112
TA Job Code: Barber Ranch 3000109
Casualty Code: EQ-112
Project Location: Barber Lea County, New Mexico
Enercon Services Inc. / Midland / Jeff Kindley

Enclosed are the Analytical Results and Quality Control Data Reports for the following samples submitted to Trace-Analysis, Inc.

Sample	Description	Matrix	Date Taken	Time Taken	Date Received
206043	MW-20	Water	8/21/02	:	8/23/02
206044	MW-21	Water	8/21/02	:	8/23/02
206045	MW-22	Water	8/21/02	:	8/23/02

These results represent only the samples received in the laboratory. The Quality Control Report is generated on a batch basis. All information contained in this report is for the analytical batch(es) in which your sample(s) were analyzed. Note: the RDL is equal to MQL for all organic analytes including TPH.
The test results contained within this report meet all requirements of LAC 33:I unless otherwise noted.

This report consists of a total of 9 pages and shall not be reproduced except in its entirety including the chain of custody (COC), without written approval of TraceAnalysis, Inc.

Note: Samples will be disposed of 30 days from the report date unless the lab is contacted before the 30 days has past.

Dr. Blair Leftwich, Director

Analytical Report

Sample: 206043 - MW-20

Analysis:	BTEX	Analytical Method:	S 8021B	QC Batch:	QC23119	Date Analyzed:	8/26/02
Analyst:	CG	Preparation Method:	S 5030B	Prep Batch:	PB21714	Date Prepared:	8/26/02

Param	Flag	Result	Units	Dilution	RDL
Benzene		<0.005	mg/L	5	0.001
Toluene		<0.005	mg/L	5	0.001
Ethylbenzene		<0.005	mg/L	5	0.001
M,P,O-Xylene		0.0092	mg/L	5	0.001
Total BTEX		0.0092	mg/L	5	0.001

Surrogate	Flag	Result	Units	Dilution	Spike Amount	Percent Recovery	Recovery Limits
TFT		0.089	mg/L	5	0.10	89	70 - 130
4-BFB		0.0881	mg/L	5	0.10	88	70 - 130

Sample: 206043 - MW-20

Analysis:	PAH	Analytical Method:	S 8270C	QC Batch:	QC23256	Date Analyzed:	8/28/02
Analyst:	RC	Preparation Method:	E 3510C	Prep Batch:	PB21753	Date Prepared:	8/26/02

Param	Flag	Result	Units	Dilution	RDL
Naphthalene		0.0011	mg/L	1	0.0002
Acenaphthylene		<0.0002	mg/L	1	0.0002
Acenaphthene		<0.0002	mg/L	1	0.0002
Fluorene		<0.0002	mg/L	1	0.0002
Phenanthrene		<0.0002	mg/L	1	0.0002
Anthracene		<0.0002	mg/L	1	0.0002
Fluoranthene		<0.0002	mg/L	1	0.0002
Pyrene		<0.0002	mg/L	1	0.0002
Benzo(a)anthracene		<0.0002	mg/L	1	0.0002
Chrysene		<0.0002	mg/L	1	0.0002
Benzo(b)fluoranthene		<0.0002	mg/L	1	0.0002
Benzo(k)fluoranthene		<0.0002	mg/L	1	0.0002
Benzo(a)pyrene		<0.0002	mg/L	1	0.0002
Indeno(1,2,3-cd)pyrene		<0.0002	mg/L	1	0.0002
Dibenzo(a,h)anthracene		<0.0002	mg/L	1	0.0002
Benzo(g,h,i)perylene		<0.0002	mg/L	1	0.0002

Surrogate	Flag	Result	Units	Dilution	Spike Amount	Percent Recovery	Recovery Limits
Nitrobenzene-d5		58.5	mg/L	1	80	73	35 - 114
2-Fluorobiphenyl		58.5	mg/L	1	80	73	43 - 116
Terphenyl-d14		57.38	mg/L	1	80	71	33 - 141

Sample: 206044 - MW-21

Analysis:	BTEX	Analytical Method:	S 8021B	QC Batch:	QC23040	Date Analyzed:	8/23/02
Analyst:	CG	Preparation Method:	S 5030B	Prep Batch:	PB21650	Date Prepared:	8/23/02

Param	Flag	Result	Units	Dilution	RDL
Benzene		0.152	mg/L	50	0.001
Toluene		0.427	mg/L	50	0.001
Ethylbenzene		0.470	mg/L	50	0.001
M,P,O-Xylene		1.35	mg/L	50	0.001
Total BTEX		2.40	mg/L	50	0.001

Surrogate	Flag	Result	Units	Dilution	Spike Amount	Percent Recovery	Recovery Limits
TFT		0.101	mg/L	50	0.10	101	70 - 130
4-BFB		0.0845	mg/L	50	0.10	84	70 - 130

Sample: 206044 - MW-21

Analysis:	PAH	Analytical Method:	S 8270C	QC Batch:	QC23256	Date Analyzed:	8/28/02
Analyst:	RC	Preparation Method:	E 3510C	Prep Batch:	PB21753	Date Prepared:	8/26/02

Param	Flag	Result	Units	Dilution	RDL
Naphthalene		0.0200	mg/L	1	0.0002
Acenaphthylene		<0.0002	mg/L	1	0.0002
Acenaphthene		<0.0002	mg/L	1	0.0002
Fluorene		<0.0002	mg/L	1	0.0002
Phenanthrene		<0.0002	mg/L	1	0.0002
Anthracene		0.0003	mg/L	1	0.0002
Fluoranthene		<0.0002	mg/L	1	0.0002
Pyrene		<0.0002	mg/L	1	0.0002
Benzo(a)anthracene		<0.0002	mg/L	1	0.0002
Chrysene		<0.0002	mg/L	1	0.0002
Benzo(b)fluoranthene		<0.0002	mg/L	1	0.0002
Benzo(k)fluoranthene		<0.0002	mg/L	1	0.0002
Benzo(a)pyrene		<0.0002	mg/L	1	0.0002
Indeno(1,2,3-cd)pyrene		<0.0002	mg/L	1	0.0002
Dibenzo(a,h)anthracene		<0.0002	mg/L	1	0.0002
Benzo(g,h,i)perylene		<0.0002	mg/L	1	0.0002

Surrogate	Flag	Result	Units	Dilution	Spike Amount	Percent Recovery	Recovery Limits
Nitrobenzene-d5		71.38	mg/L	1	80	89	35 - 114
2-Fluorobiphenyl		74.07	mg/L	1	80	92	43 - 116
Terphenyl-d14		45.59	mg/L	1	80	56	33 - 141

Sample: 206045 - MW-22

Analysis:	BTEX	Analytical Method:	S 8021B	QC Batch:	QC23040	Date Analyzed:	8/23/02
Analyst:	CG	Preparation Method:	S 5030B	Prep Batch:	PB21650	Date Prepared:	8/23/02

Param	Flag	Result	Units	Dilution	RDL
Benzene		0.0663	mg/L	20	0.001
Toluene		<0.020	mg/L	20	0.001
Ethylbenzene		<0.020	mg/L	20	0.001
M,P,O-Xylene		0.519	mg/L	20	0.001
Total BTEX		0.585	mg/L	20	0.001

Surrogate	Flag	Result	Units	Dilution	Spike Amount	Percent Recovery	Recovery Limits
TFT		0.1	mg/L	20	0.10	100	70 - 130
4-BFB		0.0809	mg/L	20	0.10	80	70 - 130

Sample: 206045 - MW-22

Analysis: PAH | Analytical Method: S 8270C | QC Batch: QC23256 | Date Analyzed: 8/28/02
Analyst: RC | Preparation Method: E 3510C | Prep Batch: PB21753 | Date Prepared: 8/26/02

Param	Flag	Result	Units	Dilution	RDL
Naphthalene		0.0097	mg/L	1	0.0002
Acenaphthylene		<0.0002	mg/L	1	0.0002
Acenaphthene		<0.0002	mg/L	1	0.0002
Fluorene		<0.0002	mg/L	1	0.0002
Phenanthrene		<0.0002	mg/L	1	0.0002
Anthracene		<0.0002	mg/L	1	0.0002
Fluoranthene		<0.0002	mg/L	1	0.0002
Pyrene		<0.0002	mg/L	1	0.0002
Benzo(a)anthracene		<0.0002	mg/L	1	0.0002
Chrysene		<0.0002	mg/L	1	0.0002
Benzo(b)fluoranthene		<0.0002	mg/L	1	0.0002
Benzo(k)fluoranthene		<0.0002	mg/L	1	0.0002
Benzo(a)pyrene		<0.0002	mg/L	1	0.0002
Indeno(1,2,3-cd)pyrene		<0.0002	mg/L	1	0.0002
Dibenzo(a,h)anthracene		<0.0002	mg/L	1	0.0002
Benzo(g,h,i)perylene		<0.0002	mg/L	1	0.0002

Surrogate	Flag	Result	Units	Dilution	Spike Amount	Percent Recovery	Recovery Limits
Nitrobenzene-d5		55.99	mg/L	1	80	69	35 - 114
2-Fluorobiphenyl		54.6	mg/L	1	80	68	43 - 116
Terphenyl-d14		41.21	mg/L	1	80	51	33 - 141

Quality Control Report
Method Blank

Method Blank

QCBatch: QC23040

Param	Flag	Results	Units	Reporting Limit
Benzene		<0.001	mg/L	0.001
Toluene		<0.001	mg/L	0.001
Ethylbenzene		<0.001	mg/L	0.001
M,P,O-Xylene		<0.001	mg/L	0.001
Total BTEX		<0.001	mg/L	0.001

Surrogate	Flag	Result	Units	Dilution	Spike Amount	Percent Recovery	Recovery Limits
TFT		0.109	mg/L	1	0.10	109	70 - 130
4-BFB		0.0869	mg/L	1	0.10	87	70 - 130

Method Blank

QCBatch: QC23119

Param	Flag	Results	Units	Reporting Limit
Benzene		<0.001	mg/L	0.001
Toluene		<0.001	mg/L	0.001
Ethylbenzene		<0.001	mg/L	0.001
M,P,O-Xylene		<0.001	mg/L	0.001
Total BTEX		<0.001	mg/L	0.001

Surrogate	Flag	Result	Units	Dilution	Spike Amount	Percent Recovery	Recovery Limits
TFT		0.0937	mg/L	1	0.10	94	70 - 130
4-BFB		0.0909	mg/L	1	0.10	91	70 - 130

Method Blank

QCBatch: QC23256

Param	Flag	Results	Units	Reporting Limit
Naphthalene		<0.0002	mg/L	0.0002
Acenaphthylene		<0.0002	mg/L	0.0002
Acenaphthene		<0.0002	mg/L	0.0002
Fluorene		<0.0002	mg/L	0.0002
Phenanthrene		<0.0002	mg/L	0.0002
Anthracene		<0.0002	mg/L	0.0002
Fluoranthene		<0.0002	mg/L	0.0002
Pyrene		<0.0002	mg/L	0.0002
Benzo(a)anthracene		<0.0002	mg/L	0.0002
Chrysene		<0.0002	mg/L	0.0002

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Param	Flag	Results	Units	Reporting Limit
Benzo(b)fluoranthene		<0.0002	mg/L	0.0002
Benzo(k)fluoranthene		<0.0002	mg/L	0.0002
Benzo(a)pyrene		<0.0002	mg/L	0.0002
Indeno(1,2,3-cd)pyrene		<0.0002	mg/L	0.0002
Dibenzo(a,h)anthracene		<0.0002	mg/L	0.0002
Benzo(g,h,i)perylene		<0.0002	mg/L	0.0002

Surrogate	Flag	Result	Units	Dilution	Spike Amount	Percent Recovery	Recovery Limits
Nitrobenzene-d5		66.23	mg/L	1	80	82	35 - 114
2-Fluorobiphenyl		61.27	mg/L	1	80	76	43 - 116
Terphenyl-d14		66.16	mg/L	1	80	82	33 - 141

Quality Control Report
Lab Control Spikes and Duplicate Spikes

Laboratory Control Spikes

QCBatch: QC23040

Param	LCS Result	LCSD Result	Units	Dil.	Spike Amount Added	Matrix Result	% Rec	RPD	% Rec Limit	RPD Limit
MTBE	0.108	0.109	mg/L	1	0.10	<0.001	108	1	70 - 130	20
Benzene	0.108	0.111	mg/L	1	0.10	<0.001	108	3	70 - 130	20
Toluene	0.101	0.106	mg/L	1	0.10	<0.001	101	5	70 - 130	20
Ethylbenzene	0.0994	0.106	mg/L	1	0.10	<0.001	99	6	70 - 130	20
M,P,O-Xylene	0.304	0.319	mg/L	1	0.30	<0.001	101	5	70 - 130	20

Percent recovery is based on the spike result. RPD is based on the spike and spike duplicate result.

Surrogate	LCS Result	LCSD Result	Units	Dilution	Spike Amount	LCS % Rec	LCSD % Rec	Recovery Limits
TFT	0.104	0.110	mg/L	1	0.10	104	110	70 - 130
4-BFB	0.101	0.107	mg/L	1	0.10	101	107	70 - 130

Laboratory Control Spikes

QCBatch: QC23119

Param	LCS Result	LCSD Result	Units	Dil.	Spike Amount Added	Matrix Result	% Rec	RPD	% Rec Limit	RPD Limit
MTBE	0.0961	0.0987	mg/L	1	0.10	<0.001	96	3	70 - 130	20
Benzene	0.0935	0.093	mg/L	1	0.10	<0.001	94	0	70 - 130	20
Toluene	0.0918	0.0933	mg/L	1	0.10	<0.001	92	2	70 - 130	20
Ethylbenzene	0.0955	0.095	mg/L	1	0.10	<0.001	96	0	70 - 130	20
M,P,O-Xylene	0.291	0.291	mg/L	1	0.30	<0.001	97	0	70 - 130	20

Percent recovery is based on the spike result. RPD is based on the spike and spike duplicate result.

Surrogate	LCS Result	LCSD Result	Units	Dilution	Spike Amount	LCS % Rec	LCSD % Rec	Recovery Limits
TFT	0.0883	0.0891	mg/L	1	0.10	88	89	70 - 130
4-BFB	0.0929	0.0926	mg/L	1	0.10	93	93	70 - 130

Laboratory Control Spikes

QCBatch: QC23256

Param	LCS Result	LCSD Result	Units	Dil.	Spike Amount Added	Matrix Result	% Rec	RPD	% Rec Limit	RPD Limit
Naphthalene	67.76	65.43	mg/L	1	80	<0.0002	84	3	16 - 96	20
Acenaphthylene	74.19	71.3	mg/L	1	80	<0.0002	92	3	20 - 110	20
Acenaphthene	71.59	68.32	mg/L	1	80	<0.0002	89	4	18 - 108	20
Fluorene	72.21	69.4	mg/L	1	80	<0.0002	90	3	22 - 102	20
Phenanthrene	73.37	70.47	mg/L	1	80	<0.0002	91	4	25 - 103	20
Anthracene	76.66	72.95	mg/L	1	80	<0.0002	95	4	22 - 110	20
Fluoranthene	80.57	74.97	mg/L	1	80	<0.0002	100	7	21 - 110	20
Pyrene	70.94	73.5	mg/L	1	80	<0.0002	88	3	22 - 100	20
Benzo(a)anthracene	76.64	75.41	mg/L	1	80	<0.0002	95	1	30 - 99	20
Chrysene	62.83	62.45	mg/L	1	80	<0.0002	78	0	27 - 108	20
Benzo(b)fluoranthene	73.85	71.89	mg/L	1	80	<0.0002	92	2	19 - 102	20
Benzo(k)fluoranthene	69.31	66.52	mg/L	1	80	<0.0002	86	4	35 - 103	20
Benzo(a)pyrene	73.35	72.01	mg/L	1	80	<0.0002	91	1	24 - 105	20
Indeno(1,2,3-cd)pyrene	69.05	67.95	mg/L	1	80	<0.0002	86	1	22 - 108	20
Dibenzo(a,h)anthracene	50.99	53.72	mg/L	1	80	<0.0002	63	5	23 - 77	20
Benzo(g,h,i)perylene	81.59	82.53	mg/L	1	80	<0.0002	101	1	19 - 119	20

Percent recovery is based on the spike result. RPD is based on the spike and spike duplicate result.

Surrogate	LCS Result	LCSD Result	Units	Dilution	Spike Amount	LCS % Rec	LCSD % Rec	Recovery Limits
Nitrobenzene-d5	80.94	78.45	mg/L	1	80	101	98	35 - 114
2-Fluorobiphenyl	79.77	76.72	mg/L	1	80	99	95	43 - 116
Terphenyl-d14	82.38	84.2	mg/L	1	80	102	105	33 - 141

Quality Control Report
Continuing Calibration Verification Standards

CCV (1)

QCBatch: QC23040

Param	Flag	Units	CCVs True Conc.	CCVs Found Conc.	CCVs Percent Recovery	Percent Recovery Limits	Date Analyzed
MTBE		mg/L	0.10	0.110	110	85 - 115	8/23/02
Benzene		mg/L	0.10	0.106	106	85 - 115	8/23/02
Toluene		mg/L	0.10	0.104	104	85 - 115	8/23/02
Ethylbenzene		mg/L	0.10	0.104	104	85 - 115	8/23/02
M,P,O-Xylene		mg/L	0.30	0.309	103	85 - 115	8/23/02

CCV (2)

QCBatch: QC23040

Param	Flag	Units	CCVs True Conc.	CCVs Found Conc.	CCVs Percent Recovery	Percent Recovery Limits	Date Analyzed
MTBE		mg/L	0.10	0.108	108	85 - 115	8/23/02
Benzene		mg/L	0.10	0.102	102	85 - 115	8/23/02
Toluene		mg/L	0.10	0.105	105	85 - 115	8/23/02
Ethylbenzene		mg/L	0.10	0.110	110	85 - 115	8/23/02
M,P,O-Xylene		mg/L	0.30	0.322	107	85 - 115	8/23/02

ICV (1) QCBatch: QC23040

Param	Flag	Units	CCVs True Conc.	CCVs Found Conc.	CCVs Percent Recovery	Percent Recovery Limits	Date Analyzed
MTBE		mg/L	0.10	0.105	105	85 - 115	8/23/02
Benzene		mg/L	0.10	0.110	110	85 - 115	8/23/02
Toluene		mg/L	0.10	0.105	105	85 - 115	8/23/02
Ethylbenzene		mg/L	0.10	0.102	102	85 - 115	8/23/02
M,P,O-Xylene		mg/L	0.30	0.314	105	85 - 115	8/23/02

CCV (1) QCBatch: QC23119

Param	Flag	Units	CCVs True Conc.	CCVs Found Conc.	CCVs Percent Recovery	Percent Recovery Limits	Date Analyzed
MTBE		mg/L	0.10	0.0919	92	85 - 115	8/26/02
Benzene		mg/L	0.10	0.092	92	85 - 115	8/26/02
Toluene		mg/L	0.10	0.0921	92	85 - 115	8/26/02
Ethylbenzene		mg/L	0.10	0.0915	92	85 - 115	8/26/02
M,P,O-Xylene		mg/L	0.30	0.279	93	85 - 115	8/26/02

CCV (2) QCBatch: QC23119

Param	Flag	Units	CCVs True Conc.	CCVs Found Conc.	CCVs Percent Recovery	Percent Recovery Limits	Date Analyzed
MTBE		mg/L	0.10	0.0883	88	85 - 115	8/26/02
Benzene		mg/L	0.10	0.0886	88	85 - 115	8/26/02
Toluene		mg/L	0.10	0.0876	87	85 - 115	8/26/02
Ethylbenzene		mg/L	0.10	0.0889	88	85 - 115	8/26/02
M,P,O-Xylene		mg/L	0.30	0.272	90	85 - 115	8/26/02

ICV (1) QCBatch: QC23119

Param	Flag	Units	CCVs True Conc.	CCVs Found Conc.	CCVs Percent Recovery	Percent Recovery Limits	Date Analyzed
MTBE		mg/L	0.10	0.0971	97	85 - 115	8/26/02
Benzene		mg/L	0.10	0.0967	97	85 - 115	8/26/02
Toluene		mg/L	0.10	0.0977	98	85 - 115	8/26/02
Ethylbenzene		mg/L	0.10	0.0987	99	85 - 115	8/26/02
M,P,O-Xylene		mg/L	0.30	0.300	100	85 - 115	8/26/02

CCV (1)

QCBatch: QC23256

Param	Flag	Units	CCVs True Conc.	CCVs Found Conc.	CCVs Percent Recovery	Percent Recovery Limits	Date Analyzed
Naphthalene		mg/L	60	57.79	96	80 - 120	8/28/02
Acenaphthylene		mg/L	60	57.22	95	80 - 120	8/28/02
Acenaphthene		mg/L	60	57.28	95	80 - 120	8/28/02
Fluorene		mg/L	60	56.8	94	80 - 120	8/28/02
Phenanthrene		mg/L	60	58.36	97	80 - 120	8/28/02
Anthracene		mg/L	60	58.59	97	80 - 120	8/28/02
Fluoranthene		mg/L	60	56.89	94	80 - 120	8/28/02
Pyrene		mg/L	60	55.86	93	80 - 120	8/28/02
Benzo(a)anthracene		mg/L	60	62.58	104	80 - 120	8/28/02
Chrysene		mg/L	60	57.69	96	80 - 120	8/28/02
Benzo(b)fluoranthene		mg/L	60	71.02	118	80 - 120	8/28/02
Benzo(k)fluoranthene		mg/L	60	50.82	84	80 - 120	8/28/02
Benzo(a)pyrene		mg/L	60	59.55	99	80 - 120	8/28/02
Indeno(1,2,3-cd)pyrene		mg/L	60	61.39	102	80 - 120	8/28/02
Dibenzo(a,h)anthracene		mg/L	60	60.71	101	80 - 120	8/28/02
Benzo(g,h,i)perylene		mg/L	60	65.21	108	80 - 120	8/28/02
Nitrobenzene-d5		mg/L	60	63.21	105	80 - 120	8/28/02
2-Fluorobiphenyl		mg/L	60	60.25	100	80 - 120	8/28/02
Terphenyl-d14		mg/L	60	58.45	97	80 - 120	8/28/02

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Page 1 of 1

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CHAIN-OF-CUSTODY AND ANALYSIS REQUEST

LAB Order ID # A02082311

npany Name: Enercon Services Inc
Phone #: 915-570-8726
dress: (Street, City, Zip) 306 West Wall, Suite 1312, Midland, TX 79701
Fax #: 915-684-7587
ntact Person: Jeffrey Kindley
oice to: (different from above) Kyle Landreneau Equiva Services
Incident # 300109
ject #: EQ-112
Project Name: Barber Ranch
ject Location: Monument, Lea Co. New Mexico
Sampler Signature: Jeffrey Kindley

ANALYSIS REQUEST
(Circle or Specify Method No.)

LAB # (LAB USE ONLY)	FIELD CODE	# CONTAINERS	Volume/Amount	MATRIX: WATER	SOIL	AIR	SLUDGE		PRESERVATIVE METHOD: HCl	HNO_3	H_2SO_4	NaOH	ICE	NONE		SAMPLING: DATE	TIME	MTBE 8021B/602	BTEX 8021B/602	TPH 418.1/TX1005	PAH 8270C	Total Metals Ag As Ba Cd Cr Pb Se Hg 6010B/200.7	TCLP Metals Ag As Ba Cd Cr Pb Se Hg	TCLP Volatiles	TCLP Semi Volatiles	TCLP Pesticides	RCI	GC/MS Vol. 8260B/624	GC/MS Semi. Vol. 8270C/625	PCB's 8082/608	Pesticides 8081A/608	BOD, TSS, pH						Turn Around Time if different from standard	Hold
6043	MW-20	3	1 Liter 40ml	✓					✓					✓		8/21/02			✓		✓																		
44	MW-21	3	1 Liter 40ml	✓					✓					✓		8/21/02			✓		✓																		
45	MW-22	3	1 Liter 40ml	✓					✓					✓		8/21/02			✓		✓																		

Relinquished by:	Date:	Time:	Received by:	Date:	Time:
Jeffrey Kindley	08/22/02	0900	Helen Shelton	8/22/02	0900
Helen Shelton	8/22/02	1830			
			Received at Laboratory by: Vick Dinsley	8-23-02	1000

LAB USE ONLY
Intact Y / N
Headspace Y / N
Temp 3°
Log-in Review N

REMARKS:

PYF 9/6/02

☐ Check If Special Reporting Limits Are Needed

bmittal of samples constitutes agreement to Terms and Conditions listed on reverse side of C.O.C. 9 samples-HS

Carrier # Grey Hound GLI 163 566 554-8

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Analytical and Quality Control Report

Jeff Kindley
Enercon Services Inc.
306 W. Wall Suite 1312
Midland, Tx. 79701

Report Date: September 9, 2002

Order ID Number: A02082615

Project Number: EQ-112
Project Name: Barber Ranch 3000109
Project Location: Barber Lea County, New Mexico

Enclosed are the Analytical Results and Quality Control Data Reports for the following samples submitted to Trace-Analysis, Inc.

Sample	Description	Matrix	Date Taken	Time Taken	Date Received
206233	MW-23	Water	8/23/02	9:00	8/24/02

These results represent only the samples received in the laboratory. The Quality Control Report is generated on a batch basis. All information contained in this report is for the analytical batch(es) in which your sample(s) were analyzed. Note: the RDL is equal to MQL for all organic analytes including TPH.
The test results contained within this report meet all requirements of LAC 33:I unless otherwise noted.

This report consists of a total of 6 pages and shall not be reproduced except in its entirety including the chain of custody (COC), without written approval of TraceAnalysis, Inc.

Note: Samples will be disposed of 30 days from the report date unless the lab is contacted before the 30 days has past.

Michael Abel for
Dr. Blair Leftwich, Director

TraceAnalysis, Inc. 6701 Aberdeen Ave., Suite 9 Lubbock, TX 79424-1515 (806) 794-1296

Summary Report

Jeff Kindley
Enercon Services Inc.
306 W. Wall Suite 1312
Midland, Tx. 79701

Report Date: September 9, 2002

Order ID Number: A02082615

Project Number: EQ-112
Project Name: Barber Ranch 3000109
Project Location: Barber Lea County, New Mexico

Sample	Description	Matrix	Date Taken	Time Taken	Date Received
206233	MW-23	Water	8/23/02	9:00	8/24/02

0 This report consists of a total of 1 page(s) and is intended only as a summary of results for the sample(s) listed above.

	BTEX				
Sample - Field Code	Benzene (ppm)	Toluene (ppm)	Ethylbenzene (ppm)	M,P,O-Xylene (ppm)	Total BTEX (ppm)
206233 - MW-23	0.0577	<0.005	<0.005	<0.005	0.0577

Sample: 206233 - MW-23

Param	Flag	Result	Units
Naphthalene		<0.0002	mg/L
Acenaphthylene		<0.0002	mg/L
Acenaphthene		<0.0002	mg/L
Fluorene		<0.0002	mg/L
Phenanthrene		<0.0002	mg/L
Anthracene		<0.0002	mg/L
Fluoranthene		<0.0002	mg/L
Pyrene		<0.0002	mg/L
Benzo(a)anthracene		<0.0002	mg/L
Chrysene		<0.0002	mg/L
Benzo(b)fluoranthene		<0.0002	mg/L
Benzo(k)fluoranthene		<0.0002	mg/L
Benzo(a)pyrene		<0.0002	mg/L
Indeno(1,2,3-cd)pyrene		<0.0002	mg/L
Dibenzo(a,h)anthracene		<0.0002	mg/L
Benzo(g,h,i)perylene		<0.0002	mg/L

Analytical Report

Sample: 206233 - MW-23

Analysis:	BTEX	Analytical Method:	S 8021B	QC Batch:	QC23160	Date Analyzed:	8/27/02
Analyst:	CG	Preparation Method:	S 5030B	Prep Batch:	PB21737	Date Prepared:	8/27/02

Param	Flag	Result	Units	Dilution	RDL
Benzene		0.0577	mg/L	5	0.001
Toluene		<0.005	mg/L	5	0.001
Ethylbenzene		<0.005	mg/L	5	0.001
M,P,O-Xylene		<0.005	mg/L	5	0.001
Total BTEX		0.0577	mg/L	5	0.001

Surrogate	Flag	Result	Units	Dilution	Spike Amount	Percent Recovery	Recovery Limits
TFT		0.11	mg/L	5	0.10	110	70 - 130
4-BFB		0.0943	mg/L	5	0.10	94	70 - 130

Sample: 206233 - MW-23

Analysis:	PAH	Analytical Method:	S 8270C	QC Batch:	QC23256	Date Analyzed:	8/28/02
Analyst:	RC	Preparation Method:	E 3510C	Prep Batch:	PB21753	Date Prepared:	8/26/02

Param	Flag	Result	Units	Dilution	RDL
Naphthalene		<0.0002	mg/L	1	0.0002
Acenaphthylene		<0.0002	mg/L	1	0.0002
Acenaphthene		<0.0002	mg/L	1	0.0002
Fluorene		<0.0002	mg/L	1	0.0002
Phenanthrene		<0.0002	mg/L	1	0.0002
Anthracene		<0.0002	mg/L	1	0.0002
Fluoranthene		<0.0002	mg/L	1	0.0002
Pyrene		<0.0002	mg/L	1	0.0002
Benzo(a)anthracene		<0.0002	mg/L	1	0.0002
Chrysene		<0.0002	mg/L	1	0.0002
Benzo(b)fluoranthene		<0.0002	mg/L	1	0.0002
Benzo(k)fluoranthene		<0.0002	mg/L	1	0.0002
Benzo(a)pyrene		<0.0002	mg/L	1	0.0002
Indeno(1,2,3-cd)pyrene		<0.0002	mg/L	1	0.0002
Dibenzo(a,h)anthracene		<0.0002	mg/L	1	0.0002
Benzo(g,h,i)perylene		<0.0002	mg/L	1	0.0002

Surrogate	Flag	Result	Units	Dilution	Spike Amount	Percent Recovery	Recovery Limits
Nitrobenzene-d5		65.32	mg/L	1	80	81	35 - 114
2-Fluorobiphenyl		68.4	mg/L	1	80	85	43 - 116
Terphenyl-d14		68.93	mg/L	1	80	86	33 - 141

Quality Control Report
Method Blank

Method Blank

QCBatch: QC23160

Param	Flag	Results	Units	Reporting Limit
Benzene		<0.001	mg/L	0.001
Toluene		<0.001	mg/L	0.001
Ethylbenzene		<0.001	mg/L	0.001
M,P,O-Xylene		<0.001	mg/L	0.001
Total BTEX		<0.001	mg/L	0.001

Surrogate	Flag	Result	Units	Dilution	Spike Amount	Percent Recovery	Recovery Limits
TFT		0.0966	mg/L	1	0.10	97	70 - 130
4-BFB		0.0796	mg/L	1	0.10	80	70 - 130

Method Blank

QCBatch: QC23256

Param	Flag	Results	Units	Reporting Limit
Naphthalene		<0.0002	mg/L	0.0002
Acenaphthylene		<0.0002	mg/L	0.0002
Acenaphthene		<0.0002	mg/L	0.0002
Fluorene		<0.0002	mg/L	0.0002
Phenanthrene		<0.0002	mg/L	0.0002
Anthracene		<0.0002	mg/L	0.0002
Fluoranthene		<0.0002	mg/L	0.0002
Pyrene		<0.0002	mg/L	0.0002
Benzo(a)anthracene		<0.0002	mg/L	0.0002
Chrysene		<0.0002	mg/L	0.0002
Benzo(b)fluoranthene		<0.0002	mg/L	0.0002
Benzo(k)fluoranthene		<0.0002	mg/L	0.0002
Benzo(a)pyrene		<0.0002	mg/L	0.0002
Indeno(1,2,3-cd)pyrene		<0.0002	mg/L	0.0002
Dibenzo(a,h)anthracene		<0.0002	mg/L	0.0002
Benzo(g,h,i)perylene		<0.0002	mg/L	0.0002

Surrogate	Flag	Result	Units	Dilution	Spike Amount	Percent Recovery	Recovery Limits
Nitrobenzene-d5		66.23	mg/L	1	80	82	35 - 114
2-Fluorobiphenyl		61.27	mg/L	1	80	76	43 - 116
Terphenyl-d14		66.16	mg/L	1	80	82	33 - 141

Quality Control Report
Lab Control Spikes and Duplicate Spikes

Laboratory Control Spikes

QCBatch: QC23160

Param	LCS Result	LCSD Result	Units	Dil.	Spike Amount Added	Matrix Result	% Rec	RPD	% Rec Limit	RPD Limit
MTBE	0.0925	0.0884	mg/L	1	0.10	<0.001	92	4	70 - 130	20
Benzene	0.0968	0.0985	mg/L	1	0.10	<0.001	97	2	70 - 130	20
Toluene	0.095	0.0977	mg/L	1	0.10	<0.001	95	3	70 - 130	20
Ethylbenzene	0.0978	0.101	mg/L	1	0.10	<0.001	98	3	70 - 130	20
M,P,O-Xylene	0.286	0.293	mg/L	1	0.30	<0.001	95	2	70 - 130	20

Percent recovery is based on the spike result. RPD is based on the spike and spike duplicate result.

Surrogate	LCS Result	LCSD Result	Units	Dilution	Spike Amount	LCS % Rec	LCSD % Rec	Recovery Limits
TFT	0.0958	0.095	mg/L	1	0.10	96	95	70 - 130
4-BFB	0.0934	0.0943	mg/L	1	0.10	93	94	70 - 130

Laboratory Control Spikes

QCBatch: QC23256

Param	LCS Result	LCSD Result	Units	Dil.	Spike Amount Added	Matrix Result	% Rec	RPD	% Rec Limit	RPD Limit
Naphthalene	67.76	65.43	mg/L	1	80	<0.0002	84	3	16 - 96	20
Acenaphthylene	74.19	71.3	mg/L	1	80	<0.0002	92	3	20 - 110	20
Acenaphthene	71.59	68.32	mg/L	1	80	<0.0002	89	4	18 - 108	20
Fluorene	72.21	69.4	mg/L	1	80	<0.0002	90	3	22 - 102	20
Phenanthrene	73.37	70.47	mg/L	1	80	<0.0002	91	4	25 - 103	20
Anthracene	76.66	72.95	mg/L	1	80	<0.0002	95	4	22 - 110	20
Fluoranthene	80.57	74.97	mg/L	1	80	<0.0002	100	7	21 - 110	20
Pyrene	70.94	73.5	mg/L	1	80	<0.0002	88	3	22 - 100	20
Benzo(a)anthracene	76.64	75.41	mg/L	1	80	<0.0002	95	1	30 - 99	20
Chrysene	62.83	62.45	mg/L	1	80	<0.0002	78	0	27 - 108	20
Benzo(b)fluoranthene	73.85	71.89	mg/L	1	80	<0.0002	92	2	19 - 102	20
Benzo(k)fluoranthene	69.31	66.52	mg/L	1	80	<0.0002	86	4	35 - 103	20
Benzo(a)pyrene	73.35	72.01	mg/L	1	80	<0.0002	91	1	24 - 105	20
Indeno(1,2,3-cd)pyrene	69.05	67.95	mg/L	1	80	<0.0002	86	1	22 - 108	20
Dibenzo(a,h)anthracene	50.99	53.72	mg/L	1	80	<0.0002	63	5	23 - 77	20
Benzo(g,h,i)perylene	81.59	82.53	mg/L	1	80	<0.0002	101	1	19 - 119	20

Percent recovery is based on the spike result. RPD is based on the spike and spike duplicate result.

Surrogate	LCS Result	LCSD Result	Units	Dilution	Spike Amount	LCS % Rec	LCSD % Rec	Recovery Limits
Nitrobenzene-d5	80.94	78.45	mg/L	1	80	101	98	35 - 114
2-Fluorobiphenyl	79.77	76.72	mg/L	1	80	99	95	43 - 116
Terphenyl-d14	82.38	84.2	mg/L	1	80	102	105	33 - 141

Quality Control Report
Continuing Calibration Verification Standards

CCV (1)

QCBatch: QC23160

Param	Flag	Units	CCVs True Conc.	CCVs Found Conc.	CCVs Percent Recovery	Percent Recovery Limits	Date Analyzed
MTBE		mg/L	0.10	0.0958	96	85 - 115	8/27/02
Benzene		mg/L	0.10	0.0998	100	85 - 115	8/27/02
Toluene		mg/L	0.10	0.098	98	85 - 115	8/27/02
Ethylbenzene		mg/L	0.10	0.0982	98	85 - 115	8/27/02
M,P,O-Xylene		mg/L	0.30	0.291	97	85 - 115	8/27/02

CCV (2)

QCBatch: QC23160

Param	Flag	Units	CCVs True Conc.	CCVs Found Conc.	CCVs Percent Recovery	Percent Recovery Limits	Date Analyzed
MTBE		mg/L	0.10	0.088	88	85 - 115	8/27/02
Benzene		mg/L	0.10	0.0893	89	85 - 115	8/27/02
Toluene		mg/L	0.10	0.0865	86	85 - 115	8/27/02
Ethylbenzene		mg/L	0.10	0.0884	88	85 - 115	8/27/02
M,P,O-Xylene		mg/L	0.30	0.26	86	85 - 115	8/27/02

ICV (1)

QCBatch: QC23160

Param	Flag	Units	CCVs True Conc.	CCVs Found Conc.	CCVs Percent Recovery	Percent Recovery Limits	Date Analyzed
MTBE		mg/L	0.10	0.089	89	85 - 115	8/27/02
Benzene		mg/L	0.10	0.0966	97	85 - 115	8/27/02
Toluene		mg/L	0.10	0.0947	95	85 - 115	8/27/02
Ethylbenzene		mg/L	0.10	0.0978	98	85 - 115	8/27/02
M,P,O-Xylene		mg/L	0.30	0.284	95	85 - 115	8/27/02

CCV (1)

QCBatch: QC23256

Param	Flag	Units	CCVs True Conc.	CCVs Found Conc.	CCVs Percent Recovery	Percent Recovery Limits	Date Analyzed
Naphthalene		mg/L	60	57.79	96	80 - 120	8/28/02
Acenaphthylene		mg/L	60	57.22	95	80 - 120	8/28/02
Acenaphthene		mg/L	60	57.28	95	80 - 120	8/28/02
Fluorene		mg/L	60	56.8	94	80 - 120	8/28/02
Phenanthrene		mg/L	60	58.36	97	80 - 120	8/28/02
Anthracene		mg/L	60	58.59	97	80 - 120	8/28/02
Fluoranthene		mg/L	60	56.89	94	80 - 120	8/28/02
Pyrene		mg/L	60	55.86	93	80 - 120	8/28/02
Benzo(a)anthracene		mg/L	60	62.58	104	80 - 120	8/28/02
Chrysene		mg/L	60	57.69	96	80 - 120	8/28/02
Benzo(b)fluoranthene		mg/L	60	71.02	118	80 - 120	8/28/02
Benzo(k)fluoranthene		mg/L	60	50.82	84	80 - 120	8/28/02

Continued ...

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Param	Flag	Units	CCVs True Conc.	CCVs Found Conc.	CCVs Percent Recovery	Percent Recovery Limits	Date Analyzed
Benzo(a)pyrene		mg/L	60	59.55	99	80 - 120	8/28/02
Indeno(1,2,3-cd)pyrene		mg/L	60	61.39	102	80 - 120	8/28/02
Dibenzo(a,h)anthracene		mg/L	60	60.71	101	80 - 120	8/28/02
Benzo(g,h,i)perylene		mg/L	60	65.21	108	80 - 120	8/28/02
Nitrobenzene-d5		mg/L	60	63.21	105	80 - 120	8/28/02
2-Fluorobiphenyl		mg/L	60	60.25	100	80 - 120	8/28/02
Terphenyl-d14		mg/L	60	58.45	97	80 - 120	8/28/02

Analytical and Quality Control Report

Jeff Kindley
Enercon Services Inc.
306 W. Wall Suite 1312
Midland, Tx. 79701

Report Date: September 6, 2002

Order ID Number: A02082311

Project Number: EQ-112
Project Name: Barber Ranch 3000109
Project Location: Barber Lea County, New Mexico

Enclosed are the Analytical Results and Quality Control Data Reports for the following samples submitted to Trace-Analysis, Inc.

Sample	Description	Matrix	Date Taken	Time Taken	Date Received
206043	MW-20	Water	8/21/02	:	8/23/02
206044	MW-21	Water	8/21/02	:	8/23/02
206045	MW-22	Water	8/21/02	:	8/23/02

These results represent only the samples received in the laboratory. The Quality Control Report is generated on a batch basis. All information contained in this report is for the analytical batch(es) in which your sample(s) were analyzed. Note: the RDL is equal to MQL for all organic analytes including TPH.
The test results contained within this report meet all requirements of LAC 33:I unless otherwise noted.

This report consists of a total of 9 pages and shall not be reproduced except in its entirety including the chain of custody (COC), without written approval of TraceAnalysis, Inc.

Note: Samples will be disposed of 30 days from the report date unless the lab is contacted before the 30 days has past.

for
Dr. Blair Leftwich, Director

Summary Report

Jeff Kindley
Enercon Services Inc.
306 W. Wall Suite 1312
Midland, Tx. 79701

Report Date: September 6, 2002

Order ID Number: A02082311

Project Number: EQ-112
Project Name: Barber Ranch 3000109
Project Location: Barber Lea County, New Mexico

Sample	Description	Matrix	Date Taken	Time Taken	Date Received
206043	MW-20	Water	8/21/02	:	8/23/02
206044	MW-21	Water	8/21/02	:	8/23/02
206045	MW-22	Water	8/21/02	:	8/23/02

0 This report consists of a total of 2 page(s) and is intended only as a summary of results for the sample(s) listed above.

	BTEX				
Sample - Field Code	Benzene (ppm)	Toluene (ppm)	Ethylbenzene (ppm)	M,P,O-Xylene (ppm)	Total BTEX (ppm)
206043 - MW-20	<0.005	<0.005	<0.005	0.0092	0.0092
206044 - MW-21	0.152	0.427	0.470	1.35	2.40
206045 - MW-22	0.0663	<0.020	<0.020	0.519	0.585

Sample: 206043 - MW-20

Param	Flag	Result	Units
Naphthalene		0.0011	mg/L
Acenaphthylene		<0.0002	mg/L
Acenaphthene		<0.0002	mg/L
Fluorene		<0.0002	mg/L
Phenanthrene		<0.0002	mg/L
Anthracene		<0.0002	mg/L
Fluoranthene		<0.0002	mg/L
Pyrene		<0.0002	mg/L
Benzo(a)anthracene		<0.0002	mg/L
Chrysene		<0.0002	mg/L
Benzo(b)fluoranthene		<0.0002	mg/L
Benzo(k)fluoranthene		<0.0002	mg/L
Benzo(a)pyrene		<0.0002	mg/L
Indeno(1,2,3-cd)pyrene		<0.0002	mg/L
Dibenzo(a,h)anthracene		<0.0002	mg/L
Benzo(g,h,i)perylene		<0.0002	mg/L

This is only a summary. Please, refer to the complete report package for quality control data.

Sample: 206044 - MW-21

Param	Flag	Result	Units
Naphthalene		0.0200	mg/L
Acenaphthylene		<0.0002	mg/L
Acenaphthene		<0.0002	mg/L
Fluorene		<0.0002	mg/L
Phenanthrene		<0.0002	mg/L
Anthracene		0.0003	mg/L
Fluoranthene		<0.0002	mg/L
Pyrene		<0.0002	mg/L
Benzo(a)anthracene		<0.0002	mg/L
Chrysene		<0.0002	mg/L
Benzo(b)fluoranthene		<0.0002	mg/L
Benzo(k)fluoranthene		<0.0002	mg/L
Benzo(a)pyrene		<0.0002	mg/L
Indeno(1,2,3-cd)pyrene		<0.0002	mg/L
Dibenzo(a,h)anthracene		<0.0002	mg/L
Benzo(g,h,i)perylene		<0.0002	mg/L

Sample: 206045 - MW-22

Param	Flag	Result	Units
Naphthalene		0.0097	mg/L
Acenaphthylene		<0.0002	mg/L
Acenaphthene		<0.0002	mg/L
Fluorene		<0.0002	mg/L
Phenanthrene		<0.0002	mg/L
Anthracene		<0.0002	mg/L
Fluoranthene		<0.0002	mg/L
Pyrene		<0.0002	mg/L
Benzo(a)anthracene		<0.0002	mg/L
Chrysene		<0.0002	mg/L
Benzo(b)fluoranthene		<0.0002	mg/L
Benzo(k)fluoranthene		<0.0002	mg/L
Benzo(a)pyrene		<0.0002	mg/L
Indeno(1,2,3-cd)pyrene		<0.0002	mg/L
Dibenzo(a,h)anthracene		<0.0002	mg/L
Benzo(g,h,i)perylene		<0.0002	mg/L

Analytical Report

Sample: 206043 - MW-20

Analysis:	BTEX	Analytical Method:	S 8021B	QC Batch:	QC23119	Date Analyzed:	8/26/02
Analyst:	CG	Preparation Method:	S 5030B	Prep Batch:	PB21714	Date Prepared:	8/26/02

Param	Flag	Result	Units	Dilution	RDL
Benzene		<0.005	mg/L	5	0.001
Toluene		<0.005	mg/L	5	0.001
Ethylbenzene		<0.005	mg/L	5	0.001
M,P,O-Xylene		0.0092	mg/L	5	0.001
Total BTEX		0.0092	mg/L	5	0.001

Surrogate	Flag	Result	Units	Dilution	Spike Amount	Percent Recovery	Recovery Limits
TFT		0.089	mg/L	5	0.10	89	70 - 130
4-BFB		0.0881	mg/L	5	0.10	88	70 - 130

Sample: 206043 - MW-20

Analysis:	PAH	Analytical Method:	S 8270C	QC Batch:	QC23256	Date Analyzed:	8/28/02
Analyst:	RC	Preparation Method:	E 3510C	Prep Batch:	PB21753	Date Prepared:	8/26/02

Param	Flag	Result	Units	Dilution	RDL
Naphthalene		0.0011	mg/L	1	0.0002
Acenaphthylene		<0.0002	mg/L	1	0.0002
Acenaphthene		<0.0002	mg/L	1	0.0002
Fluorene		<0.0002	mg/L	1	0.0002
Phenanthrene		<0.0002	mg/L	1	0.0002
Anthracene		<0.0002	mg/L	1	0.0002
Fluoranthene		<0.0002	mg/L	1	0.0002
Pyrene		<0.0002	mg/L	1	0.0002
Benzo(a)anthracene		<0.0002	mg/L	1	0.0002
Chrysene		<0.0002	mg/L	1	0.0002
Benzo(b)fluoranthene		<0.0002	mg/L	1	0.0002
Benzo(k)fluoranthene		<0.0002	mg/L	1	0.0002
Benzo(a)pyrene		<0.0002	mg/L	1	0.0002
Indeno(1,2,3-cd)pyrene		<0.0002	mg/L	1	0.0002
Dibenzo(a,h)anthracene		<0.0002	mg/L	1	0.0002
Benzo(g,h,i)perylene		<0.0002	mg/L	1	0.0002

Surrogate	Flag	Result	Units	Dilution	Spike Amount	Percent Recovery	Recovery Limits
Nitrobenzene-d5		58.5	mg/L	1	80	73	35 - 114
2-Fluorobiphenyl		58.5	mg/L	1	80	73	43 - 116
Terphenyl-d14		57.38	mg/L	1	80	71	33 - 141

Sample: 206044 - MW-21

Analysis:	BTEX	Analytical Method:	S 8021B	QC Batch:	QC23040	Date Analyzed:	8/23/02
Analyst:	CG	Preparation Method:	S 5030B	Prep Batch:	PB21650	Date Prepared:	8/23/02

Param	Flag	Result	Units	Dilution	RDL
Benzene		0.152	mg/L	50	0.001
Toluene		0.427	mg/L	50	0.001
Ethylbenzene		0.470	mg/L	50	0.001
M,P,O-Xylene		1.35	mg/L	50	0.001
Total BTEX		2.40	mg/L	50	0.001

Surrogate	Flag	Result	Units	Dilution	Spike Amount	Percent Recovery	Recovery Limits
TFT		0.101	mg/L	50	0.10	101	70 - 130
4-BFB		0.0845	mg/L	50	0.10	84	70 - 130

Sample: 206044 - MW-21

Analysis:	PAH	Analytical Method:	S 8270C	QC Batch:	QC23256	Date Analyzed:	8/28/02
Analyst:	RC	Preparation Method:	E 3510C	Prep Batch:	PB21753	Date Prepared:	8/26/02

Param	Flag	Result	Units	Dilution	RDL
Naphthalene		0.0200	mg/L	1	0.0002
Acenaphthylene		<0.0002	mg/L	1	0.0002
Acenaphthene		<0.0002	mg/L	1	0.0002
Fluorene		<0.0002	mg/L	1	0.0002
Phenanthrene		<0.0002	mg/L	1	0.0002
Anthracene		0.0003	mg/L	1	0.0002
Fluoranthene		<0.0002	mg/L	1	0.0002
Pyrene		<0.0002	mg/L	1	0.0002
Benzo(a)anthracene		<0.0002	mg/L	1	0.0002
Chrysene		<0.0002	mg/L	1	0.0002
Benzo(b)fluoranthene		<0.0002	mg/L	1	0.0002
Benzo(k)fluoranthene		<0.0002	mg/L	1	0.0002
Benzo(a)pyrene		<0.0002	mg/L	1	0.0002
Indeno(1,2,3-cd)pyrene		<0.0002	mg/L	1	0.0002
Dibenzo(a,h)anthracene		<0.0002	mg/L	1	0.0002
Benzo(g,h,i)perylene		<0.0002	mg/L	1	0.0002

Surrogate	Flag	Result	Units	Dilution	Spike Amount	Percent Recovery	Recovery Limits
Nitrobenzene-d5		71.38	mg/L	1	80	89	35 - 114
2-Fluorobiphenyl		74.07	mg/L	1	80	92	43 - 116
Terphenyl-d14		45.59	mg/L	1	80	56	33 - 141

Sample: 206045 - MW-22

Analysis:	BTEX	Analytical Method:	S 8021B	QC Batch:	QC23040	Date Analyzed:	8/23/02
Analyst:	CG	Preparation Method:	S 5030B	Prep Batch:	PB21650	Date Prepared:	8/23/02

Param	Flag	Result	Units	Dilution	RDL
Benzene		0.0663	mg/L	20	0.001
Toluene		<0.020	mg/L	20	0.001
Ethylbenzene		<0.020	mg/L	20	0.001
M,P,O-Xylene		0.519	mg/L	20	0.001
Total BTEX		0.585	mg/L	20	0.001

Surrogate	Flag	Result	Units	Dilution	Spike Amount	Percent Recovery	Recovery Limits
TFT		0.1	mg/L	20	0.10	100	70 - 130
4-BFB		0.0809	mg/L	20	0.10	80	70 - 130

Sample: 206045 - MW-22

Analysis:	PAH	Analytical Method:	S 8270C	QC Batch:	QC23256	Date Analyzed:	8/28/02
Analyst:	RC	Preparation Method:	E 3510C	Prep Batch:	PB21753	Date Prepared:	8/26/02

Param	Flag	Result	Units	Dilution	RDL
Naphthalene		0.0097	mg/L	1	0.0002
Acenaphthylene		<0.0002	mg/L	1	0.0002
Acenaphthene		<0.0002	mg/L	1	0.0002
Fluorene		<0.0002	mg/L	1	0.0002
Phenanthrene		<0.0002	mg/L	1	0.0002
Anthracene		<0.0002	mg/L	1	0.0002
Fluoranthene		<0.0002	mg/L	1	0.0002
Pyrene		<0.0002	mg/L	1	0.0002
Benzo(a)anthracene		<0.0002	mg/L	1	0.0002
Chrysene		<0.0002	mg/L	1	0.0002
Benzo(b)fluoranthene		<0.0002	mg/L	1	0.0002
Benzo(k)fluoranthene		<0.0002	mg/L	1	0.0002
Benzo(a)pyrene		<0.0002	mg/L	1	0.0002
Indeno(1,2,3-cd)pyrene		<0.0002	mg/L	1	0.0002
Dibenzo(a,h)anthracene		<0.0002	mg/L	1	0.0002
Benzo(g,h,i)perylene		<0.0002	mg/L	1	0.0002

Surrogate	Flag	Result	Units	Dilution	Spike Amount	Percent Recovery	Recovery Limits
Nitrobenzene-d5		55.99	mg/L	1	80	69	35 - 114
2-Fluorobiphenyl		54.6	mg/L	1	80	68	43 - 116
Terphenyl-d14		41.21	mg/L	1	80	51	33 - 141

Quality Control Report
Method Blank

Method Blank

QCBatch: QC23040

Param	Flag	Results	Units	Reporting Limit
Benzene		<0.001	mg/L	0.001
Toluene		<0.001	mg/L	0.001
Ethylbenzene		<0.001	mg/L	0.001
M,P,O-Xylene		<0.001	mg/L	0.001
Total BTEX		<0.001	mg/L	0.001

Surrogate	Flag	Result	Units	Dilution	Spike Amount	Percent Recovery	Recovery Limits
TFT		0.109	mg/L	1	0.10	109	70 - 130
4-BFB		0.0869	mg/L	1	0.10	87	70 - 130

Method Blank

QCBatch: QC23119

Param	Flag	Results	Units	Reporting Limit
Benzene		<0.001	mg/L	0.001
Toluene		<0.001	mg/L	0.001
Ethylbenzene		<0.001	mg/L	0.001
M,P,O-Xylene		<0.001	mg/L	0.001
Total BTEX		<0.001	mg/L	0.001

Surrogate	Flag	Result	Units	Dilution	Spike Amount	Percent Recovery	Recovery Limits
TFT		0.0937	mg/L	1	0.10	94	70 - 130
4-BFB		0.0909	mg/L	1	0.10	91	70 - 130

Method Blank

QCBatch: QC23256

Param	Flag	Results	Units	Reporting Limit
Naphthalene		<0.0002	mg/L	0.0002
Acenaphthylene		<0.0002	mg/L	0.0002
Acenaphthene		<0.0002	mg/L	0.0002
Fluorene		<0.0002	mg/L	0.0002
Phenanthrene		<0.0002	mg/L	0.0002
Anthracene		<0.0002	mg/L	0.0002
Fluoranthene		<0.0002	mg/L	0.0002
Pyrene		<0.0002	mg/L	0.0002
Benzo(a)anthracene		<0.0002	mg/L	0.0002
Chrysene		<0.0002	mg/L	0.0002

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Param	Flag	Results	Units	Reporting Limit
Benzo(b)fluoranthene		<0.0002	mg/L	0.0002
Benzo(k)fluoranthene		<0.0002	mg/L	0.0002
Benzo(a)pyrene		<0.0002	mg/L	0.0002
Indeno(1,2,3-cd)pyrene		<0.0002	mg/L	0.0002
Dibenzo(a,h)anthracene		<0.0002	mg/L	0.0002
Benzo(g,h,i)perylene		<0.0002	mg/L	0.0002

Surrogate	Flag	Result	Units	Dilution	Spike Amount	Percent Recovery	Recovery Limits
Nitrobenzene-d5		66.23	mg/L	1	80	82	35 - 114
2-Fluorobiphenyl		61.27	mg/L	1	80	76	43 - 116
Terphenyl-d14		66.16	mg/L	1	80	82	33 - 141

Quality Control Report
Lab Control Spikes and Duplicate Spikes

Laboratory Control Spikes

QCBatch: QC23040

Param	LCS Result	LCSD Result	Units	Dil.	Spike Amount Added	Matrix Result	% Rec	RPD	% Rec Limit	RPD Limit
MTBE	0.108	0.109	mg/L	1	0.10	<0.001	108	1	70 - 130	20
Benzene	0.108	0.111	mg/L	1	0.10	<0.001	108	3	70 - 130	20
Toluene	0.101	0.106	mg/L	1	0.10	<0.001	101	5	70 - 130	20
Ethylbenzene	0.0994	0.106	mg/L	1	0.10	<0.001	99	6	70 - 130	20
M,P,O-Xylene	0.304	0.319	mg/L	1	0.30	<0.001	101	5	70 - 130	20

Percent recovery is based on the spike result. RPD is based on the spike and spike duplicate result.

Surrogate	LCS Result	LCSD Result	Units	Dilution	Spike Amount	LCS % Rec	LCSD % Rec	Recovery Limits
TFT	0.104	0.110	mg/L	1	0.10	104	110	70 - 130
4-BFB	0.101	0.107	mg/L	1	0.10	101	107	70 - 130

Laboratory Control Spikes

QCBatch: QC23119

Param	LCS Result	LCSD Result	Units	Dil.	Spike Amount Added	Matrix Result	% Rec	RPD	% Rec Limit	RPD Limit
MTBE	0.0961	0.0987	mg/L	1	0.10	<0.001	96	3	70 - 130	20
Benzene	0.0935	0.093	mg/L	1	0.10	<0.001	94	0	70 - 130	20
Toluene	0.0918	0.0933	mg/L	1	0.10	<0.001	92	2	70 - 130	20
Ethylbenzene	0.0955	0.095	mg/L	1	0.10	<0.001	96	0	70 - 130	20
M,P,O-Xylene	0.291	0.291	mg/L	1	0.30	<0.001	97	0	70 - 130	20

Percent recovery is based on the spike result. RPD is based on the spike and spike duplicate result.

Surrogate	LCS Result	LCSD Result	Units	Dilution	Spike Amount	LCS % Rec	LCSD % Rec	Recovery Limits
TFT	0.0883	0.0891	mg/L	1	0.10	88	89	70 - 130
4-BFB	0.0929	0.0926	mg/L	1	0.10	93	93	70 - 130

Laboratory Control Spikes

QCBatch: QC23256

Param	LCS Result	LCSD Result	Units	Dil.	Spike Amount Added	Matrix Result	% Rec	RPD	% Rec Limit	RPD Limit
Naphthalene	67.76	65.43	mg/L	1	80	<0.0002	84	3	16 - 96	20
Acenaphthylene	74.19	71.3	mg/L	1	80	<0.0002	92	3	20 - 110	20
Acenaphthene	71.59	68.32	mg/L	1	80	<0.0002	89	4	18 - 108	20
Fluorene	72.21	69.4	mg/L	1	80	<0.0002	90	3	22 - 102	20
Phenanthrene	73.37	70.47	mg/L	1	80	<0.0002	91	4	25 - 103	20
Anthracene	76.66	72.95	mg/L	1	80	<0.0002	95	4	22 - 110	20
Fluoranthene	80.57	74.97	mg/L	1	80	<0.0002	100	7	21 - 110	20
Pyrene	70.94	73.5	mg/L	1	80	<0.0002	88	3	22 - 100	20
Benzo(a)anthracene	76.64	75.41	mg/L	1	80	<0.0002	95	1	30 - 99	20
Chrysene	62.83	62.45	mg/L	1	80	<0.0002	78	0	27 - 108	20
Benzo(b)fluoranthene	73.85	71.89	mg/L	1	80	<0.0002	92	2	19 - 102	20
Benzo(k)fluoranthene	69.31	66.52	mg/L	1	80	<0.0002	86	4	35 - 103	20
Benzo(a)pyrene	73.35	72.01	mg/L	1	80	<0.0002	91	1	24 - 105	20
Indeno(1,2,3-cd)pyrene	69.05	67.95	mg/L	1	80	<0.0002	86	1	22 - 108	20
Dibenzo(a,h)anthracene	50.99	53.72	mg/L	1	80	<0.0002	63	5	23 - 77	20
Benzo(g,h,i)perylene	81.59	82.53	mg/L	1	80	<0.0002	101	1	19 - 119	20

Percent recovery is based on the spike result. RPD is based on the spike and spike duplicate result.

Surrogate	LCS Result	LCSD Result	Units	Dilution	Spike Amount	LCS % Rec	LCSD % Rec	Recovery Limits
Nitrobenzene-d5	80.94	78.45	mg/L	1	80	101	98	35 - 114
2-Fluorobiphenyl	79.77	76.72	mg/L	1	80	99	95	43 - 116
Terphenyl-d14	82.38	84.2	mg/L	1	80	102	105	33 - 141

Quality Control Report
Continuing Calibration Verification Standards

CCV (1)

QCBatch: QC23040

Param	Flag	Units	CCVs True Conc.	CCVs Found Conc.	CCVs Percent Recovery	Percent Recovery Limits	Date Analyzed
MTBE		mg/L	0.10	0.110	110	85 - 115	8/23/02
Benzene		mg/L	0.10	0.106	106	85 - 115	8/23/02
Toluene		mg/L	0.10	0.104	104	85 - 115	8/23/02
Ethylbenzene		mg/L	0.10	0.104	104	85 - 115	8/23/02
M,P,O-Xylene		mg/L	0.30	0.309	103	85 - 115	8/23/02

CCV (2)

QCBatch: QC23040

Param	Flag	Units	CCVs True Conc.	CCVs Found Conc.	CCVs Percent Recovery	Percent Recovery Limits	Date Analyzed
MTBE		mg/L	0.10	0.108	108	85 - 115	8/23/02
Benzene		mg/L	0.10	0.102	102	85 - 115	8/23/02
Toluene		mg/L	0.10	0.105	105	85 - 115	8/23/02
Ethylbenzene		mg/L	0.10	0.110	110	85 - 115	8/23/02
M,P,O-Xylene		mg/L	0.30	0.322	107	85 - 115	8/23/02

ICV (1) QCBatch: QC23040

Param	Flag	Units	CCVs True Conc.	CCVs Found Conc.	CCVs Percent Recovery	Percent Recovery Limits	Date Analyzed
MTBE		mg/L	0.10	0.105	105	85 - 115	8/23/02
Benzene		mg/L	0.10	0.110	110	85 - 115	8/23/02
Toluene		mg/L	0.10	0.105	105	85 - 115	8/23/02
Ethylbenzene		mg/L	0.10	0.102	102	85 - 115	8/23/02
M,P,O-Xylene		mg/L	0.30	0.314	105	85 - 115	8/23/02

CCV (1) QCBatch: QC23119

Param	Flag	Units	CCVs True Conc.	CCVs Found Conc.	CCVs Percent Recovery	Percent Recovery Limits	Date Analyzed
MTBE		mg/L	0.10	0.0919	92	85 - 115	8/26/02
Benzene		mg/L	0.10	0.092	92	85 - 115	8/26/02
Toluene		mg/L	0.10	0.0921	92	85 - 115	8/26/02
Ethylbenzene		mg/L	0.10	0.0915	92	85 - 115	8/26/02
M,P,O-Xylene		mg/L	0.30	0.279	93	85 - 115	8/26/02

CCV (2) QCBatch: QC23119

Param	Flag	Units	CCVs True Conc.	CCVs Found Conc.	CCVs Percent Recovery	Percent Recovery Limits	Date Analyzed
MTBE		mg/L	0.10	0.0883	88	85 - 115	8/26/02
Benzene		mg/L	0.10	0.0886	88	85 - 115	8/26/02
Toluene		mg/L	0.10	0.0876	87	85 - 115	8/26/02
Ethylbenzene		mg/L	0.10	0.0889	88	85 - 115	8/26/02
M,P,O-Xylene		mg/L	0.30	0.272	90	85 - 115	8/26/02

ICV (1) QCBatch: QC23119

Param	Flag	Units	CCVs True Conc.	CCVs Found Conc.	CCVs Percent Recovery	Percent Recovery Limits	Date Analyzed
MTBE		mg/L	0.10	0.0971	97	85 - 115	8/26/02
Benzene		mg/L	0.10	0.0967	97	85 - 115	8/26/02
Toluene		mg/L	0.10	0.0977	98	85 - 115	8/26/02
Ethylbenzene		mg/L	0.10	0.0987	99	85 - 115	8/26/02
M,P,O-Xylene		mg/L	0.30	0.300	100	85 - 115	8/26/02

CCV (1)

QCBatch: QC23256

Param	Flag	Units	CCVs True Conc.	CCVs Found Conc.	CCVs Percent Recovery	Percent Recovery Limits	Date Analyzed
Naphthalene		mg/L	60	57.79	96	80 - 120	8/28/02
Acenaphthylene		mg/L	60	57.22	95	80 - 120	8/28/02
Acenaphthene		mg/L	60	57.28	95	80 - 120	8/28/02
Fluorene		mg/L	60	56.8	94	80 - 120	8/28/02
Phenanthrene		mg/L	60	58.36	97	80 - 120	8/28/02
Anthracene		mg/L	60	58.59	97	80 - 120	8/28/02
Fluoranthene		mg/L	60	56.89	94	80 - 120	8/28/02
Pyrene		mg/L	60	55.86	93	80 - 120	8/28/02
Benzo(a)anthracene		mg/L	60	62.58	104	80 - 120	8/28/02
Chrysene		mg/L	60	57.69	96	80 - 120	8/28/02
Benzo(b)fluoranthene		mg/L	60	71.02	118	80 - 120	8/28/02
Benzo(k)fluoranthene		mg/L	60	50.82	84	80 - 120	8/28/02
Benzo(a)pyrene		mg/L	60	59.55	99	80 - 120	8/28/02
Indeno(1,2,3-cd)pyrene		mg/L	60	61.39	102	80 - 120	8/28/02
Dibenzo(a,h)anthracene		mg/L	60	60.71	101	80 - 120	8/28/02
Benzo(g,h,i)perylene		mg/L	60	65.21	108	80 - 120	8/28/02
Nitrobenzene-d5		mg/L	60	63.21	105	80 - 120	8/28/02
2-Fluorobiphenyl		mg/L	60	60.25	100	80 - 120	8/28/02
Terphenyl-d14		mg/L	60	58.45	97	80 - 120	8/28/02

Summary Report

Kyle Landreneau
Equiva Kyle Landreneau
PMB 284 40 FM 1960 West
Houston, TX 77090

Report Date: September 9, 2002

Order ID Number: A02082615

Project: EQ-112
TA Job Code: Barber Ranch 3000109
Casualty Code: EQ-112
Project Location: Barber Lea County, New Mexico
Project Address:
Enercon Services Inc. / Midland / Jeff Kindley

Sample	Description	Matrix	Date Taken	Time Taken	Date Received
206233	MW-23	Water	8/23/02	9:00	8/24/02

0 This report consists of a total of 1 page(s) and is intended only as a summary of results for the sample(s) listed above.

	BTEX				
Sample - Field Code	Benzene (ppm)	Toluene (ppm)	Ethylbenzene (ppm)	M,P,O-Xylene (ppm)	Total BTEX (ppm)
206233 - MW-23	0.0577	<0.005	<0.005	<0.005	0.0577

Sample: 206233 - MW-23

Param	Flag	Result	Units
Naphthalene		<0.0002	mg/L
Acenaphthylene		<0.0002	mg/L
Acenaphthene		<0.0002	mg/L
Fluorene		<0.0002	mg/L
Phenanthrene		<0.0002	mg/L
Anthracene		<0.0002	mg/L
Fluoranthene		<0.0002	mg/L
Pyrene		<0.0002	mg/L
Benzo(a)anthracene		<0.0002	mg/L
Chrysene		<0.0002	mg/L
Benzo(b)fluoranthene		<0.0002	mg/L
Benzo(k)fluoranthene		<0.0002	mg/L
Benzo(a)pyrene		<0.0002	mg/L
Indeno(1,2,3-cd)pyrene		<0.0002	mg/L
Dibenzo(a,h)anthracene		<0.0002	mg/L
Benzo(g,h,i)perylene		<0.0002	mg/L

This is only a summary. Please, refer to the complete report package for quality control data.

TRACEANALYSIS, INC.

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Analytical and Quality Control Report

Kyle Landreneau
Equiva Kyle Landreneau
PMB 284 40 FM 1960 West
Houston, TX 77090

Report Date: September 9, 2002

Order ID Number: A02082615

Project: EQ-112
TA Job Code: Barber Ranch 3000109
Casualty Code: EQ-112
Project Location: Barber Lea County, New Mexico
Enercon Services Inc. / Midland / Jeff Kindley

Enclosed are the Analytical Results and Quality Control Data Reports for the following samples submitted to Trace-Analysis, Inc.

Sample	Description	Matrix	Date Taken	Time Taken	Date Received
206233	MW-23	Water	8/23/02	9:00	8/24/02

These results represent only the samples received in the laboratory. The Quality Control Report is generated on a batch basis. All information contained in this report is for the analytical batch(es) in which your sample(s) were analyzed. Note: the RDL is equal to MQL for all organic analytes including TPH.
The test results contained within this report meet all requirements of LAC 33:I unless otherwise noted.

This report consists of a total of 6 pages and shall not be reproduced except in its entirety including the chain of custody (COC), without written approval of TraceAnalysis, Inc.

Note: Samples will be disposed of 30 days from the report date unless the lab is contacted before the 30 days has past.

Dr. Blair Leftwich, Director

Analytical Report

Sample: 206233 - MW-23

Analysis:	BTEX	Analytical Method:	S 8021B	QC Batch:	QC23160	Date Analyzed:	8/27/02
Analyst:	CG	Preparation Method:	S 5030B	Prep Batch:	PB21737	Date Prepared:	8/27/02

Param	Flag	Result	Units	Dilution	RDL
Benzene		0.0577	mg/L	5	0.001
Toluene		<0.005	mg/L	5	0.001
Ethylbenzene		<0.005	mg/L	5	0.001
M,P,O-Xylene		<0.005	mg/L	5	0.001
Total BTEX		0.0577	mg/L	5	0.001

Surrogate	Flag	Result	Units	Dilution	Spike Amount	Percent Recovery	Recovery Limits
TFT		0.11	mg/L	5	0.10	110	70 - 130
4-BFB		0.0943	mg/L	5	0.10	94	70 - 130

Sample: 206233 - MW-23

Analysis:	PAH	Analytical Method:	S 8270C	QC Batch:	QC23256	Date Analyzed:	8/28/02
Analyst:	RC	Preparation Method:	E 3510C	Prep Batch:	PB21753	Date Prepared:	8/26/02

Param	Flag	Result	Units	Dilution	RDL
Naphthalene		<0.0002	mg/L	1	0.0002
Acenaphthylene		<0.0002	mg/L	1	0.0002
Acenaphthene		<0.0002	mg/L	1	0.0002
Fluorene		<0.0002	mg/L	1	0.0002
Phenanthrene		<0.0002	mg/L	1	0.0002
Anthracene		<0.0002	mg/L	1	0.0002
Fluoranthene		<0.0002	mg/L	1	0.0002
Pyrene		<0.0002	mg/L	1	0.0002
Benzo(a)anthracene		<0.0002	mg/L	1	0.0002
Chrysene		<0.0002	mg/L	1	0.0002
Benzo(b)fluoranthene		<0.0002	mg/L	1	0.0002
Benzo(k)fluoranthene		<0.0002	mg/L	1	0.0002
Benzo(a)pyrene		<0.0002	mg/L	1	0.0002
Indeno(1,2,3-cd)pyrene		<0.0002	mg/L	1	0.0002
Dibenzo(a,h)anthracene		<0.0002	mg/L	1	0.0002
Benzo(g,h,i)perylene		<0.0002	mg/L	1	0.0002

Surrogate	Flag	Result	Units	Dilution	Spike Amount	Percent Recovery	Recovery Limits
Nitrobenzene-d5		65.32	mg/L	1	80	81	35 - 114
2-Fluorobiphenyl		68.4	mg/L	1	80	85	43 - 116
Terphenyl-d14		68.93	mg/L	1	80	86	33 - 141

Quality Control Report
Method Blank

Method Blank

QCBatch: QC23160

Param	Flag	Results	Units	Reporting Limit
Benzene		<0.001	mg/L	0.001
Toluene		<0.001	mg/L	0.001
Ethylbenzene		<0.001	mg/L	0.001
M,P,O-Xylene		<0.001	mg/L	0.001
Total BTEX		<0.001	mg/L	0.001

Surrogate	Flag	Result	Units	Dilution	Spike Amount	Percent Recovery	Recovery Limits
TFT		0.0966	mg/L	1	0.10	97	70 - 130
4-BFB		0.0796	mg/L	1	0.10	80	70 - 130

Method Blank

QCBatch: QC23256

Param	Flag	Results	Units	Reporting Limit
Naphthalene		<0.0002	mg/L	0.0002
Acenaphthylene		<0.0002	mg/L	0.0002
Acenaphthene		<0.0002	mg/L	0.0002
Fluorene		<0.0002	mg/L	0.0002
Phenanthrene		<0.0002	mg/L	0.0002
Anthracene		<0.0002	mg/L	0.0002
Fluoranthene		<0.0002	mg/L	0.0002
Pyrene		<0.0002	mg/L	0.0002
Benzo(a)anthracene		<0.0002	mg/L	0.0002
Chrysene		<0.0002	mg/L	0.0002
Benzo(b)fluoranthene		<0.0002	mg/L	0.0002
Benzo(k)fluoranthene		<0.0002	mg/L	0.0002
Benzo(a)pyrene		<0.0002	mg/L	0.0002
Indeno(1,2,3-cd)pyrene		<0.0002	mg/L	0.0002
Dibenzo(a,h)anthracene		<0.0002	mg/L	0.0002
Benzo(g,h,i)perylene		<0.0002	mg/L	0.0002

Surrogate	Flag	Result	Units	Dilution	Spike Amount	Percent Recovery	Recovery Limits
Nitrobenzene-d5		66.23	mg/L	1	80	82	35 - 114
2-Fluorobiphenyl		61.27	mg/L	1	80	76	43 - 116
Terphenyl-d14		66.16	mg/L	1	80	82	33 - 141

Quality Control Report
Lab Control Spikes and Duplicate Spikes

Laboratory Control Spikes

QCBatch: QC23160

Param	LCS Result	LCSD Result	Units	Dil.	Spike Amount Added	Matrix Result	% Rec	RPD	% Rec Limit	RPD Limit
MTBE	0.0925	0.0884	mg/L	1	0.10	<0.001	92	4	70 - 130	20
Benzene	0.0968	0.0985	mg/L	1	0.10	<0.001	97	2	70 - 130	20
Toluene	0.095	0.0977	mg/L	1	0.10	<0.001	95	3	70 - 130	20
Ethylbenzene	0.0978	0.101	mg/L	1	0.10	<0.001	98	3	70 - 130	20
M,P,O-Xylene	0.286	0.293	mg/L	1	0.30	<0.001	95	2	70 - 130	20

Percent recovery is based on the spike result. RPD is based on the spike and spike duplicate result.

Surrogate	LCS Result	LCSD Result	Units	Dilution	Spike Amount	LCS % Rec	LCSD % Rec	Recovery Limits
TFT	0.0958	0.095	mg/L	1	0.10	96	95	70 - 130
4-BFB	0.0934	0.0943	mg/L	1	0.10	93	94	70 - 130

Laboratory Control Spikes

QCBatch: QC23256

Param	LCS Result	LCSD Result	Units	Dil.	Spike Amount Added	Matrix Result	% Rec	RPD	% Rec Limit	RPD Limit
Naphthalene	67.76	65.43	mg/L	1	80	<0.0002	84	3	16 - 96	20
Acenaphthylene	74.19	71.3	mg/L	1	80	<0.0002	92	3	20 - 110	20
Acenaphthene	71.59	68.32	mg/L	1	80	<0.0002	89	4	18 - 108	20
Fluorene	72.21	69.4	mg/L	1	80	<0.0002	90	3	22 - 102	20
Phenanthrene	73.37	70.47	mg/L	1	80	<0.0002	91	4	25 - 103	20
Anthracene	76.66	72.95	mg/L	1	80	<0.0002	95	4	22 - 110	20
Fluoranthene	80.57	74.97	mg/L	1	80	<0.0002	100	7	21 - 110	20
Pyrene	70.94	73.5	mg/L	1	80	<0.0002	88	3	22 - 100	20
Benzo(a)anthracene	76.64	75.41	mg/L	1	80	<0.0002	95	1	30 - 99	20
Chrysene	62.83	62.45	mg/L	1	80	<0.0002	78	0	27 - 108	20
Benzo(b)fluoranthene	73.85	71.89	mg/L	1	80	<0.0002	92	2	19 - 102	20
Benzo(k)fluoranthene	69.31	66.52	mg/L	1	80	<0.0002	86	4	35 - 103	20
Benzo(a)pyrene	73.35	72.01	mg/L	1	80	<0.0002	91	1	24 - 105	20
Indeno(1,2,3-cd)pyrene	69.05	67.95	mg/L	1	80	<0.0002	86	1	22 - 108	20
Dibenzo(a,h)anthracene	50.99	53.72	mg/L	1	80	<0.0002	63	5	23 - 77	20
Benzo(g,h,i)perylene	81.59	82.53	mg/L	1	80	<0.0002	101	1	19 - 119	20

Percent recovery is based on the spike result. RPD is based on the spike and spike duplicate result.

Surrogate	LCS Result	LCSD Result	Units	Dilution	Spike Amount	LCS % Rec	LCSD % Rec	Recovery Limits
Nitrobenzene-d5	80.94	78.45	mg/L	1	80	101	98	35 - 114
2-Fluorobiphenyl	79.77	76.72	mg/L	1	80	99	95	43 - 116
Terphenyl-d14	82.38	84.2	mg/L	1	80	102	105	33 - 141

Quality Control Report
Continuing Calibration Verification Standards

CCV (1)

QCBatch: QC23160

Param	Flag	Units	CCVs True Conc.	CCVs Found Conc.	CCVs Percent Recovery	Percent Recovery Limits	Date Analyzed
MTBE		mg/L	0.10	0.0958	96	85 - 115	8/27/02
Benzene		mg/L	0.10	0.0998	100	85 - 115	8/27/02
Toluene		mg/L	0.10	0.098	98	85 - 115	8/27/02
Ethylbenzene		mg/L	0.10	0.0982	98	85 - 115	8/27/02
M,P,O-Xylene		mg/L	0.30	0.291	97	85 - 115	8/27/02

CCV (2)

QCBatch: QC23160

Param	Flag	Units	CCVs True Conc.	CCVs Found Conc.	CCVs Percent Recovery	Percent Recovery Limits	Date Analyzed
MTBE		mg/L	0.10	0.088	88	85 - 115	8/27/02
Benzene		mg/L	0.10	0.0893	89	85 - 115	8/27/02
Toluene		mg/L	0.10	0.0865	86	85 - 115	8/27/02
Ethylbenzene		mg/L	0.10	0.0884	88	85 - 115	8/27/02
M,P,O-Xylene		mg/L	0.30	0.26	86	85 - 115	8/27/02

ICV (1)

QCBatch: QC23160

Param	Flag	Units	CCVs True Conc.	CCVs Found Conc.	CCVs Percent Recovery	Percent Recovery Limits	Date Analyzed
MTBE		mg/L	0.10	0.089	89	85 - 115	8/27/02
Benzene		mg/L	0.10	0.0966	97	85 - 115	8/27/02
Toluene		mg/L	0.10	0.0947	95	85 - 115	8/27/02
Ethylbenzene		mg/L	0.10	0.0978	98	85 - 115	8/27/02
M,P,O-Xylene		mg/L	0.30	0.284	95	85 - 115	8/27/02

CCV (1)

QCBatch: QC23256

Param	Flag	Units	CCVs True Conc.	CCVs Found Conc.	CCVs Percent Recovery	Percent Recovery Limits	Date Analyzed
Naphthalene		mg/L	60	57.79	96	80 - 120	8/28/02
Acenaphthylene		mg/L	60	57.22	95	80 - 120	8/28/02
Acenaphthene		mg/L	60	57.28	95	80 - 120	8/28/02
Fluorene		mg/L	60	56.8	94	80 - 120	8/28/02
Phenanthrene		mg/L	60	58.36	97	80 - 120	8/28/02
Anthracene		mg/L	60	58.59	97	80 - 120	8/28/02
Fluoranthene		mg/L	60	56.89	94	80 - 120	8/28/02
Pyrene		mg/L	60	55.86	93	80 - 120	8/28/02
Benzo(a)anthracene		mg/L	60	62.58	104	80 - 120	8/28/02
Chrysene		mg/L	60	57.69	96	80 - 120	8/28/02
Benzo(b)fluoranthene		mg/L	60	71.02	118	80 - 120	8/28/02
Benzo(k)fluoranthene		mg/L	60	50.82	84	80 - 120	8/28/02

Continued ...

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Param	Flag	Units	CCVs True Conc.	CCVs Found Conc.	CCVs Percent Recovery	Percent Recovery Limits	Date Analyzed
Benzo(a)pyrene		mg/L	60	59.55	99	80 - 120	8/28/02
Indeno(1,2,3-cd)pyrene		mg/L	60	61.39	102	80 - 120	8/28/02
Dibenzo(a,h)anthracene		mg/L	60	60.71	101	80 - 120	8/28/02
Benzo(g,h,i)perylene		mg/L	60	65.21	108	80 - 120	8/28/02
Nitrobenzene-d5		mg/L	60	63.21	105	80 - 120	8/28/02
2-Fluorobiphenyl		mg/L	60	60.25	100	80 - 120	8/28/02
Terphenyl-d14		mg/L	60	58.45	97	80 - 120	8/28/02

206233

TraceAnalysis, Inc.

6701 Aberdeen Avenue, Ste. 9 Lubbock, Texas 79424
Tel (806) 794 1296 Fax (806) 794 1298
1 (800) 378 1296

CHAIN-OF-CUSTODY RECORD AND ANALYSIS REQUEST

LAB Order ID # A02082615

Company Name: Enercon Services Inc.
Phone #: 915-570-8726
Address: 306 West Wall, Suite 1312, Midland, Tx 79701
Fax #: 915-684-7587
Contact Person: Jeffrey Kindley
Invoice to: (If different from above) Equiva Service Attn: Kyle Landreneau Incident # 300109
Project #: EQ-112
Project Name: Barber Ranch
Project Location: Monument, Lea County, New Mexico
Sampler Signature: Jeffrey Kindley

ANALYSIS REQUEST (Circle or Specify Method No.)

LAB # (LAB USE ONLY)	FIELD CODE	# CONTAINERS	Volume/Amount	MATRIX: WATER	SOIL	AIR	SLUDGE		PRESERVATIVE METHOD: HCL	HNO3	ICE	NONE		SAMPLING: DATE	TIME	MTBE 8020/602	BTEX 8020/602	TPH	PAH 8270	Total Metals Ag As Ba Cd Cr Pb Hg Se	TCLP Metals Ag As Ba Cd Cr Pb Hg Se	TCLP Volatiles	TCLP Semi Volatiles	RCI	GC.MS Vol. 8240/8260/624	GC/MS Semi. Vol. 8270/625	PCB's 8080/608	Pest. 8080/608	BOD, TSS, PH					Turn Around Time if different from standard	Hold
206233	MW-23	2	40ml	✓					✓					8/23/02	900		✓																		
	MW-23	1	1Liter	✓								✓		8/23/02	900				✓																

Relinquished by:	Date:	Time:	Received by:	Date:	Time:
Jeffrey Kindley	August 23 2002	1700	Helen Shelton	8/23/02	1700
Helen Shelton	8/23/02	1830			
			Received at Laboratory by: Patel T H	8-24-02	11:00 Am

LAB USE ONLY
Intact (Y) / N
Headspace Y / N
Temp 4 °C
Log-in Review MS

REMARKS: P&F 9/9/02

S[redacted]al of [redacted]es co[redacted]es ag[redacted]nt to [redacted] and [redacted]tions [redacted]on re[redacted]side [redacted].C. [redacted] 3 samples [redacted]

Ca[redacted]

ORIGINAL COPY

Summary Report

Kyle Landreneau
Equiva Kyle Landreneau
PMB 284 40 FM 1960 West
Houston, TX 77090

Report Date: November 5, 2002

Order ID Number: A02101402

Project: EQ-112 Monument
TA Job Code: Barber Ranch 300109
Casualty Code: EQ-112
Project Location: Monument, Lea County,New Mexico
Project Address:
Enercon Services Inc. / Midland / Jeff Kindley

Sample	Description	Matrix	Date Taken	Time Taken	Date Received
210373	MW-3	Water	10/10/02	:	10/12/02
210374	MW-4	Water	10/10/02	:	10/12/02
210375	MW-5	Water	10/10/02	:	10/12/02
210376	MW-6	Water	10/10/02	:	10/12/02
210377	MW-1	Water	10/10/02	:	10/12/02
210378	MW-11	Water	10/10/02	:	10/12/02
210379	MW-12	Water	10/10/02	:	10/12/02
210380	MW-22	Water	10/10/02	:	10/12/02
210381	MW-20	Water	10/10/02	:	10/12/02
210382	MW-21	Water	10/10/02	:	10/12/02
210383	MW-23	Water	10/10/02	:	10/12/02
210384	MW-14	Water	10/10/02	:	10/12/02
210385	MW-15	Water	10/10/02	:	10/12/02
210386	MW-8	Water	10/10/02	:	10/12/02
210387	MW-9	Water	10/10/02	:	10/12/02
210388	MW-16	Water	10/10/02	:	10/12/02
210389	MW-17	Water	10/10/02	:	10/12/02
210390	MW-18	Water	10/10/02	:	10/12/02

0 This report consists of a total of 9 page(s) and is intended only as a summary of results for the sample(s) listed above.

	BTEX				
Sample - Field Code	Benzene (ppm)	Toluene (ppm)	Ethylbenzene (ppm)	M,P,O-Xylene (ppm)	Total BTEX (ppm)
210373 - MW-3	<0.001	<0.001	<0.001	<0.001	<0.001
210374 - MW-4	<0.001	<0.001	<0.001	<0.001	<0.001
210375 - MW-5	0.0203	<0.005	0.0077	0.0204	0.0484
210376 - MW-6	0.0501	<0.005	<0.005	<0.005	0.0501
210377 - MW-1	0.0054	<0.001	<0.001	<0.001	0.0054
210378 - MW-11	<0.001	<0.001	<0.001	<0.001	<0.001
210379 - MW-12	<0.001	<0.001	<0.001	<0.001	<0.001
210380 - MW-22	0.0362	<0.005	<0.005	<0.005	0.0362
210381 - MW-20	<0.001	<0.001	<0.001	<0.001	<0.001

Continued ...

This is only a summary. Please, refer to the complete report package for quality control data.

Continued ...

Sample - Field Code	BTEX Benzene (ppm)	Toluene (ppm)	Ethylbenzene (ppm)	M,P,O-Xylene (ppm)	Total BTEX (ppm)
210382 - MW-21	<0.005	<0.005	<0.005	0.0086	0.0086
210383 - MW-23	0.0029	<0.001	<0.001	<0.001	0.0029
210384 - MW-14	<0.005	<0.005	<0.005	<0.005	<0.005
210385 - MW-15	0.0231	<0.001	<0.001	<0.001	0.0231
210386 - MW-8	<0.001	<0.001	<0.001	<0.001	<0.001
210387 - MW-9	<0.005	<0.005	<0.005	<0.005	<0.005
210388 - MW-16	<0.001	<0.001	<0.001	<0.001	<0.001
210389 - MW-17	<0.005	<0.005	<0.005	<0.005	<0.005
210390 - MW-18	<0.005	<0.005	<0.005	<0.005	<0.005

Sample: 210373 - MW-3

Param	Flag	Result	Units
Naphthalene		<0.0002	mg/L
Acenaphthylene		<0.0002	mg/L
Acenaphthene		<0.0002	mg/L
Fluorene		<0.0002	mg/L
Phenanthrene		<0.0002	mg/L
Anthracene		<0.0002	mg/L
Fluoranthene		<0.0002	mg/L
Pyrene		<0.0002	mg/L
Benzo(a)anthracene		<0.0002	mg/L
Chrysene		<0.0002	mg/L
Benzo(b)fluoranthene		<0.0002	mg/L
Benzo(k)fluoranthene		<0.0002	mg/L
Benzo(a)pyrene		<0.0002	mg/L
Indeno(1,2,3-cd)pyrene		<0.0002	mg/L
Dibenzo(a,h)anthracene		<0.0002	mg/L
Benzo(g,h,i)perylene		<0.0002	mg/L

Sample: 210374 - MW-4

Param	Flag	Result	Units
Naphthalene		<0.0002	mg/L
Acenaphthylene		<0.0002	mg/L
Acenaphthene		<0.0002	mg/L
Fluorene		<0.0002	mg/L
Phenanthrene		<0.0002	mg/L
Anthracene		<0.0002	mg/L
Fluoranthene		<0.0002	mg/L
Pyrene		<0.0002	mg/L
Benzo(a)anthracene		<0.0002	mg/L
Chrysene		<0.0002	mg/L
Benzo(b)fluoranthene		<0.0002	mg/L
Benzo(k)fluoranthene		<0.0002	mg/L
Benzo(a)pyrene		<0.0002	mg/L
Indeno(1,2,3-cd)pyrene		<0.0002	mg/L

Continued on next page ...

Sample 210374 continued ...

Param	Flag	Result	Units
Dibenzo(a,h)anthracene		<0.0002	mg/L
Benzo(g,h,i)perylene		<0.0002	mg/L

Sample: 210375 - MW-5

Param	Flag	Result	Units
Naphthalene		0.01384	mg/L
Acenaphthylene		<0.0002	mg/L
Acenaphthene		<0.0002	mg/L
Fluorene		<0.0002	mg/L
Phenanthrene		0.0006	mg/L
Anthracene		<0.0002	mg/L
Fluoranthene		<0.0002	mg/L
Pyrene		<0.0002	mg/L
Benzo(a)anthracene		<0.0002	mg/L
Chrysene		<0.0002	mg/L
Benzo(b)fluoranthene		<0.0002	mg/L
Benzo(k)fluoranthene		<0.0002	mg/L
Benzo(a)pyrene		<0.0002	mg/L
Indeno(1,2,3-cd)pyrene		<0.0002	mg/L
Dibenzo(a,h)anthracene		<0.0002	mg/L
Benzo(g,h,i)perylene		<0.0002	mg/L

Sample: 210376 - MW-6

Param	Flag	Result	Units
Naphthalene		<0.0002	mg/L
Acenaphthylene		<0.0002	mg/L
Acenaphthene		<0.0002	mg/L
Fluorene		<0.0002	mg/L
Phenanthrene		<0.0002	mg/L
Anthracene		<0.0002	mg/L
Fluoranthene		<0.0002	mg/L
Pyrene		<0.0002	mg/L
Benzo(a)anthracene		<0.0002	mg/L
Chrysene		<0.0002	mg/L
Benzo(b)fluoranthene		<0.0002	mg/L
Benzo(k)fluoranthene		<0.0002	mg/L
Benzo(a)pyrene		<0.0002	mg/L
Indeno(1,2,3-cd)pyrene		<0.0002	mg/L
Dibenzo(a,h)anthracene		<0.0002	mg/L
Benzo(g,h,i)perylene		<0.0002	mg/L

Sample: 210377 - MW-1

Param	Flag	Result	Units
Naphthalene		<0.0002	mg/L
Acenaphthylene		<0.0002	mg/L
Acenaphthene		<0.0002	mg/L
Fluorene		<0.0002	mg/L
Phenanthrene		<0.0002	mg/L
Anthracene		<0.0002	mg/L
Fluoranthene		<0.0002	mg/L
Pyrene		<0.0002	mg/L
Benzo(a)anthracene		<0.0002	mg/L
Chrysene		<0.0002	mg/L
Benzo(b)fluoranthene		<0.0002	mg/L
Benzo(k)fluoranthene		<0.0002	mg/L
Benzo(a)pyrene		<0.0002	mg/L
Indeno(1,2,3-cd)pyrene		<0.0002	mg/L
Dibenzo(a,h)anthracene		<0.0002	mg/L
Benzo(g,h,i)perylene		<0.0002	mg/L

Sample: 210378 - MW-11

Param	Flag	Result	Units
Naphthalene		<0.0002	mg/L
Acenaphthylene		<0.0002	mg/L
Acenaphthene		<0.0002	mg/L
Fluorene		<0.0002	mg/L
Phenanthrene		<0.0002	mg/L
Anthracene		<0.0002	mg/L
Fluoranthene		<0.0002	mg/L
Pyrene		<0.0002	mg/L
Benzo(a)anthracene		<0.0002	mg/L
Chrysene		<0.0002	mg/L
Benzo(b)fluoranthene		<0.0002	mg/L
Benzo(k)fluoranthene		<0.0002	mg/L
Benzo(a)pyrene		<0.0002	mg/L
Indeno(1,2,3-cd)pyrene		<0.0002	mg/L
Dibenzo(a,h)anthracene		<0.0002	mg/L
Benzo(g,h,i)perylene		<0.0002	mg/L

Sample: 210379 - MW-12

Param	Flag	Result	Units
Naphthalene		<0.0002	mg/L
Acenaphthylene		<0.0002	mg/L
Acenaphthene		<0.0002	mg/L
Fluorene		<0.0002	mg/L
Phenanthrene		<0.0002	mg/L
Anthracene		<0.0002	mg/L
Fluoranthene		<0.0002	mg/L
Pyrene		<0.0002	mg/L

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Sample 210379 continued ...

Param	Flag	Result	Units
Benzo(a)anthracene		<0.0002	mg/L
Chrysene		<0.0002	mg/L
Benzo(b)fluoranthene		<0.0002	mg/L
Benzo(k)fluoranthene		<0.0002	mg/L
Benzo(a)pyrene		<0.0002	mg/L
Indeno(1,2,3-cd)pyrene		<0.0002	mg/L
Dibenzo(a,h)anthracene		<0.0002	mg/L
Benzo(g,h,i)perylene		<0.0002	mg/L

Sample: 210380 - MW-22

Param	Flag	Result	Units
Naphthalene		0.0034	mg/L
Acenaphthylene		<0.0002	mg/L
Acenaphthene		<0.0002	mg/L
Fluorene		<0.0002	mg/L
Phenanthrene		<0.0002	mg/L
Anthracene		<0.0002	mg/L
Fluoranthene		<0.0002	mg/L
Pyrene		<0.0002	mg/L
Benzo(a)anthracene		<0.0002	mg/L
Chrysene		<0.0002	mg/L
Benzo(b)fluoranthene		<0.0002	mg/L
Benzo(k)fluoranthene		<0.0002	mg/L
Benzo(a)pyrene		<0.0002	mg/L
Indeno(1,2,3-cd)pyrene		<0.0002	mg/L
Dibenzo(a,h)anthracene		<0.0002	mg/L
Benzo(g,h,i)perylene		<0.0002	mg/L

Sample: 210381 - MW-20

Param	Flag	Result	Units
Naphthalene		<0.0002	mg/L
Acenaphthylene		<0.0002	mg/L
Acenaphthene		<0.0002	mg/L
Fluorene		<0.0002	mg/L
Phenanthrene		<0.0002	mg/L
Anthracene		<0.0002	mg/L
Fluoranthene		<0.0002	mg/L
Pyrene		<0.0002	mg/L
Benzo(a)anthracene		<0.0002	mg/L
Chrysene		<0.0002	mg/L
Benzo(b)fluoranthene		<0.0002	mg/L
Benzo(k)fluoranthene		<0.0002	mg/L
Benzo(a)pyrene		<0.0002	mg/L
Indeno(1,2,3-cd)pyrene		<0.0002	mg/L
Dibenzo(a,h)anthracene		<0.0002	mg/L

Continued on next page ...

Sample 210381 continued ...

Param	Flag	Result	Units
Benzo(g,h,i)perylene		<0.0002	mg/L

Sample: 210382 - MW-21

Param	Flag	Result	Units
Naphthalene		0.0084	mg/L
Acenaphthylene		<0.0002	mg/L
Acenaphthene		<0.0002	mg/L
Fluorene		<0.0002	mg/L
Phenanthrene		<0.0002	mg/L
Anthracene		<0.0002	mg/L
Fluoranthene		<0.0002	mg/L
Pyrene		<0.0002	mg/L
Benzo(a)anthracene		<0.0002	mg/L
Chrysene		<0.0002	mg/L
Benzo(b)fluoranthene		<0.0002	mg/L
Benzo(k)fluoranthene		<0.0002	mg/L
Benzo(a)pyrene		<0.0002	mg/L
Indeno(1,2,3-cd)pyrene		<0.0002	mg/L
Dibenzo(a,h)anthracene		<0.0002	mg/L
Benzo(g,h,i)perylene		<0.0002	mg/L

Sample: 210383 - MW-23

Param	Flag	Result	Units
Naphthalene		<0.0002	mg/L
Acenaphthylene		<0.0002	mg/L
Acenaphthene		<0.0002	mg/L
Fluorene		<0.0002	mg/L
Phenanthrene		<0.0002	mg/L
Anthracene		<0.0002	mg/L
Fluoranthene		<0.0002	mg/L
Pyrene		<0.0002	mg/L
Benzo(a)anthracene		<0.0002	mg/L
Chrysene		<0.0002	mg/L
Benzo(b)fluoranthene		<0.0002	mg/L
Benzo(k)fluoranthene		<0.0002	mg/L
Benzo(a)pyrene		<0.0002	mg/L
Indeno(1,2,3-cd)pyrene		<0.0002	mg/L
Dibenzo(a,h)anthracene		<0.0002	mg/L
Benzo(g,h,i)perylene		<0.0002	mg/L

Sample: 210384 - MW-14

Param	Flag	Result	Units
Naphthalene		<0.0002	mg/L
Acenaphthylene		<0.0002	mg/L
Acenaphthene		<0.0002	mg/L
Fluorene		<0.0002	mg/L
Phenanthrene		<0.0002	mg/L
Anthracene		<0.0002	mg/L
Fluoranthene		<0.0002	mg/L
Pyrene		<0.0002	mg/L
Benzo(a)anthracene		<0.0002	mg/L
Chrysene		<0.0002	mg/L
Benzo(b)fluoranthene		<0.0002	mg/L
Benzo(k)fluoranthene		<0.0002	mg/L
Benzo(a)pyrene		<0.0002	mg/L
Indeno(1,2,3-cd)pyrene		<0.0002	mg/L
Dibenzo(a,h)anthracene		<0.0002	mg/L
Benzo(g,h,i)perylene		<0.0002	mg/L

Sample: 210385 - MW-15

Param	Flag	Result	Units
Naphthalene		<0.0002	mg/L
Acenaphthylene		<0.0002	mg/L
Acenaphthene		<0.0002	mg/L
Fluorene		<0.0002	mg/L
Phenanthrene		<0.0002	mg/L
Anthracene		<0.0002	mg/L
Fluoranthene		<0.0002	mg/L
Pyrene		<0.0002	mg/L
Benzo(a)anthracene		<0.0002	mg/L
Chrysene		<0.0002	mg/L
Benzo(b)fluoranthene		<0.0002	mg/L
Benzo(k)fluoranthene		<0.0002	mg/L
Benzo(a)pyrene		<0.0002	mg/L
Indeno(1,2,3-cd)pyrene		<0.0002	mg/L
Dibenzo(a,h)anthracene		<0.0002	mg/L
Benzo(g,h,i)perylene		<0.0002	mg/L

Sample: 210386 - MW-8

Param	Flag	Result	Units
Naphthalene		<0.0002	mg/L
Acenaphthylene		<0.0002	mg/L
Acenaphthene		<0.0002	mg/L
Fluorene		<0.0002	mg/L
Phenanthrene		<0.0002	mg/L
Anthracene		<0.0002	mg/L
Fluoranthene		<0.0002	mg/L
Pyrene		<0.0002	mg/L

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Sample 210386 continued ...

Param	Flag	Result	Units
Benzo(a)anthracene		<0.0002	mg/L
Chrysene		<0.0002	mg/L
Benzo(b)fluoranthene		<0.0002	mg/L
Benzo(k)fluoranthene		<0.0002	mg/L
Benzo(a)pyrene		<0.0002	mg/L
Indeno(1,2,3-cd)pyrene		<0.0002	mg/L
Dibenzo(a,h)anthracene		<0.0002	mg/L
Benzo(g,h,i)perylene		<0.0002	mg/L

Sample: 210387 - MW-9

Param	Flag	Result	Units
Naphthalene		<0.0002	mg/L
Acenaphthylene		<0.0002	mg/L
Acenaphthene		<0.0002	mg/L
Fluorene		<0.0002	mg/L
Phenanthrene		<0.0002	mg/L
Anthracene		<0.0002	mg/L
Fluoranthene		<0.0002	mg/L
Pyrene		<0.0002	mg/L
Benzo(a)anthracene		<0.0002	mg/L
Chrysene		<0.0002	mg/L
Benzo(b)fluoranthene		<0.0002	mg/L
Benzo(k)fluoranthene		<0.0002	mg/L
Benzo(a)pyrene		<0.0002	mg/L
Indeno(1,2,3-cd)pyrene		<0.0002	mg/L
Dibenzo(a,h)anthracene		<0.0002	mg/L
Benzo(g,h,i)perylene		<0.0002	mg/L

Sample: 210388 - MW-16

Param	Flag	Result	Units
Naphthalene		<0.0002	mg/L
Acenaphthylene		<0.0002	mg/L
Acenaphthene		<0.0002	mg/L
Fluorene		<0.0002	mg/L
Phenanthrene		<0.0002	mg/L
Anthracene		<0.0002	mg/L
Fluoranthene		<0.0002	mg/L
Pyrene		<0.0002	mg/L
Benzo(a)anthracene		<0.0002	mg/L
Chrysene		<0.0002	mg/L
Benzo(b)fluoranthene		<0.0002	mg/L
Benzo(k)fluoranthene		<0.0002	mg/L
Benzo(a)pyrene		<0.0002	mg/L
Indeno(1,2,3-cd)pyrene		<0.0002	mg/L
Dibenzo(a,h)anthracene		<0.0002	mg/L

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Sample 210388 continued ...

Param	Flag	Result	Units
Benzo(g,h,i)perylene		<0.0002	mg/L

Sample: 210389 - MW-17

Param	Flag	Result	Units
Naphthalene		<0.0002	mg/L
Acenaphthylene		<0.0002	mg/L
Acenaphthene		<0.0002	mg/L
Fluorene		<0.0002	mg/L
Phenanthrene		<0.0002	mg/L
Anthracene		<0.0002	mg/L
Fluoranthene		<0.0002	mg/L
Pyrene		<0.0002	mg/L
Benzo(a)anthracene		<0.0002	mg/L
Chrysene		<0.0002	mg/L
Benzo(b)fluoranthene		<0.0002	mg/L
Benzo(k)fluoranthene		<0.0002	mg/L
Benzo(a)pyrene		<0.0002	mg/L
Indeno(1,2,3-cd)pyrene		<0.0002	mg/L
Dibenzo(a,h)anthracene		<0.0002	mg/L
Benzo(g,h,i)perylene		<0.0002	mg/L

Sample: 210390 - MW-18

Param	Flag	Result	Units
Naphthalene		<0.0002	mg/L
Acenaphthylene		<0.0002	mg/L
Acenaphthene		<0.0002	mg/L
Fluorene		<0.0002	mg/L
Phenanthrene		<0.0002	mg/L
Anthracene		<0.0002	mg/L
Fluoranthene		<0.0002	mg/L
Pyrene		<0.0002	mg/L
Benzo(a)anthracene		<0.0002	mg/L
Chrysene		<0.0002	mg/L
Benzo(b)fluoranthene		<0.0002	mg/L
Benzo(k)fluoranthene		<0.0002	mg/L
Benzo(a)pyrene		<0.0002	mg/L
Indeno(1,2,3-cd)pyrene		<0.0002	mg/L
Dibenzo(a,h)anthracene		<0.0002	mg/L
Benzo(g,h,i)perylene		<0.0002	mg/L

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Analytical and Quality Control Report

Kyle Landreneau
Equiva Kyle Landreneau
PMB 284 40 FM 1960 West
Houston, TX 77090

Report Date: November 5, 2002

Order ID Number: A02101402

Project: EQ-112 Monument
TA Job Code: Barber Ranch 300109
Casualty Code: EQ-112
Project Location: Monument, Lea County,New Mexico
Enercon Services Inc. / Midland / Jeff Kindley

Enclosed are the Analytical Results and Quality Control Data Reports for the following samples submitted to Trace-Analysis, Inc.

Sample	Description	Matrix	Date Taken	Time Taken	Date Received
210373	MW-3	Water	10/10/02	:	10/12/02
210374	MW-4	Water	10/10/02	:	10/12/02
210375	MW-5	Water	10/10/02	:	10/12/02
210376	MW-6	Water	10/10/02	:	10/12/02
210377	MW-1	Water	10/10/02	:	10/12/02
210378	MW-11	Water	10/10/02	:	10/12/02
210379	MW-12	Water	10/10/02	:	10/12/02
210380	MW-22	Water	10/10/02	:	10/12/02
210381	MW-20	Water	10/10/02	:	10/12/02
210382	MW-21	Water	10/10/02	:	10/12/02
210383	MW-23	Water	10/10/02	:	10/12/02
210384	MW-14	Water	10/10/02	:	10/12/02
210385	MW-15	Water	10/10/02	:	10/12/02
210386	MW-8	Water	10/10/02	:	10/12/02
210387	MW-9	Water	10/10/02	:	10/12/02
210388	MW-16	Water	10/10/02	:	10/12/02
210389	MW-17	Water	10/10/02	:	10/12/02
210390	MW-18	Water	10/10/02	:	10/12/02

These results represent only the samples received in the laboratory. The Quality Control Report is generated on a batch basis. All information contained in this report is for the analytical batch(es) in which your sample(s) were analyzed. Note: the RDL is equal to MQL for all organic analytes including TPH.
The test results contained within this report meet all requirements of LAC 33:I unless otherwise noted.

This report consists of a total of 27 pages and shall not be reproduced except in its entirety including the chain of custody (COC), without written approval of TraceAnalysis, Inc.

Note: Samples will be disposed of 30 days from the report date unless the lab is contacted before the 30 days has past.

Dr. Blair Leftwich, Director

Analytical Report

Sample: 210373 - MW-3

Analysis:	BTEX	Analytical Method:	S 8021B	QC Batch:	QC24160	Date Analyzed:	10/14/02
Analyst:	CG	Preparation Method:	S 5030B	Prep Batch:	PB22547	Date Prepared:	10/14/02

Param	Flag	Result	Units	Dilution	RDL
Benzene		<0.001	mg/L	1	0.001
Toluene		<0.001	mg/L	1	0.001
Ethylbenzene		<0.001	mg/L	1	0.001
M,P,O-Xylene		<0.001	mg/L	1	0.001
Total BTEX		<0.001	mg/L	1	0.001

Surrogate	Flag	Result	Units	Dilution	Spike Amount	Percent Recovery	Recovery Limits
TFT		0.0835	mg/L	1	0.10	84	70 - 130
4-BFB		0.079	mg/L	1	0.10	79	70 - 130

Sample: 210373 - MW-3

Analysis:	PAH	Analytical Method:	S 8270C	QC Batch:	QC24612	Date Analyzed:	10/29/02
Analyst:	RC	Preparation Method:	E 3510C	Prep Batch:	PB22936	Date Prepared:	10/17/02

Param	Flag	Result	Units	Dilution	RDL
Naphthalene		<0.0002	mg/L	1	0.0002
Acenaphthylene		<0.0002	mg/L	1	0.0002
Acenaphthene		<0.0002	mg/L	1	0.0002
Fluorene		<0.0002	mg/L	1	0.0002
Phenanthrene		<0.0002	mg/L	1	0.0002
Anthracene		<0.0002	mg/L	1	0.0002
Fluoranthene		<0.0002	mg/L	1	0.0002
Pyrene		<0.0002	mg/L	1	0.0002
Benzo(a)anthracene		<0.0002	mg/L	1	0.0002
Chrysene		<0.0002	mg/L	1	0.0002
Benzo(b)fluoranthene		<0.0002	mg/L	1	0.0002
Benzo(k)fluoranthene		<0.0002	mg/L	1	0.0002
Benzo(a)pyrene		<0.0002	mg/L	1	0.0002
Indeno(1,2,3-cd)pyrene		<0.0002	mg/L	1	0.0002
Dibenzo(a,h)anthracene		<0.0002	mg/L	1	0.0002
Benzo(g,h,i)perylene		<0.0002	mg/L	1	0.0002

Surrogate	Flag	Result	Units	Dilution	Spike Amount	Percent Recovery	Recovery Limits
Nitrobenzene-d5		64.11	mg/L	1	80	80	35 - 114
2-Fluorobiphenyl		50.74	mg/L	1	80	63	43 - 116
Terphenyl-d14		52.59	mg/L	1	80	65	33 - 141

Sample: 210374 - MW-4

Analysis:	BTEX	Analytical Method:	S 8021B	QC Batch:	QC24160	Date Analyzed:	10/14/02
Analyst:	CG	Preparation Method:	S 5030B	Prep Batch:	PB22547	Date Prepared:	10/14/02

Param	Flag	Result	Units	Dilution	RDL
Benzene		<0.001	mg/L	1	0.001
Toluene		<0.001	mg/L	1	0.001
Ethylbenzene		<0.001	mg/L	1	0.001
M,P,O-Xylene		<0.001	mg/L	1	0.001
Total BTEX		<0.001	mg/L	1	0.001

Surrogate	Flag	Result	Units	Dilution	Spike Amount	Percent Recovery	Recovery Limits
TFT		0.0813	mg/L	1	0.10	81	70 - 130
4-BFB		0.0776	mg/L	1	0.10	78	70 - 130

Sample: 210374 - MW-4

Analysis:	PAH	Analytical Method:	S 8270C	QC Batch:	QC24497	Date Analyzed:	10/23/02
Analyst:	RC	Preparation Method:	E 3510C	Prep Batch:	PB22839	Date Prepared:	10/17/02

Param	Flag	Result	Units	Dilution	RDL
Naphthalene		<0.0002	mg/L	1	0.0002
Acenaphthylene		<0.0002	mg/L	1	0.0002
Acenaphthene		<0.0002	mg/L	1	0.0002
Fluorene		<0.0002	mg/L	1	0.0002
Phenanthrene		<0.0002	mg/L	1	0.0002
Anthracene		<0.0002	mg/L	1	0.0002
Fluoranthene		<0.0002	mg/L	1	0.0002
Pyrene		<0.0002	mg/L	1	0.0002
Benzo(a)anthracene		<0.0002	mg/L	1	0.0002
Chrysene		<0.0002	mg/L	1	0.0002
Benzo(b)fluoranthene		<0.0002	mg/L	1	0.0002
Benzo(k)fluoranthene		<0.0002	mg/L	1	0.0002
Benzo(a)pyrene		<0.0002	mg/L	1	0.0002
Indeno(1,2,3-cd)pyrene		<0.0002	mg/L	1	0.0002
Dibenzo(a,h)anthracene		<0.0002	mg/L	1	0.0002
Benzo(g,h,i)perylene		<0.0002	mg/L	1	0.0002

Surrogate	Flag	Result	Units	Dilution	Spike Amount	Percent Recovery	Recovery Limits
Nitrobenzene-d5		48.07	mg/L	1	80	60	35 - 114
2-Fluorobiphenyl		50.66	mg/L	1	80	63	43 - 116
Terphenyl-d14		43.32	mg/L	1	80	54	33 - 141

Sample: 210375 - MW-5

Analysis:	BTEX	Analytical Method:	S 8021B	QC Batch:	QC24219	Date Analyzed:	10/16/02
Analyst:	CG	Preparation Method:	S 5030B	Prep Batch:	PB22589	Date Prepared:	10/16/02

Param	Flag	Result	Units	Dilution	RDL
Benzene		0.0203	mg/L	5	0.001
Toluene		<0.005	mg/L	5	0.001
Ethylbenzene		0.0077	mg/L	5	0.001
M,P,O-Xylene		0.0204	mg/L	5	0.001
Total BTEX		0.0484	mg/L	5	0.001

Surrogate	Flag	Result	Units	Dilution	Spike Amount	Percent Recovery	Recovery Limits
TFT		0.0886	mg/L	5	0.10	88	70 - 130
4-BFB		0.0795	mg/L	5	0.10	79	70 - 130

Sample: 210375 - MW-5

Analysis:	PAH	Analytical Method:	S 8270C	QC Batch:	QC24497	Date Analyzed:	10/23/02
Analyst:	RC	Preparation Method:	E 3510C	Prep Batch:	PB22839	Date Prepared:	10/17/02

Param	Flag	Result	Units	Dilution	RDL
Naphthalene		0.01384	mg/L	1	0.0002
Acenaphthylene		<0.0002	mg/L	1	0.0002
Acenaphthene		<0.0002	mg/L	1	0.0002
Fluorene		<0.0002	mg/L	1	0.0002
Phenanthrene		0.0006	mg/L	1	0.0002
Anthracene		<0.0002	mg/L	1	0.0002
Fluoranthene		<0.0002	mg/L	1	0.0002
Pyrene		<0.0002	mg/L	1	0.0002
Benzo(a)anthracene		<0.0002	mg/L	1	0.0002
Chrysene		<0.0002	mg/L	1	0.0002
Benzo(b)fluoranthene		<0.0002	mg/L	1	0.0002
Benzo(k)fluoranthene		<0.0002	mg/L	1	0.0002
Benzo(a)pyrene		<0.0002	mg/L	1	0.0002
Indeno(1,2,3-cd)pyrene		<0.0002	mg/L	1	0.0002
Dibenzo(a,h)anthracene		<0.0002	mg/L	1	0.0002
Benzo(g,h,i)perylene		<0.0002	mg/L	1	0.0002

Surrogate	Flag	Result	Units	Dilution	Spike Amount	Percent Recovery	Recovery Limits
Nitrobenzene-d5		49.71	mg/L	1	80	62	35 - 114
2-Fluorobiphenyl		45.87	mg/L	1	80	57	43 - 116
Terphenyl-d14		53.74	mg/L	1	80	67	33 - 141

Sample: 210376 - MW-6

Analysis:	BTEX	Analytical Method:	S 8021B	QC Batch:	QC24219	Date Analyzed:	10/16/02
Analyst:	CG	Preparation Method:	S 5030B	Prep Batch:	PB22589	Date Prepared:	10/16/02

Param	Flag	Result	Units	Dilution	RDL
Benzene		0.0501	mg/L	5	0.001
Toluene		<0.005	mg/L	5	0.001
Ethylbenzene		<0.005	mg/L	5	0.001
M,P,O-Xylene		<0.005	mg/L	5	0.001

Continued ...

... *Continued* Sample: 210376 Analysis: BTEX

Param	Flag	Result	Units	Dilution	RDL
Total BTEX		0.0501	mg/L	5	0.001

Surrogate	Flag	Result	Units	Dilution	Spike Amount	Percent Recovery	Recovery Limits
TFT		0.0905	mg/L	5	0.10	90	70 - 130
4-BFB		0.078	mg/L	5	0.10	78	70 - 130

Sample: 210376 - MW-6

Analysis:	PAH	Analytical Method:	S 8270C	QC Batch:	QC24612	Date Analyzed:	10/29/02
Analyst:	RC	Preparation Method:	E 3510C	Prep Batch:	PB22936	Date Prepared:	10/17/02

Param	Flag	Result	Units	Dilution	RDL
Naphthalene		<0.0002	mg/L	1	0.0002
Acenaphthylene		<0.0002	mg/L	1	0.0002
Acenaphthene		<0.0002	mg/L	1	0.0002
Fluorene		<0.0002	mg/L	1	0.0002
Phenanthrene		<0.0002	mg/L	1	0.0002
Anthracene		<0.0002	mg/L	1	0.0002
Fluoranthene		<0.0002	mg/L	1	0.0002
Pyrene		<0.0002	mg/L	1	0.0002
Benzo(a)anthracene		<0.0002	mg/L	1	0.0002
Chrysene		<0.0002	mg/L	1	0.0002
Benzo(b)fluoranthene		<0.0002	mg/L	1	0.0002
Benzo(k)fluoranthene		<0.0002	mg/L	1	0.0002
Benzo(a)pyrene		<0.0002	mg/L	1	0.0002
Indeno(1,2,3-cd)pyrene		<0.0002	mg/L	1	0.0002
Dibenzo(a,h)anthracene		<0.0002	mg/L	1	0.0002
Benzo(g,h,i)perylene		<0.0002	mg/L	1	0.0002

Surrogate	Flag	Result	Units	Dilution	Spike Amount	Percent Recovery	Recovery Limits
Nitrobenzene-d5		74.17	mg/L	1	80	92	35 - 114
2-Fluorobiphenyl		63.06	mg/L	1	80	78	43 - 116
Terphenyl-d14		56.71	mg/L	1	80	70	33 - 141

Sample: 210377 - MW-1

Analysis:	BTEX	Analytical Method:	S 8021B	QC Batch:	QC24160	Date Analyzed:	10/14/02
Analyst:	CG	Preparation Method:	S 5030B	Prep Batch:	PB22547	Date Prepared:	10/14/02

Param	Flag	Result	Units	Dilution	RDL
Benzene		0.0054	mg/L	1	0.001
Toluene		<0.001	mg/L	1	0.001
Ethylbenzene		<0.001	mg/L	1	0.001
M,P,O-Xylene		<0.001	mg/L	1	0.001
Total BTEX		0.0054	mg/L	1	0.001

Surrogate	Flag	Result	Units	Dilution	Spike Amount	Percent Recovery	Recovery Limits
TFT		0.0895	mg/L	1	0.10	90	70 - 130
4-BFB		0.0735	mg/L	1	0.10	74	70 - 130

Sample: 210377 - MW-1

Analysis:	PAH	Analytical Method:	S 8270C	QC Batch:	QC24497	Date Analyzed:	10/23/02
Analyst:	RC	Preparation Method:	E 3510C	Prep Batch:	PB22839	Date Prepared:	10/17/02

Param	Flag	Result	Units	Dilution	RDL
Naphthalene		<0.0002	mg/L	1	0.0002
Acenaphthylene		<0.0002	mg/L	1	0.0002
Acenaphthene		<0.0002	mg/L	1	0.0002
Fluorene		<0.0002	mg/L	1	0.0002
Phenanthrene		<0.0002	mg/L	1	0.0002
Anthracene		<0.0002	mg/L	1	0.0002
Fluoranthene		<0.0002	mg/L	1	0.0002
Pyrene		<0.0002	mg/L	1	0.0002
Benzo(a)anthracene		<0.0002	mg/L	1	0.0002
Chrysene		<0.0002	mg/L	1	0.0002
Benzo(b)fluoranthene		<0.0002	mg/L	1	0.0002
Benzo(k)fluoranthene		<0.0002	mg/L	1	0.0002
Benzo(a)pyrene		<0.0002	mg/L	1	0.0002
Indeno(1,2,3-cd)pyrene		<0.0002	mg/L	1	0.0002
Dibenzo(a,h)anthracene		<0.0002	mg/L	1	0.0002
Benzo(g,h,i)perylene		<0.0002	mg/L	1	0.0002

Surrogate	Flag	Result	Units	Dilution	Spike Amount	Percent Recovery	Recovery Limits
Nitrobenzene-d5		54.56	mg/L	1	80	68	35 - 114
2-Fluorobiphenyl		50.33	mg/L	1	80	62	43 - 116
Terphenyl-d14		54.07	mg/L	1	80	67	33 - 141

Sample: 210378 - MW-11

Analysis:	BTEX	Analytical Method:	S 8021B	QC Batch:	QC24160	Date Analyzed:	10/14/02
Analyst:	CG	Preparation Method:	S 5030B	Prep Batch:	PB22547	Date Prepared:	10/14/02

Param	Flag	Result	Units	Dilution	RDL
Benzene		<0.001	mg/L	1	0.001
Toluene		<0.001	mg/L	1	0.001
Ethylbenzene		<0.001	mg/L	1	0.001
M,P,O-Xylene		<0.001	mg/L	1	0.001
Total BTEX		<0.001	mg/L	1	0.001

Surrogate	Flag	Result	Units	Dilution	Spike Amount	Percent Recovery	Recovery Limits
TFT		0.0769	mg/L	1	0.10	77	70 - 130
4-BFB		0.079	mg/L	1	0.10	79	70 - 130

Sample: 210378 - MW-11

Analysis:	PAH	Analytical Method:	S 8270C	QC Batch:	QC24497	Date Analyzed:	10/23/02
Analyst:	RC	Preparation Method:	E 3510C	Prep Batch:	PB22839	Date Prepared:	10/17/02

Param	Flag	Result	Units	Dilution	RDL
Naphthalene		<0.0002	mg/L	1	0.0002
Acenaphthylene		<0.0002	mg/L	1	0.0002
Acenaphthene		<0.0002	mg/L	1	0.0002
Fluorene		<0.0002	mg/L	1	0.0002
Phenanthrene		<0.0002	mg/L	1	0.0002
Anthracene		<0.0002	mg/L	1	0.0002
Fluoranthene		<0.0002	mg/L	1	0.0002
Pyrene		<0.0002	mg/L	1	0.0002
Benzo(a)anthracene		<0.0002	mg/L	1	0.0002
Chrysene		<0.0002	mg/L	1	0.0002
Benzo(b)fluoranthene		<0.0002	mg/L	1	0.0002
Benzo(k)fluoranthene		<0.0002	mg/L	1	0.0002
Benzo(a)pyrene		<0.0002	mg/L	1	0.0002
Indeno(1,2,3-cd)pyrene		<0.0002	mg/L	1	0.0002
Dibenzo(a,h)anthracene		<0.0002	mg/L	1	0.0002
Benzo(g,h,i)perylene		<0.0002	mg/L	1	0.0002

Surrogate	Flag	Result	Units	Dilution	Spike Amount	Percent Recovery	Recovery Limits
Nitrobenzene-d5		56.45	mg/L	1	80	70	35 - 114
2-Fluorobiphenyl		52.7	mg/L	1	80	65	43 - 116
Terphenyl-d14		54.47	mg/L	1	80	68	33 - 141

Sample: 210379 - MW-12

Analysis:	BTEX	Analytical Method:	S 8021B	QC Batch:	QC24160	Date Analyzed:	10/14/02
Analyst:	CG	Preparation Method:	S 5030B	Prep Batch:	PB22547	Date Prepared:	10/14/02

Param	Flag	Result	Units	Dilution	RDL
Benzene		<0.001	mg/L	1	0.001
Toluene		<0.001	mg/L	1	0.001
Ethylbenzene		<0.001	mg/L	1	0.001
M,P,O-Xylene		<0.001	mg/L	1	0.001
Total BTEX		<0.001	mg/L	1	0.001

Surrogate	Flag	Result	Units	Dilution	Spike Amount	Percent Recovery	Recovery Limits
TFT		0.0751	mg/L	1	0.10	75	70 - 130
4-BFB		0.0752	mg/L	1	0.10	75	70 - 130

Sample: 210379 - MW-12

Analysis:	PAH	Analytical Method:	S 8270C	QC Batch:	QC24497	Date Analyzed:	10/23/02
Analyst:	RC	Preparation Method:	E 3510C	Prep Batch:	PB22839	Date Prepared:	10/17/02

Param	Flag	Result	Units	Dilution	RDL
Naphthalene		<0.0002	mg/L	1	0.0002
Acenaphthylene		<0.0002	mg/L	1	0.0002
Acenaphthene		<0.0002	mg/L	1	0.0002
Fluorene		<0.0002	mg/L	1	0.0002
Phenanthrene		<0.0002	mg/L	1	0.0002
Anthracene		<0.0002	mg/L	1	0.0002
Fluoranthene		<0.0002	mg/L	1	0.0002
Pyrene		<0.0002	mg/L	1	0.0002
Benzo(a)anthracene		<0.0002	mg/L	1	0.0002
Chrysene		<0.0002	mg/L	1	0.0002
Benzo(b)fluoranthene		<0.0002	mg/L	1	0.0002
Benzo(k)fluoranthene		<0.0002	mg/L	1	0.0002
Benzo(a)pyrene		<0.0002	mg/L	1	0.0002
Indeno(1,2,3-cd)pyrene		<0.0002	mg/L	1	0.0002
Dibenzo(a,h)anthracene		<0.0002	mg/L	1	0.0002
Benzo(g,h,i)perylene		<0.0002	mg/L	1	0.0002

Surrogate	Flag	Result	Units	Dilution	Spike Amount	Percent Recovery	Recovery Limits
Nitrobenzene-d5		58.67	mg/L	1	80	73	35 - 114
2-Fluorobiphenyl		58.88	mg/L	1	80	73	43 - 116
Terphenyl-d14		58.57	mg/L	1	80	73	33 - 141

Sample: 210380 - MW-22

Analysis:	BTEX	Analytical Method:	S 8021B	QC Batch:	QC24219	Date Analyzed:	10/16/02
Analyst:	CG	Preparation Method:	S 5030B	Prep Batch:	PB22589	Date Prepared:	10/16/02

Param	Flag	Result	Units	Dilution	RDL
Benzene		0.0362	mg/L	5	0.001
Toluene		<0.005	mg/L	5	0.001
Ethylbenzene		<0.005	mg/L	5	0.001
M,P,O-Xylene		<0.005	mg/L	5	0.001
Total BTEX		0.0362	mg/L	5	0.001

Surrogate	Flag	Result	Units	Dilution	Spike Amount	Percent Recovery	Recovery Limits
TFT		0.0764	mg/L	5	0.10	76	70 - 130
4-BFB		0.0907	mg/L	5	0.10	90	70 - 130

Sample: 210380 - MW-22

Analysis:	PAH	Analytical Method:	S 8270C	QC Batch:	QC24497	Date Analyzed:	10/23/02
Analyst:	RC	Preparation Method:	E 3510C	Prep Batch:	PB22839	Date Prepared:	10/17/02

Param	Flag	Result	Units	Dilution	RDL
Naphthalene		0.0034	mg/L	1	0.0002
Acenaphthylene		<0.0002	mg/L	1	0.0002
Acenaphthene		<0.0002	mg/L	1	0.0002
Fluorene		<0.0002	mg/L	1	0.0002

Continued ...

... *Continued* Sample: 210380 Analysis: PAH

Param	Flag	Result	Units	Dilution	RDL
Phenanthrene		<0.0002	mg/L	1	0.0002
Anthracene		<0.0002	mg/L	1	0.0002
Fluoranthene		<0.0002	mg/L	1	0.0002
Pyrene		<0.0002	mg/L	1	0.0002
Benzo(a)anthracene		<0.0002	mg/L	1	0.0002
Chrysene		<0.0002	mg/L	1	0.0002
Benzo(b)fluoranthene		<0.0002	mg/L	1	0.0002
Benzo(k)fluoranthene		<0.0002	mg/L	1	0.0002
Benzo(a)pyrene		<0.0002	mg/L	1	0.0002
Indeno(1,2,3-cd)pyrene		<0.0002	mg/L	1	0.0002
Dibenzo(a,h)anthracene		<0.0002	mg/L	1	0.0002
Benzo(g,h,i)perylene		<0.0002	mg/L	1	0.0002

Surrogate	Flag	Result	Units	Dilution	Spike Amount	Percent Recovery	Recovery Limits
Nitrobenzene-d5		57.23	mg/L	1	80	71	35 - 114
2-Fluorobiphenyl		50.68	mg/L	1	80	63	43 - 116
Terphenyl-d14		45.74	mg/L	1	80	57	33 - 141

Sample: 210381 - MW-20

Analysis:	BTEX	Analytical Method:	S 8021B	QC Batch:	QC24160	Date Analyzed:	10/14/02
Analyst:	CG	Preparation Method:	S 5030B	Prep Batch:	PB22547	Date Prepared:	10/14/02

Param	Flag	Result	Units	Dilution	RDL
Benzene		<0.001	mg/L	1	0.001
Toluene		<0.001	mg/L	1	0.001
Ethylbenzene		<0.001	mg/L	1	0.001
M,P,O-Xylene		<0.001	mg/L	1	0.001
Total BTEX		<0.001	mg/L	1	0.001

Surrogate	Flag	Result	Units	Dilution	Spike Amount	Percent Recovery	Recovery Limits
TFT		0.0767	mg/L	1	0.10	77	70 - 130
4-BFB		0.0759	mg/L	1	0.10	76	70 - 130

Sample: 210381 - MW-20

Analysis:	PAH	Analytical Method:	S 8270C	QC Batch:	QC24612	Date Analyzed:	10/29/02
Analyst:	RC	Preparation Method:	E 3510C	Prep Batch:	PB22936	Date Prepared:	10/17/02

Param	Flag	Result	Units	Dilution	RDL
Naphthalene		<0.0002	mg/L	1	0.0002
Acenaphthylene		<0.0002	mg/L	1	0.0002
Acenaphthene		<0.0002	mg/L	1	0.0002
Fluorene		<0.0002	mg/L	1	0.0002
Phenanthrene		<0.0002	mg/L	1	0.0002
Anthracene		<0.0002	mg/L	1	0.0002
Fluoranthene		<0.0002	mg/L	1	0.0002

Continued ...

... *Continued* Sample: 210381 Analysis: PAH

Param	Flag	Result	Units	Dilution	RDL
Pyrene		<0.0002	mg/L	1	0.0002
Benzo(a)anthracene		<0.0002	mg/L	1	0.0002
Chrysene		<0.0002	mg/L	1	0.0002
Benzo(b)fluoranthene		<0.0002	mg/L	1	0.0002
Benzo(k)fluoranthene		<0.0002	mg/L	1	0.0002
Benzo(a)pyrene		<0.0002	mg/L	1	0.0002
Indeno(1,2,3-cd)pyrene		<0.0002	mg/L	1	0.0002
Dibenzo(a,h)anthracene		<0.0002	mg/L	1	0.0002
Benzo(g,h,i)perylene		<0.0002	mg/L	1	0.0002

Surrogate	Flag	Result	Units	Dilution	Spike Amount	Percent Recovery	Recovery Limits
Nitrobenzene-d5		38.1	mg/L	1	80	47	35 - 114
2-Fluorobiphenyl		35.51	mg/L	1	80	44	43 - 116
Terphenyl-d14		22.65	mg/L	1	80	28	33 - 141

Sample: 210382 - MW-21

Analysis:	BTEX	Analytical Method:	S 8021B	QC Batch:	QC24219	Date Analyzed:	10/16/02
Analyst:	CG	Preparation Method:	S 5030B	Prep Batch:	PB22589	Date Prepared:	10/16/02

Param	Flag	Result	Units	Dilution	RDL
Benzene		<0.005	mg/L	5	0.001
Toluene		<0.005	mg/L	5	0.001
Ethylbenzene		<0.005	mg/L	5	0.001
M,P,O-Xylene		0.0086	mg/L	5	0.001
Total BTEX		0.0086	mg/L	5	0.001

Surrogate	Flag	Result	Units	Dilution	Spike Amount	Percent Recovery	Recovery Limits
TFT		0.0764	mg/L	5	0.10	76	70 - 130
4-BFB		0.0923	mg/L	5	0.10	92	70 - 130

Sample: 210382 - MW-21

Analysis:	PAH	Analytical Method:	S 8270C	QC Batch:	QC24497	Date Analyzed:	10/23/02
Analyst:	RC	Preparation Method:	E 3510C	Prep Batch:	PB22839	Date Prepared:	10/17/02

Param	Flag	Result	Units	Dilution	RDL
Naphthalene		0.0084	mg/L	1	0.0002
Acenaphthylene		<0.0002	mg/L	1	0.0002
Acenaphthene		<0.0002	mg/L	1	0.0002
Fluorene		<0.0002	mg/L	1	0.0002
Phenanthrene		<0.0002	mg/L	1	0.0002
Anthracene		<0.0002	mg/L	1	0.0002
Fluoranthene		<0.0002	mg/L	1	0.0002
Pyrene		<0.0002	mg/L	1	0.0002
Benzo(a)anthracene		<0.0002	mg/L	1	0.0002
Chrysene		<0.0002	mg/L	1	0.0002

Continued ...

... *Continued* Sample: 210382 Analysis: PAH

Param	Flag	Result	Units	Dilution	RDL
Benzo(b)fluoranthene		<0.0002	mg/L	1	0.0002
Benzo(k)fluoranthene		<0.0002	mg/L	1	0.0002
Benzo(a)pyrene		<0.0002	mg/L	1	0.0002
Indeno(1,2,3-cd)pyrene		<0.0002	mg/L	1	0.0002
Dibenzo(a,h)anthracene		<0.0002	mg/L	1	0.0002
Benzo(g,h,i)perylene		<0.0002	mg/L	1	0.0002

Surrogate	Flag	Result	Units	Dilution	Spike Amount	Percent Recovery	Recovery Limits
Nitrobenzene-d5		48.05	mg/L	1	80	60	35 - 114
2-Fluorobiphenyl		46.18	mg/L	1	80	57	43 - 116
Terphenyl-d14		36.18	mg/L	1	80	45	33 - 141

Sample: 210383 - MW-23

Analysis: BTEX Analytical Method: S 8021B QC Batch: QC24160 Date Analyzed: 10/14/02
Analyst: CG Preparation Method: S 5030B Prep Batch: PB22547 Date Prepared: 10/14/02

Param	Flag	Result	Units	Dilution	RDL
Benzene		0.0029	mg/L	1	0.001
Toluene		<0.001	mg/L	1	0.001
Ethylbenzene		<0.001	mg/L	1	0.001
M,P,O-Xylene		<0.001	mg/L	1	0.001
Total BTEX		0.0029	mg/L	1	0.001

Surrogate	Flag	Result	Units	Dilution	Spike Amount	Percent Recovery	Recovery Limits
TFT		0.0786	mg/L	1	0.10	79	70 - 130
4-BFB		0.0777	mg/L	1	0.10	78	70 - 130

Sample: 210383 - MW-23

Analysis: PAH Analytical Method: S 8270C QC Batch: QC24497 Date Analyzed: 10/23/02
Analyst: RC Preparation Method: E 3510C Prep Batch: PB22839 Date Prepared: 10/17/02

Param	Flag	Result	Units	Dilution	RDL
Naphthalene		<0.0002	mg/L	1	0.0002
Acenaphthylene		<0.0002	mg/L	1	0.0002
Acenaphthene		<0.0002	mg/L	1	0.0002
Fluorene		<0.0002	mg/L	1	0.0002
Phenanthrene		<0.0002	mg/L	1	0.0002
Anthracene		<0.0002	mg/L	1	0.0002
Fluoranthene		<0.0002	mg/L	1	0.0002
Pyrene		<0.0002	mg/L	1	0.0002
Benzo(a)anthracene		<0.0002	mg/L	1	0.0002
Chrysene		<0.0002	mg/L	1	0.0002
Benzo(b)fluoranthene		<0.0002	mg/L	1	0.0002
Benzo(k)fluoranthene		<0.0002	mg/L	1	0.0002
Benzo(a)pyrene		<0.0002	mg/L	1	0.0002

Continued ...

... *Continued* Sample: 210383 Analysis: PAH

Param	Flag	Result	Units	Dilution	RDL
Indeno(1,2,3-cd)pyrene		<0.0002	mg/L	1	0.0002
Dibenzo(a,h)anthracene		<0.0002	mg/L	1	0.0002
Benzo(g,h,i)perylene		<0.0002	mg/L	1	0.0002

Surrogate	Flag	Result	Units	Dilution	Spike Amount	Percent Recovery	Recovery Limits
Nitrobenzene-d5		42.74	mg/L	1	80	53	35 - 114
2-Fluorobiphenyl		39.35	mg/L	1	80	49	43 - 116
Terphenyl-d14		52.7	mg/L	1	80	65	33 - 141

Sample: 210384 - MW-14

Analysis:	BTEX	Analytical Method:	S 8021B	QC Batch:	QC24160	Date Analyzed:	10/14/02
Analyst:	CG	Preparation Method:	S 5030B	Prep Batch:	PB22547	Date Prepared:	10/14/02

Param	Flag	Result	Units	Dilution	RDL
Benzene		<0.005	mg/L	5	0.001
Toluene		<0.005	mg/L	5	0.001
Ethylbenzene		<0.005	mg/L	5	0.001
M,P,O-Xylene		<0.005	mg/L	5	0.001
Total BTEX		<0.005	mg/L	5	0.001

Surrogate	Flag	Result	Units	Dilution	Spike Amount	Percent Recovery	Recovery Limits
TFT		0.073	mg/L	5	0.10	73	70 - 130
4-BFB		0.073	mg/L	5	0.10	73	70 - 130

Sample: 210384 - MW-14

Analysis:	PAH	Analytical Method:	S 8270C	QC Batch:	QC24497	Date Analyzed:	10/23/02
Analyst:	RC	Preparation Method:	E 3510C	Prep Batch:	PB22839	Date Prepared:	10/17/02

Param	Flag	Result	Units	Dilution	RDL
Naphthalene		<0.0002	mg/L	1	0.0002
Acenaphthylene		<0.0002	mg/L	1	0.0002
Acenaphthene		<0.0002	mg/L	1	0.0002
Fluorene		<0.0002	mg/L	1	0.0002
Phenanthrene		<0.0002	mg/L	1	0.0002
Anthracene		<0.0002	mg/L	1	0.0002
Fluoranthene		<0.0002	mg/L	1	0.0002
Pyrene		<0.0002	mg/L	1	0.0002
Benzo(a)anthracene		<0.0002	mg/L	1	0.0002
Chrysene		<0.0002	mg/L	1	0.0002
Benzo(b)fluoranthene		<0.0002	mg/L	1	0.0002
Benzo(k)fluoranthene		<0.0002	mg/L	1	0.0002
Benzo(a)pyrene		<0.0002	mg/L	1	0.0002
Indeno(1,2,3-cd)pyrene		<0.0002	mg/L	1	0.0002
Dibenzo(a,h)anthracene		<0.0002	mg/L	1	0.0002
Benzo(g,h,i)perylene		<0.0002	mg/L	1	0.0002

Surrogate	Flag	Result	Units	Dilution	Spike Amount	Percent Recovery	Recovery Limits
Nitrobenzene-d5		47.79	mg/L	1	80	59	35 - 114
2-Fluorobiphenyl		49.2	mg/L	1	80	61	43 - 116
Terphenyl-d14		51.79	mg/L	1	80	64	33 - 141

Sample: 210385 - MW-15

Analysis: BTEX Analytical Method: S 8021B QC Batch: QC24173 Date Analyzed: 10/15/02
Analyst: CG Preparation Method: S 5030B Prep Batch: PB22556 Date Prepared: 10/15/02

Param	Flag	Result	Units	Dilution	RDL
Benzene		0.0231	mg/L	1	0.001
Toluene		<0.001	mg/L	1	0.001
Ethylbenzene		<0.001	mg/L	1	0.001
M,P,O-Xylene		<0.001	mg/L	1	0.001
Total BTEX		0.0231	mg/L	1	0.001

Surrogate	Flag	Result	Units	Dilution	Spike Amount	Percent Recovery	Recovery Limits
TFT		0.0927	mg/L	1	0.10	92	70 - 130
4-BFB		0.0923	mg/L	1	0.10	92	70 - 130

Sample: 210385 - MW-15

Analysis: PAH Analytical Method: S 8270C QC Batch: QC24612 Date Analyzed: 10/29/02
Analyst: RC Preparation Method: E 3510C Prep Batch: PB22936 Date Prepared: 10/17/02

Param	Flag	Result	Units	Dilution	RDL
Naphthalene		<0.0002	mg/L	1	0.0002
Acenaphthylene		<0.0002	mg/L	1	0.0002
Acenaphthene		<0.0002	mg/L	1	0.0002
Fluorene		<0.0002	mg/L	1	0.0002
Phenanthrene		<0.0002	mg/L	1	0.0002
Anthracene		<0.0002	mg/L	1	0.0002
Fluoranthene		<0.0002	mg/L	1	0.0002
Pyrene		<0.0002	mg/L	1	0.0002
Benzo(a)anthracene		<0.0002	mg/L	1	0.0002
Chrysene		<0.0002	mg/L	1	0.0002
Benzo(b)fluoranthene		<0.0002	mg/L	1	0.0002
Benzo(k)fluoranthene		<0.0002	mg/L	1	0.0002
Benzo(a)pyrene		<0.0002	mg/L	1	0.0002
Indeno(1,2,3-cd)pyrene		<0.0002	mg/L	1	0.0002
Dibenzo(a,h)anthracene		<0.0002	mg/L	1	0.0002
Benzo(g,h,i)perylene		<0.0002	mg/L	1	0.0002

Surrogate	Flag	Result	Units	Dilution	Spike Amount	Percent Recovery	Recovery Limits
Nitrobenzene-d5		52.24	mg/L	1	80	65	35 - 114
2-Fluorobiphenyl		43.94	mg/L	1	80	54	43 - 116
Terphenyl-d14		57.54	mg/L	1	80	71	33 - 141

Sample: 210386 - MW-8

Analysis:	BTEX	Analytical Method:	S 8021B	QC Batch:	QC24173	Date Analyzed:	10/15/02
Analyst:	CG	Preparation Method:	S 5030B	Prep Batch:	PB22556	Date Prepared:	10/15/02

Param	Flag	Result	Units	Dilution	RDL
Benzene		<0.001	mg/L	1	0.001
Toluene		<0.001	mg/L	1	0.001
Ethylbenzene		<0.001	mg/L	1	0.001
M,P,O-Xylene		<0.001	mg/L	1	0.001
Total BTEX		<0.001	mg/L	1	0.001

Surrogate	Flag	Result	Units	Dilution	Spike Amount	Percent Recovery	Recovery Limits
TFT		0.0928	mg/L	1	0.10	92	70 - 130
4-BFB		0.0919	mg/L	1	0.10	91	70 - 130

Sample: 210386 - MW-8

Analysis:	PAH	Analytical Method:	S 8270C	QC Batch:	QC24612	Date Analyzed:	10/29/02
Analyst:	RC	Preparation Method:	E 3510C	Prep Batch:	PB22936	Date Prepared:	10/16/02

Param	Flag	Result	Units	Dilution	RDL
Naphthalene		<0.0002	mg/L	1	0.0002
Acenaphthylene		<0.0002	mg/L	1	0.0002
Acenaphthene		<0.0002	mg/L	1	0.0002
Fluorene		<0.0002	mg/L	1	0.0002
Phenanthrene		<0.0002	mg/L	1	0.0002
Anthracene		<0.0002	mg/L	1	0.0002
Fluoranthene		<0.0002	mg/L	1	0.0002
Pyrene		<0.0002	mg/L	1	0.0002
Benzo(a)anthracene		<0.0002	mg/L	1	0.0002
Chrysene		<0.0002	mg/L	1	0.0002
Benzo(b)fluoranthene		<0.0002	mg/L	1	0.0002
Benzo(k)fluoranthene		<0.0002	mg/L	1	0.0002
Benzo(a)pyrene		<0.0002	mg/L	1	0.0002
Indeno(1,2,3-cd)pyrene		<0.0002	mg/L	1	0.0002
Dibenzo(a,h)anthracene		<0.0002	mg/L	1	0.0002
Benzo(g,h,i)perylene		<0.0002	mg/L	1	0.0002

Surrogate	Flag	Result	Units	Dilution	Spike Amount	Percent Recovery	Recovery Limits
Nitrobenzene-d5		35.95	mg/L	1	80	44	35 - 114
2-Fluorobiphenyl		30.62	mg/L	1	80	38	43 - 116
Terphenyl-d14		68.62	mg/L	1	80	85	33 - 141

Sample: 210387 - MW-9

Analysis:	BTEX	Analytical Method:	S 8021B	QC Batch:	QC24219	Date Analyzed:	10/16/02
Analyst:	CG	Preparation Method:	S 5030B	Prep Batch:	PB22589	Date Prepared:	10/16/02

Param	Flag	Result	Units	Dilution	RDL
Benzene		<0.005	mg/L	5	0.001
Toluene		<0.005	mg/L	5	0.001
Ethylbenzene		<0.005	mg/L	5	0.001
M,P,O-Xylene		<0.005	mg/L	5	0.001
Total BTEX		<0.005	mg/L	5	0.001

Surrogate	Flag	Result	Units	Dilution	Spike Amount	Percent Recovery	Recovery Limits
TFT		0.0775	mg/L	5	0.10	77	70 - 130
4-BFB		0.0908	mg/L	5	0.10	90	70 - 130

Sample: 210387 - MW-9

Analysis: PAH Analytical Method: S 8270C QC Batch: QC24497 Date Analyzed: 10/23/02
Analyst: RC Preparation Method: E 3510C Prep Batch: PB22839 Date Prepared: 10/16/02

Param	Flag	Result	Units	Dilution	RDL
Naphthalene		<0.0002	mg/L	1	0.0002
Acenaphthylene		<0.0002	mg/L	1	0.0002
Acenaphthene		<0.0002	mg/L	1	0.0002
Fluorene		<0.0002	mg/L	1	0.0002
Phenanthrene		<0.0002	mg/L	1	0.0002
Anthracene		<0.0002	mg/L	1	0.0002
Fluoranthene		<0.0002	mg/L	1	0.0002
Pyrene		<0.0002	mg/L	1	0.0002
Benzo(a)anthracene		<0.0002	mg/L	1	0.0002
Chrysene		<0.0002	mg/L	1	0.0002
Benzo(b)fluoranthene		<0.0002	mg/L	1	0.0002
Benzo(k)fluoranthene		<0.0002	mg/L	1	0.0002
Benzo(a)pyrene		<0.0002	mg/L	1	0.0002
Indeno(1,2,3-cd)pyrene		<0.0002	mg/L	1	0.0002
Dibenzo(a,h)anthracene		<0.0002	mg/L	1	0.0002
Benzo(g,h,i)perylene		<0.0002	mg/L	1	0.0002

Surrogate	Flag	Result	Units	Dilution	Spike Amount	Percent Recovery	Recovery Limits
Nitrobenzene-d5		38.98	mg/L	1	80	48	35 - 114
2-Fluorobiphenyl		38.86	mg/L	1	80	48	43 - 116
Terphenyl-d14		41.08	mg/L	1	80	51	33 - 141

Sample: 210388 - MW-16

Analysis: BTEX Analytical Method: S 8021B QC Batch: QC24173 Date Analyzed: 10/15/02
Analyst: CG Preparation Method: S 5030B Prep Batch: PB22556 Date Prepared: 10/15/02

Param	Flag	Result	Units	Dilution	RDL
Benzene		<0.001	mg/L	1	0.001
Toluene		<0.001	mg/L	1	0.001
Ethylbenzene		<0.001	mg/L	1	0.001
M,P,O-Xylene		<0.001	mg/L	1	0.001

Continued ...

... Continued Sample: 210388 Analysis: BTEX

Param	Flag	Result	Units	Dilution	RDL
Total BTEX		<0.001	mg/L	1	0.001

Surrogate	Flag	Result	Units	Dilution	Spike Amount	Percent Recovery	Recovery Limits
TFT		0.0958	mg/L	1	0.10	96	70 - 130
4-BFB		0.0951	mg/L	1	0.10	95	70 - 130

Sample: 210388 - MW-16

Analysis:	PAH	Analytical Method:	S 8270C	QC Batch:	QC24497	Date Analyzed:	10/23/02
Analyst:	RC	Preparation Method:	E 3510C	Prep Batch:	PB22839	Date Prepared:	10/16/02

Param	Flag	Result	Units	Dilution	RDL
Naphthalene		<0.0002	mg/L	1	0.0002
Acenaphthylene		<0.0002	mg/L	1	0.0002
Acenaphthene		<0.0002	mg/L	1	0.0002
Fluorene		<0.0002	mg/L	1	0.0002
Phenanthrene		<0.0002	mg/L	1	0.0002
Anthracene		<0.0002	mg/L	1	0.0002
Fluoranthene		<0.0002	mg/L	1	0.0002
Pyrene		<0.0002	mg/L	1	0.0002
Benzo(a)anthracene		<0.0002	mg/L	1	0.0002
Chrysene		<0.0002	mg/L	1	0.0002
Benzo(b)fluoranthene		<0.0002	mg/L	1	0.0002
Benzo(k)fluoranthene		<0.0002	mg/L	1	0.0002
Benzo(a)pyrene		<0.0002	mg/L	1	0.0002
Indeno(1,2,3-cd)pyrene		<0.0002	mg/L	1	0.0002
Dibenzo(a,h)anthracene		<0.0002	mg/L	1	0.0002
Benzo(g,h,i)perylene		<0.0002	mg/L	1	0.0002

Surrogate	Flag	Result	Units	Dilution	Spike Amount	Percent Recovery	Recovery Limits
Nitrobenzene-d5		40.16	mg/L	1	80	50	35 - 114
2-Fluorobiphenyl		35.72	mg/L	1	80	44	43 - 116
Terphenyl-d14		46.29	mg/L	1	80	57	33 - 141

Sample: 210389 - MW-17

Analysis:	BTEX	Analytical Method:	S 8021B	QC Batch:	QC24173	Date Analyzed:	10/15/02
Analyst:	CG	Preparation Method:	S 5030B	Prep Batch:	PB22556	Date Prepared:	10/15/02

Param	Flag	Result	Units	Dilution	RDL
Benzene		<0.005	mg/L	5	0.001
Toluene		<0.005	mg/L	5	0.001
Ethylbenzene		<0.005	mg/L	5	0.001
M,P,O-Xylene		<0.005	mg/L	5	0.001
Total BTEX		<0.005	mg/L	5	0.001

Surrogate	Flag	Result	Units	Dilution	Spike Amount	Percent Recovery	Recovery Limits
TFT		0.0932	mg/L	5	0.10	93	70 - 130
4-BFB		0.0911	mg/L	5	0.10	91	70 - 130

Sample: 210389 - MW-17

Analysis:	PAH	Analytical Method:	S 8270C	QC Batch:	QC24497	Date Analyzed:	10/23/02
Analyst:	RC	Preparation Method:	E 3510C	Prep Batch:	PB22839	Date Prepared:	10/16/02

Param	Flag	Result	Units	Dilution	RDL
Naphthalene		<0.0002	mg/L	1	0.0002
Acenaphthylene		<0.0002	mg/L	1	0.0002
Acenaphthene		<0.0002	mg/L	1	0.0002
Fluorene		<0.0002	mg/L	1	0.0002
Phenanthrene		<0.0002	mg/L	1	0.0002
Anthracene		<0.0002	mg/L	1	0.0002
Fluoranthene		<0.0002	mg/L	1	0.0002
Pyrene		<0.0002	mg/L	1	0.0002
Benzo(a)anthracene		<0.0002	mg/L	1	0.0002
Chrysene		<0.0002	mg/L	1	0.0002
Benzo(b)fluoranthene		<0.0002	mg/L	1	0.0002
Benzo(k)fluoranthene		<0.0002	mg/L	1	0.0002
Benzo(a)pyrene		<0.0002	mg/L	1	0.0002
Indeno(1,2,3-cd)pyrene		<0.0002	mg/L	1	0.0002
Dibenzo(a,h)anthracene		<0.0002	mg/L	1	0.0002
Benzo(g,h,i)perylene		<0.0002	mg/L	1	0.0002

Surrogate	Flag	Result	Units	Dilution	Spike Amount	Percent Recovery	Recovery Limits
Nitrobenzene-d5		52.29	mg/L	1	80	65	35 - 114
2-Fluorobiphenyl		45.2	mg/L	1	80	56	43 - 116
Terphenyl-d14		49.34	mg/L	1	80	61	33 - 141

Sample: 210390 - MW-18

Analysis:	BTEX	Analytical Method:	S 8021B	QC Batch:	QC24173	Date Analyzed:	10/15/02
Analyst:	CG	Preparation Method:	S 5030B	Prep Batch:	PB22556	Date Prepared:	10/15/02

Param	Flag	Result	Units	Dilution	RDL
Benzene		<0.005	mg/L	5	0.001
Toluene		<0.005	mg/L	5	0.001
Ethylbenzene		<0.005	mg/L	5	0.001
M,P,O-Xylene		<0.005	mg/L	5	0.001
Total BTEX		<0.005	mg/L	5	0.001

Surrogate	Flag	Result	Units	Dilution	Spike Amount	Percent Recovery	Recovery Limits
TFT		0.0923	mg/L	5	0.10	92	70 - 130
4-BFB		0.0895	mg/L	5	0.10	89	70 - 130

Sample: 210390 - MW-18

Analysis:	PAH	Analytical Method:	S 8270C	QC Batch:	QC24497	Date Analyzed:	10/23/02
Analyst:	RC	Preparation Method:	E 3510C	Prep Batch:	PB22839	Date Prepared:	10/16/02

Param	Flag	Result	Units	Dilution	RDL
Naphthalene		<0.0002	mg/L	1	0.0002
Acenaphthylene		<0.0002	mg/L	1	0.0002
Acenaphthene		<0.0002	mg/L	1	0.0002
Fluorene		<0.0002	mg/L	1	0.0002
Phenanthrene		<0.0002	mg/L	1	0.0002
Anthracene		<0.0002	mg/L	1	0.0002
Fluoranthene		<0.0002	mg/L	1	0.0002
Pyrene		<0.0002	mg/L	1	0.0002
Benzo(a)anthracene		<0.0002	mg/L	1	0.0002
Chrysene		<0.0002	mg/L	1	0.0002
Benzo(b)fluoranthene		<0.0002	mg/L	1	0.0002
Benzo(k)fluoranthene		<0.0002	mg/L	1	0.0002
Benzo(a)pyrene		<0.0002	mg/L	1	0.0002
Indeno(1,2,3-cd)pyrene		<0.0002	mg/L	1	0.0002
Dibenzo(a,h)anthracene		<0.0002	mg/L	1	0.0002
Benzo(g,h,i)perylene		<0.0002	mg/L	1	0.0002

Surrogate	Flag	Result	Units	Dilution	Spike Amount	Percent Recovery	Recovery Limits
Nitrobenzene-d5		52.42	mg/L	1	80	65	35 - 114
2-Fluorobiphenyl		45.46	mg/L	1	80	56	43 - 116
Terphenyl-d14		47.19	mg/L	1	80	58	33 - 141

Quality Control Report
Method Blank

Method Blank

QCBatch: QC24160

Param	Flag	Results	Units	Reporting Limit
Benzene		<0.001	mg/L	0.001
Toluene		<0.001	mg/L	0.001
Ethylbenzene		<0.001	mg/L	0.001
M,P,O-Xylene		<0.001	mg/L	0.001
Total BTEX		<0.001	mg/L	0.001

Surrogate	Flag	Result	Units	Dilution	Spike Amount	Percent Recovery	Recovery Limits
TFT		0.0778	mg/L	1	0.10	78	70 - 130
4-BFB		0.0716	mg/L	1	0.10	72	70 - 130

Method Blank

QCBatch: QC24173

Param	Flag	Results	Units	Reporting Limit
Benzene		<0.001	mg/L	0.001
Toluene		<0.001	mg/L	0.001
Ethylbenzene		<0.001	mg/L	0.001
M,P,O-Xylene		<0.001	mg/L	0.001
Total BTEX		<0.001	mg/L	0.001

Surrogate	Flag	Result	Units	Dilution	Spike Amount	Percent Recovery	Recovery Limits
TFT		0.0865	mg/L	1	0.10	86	70 - 130
4-BFB		0.0817	mg/L	1	0.10	82	70 - 130

Method Blank

QCBatch: QC24219

Param	Flag	Results	Units	Reporting Limit
Benzene		<0.001	mg/L	0.001
Toluene		<0.001	mg/L	0.001
Ethylbenzene		<0.001	mg/L	0.001
M,P,O-Xylene		<0.001	mg/L	0.001
Total BTEX		<0.001	mg/L	0.001

Surrogate	Flag	Result	Units	Dilution	Spike Amount	Percent Recovery	Recovery Limits
TFT		0.104	mg/L	1	0.10	104	70 - 130

Continued ...

Surrogate	Flag	Result	Units	Dilution	Spike Amount	Percent Recovery	Recovery Limits
4-BFB	[1]	0.0687	mg/L	1	0.10	68	70 - 130

Method Blank

QCBatch: QC24497

Param	Flag	Results	Units	Reporting Limit
Naphthalene		<0.0002	mg/L	0.0002
Acenaphthylene		<0.0002	mg/L	0.0002
Acenaphthene		<0.0002	mg/L	0.0002
Fluorene		<0.0002	mg/L	0.0002
Phenanthrene		<0.0002	mg/L	0.0002
Anthracene		<0.0002	mg/L	0.0002
Fluoranthene		<0.0002	mg/L	0.0002
Pyrene		<0.0002	mg/L	0.0002
Benzo(a)anthracene		<0.0002	mg/L	0.0002
Chrysene		<0.0002	mg/L	0.0002
Benzo(b)fluoranthene		<0.0002	mg/L	0.0002
Benzo(k)fluoranthene		<0.0002	mg/L	0.0002
Benzo(a)pyrene		<0.0002	mg/L	0.0002
Indeno(1,2,3-cd)pyrene		<0.0002	mg/L	0.0002
Dibenzo(a,h)anthracene		<0.0002	mg/L	0.0002
Benzo(g,h,i)perylene		<0.0002	mg/L	0.0002

Surrogate	Flag	Result	Units	Dilution	Spike Amount	Percent Recovery	Recovery Limits
Nitrobenzene-d5		63.24	mg/L	1	80	79	35 - 114
2-Fluorobiphenyl		63.69	mg/L	1	80	79	43 - 116
Terphenyl-d14		80.41	mg/L	1	80	100	33 - 141

Method Blank

QCBatch: QC24612

Param	Flag	Results	Units	Reporting Limit
Naphthalene		<0.0002	mg/L	0.0002
Acenaphthylene		<0.0002	mg/L	0.0002
Acenaphthene		<0.0002	mg/L	0.0002
Fluorene		<0.0002	mg/L	0.0002
Phenanthrene		<0.0002	mg/L	0.0002
Anthracene		<0.0002	mg/L	0.0002
Fluoranthene		<0.0002	mg/L	0.0002
Pyrene		<0.0002	mg/L	0.0002
Benzo(a)anthracene		<0.0002	mg/L	0.0002
Chrysene		<0.0002	mg/L	0.0002
Benzo(b)fluoranthene		<0.0002	mg/L	0.0002
Benzo(k)fluoranthene		<0.0002	mg/L	0.0002
Benzo(a)pyrene		<0.0002	mg/L	0.0002

Continued ...

[1]Low surrogate recovery due to prep. ICV, CCV show the method to be in control.

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Param	Flag	Results	Units	Reporting Limit
Indeno(1,2,3-cd)pyrene		<0.0002	mg/L	0.0002
Dibenzo(a,h)anthracene		<0.0002	mg/L	0.0002
Benzo(g,h,i)perylene		<0.0002	mg/L	0.0002

Surrogate	Flag	Result	Units	Dilution	Spike Amount	Percent Recovery	Recovery Limits
Nitrobenzene-d5		71.6	mg/L	1	80	89	35 - 114
2-Fluorobiphenyl		61.38	mg/L	1	80	76	43 - 116
Terphenyl-d14		73.48	mg/L	1	80	91	33 - 141

Quality Control Report
Lab Control Spikes and Duplicate Spikes

Laboratory Control Spikes

QCBatch: QC24160

Param	LCS Result	LCSD Result	Units	Dil.	Spike Amount Added	Matrix Result	% Rec	RPD	% Rec Limit	RPD Limit
MTBE	0.0859	0.101	mg/L	1	0.10	<0.001	86	16	70 - 130	20
Benzene	0.0919	0.108	mg/L	1	0.10	<0.001	91	16	70 - 130	20
Toluene	0.0904	0.103	mg/L	1	0.10	<0.001	90	13	70 - 130	20
Ethylbenzene	0.0909	0.0945	mg/L	1	0.10	<0.001	91	4	70 - 130	20
M,P,O-Xylene	0.276	0.282	mg/L	1	0.30	<0.001	92	2	70 - 130	20

Percent recovery is based on the spike result. RPD is based on the spike and spike duplicate result.

Surrogate	LCS Result	LCSD Result	Units	Dilution	Spike Amount	LCS % Rec	LCSD % Rec	Recovery Limits
TFT	0.0829	0.0976	mg/L	1	0.10	83	98	70 - 130
4-BFB	0.0854	0.0834	mg/L	1	0.10	85	83	70 - 130

Laboratory Control Spikes

QCBatch: QC24173

Param	LCS Result	LCSD Result	Units	Dil.	Spike Amount Added	Matrix Result	% Rec	RPD	% Rec Limit	RPD Limit
MTBE	0.0948	0.0951	mg/L	1	0.10	<0.001	95	0	70 - 130	20
Benzene	0.0975	0.0972	mg/L	1	0.10	<0.001	98	0	70 - 130	20
Toluene	0.0975	0.0975	mg/L	1	0.10	<0.001	98	0	70 - 130	20
Ethylbenzene	0.0965	0.0964	mg/L	1	0.10	<0.001	96	0	70 - 130	20
M,P,O-Xylene	0.286	0.285	mg/L	1	0.30	<0.001	95	0	70 - 130	20

Percent recovery is based on the spike result. RPD is based on the spike and spike duplicate result.

Surrogate	LCS Result	LCSD Result	Units	Dilution	Spike Amount	LCS % Rec	LCSD % Rec	Recovery Limits
TFT	0.0904	0.0908	mg/L	1	0.10	90	91	70 - 130
4-BFB	0.0866	0.0888	mg/L	1	0.10	87	89	70 - 130

Laboratory Control Spikes

QCBatch: QC24219

Param	LCS Result	LCSD Result	Units	Dil.	Spike Amount Added	Matrix Result	% Rec	RPD	% Rec Limit	RPD Limit
MTBE	0.0908	0.0985	mg/L	1	0.10	<0.001	90	8	70 - 130	20
Benzene	0.0949	0.108	mg/L	1	0.10	<0.001	94	12	70 - 130	20
Toluene	0.0934	0.107	mg/L	1	0.10	<0.001	93	13	70 - 130	20
Ethylbenzene	0.0922	0.0914	mg/L	1	0.10	<0.001	92	0	70 - 130	20
M,P,O-Xylene	0.279	0.266	mg/L	1	0.30	<0.001	93	4	70 - 130	20

Percent recovery is based on the spike result. RPD is based on the spike and spike duplicate result.

Surrogate	LCS Result	LCSD Result	Units	Dilution	Spike Amount	LCS % Rec	LCSD % Rec	Recovery Limits
TFT	0.0915	0.107	mg/L	1	0.10	91	107	70 - 130
4-BFB	0.0827	0.0854	mg/L	1	0.10	82	85	70 - 130

Laboratory Control Spikes

QCBatch: QC24497

Param	LCS Result	LCSD Result	Units	Dil.	Spike Amount Added	Matrix Result	% Rec	RPD	% Rec Limit	RPD Limit
Naphthalene	74.91	69.7	mg/L	1	80	<0.0002	93	7	16 - 96	20
Acenaphthylene	80.84	72.86	mg/L	1	80	<0.0002	101	10	20 - 110	20
Acenaphthene	79.62	73.62	mg/L	1	80	<0.0002	99	7	18 - 108	20
Fluorene	80.91	76.38	mg/L	1	80	<0.0002	101	5	22 - 102	20
Phenanthrene	78.16	73.569	mg/L	1	80	<0.0002	97	6	25 - 103	20
Anthracene	72.57	64.63	mg/L	1	80	<0.0002	90	11	22 - 110	20
Fluoranthene	76.89	69.71	mg/L	1	80	<0.0002	96	9	21 - 110	20
Pyrene	82.85	98.99	mg/L	1	80	<0.0002	103	17	22 - 100	20
Benzo(a)anthracene	76.14	106.3	mg/L	1	80	<0.0002	95	33	30 - 99	20
Chrysene	70.09	77.9	mg/L	1	80	<0.0002	87	10	27 - 108	20
Benzo(b)fluoranthene	75.15	91.4	mg/L	1	80	<0.0002	93	19	19 - 102	20
Benzo(k)fluoranthene	77.61	44.68	mg/L	1	80	<0.0002	97	53	35 - 103	20
Benzo(a)pyrene	77.63	77.77	mg/L	1	80	<0.0002	97	0	24 - 105	20
Indeno(1,2,3-cd)pyrene	79.29	98.35	mg/L	1	80	<0.0002	99	21	22 - 108	20
Dibenzo(a,h)anthracene	66.04	65.29	mg/L	1	80	<0.0002	82	1	23 - 77	20
Benzo(g,h,i)perylene	82.39	74.76	mg/L	1	80	<0.0002	102	9	19 - 119	20

Percent recovery is based on the spike result. RPD is based on the spike and spike duplicate result.

Surrogate	LCS Result	LCSD Result	Units	Dilution	Spike Amount	LCS % Rec	LCSD % Rec	Recovery Limits
Nitrobenzene-d5	74.06	75.56	mg/L	1	80	92	94	35 - 114
2-Fluorobiphenyl	75.71	68.41	mg/L	1	80	94	85	43 - 116
Terphenyl-d14	81.69	99.51	mg/L	1	80	102	124	33 - 141

Laboratory Control Spikes

QCBatch: QC24612

Param	LCS Result	LCSD Result	Units	Dil.	Spike Amount Added	Matrix Result	% Rec	RPD	% Rec Limit	RPD Limit
Naphthalene	67.68	70.69	mg/L	1	80	<0.0002	84	4	16 - 96	20

Continued ...

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Param	LCS Result	LCSD Result	Units	Dil.	Spike Amount Added	Matrix Result	% Rec	RPD	% Rec Limit	RPD Limit
Acenaphthylene	65.32	68.46	mg/L	1	80	<0.0002	81	4	20 - 110	20
Acenaphthene	64.03	67.96	mg/L	1	80	<0.0002	80	5	18 - 108	20
Fluorene	66.88	75.64	mg/L	1	80	<0.0002	83	12	22 - 102	20
Phenanthrene	71.51	77.14	mg/L	1	80	<0.0002	89	7	25 - 103	20
Anthracene	50.75	45.91	mg/L	1	80	<0.0002	63	10	22 - 110	20
Fluoranthene	58.65	61.79	mg/L	1	80	<0.0002	73	5	21 - 110	20
Pyrene	73.85	79.84	mg/L	1	80	<0.0002	92	7	22 - 100	20
Benzo(a)anthracene	89.59	97.1	mg/L	1	80	<0.0002	111	8	30 - 99	20
Chrysene	54.62	50.11	mg/L	1	80	<0.0002	68	8	27 - 108	20
Benzo(b)fluoranthene	91.69	112	mg/L	1	80	<0.0002	114	19	19 - 102	20
Benzo(k)fluoranthene	57.93	53.58	mg/L	1	80	<0.0002	72	7	35 - 103	20
Benzo(a)pyrene	76.45	77.07	mg/L	1	80	<0.0002	95	0	24 - 105	20
Indeno(1,2,3-cd)pyrene	79.36	86.58	mg/L	1	80	<0.0002	99	8	22 - 108	20
Dibenzo(a,h)anthracene	66.11	70.81	mg/L	1	80	<0.0002	82	6	23 - 77	20
Benzo(g,h,i)perylene	71.39	76.03	mg/L	1	80	<0.0002	89	6	19 - 119	20

Percent recovery is based on the spike result. RPD is based on the spike and spike duplicate result.

Surrogate	LCS Result	LCSD Result	Units	Dilution	Spike Amount	LCS % Rec	LCSD % Rec	Recovery Limits
Nitrobenzene-d5	81.29	81.94	mg/L	1	80	101	102	35 - 114
2-Fluorobiphenyl	67.51	66.69	mg/L	1	80	84	83	43 - 116
Terphenyl-d14	74.72	81.53	mg/L	1	80	93	101	33 - 141

Quality Control Report
Continuing Calibration Verification Standards

CCV (1)

QCBatch: QC24160

Param	Flag	Units	CCVs True Conc.	CCVs Found Conc.	CCVs Percent Recovery	Percent Recovery Limits	Date Analyzed
MTBE		mg/L	0.10	0.086	86	85 - 115	10/14/02
Benzene		mg/L	0.10	0.089	89	85 - 115	10/14/02
Toluene		mg/L	0.10	0.088	88	85 - 115	10/14/02
Ethylbenzene		mg/L	0.10	0.086	86	85 - 115	10/14/02
M,P,O-Xylene		mg/L	0.30	0.262	87	85 - 115	10/14/02

CCV (2)

QCBatch: QC24160

Param	Flag	Units	CCVs True Conc.	CCVs Found Conc.	CCVs Percent Recovery	Percent Recovery Limits	Date Analyzed
MTBE	[2]	mg/L	0.10	0.083	83	85 - 115	10/14/02
Benzene		mg/L	0.10	0.086	86	85 - 115	10/14/02
Toluene		mg/L	0.10	0.086	86	85 - 115	10/14/02

Continued ...

[2]MTBE outside normal limits. Average (85) of CCV components within acceptable range.

... Continued

Param	Flag	Units	CCVs True Conc.	CCVs Found Conc.	CCVs Percent Recovery	Percent Recovery Limits	Date Analyzed
Ethylbenzene		mg/L	0.10	0.085	85	85 - 115	10/14/02
M,P,O-Xylene		mg/L	0.30	0.257	85	85 - 115	10/14/02

ICV (1) QCBatch: QC24160

Param	Flag	Units	CCVs True Conc.	CCVs Found Conc.	CCVs Percent Recovery	Percent Recovery Limits	Date Analyzed
MTBE		mg/L	0.10	0.089	89	85 - 115	10/14/02
Benzene		mg/L	0.10	0.0913	90	85 - 115	10/14/02
Toluene		mg/L	0.10	0.0903	90	85 - 115	10/14/02
Ethylbenzene		mg/L	0.10	0.0903	90	85 - 115	10/14/02
M,P,O-Xylene		mg/L	0.30	0.275	92	85 - 115	10/14/02

CCV (1) QCBatch: QC24173

Param	Flag	Units	CCVs True Conc.	CCVs Found Conc.	CCVs Percent Recovery	Percent Recovery Limits	Date Analyzed
MTBE		mg/L	0.10	0.0992	99	85 - 115	10/15/02
Benzene		mg/L	0.10	0.0981	98	85 - 115	10/15/02
Toluene		mg/L	0.10	0.0982	98	85 - 115	10/15/02
Ethylbenzene		mg/L	0.10	0.0968	97	85 - 115	10/15/02
M,P,O-Xylene		mg/L	0.30	0.287	96	85 - 115	10/15/02

CCV (2) QCBatch: QC24173

Param	Flag	Units	CCVs True Conc.	CCVs Found Conc.	CCVs Percent Recovery	Percent Recovery Limits	Date Analyzed
MTBE		mg/L	0.10	0.0965	96	85 - 115	10/15/02
Benzene		mg/L	0.10	0.0962	96	85 - 115	10/15/02
Toluene		mg/L	0.10	0.0962	96	85 - 115	10/15/02
Ethylbenzene		mg/L	0.10	0.095	95	85 - 115	10/15/02
M,P,O-Xylene		mg/L	0.30	0.28	93	85 - 115	10/15/02

ICV (1) QCBatch: QC24173

Param	Flag	Units	CCVs True Conc.	CCVs Found Conc.	CCVs Percent Recovery	Percent Recovery Limits	Date Analyzed
MTBE		mg/L	0.10	0.0921	92	85 - 115	10/15/02

Continued ...

... Continued

Param	Flag	Units	CCVs True Conc.	CCVs Found Conc.	CCVs Percent Recovery	Percent Recovery Limits	Date Analyzed
Benzene		mg/L	0.10	0.0937	94	85 - 115	10/15/02
Toluene		mg/L	0.10	0.107	107	85 - 115	10/15/02
Ethylbenzene		mg/L	0.10	0.0949	95	85 - 115	10/15/02
M,P,O-Xylene		mg/L	0.30	0.287	96	85 - 115	10/15/02

CCV (1) QCBatch: QC24219

Param	Flag	Units	CCVs True Conc.	CCVs Found Conc.	CCVs Percent Recovery	Percent Recovery Limits	Date Analyzed
MTBE		mg/L	0.10	0.0985	98	85 - 115	10/16/02
Benzene		mg/L	0.10	0.108	108	85 - 115	10/16/02
Toluene		mg/L	0.10	0.0986	99	85 - 115	10/16/02
Ethylbenzene		mg/L	0.10	0.0914	91	85 - 115	10/16/02
M,P,O-Xylene		mg/L	0.30	0.266	89	85 - 115	10/16/02

CCV (2) QCBatch: QC24219

Param	Flag	Units	CCVs True Conc.	CCVs Found Conc.	CCVs Percent Recovery	Percent Recovery Limits	Date Analyzed
MTBE		mg/L	0.10	0.0943	94	85 - 115	10/16/02
Benzene		mg/L	0.10	0.0947	94	85 - 115	10/16/02
Toluene		mg/L	0.10	0.0928	92	85 - 115	10/16/02
Ethylbenzene		mg/L	0.10	0.091	91	85 - 115	10/16/02
M,P,O-Xylene		mg/L	0.30	0.275	91	85 - 115	10/16/02

ICV (1) QCBatch: QC24219

Param	Flag	Units	CCVs True Conc.	CCVs Found Conc.	CCVs Percent Recovery	Percent Recovery Limits	Date Analyzed
MTBE		mg/L	0.10	0.093	93	85 - 115	10/16/02
Benzene		mg/L	0.10	0.0967	97	85 - 115	10/16/02
Toluene		mg/L	0.10	0.094	94	85 - 115	10/16/02
Ethylbenzene		mg/L	0.10	0.0937	94	85 - 115	10/16/02
M,P,O-Xylene		mg/L	0.30	0.282	94	85 - 115	10/16/02

CCV (1) QCBatch: QC24497

Param	Flag	Units	CCVs True Conc.	CCVs Found Conc.	CCVs Percent Recovery	Percent Recovery Limits	Date Analyzed
Naphthalene		mg/L	60	58.44	97	80 - 120	10/23/02
Acenaphthylene		mg/L	60	54.2	90	80 - 120	10/23/02
Acenaphthene		mg/L	60	55.83	93	80 - 120	10/23/02
Fluorene		mg/L	60	56.75	94	80 - 120	10/23/02
Phenanthrene		mg/L	60	61.15	101	80 - 120	10/23/02
Anthracene		mg/L	60	57.64	96	80 - 120	10/23/02
Fluoranthene		mg/L	60	54.04	90	80 - 120	10/23/02
Pyrene		mg/L	60	54.8	91	80 - 120	10/23/02
Benzo(a)anthracene		mg/L	60	65.76	109	80 - 120	10/23/02
Chrysene		mg/L	60	59.32	98	80 - 120	10/23/02
Benzo(b)fluoranthene		mg/L	60	60.31	100	80 - 120	10/23/02
Benzo(k)fluoranthene		mg/L	60	50.48	84	80 - 120	10/23/02
Benzo(a)pyrene		mg/L	60	60.24	100	80 - 120	10/23/02
Indeno(1,2,3-cd)pyrene		mg/L	60	63.24	105	80 - 120	10/23/02
Dibenzo(a,h)anthracene		mg/L	60	57.45	95	80 - 120	10/23/02
Benzo(g,h,i)perylene		mg/L	60	54.34	90	80 - 120	10/23/02
Nitrobenzene-d5		mg/L	60	60.56	100	80 - 120	10/23/02
2-Fluorobiphenyl		mg/L	60	53.92	89	80 - 120	10/23/02
Terphenyl-d14		mg/L	60	56.02	93	80 - 120	10/23/02

CCV (1) QCBatch: QC24612

Param	Flag	Units	CCVs True Conc.	CCVs Found Conc.	CCVs Percent Recovery	Percent Recovery Limits	Date Analyzed
Naphthalene		mg/L	60	59.64	99	80 - 120	10/29/02
Acenaphthylene		mg/L	60	53.57	89	80 - 120	10/29/02
Acenaphthene		mg/L	60	52.77	87	80 - 120	10/29/02
Fluorene		mg/L	60	54.34	90	80 - 120	10/29/02
Phenanthrene		mg/L	60	66.35	110	80 - 120	10/29/02
Anthracene		mg/L	60	61.84	103	80 - 120	10/29/02
Fluoranthene		mg/L	60	49.36	82	80 - 120	10/29/02
Pyrene		mg/L	60	57.88	96	80 - 120	10/29/02
Benzo(a)anthracene		mg/L	60	68.28	113	80 - 120	10/29/02
Chrysene		mg/L	60	53.22	88	80 - 120	10/29/02
Benzo(b)fluoranthene		mg/L	60	65.28	108	80 - 120	10/29/02
Benzo(k)fluoranthene		mg/L	60	51.31	85	80 - 120	10/29/02
Benzo(a)pyrene		mg/L	60	59.5	99	80 - 120	10/29/02
Indeno(1,2,3-cd)pyrene		mg/L	60	61.5	102	80 - 120	10/29/02
Dibenzo(a,h)anthracene		mg/L	60	57.63	96	80 - 120	10/29/02
Benzo(g,h,i)perylene		mg/L	60	55.02	91	80 - 120	10/29/02
Nitrobenzene-d5		mg/L	60	68.09	113	80 - 120	10/29/02
2-Fluorobiphenyl		mg/L	60	56.14	93	80 - 120	10/29/02
Terphenyl-d14		mg/L	60	58.68	97	80 - 120	10/29/02

210373-90

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1 (888) 588-3443

CHAIN-OF-CUSTODY AND ANALYSIS REQUEST

LAB Order ID # A02101402

Company Name: Enercon Services Inc.
Phone #: 915-570-8726
Address: (Street, City, Zip) 306 West Wall, Suite 1312, Midland, Tx 79701
Fax #: 915-684-7587
Contact Person: Jeffrey Kindley
Incident # 300109
Invoice to: (If different from above) Kyle Landreneau / Equiva Services Inc
Project #: EQ-112
Project Name: Barber Ranch
Project Location: Monument, Lea County, New Mexico
Sampler Signature: Jeffrey Kindley

ANALYSIS REQUEST
(Circle or Specify Method No.)

LAB # (LAB USE ONLY)	FIELD CODE	# CONTAINERS	Volume/Amount	MATRIX: WATER	SOIL	AIR	SLUDGE	PRESERVATIVE METHOD: HCl	HNO_3	H_2SO_4	NaOH	ICE	NONE	SAMPLING: DATE	TIME	MTBE 8021B/602	BTEX 8021B/602	TPH 418.1/TX1005	PAH 8270C	Total Metals Ag As Ba Cd Cr Pb Se Hg 6010B/200.7	TCLP Metals Ag As Ba Cd Cr Pb Se Hg	TCLP Volatiles	TCLP Semi Volatiles	TCLP Pesticides	RCI	GC/MS Vol. 8260B/624	GC/MS Semi. Vol. 8270C/625	PCB's 8082/608	Pesticides 8081A/608	BOD, TSS, pH	Turn Around Time if different from standard	Hold
210373	MW-3	3	40ml 1 Liter	✓				✓					✓	10/10/02			✓		✓													
74	MW-4	3	40ml Liter	✓				✓					✓	10/10/02			✓		✓													
75	MW-5	3	40ml Liter	✓				✓					✓	10/10/02			✓		✓													
76	MW-6	3	40ml Liter	✓				✓					✓	10/10/02			✓		✓													
77	MW-1	3	40ml Liter	✓				✓					✓	10/10/02			✓		✓													
78	MW-11	3	40ml Liter	✓				✓					✓	10/10/02			✓		✓													
79	MW-12	3	40ml Liter	✓				✓					✓	10/10/02			✓		✓													
80	MW-22	3	40ml Liter	✓				✓					✓	10/10/02			✓		✓													
81	MW-20	3	40ml Liter	✓				✓					✓	10/10/02			✓		✓													
82	MW-21	3	40ml Liter	✓				✓					✓	10/10/02			✓		✓													
83	MW-23	3	40ml Liter	✓				✓					✓	10/10/02			✓		✓													

Relinquished by:	Date:	Time:	Received by:	Date:	Time:
Jeffrey Kindley	October 11, 2002	0900	Helen Shelton	10/11/02	0900
Helen Shelton	10/11/02	1830			
			Received at Laboratory by: Bri Per	10/11/02	930

LAB USE ONLY
Intact Y / N
Headspace Y / N
Temp 4 °
Log-in Review MK

REMARKS: Normal Turnaround

☐ Check If Special Reporting Limits Are Needed

Submittal of samples constitutes agreement to Terms and Conditions listed on reverse side of C.O.C. 33 samples HS

Carrier [redacted] GLI [redacted] 3 5 [redacted] 7 5 [redacted]

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Fax (915) 585-4944
1 (888) 588-3443

CHAIN-OF-CUSTODY AND ANALYSIS REQUEST

LAB Order ID # AD201402

Company Name: Enercon Services Inc
Phone #: 915-570-8726
Address: (Street, City, Zip) 306 west Wall, Suite 1312, Midland, Tx 79701
Fax #: 915-684-7587
Contact Person: Jeffrey Kindley
Incident # 300109
Invoice to: (If different from above) Kyle Landreneau / Equiva Services Inc
Project #: EQ-112
Project Name:
Project Location:
Sampler Signature:

ANALYSIS REQUEST
(Circle or Specify Method No.)

LAB # (LAB USE ONLY)	FIELD CODE	# CONTAINERS	Volume/Amount	MATRIX: WATER	SOIL	AIR	SLUDGE	PRESERVATIVE METHOD: HCl	HNO_3	H_2SO_4	NaOH	ICE	NONE	SAMPLING: DATE	TIME	MTBE 8021B/602	BTEX 8021B/602	TPH 418.1/TX1005	PAH 8270C	Total Metals Ag As Ba Cd Cr Pb Se Hg 6010B/200.7	TCLP Metals Ag As Ba Cd Cr Pb Se Hg	TCLP Volatiles	TCLP Semi Volatiles	TCLP Pesticides	RCI	GC/MS Vol. 8260B/624	GC/MS Semi. Vol. 8270C/625	PCB's 8082/608	Pesticides 8081A/608	BOD, TSS, pH								Turn Around Time if different from standard	Hold
84	MW-14	3	40ml Liter	✓				✓					✓	10/10/02			✓		✓																					
85	MW-15	3	40ml Liter	✓				✓					✓	10/10/02			✓		✓																					
86	MW-8	3	40ml Liter	✓				✓					✓	10/09/02			✓		✓																					
87	MW-9	3	40ml Liter	✓				✓					✓	10/09/02			✓		✓																					
88	MW-16	3	40ml Liter	✓				✓					✓	10/09/02			✓		✓																					
89	MW-17	3	40ml Liter	✓				✓					✓	10/09/02			✓		✓																					
90	MW-18	3	40ml Liter	✓				✓					✓	10/09/02			✓		✓																					

Relinquished by:	Date:	Time:	Received by:	Date:	Time:
Jeffrey Kindley	October 11, 2002	0900	Helen Shelton	10/11/02	0900
Helen Shelton	10/11/02	18:30	Received by:	Date:	Time:
Relinquished by:	Date:	Time:	Received at Laboratory by:	Date:	Time:
				10/12/02	930

LAB USE ONLY
Intact Y / N
Headspace Y / N
Temp 4 °
Log-in Review MS

REMARKS:
Normal Turnaround

☐ Check If Special Reporting Limits Are Needed

Carrier # GT 1673566259

Submittal of samples constitutes agreement to Terms and Conditions listed on reverse side of C.O.C.

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